SECTION ADP В AUTOMATIC DRIVE POSITIONER С

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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:

- 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 the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.
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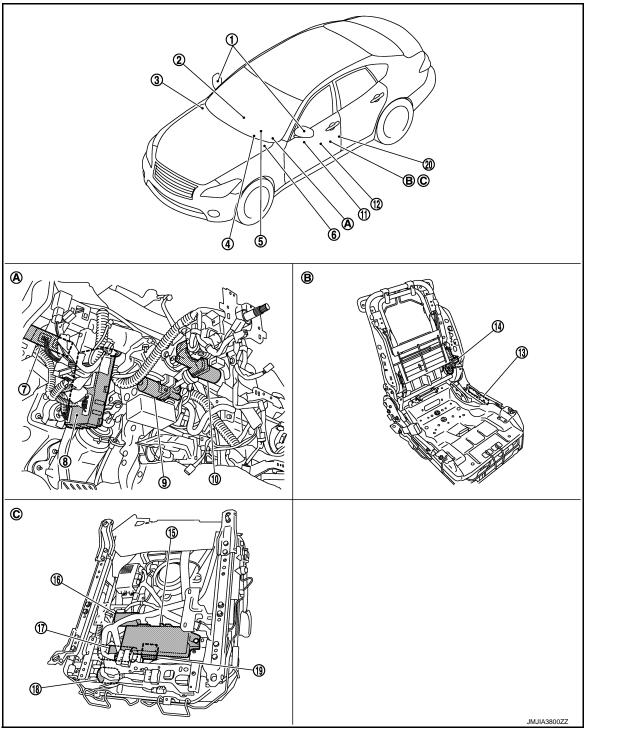
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< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION COMPONENT PARTS

Component Parts Location



1. Door mirror

- 2. TCM Refer to <u>TM-8, "A/T CONTROL SYS-</u> <u>TEM : Component Parts Location"</u>
- 3. IPDM E/R
 - Refer to <u>PCS-5</u>, "IPDM E/R : Component Parts Location"
 - ABS actuator and electric unit (control unit) Refer to <u>BRC-10, "Component Parts</u> <u>Location"</u>

- 4. Combination meter Refer to <u>MWI-6. "METER SYSTEM :</u> <u>Component Parts Location"</u>
- Tilt & telescopic switch

5.

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

7.	Automatic drive positioner control unit	8.	BCM Refer to <u>BCS-4, "BODY CONTROL</u> <u>SYSTEM : Component Parts Loca-</u> <u>tion"</u>	9.	Telescopic motor	А
10.	Tilt motor	11.	Reclining switch	12.	Power window main switch (door mir- ror remote control switch)	В
13.	Power seat switch	14.	Reclining motor	15.	Diver seat control unit	
16.	Lifting motor (rear)	17.	Lifting motor (front)	18.	Sliding motor	0
19.	Lifting sensor control unit	20.	Driver side door switch			С
Α.	View with steering column cover low- er and instrument driver lower panel removed	В.	View with seat cushion pad and seat back pad removed	C.	Backside of the seat cushion	D

Component Description

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Component parts	 Description 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 driver positioner control unit. 		
Driver seat 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 		
Lifting sensor control unit	Lifting position signal from lifter sensor (front) and lifter sensor (rear) is converted and transmitted to driver seat control unit.		
ВСМ	 Recognizes the following status and transmits it to driver seat con trol 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 (detent switch) is transmitted 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.		
ABS actuator and electric unit (control unit)	Transmit the vehicle speed signal to driver seat control unit via CAN communication.		

COMPONENT PARTS

< SYSTEM DESCRIPTION >

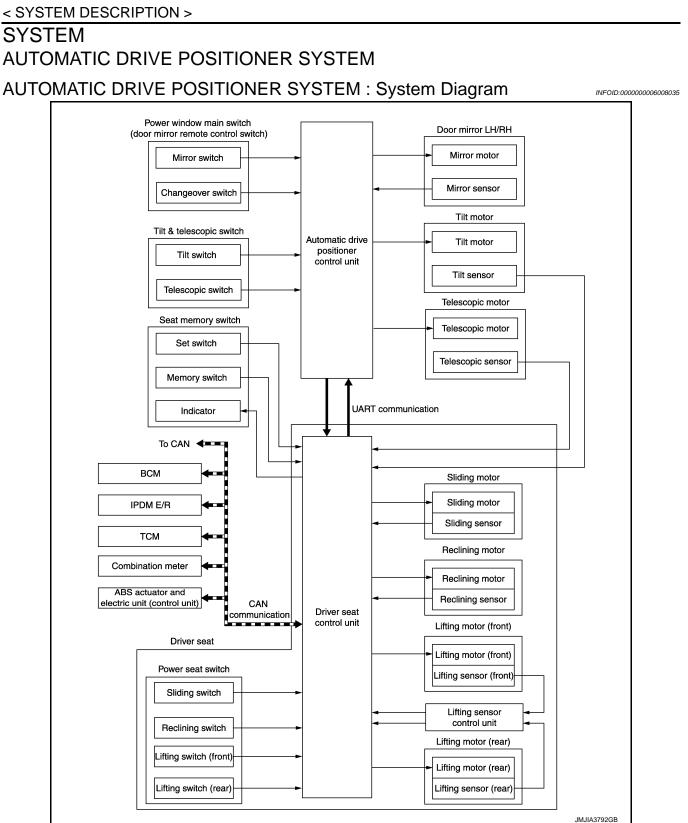
Com	ponent parts	Description
A/T sift selector (Detentio	n switch)	 Detention switch is installed on A/T shift selector. It is turned OFF when A/T selector lever is in P position. Driver seat control unit judges that A/T selector lever is in P po- sition if continuity does not exist in this circuit.
	Mirror switch	 Mirror switch is integrated in mirror remote control switch. It operates angle of door mirror face. It transmits mirror face adjust operation to automatic drive positioner control unit.
Power window main switch (door mirror re- mote control switch)	Changeover switch	 Changeover switch is integrated in 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 mirror remote control switch. Power is supplied to folding mirror from door mirror remote control switch when operating switch.
Tilt & telescopic 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.
	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.
	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.
Power seat switch	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.
rower seat switch	Lifting switch (front)	 Lifting switch (front) is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when lifting switch (front) is operated.
	Lifting switch (rear)	 Lifting switch (rear) is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when lifting switch (rear) is operated.
	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.

Revision: 2010 June

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component parts		Description		
	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 slid ing amount of the seat. 		
Reclining motor	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 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) 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 		
Lifting motor (rear)	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 ro tation direction of lifting motor (rear). 		
	Lifting sensor (rear)	 Lifting sensor (rear) is installed to seat side cushion frame. The pulse signal is input to driver seat control unit when lifting (rear) is operated. Driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat. 		



AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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

< SYSTEM DESCRIPTION >

Function		Description	
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch.	
Seat synchronization function		The positions of the steering column and door mirror are adjusted to the proper posi- tion automatically while linking with manual operation [seat sliding, seat lifting (rear) or seat reclining].	
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).	
	Exit	On exit, the seat moves backward and the steering column moves upward.	
Entry/Exit assist function Entry		On entry, the seat and steering column returns from exiting position to the previous driving position.	
Intelligent Key interlock function		Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.	

NOTE:

The lumbar support system are controlled independently with no link to the automatic drive positioner system. F Refer to SE-13. "LUMBAR SUPPORT SYSTEM : System Description".

Sleep control

Driver seat control unit equips sleep control for reducing power consumption. The system switches to sleep control when all of the following conditions are satisfied. • Ignition switch is OFF (steering lock status). All devices of auto driving position system are not operating. Н 45 seconds timer of driver seat control unit is not operating. Set switch and memory switch (1 and 2) are OFF. Wake-up control Sleep control releases when detecting status change in either of the following item. CAN communication Power seat switch ADP • Set switch and seat memory switch (1 and 2) Tilt & telescopic switch

MANUAL FUNCTION

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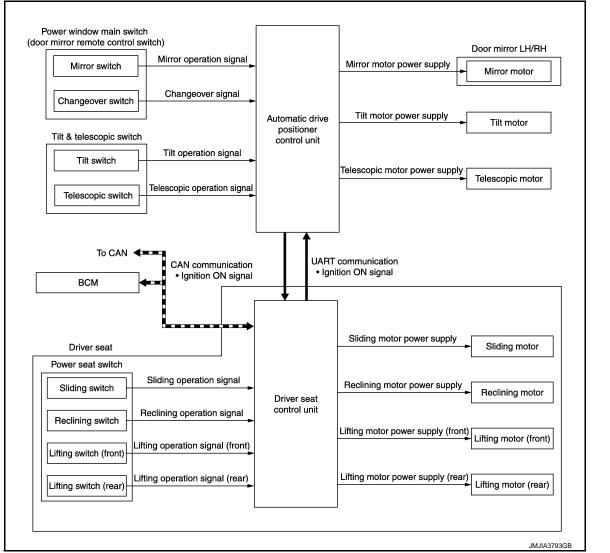
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MANUAL FUNCTION : System Description

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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.

DETAIL FLOW

Seat

Order	Input	Output	Control unit condition
1	Power seat switch (sliding, lifting, reclin- ing)	_	The power seat switch signal is inputted to the driver seat control unit when the power seat switch is operated.
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.

< SYSTEM DESCRIPTION >

NOTE:

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

Tilt & Telescopic

-	Order	Input	Output	Control unit condition	В
-	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.	С
-	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.	F

NOTE:

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

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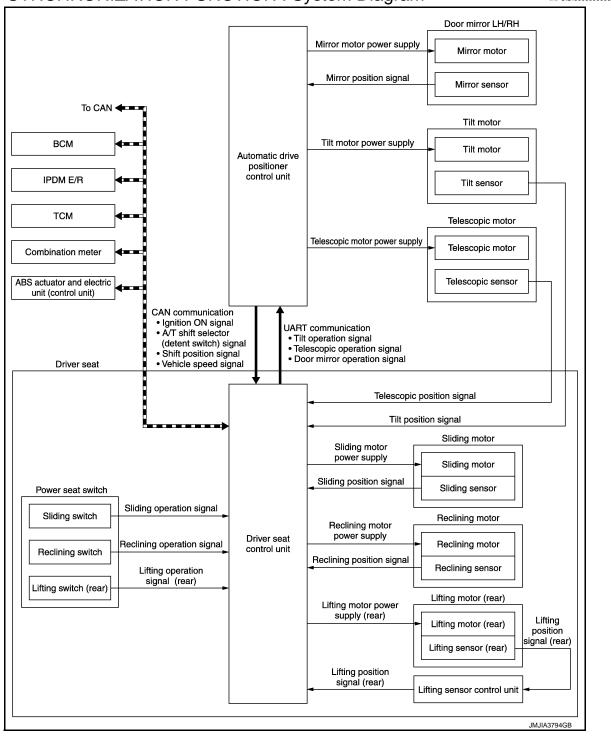
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< SYSTEM DESCRIPTION >

SEAT SYNCHRONIZATION FUNCTION : System Diagram





SEAT SYNCHRONIZATION FUNCTION : System Description

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The steering column position and door mirror position is adjusted to the position automatically according to the direction and distance of seat movement when performing the manual operation of sliding, reclining or lifting (rear). This function saves adjusting the mirror and steering column when adjusting the seat. **NOTE:**

- This function is set to OFF before delivery (initial setting).
- For the system setting procedure. Refer to <u>ADP-60, "SYSTEM SETTING : Description"</u>.

OPERATION PROCEDURE

1. Turn ignition switch ON.

< SYSTEM DESCRIPTION >

- 2. Adjust seat position [sliding, reclining, lifting (rear)].
- 3. The steering and outside mirror is adjusted automatically.

NOTE:

• The seat synchronization function will not operate if seat adjusting value is more than limit value.

ltem	Limit value	B
Seat sliding	76 [mm]	
Seat reclining	9.1 [degrees]	С
Seat lifter (rear)	20 [mm]	

• The seat synchronization function will not operate if the steering column or door mirror moves to the operating end while this function is operating. Perform memory function or drive the vehicle at vehicle speed of 7 D km/h or more once to activate this function again.

• If the seat position is uncomfortable after the adjustment, seat position can be adjusted easily by memory operation.

OPERATION CONDITION

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

Item	Request status	
Ignition position	ON	
System setting	ON	
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	
CONSULT-III	Not connected	

DETAIL FLOW

Order	Input	Output	Control unit condition
1	—	_	Perform Manual operation [Sliding, reclining or lifting (rear)].
2	Sensors [Sliding, reclining, lifting (rear)]	_	The driver seat control unit judges the direction and distance of seat movement according to the signal input from each seat sensor during manual operation.
3	_	Motors (Tilt, telescopic, out- side mirror)	Driver seat control unit requests the operation to position accord- ing to the direction and distance of seat movement to the automat- ic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor.
	Sensors (Tilt, telescopic, outside mirror)	_	Driver seat control unit stops the operation of each motor when the value of each sensor that is input to automatic drive positioner control unit via UART communication reaches the target address.

MEMORY FUNCTION

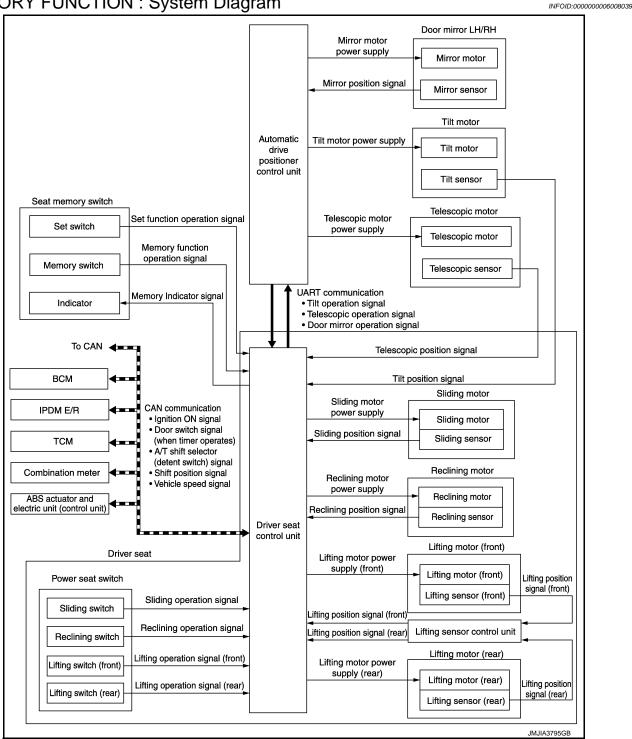
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< SYSTEM DESCRIPTION >





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-59, "MEMORY STORING : Description"</u>.

OPERATION PROCEDURE

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

< 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-III	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	
Handle position	LHD	
CUNSULT-III	Not connected	

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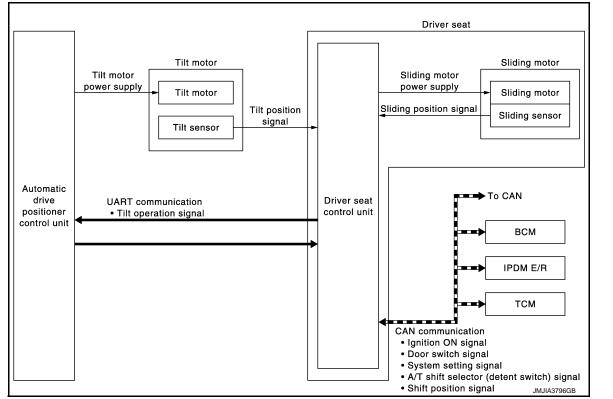
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< SYSTEM DESCRIPTION >

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Diagram



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-60, "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 >

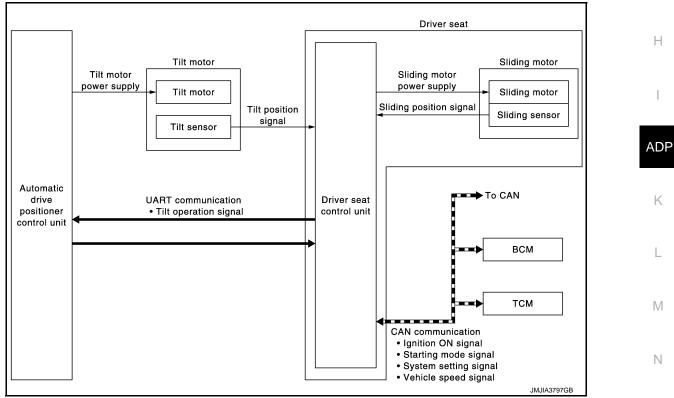
	Item	Request status	٥
Transmission		A/T	A
CUNSULT-III		Not connected	
DETAIL FLOW			В

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 steering reaches to the tilt top position and seat reaches to the rearmost position.

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Diagram



ENTRY ASSIST FUNCTION : System Description

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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-60. "SYSTEM SETTING : Description"</u>.

OPERATION PROCEDURE

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

ADP-19

< SYSTEM DESCRIPTION >

OPERATION CONDITION

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

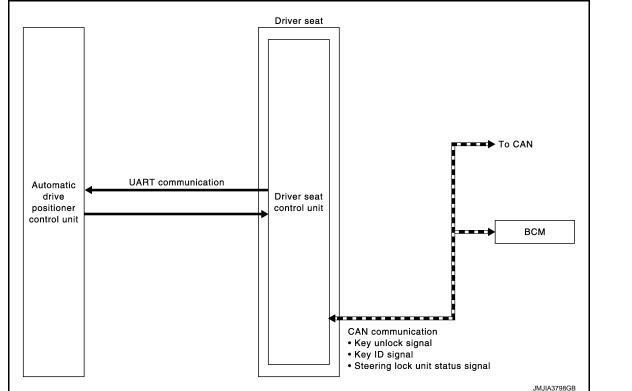
Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Vehicle speed	0 Km/h (0 MPH)
Starter	OFF
Transmission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

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram



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< SYSTEM DESCRIPTION >

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 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-60, "INTELLIGENT KEY INTERLOCK</u>	ш
STORING : Description".	

OPERATION CONDITION

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

Item	Request status	/
Ignition position	OFF	
Intelligent key interlock function	Registered	
Steering lock unit status	LOCK	
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch 	OFF (Not operated)	
CONSULT-III	Not connected	

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

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

ADP-21

< SYSTEM DESCRIPTION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	<u>ADP-62</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-63</u>
	EEPROM	B2130	<u>ADP-72</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-70</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-64</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-66</u>
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-68</u>

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

Diagnosis Description

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

Diagnostic mode [AUTO DRIVE POS.]	Description
WORK SUPPORT	Changes the setting of each function.
SELF-DIAG RESULTS	Performs self-diagnosis for the auto drive positioner system and displays the results.
DATA MONITOR	Displays input signals transmitted from various switches and sensors to driver seat con- trol unit in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Drive each output device.
ECU IDENTIFICATION	Displays part numbers of driver seat control unit parts.

CONSULT-III Function

SELF-DIAGNOSIS RESULTS Refer to <u>ADP-33. "DTC Index"</u>.

DATA MONITOR

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

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

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

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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.
STEERING STATUS	"LOCK/UN- LOCK"	×	×	LOCK/UNLOCK status judged from steering lock unit.

ACTIVE TEST **CAUTION:**

When driving vehicle, do not perform active test.

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

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	
	ON (operated) – OFF (not operated)	OFF	

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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:000000006008053

ECU	Reference
	BCS-32, "Reference Value"
BCM	BCS-52, "Fail-safe"
	BCS-54, "DTC Inspection Priority Chart"
	BCS-55, "DTC Index"

< ECU DIAGNOSIS INFORMATION >

DRIVER SEAT CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condi	tion	Value/Status	
	Sot owitch	Push	ON	-
SET SW	Set switch	Release	OFF	-
	Momony owitch 1	Push	ON	-
MEMORY SW1	Memory switch 1	Release	OFF	-
	Momony switch 2	Push	ON	-
MEMORY SW2	Memory switch 2	Release	OFF	-
	Sliding owitch (forward)	Operate	ON	-
SLIDE SW-FR	Sliding switch (forward)	Release	OFF	-
SLIDE SW-RR	Sliding owitch (healtward)	Operate	ON	-
SLIDE SW-KK	Sliding switch (backward)	Release	OFF	-
	Poolining quitch (forwar-1)	Operate	ON	-
RECLN SW-FR	Reclining switch (forward)	Release	OFF	-
RECLN SW-RR	Reclining switch (back-	Operate	ON	-
RECLIN SW-RR	ward)	Release	OFF	-
	Lifting quitch front (up)	Operate	ON	-
LIFT FR SW-UP	Lifting switch front (up)	Release	OFF	-
	Lifting quitch front (down)	Operate	ON	-
LIFT FR SW-DN	Lifting switch front (down)	Release	OFF	-
	Lifting owitch root (w)	Operate	ON	-
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF	-
	Lifting out to rear (down)	Operate	ON	-
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF	-
MIR CON SW-UP	Mirror switch	Up	ON	-
WIT CON SVE-UP		Other than the above	OFF	-
	Mirror owitch	Down	ON	-
MIR CON SW-DN	Mirror switch	Other than the above	OFF	-
	Mirror switch	Right	ON	-
MIR CON SW-RH		Other than the above	OFF	-
	Mirror owitch	Left	ON	-
MIR CON SW-LH	Mirror switch	Other than the above	OFF	-
	Changeover switch	Right	ON	-
MIR CHNG SW-R	Changeover switch	Other than the above	OFF	-
	Changeoverswitch	Left	ON	-
MIR CHNG SW-L	Changeover switch	Other than the above	OFF	-
	Tilt ouritab	Upward	ON	-
TILT SW-UP	Tilt switch	Other than the above	OFF	-
	Tilt outitab	Downward	ON	-
TILT SW-DOWN	Tilt switch	Other than the above	OFF	-

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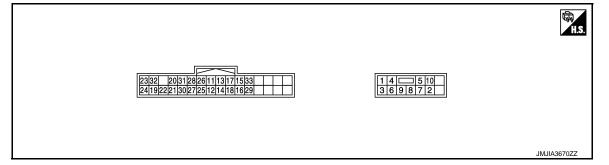
Monitor Item	Cor	ndition	Value/Status
	Talaasania suuitak	Forward	ON
TELESCO SW-FR	Telescopic switch	Other than the above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
TELESCO SW-RR	Telescopic Switch	Other than the above	OFF
DETENT SW	A/T selector lever	P position	OFF
DETENT SW	AT Selector level	Other than the above	ON
STARTER SW	Ignition position	Cranking	ON
OWNER	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 *
		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 s	ide)	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		km/h
		P position	ON
P RANG SW CAN	A/T selector lever	Other than the above	OFF
		R position	ON
R RANGE (CAN)	A/T selector lever	Other than the above	OFF
		Open	ON
DOOR SW-FL	Driver door	Close	OFF

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cond	lition	Value/Status	٥
DOOR SW-FR	December deer	Open	ON	A
DOOR SW-FR	Passenger door	Close	OFF	
IGN ON SW	Ignition switch	ON position	ON	В
IGIN ON SW	Ignition Switch	Other than the above	OFF	
ACC ON SW	Ignition owitch	ACC or ON position	ON	
ACC ON SW	Ignition switch	Other than the above	OFF	С
KEY ON SW	Intelligent Koy	Inserted is key slot	ON	
KET ON SW	Intelligent Key	Inserted is not key slot	OFF	D
KEYLESS ID	UNLOCK button of Intellige	ent Key is pressed	1,2,3,4or5	
KYLS DR UNLK	Intelligent Key or driver	ON	ON	
KTLS DR UNLK	side door request switch	OFF	OFF	E
	Con signal from ABS	Received	ON	
VHCL SPEED (ABS)	Can signal from ABS	Not received	OFF	F
HANDLE	The DOM for bondle positiv		LHD	Г
HANDLE	The BCM for handle position	on is displayed	RHD	
TRANSMISSION		wed	AT or CVT	G
I KANSINISSION	Transmission type is displa	ayeu	MT	

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

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Descriptio	n	Condition		Condition		Voltage (V)
+	-	Signal name	Input/ output	Con		(Approx.)		
1 (R)	Ground	Battery power supply	Input	-	_	Battery voltage		
2 (B)	Ground	Ground	_	_		0		
3	Ground	Sliding motor forward output	Out-	Soot cliding	Operate (forward)	12		
(G)		signal	put	Seat sliding	Other than the above	0		
4	Cround	Sliding motor	Out-	Costaliding	Operate (backward)	12		
(¬/R)	d backward output put signal		Seat sliding	Other than the above	0			

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5	Ground	Reclining motor	Out-	Sect realizing	Operate (forward)	12		
(V)	Ground	forward output signal	put	Seat reclining	Other than the above	0		
6		Reclining motor	Out-	0	Operate (backward)	12		
(R/L)	Ground	backward output signal	put	Seat reclining	Other than the above	0		
7		Lifting motor	Out-		Operate (down)	12		
(L)	Ground	(rear) down out- put signal	put	Seat lifting (rear)	Other than the above	0		
8		Lifting motor	Out-		Operate (up)	12		
(L/W)	Ground	(rear) up output signal	put	Seat lifting (rear)	Other than the above	0		
9	Orrent	Lifting motor	Out-		Operate (up)	12		
(L/R)	Ground	(front) up output signal	put	Seat lifting (front)	Other than the above	0		
10		Lifting motor	Out-		Operate (down)	12		
(L/B)	Ground	(front) down out- put signal	put Seat lifting (front) Other than the above	Other than the above	0			
	Orrent	Sliding switch					Operate (backward)	0
(G/B)	Ground	backward signal	Input	Sliding switch	Other than the above	12		
12	Ground	Sliding switch	Innut	Sliding switch	Operate (forward)	0		
(G/W)	Ground	forward signal	Input	Sliding switch	Other than the above	12		
13	Ground	Reclining switch	Innut	Reclining switch	Operate (backward)	0		
(R/G)	Ground	backward signal	mput	Reclining switch	Other than the above	12		
14	Ground	Reclining switch	Innut	Reclining switch	Operate (forward)	0		
(R/W)	Ground	forward signal	Input	Reclining switch	Other than the above	12		
15	Ground	Lifting switch (rear) down sig-	Input	Lifting switch (rear)	Operate (down)	0		
(Y/B)	Ground	nal	mput	Lining Switch (Iear)	Other than the above	12		
16	Ground	Lifting switch	Input	Lifting switch (rear)	Operate (up)	0		
(Y/R)	Cround	(rear) up signal	mput		Other than the above	12		
17	Ground	Lifting switch (front) down sig-	Input	Lifting switch (front)	Operate (down)	0		
(LG/B)	Cround	nal	input		Other than the above	12		

< ECU DIAGNOSIS INFORMATION >

18	Oraciand	Lifting switch		Lifting switch (front)	Operate (up)	0
(LG/R)	Ground	(front) up signal	Input	Other than the above		12
19 (G/Y)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div
					Other than the above	0 or 5
20 (R/Y)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	10mSec/div
					Other than the above	0 or 5
21 (Y)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div 5V/div JMJIA3675ZZ
					Other than the above	0 or 12
22 (R)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 5V/div JMJIA36752Z
					Other than the above	0 or 12
23 (P)		CAN-H			-	
24 (P/L)		CAN-L	_	_	-	_
25 (G/O)	Ground	Memory indica- tor 1 signal	Out- put	Memory indicator 1	Illuminate Other than the above	1 12
26 (L/O)	Ground	Memory indica- tor 2 signal	Out- put	Memory indicator 2	Illuminate Other than the above	1 12

27		Memory switch 1			Press	0
(V)	Ground	signal	Input	Memory switch 1	Other than the above	5
28		Memory switch 2			Press	0
(V/W)	Ground	signal	Input	Memory switch 2	Other than the above	5
29					Press	0
(L)	Ground	Set switch signal	Input	Set switch	Other than the above	5
30 (BR)	Ground	Tilt sensor signal	Input	Steering tilt	Operate	10mSec/div
					Other than the above	0 or 5
31 (BR/W)	Ground	Telescopic sen- sor signal	Input	Steering telescopic	Operate	10mSec/div
					Other than the above	0 or 5
32 (W/L)	Ground	UART communi- cation (TX/RX)	Input	Ignition switch ON		10msec/div 10msec
33 (W)	Ground	Sensor power supply	Out- put	_	-	12

< ECU DIAGNOSIS INFORMATION >

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-62</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-63</u>
	EEPROM	B2130	<u>ADP-72</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-70</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-64</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-66</u>
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-68</u>

< ECU DIAGNOSIS INFORMATION >

DTC Index

INFOID:000000006008051

А

CONSULT-III	Tim	ing ^{*1}			
display	Current mal- function function Item		Item	Reference page	
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	<u>ADP-62</u>	
CONTROL UNIT [U1010]	0	1-39	Control unit	<u>ADP-63</u>	
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-64	
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-66	
STEERING TILT [B2116]	0	1-39	Tilt motor output	<u>ADP-68</u>	
UART COMM [B2128]	0	1-39	UART communication	<u>ADP-70</u>	
EEPROM [B2130]	0	1-39	EEPROM	ADP-72	

*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.

ADP

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

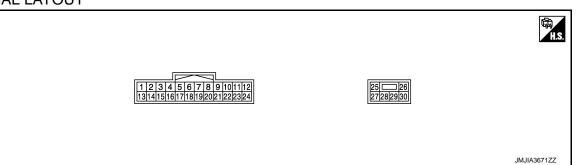
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000006008052

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)			Con	dition	Voltage (V)	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
1	Ground	Tilt switch up signal	Input	Tilt switch	Operate (up)	0	
(Y)	Ground	The switch up signal	input		Other than the above	5	
2	Ground	Changeover switch RH	Input	Changeover	RH	0	
(V)	Ground	signal	mput	switch position	Neutral or LH	5	
3	Ground	Mirror switch up signal	Input	Mirror switch	Operate (up)	0	
(Y)	Ground	Winter Switch up Signal	input	MITO SWICH	Other than the above	5	
4					Operate (left)	0	
(V)	Ground	Mirror switch left signal	Input	Input Mirror switch	Other than the above	5	
5 (BR)	Ground	Door mirror sensor (pas- senger side) up/down sig- nal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)	
6 (BR)	Ground	Door mirror sensor (driver side) up/down signal	Input	Door mirror LH pos	sition	Change between 3.4 (close to peak) 0.6 (close to valley)	
7	Ground	Telescopic switch forward		Telescopic switch	Operate (forward)	0	
(W)	Ground	signal	Input	Telescopic switch	Other than the above	5	
8 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		10msec/div MUTALIVALIVAL SV/div JMJIA1391ZZ	

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Cond	altion	(Approx.)
10 (BR)	Ground	Door mirror motor (pas- senger side) up/right out- put signal	Output	Door mirror RH	Operate (up/right)	12
					Other than the above	0
11 (L)	Ground	Door mirror motor (pas- senger side) down/left output signal	Output	Door mirror RH	Operate (down/left)	12
					Other than the above	0
12 (G)	Ground	Door mirror motor (driver side) down/right output signal	Output	Door mirror (LH)	Operate (down/right)	12
					Other than the above	0
13 (SB)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
					Other than the above	5
14 (BG)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0
					Neutral or RH	5
15 (L)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0
					Other than the above	5
16 (V)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
					Other than the above	5
17 (G)	Ground	Door mirror sensor (pas- senger side) left/right sig- nal	Input	Door mirror RH position		Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (G)	Ground	Door mirror sensor (driver side) left/right signal	Input	Door mirror LH position		Change between 0.6 (close to left edge) 3.4 (close to right edge)
19 (G)	Ground	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (backward)	0
					Other than the above	5
20 (Y)	Ground	Ground (sensor)		—		0
21 (GR)	Ground	Door mirror motor sensor power supply	Input			5
22 (Y)	Ground	Door mirror motor (pas- senger side) down/right output signal	Output	Door mirror (RH)	Operate (down/right)	12
					Other than the above	0
23 (BG)	Ground	Door mirror motor (driver side) up/right output sig- nal	Output	Door mirror (LH)	Operate (up/right)	12
					Other than the above	0

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

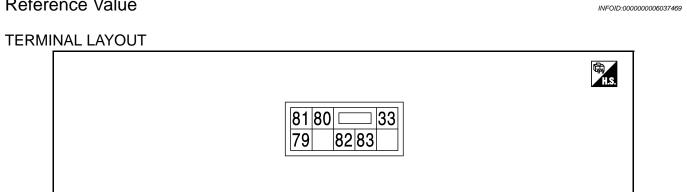
	nal No. color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Condition		(Approx.)
24	Ground	Door mirror motor (driver side) down/left output sig- nal	Output	Door mirror (LH)	Operate (down/left)	12
(GR)					Other than the above	0
25 (W)	Ground	Battery power supply	Input	_		Battery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

LIFTING SENSOR CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

LIFTING SENSOR CONTROL UNIT

Reference Value



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
33 (W)	Ground	sensor power supply	Output	_	1	Battery voltage	
79 (R)	Ground	Aftor conversion of lifting sensor (front) signal	Output	Seat lifting (front)	Operate	10mSec/div	
					Other than the above	0 or 12	
80 (L/Y)	Ground	Before conversion of lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div	
					Other than the above	7 or 12	
81 [BR/Y)	Ground	Before conversion of lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 5V/div JMJIA3674ZZ	
					Other than the above	7 or 12	

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LIFTING SENSOR CONTROL UNIT

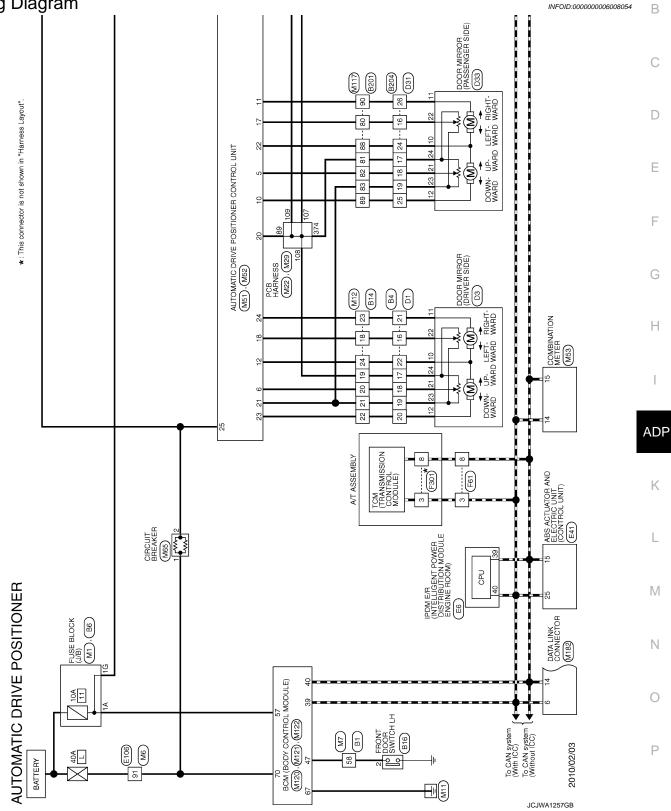
< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V)		
+	-	Signal name	Input/ Output	Condition		(Approx.)		
82 (Y)	Ground	Aftor conversion of lifting sensor (rear) signal	Output	Seat lifting (rear)	Operate	10mSec/div		
					Other than the above	0 or 12		
83 (B)	Ground	Ground		_		0		

< WIRING DIAGRAM >

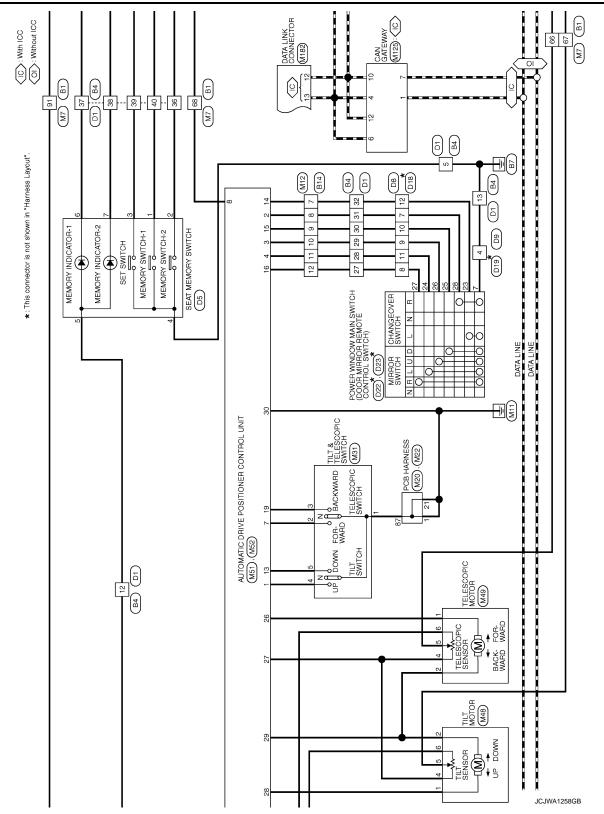
WIRING DIAGRAM AUTOMATIC DRIVE POSITIONER SYSTEM

Wiring Diagram

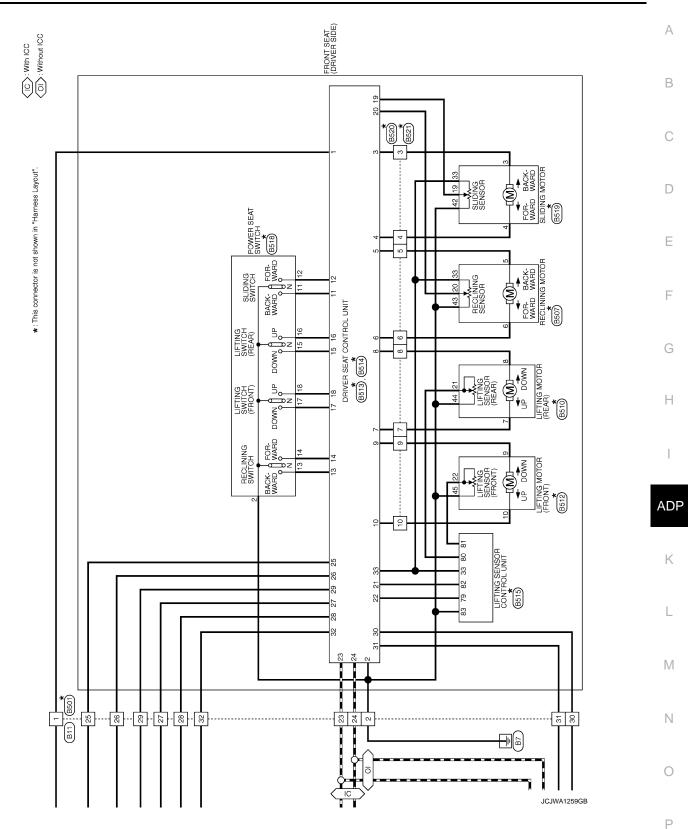


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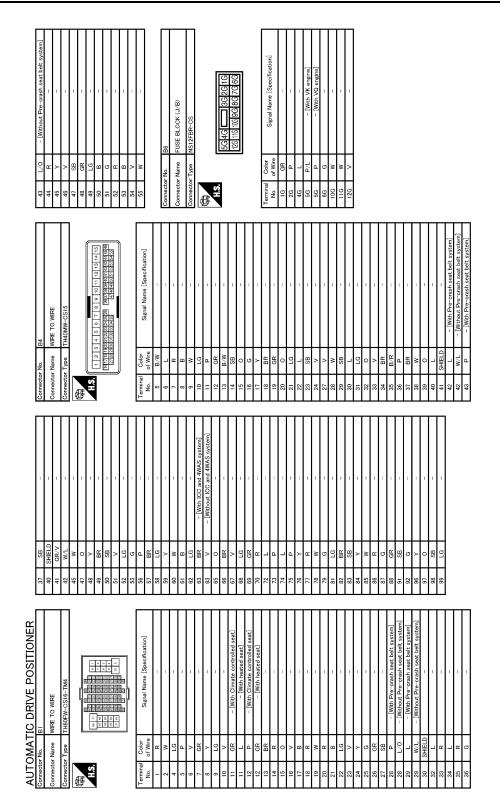
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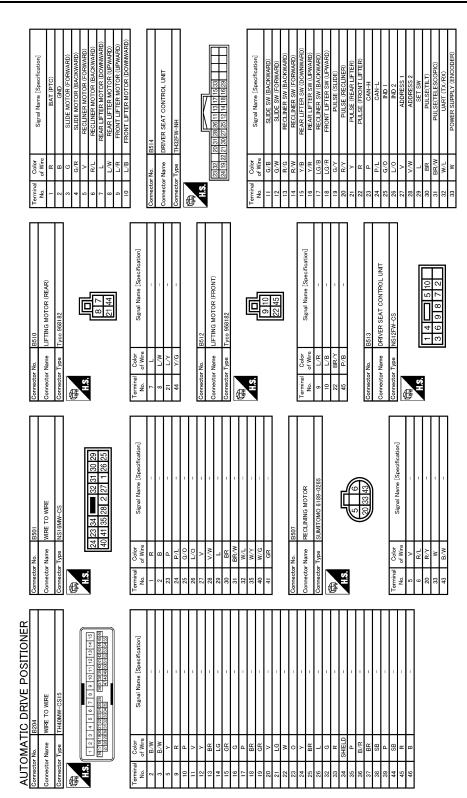
JCJWA1260GB

< WIRING DIAGRAM >

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AUTOMA Gameetar Mane Connector Name Connector Name	0

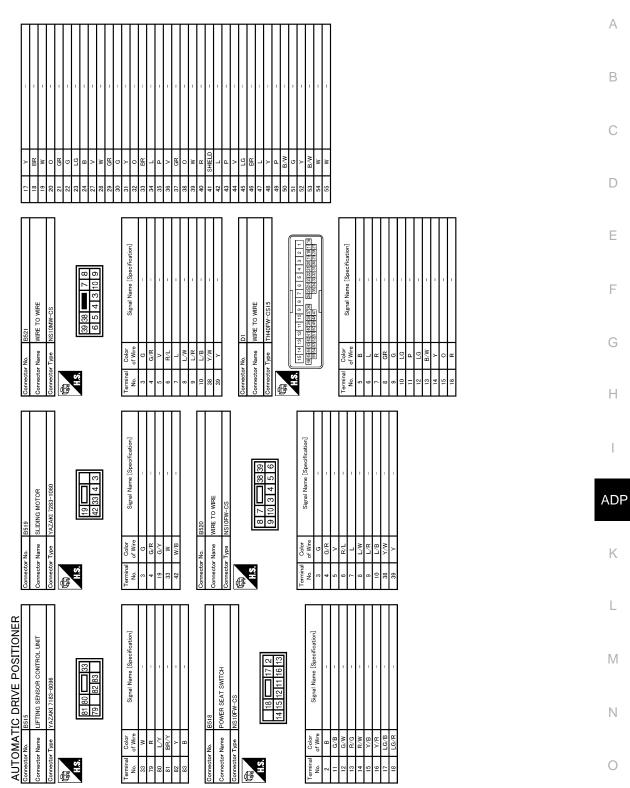
JCJWA1261GB

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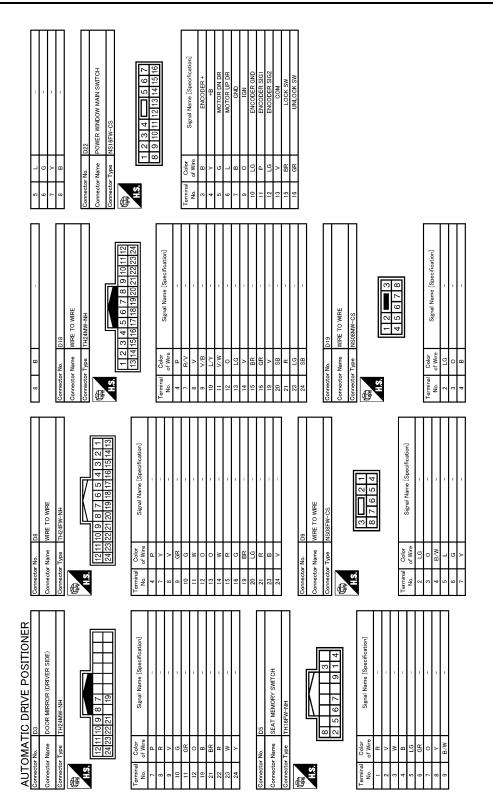
JCJWA1262GB

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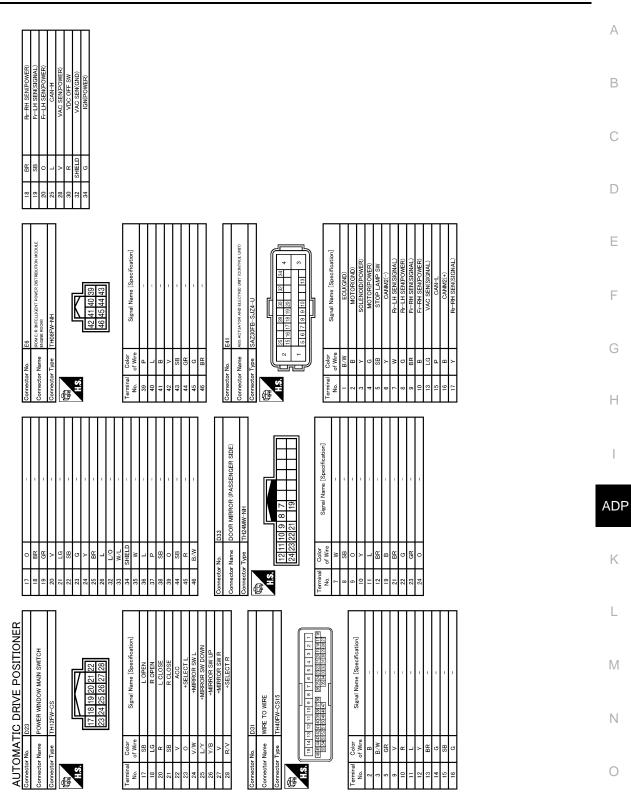
JCJWA1263GB

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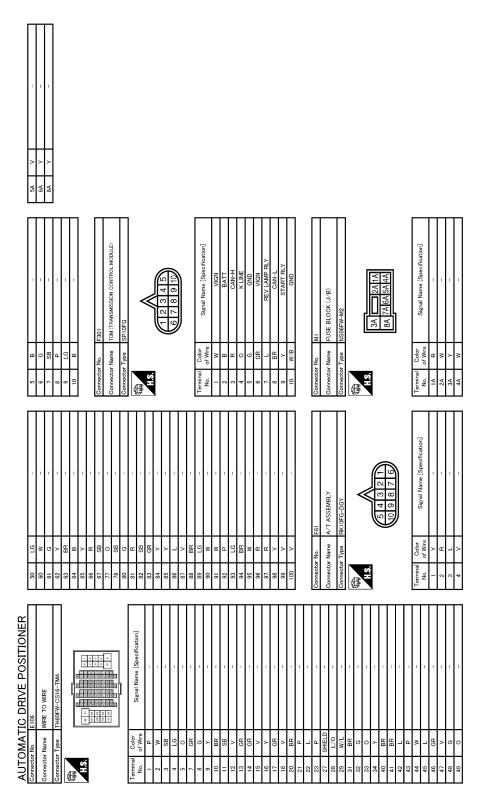


JCJWA1264GB

< WIRING DIAGRAM >



JCJWA1265GB

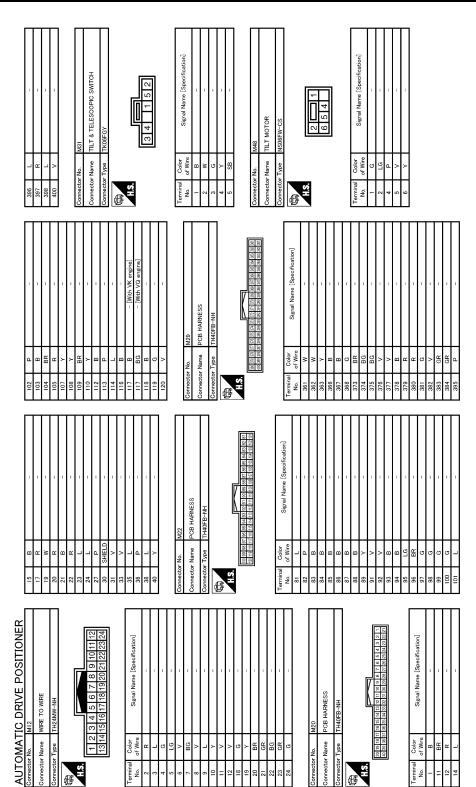


JCJWA1266GB

< WIRING DIAGRAM >

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AUTOMATIC DRIVE POSITIONER SYSTEM

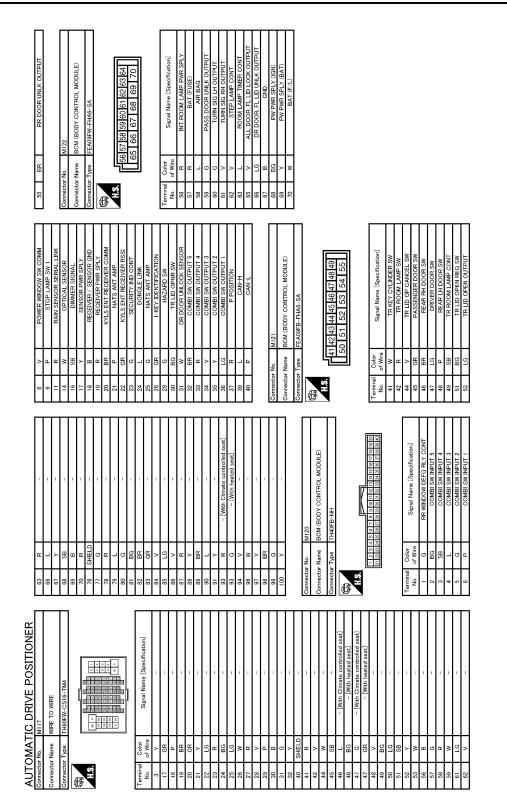
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JCJWA1270GB

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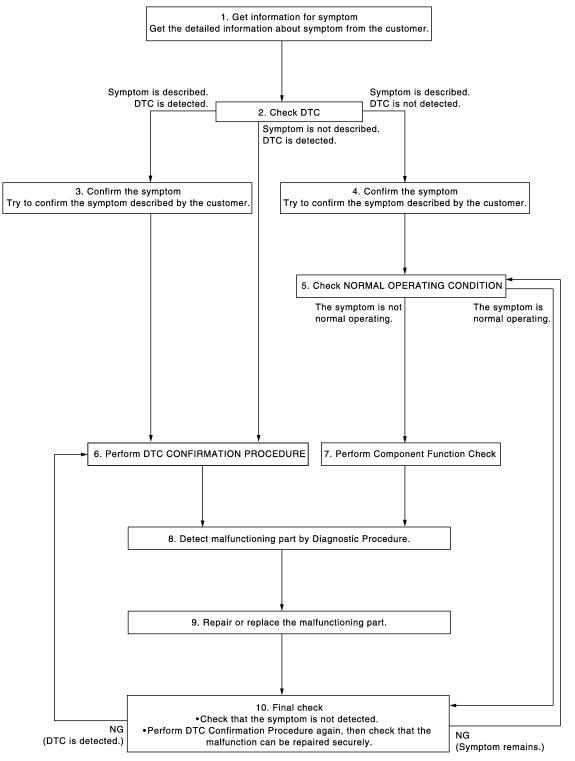
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< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

OVERALL SEQUENCE



JMJIA1702GB

DETAILED FLOW

JMJIA1702GB

INFOID:000000006008055

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 whe the incident/malfunction occurred).	n
>> GO TO 2.	
2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM	
Check "Self Diagnostic Result" with CONSULT-III. Refer to ADP-33, "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-145</u> , "Description".	-
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-38, "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 th component diagnosis.	Э
>> 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 i	s

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?

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : De-

scription

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
		Perform initialization
Entry/exit assist	ON	Set slide amount ^{*1}
Intelligent Kow interlegk	Erased	Perform initialization
Intelligent Key interlock	Elaseu	Perform storing
Seat synchronization	OFF	_
NOTE: Notice that disconnecting the battery when d ADDITIONAL SERVICE WHEN RE cial Repair Requirement	•	•
1.SYSTEM INITIALIZATION		
Perform system initialization. Refer to ADP-5	8, "SYSTEM INITIALI	ZATION : Description".
>> GO TO 2.		
2.MEMORY STORAGE		
Perform memory storage. Refer to <u>ADP-59, '</u>	MEMORY STORING	: Description".
	05	
3.INTELLIGENT KEY INTERLOCK STORA		
		NTERLOCK STORING : Description".
3.INTELLIGENT KEY INTERLOCK STORA		NTERLOCK STORING : Description".
3. INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60.</u>		NTERLOCK STORING : Description".
3.INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60, '</u> >> GO TO 4. 4.SYSTEM SETTING	'INTELLIGENT KEY II	
3.INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60, '</u> >> GO TO 4. 4.SYSTEM SETTING	'INTELLIGENT KEY II	
3.INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60, '</u> >> GO TO 4. 4.SYSTEM SETTING	'INTELLIGENT KEY II	
3.INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60</u> , ' >> GO TO 4. 4.SYSTEM SETTING Perform system setting. Refer to <u>ADP-60</u> , ''S >> END	<u>'INTELLIGENT KEY II</u> <u>YSTEM SETTING : D</u>	escription".
3.INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60</u> , ' >> GO TO 4. 4.SYSTEM SETTING Perform system setting. Refer to <u>ADP-60</u> , "S	<u>YSTEM SETTING : D</u>	escription".
3.INTELLIGENT KEY INTERLOCK STORA Perform memory storage. Refer to <u>ADP-60.</u> >> GO TO 4. 4.SYSTEM SETTING Perform system setting. Refer to <u>ADP-60.</u> "S >> END ADDITIONAL SERVICE WHEN R	YSTEM SETTING : D REPLACING COI	escription". NTROL UNIT "ROL UNIT : Description

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

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INFOID:000000006008056

< BASIC INSPECTION >

Function	Condition	Procedure	
Intelligent Key interlock	Erased	Perform initialization	
	Liaseu	Perform storing	
Seat synchronization	OFF	_	

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

NOTE:

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000006008059

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-58, "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to ADP-59, "MEMORY STORING : Description".

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform memory storage. Refer to ADP-60, "INTELLIGENT KEY INTERLOCK STORING : Description".

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to ADP-60, "SYSTEM SETTING : Description".

>> END SYSTEM INITIALIZATION

SYSTEM INITIALIZATION : Description

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

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

SYSTEM INITIALIZATION : Special Repair Requirement

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INFOID:000000006008060

INITIALIZATION PROCEDURE

1. CHOOSE METHOD

There are two initialization methods.

Which method do you use?

With door switch>>GO TO 2. With vehicle speed>>GO TO 4.

2. STEP A-1

Turn ignition switch from ACC to OFF position.

>> GO TO 3.

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

< BASIC INSPECTION >	
>> END	А
4. STEP B-1	
Drive the vehicle at more than 25 km/h (16 MPH).	В
>> END	
MEMORY STORING	С
MEMORY STORING : Description	
Always perform the memory storage when the battery terminal is disconnected or the driver seat control unit is replaced. The memory function will not operate normally if no memory storage is performed.	D
MEMORY STORING : Special Repair Requirement	Е
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	F
Check the following conditions. Ignirion switch : ON A/T selector lever : P position 	G
>> GO TO 2. 2.STEP 2 Adjust driver seat, steering column and outside mirror position manually.	I
>> GO TO 3. 3. STEP 3	ADF
 Push set switch. NOTE: Memory indicator for which driver seat position is already retained in memory is illuminated for 5 sec- 	K
 onds. Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch. NOTE: 	L
 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. 	M
NOTE: If memory is stored in the same memory switch, the previous memory will be deleted.	Ν
>> GO TO 4.	~
4.STEP 4	0
Confirm the operation of each part with memory operation.	Ρ

>> END INTELLIGENT KEY INTERLOCK STORING

< BASIC INSPECTION >

INTELLIGENT KEY INTERLOCK STORING : Description

INFOID:000000006008064

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 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 : ŎFF
- Initialization : done
- Driving position : registered

>> GO TO 2.

2.STEP 2

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

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

>> GO TO 3.

3.STEP 3

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

>> END SYSTEM SETTING

SYSTEM SETTING : Description

INFOID:000000006008066

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

Setting Change

5 5				×: Applicable
ltem	Content	CON- SULT –III	Set switch	Factory setting
Amount of seat sliding for entry/exit assist	The amount of seat sliding for entry/exit assist can be selected from 3 items. [40mm/80mm/150mm]	х	_	40mm
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	х	Y	ON
Entry/exit assistEntry/exit assist (steering column) can be selected:(steering column)ON (operated) - OFF (not operated)		х	X	ON
Seat synchronization	All settings can be set to default (factory setting)	_	х	OFF

< BASIC INSPECTION >	
SYSTEM SETTING : Special Repair Requirement	
1. CHOOSE METHOD	А
There are three way of setting method.	В
Which method do you choose?	
With CONSULT-III>>GO TO 2. With set switch>>GO TO 4.	
2. WITH CONSULT-III - STEP 1	С
Select "Work support".	D
>> GO TO 3.	
3. WITH CONSULT-III - STEP 2	E
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)	F
2. Select "SEAT SLIDE VOLUME SET" and touch either of "40 mm", "80 mm", or "150 mm".	
3. Then touch "OK".	G
>> END	
4. WITH SET SWITCH - STEP 1	Н
 Turn ignition switch OFF. Push setting button and hold for more than 10 seconds, then confirm blinking of the memory switch indi- cotor. 	
 cator. 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. 	
>> GO TO 5.	AC
5. WITH SET SWITCH - STEP 2	
 Turm ignition switch ACC Push setting button and hold for more than 10 seconds, then confirm blinking of the memory switch indicator. 	K
 Seat synchronization are ON: Memory switch indicator blink two times. Seat synchronization are OFF: Memory switch indicator blink once. 	L
>> END	N
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DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

INFOID:000000006037507

INFOID-000000006037508

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-III 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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-62, "DTC Logic"</u>.

NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.

2. Check "Self Diagnostic Result".

Is DTC "U1000" displayed?

- YES >> Refer to LAN-25, "Trouble Diagnosis Flow Chart".
- NO >> Refer to GI-35, "How to Check Terminal".

INFOID:000000006113022

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

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

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.Refer to <u>ADP-146, "Removal and Installation"</u>.

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INFOID:000000006037511

INFOID:000000006037512

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< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

DTC Logic

INFOID:000000006037513

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2112	SEAT SLIDE	The driver seat control unit detects the output of slid- ing motor output terminal for 0.1 second or more even if the sliding switch is not input.	Driver seat control unitSlide motor harness is shorted

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-64, "DTC Logic"</u>.
- Is the DTC displayed again?
- YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

2. CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)

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

(+) Sliding motor		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B519	3 4	Ground	0	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

${ m 3.}$ CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.

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

INFOID:000000006037514

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+)			
Driver seat control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals	(++)	
B513	3	- Ground	0
	4	Croand	0
he inspection result nor	mal?		
ES >> GO TO 4.			2 H 22 H
	seat control unit. Refer to A	ADP-146, "Removal and Ins	stallation"
CHECK INTERMITTEN	TINCIDENT		
efer to <u>GI-38, "Intermitter</u>	nt Incident".		
>> INSPECTION	END		

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< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

DTC Logic

INFOID:000000006037515

DTC DETECTION LOGIC

DTC No.	C No. Trouble diagnosis DTC detecting condition		Possible cause
B2113	SEAT RECLINING	The driver seat control unit detects the output of re- clining motor output terminal for 0.1 second or more even if the reclining switch is not input.	 Driver seat control unit Reclining motor harness is shorted

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-66, "DTC Logic"</u>.
- Is the DTC displayed again?
- YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

2. CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+) Reclining motor		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B507	5	Ground	0	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

${\it 3.}$ check driver seat control unit output signal

1. Connect driver seat control unit connector.

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

INFOID:000000006037516

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+)				
Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(//pp/0x.)	
B513	5	Ground	0	
	6	Cround		
the inspection result norm YES >> GO TO 4. NO >> Replace driver	seat control unit. Refer to A	DP-146, "Removal and Ir	nstallation".	
efer to GI-38, "Intermittent				
>> INSPECTION E	ND			

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< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

DTC Logic

INFOID:000000006037517

INFOID:000000006037518

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-68, "DTC Logic"</u>.
- Is the DTC displayed again?
- YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-38. "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.)
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
 M48	1	Ground	0
10140	2	Ground	U

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

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

1. Connect automatic drive positioner control unit connector.

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

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+)			
Automatic drive positioner control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals	_	(11 - 7
M52 –	28 29	- Ground	0
 <u>inspection result norma</u> S >> GO TO 4. >> Replace automati HECK INTERMITTENT II 	c drive positioner contro	I unit. Refer to <u>ADP-147. "I</u>	Removal and Installation
to <u>GI-38, "Intermittent Ir</u>	ncident".		
>> INSPECTION EN	П		
	-		

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< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

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

DTC Logic

INFOID:000000006037520

INFOID:000000006037519

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-III.

Is the DTC detected?

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

Diagnosis Procedure

INFOID:000000006037521

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-70, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

2.CHECK UART COMMUNICATION LINE CONTINUITY

1. Turn ignition switch OFF.

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

Driver seat control unit		Automatic drive positioner control unit		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B514	32	M51	8	Existed	

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

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

Driver seat			Continuity	
Connector	Terminal	Ground	Continuity	
B514	32		Not existed	
e inspection result norma				
 S >> Check intermitter >> Repair or replace 	nt incident. Refer to <u>GI-3</u> harness or connector.	8, "Intermittent Incident".		

B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

INFOID:000000006037522

INFOID:000000006037523

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-72, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-72, "DTC Logic"</u>.

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

2. REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to ADP-146, "Removal and Installation".

>> INSPECTION END

P (< DTC/CIRCUIT DIAGNOS		D GROUND CIRCUI	т
POWER SUPPLY A			
DRIVER SEAT CONT			A
DRIVER SEAT CONTR	ROL UNIT : Diagnos	sis Procedure	INFOID:00000006037524
1.CHECK FUSE			В
Check that the following fuse	and fusible link are not fu	ising.	C
Signal	name	Fuse	e No.
Battery po		L (4	0 A)
Is the inspection result normalYES>> GO TO 2.NO>> Replace the blow2.CHECK POWER SUPPLY	vn fuse after repairing the	affected circuit if a fuse are	e blown.
 Turn ignition switch OFF. Disconnect driver seat co Check voltage between of 	ontrol unit connector.	mess connector and ground	f.
(+			G Voltage (V)
Driver seat		(-)	(Approx.)
Connector B513	Terminals 1	Ground	Battery voltage
Is the inspection result norma		Cround	Dattery Voltage
YES >> GO TO 3. NO >> Repair or replace 3. CHECK GROUND CIRCL	e harness.		1
Check continuity between the	e driver seat control unit h	arness connector and grou	nd. AD
Driver seat	control unit		Orationity
Connector	Terminal	Ground	Continuity
B513	2		Existed
Is the inspection result norma YES >> INSPECTION EN NO >> Repair or replace	ND e harness.		L
DRIVER SEAT CONTR	ROL UNIT : Special	Repair Requirement	INFOID:000000006037525
1. PERFORM ADDITIONAL	SERVICE		
Perform additional service whether the service	nen removing battery neg	ative terminal.	N
	pair Requirement".		TTERY NEGATIVE TERMI-
			– –
AUTOMATIC DRIVE P	OSITIONER CONT	ROL UNIT : Diagnosi	s Procedure
NOTE: Do not disconnect the batter firmed with CONSULT-III. 1.CHECK FUSE	y negative terminal and t	he driver seat control unit	connector until DTC is con-

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse are blown.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

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

(- Automatic drive po		(-)	Voltage (V) (Approx.)
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M52	25	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${f 3.}$ CHECK GROUND CIRCUIT

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	30		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:000000006037527

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-57, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-NAL : Special Repair Requirement".

LIFTING SENSOR CONTROL UNIT

LIFTING SENSOR CONTROL UNIT : Diagnosis Procedure

INFOID:000000006037675

1.CHECK LIFTING SENSOR POWER SUPPLY

1. Turn ignition switch ON.

2. Check voltage between lifting sensor control unit harness connector and ground.

(+)			
Lifting sensor control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminals			
B515	33	Ground	12	

Is the inspection result normal?

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

 Disconnect lifting sensor control unit connector and driver seat control unit connector. Check continuity between lifting sensor control unit harness connector and driver seat connector. 					seat control unit har
_	Lifting sensor co			t control unit	Continuity
_	Connector	Terminal	Connector	Terminal	
	B515 Check continuity betwe	33 een lifting sensor co	B514 Introl unit harness of	33 connector and grour	Existed
-		sor control unit		3	
-	Connector	Terminal		Ground	Continuity
_	B515	33			Not existed
-	he inspection result norr				
e	eck continuity between t	the lifting sensor con	ntrol unit harness c	onnector and groun	
_	Connector	Terminal		Ground	Continuity
-	B515	83			Existed

SLIDING SWITCH

Component Function Check

INFOID:000000006037528

INFOID:000000006037529

1. CHECK FUNCTION

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

2. Check sliding switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1.CHECK SLIDING SWITCH 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.

Device	(+)		Voltage (V)	
Connector	eat switch Terminals	(-)	Voltage (V) (Approx.)	
B518	11	Ground	10	
8168	12	Ground	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 sea	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B514	11	B518	11	Existed
6514	12	510	12	

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

Driver seat	control unit		Continuity
 Connector	Terminal	Ground	
 B514	11	Ground	Not existed
D314	12		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

SLIDING SWITCH

DTC/CIRCUIT DIAGN NO >> Repair or rep CHECK SLIDING SW efer to <u>ADP-77, "Comp</u> the inspection result n YES >> GO TO 4.	place harness or o	aanaatar		
CHECK SLIDING SW efer to <u>ADP-77, "Comp</u> the inspection result n	•	oonnootor		
efer to <u>ADP-77, "Comp</u> the inspection result n	/ITCH	connector.		
the inspection result n				
	onent Inspection"			
	ormal?			
	war agat gwitch D	ofer to ADD 150 "Demovie	l and Installation	n
CHECK INTERMITTE		efer to <u>ADP-150, "Remova</u>	ii and installation	-
efer to <u>GI-38, "Intermitt</u>	<u>ent Incident"</u> .			
>> INSPECTIO				
omponent Inspec	lion			INFOID:00000006037530
CHECK SLIDING SW	/ITCH			
Turn ignition switch				
Disconnect power se		switch) connector. switch (sliding switch) tern	ainala	
Check continuity bei	ween power sear	Switch (Sinding Switch) term	lillais.	
Power seat switch	n (Sliding switch)	Cond	ition	Continuity
Term	inal		luon	Continuity
		Operate Existed		Existed
	11	Sliding switch (backward)		Exiotod
	11	Sliding switch (backward)	Release	Not existed
2			Release Operate	
2	12	Sliding switch (backward) Sliding switch (forward)		Not existed
2 the inspection result n	12 lormal?		Operate	Not existed Existed
2 the inspection result n 'ES >> INSPECTIO	12 Iormal? IN END		Operate Release	Not existed Existed Not existed
Term	inal		Operate	Fx

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RECLINING SWITCH

Component Function Check

INFOID:000000006037531

1. CHECK FUNCTION

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

2. Check reclining switch signal under the following conditions.

Monitor item	Condition		Status
RECLINE SW-FR Reclining switch (forwa	Poclining switch (forward)	Operate	ON
	reciring switch (lorward)	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-78, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037532

1. CHECK RECLINING SWITCH 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	Power seat switch		Voltage (V) (Approx.)
Connector	Terminals		
B518	13	Ground	12
	14	Ground	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 sea	t control unit	Power seat switch Connector Terminal		Continuity
Connector	Terminal			Continuity
B514	13	B518	13	Existed
D314	14	6510	14	LXISIEU

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

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B514	13	Ground	Not existed
D314	14		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

RECLINING SWITCH

< DTC/CIRCUIT DIAGN	NOSIS >			
	place harness or o	connector.		
3. CHECK RECLINING	SWITCH			
Refer to <u>ADP-79, "Comp</u>	onent Inspection"			
ls the inspection result n	ormal?			
YES >> GO TO 4.				- 11
NO >> Replace pow 1. CHECK INTERMITTE		efer to ADP-150, "Removal	and installation	<u>1°</u> .
Refer to <u>GI-38, "Intermitt</u>	<u>tent Incident"</u> .			
>> INSPECTIO	N END			
Component Inspec	tion			INFOID:000000006037533
				INFOID.00000000037333
.CHECK RECLINING	SWITCH			
. Turn ignition switch				
Disconnect power se	oot owitch (roolinir			
		ng switch) connector. switch (reclining switch) ter	minals	
		switch (reclining switch) ter	minals.	
3. Check continuity bet Power seat switch	(Reclining switch)			Continuity
 Check continuity bet 	(Reclining switch)	switch (reclining switch) ter	1	Continuity
3. Check continuity bet Power seat switch	(Reclining switch)	switch (reclining switch) ter	Operate	Existed
3. Check continuity bet Power seat switch	tween power seat (Reclining switch) inal	Switch (reclining switch) ter	Operate Release	Existed Not existed
3. Check continuity bet Power seat switch Term	tween power seat (Reclining switch) inal	Switch (reclining switch) ter	Operate Release Operate	Existed Not existed Existed
Check continuity bet	tween power seat (Reclining switch) inal 13 14	Switch (reclining switch) ter Condition Reclining switch (backward)	Operate Release	Existed Not existed
2 Check continuity bet Power seat switch Term 2 s the inspection result n	tween power seat (Reclining switch) inal 13 14 ormal?	Switch (reclining switch) ter Condition Reclining switch (backward)	Operate Release Operate	Existed Not existed Existed
2 S. Check continuity before Power seat switch Term 2 2 5 the inspection result n YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward) Reclining switch (forward)	Operate Release Operate Release	Existed Not existed Existed Not existed
Check continuity bet Power seat switch Term 2 <u>s the inspection result n</u> YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward)	Operate Release Operate Release	Existed Not existed Existed Not existed
Check continuity bet Power seat switch Term 2 <u>s the inspection result n</u> YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward) Reclining switch (forward)	Operate Release Operate Release	Existed Not existed Existed Not existed
2 S. Check continuity before Power seat switch Term 2 2 5 the inspection result n YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward) Reclining switch (forward)	Operate Release Operate Release	Existed Not existed Existed Not existed
2 S. Check continuity before Power seat switch Term 2 2 5 the inspection result n YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward) Reclining switch (forward)	Operate Release Operate Release	Existed Not existed Existed Not existed
Check continuity bet Power seat switch Term 2 s the inspection result n YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward) Reclining switch (forward)	Operate Release Operate Release	Existed Not existed Existed Not existed
Check continuity bet Power seat switch Term 2 s the inspection result n YES >> INSPECTIO	tween power seat (Reclining switch) inal 13 14 ormal? N END	Switch (reclining switch) ter Condition Reclining switch (backward) Reclining switch (forward)	Operate Release Operate Release	Existed Not existed Existed Not existed

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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-III.

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000006037535

INFOID:000000006037534

1.CHECK LIFTING SWITCH (FRONT) 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		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B518	17	Ground	10	
B316	18	Ground	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver seat	control unit	Power seat switch Connector Terminal		Continuity
Connector	Terminal			Continuity
B514	17	B518	17	Existed
D314	18	6510	18	LAISIEU

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

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B514	17	Ground	Not existed
0014	18		INDI EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

LIFTING SWITCH (FRONT)

		•	(ONT)	
DTC/CIRCUIT DIAGN				
	lace harness or co	onnector.		
3. CHECK LIFTING SWI ⁻				
Refer to ADP-81, "Compo				
s the inspection result no	ormal?			
YES >> GO TO 4. NO >> Replace powe	er seat switch Re	efer to <u>ADP-150, "Rem</u>	oval and Installation	מר"
1. CHECK INTERMITTEI		<u>100, 100, 100, 100</u>		<u> </u>
Refer to <u>GI-38, "Intermitte</u>				
	<u>ent incluent</u> .			
>> INSPECTION	I END			
Component Inspecti	ion			INF01D:000000006037536
				NN 012.00000000000000000000000000000000000
.CHECK LIFTING SWI	TCH (FRONT)			
. Turn ignition switch C				
		witch front) connector. switch (lifting switch fro	ont) terminals	
. Oncor continuity betv		Switch (inting Switch he		
Power seat switch (lif	ting switch front)	Con	dition	Continuity
Termin	al			
	17	Lifting switch front	Operate	Existed
2		(down)	Release	Not existed
	18	Lifting switch front (up)	Operate	Existed
		o (1)	Release	Not existed
			I	
YES >> INSPECTION	N END	for to ADD 150 "Pom	oval and Installati	
	N END	fer to <u>ADP-150, "Rem</u>	oval and Installation	on".
YES >> INSPECTION	N END	ofer to <u>ADP-150. "Rem</u>	oval and Installation	<u>on"</u> .
YES >> INSPECTION	N END	efer to <u>ADP-150, "Rem</u>	oval and Installation	<u>on"</u> .
YES >> INSPECTION	N END	efer to <u>ADP-150, "Rem</u>	oval and Installation	<u>on"</u> .
YES >> INSPECTION	N END	efer to <u>ADP-150, "Rem</u>	oval and Installation	<u>on"</u> .
YES >> INSPECTION	N END	efer to <u>ADP-150. "Rem</u>	oval and Installatio	<u>on"</u> .
YES >> INSPECTION	N END	efer to <u>ADP-150, "Rem</u>	oval and Installation	<u>on"</u> .
YES >> INSPECTION	N END	efer to <u>ADP-150. "Rem</u>	oval and Installation	<u>on"</u> .

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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-III.

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000006037538

INFOID:000000006037537

1.CHECK LIFTING SWITCH (REAR) 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		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B518	15	Ground	12	
0100	16	Gibunu	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver sea	t control unit	Power seat switch Connector Terminal		Continuity
Connector	Terminal			Continuity
B514	15	B518	15	Existed
6514	16	6310	16	

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

	Driver seat	control unit		Continuity
_	Connector	Terminal	Ground	Continuity
	B514	15	Ground	Not existed
	B314	16		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAG	NOSIS >	-	-	
NO >> Repair or re	place harness or	connector.		
3.CHECK LIFTING SV	•			
Refer to ADP-83, "Com	ponent Inspection	<u>.</u> .		
Is the inspection result r	normal?			
YES >> GO TO 4.	war aast switch F	Defer to ADD 150 "Dom	aval and installati	ion"
NO >> Replace po 4.CHECK INTERMITT		Refer to <u>ADP-150, "Rem</u>	oval and installati	<u>ion</u> .
Refer to <u>GI-38, "Intermit</u>	<u>ttent Incident"</u> .			
>> INSPECTIO	ON END			
Component Inspec	ction			INFOID:00000006037539
				141 012.00000000037333
1. CHECK LIFTING SV	VITCH (REAR)			
1. Turn ignition switch				
		switch rear) connector. switch (lifting switch re	ar) terminals.	
, 	•		,	
Power seat switch (Conc	dition	Continuity
Term	inal			
	15	Lifting switch rear (down)	Operate	Existed
2			Release	Not existed Existed
	16	Lifting switch rear (up)	Operate Release	Not existed
la the ineraction regult i	ormol2		Release	NOI EXISIEU
Is the inspection result r				
		Refer to <u>ADP-150, "Rem</u>	oval and Installati	ion".
YES >> INSPECTIC NO >> Replace po		efer to <u>ADP-150. "Rem</u>	oval and Installati	ion".

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TILT SWITCH

Component Function Check

INFOID:000000006037540

1. CHECK FUNCTION

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

2. Check tilt switch signal under the following conditions.

Monitor item	Cor	ndition	Status
TILT SW-UP	Tilt switch (up)	Operate	ON
	The switch (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-84, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037541

1.CHECK TILT SWITCH 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.

-	+) copic switch	(-)	Voltage (V) (Approx.)
Connector	Terminals		(//pp/0/.)
M31	4	Ground	5
	5	Giouna	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TILT SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

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

Automatic drive po	ositioner control unit	Tilt & teleso	copic switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	1	M31	4	Existed
WIG I	13	1013 1	5	LAISIEU

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

Automatic drive po	sitioner control unit		Continuity
 Connector	Terminal	Ground	Continuity
 M51	1	Ground	Not existed
IND I	13		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>.

TILT SWITCH

S.CHECK TILT SWITCH efer to ADP-85, "Component Inspection". .the inspection result normal? YES >> GO TO 4. NO >> Replace tilt & telescopic switch. Refer to ADP-151, "Removal and Installation". .CHECK INTERMITTENT INCIDENT efer to GI-38, "Intermittent Incident". .CHECK INTERMITTENT INCIDENT efer to GI-38, "Intermittent Incident". .SINSPECTION END component Inspection .CHECK TILT SWITCH Turn ignition switch OFF. Disconnect tilt & telescopic switch connector. Check continuity between tilt & telescopic switch terminals. Image: the inspection result normal? 1 4 1 Condition 1 4 1 Generate 5 Tilt switch (downward) Operate Existed Release Not existed 0perate Existed Release Not existed 0perate Existed Release Not existed 0perate Existed Release Not existed Not existed Not existed	DTC/CIRCUIT DIAG				
CHECK TILT SWITCH Terminal Condition Terminal Condition Continuity Terminal Condition Continuity Continu					
Refer to <u>ADP-85, "Component Inspection".</u> s the inspection result normal? YES >> GO TO 4. NO >> Replace tilt & telescopic switch. Refer to <u>ADP-151, "Removal and Installation"</u> . 4.CHECK INTERMITTENT INCIDENT Refer to GI-38, "Intermittent Incident". >> INSPECTION END Descent of the second		•	nnector.		
YES >> GO TO 4. NO >> Replace tilt & telescopic switch. Refer to <u>ADP-151, "Removal and Installation"</u> . 4.CHECK INTERMITTENT INCIDENT Refer to <u>GI-38. "Intermittent Incident"</u> . >> INSPECTION END Component Inspection Intermittent Section 1.CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. Tilt switch Condition Condition Continuity 1 4 Tilt switch (upward) Operate Existed 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3. CHECK TILT SWITC	Н			
NO >> Replace tilt & telescopic switch. Refer to <u>ADP-151, "Removal and Installation"</u> . 4.CHECK INTERMITTENT INCIDENT Refer to <u>GI-38. "Intermittent Incident"</u> . >> INSPECTION END Component Inspection 1.CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. $ \frac{1}{1} \frac{4}{1} \frac{1}{1it \ switch} \frac{Condition}{Continuity} \frac{Operate}{Release} Not existed}{Release} Not existed} \frac{Operate}{Release} Not existed}{Release} \frac{Not existed}{Release} Not existed}{Release} \frac{Not existed}{Release} Not existed}{Release} Not existed} \frac{Is the inspection result normal?}{YES >> INSPECTION END} $	Refer to <u>ADP-85, "Com</u>	ponent Inspection".			
NO >> Replace tilt & telescopic switch. Refer to <u>ADP-151, "Removal and Installation"</u> . 4.CHECK INTERMITTENT INCIDENT Refer to <u>GI-38. "Intermittent Incident"</u> . >> INSPECTION END Component Inspection 1.CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. $ \frac{\hline Ilt switch}{1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 &$	•	normal?			
4. CHECK INTERMITTENT INCIDENT Refer to GI-38. "Intermittent Incident". >> INSPECTION END Component Inspection COMPONENT INCIDENT 1. CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. Tilt switch Operate A Tilt switch (upward) Operate A Tilt switch (downward) Operate A tilt switch (downward) Operate Existed Release Not existed Is the inspection result normal? YES YES		9 tologopio owitch	Defer to ADD 151 "	Domoval and Installat	ion"
Refer to GI-38. "Intermittent Incident". >> INSPECTION END Component Inspection 1.CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. Image: style="text-align: center;">Image: style="text-align: center;">Operate 1 Image: style="text-align: center;">Image: style="text-align: center;">Operate 2 Image: style="text-align: center;">Image: style="text-align: center;">Operate 2 Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style="text-ali			Relef to <u>ADP-151, 1</u>	Removal and Installat	<u>1011</u> .
>> INSPECTION END Component Inspection 1.CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. $ \frac{\hline Iit switch}{Terminal} & Condition & Continuity Terminal & Iit switch (upward) & Operate & Existed Release & Not existed 1 & 5 & Tilt switch (downward) & Operate & Existed Release & Not existe$					
Component Inspection NFORD-000000000000000000000000000000000000	Refer to GI-38, "Intermit	ttent Incident".			
Component Inspection NFORD-000000000000000000000000000000000000	>> INSPECTIO				
1. CHECK TILT SWITCH 1. Turn ignition switch OFF. 2. Disconnect till & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. Image: terminal structure Image: terminal structure 1 Image: terminal structure <td></td> <td></td> <td></td> <td></td> <td></td>					
1. Turn ignition switch OFF. 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. Image: style	Joinponent inspec				INFOID:000000006037542
 2. Disconnect tilt & telescopic switch connector. 3. Check continuity between tilt & telescopic switch terminals. Tilt switch Condition Continuity Continuity Terminal A Tilt switch (upward) Operate Existed Release Not existed Release Release Not existed Release Release Release Release Release Release Release Release	1 .CHECK TILT SWITC	Н			
3. Check continuity between tilt & telescopic switch terminals. Tilt switch Condition Continuity Terminal 1 Condition Continuity 1 4 Tilt switch (upward) Operate Existed 1 5 Tilt switch (downward) Operate Not existed 1 5 Tilt switch (downward) Yes Not existed 1 5 Sthe inspection result normal? Not existed YES >> INSPECTION END State State	I. Turn ignition switch	OFF.			
Tilt switch Condition Continuity Terminal 1 4 Tilt switch (upward) Operate Existed 1 4 Tilt switch (upward) Operate Existed 1 5 Tilt switch (downward) Operate Not existed 1 5 Tilt switch (downward) Operate Existed 1 5 Tilt switch (downward) Operate Not existed	Disconnect tilt & tel	escopic switch conn			
Terminal Condition Continuity 1 4 Tilt switch (upward) Operate Existed 1 5 Tilt switch (downward) Operate Existed 5 Tilt switch (downward) Operate Existed 1 5 Tilt switch (downward) Operate Existed 1 5 Tilt switch (downward) Operate Existed 1 1 1 1 1 1	3. Check continuity be	etween tilt & telescop	dic switch terminals.		
Terminal Operate Existed 1 4 Tilt switch (upward) Operate Existed 1 5 Tilt switch (downward) Operate Existed 5 Tilt switch (downward) Operate Existed Is the inspection result normal? YES >> INSPECTION END	Tilt s	witch		1945	
1 1 1 Release Not existed 5 Tilt switch (upward) Operate Existed 5 Tilt switch (downward) Release Not existed Is the inspection result normal? YES >> INSPECTION END Image: Comparison of the co		ninal	- Con	Idition	Continuity
1 Release Not existed 5 Tilt switch (downward) Operate Existed Is the inspection result normal? YES >> INSPECTION END	Ierr				
5 Tilt switch (downward) Operate Existed 1s the inspection result normal? YES >> INSPECTION END	lerr		Tilt switch (upward)	Operate	Existed
Is the inspection result normal? Not existed YES >> INSPECTION END			Tilt switch (upward)	-	
YES >> INSPECTION END		4		Release	Not existed
	1	4		Release Operate	Not existed Existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed
	1 <u>s the inspection result r</u> YES >> INSPECTIO	4 5 <u>normal?</u> DN END	Tilt switch (downward)	Release Operate Release	Not existed Existed Not existed

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TELESCOPIC SWITCH

Component Function Check

INFOID:000000006037543

1. CHECK FUNCTION

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

2. Check telescopic switch signal under the following conditions.

Monitor item	Con	dition	Status
TELESCO SW-FR	Telescopic switch (forward)	Operate	ON
		Release	OFF
TELESCO SW-RR	Telescopic switch (backward)	Operate	ON
TELESCO SW-RR	Telescopic Switch (Dackward)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-86, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037544

1. CHECK TELESCOPIC SWITCH 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 & teleso	copic switch	(-)	Voltage (V) (Approx.)
Connector	Terminals		(, , , , , , , , , , , , , , , , , , ,
M31	2	Ground	5
	3	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.
- Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic switch harness connector.

Automatic drive po	ositioner control unit	Tilt & teleso	copic switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	7	M31	2	Existed
IVIO I	19	1013 1	3	LXISIEU

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

Automatic drive po	sitioner control unit		Continuity
 Connector	Terminal	Ground	Continuity
 M51	7	Ground	Not existed
IND I	19		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>.

TELESCOPIC SWITCH

	DIAGNOSIS	>		
NO →> Repa	ir or replace h	arness or connector.		
CHECK TELE	SCOPIC SWIT	СН		
fer to <u>ADP-87,</u>	"Component I	nspection".		
he inspection I				
ES >> GO T O >> Repla		copic switch. Refer to ADP-15	1 "Removal and Install	ation"
	RMITTENT INC	-		allon.
fer to <u>GI-38, "li</u>				
ioi to <u>oi oo, ii</u>		<u>uont</u> .		
>> INSP	ECTION END			
mponent Ir	nspection			INFOID:000000006037545
	SCOPIC SWIT			
		CH		
Turn ignition		switch connector.		
		It & telescopic switch terminal	S.	
Tologoo	pic switch			
Telesco		Conditio	n	Continuity
Terr	minai			
Terr			Operate	Existed
	ninai 2	Telescopic switch (forward)	Operate Release	Existed Not existed
Terr 1	2			
1		Telescopic switch (forward) Telescopic switch (backward)	Release	Not existed
1 he inspection i ES >> INSP	2 3 result normal? PECTION END		Release Operate Release	Not existed Existed Not existed
1 ne inspection i ES >> INSP	2 3 result normal? PECTION END	Telescopic switch (backward)	Release Operate Release	Not existed Existed Not existed
1 ne inspection i ES >> INSP	2 3 result normal? PECTION END	Telescopic switch (backward)	Release Operate Release	Not existed Existed Not existed

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SEAT MEMORY SWITCH

Component Function Check

INFOID:000000006037546

1. CHECK FUNCTION

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

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

Monitor item		Condition	
MEMORY SW 1	Memory switch 1	Push	ON
MEMORT 3W I	Memory Switch 1	Release	OFF
MEMORY SW 2	Memory switch 2	Push	ON
MEMORT 3W 2	Svv 2 Memory Switch 2	Release	OFF
SET SW	Sat awitch	Push	ON
3E1 3W	Set switch	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-88, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037547

1.CHECK SEAT MEMORY SWITCH SIGNAL

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(
	1			
D5	2	Ground	5	
	3			

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK MEMORY SWITCH CIRCUIT

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

Driver sea	t control unit	Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	27		1	
B514	28	D5	2	Existed
	29		3	

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

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driv	er seat control unit			Continuity
Connector	Termina	al		Continuity
	27		Ground	
B514	28			Not existed
	29			
	iver seat control unit.		. "Removal and Ins	stallation".
NO >> Repair or re CHECK MEMORY S	eplace harness or cor WITCH GROUND CI			
Check continuity betwe			tor and ground.	
Sea	at memory switch			0 . <i>i</i> . <i>i</i> .
Connector	Termina	al	Ground	Continuity
D5	4			Existed
CHECK SEAT MEM Refer to <u>ADP-89, "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D.CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident".	efer to <u>ADP-149, "F</u>	Removal and Insta	<u>llation"</u> .
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO Component Inspec	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END ction	efer to <u>ADP-149, "F</u>	Removal and Insta	<u>llation"</u> . INFOID:000000006037548
Refer to <u>ADP-89, "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END ction	efer to <u>ADP-149, "F</u>	Removal and Insta	
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO COMPONENT INSPECTIO CHECK SEAT MEM . Turn ignition switch . Disconnect seat mo	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END CN END Ction	or.	Removal and Insta	
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38. "Intermi</u> >> INSPECTION COMPONENT INSPECTION CHECK SEAT MEM . Turn ignition switch . Disconnect seat me . Check continuity be	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END Ction ORY SWITCH	or. switch terminals.		INFOID:00000006037548
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO COMPONENT INSPECTIO . CHECK SEAT MEM . Turn ignition switch . Disconnect seat men . Check continuity be <u>Seat men</u>	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END Ction ORY SWITCH OFF. emory switch connect etween seat memory s	or. switch terminals.	Removal and Insta	
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO COMPONENT INSPECTIO . CHECK SEAT MEM . Turn ignition switch . Disconnect seat men . Check continuity be <u>Seat men</u>	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END Ction ORY SWITCH OFF. emory switch connect etween seat memory suitch nory switch	or. switch terminals. C		INFOID:00000006037548
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO COMPONENT INSPECTIO . CHECK SEAT MEM . Turn ignition switch . Disconnect seat men . Check continuity be <u>Seat men</u>	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END Ction ORY SWITCH OFF. emory switch connect etween seat memory suitch	or. switch terminals.	ondition	INFOID:000000006037548
Refer to <u>ADP-89. "Com</u> <u>s the inspection result</u> YES >> GO TO 5. NO >> Replace se D .CHECK INTERMITT Refer to <u>GI-38, "Intermi</u> >> INSPECTIO COMPONENT INSPECTIO . CHECK SEAT MEM . Turn ignition switch . Disconnect seat men . Check continuity be <u>Seat men</u>	ponent Inspection". normal? eat memory switch. Re ENT INCIDENT ttent Incident". ON END Ction ORY SWITCH OFF. emory switch connect etween seat memory suitch nory switch	or. switch terminals. C	ondition	INFOID:000000000000000000000000000000000000

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to <u>ADP-149</u>, "Removal and Installation".

Set switch

3

Push

Release

Ρ

Existed

Not existed

< DTC/CIRCUIT DIAGNOSIS >

POWER WINDOW MAIN 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-III.

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 >> Changeover switch function is OK.

NO >> Refer to <u>ADP-90, "CHANGEOVER SWITCH : Diagnosis Procedure"</u>.

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:000000006037550

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

	+) or mirror remote control switch)	(-)	Voltage (V) (Approx.)
Connector	Terminal	(-)	(Approx.)
D23	23 28	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 power window main switch (door mirror remote control switch) harness connector.

Automatic drive po	Automatic drive positioner control unit		Power window main switch (door mirror remote control switch)	
Connector	Terminal	Connector Terminal		
M51	2	D23	28	Existed
IVIJ I	14	025	23	LXISIEU

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

Automatic drive po	Automatic drive positioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
 M51	2	Ground	Not existed	
	14		Not existed	

Is the inspection result normal?

INEOID:0000000006037549

YES >> Replace automatic drive positioner control unit.		
NO >> Repair or replace harness.	Refer to ADP-147, "Remo	oval and Installation".
3.check power window main switch (door mij	RROR REMOTE CONTR	ROL SWITCH) GROUND
CIRCUIT		
 Turn ignition switch OFF. Check continuity between power window main switch (d tor and ground. 	door mirror remote contro	l switch) harness connec-
Power window main switch (door mirror remote control switch)		
Connector Terminal	Ground	Continuity
D22 7		Existed
Is the inspection result normal?		
YES >> GO TO 4.		
NO >> Repair or replace harness.		
4. CHECK CHANGEOVER SWITCH		
Check changeover switch on power window main switch (do		switch).
Refer to ADP-91, "CHANGEOVER SWITCH : Component In	nspection".	
Is the inspection result normal?		
YES >> GO TO 5. NO >> Replace power window main switch (door m	nirror remote control sw	itch). Refer to PWC-72.
"Removal and Installation".		
5. CHECK INTERMITTENT INCIDENT		
Check intermittent incident.		
Refer to GI-38, "Intermittent Incident".		
>> INSPECTION END		
CHANGEOVER SWITCH : Component Inspec	tion	INFOID:000000006037551
1.CHECK CHANGEOVER SWITCH		-
1. Turn ignition switch OFF.		
 Disconnect power window main switch (door mirror rem Check continuity between power window main switch (continuity between power window main switch) 		
		l switch) terminals
		l switch) terminals.
Power window main switch (door mirror remote		I switch) terminals.
Power window main switch (door mirror remote control switch)	Condition	Continuity
Power window main switch (door mirror remote		Continuity
Power window main switch (door mirror remote control switch)	LEFT	Continuity
Power window main switch (door mirror remote control switch) Terminal	LEFT Other than the above	Continuity Existed Not existed
Power window main switch (door mirror remote control switch) Terminal 23	ch LEFT Other than the above RIGHT	Continuity Existed Not existed Existed
Power window main switch (door mirror remote control switch) Terminal 23 7 28	LEFT Other than the above	Continuity Existed Not existed
Power window main switch (door mirror remote control switch) Terminal 23 23 28 Is the inspection result normal?	ch LEFT Other than the above RIGHT	Continuity Existed Not existed Existed
Power window main switch (door mirror remote control switch) Terminal 23 23 28 Is the inspection result normal? YES >> INSPECTION END	ch LEFT Other than the above RIGHT Other than the above	Continuity Existed Not existed Existed Not existed
Power window main switch (door mirror remote control switch) Terminal Changeover switch 23 7 28 7 Changeover switch Is the inspection result normal? YES >> INSPECTION END NO >> Replace power window main switch (door mirror remote control switch)	ch LEFT Other than the above RIGHT Other than the above	Continuity Existed Not existed Existed Not existed
Power window main switch (door mirror remote control switch) Terminal 23 23 28 Is the inspection result normal? YES YES	ch LEFT Other than the above RIGHT Other than the above	Continuity Existed Not existed Existed Not existed

1.CHECK MIRROR SWITCH FUNCTION

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

ADP-91

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Mirror switch function is OK.

NO >> Refer to <u>ADP-92, "MIRROR SWITCH : Diagnosis Procedure"</u>.

MIRROR SWITCH : Diagnosis Procedure

INFOID:000000006037553

1. CHECK MIRROR SWITCH INPUT SIGNAL

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

((+)		
Power window main switch (door mirror remote control switch)		(-)	Voltage (V) (Approx.)
Connector	Connector Terminal		
	24		F
D22	25	Cround	
D23	26	Ground	5
	27		

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 power window main switch (door mirror remote control switch) harness connector.

Automatic drive p	Automatic drive positioner control unit		Power window main switch (door mirror remote control switch)	
Connector	Terminal	Connector Terminal		
	3	- D23	26	
M51	4		24	Existed
I CIVI	15		25	Existed
	16		27	

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		
N/51	4	Giouna	Not existed	
M51	15		NOT EXISTED	
	16			

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>. A NO >> Repair or replace harness. **3** CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) GROUND

$\textbf{3.} \textbf{CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) GROUND CIRCUIT$

1. Turn ignition switch OFF.

2. Check continuity between power window main switch (door mirror remote control switch) harness connector and ground.

Pov	ver window main switch (do	or mirror remote control switch)		Continuity	-
	Connector	Terminal	Ground	Continuity	L
	D22	7		Existed	
ls the i	nspection result norma	al?		·	E
YES	>> GO TO 4.				
NO	>> Repair or replace	e harness.			
4.сн	ECK MIRROR SWITC	Н			F
Check	mirror swtich on powe	er window main switch (doo	or mirror remote control sv	vitch).	
Refer	o ADP-93, "MIRROR	SWITCH : Component Insp	<u>pection"</u> .		
ls the i	nspection result norma	al?			(
YES	>> GO TO 5.				
NO	>> Replace power <u>"Removal and In</u>		or mirror remote control	switch). Refer to <u>PWC-72.</u>	ŀ
5.сн	ECK INTERMITTENT	INCIDENT			
	intermittent incident.				
Refer	o <u>GI-38, "Intermittent</u>	Incident".			
	>> INSPECTION EI	חא			
					A
MIRF	COR SWITCH : C	omponent Inspection		INF0ID:00000006037554	
1.сн	ECK MIRROR SWITC	н			k
1. Tu	rn ignition switch OFF	-			
		w main switch (door mirror	remote control switch) co	onnector.	

3. Check continuity between power window main switch (door mirror remote control switch) terminals.

Power window main switch (door mirror remote control switch) Terminal		Condition		Continuity	
24			LEFT	Existed	-
24			Other than the above	Not existed	-
25	_		DOWN	Existed	-
25	7		Other than the above	Not existed	-
20		Mirror switch	UP	Existed	-
26			Other than the above	Not existed	-
07			RIGHT	Existed	-
27			Other than the above	Not existed	-

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power window main switch (door mirror remote control switch). Refer to <u>PWC-72.</u> <u>"Removal and Installation"</u>.

ADP-93

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POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000006037555

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
B518	2		Existed

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".
- NO >> Repair or replace harness or connector.

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOS			
TILT & TELESCOPIC	C SWITCH GROUI	ND CIRCUIT	/
Diagnosis Procedure			INFOID:00000006037556
1.CHECK TILT & TELESCO	PIC SWITCH GROUND	CIRCUIT	E
 Turn ignition switch OFF. Disconnect tilt & telescop Check continuity betwee 	bic switch connector.	arness connector and grou	ind.
Tilt & telesc	•		Continuity
Connector M31	Terminal 1	Ground	Existed
Is the inspection result norma YES >> Check intermitte NO >> Repair or replace	nt incident. Refer to <u>GI-38</u>	<u>, "Intermittent Incident"</u> .	F
			C
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SLIDING SENSOR

Component Function Check

INFOID:000000006037560

1. CHECK FUNCTION

- 1. Select "SLIDE PULSE" in "Data monitor" mode with CONSULT-III.
- 2. Check sliding sensor signal under the following conditions.

Monitor item	Con	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-96, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037561

1.CHECK SLIDING SENSOR SIGNAL

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

	(+) Driver seat control unit		Condition		Signal (Reference value)
Connector	Terminals				
B514	19	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. Refer to <u>ADP-146, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Sliding motor		
Connector	Terminal	Connector	Terminal	Continuity	
B514	19	B519	19	Existed	

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

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

	r agat gantral unit					
Connector	r seat control unit Termina	al	G	round		Continuity
B514	19		0			Not existed
the inspection result r	_					
YES >> GO TO 3.						
	place harness or cor	nnector.				
CHECK SLIDING SE	NSOR POWER SUF	PPLY				
Connect driver seat	control unit connect	or.				
. Turn ignition switch	ON.					
. Check voltage betw	een sliding motor ha	arness conne	ector and g	round.		
	(+)					
	Sliding motor			(-)		Voltage (V)
Connector	Termina	als				(Approx.)
B519	33		G	round		12
the inspection result r			_			
YES >> GO TO 5.						
NO >> GO TO 4.						
CHECK SLIDING SE	NSOR POWER SUP	PPLY CIRCL	UIT			
	OFF.					
. Turn ignition switch . Disconnect driver se	eat control unit conne					
. Turn ignition switch . Disconnect driver se			rness conr	nector and slid	ling mot	tor harness cor
. Turn ignition switch . Disconnect driver se	eat control unit conne tween driver seat co				ling mot	
 Turn ignition switch Disconnect driver se Check continuity be 	eat control unit conne tween driver seat co		Sliding r		ling mot	tor harness cor Continuity
 Turn ignition switch Disconnect driver set Check continuity be 	eat control unit conne tween driver seat con control unit	ntrol unit hai	Sliding r	notor	ling mot	
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 	eat control unit conne tween driver seat con control unit Terminal 33	ntrol unit hai Conne B51	Sliding r ector	motor Terminal 33		Continuity
Turn ignition switch Disconnect driver se Check continuity be Driver seat Connector B514	eat control unit conne tween driver seat con control unit Terminal 33	ntrol unit hai Conne B51	Sliding r ector	motor Terminal 33		Continuity
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be 	eat control unit conne tween driver seat con control unit Terminal 33	ntrol unit hai Conne B51	Sliding r ector	motor Terminal 33		Continuity Existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive 	eat control unit connectiveen driver seat control unit Terminal 33 tween driver seat co r seat control unit Terminal Termina	Conne B51 Ontrol unit ha	Sliding r ector 9 arness conr	motor Terminal 33		Continuity Existed Continuity
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Drive Drive B514 	eat control unit connectiveen driver seat control unit Terminal 33 Atween driver seat coordinates of the seat control unit Terminal 33 Atween driver seat coordinates of the seat control unit Termina 33	Conne B51 Ontrol unit ha	Sliding r ector 9 arness conr	motor Terminal 33 nector and gro		Continuity Existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Drive Drive B514 Sthe inspection result result result 	eat control unit connectiveen driver seat control unit Control unit Terminal 33 Atween driver seat co r seat control unit Termina 33 Cormal?	ntrol unit har Conne B51 ontrol unit har al	Sliding r ector 9 Irness conr G	motor Terminal 33 nector and gro	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Connector B514 the inspection result r YES >> Replace drive 	eat control unit connectiveen driver seat control unit Terminal 33 tween driver seat co r seat control unit Termina 33 normal? ver seat control unit.	Conne B51 ontrol unit ha	Sliding r ector 9 Irness conr G	motor Terminal 33 nector and gro	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Connector B514 Check continuity be Connector B514 State inspection result result results YES >> Replace drive NO >> Repair or result 	eat control unit connectiveen driver seat control unit Control unit Terminal 33 Etween driver seat co r seat control unit Termina 33 Pormal? Ver seat control unit. Eplace harness or cor	Conne B51 ontrol unit ha	Sliding r ector 9 Irness conr G	motor Terminal 33 nector and gro	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Check continuity be Drive Connector B514 Check continuity be Drive Connector B514 State inspection result result result results YES >> Replace drive NO >> Repair or result 	eat control unit connectiveen driver seat control unit Terminal 33 etween driver seat control unit reseat control unit Termina 33 etween driver seat control unit Termina 33 etween driver seat control unit Seplace harness or control unit. Explace harness or control unit ENSOR GROUND	Conne B51 ontrol unit ha	Sliding r ector 9 Irness conr G	motor Terminal 33 nector and gro	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Connector B514 Check continuity be Drive Connector B514 Check continuity be Connector B514 Check continuity be Connector B514 Check continuity be Connector B514 Check station result r Check station result r CHECK SLIDING SE Turn ignition switch 	eat control unit connectiveen driver seat control unit Terminal 33 etween driver seat control unit Termina 33 etween driver seat control unit Termina 33 etween arress or control unit. Eplace harness or control unit. ENSOR GROUND OFF.	Conne B51 ontrol unit hat al Refer to AD nnector.	Sliding r ector 9 arness conr G DP-146, "Re	motor Terminal 33 nector and gro round	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Connector B514 Check continuity be Drive Connector B514 Check continuity be Connector B514 Check continuity be Connector B514 Check continuity be Connector B514 Check station result r Check station result r CHECK SLIDING SE Turn ignition switch 	eat control unit connectiveen driver seat control unit Terminal 33 etween driver seat control unit reseat control unit Termina 33 etween driver seat control unit Termina 33 etween driver seat control unit Seplace harness or control unit. Explace harness or control unit ENSOR GROUND	Conne B51 ontrol unit hat al Refer to AD nnector.	Sliding r ector 9 arness conr G DP-146, "Re	motor Terminal 33 nector and gro round	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Connector B514 Check continuity be Connector B514 Connector B514 Check continuity be Connector B514 Turn ignition switch Check continuity be 	eat control unit connectiveen driver seat control unit Terminal 33 etween driver seat control unit Termina 33 etween driver seat control unit Termina 33 etween arress or control unit. Eplace harness or control unit. ENSOR GROUND OFF.	Conne B51 ontrol unit hat al Refer to AD nnector.	Sliding r ector 9 arness conr G DP-146, "Re	motor Terminal 33 nector and gro round	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Drive Connector B514 Check continuity be Connector B514 Connector B514 Check continuity be Connector B514 Turn ignition switch Check continuity be 	eat control unit connectiveen driver seat control unit Terminal 33 tween driver seat co r seat control unit r seat control unit Termina 33 normal? ver seat control unit. eplace harness or cor ENSOR GROUND OFF. etween sliding sensor	Conne B51 ontrol unit ha al Refer to AD nnector.	Sliding r ector 9 arness conr G DP-146, "Re onnector an	motor Terminal 33 nector and gro round	bund.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver set Check continuity be Driver seat Connector B514 Check continuity be Connector B514 Connector B514 Check continuity be Connector B514 Check continuity be Check SLIDING SE Turn ignition switch Check continuity be 	eat control unit connectiveen driver seat control unit Terminal 33 Atween driver seat control unit Termina 33 Atween driver seat control unit Termina 33 Atween seat control unit Explace harness or cortex Control unit Control u	Conne B51 ontrol unit ha al Refer to AD nnector.	Sliding r ector 9 arness conr G DP-146, "Re onnector an	motor Terminal 33 nector and gro round emoval and In	bund.	Continuity Existed Continuity Not existed

RECLINING SENSOR

Component Function Check

INFOID:000000006037562

1. CHECK FUNCTION

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

2. Check reclining sensor signal under the following conditions.

Monitor item	Con	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-98, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037563

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 Connector		(-)	Condition		Signal (Reference value)
B514	20	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. Refer to <u>ADP-146, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	control unit	Reclinir	ng motor	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B514	20	B507	20	Existed	

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

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver s	eat control unit			Continuity
Connector	Termina	al	Ground	
B514	20			Not existed
<u>he inspection result no</u> ES >> GO TO 3. O >> Repair or repl CHECK RECLINING S	ace harness or cor			
Connect driver seat c Turn ignition switch C Check voltage betwee	N.		nector and ground.	
	(+)			Voltage (V/)
Rec	lining motor		(-)	Voltage (V) (Approx.)
Connector	Termina	ls		
B507 he inspection result no	33		Ground	12
O >> GO TO 4. CHECK RECLINING S	ENSOR POWER S	SUPPLY CIF	RCUIT	
CHECK RECLINING S Turn ignition switch O Disconnect driver sea	FF. t control unit conne	ector.	RCUIT	lining motor harness o
CHECK RECLINING S Turn ignition switch C Disconnect driver sea Check continuity betw	FF. t control unit conne een driver seat co	ector.		
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor.	FF. t control unit conne een driver seat co	ector.	rness connector and rec Reclining motor	lining motor harness o
CHECK RECLINING S Turn ignition switch C Disconnect driver sea Check continuity betw tor. Driver seat co	FF. t control unit conne reen driver seat co	ector. ntrol unit ha	rness connector and rec Reclining motor ctor Terminal	
CHECK RECLINING S Turn ignition switch C Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514	FF. t control unit conne veen driver seat co ntrol unit Terminal 33	ector. ntrol unit ha Conne B50	rness connector and rec Reclining motor ctor Terminal	Continuity Existed
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514 Check continuity betw	FF. t control unit conne veen driver seat co ntrol unit Terminal 33	ector. ntrol unit ha Conne B50	rness connector and rec Reclining motor ctor Terminal 7 33	Continuity Existed und.
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514 Check continuity betw	FF. t control unit conne veen driver seat co ntrol unit Terminal 33 veen driver seat co	ector. ntrol unit ha Conne B50 ntrol unit ha	rness connector and rec Reclining motor ctor Terminal 7 33	Continuity Existed
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514 Check continuity betw Driver s	FF. t control unit conne veen driver seat co ntrol unit Terminal 33 veen driver seat co eat control unit	ector. ntrol unit ha Conne B50 ntrol unit ha	rness connector and rec Reclining motor ctor Terminal 7 33 rness connector and gro	Continuity Existed und.
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw Check cont	FF. t control unit conne veen driver seat co ntrol unit Terminal 33 veen driver seat co eat control unit Termina 33 rmal? rr seat control unit. ace harness or cor ENSOR GROUND	Conne B50 ntrol unit ha	rness connector and rec Reclining motor ctor Terminal 7 33 rness connector and gro	Continuity Existed und. Continuity Not existed
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw CHECK RECLINING S Turn ignition switch O Check continuity betw	FF. t control unit conne veen driver seat co ntrol unit Terminal 33 veen driver seat co eat control unit Termina 33 rmal? rr seat control unit. ace harness or cor ENSOR GROUND FF.	Conne B50 ntrol unit ha	rness connector and rec Reclining motor ctor Terminal 7 33 rness connector and gro Ground P-146, "Removal and In	Continuity Existed und. Continuity Not existed Stallation".
CHECK RECLINING S Turn ignition switch O Disconnect driver sea Check continuity betw tor. Driver seat co Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw Driver s Connector B514 Check continuity betw CHECK RECLINING S Turn ignition switch O Check continuity betw	FF. t control unit connerveen driver seat control unit Terminal 33 veen driver seat control unit eat control unit Terminal 33 veen driver seat control unit. ace harness or cortrol unit. Ace harness or cortr	Conne B50 ntrol unit ha al Refer to AD nnector.	rness connector and rec Reclining motor ctor Terminal 7 33 rness connector and gro Ground P-146, "Removal and In	Continuity Existed und. Continuity Not existed

NO >> Repair or replace harness or connector.

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:000000006037564

1. CHECK FUNCTION

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

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

Monitor item	Con	Value	
	Seat lifting (front)	Operate (up)	Change (increase) ^{*1}
LIFT FR PULSE		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-100, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037565

1. CHECK LIFTING SENSOR CONTROL UNIT OUTPUT SIGNAL

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

(+ Lifting sensed Connector) or control unit Terminals	(-)	Condition		Voltage (V) (Approx.)
B515	79	Ground	Seat Lifting (front)	Operate	10mSec/div
				Other than the above	0 or 12

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK LIFTING SENSOR CONTROL UNIT CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Lifting sensor control unit		
Connector	Terminal	Connector Terminal		Continuity	
B514	22	B515	79	Existed	

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

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

	Driver seat			Cround		- Ground C		Continuity
Conne		Termir	al	Ground				
B51		22				Not existed		
NO >> Rep CHECK LIFT	lace driver se air or replace ING SENSO	eat control unit harness or co R CONTROL U	nnector. JNIT INPUT S	P-146, "Remova GIGNAL connector and				
(*	+)							
	or control unit	(-)				oltage (V)		
Connector	Terminals	-			(Approx.)		
B515	81	Ground	Seat Lifting (front)	Operate		MSec/div		
				Other than the above		7 or 12		
NO >> GO	lace lifting se TO 4.	ensor control ur		<u>DP-148, "Remo</u>	val and Installa	<u>ation"</u> .		
YES >> Rep NO >> GO •CHECK LIFT • Turn ignition • Disconnect I	lace lifting se TO 4. ING SENSO switch OFF. lifting sensor	ensor control un R (FRONT) CII	RCUIT nnector and lif	fting motor (fron	t) connector.	ation". motor (front) har		
YES >> Rep NO >> GO CHECK LIFT Turn ignition Disconnect I Check conti connector.	lace lifting se TO 4. ING SENSO switch OFF. lifting sensor nuity betwee	ensor control ur R (FRONT) CII control unit co n lifting senso	RCUIT nnector and lif r control unit	fting motor (fron harness conned	t) connector. ctor and lifting			
YES >> Rep NO >> GO •CHECK LIFT • Turn ignition • Disconnect I • Check conti connector.	lace lifting se TO 4. ING SENSO switch OFF. lifting sensor nuity betwee	ensor control ur R (FRONT) CII control unit co n lifting senso	RCUIT nnector and lif r control unit	fting motor (fron harness connec Lifting motor (front)	t) connector. ctor and lifting			
YES >> Rep NO >> GO •CHECK LIFT Disconnect I Check conti connector.	lace lifting se TO 4. ING SENSO switch OFF. lifting sensor nuity betwee	ensor control ur R (FRONT) CI control unit co n lifting senso	RCUIT nnector and lif r control unit	fting motor (fron harness connec Lifting motor (front)	t) connector. ctor and lifting	motor (front) har		
YES >> Rep NO >> GO •CHECK LIFT Turn ignition Disconnect I Check conti connector.	lace lifting se TO 4. ING SENSO switch OFF. lifting sensor nuity betwee	ensor control un R (FRONT) CII control unit co in lifting senso ol unit Terminal 81	RCUIT nnector and lif r control unit Connect B512	fting motor (fron harness connec Lifting motor (front)	t) connector. ctor and lifting) Terminal 22	motor (front) har Continuity		
YES >> Rep NO >> GO •CHECK LIFT • Turn ignition • Disconnect I • Check conti connector. • Lifti Connector	lace lifting se TO 4. ING SENSO switch OFF. lifting sensor nuity betwee	ensor control un R (FRONT) CII control unit co en lifting senso ol unit Terminal 81 n driver seat co	RCUIT nnector and lif r control unit Connect B512	fting motor (fron harness connec Lifting motor (front) tor	t) connector. ctor and lifting) Terminal 22	motor (front) har Continuity Existed		
YES >> Rep NO >> GO •CHECK LIFT Disconnect I Check conti connector.	lace lifting se TO 4. ING SENSO a switch OFF. lifting sensor nuity betwee ng sensor contror or nuity betwee Lifting senso	ensor control un R (FRONT) CII control unit co en lifting senso ol unit Terminal 81 n driver seat co	RCUIT nnector and lif r control unit Connect B512 ontrol unit harr	fting motor (fron harness connec Lifting motor (front) tor	t) connector. ctor and lifting) Terminal 22	motor (front) har Continuity		
YES >> Rep NO >> GO •CHECK LIFT • Turn ignition • Disconnect I • Check conti • Check conti • Connector. • Eifti • Connector • B515 • Check contin	lace lifting set TO 4. ING SENSO is switch OFF. lifting sensor nuity betweet ng sensor contro- or Lifting senso ector	ensor control un R (FRONT) CII control unit co en lifting senso ol unit Terminal 81 n driver seat co r control unit Termir 81	RCUIT nnector and lif r control unit Connect B512 ontrol unit harr	fting motor (fron harness connec Lifting motor (front) tor	t) connector. ctor and lifting) Terminal 22	motor (front) har Continuity Existed		
YES >> Rep NO >> GO .CHECK LIFT Disconnect I Check conti connector. <u>Lifti</u> Connector B515 Check conti <u>Connector</u> B515 Check conti <u>Connector</u> B515 . Check conti B515 . Check conti	lace lifting set TO 4. ING SENSO is witch OFF. lifting sensor nuity betweet ng sensor contro- or Lifting senso ector 15 result norma TO 5. air or replace ING SENSO is witch OFF.	ensor control un R (FRONT) Cli control unit co en lifting senso ol unit Terminal 81 n driver seat co r control unit Termir 81 al? e harness or co R (FRONT) GF	RCUIT Innector and life r control unit Connect B512 Dontrol unit harr Ital Innector. ROUND	fting motor (fron harness connec Lifting motor (front) tor	t) connector. ctor and lifting	motor (front) har Continuity Existed Continuity		
YES >> Rep NO >> GO .CHECK LIFT Disconnect I Check conti connector. <u>Lifti</u> Connector B515 Check conti <u>Connector</u> B515 Check conti <u>Connector</u> B515 . Check conti B515 . Check conti	lace lifting set TO 4. ING SENSO switch OFF. lifting sensor nuity betweet Lifting senso ector 15 result norma TO 5. air or replace ING SENSO switch OFF. nuity betweet	ensor control un R (FRONT) Cli control unit co en lifting senso ol unit Terminal 81 n driver seat co r control unit Termir 81 al? e harness or co R (FRONT) GF n lifting motor (RCUIT Innector and life r control unit Connect B512 Dontrol unit harr Ital Innector. ROUND	fting motor (fron harness connect Lifting motor (front) tor ness connector Ground	t) connector. ctor and lifting	motor (front) har Continuity Existed Continuity		
YES >> Rep NO >> GO .CHECK LIFT Disconnect I Check conti connector. <u>Lifti</u> Connector B515 Check conti <u>Connector</u> B515 Check conti <u>Connector</u> B515 . Check conti B515 . Check conti	lace lifting set TO 4. ING SENSO a switch OFF. lifting sensor nuity betweet ng sensor contro- or Lifting senso ector 15 result norma TO 5. air or replace ING SENSO a switch OFF. nuity betweet Lifting mo	ensor control un R (FRONT) Cli control unit co en lifting senso ol unit Terminal 81 n driver seat co r control unit Termir 81 al? e harness or co R (FRONT) GF n lifting motor (RCUIT Innector and life r control unit Connect B512 Dontrol unit harr Inal Innector. ROUND front) harness	fting motor (fron harness connect Lifting motor (front) tor ness connector Ground	t) connector. ctor and lifting	motor (front) har Continuity Existed Continuity		

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace lifting motor (front). .
- NO >> Repair or replace harness or connector.

< DTC/CIRCUIT DIAGNOSIS >	
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LIFTING SENSOR (REAR)

Component Function Check

1.CHECK FUNCTION

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

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

Monitor item		Condition	Value	
		Operate (up)	Change (increase) ^{*1}	
IFT 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 ADP-103, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK LIFTING SENSOR CONTROL UNIT OUTPUT SIGNAL

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

(+	+)					
Lifting sensed	or control unit	(-)	Co	ndition	Voltage (V) (Approx.)	
Connector	Terminals				(
B515	82	Ground	Seat Lifting (rear)	Operate	10mSec/div 5V/div JMJIA3675ZZ	AD K
				Other than the above	0 or 12	

Is the inspection result normal?

YES >> GO TO 2.

NO >> GO TO 3.

2.check lifting sensor control unit circuit

1. Turn ignition switch OFF.

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

 connector.

Driver sea	at control unit	Lifting sense	Continuity	P	
Connector	Terminal	Connector	Terminal	Continuity	
B514	21	B515	82	Existed	-

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

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INFOID:000000006037566

INFOID:000000006037634

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B514	21		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SENSOR CONTROL UNIT INPUT SIGNAL

Read the voltage signal lifting sensor control unit harness connector and ground with an oscilloscope.

	+) or control unit Terminals	(-)	Condition		Voltage (V) (Approx.)
B515	80	Ground	Seat Lifting (rear)	Operate	10mSec/div
				Other than the above	7 or 12

Is the inspection result normal?

YES >> Replace lifting sensor control unit. Refer to <u>ADP-148</u>, "Removal and Installation".

NO >> GO TO 4.

4. CHECK LIFTING SENSOR (REAR) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect lifting sensor control unit connector and lifting motor (rear) connector.

3. Check continuity between lifting sensor control unit harness connector and lifting motor (rear) harness connector.

Lifting sense	nsor control unit Lifting mo		Lifting sensor control unit		Lifting motor (rear)		
Connector	Terminal	Connector Terminal		Continuity			
B515	80	B510	21	Existed			

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

Lifting sense	or control unit		Continuity	
Connector	Connector Terminal		Continuity	
B515	80		Not existed	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

5.CHECK LIFTING SENSOR (REAR) GROUND

1. Turn ignition switch OFF.

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

Lifting mo	otor (rear)		Continuity	
Connector	Connector Terminal		Continuity	
B510	B510 44		Existed	

Is the inspection result normal?

LIFTING SENSOR (REAR)	
< DTC/CIRCUIT DIAGNOSIS >	
YES >> Replace lifting motor (rear).NO >> Repair or replace harness or connector.	A
	В
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	ADP
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TILT SENSOR

Component Function Check

INFOID:000000006037568

1. CHECK FUNCTION

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

2. Check tilt sensor signal under the following conditions.

Monitor item	Con	Value	
	Steering column	Operate (up)	Change (increase) ^{*1}
TILT PULSE		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-106, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037569

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.)
B514	30	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. Refer to <u>ADP-146, "Removal and Installation"</u>.

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.

Driver seat	control unit	Tilt motor		Continuity
Connector	Terminal	Connector Terminal		Continuity
B514	30	M48	5	Existed

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

Driver seat	control unit		Continuity
Connector	Connector Terminal		Continuity
B514	30		Not existed

TILT SENSOR

he inspection result	normal?			
'ES >> GO TO 3.				
•	eplace harness or cor OR POWER SUPPLY			
Turn ignition switch Check voltage betw	ON. veen tilt motor harnes	s connector and arc	ound.	
	(+)			Voltage (V)
	Tilt motor		(-)	(Approx.)
Connector	Termina	ls		10
M48 the inspection result	4		Ground	12
YES >> GO TO 5. NO >> GO TO 4.	DR POWER SUPPLY	CIRCUIT		
Check continuity be connector.	tic drive positioner co atween automatic driv	e positioner control	unit harness connec	tor and tilt motor harn
Automatic drive po	sitioner control unit	Tilt	Tilt motor Continuity	
Connector	Terminal	Connector	Terminal	
M52	27	M48	4	Existed
Check continuity be	etween automatic driv	e positioner control	unit harness connec	ctor and ground.
-				
Automatic d	rive positioner control unit			
Automatic d Connector	rive positioner control unit	al	Ground	Continuity
	-	al	Ground	Continuity Not existed
Connector	Termina 27	ai	Ground	
Connector M52 the inspection result (ES >> Replace au IO >> Repair or re CHECK TILT SENSO	Termina 27 normal? itomatic drive position eplace harness or cor DR GROUND CIRCU	ner control unit. Refe		
Connector M52 the inspection result of (ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa	Termina 27 normal? itomatic drive position eplace harness or cor DR GROUND CIRCU OFF. tic drive positioner co	ner control unit. Refe nnector. IT ontrol unit connector	er to <u>ADP-147, "Rem</u>	Not existed
Connector M52 the inspection result of (ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector.	Termina 27 normal? itomatic drive position eplace harness or cor DR GROUND CIRCU OFF. tic drive positioner co	ner control unit. Refe nnector. IT ontrol unit connector e positioner control	er to <u>ADP-147, "Rem</u>	Not existed
Connector M52 the inspection result of (ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector.	Termina 27 normal? itomatic drive position eplace harness or cor OR GROUND CIRCU OFF. tic drive positioner co etween automatic driv	ner control unit. Refe nnector. IT ontrol unit connector e positioner control	er to <u>ADP-147, "Rem</u> unit harness connec	Not existed
Connector M52 the inspection result (ES >> Replace au NO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M51	Termina 27 normal? normal? normal? normal? normal? Normal DR GROUND CIRCU OFF. tic drive positioner co etween automatic driv sitioner control unit Terminal 20	er control unit. Refe nector. IT ontrol unit connector e positioner control Tilt Connector M48	er to <u>ADP-147, "Rem</u> unit harness connect motor <u>Terminal</u> 6	Not existed Not existed Not existed Not existed Continuity Existed
Connector M52 the inspection result (ES >> Replace au NO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M51	Termina 27 normal? Itomatic drive position eplace harness or cor DR GROUND CIRCU OFF. Itic drive positioner co etween automatic driv	er control unit. Refe nector. IT ontrol unit connector e positioner control Tilt Connector M48	er to <u>ADP-147, "Rem</u> unit harness connect motor <u>Terminal</u> 6	Not existed Not existed Not existed Not existed Continuity Existed
Connector M52 the inspection result of YES >> Replace au NO >> Repair or result CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M51 Check continuity be	Termina 27 normal? normal? normal? normal? normal? Normal DR GROUND CIRCU OFF. tic drive positioner co etween automatic driv sitioner control unit Terminal 20	er control unit. Refe nector. IT ontrol unit connector e positioner control Tilt Connector M48	er to <u>ADP-147, "Rem</u> unit harness connect motor <u>Terminal</u> 6	Not existed Not existed Not existed Coval and Installation". Continuity Existed Continuity Existed Corr and ground.
Connector M52 the inspection result of YES >> Replace au NO >> Repair or result CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M51 Check continuity be	Termina 27 normal? Itomatic drive position eplace harness or cor OR GROUND CIRCU OFF. tic drive positioner co etween automatic driv sitioner control unit Terminal 20 etween automatic driv	er control unit. Refe nector. IT ontrol unit connector e positioner control Tilt Connector M48 re positioner control	er to <u>ADP-147, "Rem</u> unit harness connect motor <u>Terminal</u> 6	Not existed Not existed Not existed Not existed Continuity Existed

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

TELESCOPIC SENSOR

Component Function Check

INFOID:000000006037570

1. CHECK FUNCTION

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

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-108, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037571

1.CHECK TELESCOPIC SENSOR SIGNAL

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

(+) Driver seat o				Voltage (V) (Approx.)		
Connector	Terminals				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B514	31	Ground	Steering col- umn	Operate Other than the	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

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	control unit Telescopic motor		Telescopic motor		
Connector	Terminal	Connector Terminal		Continuity	
B514	31	M49	5	Existed	

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

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver se			1			
	at control unit		-			Continuity
Connector	Termina	al	-	Ground		-
B514	31					Not existed
the inspection result nor (ES >> GO TO 3. IO >> Repair or repla CHECK TELESCOPIC Connect driver seat co Turn ignition switch Of	ice harness or co SENSOR POWEI ntrol unit connect	R SUPPLY or.				
. Check voltage betwee	n telescopic moto	r harness o	connector a	and ground.		
	(+)					
Teles	copic motor			(-)		Voltage (V) (Approx.)
Connector	Termina	als				(II)
M49	4			Ground		12
Turn ignition switch OF Disconnect automatic Check continuity betw harness connector.	drive positioner co een automatic driv		er control		nnector	and telescopic mo
Automatic drive positic		Con		pic motor Terminal		Continuity
	Terminal 27		nector 149	rerminar 4		Existed
M62		IV	143	4		Existed
M52		o position	or control i	init harness cor	noctor '	and around
		ve position	er control u	unit harness cor	nector a	and ground.
. Check continuity betw		•	er control u	unit harness cor	nector a	-
. Check continuity betw	en automatic driv		-	unit harness cor Ground	inector a	and ground. Continuity
Automatic drive Connector M52	een automatic driv positioner control unit Termina 27		-			-
Automatic drive Connector M52 S the inspection result nor YES >> Replace autom NO >> Repair or repla D.CHECK TELESCOPIC Turn ignition switch Of Disconnect automatic Check continuity betw	een automatic driv positioner control unit Termini 27 mal? natic drive position ice harness or con SENSOR GROUN F. drive positioner co	al ner control nnecter. ND CIRCU	unit. Refer IT connector.	Ground ^r to <u>ADP-147, "F</u>	Removal	Continuity Not existed and Installation".
Automatic drive Connector M52 Sthe inspection result nor YES >> Replace autor NO >> Repair or repla CHECK TELESCOPIC Turn ignition switch OF Disconnect automatic Check continuity betw harness connector.	een automatic driv positioner control unit Termina 27 mal? matic drive position ice harness or con SENSOR GROUN FF. drive positioner co sen automatic driv	al ner control nnecter. ND CIRCU	unit. Refer IT connector. er control	Ground r to <u>ADP-147, "F</u> unit harness cor	Removal	Continuity Not existed and Installation".
Check continuity between Automatic drive Connector M52 sthe inspection result nor YES >> Replace auton NO >> Repair or repla O.CHECK TELESCOPIC Turn ignition switch Of Disconnect automatic Check continuity between harness connector. Automatic drive position	een automatic driv positioner control unit Termin: 27 mal? natic drive position ice harness or con SENSOR GROUN F. drive positioner co een automatic driv	al ner control nnecter. ND CIRCU ontrol unit o ve position	unit. Refer IT connector. er control o Telescop	Ground to <u>ADP-147, "F</u> unit harness com	Removal	Continuity Not existed and Installation".
Check continuity between Automatic drive Connector M52 sthe inspection result nor YES >> Replace autom NO >> Repair or repla CHECK TELESCOPIC Turn ignition switch OF Disconnect automatic Check continuity between harness connector. Automatic drive position Connector	een automatic driv positioner control unit Termina 27 mal? natic drive position ce harness or con SENSOR GROUN F. drive positioner co een automatic driv ner control unit Terminal	al ner control nnecter. ND CIRCU ontrol unit ove position	unit. Refer IT connector. er control Telescop nector	Ground r to <u>ADP-147, "F</u> unit harness con pic motor Terminal	Removal	Continuity Not existed and Installation". and telescopic mo
Check continuity between Automatic drive Connector M52 Connector YES >> Replace autom NO >> Repair or replace CHECK TELESCOPIC Turn ignition switch OF Disconnect automatic Check continuity between harness connector. Automatic drive position Connector M51	een automatic driv positioner control unit Termin: 27 mal? natic drive position ice harness or con SENSOR GROUN FF. drive positioner co een automatic driv ner control unit Terminal 20	al ner control nnecter. ND CIRCU ontrol unit of ve position	unit. Refer IT connector. ter control to Telescop nector	Ground r to <u>ADP-147, "F</u> unit harness com pic motor Terminal 6		Continuity Not existed and Installation". and telescopic mo Continuity Existed
Check continuity between Automatic drive Connector M52 sthe inspection result nor YES >> Replace autom NO >> Repair or repla CHECK TELESCOPIC Turn ignition switch OF Disconnect automatic Check continuity between harness connector. Automatic drive position Connector	een automatic driv positioner control unit Termin: 27 mal? natic drive position ice harness or con SENSOR GROUN FF. drive positioner co een automatic driv ner control unit Terminal 20	al ner control nnecter. ND CIRCU ontrol unit of ve position	unit. Refer IT connector. ter control to Telescop nector	Ground r to <u>ADP-147, "F</u> unit harness com pic motor Terminal 6		Continuity Not existed and Installation". and telescopic mo Continuity Existed
Check continuity between Automatic drive Connector M52 sthe inspection result nor YES >> Replace autom NO >> Repair or repla O.CHECK TELESCOPIC Turn ignition switch OF Disconnect automatic Check continuity between harness connector. Automatic drive position Connector M51 Check continuity between Automatic drive position Automatic drive position	een automatic driv positioner control unit Termin: 27 mal? natic drive position ice harness or con SENSOR GROUN F. drive positioner co een automatic driv ner control unit Terminal 20 een automatic driv	al ner control nnecter. ND CIRCU ontrol unit of ve position Com M	unit. Refer IT connector. ter control to Telescop nector 149 er control to	Ground r to <u>ADP-147, "F</u> unit harness com pic motor Terminal 6 unit harness cor		Continuity Not existed and Installation". and telescopic mo Continuity Existed
Automatic drive Automatic drive Connector M52 Sthe inspection result nor YES >> Replace autom NO >> Repair or repla CHECK TELESCOPIC Turn ignition switch Of Disconnect automatic Check continuity betw harness connector. Automatic drive positic Connector M51 Check continuity betw	een automatic driv positioner control unit Termina 27 mal? natic drive position SENSOR GROUN F. drive positioner co sen automatic driv ner control unit Terminal 20 een automatic driv	al ner control nnecter. ND CIRCU ontrol unit of ve position Com M	unit. Refer IT connector. ter control to Telescop nector 149 er control to	Ground r to <u>ADP-147, "F</u> unit harness com pic motor Terminal 6		Continuity Not existed and Installation" Continuity Continuity Existed and ground.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

DTC/CIRCUIT DIAGNOSIS	>>			
AIRROR SENSOR				
_				
RIVER SIDE : Compo	nent Function (Check		INFOID:000000006037572
.CHECK FUNCTION				
. Select "MIR/SEN LH U-D" . Check mirror sensor (drive				111.
Monitor item		Condition		Value
MIR/SEN LH U-D	Door mirror (dri	ror (driver side) Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley) Change between		to peak)
MIR/SEN LH R-L	Door mirror (ari	Door mirror (driver side) Change between 0.6 [V] (close to left ec 3.4 [V] (close to right e		to left edge)
the indication normal? YES >> INSPECTION ENINO >> Perform diagnosis				nosis Procedure"
RIVER SIDE : Diagnos		<u>חס , דד יסא</u>	THEIR OIDE . Diagl	
_				INFOID:000000006037573
CHECK DOOR MIRROR (I Turn ignition switch OFF.	DRIVER SIDE) SENS	SOR POWER	SUPPLY	
 Disconnect door mirror (dr Turn ignition switch ON. Check voltage between do 	·		nector and ground.	
(+)				Voltage (V)
Door mirror (c	,		(-)	(Approx.)
Connector D3	Terminals 23		Ground	5
the inspection result normal	-			5
YES >> GO TO 3. NO >> GO TO 2.	÷			
CHECK DOOR MIRROR (I	ORIVER SIDE) SENS	SOR POWER	SUPPLY CIRCUIT	
Turn ignition switch OFF. Disconnect automatic driv	re positioner control u n automatic drive po	init connector.		onnector and door mirror
Turn ignition switch OFF. Disconnect automatic driv Check continuity betweer	re positioner control u n automatic drive po nector.	init connector. ositioner conti		
Turn ignition switch OFF. Disconnect automatic driv Check continuity between (driver side) harness conn Automatic drive positioner of Connector	re positioner control u n automatic drive po nector. control unit Terminal	Init connector. Disitioner contr Door mirror Connector	ol unit harness co (driver side) Terminal	Continuity
Turn ignition switch OFF. Disconnect automatic driv Check continuity between (driver side) harness conn Automatic drive positioner of	re positioner control u n automatic drive po nector. control unit Terminal 21	Door mirror D3	rol unit harness co (driver side) Terminal 23	Continuity Existed
Turn ignition switch OFF. Disconnect automatic driv Check continuity between (driver side) harness conn Automatic drive positioner Connector M51 Check continuity between	re positioner control un n automatic drive po nector. control unit Terminal 21 automatic drive posi	Door mirror D3	rol unit harness co (driver side) Terminal 23	Continuity Existed
Disconnect automatic driv Check continuity between (driver side) harness conn Automatic drive positioner Connector M51 Check continuity between Automatic drive posit	re positioner control un n automatic drive ponector.	Door mirror Door mirror D3 tioner control	rol unit harness co (driver side) Terminal 23 unit harness connec	Continuity Existed
 Turn ignition switch OFF. Disconnect automatic driv Check continuity between (driver side) harness conn Automatic drive positioner of Connector M51 Check continuity between 	re positioner control un n automatic drive po nector. control unit Terminal 21 automatic drive posi	Door mirror Door mirror D3 tioner control	rol unit harness co (driver side) Terminal 23	Continuity Existed Ctor and ground.

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>. NO >> Repair or replace harness or connector.

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	Automatic drive positioner control unit		(driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	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
M51	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	Door mirror (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M51	6	D3	21	Existed
Ι σινι	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
M51	6	Ground	Not existed
I CIVI	18		NOT EXISTED

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:000000006037574

1.CHECK FUNCTION

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

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

Monitor item	Condition	Value
MIR/SEN RH U-D	Deer mirror (concentrate oide)	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 DIAGNO	SIS >			
IO >> Perform diagno	sis procedure. R	efer to <u>ADP-113, "P/</u>	ASSENGER SIDE : I	Diagnosis Procedure".
ASSENGER SIDE :	Diagnosis Pr	rocedure		INFOID:00000006037575
CHECK DOOR MIRRO	R SENSOR (PAS	SENGER SIDE) PO	WER SUPPLY	
Turn ignition switch OF				
Disconnect door mirror Turn ignition switch ON		connector.		
Check voltage betweel		senger side) harnes	s connector and gro	und.
-				
	(+)			Voltage (V)
	(passenger side)		(-)	(Approx.)
Connector	Termina	lls		
D33	23		Ground	5
he inspection result nor	nal?			
ES >> GO TO 3. O >> GO TO 2.				
CHECK DOOR MIRRO	R (PASSENGER "			יו ווד
		SIDE) SENSOR I O		,011
Turn ignition switch OF Disconnect automatic		ntrol unit connector		
				tor and door mirror (pas-
senger side) harness c		•		, i
Automotia drivo positia		Deer mirrer (
Automatic drive positio			passenger side)	Continuity
Connector	Terminal	Connector	Terminal	Eviete d
M51	21	D33	23	Existed
Check continuity betwe	en automatic driv	e positioner control	unit harness connec	tor and ground.
Automatic drive	positioner control unit			
Connector	Termina	al	Ground	Continuity
M51	21			Not existed
he inspection result norr	nal?			
		ner control unit. Refe	er to ADP-147, "Rem	oval and Installation".
O >> Repair or repla				
CHECK DOOR MIRRO	R (PASSENGER :	SIDE) SENSOR GR	OUND CIRCUIT	
Turn ignition switch OF				
Disconnect automatic				
Disconnect automatic of Check continuity between	en automatic driv			tor and door mirror (pas-
Disconnect automatic	en automatic driv			tor and door mirror (pas-
Disconnect automatic of Check continuity between	en automatic driv	e positioner control		
Disconnect automatic of Check continuity betwee senger side) connector	en automatic driv	e positioner control	unit harness connec	ctor and door mirror (pas-
Disconnect automatic of Check continuity betwee senger side) connector Automatic drive positio	een automatic driv	ve positioner control	unit harness connec	
Disconnect automatic of Check continuity betwee senger side) connector Automatic drive positio Connector	een automatic driv ner control unit Terminal 20	ve positioner control Door mirror (Connector D33	unit harness connect passenger side) Terminal 24	Continuity Existed
Disconnect automatic of Check continuity betwee senger side) connector Automatic drive positio Connector M51 Check continuity betwee	een automatic driv	ve positioner control Door mirror (Connector D33	unit harness connect passenger side) Terminal 24	Continuity Existed
Disconnect automatic of Check continuity betwee senger side) connector Automatic drive positio Connector M51 Check continuity betwee Automatic drive	een automatic driv ner control unit Terminal 20 een automatic driv	ve positioner control Door mirror (Connector D33 ve positioner control	unit harness connect passenger side) Terminal 24 unit harness connect	Continuity Existed
Disconnect automatic of Check continuity betwee senger side) connector Automatic drive positio Connector M51 Check continuity betwee	een automatic driv	ve positioner control Door mirror (Connector D33 ve positioner control	unit harness connect passenger side) Terminal 24	Continuity Existed

Revision: 2010 June

>> 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	Automatic drive positioner control unit		Door mirror (passenger side)	
Connector	Terminal	Connector	Terminal	Continuity
M51	5	D33	21	Existed
	17	200	22	LAISTED

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

Automatic drive	oositioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M51	5	Ground	Not existed
T CIVI	17		INDI EXISIEU

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

SLIDING MOTOR

Component Fu					INFOID:000000006037576
1.CHECK FUNCT					
	LIDE" in "Active tended to the second s		CONSULT-III.		
	Test item			Description	
	OFF			Stop	
SEAT SLIDE	FR		Seat sliding	Forward	
	RR			Backward	t
1.CHECK SLIDING	MOTOR POWER				
 Disconnect slid Turn ignition sw Perform "Active 	vitch OFF.	or. DE") with CONS		nd.	
 Disconnect slid Turn ignition sw Perform "Active Check voltage I 	vitch OFF. ing motor connecto vitch ON. e test" ("SEAT SLIE	or. DE") with CONS		nd.	
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	vitch OFF. ing motor connector vitch ON. test" ("SEAT SLIE between sliding motor	or. DE") with CONS	nnector and grou	nd.	Voltage (V) (Approx.)
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	<i>v</i> itch OFF. ing motor connector <i>v</i> itch ON. test" ("SEAT SLIE between sliding mo +)	DF. DE") with CONS otor harness co	nnector and grou	ondition	(Approx.)
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	vitch OFF. ing motor connector vitch ON. test" ("SEAT SLIE between sliding motor +) g motor Terminals	DF. DE") with CONS otor harness co	nnector and grou	ondition OFF	(Approx.) 0
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	vitch OFF. ing motor connector vitch ON. test" ("SEAT SLIE between sliding motor	DF. DE") with CONS otor harness co	nnector and grou	ondition OFF FR (forward)	(Approx.) 0 12
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	vitch OFF. ing motor connector vitch ON. test" ("SEAT SLIE between sliding motor +) g motor Terminals	DF. DE") with CONS otor harness co	nnector and grou	OFF FR (forward) RR (backward)	(Approx.) 0
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	vitch OFF. ing motor connector vitch ON. test" ("SEAT SLIE between sliding motor +) g motor Terminals	DF. DE") with CONS otor harness co	c	ondition OFF FR (forward)	(Approx.) 0 12 0
 Disconnect slid Turn ignition sw Perform "Active Check voltage l 	vitch OFF. ing motor connected vitch ON. test" ("SEAT SLIE between sliding motor Terminals 3 4	DF. DE") with CONS otor harness co	c	ondition OFF FR (forward) RR (backward) OFF	(Approx.) 0 12 0 0

0	Continuity	Sliding motor		control unit	Driver seat
	Continuity	Terminal	Connector	Terminal	Connector
P	Existed	3	B519	3	B513
	Existed	4	B319	4	8013

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

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B513	3	Ground	Not existed
	4		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

RECLINING MOTOR

CTC/CIRCUIT D						
RECLINING	MOTOR					
Component Fu	unction Cheo	k				INFOID:000000006037578
1.CHECK FUNCT	ION					
	RECLINING" in " ining motor oper		st" mode	with CONSULT	-111.	
	Test item				Descri	ption
	OFF					Stop
SEAT RECLINING	FR			Seat reclining		Forward
	RR					Backward
NO >> Perforr	CTION END n diagnosis proc		efer to <u>A</u>	DP-117, "Diagno	osis Procedui	
iagnosis Pro						INFOID:00000006037579
.CHECK RECLIN	NING MOTOR P	OWER SI	JPPLY			
Check voltage	+)	ng motor h	narness	connector and g		Voltage (V)
	ng motor	(-))	C	ondition	(Approx.)
Connector	Terminals				055	
	5				OFF FR (forward)	0 12
	5				RR (backward)	
B507		Grou	und	SEAT RECLINING	OFF	0
	6				FR (forward)	0
					RR (backwa	rd) 12
NO >> GO TC CHECK RECLIN . Turn ignition sv . Disconnect driv	e reclining moto 2. NING MOTOR C witch OFF. ver seat control	IRCUIT	ector.		ctor and reclir	ning motor harness connec-
Driver	r seat control unit			Reclining m	otor	Continuity
Connector	Termi	nal	C	onnector	Terminal	Continuity
	-		0.			
B513	5			B507	5	Existed

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

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B513	5	Ground	Not existed
	6		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

DTC/CIRCUIT I	DIAGNOS		LIFTING M	OTOR (FRON	Т)		
IFTING MO	TOR (F	RONT	-)				
component F	unction	Check					INFOID:000000006037580
.CHECK FUNC	TION						
. Select "SEAT . Check the lifti				e with CONSULT-II	I.		
	Test	item			Descr	ription	
		OFF			_	Stop	
SEAT LIFTER FR		UP		Seat lifting (front))	Upward	
		DWN				Downward	
	ECTION EN	ND		<u>ADP-119, "Diagno</u>	sis Procedu	<u>ure"</u> .	INF0ID:000000006037581
.CHECK LIFTIN							ini 012.0000000000037581
Turn ignition s	switch OFF. ting motor (nnector.				
Turn ignition s	switch ON. ve test" ("Sl	EAT LIFT	ER FR") with	CONSULT-III.	d ground.		
Turn ignition s Perform "Activ Check voltage	switch ON. ve test" ("Sl e between l	EAT LIFT	ER FR") with tor (front) har	ness connector and			Voltage (V/)
Turn ignition s Perform "Activ Check voltage (Lifting me	switch ON. ve test" ("Sl e between I (+) otor (front)	EAT LIFT	ER FR") with	ness connector and	d ground. ndition		Voltage (V) (Approx.)
Turn ignition s Perform "Activ Check voltage	switch ON. ve test" ("Sl e between l	EAT LIFT	ER FR") with tor (front) har	ness connector and	ndition		(Approx.)
Turn ignition s Perform "Activ Check voltage (Lifting mo	switch ON. ve test" ("Sl e between I (+) otor (front)	EAT LIFT	ER FR") with tor (front) har	ness connector and			
Turn ignition s Perform "Activ Check voltage (Lifting mo Connector	switch ON. ve test" ("Sl e between l (+) otor (front) Termina	EAT LIFT	ER FR") with tor (front) har	Co	ndition OFF	/N)	(Approx.)
Turn ignition s Perform "Activ Check voltage (Lifting mo	switch ON. ve test" ("Sl e between l (+) otor (front) Termina	EAT LIFT	ER FR") with tor (front) har	ness connector and	OFF UP	/N)	(Approx.) 0 12
Turn ignition s Perform "Activ Check voltage (Lifting mo Connector	switch ON. ve test" ("Sl e between l (+) otor (front) Termina	EAT LIFT	ER FR") with tor (front) har	Co	OFF UP DWN (DOW	/N)	(Approx.) 0 12 0
Turn ignition s Perform "Active Check voltage (Lifting mo Connector B512	switch ON. ve test" ("Sl e between l (+) otor (front) Termina 9 10	EAT LIFT	ER FR") with tor (front) har	Co	OFF UP DWN (DOW OFF		(Approx.) 0 12 0 0
Turn ignition s Perform "Active Check voltage (Lifting mo Connector B512 b512 the inspection re YES >> Repla NO >> GO Te CHECK LIFTIN Turn ignition s Disconnect dr Check continu	switch ON. ve test" ("SI e between I (+) otor (front) Termina 9 10 esult norma ace lifting m O 2. NG MOTOR switch OFF.	EAT LIFT ifting mot	ER FR") with tor (front) har (-) Ground at) (built in sea	SEAT LIFTER FR	OFF UP DWN (DOW OFF UP DWN (DOW	/N)	(Approx.) 0 12 0 0 0 0
Turn ignition s Perform "Active Check voltage (Lifting mo Connector B512 B512 the inspection re YES >> Repla NO >> GO TO CHECK LIFTIN Turn ignition s Disconnect dr	switch ON. ve test" ("SI e between I (+) otor (front) Termina 9 10 esult norma ace lifting m O 2. NG MOTOR switch OFF.	EAT LIFT ifting mot	ER FR") with tor (front) har (-) Ground at) (built in sea	SEAT LIFTER FR	OFF UP DWN (DOW OFF UP DWN (DOW	/N)	(Approx.) 0 12 0 0 0 0 12
Turn ignition s Perform "Active Check voltage (Lifting mo Connector B512 B512 the inspection re YES >> Repla NO >> GO Te CHECK LIFTIN Turn ignition s Disconnect dr Check continu nector.	switch ON. ve test" ("SI e between I (+) otor (front) Termina 9 10 esult norma ace lifting m O 2. NG MOTOR switch OFF.	EAT LIFT ifting mot	ER FR") with tor (front) har (-) Ground at) (built in sea T) CIRCUIT t connector. Seat control un	SEAT LIFTER FR	OFF UP DWN (DOW OFF UP DWN (DOW	/N)	(Approx.) 0 12 0 0 0 0 12

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B513	9	Ground	Not existed
	10		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

	DR (REAR)					
omponent Fun	ction Check					INFOID:00000000603758
CHECK FUNCTIO	N					
Select "SEAT LIF Check the lifting r			with CONSULT-III.			
	Test item			Description	on	
	OFF			Ste	ор	
SEAT LIFTER RR	UP		Seat lifting (rear)		oward	_
he operation of rel	DWN			Do	ownward	
ES >> INSPECT	FION END diagnosis proced		DP-121, "Diagnosi:	s Procedure	<u>."</u> .	INFOID:00000000603756
CHECK LIFTING			NΥ			
Turn ignition swite						
Disconnect lifting Turn ignition swite						
Perform "Active to Check voltage be			CONSULT-III ss connector and g	round.		
				round.		Voltage (V/)
Check voltage be (+) Lifting mote	etween lifting mo		ss connector and g	ndition		Voltage (V) (Approx.)
Check voltage be	etween lifting mo	tor (rear) harne	ss connector and g	ndition		(Approx.)
Check voltage be (+) Lifting mote	etween lifting mo or (rear) Terminals	tor (rear) harne	ss connector and g			(Approx.)
Check voltage be (+) Lifting moto	etween lifting mo	tor (rear) harne (-)	ss connector and g	OFF	N)	(Approx.)
Check voltage be (+) Lifting mote	etween lifting mo or (rear) Terminals	tor (rear) harne	ss connector and g	OFF UP	N)	(Approx.) 0 0
Check voltage be (+) Lifting moto	etween lifting mo or (rear) Terminals	tor (rear) harne (-)	ss connector and g	OFF UP DWN (DOWN	N)	(Approx.) 0 0 12
Check voltage be (+) Lifting moto	etween lifting mo or (rear) Terminals 7	tor (rear) harne (-)	ss connector and g	OFF UP DWN (DOWN OFF		(Approx.) 0 0 12 0
Check voltage be (+) Lifting moto Connector B510 he inspection resu ES >> Replace I O >> GO TO 2 CHECK LIFTING I	etween lifting mo or (rear) Terminals 7 8 <u>It normal?</u> lifting motor (rea MOTOR (REAR)	tor (rear) harne (-) Ground	SEAT LIFTER RR	OFF UP DWN (DOWN OFF UP		(Approx.) 0 0 12 0 12
Check voltage be (+) Lifting moto Connector B510 he inspection resu ES >> Replace D >> GO TO 2 CHECK LIFTING N Turn ignition swite Disconnect driver	etween lifting mo or (rear) Terminals 7 8 It normal? lifting motor (rea MOTOR (REAR) ch OFF. r seat control uni	tor (rear) harne (-) Ground r) (built in seat of CIRCUIT	SEAT LIFTER RR	OFF UP DWN (DOWN OFF UP DWN (DOWN	N)	(Approx.) 0 0 12 0 12 0 12 0
Check voltage be (+) Lifting moto Connector B510 he inspection resu ES >> Replace I D >> GO TO 2 CHECK LIFTING I Turn ignition switt Disconnect driver Check continuity nector.	etween lifting mo or (rear) Terminals 7 8 It normal? lifting motor (rea MOTOR (REAR) ch OFF. r seat control uni	tor (rear) harne (-) Ground r) (built in seat of CIRCUIT	SEAT LIFTER RR	OFF UP DWN (DOWN OFF UP DWN (DOWN	N)	(Approx.) 0 12 0 12 0 12 0 ear) harness con
Check voltage be	etween lifting mo or (rear) Terminals 7 8 <u>It normal?</u> lifting motor (rea MOTOR (REAR) ch OFF. r seat control uni between driver s	tor (rear) harne (-) Ground r) (built in seat of CIRCUIT it connector. seat control uni	ss connector and g Cor SEAT LIFTER RR cushion frame).	OFF UP DWN (DOWN OFF UP DWN (DOWN	N)	(Approx.) 0 0 12 0 12 0 12 0

LIFTING MOTOR (REAR)

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B513	7	Ground	Not existed
	8		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >	
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TILT MOTOR

CHECK FUNCTI	ON				
Select "TILT MC Check the tilt m	DTOR" in "Active t otor operation.	est" mode with	CONSULT-III.		
	Test item			Description	
	OFF			Stop	
TILT MOTOR	UP		Steering tilt	Upwar	t.
	DWN			Downw	vard
	CTION END diagnosis proced		DP-123. "Diagnos	sis Procedure".	INFOID:00000000603756
CHECK TILT MC	TOR POWER SL	JPPLY			
	itch ON. test" ("TILT MOT between tilt motor				
(-	+)				
(- Tilt n	+) notor	(-)	Co	ondition	Voltage (V)
		(-)	Co	ondition	Voltage (V) (Approx.)
Tilt n	notor	(-)	Ca	OFF	
Tilt n	notor	(-)	C		(Approx.)
Tilt n	notor Terminals	(-) Ground		OFF	(Approx.)
Tilt r Connector	notor Terminals 1			OFF UP DWN (down) OFF	(Approx.) 0 0 12 0
Tilt r Connector	notor Terminals			OFF UP DWN (down) OFF UP	(Approx.) 0 12 0 12 12
Tilt n Connector M48	notor Terminals 1 2			OFF UP DWN (down) OFF	(Approx.) 0 0 12 0
Tilt n Connector M48 the inspection res (ES >> Replace NO >> GO TO	notor Terminals 1 2 <u>sult normal?</u> e tilt motor (built in 2.	Ground	TILT MOTOR	OFF UP DWN (down) OFF UP	(Approx.) 0 12 0 12 12
Tilt n Connector M48 the inspection res (ES >> Replace VO >> GO TO .CHECK TILT MC Turn ignition sw Disconnect auto	notor Terminals 1 2 <u>sult normal?</u> e tilt motor (built in 2. DTOR CIRCUIT itch OFF. pmatic drive positi	Ground	TILT MOTOR	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 12 0 12 12
Tilt n Connector M48 the inspection res (ES >> Replace IO >> GO TO CHECK TILT MC Turn ignition sw Disconnect auto Check continuity connector.	notor Terminals 1 2 <u>sult normal?</u> e tilt motor (built in 2. DTOR CIRCUIT itch OFF. pmatic drive positi	Ground	TILT MOTOR	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 12 0 12 0 12 0 12 0 12 0
Tilt n Connector M48 the inspection res (ES >> Replace IO >> GO TO CHECK TILT MC Turn ignition sw Disconnect auto Check continuity connector.	notor Terminals 1 2 <u>sult normal?</u> e tilt motor (built in 2. DTOR CIRCUIT itch OFF. pmatic drive positi y between automa	Ground	TILT MOTOR	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 0 12 0 12 0 12 0

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	28	Ground	Not existed
10152	29		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

TELESCOPIC MOTOR

ELESCOPIC	C MOTOR					
omponent Fu	nction Check				INFOID:00000000603	7586
.CHECK FUNCTI	ION					
	CO MOTOR" in "A scopic motor opera		e with CONSULT-III			
	Test item			Descriptio	n	I
	OFF			Sto	р	-
TELESCO MOTOR	FR		Steering telescopic		rward	-
the operation of r	RR			Ba	ckward	
YES >> INSPEC	CTION END n diagnosis procee		DP-125, "Diagnosis	B Procedure		
iagnosis Proc					INFOID:00000000603	7587
CHECK TELES	COPIC MOTOR P	OWER SUPPLY				
Turn ignition sw	scopic motor coni vitch ON.	nector.) MOTOR") with	CONSULT-III			
Perform "Active						
Check voltage b	between telescopi		s connector and gro	ound.		
Check voltage b	+)	ic motor harnes	s connector and gro		Voltage (V)	ı
Check voltage b	between telescopi		s connector and gro	dition	Voltage (V) (Approx.)	
Check voltage b (Telesco	+) pic motor	ic motor harnes	s connector and gro			
Check voltage b (Telesco	+) pic motor	ic motor harnes	s connector and gro	dition	(Approx.)	
Check voltage t (Telesco Connector	+) pic motor Terminals	(-)	Con TELESCOPIC MO-	dition	(Approx.) 0 0	
Check voltage b (Telesco	+) pic motor Terminals	ic motor harnes	Con	dition OFF FR (forward)	(Approx.) 0 0	• •
Check voltage t (Telesco Connector	+) pic motor Terminals	(-)	Con TELESCOPIC MO-	dition OFF FR (forward) RR (backward OFF FR (forward)	(Approx.) 0 0 12 0 12	•
Check voltage t (Telesco Connector M49	+) pic motor Terminals 1 2	(-)	Con TELESCOPIC MO-	dition OFF FR (forward) RR (backward OFF	(Approx.) 0 0 12 0 12	•
Check voltage b (Telesco Connector M49 the inspection res	+) pic motor Terminals 1 2 sult normal? e telescopic motor 2.	(-) Ground	Con TELESCOPIC MO-	dition OFF FR (forward) RR (backward OFF FR (forward) RR (backward	(Approx.) 0 0 12 0 12	•
Check voltage b (Telesco Connector M49 the inspection res (ES >> Replace (O >> GO TO CHECK TELESO Turn ignition sw Disconnect auto	+) pic motor Terminals 1 2 Sult normal? e telescopic motor 2. COPIC MOTOR C vitch OFF. omatic drive positi ty between autom	(-) Ground r (built in steerin IRCUIT	s connector and gro Con TELESCOPIC MO- TOR g column assembly t.	dition OFF FR (forward) RR (backward OFF FR (forward) RR (backward	(Approx.) 0 0 12 0 12	tor
Check voltage b (Telesco Connector M49 the inspection res (ES >> Replace NO >> GO TO CHECK TELESC Turn ignition sw Disconnect auto Check continuit harness connec	+) pic motor Terminals 1 2 Sult normal? e telescopic motor 2. COPIC MOTOR C vitch OFF. omatic drive positi ty between autom	(-) Ground r (built in steerin IRCUIT	s connector and gro Con TELESCOPIC MO- TOR g column assembly t.	dition OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) ').	(Approx.) 0 0 12 12 13) 0 12 13) 0 Ctor and telescopic mo	tor
Check voltage b (Telesco Connector M49 the inspection res (ES >> Replace NO >> GO TO .CHECK TELESC Turn ignition sw Disconnect auto Check continuit harness connec	+) pic motor Terminals 1 2 sult normal? e telescopic motor 2. COPIC MOTOR C vitch OFF. omatic drive positi ty between autom ctor.	(-) Ground r (built in steerin IRCUIT ioner control uni atic drive positio	TELESCOPIC MO- TOR g column assembly	dition OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) ').	(Approx.) 0 0 12 12 12 1) 0	tor

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M51	26	Ground	Not existed
IND I	29		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

< DTC/CIRCUIT DIAGNOSIS >	
DOOR MIRROR MOTOR	А
Component Function Check	
1. CHECK DOOR MIRROR MOTOR FUNCTION	В
Check the operation with "MIRROR MOTOR RH" and "MIRROR MOTOR LH" in "ACTIVE TEST" mode with CONSULT-III	
Refer to <u>ADP-23, "CONSULT-III Function"</u> .	С
Is the inspection result normal?	
YES >> Door mirror motor function is OK. NO >> Refer to <u>ADP-127, "Diagnosis Procedure"</u> .	D
Diagnosis Procedure	
1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL	Е
 Turn ignition switch OFF. Disconnect door mirror connector. Turn ignition switch ON. Check voltage between door mirror harness connector and ground. 	F

(+)					
Door mirror		(-) Cond		ndition	Voltage (V) (Approx.)
Connector	Terminals				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				DOWN / RIGHT	12
	10			Other than the above	0
			LEFT	12	
D3 (Driver side) D33 (Passenger side)	11	Ground	Door mirror remote control switch	Other than the above	0
				UP	12
	12			Other than the above	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK DOOR MIRROR MOTOR 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 harness connector.

Automatic drive po	sitioner control unit	Door mirror	(driver side)	Continuity
Connector	Terminal	Connector	Terminal	- Continuity
	12		10	
M51	23	D3	12	Existed
	24		11	

L

Μ

Ν

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

[passenger side]				
Automatic drive p	ositioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	22		10	
M51	10	D33	12	Existed
	11		11	

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

[driver side]			
Automatic drive p	ositioner control unit		Continuity
Connector	Terminal		Continuity
	12	Ground	
M51	23		Not existed
	24		

[passenger side]

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal		Continuity
	22	Ground	
M51	10		Not existed
	11		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-147, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to ADP-128, "Component Inspection".

Is the inspection result normal?

- YES >> Check intermittent incident.Refer to GI-38, "Intermittent Incident".
- NO >> Replace door mirror. Refer to MIR-36, "DOOR MIRROR ASSEMBLY : Removal and Installation".

Component Inspection

INFOID:000000006037590

1.CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-37. "DOOR MIRROR ASSEMBLY : Disassembly and Assembly"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.Refer to MIR-36, "DOOR MIRROR ASSEMBLY : Removal and Installation".

2. CHECK DOOR MIRROR MOTOR-II

- 1. Turn ignition switch OFF.
- 2. Disconnect door mirror connector.
- 3. Apply 12V to each power supply terminal of door mirror motor.

	Door mirror		
Connector	Term	ninal	Operational direction
Connector	(+)	(-)	
	10	11	RIGHT
D3 (Driver side)	11	10	LEFT
D3 (Driver side) D33 (Passenger side)	12	10	UP
	10	12	DOWN

DOOR MIRROR MOTOR

< DTC/	/CIRCUIT DIAGNOSIS >	
	nspection result normal?	
YES	>> INSPECTION END	А
NO	>> Replace door mirror. Refer to MIR-36, "DOOR MIRROR ASSEMBLY : Removal and Installation".	
		В
		С
		D
		_
		Е
		_
		F
		G
		G
		Н
		ADP
		Κ
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		M
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		0
		0
		Р
		Γ

SEAT MEMORY INDICATOR

Component Function Check

1.CHECK FUNCTION

1. Select "MEMORY SW INDCTR" in "Active test" mode with CONSULT-III.

2. Check the memory indicator operation.

To	est item	Desc	cription
	OFF		OFF
MEMORY SW INDCTR	ON-1	Memory switch indicator	Indicator 1: ON
	ON-2		Indicator 2: ON

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-130, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000006037592

INFOID:000000006037591

1.CHECK SEAT MEMORY INDICATOR OPERATION

Check seat memory indicator operation.

Which is the malfunctioning indicator?

All indicators are NG>>GO TO 2.

An indicator is NG>>GO TO 4.

2.CHECK FUSE

1. Turn ignition switch OFF.

2. Check that the blown fuse after repairing the affected circuit if a fuse is blown.

Signal name	Fuse No.
Battery power supply	11 (10 A)

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

$\mathbf{3.}$ CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

	+) nory switch	(-)	Voltage (V) (Approx.)
Connector	Terminals		
D5	5	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace seat memory switch.Refer to <u>ADP-149</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

4.CHECK MEMORY INDICATOR CIRCUIT

1. Turn ignition switch OFF.

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

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat o			mory switch	Continuity
Connector	Terminal	Connector	Terminal	
B514	25 26	D5	6	Existed
k continuity bet	ween driver seat cor	ntrol unit harness co		d.
			.	
Connector	seat control unit			Continuity
Connector	25		Ground	
B514	26			Not existed

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

MANUAL FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:000000006008154

1.CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check driver seat control unit power supply and ground circuit. Refer to ADP-73, "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

Check automatic drive positioner control unit power supply and ground circuit. Refer to <u>ADP-73. "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

POWER SEAT

POWER SEAT : Diagnosis Procedure

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check power seat switch ground circuit. Refer to ADP-94, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

TILT & TELESCOPIC

TILT & TELESCOPIC : Diagnosis Procedure

1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Check tilt & telescopic switch ground circuit. Refer to <u>ADP-95, "Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

2.CONFIRM THE OPERATION

Confirm the operation again.

INFOID:000000006008155

INFOID:000000006008156

< SYMPTOM DIAGNOSIS >	
Is the result normal?	-
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	A
NO >> GO TO 1. SEAT SLIDING	
	В
SEAT SLIDING : Diagnosis Procedure	57
1.CHECK SLIDING MECHANISM	С
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	D
Is the inspection result normal?	D
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	E
2. CHECK SLIDING SWITCH	
Check sliding switch. Refer to ADP-76, "Component Function Check".	F
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	G
3. CHECK SLIDING MOTOR	
Check sliding motor.	Н
Refer to <u>ADP-115</u> , "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 4.	I
NO >> Repair or replace the malfunction parts.	I
4. CONFIRM THE OPERATION	
Check the operation again.	- ADP
Is the result normal?	
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	K
NO >> GO TO 1.	IX.
SEAT RECLINING	
SEAT RECLINING : Diagnosis Procedure	58
1.CHECK RECLINING MECHANISM	
Check for the following.	- M
 Mechanism deformation or pinched foreign materials. 	
Interference with other parts because of poor installation.	Ν
<u>Is the inspection result normal?</u> YES >> GO TO 2.	14
NO >> Repair or replace the malfunction parts.	
2 CHECK RECLINING SWITCH	0
Check reclining switch.	_
Refer to <u>ADP-78, "Component Function Check"</u> .	Р
Is the inspection result normal?	đ
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	
3.CHECK RECLINING MOTOR	_
Check reclining motor. Refer to <u>ADP-117, "Component Function Check"</u> .	

MANUAL FUNCTION DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	
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-38, "Intermittent Incident"</u> .	
NO >> GO TO 1.	
SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT) : Diagnosis Procedure	INFOID:000000006008159
1.CHECK LIFTING (FRONT) 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 LIFTING SWITCH (FRONT)	
Check lifting switch (front). Refer to <u>ADP-80, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	
NO >> Repair or replace the malfunction parts. 3.CHECK LIFTING MOTOR (FRONT)	
Check lifting motor (front). Refer to <u>ADP-119, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	
4.CONFIRM THE OPERATION	
Check the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	
NO $>>$ GO TO 1.	
SEAT LIFTING (REAR)	
SEAT LIFTING (REAR) : Diagnosis Procedure	INFOID:000000006008160
1.CHECK LIFTING (REAR) 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 LIFTING SWITCH (REAR)	
Check lifting switch (rear).	
Refer to ADP-82, "Component Function Check".	

Is the inspection result normal?

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	А
3. CHECK LIFTING MOTOR (REAR)	A
Check lifting motor (rear). Refer to <u>ADP-121, "Component Function Check"</u> .	В
<u>Is the inspection result normal?</u> YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	С
4.CONFIRM THE OPERATION	
Check the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38. "Intermittent Incident"</u> . NO >> GO TO 1.	D
STEERING TILT	
STEERING TILT : Diagnosis Procedure	F
1.CHECK STEERING TILT MECHANISM	
Check for the following.	G
Is the inspection result normal?	Н
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	
2.CHECK TILT SWITCH	Ι
Check tilt switch. Refer to <u>ADP-84, "Component Function Check"</u> .	ADP
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	K
3.CHECK TILT MOTOR	Γ
Check tilt motor. Refer to <u>ADP-123, "Component Function Check"</u> . Is the inspection result normal?	L
YES $>>$ GO TO 4.	
NO >> Repair or replace the malfunction parts.	M
4.CONFIRM THE OPERATION	
Check the operation again. <u>Is the result normal?</u>	Ν
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	
NO >> GO TO 1. STEERING TELESCOPIC	0
STEERING TELESCOPIC : Diagnosis Procedure	
1. CHECK STEERING TELESCOPIC MECHANISM	Ρ
 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
Check telescopic switch. Refer to ADP-84, "Component Function Check".
Is the inspection result normal?
YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.
3. CHECK TELESCOPIC MOTOR
Check telescopic motor. Refer to <u>ADP-123, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 4.
NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION
Check the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.
DOOR MIRROR
DOOR MIRROR · Diagnosis Procedure
DOOR MIRROR : Diagnosis Procedure
1.CHECK DOOR MIRROR MECHANISM
Check for the following. Mechanism deformation or pinched foreign materials.
 Interference with other parts because of poor installation.
Is the inspection result normal?
YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.
2.CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH)
Check mirror switch and change over switch.
Refer to <u>ADP-91, "MIRROR SWITCH : Component Function Check"</u> (mirror switch), <u>ADP-90,</u> <u>"CHANGEOVER SWITCH : Component Function Check"</u> (change over switch).
Is the inspection result normal?
YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.
3. CHECK DOOR MIRROR MOTOR
Check door mirror motor. Refer to <u>ADP-127, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.
4.CONFIRM THE OPERATION
Check the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.

NO >> GO TO 1.

MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
MEMORY FUNCTION DOES NOT OPERATE	0
ALL COMPONENT	А
ALL COMPONENT : Diagnosis Procedure	В
1. CHECK MANUAL OPERATION	
Check manual operation.	С
Is the inspection result normal?	0
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	
2. PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE	D
1. Perform initialization procedure.	_
 Refer to <u>ADP-58, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>. 2. Perform memory storing procedure. 	Е
Refer to ADP-59, "MEMORY STORING : Special Repair Requirement".	
 Check memory function. Refer to <u>ADP-16, "MEMORY FUNCTION : System Description"</u>. 	F
Is the inspection result normal?	
YES >> Memory function is normal.	G
NO >> GO TO 3. 3.CHECK SEAT MEMORY SWITCH	
Check seat memory switch.	Н
Refer to y.	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Replace seat memory switch.	I
4. CONFIRM THE OPERATION	
Confirm the operation again.	ADF
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	Κ
NO >> GO TO 1. SEAT SLIDING	
	L
SEAT SLIDING : Diagnosis Procedure	
1.CHECK MANUAL OPERATION	M
Check manual operation.	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Refer to <u>ADP-133, "SEAT SLIDING : Diagnosis Procedure"</u>	Ν
2. CHECK SLIDING SENSOR	
Check sliding sensor.	0
Refer to ADP-96, "Component Function Check". Is the inspection result normal?	
YES >> GO TO 3.	Ρ
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-38, "Intermittent Incident"</u>.

< SYMPTOM DIAGNOSIS >

NO >> GO TO 1. SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:000000006008166

INFOID:0000000006008167

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>ADP-133</u>, "SEAT RECLINING : Diagnosis Procedure"

2. CHECK RECLINING SENSOR

Check reclining sensor.

Refer to ADP-96, "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-38, "Intermittent Incident"</u>.

NO >> GO TO 1. SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>ADP-134</u>, "SEAT LIFTING (FRONT) : Diagnosis Procedure"

2.CHECK LIFTING SENSOR CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check lifting sensor control unit power supply and ground circuit. Refer to ADP-74, "LIFTING SENSOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 $\mathbf{3.}$ CHECK LIFTING SENSOR (FRONT)

Check lifting sensor (front). Refer to ADP-100, "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-38, "Intermittent Incident"</u>.

NO >> GO TO 1.

SEAT LIFTING (REAR)

MEMORY FUNCTION DOES NOT OPERATE

SYMPTOM DIAGNOSIS > SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK MANUAL OPERATION Check manual operation. Is the inspection result normal? YES >> GO TO 2. NO >> Refer to <u>ADP-134. "SEAT LIFTING (REAR) : Diagnosis Procedure"</u> 2.CHECK LIFTING SENSOR CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT Check lifting sensor control unit power supply and ground circuit. Refer to <u>ADP-74. "LIFTING SENSOR CONTROL UNIT : Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK LIFTING SENSOR (REAR) Check fitting sensor (rear). Refer to ADP-103. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check lifting sensor (rear). Refer to ADP-103. "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-38. "Intermitt</u>
1.CHECK MANUAL OPERATION Check manual operation. Is the inspection result normal? YES >> GO TO 2. NO >> Refer to <u>ADP-134</u> , "SEAT LIFTING (REAR) : Diagnosis Procedure" 2.CHECK LIFTING SENSOR CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT Check lifting sensor control unit power supply and ground circuit. Refer to <u>ADP-74</u> , "LIFTING SENSOR CONTROL UNIT : Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK LIFTING SENSOR (REAR) Check lifting sensor (rear). Refer to <u>ADP-103</u> . "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-38, "Intermittent Incident". NO >> GO TO 1. STEERING TILT
$\label{eq:constraint} \begin{array}{llllllllllllllllllllllllllllllllllll$
$ \begin{array}{ll} \mbox{Is the inspection result normal?} \\ \mbox{YES} >> GO TO 2. \\ \mbox{NO} >> Refer to ADP-134, "SEAT LIFTING (REAR) : Diagnosis Procedure"} \\ \mbox{2.cHECK LIFTING SENSOR CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT} \\ \mbox{Check lifting sensor control unit power supply and ground circuit. } \\ \mbox{Refer to ADP-74, "LIFTING SENSOR CONTROL UNIT : Diagnosis Procedure".} \\ \mbox{Is the inspection result normal?} \\ \mbox{YES} >> GO TO 3. \\ \mbox{NO} >> Repair or replace the malfunction parts.} \\ \mbox{3.cHECK LIFTING SENSOR (REAR)} \\ \mbox{Check lifting sensor (rear). } \\ \mbox{Refer to ADP-103. "Component Function Check".} \\ \mbox{Is the inspection result normal?} \\ \mbox{YES} >> GO TO 4. \\ \mbox{NO} >> Repair or replace the malfunction parts.} \\ \mbox{4.conFIRM THE OPERATION} \\ \mbox{Check the operation again.} \\ \mbox{Is the result normal?} \\ \mbox{YES} >> Check intermittent incident. Refer to GI-38. "Intermittent Incident". \\ \mbox{NO} >> GO TO 1. \\ \mbox{SUPLY} \\ \mbox{YES} TURE TILT \\ \mbox{VES} TURE TILT \\ \mbox{YES} \\ \mbox{YES} TURE TURE TURE TURE TURE TURE TURE TURE$
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$\begin{array}{l} \textbf{2.check LIFTING SENSOR CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT} \\ \hline \textbf{Check lifting sensor control unit power supply and ground circuit.} \\ \hline \textbf{Refer to } \underline{ADP-74, "LIFTING SENSOR CONTROL UNIT : Diagnosis Procedure".} \\ \hline \textbf{Is the inspection result normal?} \\ \hline \textbf{YES} & >> GO TO 3. \\ \hline \textbf{NO} & >> \text{Repair or replace the malfunction parts.} \\ \hline \textbf{3.check LIFTING SENSOR (REAR)} \\ \hline \textbf{Check lifting sensor (rear).} \\ \hline \textbf{Refer to } \underline{ADP-103, "Component Function Check".} \\ \hline \textbf{Is the inspection result normal?} \\ \hline \textbf{YES} & >> GO TO 4. \\ \hline \textbf{NO} & >> \text{Repair or replace the malfunction parts.} \\ \hline \textbf{4.cONFIRM THE OPERATION} \\ \hline \textbf{Check the operation again.} \\ \hline \textbf{Is the result normal?} \\ \hline \textbf{YES} & >> \text{Check intermittent incident. Refer to } \underline{GI-38, "Intermittent Incident".} \\ \hline \textbf{NO} & >> \text{GO TO 1.} \\ \hline \textbf{STEERING TILT} \end{array}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$
Refer to ADP-103, "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-38. "Intermittent Incident". NO >> GO TO 1. STEERING TILT
$\begin{array}{llllllllllllllllllllllllllllllllllll$
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-38, "Intermittent Incident". NO >> GO TO 1. STEERING TILT
4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident". NO >> GO TO 1. STEERING TILT
Check the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. STEERING TILT
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. STEERING TILT
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. STEERING TILT
NO >> GO TO 1. STEERING TILT
STEERING TILT : Diagnosis Procedure
-
1. CHECK MANUAL OPERATION
Check manual operation.
Is the inspection result normal?
YES >> GO TO 2. NO >> Refer to <u>ADP-135, "STEERING TILT : Diagnosis Procedure"</u>
2. CHECK TILT SENSOR
Check steering tilt sensor.
Refer to <u>ADP-106, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.
3. CONFIRM THE OPERATION
Check the operation again. Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .
NO >> GO TO 1.
STEERING TELESCOPIC
STEERING TELESCOPIC : Diagnosis Procedure
1. CHECK MANUAL OPERATION

MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>ADP-135</u>, "STEERING TELESCOPIC : Diagnosis Procedure"

2. CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

Refer to ADP-108, "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 GI-38, "Intermittent Incident".

NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:000000006008171

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>ADP-136</u>, "DOOR MIRROR : Diagnosis Procedure"

2. CHECK MIRROR SENSOR

Check mirror sensor. Refer to <u>ADP-111, "DRIVER SIDE : Component Function Check"</u>. (Driver side) Refer to <u>ADP-111, "DRIVER SIDE : Component Function Check"</u>. (Passenger side)

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-38, "Intermittent Incident".

NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure	INFOID:000000006008172	A
1.CHECK SYSTEM SETTING		В
 Check system setting. Refer to <u>ADP-61, "SYSTEM SETTING : Special Repair Requirement"</u>. Check the operation. 		С
Is the inspection result normal?		0
YES >> Entry/Exit function is OK. NO >> GO TO 2. 2.PERFORM SYSTEM INITIALIZATION		D
 Perform system initialization. Refer to <u>ADP-58, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>. Check the operation. 		E
Is the inspection result normal? YES >> Entry/Exit function is OK. NO >> GO TO 3.		F
3. check front door switch (driver side)		G
Check front door switch (driver side). Refer to <u>DLK-72, "Component Function Check"</u> .		
Is the inspection result normal?		Н
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.		
4.CONFIRM THE OPERATION		I
Confirm the operation again.		
Is the result normal?	P	٩D
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.		

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SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000006042427

1.CHECK SYSTEM SETTING

Check system setting. Refer to <u>ADP-61</u>, "SYSTEM SETTING : Special Repair Requirement".

Is the inspection result normal?

YES >> Synchronization function is normal.

NO >> GO TO 2.

 $2. {\sf CONFIRM} \text{ THE OPERATION}$

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".

NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OP	ERATE
Diagnosis Procedure	INFOID:00000006008173
1. PERFORM INTELLIGENT KEY INTERLOCK STORING PROCEDURE	В
 Perform Intelligent Key interlock storing procedure. Refer to <u>ADP-60</u>, "INTELLIGENT KEY INTERLOCK STORING : Special Repair Requires the operation. Check the operation. 	<u>uirement"</u> . C
Is the inspection result normal? 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-56, "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-38, "Intermittent Incident"</u> . NO >> GO TO 1.	Н

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< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000006008174

1.CHECK MEMORY INDICATOR

Check memory indicator. Refer to <u>ADP-130, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

 $2. {\sf CONFIRM} \text{ THE OPERATION}$

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-38. "Intermittent Incident".

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
	No initialization has been performed.	Perform initialization.	<u>ADP-58</u>
Entry/exit assist function and seat synchronization do not op- erate.	Entry/exit assist function is disabled. NOTE: The entry/exit assist function and seat synchronization function are disabled be- fore delivery (initial setting).	Change the settings.	<u>ADP-60</u>
Telescopic does not operate by entry/exit assist function.	Telescopic is not interlocked with entry/ exit assist function.	_	Exit assist function: <u>ADP-18</u>
			Entry assist function: <u>ADP-19</u>
Entry assist function does not op- erate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	ADP-14
	Either the entry/exit assist function (seat) or the entry/exit assist function (steering) is disabled.	Enable both functions.	ADP-60
Seat synchronization function does not operate.	The synchronization function will not op- erate if the steering (tilt, telescopic) or the door mirror moves to the operating end while the seat synchronization function is operating.	Perform the memory function or drive the vehicle at more than 7 km/h (4 MPH).	ADP-14
	Seat adjustment load has exceed any of the volumes below. • Seat sliding: 76 mm • Seat reclining: 9.1 degrees • Seat lifting (rear): 20 mm		_
Lumbar support does not per- form memory operation.	The lumbar support system are con- trolled independently with no link to the automatic drive positioner system.	_	Lumbar support system <u>SE-13</u>
			Seat synchronization function: <u>ADP-14</u>
			Memory function: <u>ADP-16</u>
Memory function, entry/exit as- sist function, seat synchroniza-		Fulfill the operation	Exit assist function: <u>ADP-18</u>
tion function, or Intelligent Key interlock function does not oper- ate.	The operating conditions are not fulfilled.	conditions.	Entry assist function: <u>ADP-19</u>
			Seat synchronization function: <u>ADP-14</u>
			Intelligent Key interlock function: <u>ADP-21</u>

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INFOID:000000006042548

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

Removal and Installation

INFOID:000000006008177

REMOVAL

CAUTION:

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

1. Remove the driver seat. Refer to SE-108, "Removal and Installation".

- 2. Remove the screws.
- 3. Remove driver seat control unit.

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-57, "ADDI-</u><u>TIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"</u>.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION > AUTOMATIC DRIVE POSITIONER CONTROL UNIT

	А
Removal and Installation	~
REMOVAL CAUTION:	В
When removing and installing, use shop cloths to protect parts from damage.	
1. Remove the instrument lower panel LH. Refer to <u>IP-13, "Removal and Installation"</u> .	С
2. Remove the screws.	
3. Remove automatic drive positioner control unit.	
INSTALLATION Install in the reverse order of removal. CAUTION:	D
Be sure to clump the harness to the right place.	E
NOTE:	
 After installing the driver seat, perform additional service when replacing control unit. Refer to <u>ADP-57</u>, <u>"ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"</u>. After installing the driver seat, perform additional service when removing battery negative terminal. Refer to <u>ADP-57</u>. 	F
ADP-57, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".	
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< REMOVAL AND INSTALLATION >

LIFTING SENSOR CONTROL UNIT

Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove driver seat control unit. Refer to <u>ADP-146, "Removal and Installation"</u>.
- 2. Slide lifting sensor control unit and remove it from bracket.

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-57</u>. <u>"ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"</u>.
- After installing the driver seat, perform additional service when removing battery negative terminal. Refer to <u>ADP-57, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.

INFOID:000000006037867

SEAT MEMORY SWITCH

< REMOVAL AND INSTALLATION >	
SEAT MEMORY SWITCH	A
Removal and Installation	A
REMOVAL	В
 CAUTION: When removing and installing, use shop cloths to protect parts from damage. 1. Remove the front door finisher. Refer to <u>INT-31, "FRONT DOOR FINISHER : Removal and Installation"</u>. 2. Press pawls and remove seat memory switch from front door finisher, with flat-bladed screw driver. 	С
INSTALLATION Install in the reverse order of removal. CAUTION:	D
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 ADP-57, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".	E
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< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

Removal and Installation

INFOID:000000006008183

REMOVAL

CAUTION:

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

- 1. Remove the front seat (driver side). Refer to <u>SE-108, "Removal and Installation"</u>.
- 2. Remove the seat cushion outer finisher. Refer to <u>SE-111, "SEAT CUSHION : Disassembly and Assembly</u>".
- 3. Remove the screws.
- 4. Remove power seat switch from the seat cushion outer finisher.

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-57, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.

TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION > TILT&TELESCOPIC SWITCH

Removal and Installation	A
REMOVAL CAUTION:	В
When removing and installing, use shop cloths to protect parts from damage.	
1. Remove the steering column lower cover. Refer to <u>IP-13, "Removal and Installation"</u> .	C
2. Press pawls and remove tilt & telescopic switch from the steering column lower cover.	
INSTALLATION	
Install in the reverse order of removal.	D
CAUTION:	
Be sure to clump the harness to the right place.	_
NOTE:	E
After installing the driver seat, perform additional service when removing battery negative terr ADP-57, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Des	

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