SECTION ADP В AUTOMATIC DRIVE POSITIONER С

CONTENTS

INTELLIGENT KEY INTERLOCK FUNCTION20

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram21 INTELLIGENT KEY INTERLOCK FUNCTION :	F
System Description21 Fail Safe22	G
DIAGNOSIS SYSTEM (DRIVER SEAT CON- TROL UNIT)	Н
ECU DIAGNOSIS INFORMATION26	I
DRIVER SEAT CONTROL UNIT	AD
AUTOMATIC DRIVE POSITIONER CON- TROL UNIT	K
BCM (BODY CONTROL MODULE)	L
WIRING DIAGRAM37	M
AUTOMATIC DRIVE POSITIONER SYSTEM	N
BASIC INSPECTION41	IN
DIAGNOSIS AND REPAIR WORK FLOW41 Work Flow41	0
INSPECTION AND ADJUSTMENT44	
ADDITIONAL SERVICE WHEN REMOVING BAT- TERY NEGATIVE TERMINAL	Ρ

А

D

Е

ADDITIONAL SERVICE WHEN REPLACING	
CONTROL UNIT ADDITIONAL SERVICE WHEN REPLACING	
CONTROL UNIT : Description ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement	
SYSTEM INITIALIZATION SYSTEM INITIALIZATION : Description SYSTEM INITIALIZATION : Special Repair Re-	45
quirement	
MEMORY STORING MEMORY STORING : Description MEMORY STORING : Special Repair Require- ment	46
INTELLIGENT KEY INTERLOCK STORING INTELLIGENT KEY INTERLOCK STORING : De- scription	-
INTELLIGENT KEY INTERLOCK STORING : Special Repair Requirement	
SYSTEM SETTING	
SYSTEM SETTING : Special Repair Requirement	48
DTC/CIRCUIT DIAGNOSIS	49
U1000 CAN COMM CIRCUIT	
Description DTC Logic	
Diagnosis Procedure	
Special Repair Requirement	
U1010 CONTROL UNIT (CAN)	
DTC Logic Diagnosis Procedure	
B2112 SLIDING MOTOR	
DTC Logic	
Diagnosis Procedure	
B2113 RECLINING MOTOR	
DTC Logic	
Diagnosis Procedure	
B2116 TILT MOTOR	
DTC Logic Diagnosis Procedure	
B2128 UART COMMUNICATION LINE	57
Description	
DTC Logic Diagnosis Procedure	
B2130 EEPROM	
DTC Logic	
Diagnosis Procedure	
POWER SUPPLY AND GROUND CIRCUIT	60

DRIVER SEAT CONTROL UNIT
DRIVER SEAT CONTROL UNIT : Special Repair Requirement60
AUTOMATIC DRIVE POSITIONER CONTROL
AUTOMATIC DRIVE POSITIONER CONTROL
UNIT : Diagnosis Procedure
SLIDING SWITCH
Component Function Check62
Diagnosis Procedure
Component Inspection63
RECLINING SWITCH 64
Component Function Check
Component Inspection
LIFTING SWITCH (FRONT)
Diagnosis Procedure
Component Inspection67
LIFTING SWITCH (REAR)68
Component Function Check68
Diagnosis Procedure
Component Inspection69
TILT SWITCH
Component Function Check
Component Inspection
TELESCOPIC SWITCH72
Component Function Check72
Diagnosis Procedure
Component Inspection73
SEAT MEMORY SWITCH
Component Function Check
Component Inspection
DOOR MIRROR REMOTE CONTROL
SWITCH
CHANGEOVER SWITCH76
CHANGEOVER SWITCH : Component Function
Check
CHANGEOVER SWITCH : Diagnosis Procedure 76 CHANGEOVER SWITCH : Component Inspec-
tion
MIRROR SWITCH77
MIRROR SWITCH : Component Function Check77
MIRROR SWITCH : Diagnosis Procedure
MIRROR SWITCH : Component Inspection

POWER SEAT SWITCH GROUND CIRCUIT80 Diagnosis Procedure
TILT & TELESCOPIC SWITCH GROUND CIR-
CUIT81 Diagnosis Procedure81
SLIDING SENSOR82
Component Function Check
RECLINING SENSOR84
Component Function Check
LIFTING SENSOR (FRONT)86
Component Function Check
LIFTING SENSOR (REAR)88
Component Function Check
TILT SENSOR
Component Function Check90
Diagnosis Procedure
TELESCOPIC SENSOR
Diagnosis Procedure92
MIRROR SENSOR95
DRIVER SIDE
DRIVER SIDE : Component Function Check95 DRIVER SIDE : Diagnosis Procedure95
PASSENGER SIDE
PASSENGER SIDE : Component Function Check
PASSENGER SIDE : Diagnosis Procedure97
SLIDING MOTOR
Component Function Check
RECLINING MOTOR101
Component Function Check
LIFTING MOTOR (FRONT)
Component Function Check 103
Diagnosis Procedure103
LIFTING MOTOR (REAR)105
Component Function Check
TILT MOTOR
Component Function Check 107
Diagnosis Procedure
TELESCOPIC MOTOR109

Component Function Check	А
DOOR MIRROR MOTOR111Component Function Check111Diagnosis Procedure111Component Inspection112	В
SEAT MEMORY INDICATOR	С
SYMPTOM DIAGNOSIS115	D
MANUAL FUNCTION DOES NOT OPERATE. 115	
ALL COMPONENT115 ALL COMPONENT : Diagnosis Procedure115	E
POWER SEAT115 POWER SEAT : Diagnosis Procedure115	F
TILT & TELESCOPIC 115 TILT & TELESCOPIC : Diagnosis Procedure 115	G
SEAT SLIDING116 SEAT SLIDING : Diagnosis Procedure116	Н
SEAT RECLINING116 SEAT RECLINING : Diagnosis Procedure	1
SEAT LIFTING (FRONT)117 SEAT LIFTING (FRONT) : Diagnosis Procedure 117	I
SEAT LIFTING (REAR)117 SEAT LIFTING (REAR) : Diagnosis Procedure117	AD
STEERING TILT118 STEERING TILT : Diagnosis Procedure118	K
STEERING TELESCOPIC118 STEERING TELESCOPIC : Diagnosis Procedure.118	L
DOOR MIRROR119 DOOR MIRROR : Diagnosis Procedure119	M
MEMORY FUNCTION DOES NOT OPERATE. 120	IVI
ALL COMPONENT	Ν
SEAT SLIDING	0
SEAT RECLINING	
SEAT LIFTING (FRONT)121 SEAT LIFTING (FRONT) : Diagnosis Procedure 121	Ρ
SEAT LIFTING (REAR)121 SEAT LIFTING (REAR) : Diagnosis Procedure121	
STEERING TILT122 STEERING TILT : Diagnosis Procedure122	

STEERING TELESCOPIC
DOOR MIRROR
ENTRY/EXIT ASSIST FUNCTION DOES NOT
OPERATE 124
Diagnosis Procedure124
INTELLIGENT KEY INTERLOCK FUNCTION
INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE125
DOES NOT OPERATE 125
DOES NOT OPERATE 125 Diagnosis Procedure 125
DOES NOT OPERATE125Diagnosis Procedure125MEMORY INDICATE DOES NOT OPERATE.126

REMOVAL AND INSTALLATION128
DRIVER SEAT CONTROL UNIT128 Removal and Installation128
AUTOMATIC DRIVE POSITIONER CON- TROL UNIT129
Removal and Installation 129
SEAT MEMORY SWITCH130
Removal and Installation130
POWER SEAT SWITCH131
Removal and Installation 131
TILT&TELESCOPIC SWITCH 132 Removal and Installation 132

PRECAUTIONS

< 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. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

PREPARATION

PREPARATION

Commercial Service Tools

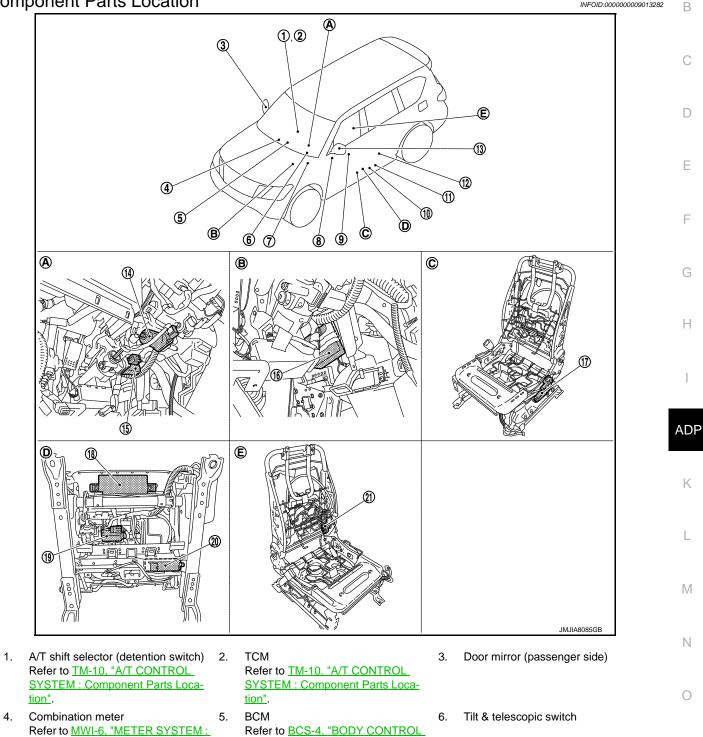
INFOID:000000009013281

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

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION **COMPONENT PARTS**

Component Parts Location



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Component Parts Location".

1.

SYSTEM : Component Parts Loca-

tion".

< SYSTEM DESCRIPTION >

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

Component Description

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Component parts	Description
Driver seat control unit	 Main units of automatic drive positioner system. It is connected to the CAN. It communicates with automatic drive positioner control unit via UART communication. It perform memory function after receiving the door unlock signal from BCM. The address of each part is recorded. Operates each motor of seat to the registered position. Requests the operation of steering column and door mirror to automatic drive positioner control unit Operates the specific seat motor with the signal from power seat switch. Transmits the ignition switch signal (ACC/ON) via UART communication to automatic drive positioner control unit.
Automatic drive positioner control unit	 It communicates with driver seat control unit via UART communication. Perform various controls with the instructions of driver seat control unit. Perform the controls of tilt & telescopic, door mirror and seat memory switch. Operates steering column and door mirror with the signal from the driver seat control unit
BCM	 Recognizes the following status and transmits it to driver seat control unit via CAN communication. Handle position: LHD Driver door: OPEN/CLOSE Ignition switch position: ACC/ON Door lock: UNLOCK (with Intelligent key or driver side door request switch operation) Key ID Starter: CRANKING/OTHER
IPDM E/R	ON/OFF signal of A/T shift selector (detention switch) is transmit- ted to driver seat control unit via CAN communication.
ТСМ	 The following signals are transmitted to driver seat control unit via CAN communication. Shift position signal (P range) Identification of transmission: A/T
Combination meter	Transmit the vehicle speed signal to driver seat control unit via CAN communication.

< SYSTEM DESCRIPTION >

Component parts ABS actuator and electric unit (control unit) A/T sift selector (Detention switch)		Description Transmit the vehicle speed signal to driver seat control unit via CAN communication.			
			Mirror switch	 Mirror switch is integrated in door mirror remote control switch. It operates angle of door mirror face. It transmits mirror face adjust operation to automatic drive positioner control unit. 	
Power window main switch (Door mirror re- mote control switch)	Changeover switch	 Changeover switch is integrated in door mirror remote control switch. Changeover switch has three positions (L, N and R). It changes operating door mirror motor by transmitting control signal to automatic drive positioner control unit. 			
	Open/close switch	 Open/close switch is integrated in door mirror remote control switch. Power is supplied to folding mirror from door mirror remote control switch when operating switch. 			
	Tilt switch	 Tilt switch is equipped to steering column. The operation signal is input to automatic drive positioner control unit when tilt switch is operated. 			
Tilt & telescopic switch Telesc	Telescopic switch	 Telescopic switch is equipped to steering column. The operation signal is input to automatic drive positioner control unit when telescopic switch is operated. 			
	Set switch	It is used for registration and setting change of driving position and Intelligent Key interlock function.			
Seat memory switch	Seat memory switch	 The maximum 2 driving positions can be registered by memory switch 1 to 2. Driving position is set to the registered driving position when memory switch is pressed while operation conditions are satisfied. 			
	Seat memory indicator	Memory indicator indicates the status of auto driving position sys- tem by turning ON or blinking.			
Power seat switch	Sliding switch	 Sliding switch is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when sliding switch is operated. 			
	Reclining switch	 The operation signal is input to driver seat control unit when reclining switch is operated. The operation signal is input to driver seat control unit when reclining switch is operated. 			
	Lifting switch (front)	 Lifting switch (front) is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when lifting switch (front) is operated. 			
	Lifting switch (rear)	 Lifting switch (rear) is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when lifting switch (rear) is operated. 			

< SYSTEM DESCRIPTION >

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

< SYSTEM DESCRIPTION >

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

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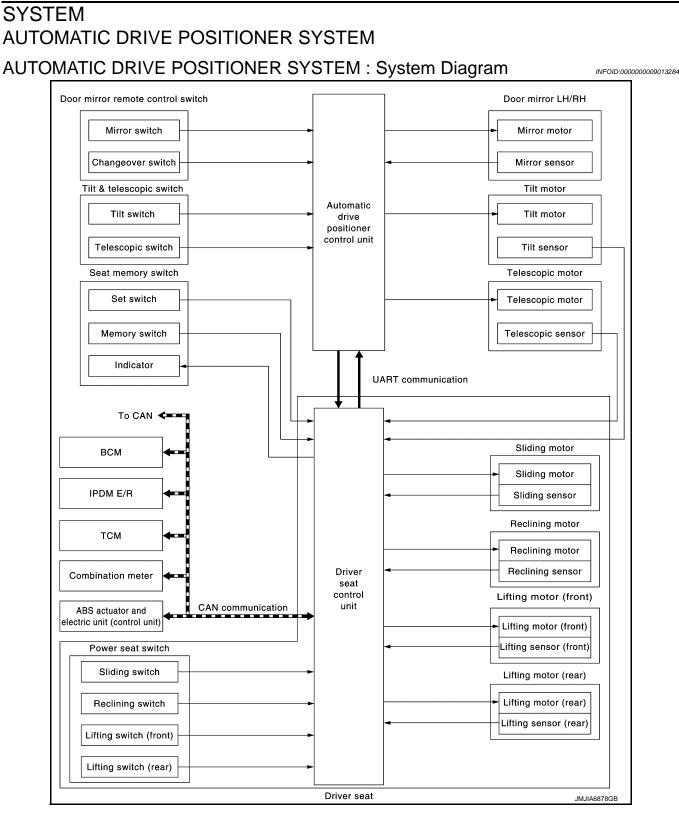
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AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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

< SYSTEM DESCRIPTION >

Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch.
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).
	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. E Refer to <u>SE-16. "LUMBAR SUPPORT SYSTEM : System Description"</u>.

Sleep control

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

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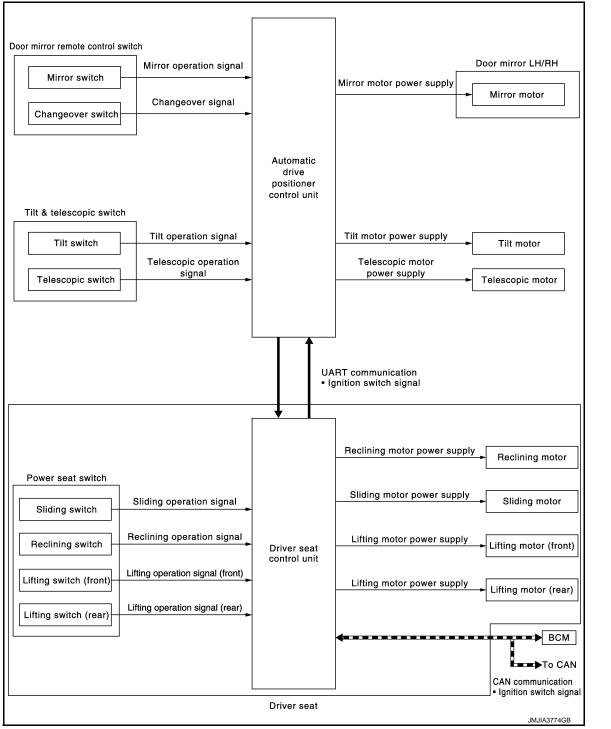
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< SYSTEM DESCRIPTION >

MANUAL FUNCTION : System Diagram



MANUAL FUNCTION : System Description

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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.

< SYSTEM DESCRIPTION >

DETAIL FLOW

Seat

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

NOTE:

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

Tilt & Telescopic

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

Door Mirror

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

NOTE:

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

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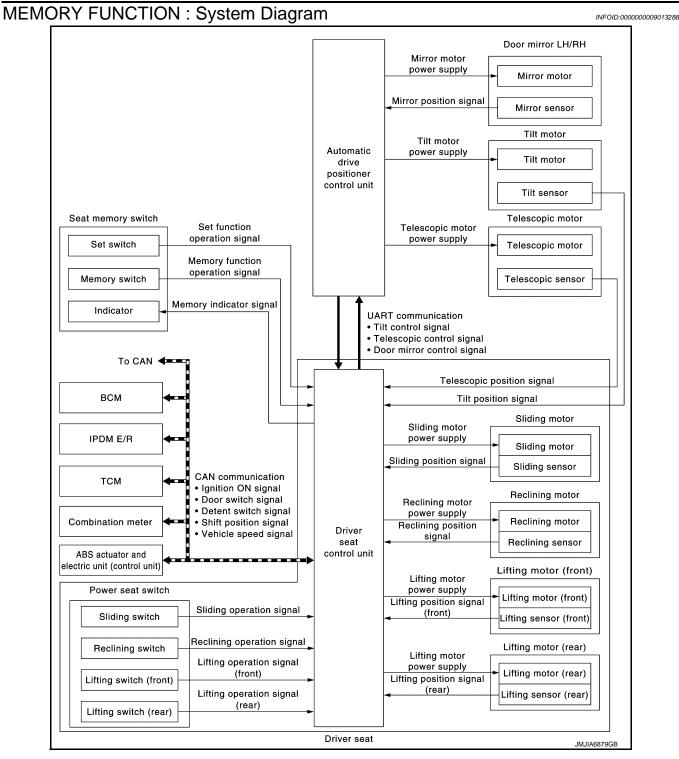
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< SYSTEM DESCRIPTION >



MEMORY FUNCTION : System Description

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

NOTE:

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

OPERATION PROCEDURE

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

< 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 Title 4 delegancies switch		
 Tilt & telescopic switch Door mirror control switch 	OFF (Not operated)	
Set switch	(Not operated)	
Memory switch		
A/T shift selector	P position	
Memory function	Registered	
Vehicle speed	0 Km/h (0 MPH)	
CONSULT	Not connected	

*: When timer function does not operate.

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the driver seat control unit when memory switch 1 or 2 is operated.
2 —	2 — Motors (Seat, Steering, door mirror) 4 Memory switch Indica- tor	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.	
		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	(
Ignition position	OFF	
Set switch/memory switch	OFF	F
Memory function	Registered	
A/T shift selector	P position	
Driver side door switch	OFF	
CONSULT	Not connected	

EXIT ASSIST FUNCTION

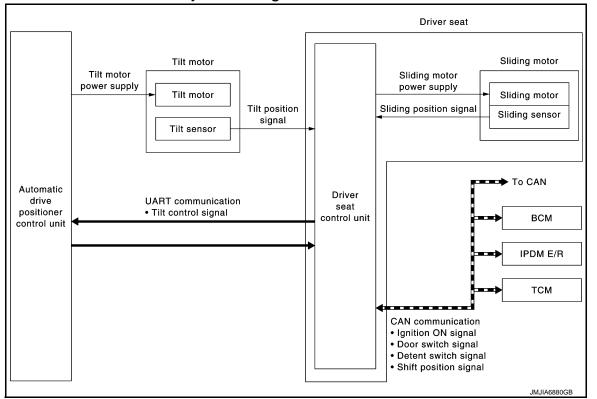
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< SYSTEM DESCRIPTION >

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 <u>ADP-47, "SYSTEM SETTING : Description"</u>.

OPERATION PROCEDURE

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

OPERATION CONDITION

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

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

< SYSTEM DESCRIPTION >

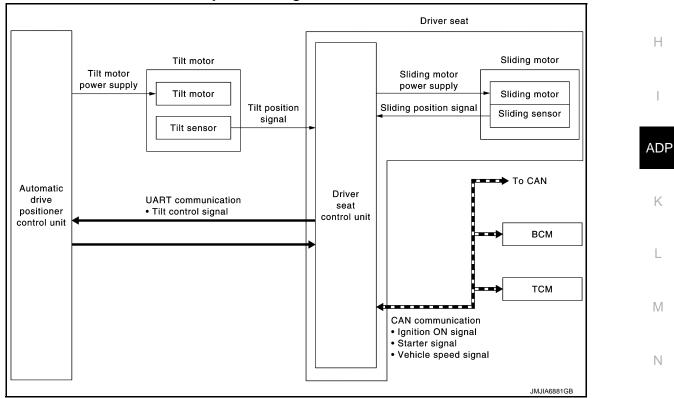
Item	Request status	
Transmission	A/T	A
CONSULT	Not connected	

DETAIL FLOW

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

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Diagram



ENTRY ASSIST FUNCTION : System Description

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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-47, "SYSTEM SETTING : Description"</u>.

OPERATION PROCEDURE

Turn ignition switch ACC. 1.

< SYSTEM DESCRIPTION >

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

OPERATION CONDITION

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

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

DETAIL FLOW

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

INTELLIGENT KEY INTERLOCK FUNCTION

< SYSTEM DESCRIPTION > INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram INFOID:000000009013294 А Driver seat UART communication Memory function operation signal D Automatic drive Driver seat positioner control unit control unit To CAN всм CAN communication • Door unlock signal Key ID signal · Steering lock relay signal Н JMJIA3778GB

INTELLIGENT KEY INTERLOCK FUNCTION : System Description

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

NOTE:

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

OPERATION PROCEDURE

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

NOTE:

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

OPERATION CONDITION

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

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< SYSTEM DESCRIPTION >

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

DETAIL FLOW

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

Fail Safe

INFOID:000000009013296

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	<u>ADP-49</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-50</u>
	EEPROM	B2130	<u>ADP-59</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-57</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-51</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-53</u>
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-55</u>

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function

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

APPLICATION ITEMS

Diagnostic mode	Description
Ecu Identification	Displays part numbers of driver seat control unit.
Self Diagnostic Result	Performs self-diagnosis for the auto drive positioner system and displays the results.
Data Monitor	Displays input signals transmitted from various switches and sensors to driver seat control unit in real time.
Active Test	Drives each output unit.
Work support	Changes the setting for each system function.

SELF-DIAGNOSIS RESULTS

Refer to ADP-32, "DTC Index".

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	
STARTER SW	"ON/OFF"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) sta- tus judged from the ignition switch signal.	
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.	
MEMORY SW 1	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 1 signal.	
MEMORY SW 2	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 2 signal.	
DETENT SW	"ON/OFF"	×	×	The A/T shift selector position "OFF (P position) / ON (other than P position)" judged from the detention switch signal.	
STEERING STATUS	"LOCK/UN- LOCK"	×	×	NOTE: This item is displayed, but cannot monitored.	
SLIDE SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.	
SLIDE SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward signal.	
RECLN SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward signal.	
RECLN SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.	
LIFT FR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (up) signal.	
LIFT FR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (down) signal.	
LIFT RR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (up) signal.	
LIFT RR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (down) signal.	
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (up) signal.	

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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.
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
VEHICLE SPEED	_	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
P RANG SW CAN	"ON/OFF"	×	×	ON/OFF status judged from the P range switch signal.
R RANGE (CAN)	"ON/OFF"	×	×	ON/OFF status judged from the R range switch signal.
DOOR SW-FL	"ON/OFF"	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the door switch (front passen- ger side) signal.
IGN ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ignition switch signal.
ACC ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ACC switch signal.
KEY ON SW	"ON/OFF"	×	×	ON/OFF status judged from the key on switch signal.
KEYLESS ID		×	×	Key ID status judged from the key ID signal.
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock ac- tuator output switch signal.
VHCL SPEED (ABS)	"ON/OFF"	×	×	ON/OFF status judged from vehicle speed signal.
HANDLE	"RHD/LHD"	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	"AT or CVT/ MT"	×	×	AT or CVT/MT status judged from transmission.
SLIDE PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U-D	"V"	_	×	Voltage input from door mirror sensor (passenger side) up/ down is displayed.
MIR/SEN RH R-L	"V"	_	×	Voltage input from door mirror sensor (passenger side) left/ right is displayed.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	А
MIR/SEN LH U-D	"V"	-	×	Voltage input from door mirror sensor (driver side) up/down is displayed.	В
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.	С
TELESCO PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.	D

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

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ECU DIAGNOSIS INFORMATION DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:000000009013298

VALUES ON THE DIAGNOSIS TOOL

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor Item	Condi	tion	Value/Status
SET SW	Set switch	Push	ON
5ET 5W	Set Switch	Release	OFF
	Manager av itali d	Push	ON
MEMORY SW1	Memory switch 1	Release	OFF
	Mamany awitch 2	Push	ON
MEMORY SW2	Memory switch 2	Release	OFF
SLIDE SW-FR	Cliding owitch (forward)	Operate	ON
SLIDE SW-FR	Sliding switch (forward)	Release	OFF
SLIDE SW-RR	Sliding switch (backward)	Operate	ON
SLIDE SW-RR	Sliding switch (backward)	Release	OFF
	Poolining switch (forward)	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 owitch front (up)	Operate	ON
LIFT FR SW-UP	Lifting switch front (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF
	Lifting switch rear (up)	Operate	ON
LIFT RR SW-UP		Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
LIFT KK SW-DN		Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
		Other than the above	OFF
MIR CON SW-DN	Mirror switch	Down	ON
		Other than the above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
		Other than the above	OFF
MIR CON SW-LH	Mirror switch	Left	ON
		Other than the above	OFF
MIR CHNG SW-R	Changeover switch	Right	ON
	Changeover Switch	Other than the above	OFF
MIR CHNG SW-L	Changeover switch	Left	ON
WIIT OF ING SW-L	Shangeover Switch	Other than the above	OFF

< ECU DIAGNOSIS INFORMATION >

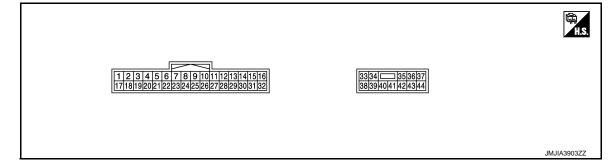
Monitor Item	Cond	ition	Value/Status
	Upward		ON
TILT SW-UP	Tilt switch	Other than the above	OFF
TILT SW-DOWN Tilt switch		Downward	ON
		Other than the above	OFF
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than the above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
	Telescopic switch	Other than the above	OFF
DETENT SW	A/T shift selector	P position	OFF
BEIENT OW		Other than the above	ON
STARTER SW	Ignition position	Cranking	ON
		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 sid	le)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger sid	le)	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 [*]
STEERING STATUS	NOTE: This item is displayed, but	cannot monitored.	·
VEHICLE SPEED	The condition of vehicle sp	eed is displayed	km/h
P RANG SW CAN	A/T shift selector	P position	ON
		Other than the above	OFF

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cond	ition	Value/Status
R RANGE (CAN)	A/T shift selector	R position	ON
R RANGE (CAN)	A/T SHIIL SELECTOR	Other than the above	OFF
DOOR SW-FL	Driver door	Open	ON
DOOK SWILL	Driver door	Close	OFF
DOOR SW-FR	Passenger door	Open	ON
DOOK SW-I K	rassenger door	Close	OFF
IGN ON SW	Ignition switch	ON position	ON
IGN ON SW	Ignition Switch	Other than the above	OFF
ACC ON SW	Ignition switch	ACC or ON position	ON
ACC ON SW	Ignition Switch	Other than the above	OFF
KEY ON SW	Intelligent Key	Inserted is key slot	ON
KET ON SW	Intelligent Key	Inserted is not key slot	OFF
KEYLESS ID	UNLOCK button of Intellige	ent Key is pressed	1, 2, 3, 4 or 5
KYLS DR UNLK	Intelligent Key or driver	ON	ON
KTLS DR UNLK	side door request switch	OFF	OFF
VHCL SPEED (ABS)	Can signal from ABS	Received	ON
VHCL SFEED (ABS)	Can signal nom ABS	Not received	OFF
HANDLE	The BCM for handle position	on is displayed	LHD
HANDLE			RHD
TRANSMISSION	Transmission type is displa	wed	AT or CVT
			MT

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

TERMINAL LAYOUT



PHYSICAL VALUES

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

< ECU DIAGNOSIS INFORMATION >

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

< ECU DIAGNOSIS INFORMATION >

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

< ECU DIAGNOSIS INFORMATION >

33 (R)	Ground	Battery power supply	Input	-	_	Battery voltage	A			
34	Ground	Sliding motor back-	Output	Seat sliding	Operate (backward)	12				
(B)	Ground	ward output signal	Output	Seat sliding	Other than the above	0	В			
35	Ground	Reclining motor for-	Output	Seat reclining	Operate (forward)	12	С			
(G)	Ground	ward output signal	Output	Seat reclining	Other than the above	0				
36	Ground	Lifting motor (front)	Output	Seat lifting (front)	Operate (down)	12	D			
(L)	Ground	down output signal	Output	Seat ming (nonc)	Other than the above	0	Е			
38	Ground	Sliding motor forward	Output	Seat sliding	Operate (forward)	12				
(GR)		output signal	output	output	Output	Output	Seat shung	Other than the above	0	F
39	Ground	Reclining motor back-	Output	Seat reclining	Operate (backward)	12	G			
(Y)	Ground	ward output signal	Output	Seat reciming	Other than the above	0				
40	Ground	Lifting motor (front) up	Output	Seat lifting (front)	Operate (up)	12	Н			
(W)	Ground	output signal	Output	Seat ming (nonc)	Other than the above	0	I			
41	Ground	Lifting motor (rear) up	Output	Seat lifting (rear)	Operate (up)	12				
(V)	Ground	output signal	Output	Seat ming (rear)	Other than the above	0	AD			
42	Ground	Lifting motor (rear)	Output	Seat lifting (rear)	Operate (down)	12	K			
(P/B)	Ground	down output signal	Output		Other than the above	0	1.			
43 (LG)	Ground	Ground	_	-	_	0	L			

Fail Safe

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis	-
	CAN communication	U1000	<u>ADP-49</u>	-
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-50</u>	-
	EEPROM	B2130	<u>ADP-59</u>	-
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-57</u>	-
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-51</u>	-
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-53</u>	-
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-55	-

< ECU DIAGNOSIS INFORMATION >

DTC Index

INFOID:000000009013300

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

*1.

• 0: Current malfunction is present

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000009013301

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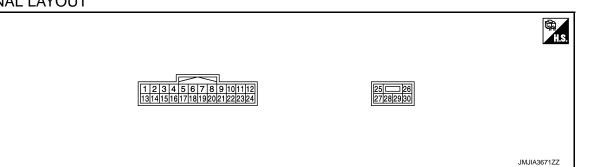
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TERMINAL LAYOUT



PHYSICAL VALUES

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Cor	Idition	(Approx.)
10	Ground	Door mirror motor (pas- senger side) up output	Quitout	Door mirror RH	Operate (up)	12
(L/O)	Ground	signal	Output		Other than the above	0
11	Ground	Door mirror motor (pas- senger side) left output	Output	Door mirror RH	Operate (left)	12
(Y/B)	Cround	signal	Output		Other than the above	0
12	Ground	Door mirror motor (driver side) down/right output	Output	Door mirror (LH)	Operate (down/right)	12
(SB)	Cround	signal	Output		Other than the above	0
13	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
(LG)	0.00110		p.a.		Other than the above	5
14	Ground	Changeover switch LH	Input	Changeover	LH	0
(BR)	Ground	signal	input	switch position	Neutral or RH	5
15	Ground	Mirror switch down sig-	Input	Mirror switch	Operate (down)	0
(O/L)	Cround	nal	mput		Other than the above	5
16	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
(V/W)	Cround	Winter ewiter right eight	mput		Other than the above	5
17 (L/R)	Ground	Door mirror sensor (pas- senger side) left/right signal	Input	Door mirror RH p	osition	Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (G/W)	Ground	Door mirror sensor (driv- er side) left/right signal	Input	Door mirror LH po	osition	Change between 0.6 (close to left edge) 3.4 (close to right edge)
19	Ground	Telescopic switch back-	Input	Telescopic	Operate (backward)	0
(G)	Ground	ward signal	mput	switch	Other than the above	5
20 (Y)	Ground	Sensor ground	_			0
21 (W/L)	Ground	Door mirror motor sen- sor power supply	Input	_		5
22	Ground	Door mirror motor (pas- senger side) down/right	Output	Door mirror (RH)	Operate (down/right)	12
(V)	C. Curid	output signal	- aipur		Other than the above	0
23	Ground	Door mirror motor (driver	Output	Door mirror (LH)	Operate (up)	12
(L/W)	2.00110	side) up output signal			Other than the above	0

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

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

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BCM (BODY CONTROL MODULE)

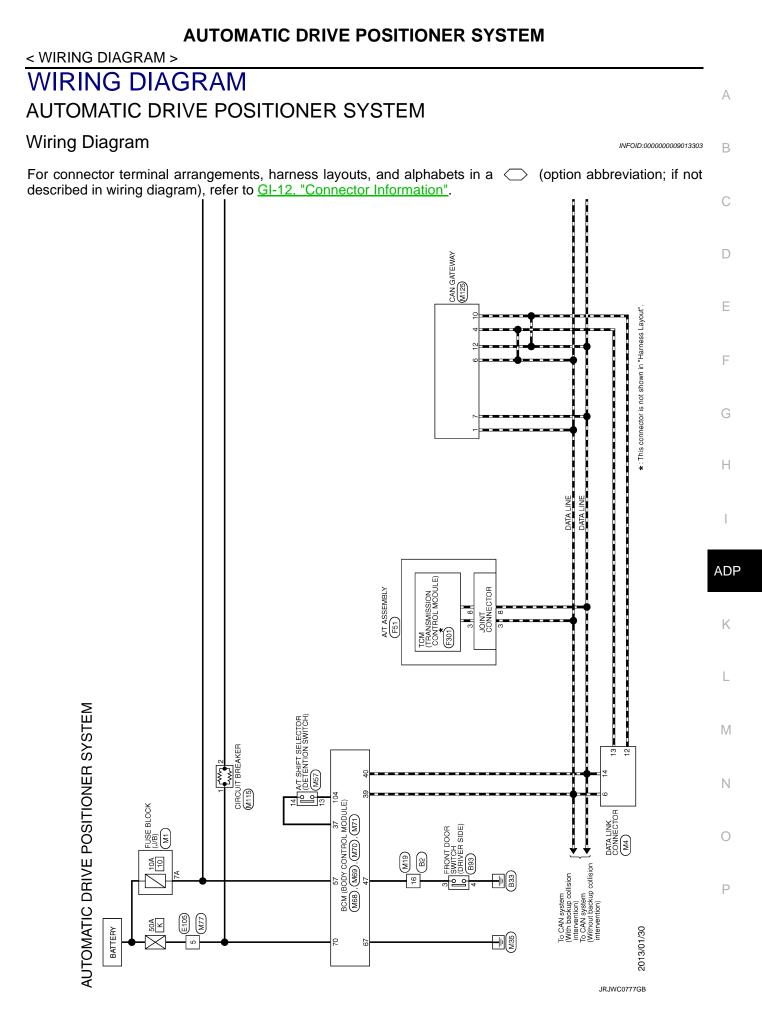
< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:000000009013302

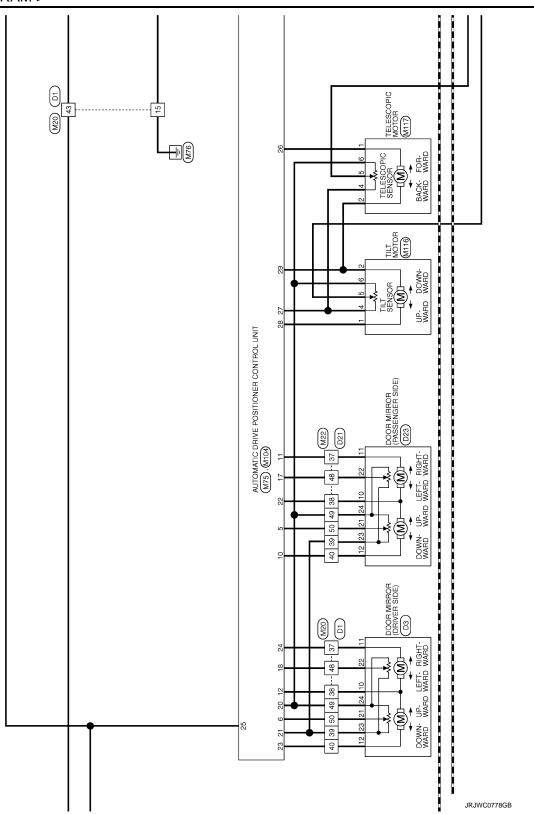
ECU	Reference
	BCS-35, "Reference Value"
BCM	BCS-56, "Fail-safe"
	BCS-57, "DTC Inspection Priority Chart"
	BCS-57, "DTC Index"



Revision: 2013 February

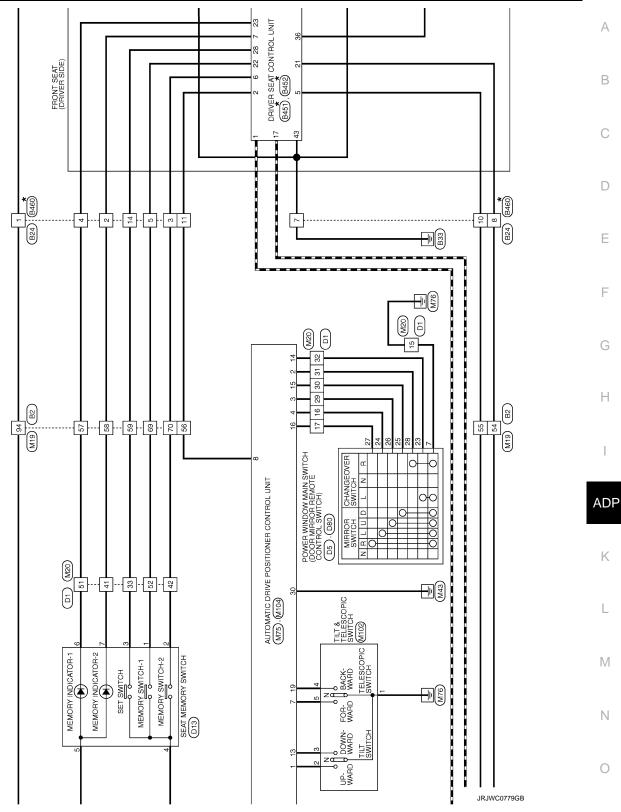
AUTOMATIC DRIVE POSITIONER SYSTEM

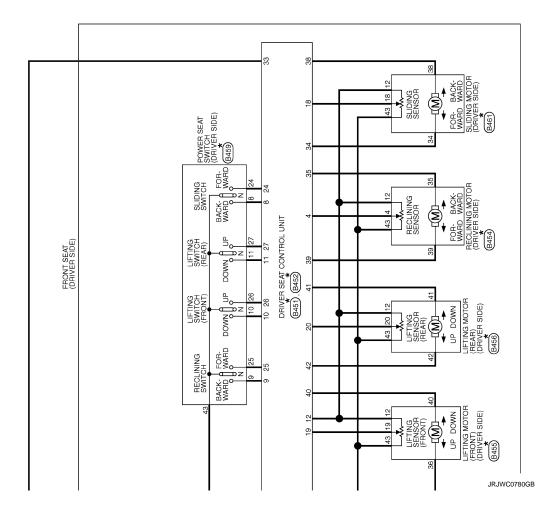
< WIRING DIAGRAM >



AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >





< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000000013304 B

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OVERALL SEQUENCE



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DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" using CONSULT. Refer to <u>ADP-32, "DTC Index"</u>

Is any symptom described and any DTC is displayed?

Symptom is described, DTC is displayed.>>GO TO 3. Symptom is not described, DTC is displayed.>>GO TO 6. Symptom is described, DTC is not displayed.>>GO TO 4.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5. CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to <u>ADP-127, "Description"</u>.

Is the incident normal operation?

YES >> INSPECTION END

NO >> GO TO 7.

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.

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

7.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

 $\mathbf{8}$. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Isolate the malfunctioning point by performing the diagnosis procedure relevant to the symptom during the component diagnosis.

>> GO TO 9.

9.Repare or replace the malfunctioning parts

Repair or replace the malfunctioning part.

>> GO TO 10.

10.FINAL CHECK

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

Revision: 2013 February

ADP-42

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

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

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

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

NOTE:

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

1.SYSTEM INITIALIZATION

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

>> GO TO 2.

2.MEMORY STORAGE

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

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

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

>> GO TO 4.

4.SYSTEM SETTING

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

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000009013307

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

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

INSPECTION AND ADJUSTMENT

Function	Condition	Procedure
	E	Perform initialization
Intelligent Key interlock	Erased	Perform storing
¹ : Default value is 40 mm.		
IOTE: Notice that disconnecting the battery when detected	d DTC are pres	ent will erase the DTC memory
ADDITIONAL SERVICE WHEN REPLA	-	•
guirement		
SYSTEM INITIALIZATION		14 C/2.0000000001350
Perform system initialization. Refer to ADP-45, "SY	STEM INITIAL	ZATION : Special Repair Requirement".
>> GO TO 2.		
2.MEMORY STORAGE		
Perform memory storage. Refer to <u>ADP-46, "MEM</u>	ORY STORING	: Special Repair Requirement".
>> GO TO 3.		
3. INTELLIGENT KEY INTERLOCK STORAGE		
Perform Intelligent Key interlock storage. Refer t	o ADP-47. "INT	ELLIGENT KEY INTERLOCK STORING
Special Repair Requirement".		
00 10 4		
>> GO TO 4. 1. SYSTEM SETTING		
Perform system setting. Refer to <u>ADP-48, "SYSTE</u>		"nonial Danair Daguiramant"
renorm system setting. Relet to <u>ADF-46, STSTE</u>	IN SETTING . S	<u>pecial Repair Requirement</u> .
>> END		
SYSTEM INITIALIZATION		
SYSTEM INITIALIZATION : Description	1	INF0/D:0000000901330
Always perform the initialization when the battery	terminal is dis	connected or the driver seat control unit is
eplaced.		
The entry/exit assist function will not operate norm	•	
SYSTEM INITIALIZATION : Special Re	pair Require	ment INFOID:000000000001331
NITIALIZATION PROCEDURE		
. CHOOSE METHOD		
There are two initialization methods.		
Which method do you use?		
With door switch>>GO TO 2.		
-		

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

>> END

4. STEP B-1

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

>> END MEMORY STORING

MEMORY STORING : Description

INFOID:000000009013311

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

MEMORY STORING : Special Repair Requirement

INFOID:000000009013312

Memory Storage Procedure

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

1.STEP 1

Check the following conditions.

Ignirion switch: ON

• Ă/T shift selector: P position

>> GO TO 2.

2.STEP 2

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

>> GO TO 3.

3.STEP 3

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

NOTE:

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

>> GO TO 4.

4.STEP 4

Confirm the operation of each part with memory operation.

>> END INTELLIGENT KEY INTERLOCK STORING

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INTELLIGENT KEY INTERLOCK STORING : Description

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

INTELLIGENT KEY INTERLOCK STORING : Special Repair Requirement INFOLD.00000000013314

Intelligent Key Interlock Storage Procedure

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

1.STEP 1

Check the following conditions.

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

>> GO TO 2.

2.STEP 2

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

NOTE:

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

>> GO TO 3.

3.STEP 3

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

>> END SYSTEM SETTING

SYSTEM SETTING : Description

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

Setting Change

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

Revision: 2013 February

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

SYSTEM SETTING : Special Repair Requirement

INFOID:000000009013316

1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

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

2. WITH CONSULT - STEP 1

Select "Work support".

>> GO TO 3.

3. WITH CONSULT - STEP 2

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

>> END

4. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

>> GO TO 5.

5. WITH SET SWITCH - STEP 2

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

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

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

>> END

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

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

DTC Logic

DTC DETECTION LOGIC

-	DTC No.	CONSULT display description	DTC detecting condition	Possible cause
-	U1000	CAN COMM CIR- CUIT	 Driver seat control unit cannot communicate to other control units. When driver seat control unit cannot communicate CAN communication signal continuously for 2 seconds or more. 	CAN communication system
DT	C CONF	IRMATION PROC	EDURE	
1.	STEP 1			
Tu	rn ignition	switch ON and wai	t at least 3 seconds.	
2.	>> (STEP 2	GO TO 2.		
Ch	eck "Self o	diagnostic result" us	sing CONSULT.	
	<u>he DTC d</u>			
-		Perform diagnosis p NSPECTION END	procedure. Refer to <u>ADP-49, "Diagnosis Procedu</u>	<u>ire"</u> .
		Procedure		INFOID:000000009013319
Re	fer to <u>LAN</u>	I-22, "Trouble Diagr	nosis Flow Chart".	
Sp	ecial Re	epair Requirem	ent	INFOID:000000009013320
Re	fer to ADF	- 2-45 "SYSTEM INI"	TIALIZATION : Description".	
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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000009013321

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000009013322

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.

B2112 SLIDING MOTOR

DTC Logic

INFOID:000000009013323

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DTC DETECTION LOGIC

.STEP 1 Im ignition switch ON. >> GO TO 2. .STEP 2 heck "Self diagnostic result" using CONSULT. the DTC detected? (ES >> Perform diagnosis procedure. Refer to ADP-51. "Diagnosis IO >> INSPECTION END agnosis Procedure .PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to ADP-51. "DTC Logic the DTC displayed again? (ES >> GO TO 2. IO >> Check intermittent incident. Refer to GI-43. "Intermittent Incident.	agnosis Proc	 briver sea Slide moto 	INFOID:0000
 STEP 2 heck "Self diagnostic result" using CONSULT. <u>a the DTC detected?</u> YES >> Perform diagnosis procedure. Refer to <u>ADP-51</u>, "Diagnosis NO >> INSPECTION END Diagnosis Procedure _PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to <u>ADP-51</u>, "DTC Logic the DTC displayed again? YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43</u>. "Intermittent Incident. CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 	<u>FC Logic"</u> . ttent Incident ctor. d ground.	Logic". nt Incident". r. ground.	Voltage (V) (Approx.)
urn ignition switch ON. >> GO TO 2. .STEP 2 heck "Self diagnostic result" using CONSULT. the DTC detected? YES >> Perform diagnosis procedure. Refer to ADP-51, "Diagnosis NO >> INSPECTION END iagnosis Procedure .PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to ADP-51, "DTC Logic the DTC displayed again? YES >> GO TO 2. NO >> Check intermittent incident. Refer to GI-43, "Intermittent Inci .CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector.	<u>FC Logic"</u> . ttent Incident ctor. d ground.	Logic". nt Incident". r. ground.	Voltage (V) (Approx.)
>> GO TO 2STEP 2 heck "Self diagnostic result" using CONSULT. the DTC detected? (ES >> Perform diagnosis procedure. Refer to ADP-51. "Diagnosis NO >> INSPECTION END iagnosis Procedure .PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to ADP-51. "DTC Logic the DTC displayed again? (ES >> GO TO 2. NO >> Check intermittent incident. Refer to GI-43. "Intermittent Inci .CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector.	<u>FC Logic"</u> . ttent Incident ctor. d ground.	Logic". nt Incident". r. ground.	Voltage (V) (Approx.)
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 Check "Self diagnostic result" using CONSULT. <u>s the DTC detected?</u> YES >> Perform diagnosis procedure. Refer to <u>ADP-51, "Diagnosis</u> NO >> INSPECTION END Diagnosis Procedure .PERFORM DTC CONFIRMATION PROCEDURE . Turn ignition switch ON. . Check "Self diagnostic result" using CONSULT. . Erase the DTC. . Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic</u> s the DTC displayed again? YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> .CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) . Turn ignition switch OFF. . Disconnect sliding motor and driver seat control unit connector. 	<u>FC Logic"</u> . ttent Incident ctor. d ground.	Logic". nt Incident". r. ground.	Voltage (V) (Approx.)
 <u>sthe DTC detected?</u> YES >> Perform diagnosis procedure. Refer to <u>ADP-51, "Diagnosis</u> NO >> INSPECTION END Diagnosis Procedure .PERFORM DTC CONFIRMATION PROCEDURE . Turn ignition switch ON. . Check "Self diagnostic result" using CONSULT. . Erase the DTC. . Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic</u> <u>sthe DTC displayed again?</u> YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> <u>CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)</u> . Turn ignition switch OFF. . Disconnect sliding motor and driver seat control unit connector. 	<u>FC Logic"</u> . ttent Incident ctor. d ground.	Logic". nt Incident". r. ground.	Voltage (V) (Approx.)
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Diagnosis Procedure .PERFORM DTC CONFIRMATION PROCEDURE . Turn ignition switch ON. . Check "Self diagnostic result" using CONSULT. . Erase the DTC. . Perform DTC confirmation procedure. Refer to ADP-51, "DTC Logic sthe DTC displayed again? YES >> GO TO 2. NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident. Refer to GI-43, "Intermittent Incident. CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) . Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector.	ttent Incident" ctor. d ground.	nt Incident". r. ground.	Voltage (V) (Approx.)
 PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic</u> sthe <u>DTC displayed again?</u> YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 	ttent Incident" ctor. d ground.	nt Incident". r. ground.	Voltage (V) (Approx.)
 Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic</u> <u>s the DTC displayed again?</u> YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 	ttent Incident" ctor. d ground.	nt Incident". r. ground.	Voltage (V) (Approx.)
 Check "Self diagnostic result" using CONSULT. Erase the DTC. Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic</u> <u>is the DTC displayed again?</u> YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> <u>CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)</u> Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 	ttent Incident" ctor. d ground.	nt Incident". r. ground.	Voltage (V) (Approx.)
 B. Erase the DTC. 4. Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic</u> <u>s the DTC displayed again?</u> YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> 2.CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) I. Turn ignition switch OFF. 2. Disconnect sliding motor and driver seat control unit connector. 	ttent Incident" ctor. d ground.	nt Incident". r. ground.	Voltage (V) (Approx.)
 <u>s the DTC displayed again?</u> YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> 2.CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) 1. Turn ignition switch OFF. 2. Disconnect sliding motor and driver seat control unit connector. 	ttent Incident" ctor. d ground.	nt Incident". r. ground.	Voltage (V) (Approx.)
YES >> GO TO 2. NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) . Turn ignition switch OFF. 2. Disconnect sliding motor and driver seat control unit connector.	ctor. d ground.	r. ground. (-)	Voltage (V) (Approx.)
 NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Inci</u> CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 	ctor. d ground.	r. ground. (-)	Voltage (V) (Approx.)
 Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 	d ground.	ground. (-)	(Approx.)
. Disconnect sliding motor and driver seat control unit connector.	d ground.	ground. (-)	(Approx.)
	d ground.	ground. (-)	(Approx.)
. Check voltage between sliding motor namess connector and ground	(-)		(Approx.)
(+)	(-)		(Approx.)
Connector Terminals		iround	0
B461 Ground	Ground		0
38	Giouna		

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

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	(+) t control unit	(-)	Voltage (V) (Approx.)	
Connector	Terminals		(, + +)	
B452	34 Ground		0	
D432	38	Ground	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

DTC Logic

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INFOID:000000009013325

DTC No.	Trouble diagnosis name	DTC detecting condition		Possible cause
B2113	SEAT RECLINING	The driver seat control unit detects the clining motor output terminal for 0.1 sec even if the reclining switch is not input.	cond or more • Re	ver seat control unit clining motor harness is short-
DTC CONFI	IRMATION PROCE	EDURE		
Turn ignition	switch ON.			
>> (2. STEP 2	GO TO 2.			
<u>s the DTC de</u> YES >> F	Perform diagnosis pr	ng CONSULT. ocedure. Refer to <u>ADP-53, "Diagr</u>	nosis Procedure	<u>"</u> .
-	NSPECTION END Procedure			INFC/ID:0000000000013;
	M DTC CONFIRMAT	ION PROCEDURE		
2. Check "S 3. Erase the 4. Perform <u>Is the DTC di</u> YES >> 0 NO >> 0	DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent inc	' using CONSULT. ocedure. Refer to <u>ADP-53, "DTC</u> cident. Refer to <u>GI-43, "Intermitter</u> CIRCUIT (POWER SHORT)	-	
1. Turn igni 2. Disconne	tion switch OFF. ect reclining motor a	nd driver seat control unit connect ning motor harness connector and		
	(+)			Voltage (V)
	Reclining mo	tor Terminals	(-)	(Approx.)
	B454	35	round	0
YES >> 0	tion result normal? GO TO 3.	ness or connector.		

1. Connect driver seat control unit connector.

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

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

	+) control unit	(-)	Voltage (V) (Approx.)	
Connector	Terminals		(+ +)	
B452	35	Ground	0	
D432	39	Ground	0	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

DTC Logic

	_				А
D٦	FC Logic	;		INFOID:000000009013327	
DT	C DETEC	CTION LOGIC			В
-	DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	С
-	B2116	STEERING TILT	The automatic drive positioner control unit detects the output of tilt motor output terminal for 0.1 second or more even if the tilt switch is not input.	 Automatic drive positioner con- trol unit Tilt motor harness is shorted 	D
		RMATION PROCE	DURE		D
١.	STEP 1				Е
Tu	rn ignition	switch ON.			

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" using CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to ADP-55, "Diagnosis Procedure".
- >> INSPECTION END NO

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- Check "Self diagnostic result" using CONSULT. 2.
- 3. Erase the DTC.
- Perform DTC confirmation procedure. Refer to ADP-55, "DTC Logic". 4.
- Is the DTC displayed again?
- YES >> GO TO 2.

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

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		(Approx.)	N
M44C	1	Oracia d	Ground 0	
M116	2	Ground	U	0

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

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

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INFOID:000000009013328

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

B2128 UART COMMUNICATION LINE

Description

Driver seat control unit performs UART communication with the automatic drive positioner control unit using 1 В 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:000000009013330

INFOID:000000009013329

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" using CONSULT.		1
Is the DTC detected?		
YES >> Perform diagnosis procedure. Refer to <u>ADP-57, "Diagnosis Procedure"</u> . NO >> INSPECTION END		ADP
Diagnosis Procedure	INFOID:000000009013331	K
1.PERFORM DTC CONFIRMATION PROCEDURE		
 Turn ignition switch ON. Check "Self diagnostic result" using CONSULT. 		L
 Erase the DTC. Perform DTC confirmation procedure. Refer to <u>ADP-55. "DTC Logic"</u>. 		M
<u>Is the DTC displayed again?</u> YES >> GO TO 2.		IVI
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .		NI
2. CHECK UART COMMUNICATION LINE CONTINUITY		Ν
1. Turn ignition switch OFF.		
2 Disconnect driver seat control unit and automatic drive positioner control unit connector		0

- 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 se	Driver seat control unit		Automatic drive positioner control unit		P
Connector	Terminal	Connector	Terminal	- Continuity	
B451	2	M75	8	Existed	-

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

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B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	2		Not existed

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

INFOID:00000009013332

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2130	EEPROM	Driver seat control unit detected CPU malfunction.	Driver seat control unit
TC CONF	IRMATION PROCI	EDURE	
.STEP 1			
urn ignition	switch ON.		
>> (GO TO 2.		
.STEP 2	00102.		
heck "Self	diagnostic result" usi	ing CONSULT.	
the DTC d			
/ES >>1 NO >>1	Perform diagnosis pr NSPECTION END	rocedure. Refer to <u>ADP-59, "Diagnosis Proc</u>	edure".
iagnosis	Procedure		INFOID:000000009013333
	M DTC CONFIRMA	TION PROCEDURE	
Turn ign Check "S	ition switch ON. Self diagnostic result		
Turn ign Check "S Erase th	ition switch ON. Self diagnostic result e DTC.		
Turn ign Check "S Erase th Perform the DTC d	ition switch ON. Self diagnostic result e DTC. DTC confirmation pl isplayed again?	" using CONSULT.	
Turn ign Check "S Erase th Perform <u>the DTC d</u> (ES >> 0	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2.	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> .	
Turn ign Check "S Erase th Perform the DTC d (ES >> 0	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2.	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	<u>'</u> .
Turn ign Check "S Erase th Perform the DTC d (ES >> (NO >> (.REPLACE	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent in	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	<u>'</u> .
Turn ign Check "S Erase th Perform the DTC d (ES >> (NO >> (.REPLACE eplace driv	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent in E DRIVER SEAT CC er seat control unit.	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	<u>.</u>
Turn ign Check "S Erase th Perform the DTC d (ES >> (NO >> (.REPLACE eplace driv	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent in E DRIVER SEAT CC	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	<u>'</u> .
Turn ign Check "S Erase th Perform the DTC d (ES >> (NO >> (.REPLACE eplace driv	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent in E DRIVER SEAT CC er seat control unit.	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	<u>-</u> .
Turn ign Check "S Erase th Perform the DTC d (ES >> (NO >> (.REPLACE eplace driv	ition switch ON. Self diagnostic result e DTC. DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent in E DRIVER SEAT CC er seat control unit.	" using CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	<u>-</u> .

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000009013334

1.CHECK FUSE

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

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

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

	(+) Driver seat control unit		Voltage (V) (Approx.)
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B452	33	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK DRIVER SEAT CONTROL UNIT GROUND CIRCUIT

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	43		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:000000009013335

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000009013336

NOTE:

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

1.CHECK FUSE

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Signal r	name	Fuse	No.
Battery pow	er supply	K (50) A)
Turn ignition switch OFF.	n fuse after repairing the /E POSITIONER CONTI /e positioner control unit	ROL UNIT POWER SUPPL	
		control unit harness connec	ctor and ground.
(+) Automatic drive posi			Voltage (V)
Connector	Terminals	(-)	(Approx.)
M104	25	Ground	Battery voltage
NO >> Repair or replace CHECK AUTOMATIC DRIN heck continuity between the	/E POSITIONER CONTI		
Automatic drive posi	tioner control unit		
			Continuity
Connector	Terminal	Ground	Continuity
M104 the inspection result normal YES >> INSPECTION EN	30 ? D	Ground	Existed
M104 the inspection result normal YES >> INSPECTION EN NO >> Repair or replace UTOMATIC DRIVE PO .PERFORM ADDITIONAL S	30 D harness. DSITIONER CONT SERVICE	ROL UNIT : Special R	Existed
M104 the inspection result normal YES >> INSPECTION EN NO >> Repair or replace UTOMATIC DRIVE PO .PERFORM ADDITIONAL S erform additional service who	30 P D harness. DSITIONER CONT SERVICE en removing battery negative "ADDITIONAL SERVICE	ROL UNIT : Special R	Existed
M104 the inspection result normal YES >> INSPECTION EN NO >> Repair or replace UTOMATIC DRIVE PO .PERFORM ADDITIONAL S erform additional service who >> Refer to ADP-44.	30 P D harness. DSITIONER CONT SERVICE en removing battery negative "ADDITIONAL SERVICE	ROL UNIT : Special R ative terminal.	Existed
M104 the inspection result normal YES >> INSPECTION EN NO >> Repair or replace UTOMATIC DRIVE PO .PERFORM ADDITIONAL S erform additional service who >> Refer to ADP-44.	30 P D harness. DSITIONER CONT SERVICE en removing battery negative "ADDITIONAL SERVICE	ROL UNIT : Special R ative terminal.	Existed

SLIDING SWITCH

Component Function Check

INFOID:000000009013338

1. CHECK FUNCTION

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

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
SLIDE SW-RR	Siluing Switch (Dackward)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000009013339

1. CHECK SLIDING SWITCH INPUT SIGNAL

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

	(+)			
Power seat switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals			
	8	Ground	12	
D439	24	Ground	IZ	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver seat	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	8	B459	8	Existed
D451	24	D455	24	LXISIEU

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

Driver seat	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B451	8	Ground	Not existed	
D431	24		NOT EXISTED	

Is the inspection result normal?

YES >> Replace driver seat control unit.

SLIDING SWITCH

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

3. Check continuity between power seat switch (sliding switch) terminals.

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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RECLINING SWITCH

Component Function Check

INFOID:000000009013341

1. CHECK FUNCTION

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

2. Check reclining switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013342

1. CHECK RECLINING SWITCH INPUT SIGNAL

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

· · · · · · · · · · · · · · · · · · ·	+) eat switch		Voltage (V) (Approx.)	
Connector	Terminals	(-)		
B459	9	Ground	12	
	25	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 seat	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	9	B459	9	Existed
D431	25	D455	25	LXISIEU

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

	Driver seat control unit			Continuity	
_	Connector	Terminal	Cround	Continuity	
	B451	9 Ground	Not existed		
	0401	25		NUL EXISIEU	

Is the inspection result normal?

YES >> Replace driver seat control unit.

RECLINING SWITCH

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

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

_	Continuity	Condition		Power seat switch (Reclining switch)		
	Continuity		Condition	minal	Terr	
-	Existed	Operate	Reclining switch (backward)		9	
_	Not existed	Release			9	
-	Existed	Operate	Declining owitch (forward)	43 25		25
-	Not existed	Release	Reclining switch (forward)			

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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LIFTING SWITCH (FRONT)

Component Function Check

1.CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013345

1. CHECK LIFTING SWITCH (FRONT) INPUT SIGNAL

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

(+) Power seat switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(, (,),)	
B459	10	Ground	12	
D439	26	Ground	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver seat	t control unit	Power se	eat switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	10	B459	10	Existed
D451	26	D433	26	LXISIEU

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

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	10	Ground	Not existed
6431	26		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit.

INFOID:000000009013344

LIFTING SWITCH (FRONT)

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

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

Power seat switch (lifting switch front)		Condition		Continuity	G
Terr	ninal	Conditio		Continuity	
10		Lifting switch front (down)	Operate	Existed	
	43	Lifting switch front (down)	Release	Not existed	Н
26	_	Lifting quitch front (up)	Operate	Existed	
20		Lifting switch front (up)		Not existed	1

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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LIFTING SWITCH (REAR)

Component Function Check

1.CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013348

1.CHECK LIFTING SWITCH (REAR) INPUT SIGNAL

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

· · · · · · · · · · · · · · · · · · ·	+) eat switch	(-)	Voltage (V) (Approx.)	
Connector	Terminals			
B459	11	Ground	10	
B459	27	Ground	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver sea	t control unit	Power se	eat switch	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B451	11	B459	11	Existed	
D451	27	D455	27	LAISted	

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

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	11	Ground	Not existed
D431	27		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit.

INFOID:000000009013347

LIFTING SWITCH (REAR)

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

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

Power seat switch (lifting switch rear)		Con	Condition		
Term	ninal	Condition		Continuity	
11		Lifting switch rear (down)	Operate	Existed	
11	40		Release	Not existed	
27 43		Operate	Existed		
		Lifting switch rear (up)	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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TILT SWITCH

Component Function Check

INFOID:000000009013350

1. CHECK FUNCTION

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

2. Check tilt switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013351

1. CHECK TILT SWITCH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TILT SWITCH CIRCUIT

1. Turn ignition switch OFF.

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	1	M102	2	Existed	
1017 5	13	WITOZ	3	LAISted	

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

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M75	1	Ground	Not existed	
WI75	13		NUL EXISIEU	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >		
NO >> Repair or replace harness or connector.		
3. CHECK TILT SWITCH	А	
Refer to ADP-71, "Component Inspection".		
Is the inspection result normal?	В	
YES >> GO TO 4.		
NO >> Replace tilt & telescopic switch.		
4.CHECK INTERMITTENT INCIDENT		
Refer to GI-43, "Intermittent Incident".		
	D	
>> INSPECTION END	D	
Component Inspection INFOID:000000000013352	Е	
1.CHECK TILT SWITCH		
 Turn ignition switch OFF. Disconnect tilt & telescopic switch connector. Check continuity between tilt & telescopic switch terminals. 	F	

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch.

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TELESCOPIC SWITCH

Component Function Check

INFOID:000000009013353

1. CHECK FUNCTION

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

2. Check telescopic switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013354

1.CHECK TELESCOPIC SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V) (Approx.)	
Tilt & telescopic switch				
Connector	Terminals			
M102	5	Ground	5	
WHOZ	4	Ciouna	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 positioner control unit		Tilt & telescopic switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	7	M102	5	Existed	
WI75	19	WITO2	4	LXISIEU	

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

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M75	7	Ground	Not existed	
	19	-	NOT EXISTED	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness or connector.	
3. CHECK TELESCOPIC SWITCH	А
Refer to ADP-73, "Component Inspection".	
Is the inspection result normal?	В
YES >> GO TO 4.	
NO >> Replace tilt & telescopic switch.	
4. CHECK INTERMITTENT INCIDENT	С
Refer to GI-43, "Intermittent Incident".	
>> INSPECTION END	D
Component Inspection INFOID:00000000013355	
1. CHECK TELESCOPIC SWITCH	Е
 Turn ignition switch OFF. Disconnect tilt & telescopic switch connector. Check continuity between tilt & telescopic switch terminals. 	F
Telescopic switch	G

	Telescopic switch Terminal		Condition		Continuity	G
					Continuity	
_	5		Telescopic switch (forward)	Operate	Existed	
;	5	1		Release	Not existed	H
_	4		Telescopic switch (backward)	Operate	Existed	
	4			Release	Not existed	1

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch.

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< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Component Function Check

INFOID:000000009013356

1. CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013357

1. CHECK SEAT MEMORY SWITCH INPUT SIGNAL

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

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SEAT MEMORY SWITCH CIRCUIT

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

Driver sea	t control unit	Seat memory switch nal Connector Terminal		Continuity	
Connector	Terminal			Continuity	
	6	D13		2	
B451	22		1	Existed	
	28		3	1	

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Drive	er seat control unit			
Connector	Termir	nal		Continuity
	6		Ground	
B451	22			Not existed
	28			
the inspection result				
	iver seat control unit			
•	eplace harness or co			
CHECK SEAT MEM				
heck continuity betwe	en seat memory swi	tch harness connec	tor and ground.	
Sea	at memory switch			
Connector	Termir	nal	Ground	Continuity
D13	4			Existed
the inspection result	normal?	l		
YES >> GO TO 4.				
•	eplace harness or co	onnector.		
CHECK SEAT MEM	ORY SWITCH			
efer to <u>ADP-75, "Com</u>	ponent Inspection".			
the inspection result	normal?			
YES >> GO TO 5. NO >> Replace se	ot momory owitch			
CHECK INTERMIT	eat memory switch.			
efer to <u>GI-43, "Intermi</u>	ttent Incident".			
>> INSPECTIO				
component Inspec	Ction			INFOID:000000009013
.CHECK SEAT MEM	ORY SWITCH			
. Turn ignition switch				
. Disconnect seat me	emory switch conned			
. Check continuity be	etween seat memory	switch terminals.		
Seat men	nory switch			
	ninal	- C	ondition	Continuity
			Push	Existed
1		Memory switch 1	Release	Not existed
			Push	Existed
2	4	Memory switch 2	Release	Not existed
			Push	Existed
3		Set switch		

Is the inspection result normal?

3

YES >> INSPECTION END

NO >> Replace seat memory switch.

Release

Set switch

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Not existed

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Component Function Check

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> INSPECTION END

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

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:000000009013360

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.

	(+)			
	Power window main switch (door mirror remote control switch)		Voltage (V) (Approx.)	
Connector	Terminal			
 D80	23	Ground	5	
Doo	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 positioner control unit			w main switch ote control switch)	Continuity
Connector	Terminal	Connector	Terminal	*
M75	2	D90	28	Existed
IVI75	14	D80	23	Existed

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	2	Ground	Not existed
IVI7 S	14		NOT EXISTED

Is the inspection result normal?

INFOID-0000000000013359

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.
9
3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT
 Turn ignition switch OFF. Check continuity between power window main switch (door mirror remote control switch) harness connec tor and ground.
Power window main switch (door mirror remote control switch) Continuity
Connector Terminal Ground
D5 7 Existed
Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace harness. 4. CHECK CHANGEOVER SWITCH Check door mirror remote control switch (changeover switch). Refer to ADP-77, "CHANGEOVER SWITCH : Component Inspection". Is the inspection result normal? YES >> GO TO 5.
NO >> Replace power window main switch (door mirror remote control switch). 5. CHECK INTERMITTENT INCIDENT Check intermittent incident. Refer to GI-43, "Intermittent Incident".
>> INSPECTION END CHANGEOVER SWITCH : Component Inspection
1. CHECK CHANGEOVER SWITCH
 Turn ignition switch OFF. Disconnect power window main switch (door mirror remote control switch) connector. Check continuity between power window main switch (door mirror remote control switch) terminals.

Power window main switch (door mirror remote control switch)		Co	Condition		L	
	Tern	ninal	-			
	23		Changeover switch	LEFT	Existed	N
		7		Other than the above	Not existed	
	28	7		RIGHT	Existed	
				Other than the above	Not existed	- N

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power window main switch (door mirror remote control switch).

MIRROR SWITCH

MIRROR SWITCH : Component Function Check

1.CHECK MIRROR SWITCH FUNCTION

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

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< 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-0P/DN	Other than the above.	: OFF		
	When operating the mirror switch toward the right or left side.	: ON		
MIR CON SW-RH/LH	Other than the above.	: OFF		

Is the inspection result normal?

YES >> INSPECTION END

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

MIRROR SWITCH : Diagnosis Procedure

INFOID:000000009013363

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	Terminal			
	27			
D80	24	Ground	5	
Doo	26	Ground	5	
	25			

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	D80	26	
M75	4		24	Existed
10175	15		25	Existed
	16		27	†

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

Automatic drive	positioner control unit		Continuity	
Connector	Terminal		Continuity	
	3	Ground		
M75	4	Giouna	Not existed	
	15		NOI EXISIEU	
	16			

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit.
- NO >> Repair or replace harness.

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

1. Turn ignition switch OFF.

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

Power window main switch (door mirror remote control switch)			Continuity
Connector	Terminal	Ground	
D5	7		Existed
s the inspection result norma YES >> GO TO 4. NO >> Repair or replace 1. CHECK MIRROR SWITC	e harness.		
Check door mirror remote co Refer to <u>ADP-79, "MIRROR S</u> Is the inspection result norma	SWITCH : Component Ins		
YES >> GO TO 5. NO >> Replace power v	vindow main switch (door INCIDENT	mirror remote control swite	ch).

MIRROR SWITCH : Component Inspection

1. CHECK MIRROR SWITCH

>> INSPECTION END

- 1. Turn ignition switch OFF.
- 2. Disconnect power window main switch (door mirror remote control switch) connector.

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

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

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INFOID:000000009013364

POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000009013365

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 seat switch			Continuity
Connector	Terminal	Ground	Continuity
B459	43		Existed

Is the inspection result normal?

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

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOS			
TILT & TELESCOPIC	C SWITCH GROUI	ND CIRCUIT	
Diagnosis Procedure			INFOID:000000000013366
1. CHECK TILT & TELESCO	PIC SWITCH GROUND (CIRCUIT	
 Turn ignition switch OFF Disconnect tilt & telesco Check continuity betweet 		arness connector and grou	und.
	copic switch	Orrend	Continuity
M102	1	Ground	Existed
Is the inspection result norm YES >> Check intermitte NO >> Repair or replace	nt incident. Refer to GI-43	"Intermittent Incident".	
Tilt & telesc Connector M102 Is the inspection result normal YES >> Check intermitte	Terminal 1 al? nt incident. Refer to <u>GI-43</u>	Ground	Continuity

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< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Component Function Check

INFOID:000000009013367

1. CHECK FUNCTION

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

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

^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013368

1.CHECK SLIDING SENSOR SIGNAL

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

	+) control unit Terminals	(-)	Con	dition	Signal (Reference value)
B451	18	Ground	Seat sliding	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

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

2. CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Sliding motor		
Connector	Terminal	Connector	Terminal	- Continuity	
B451	18	B461	18	Existed	

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Drive	er seat control unit					
Connector	Termin	al	Ground			Continuity
B451	18					Not existed
CHECK SLIDING SE Connect driver seat Turn ignition switch	eplace harness or co ENSOR POWER SU	PPLY	nector and	around		
Check voltage betw	(+)			0		
	Sliding motor			(-)		Voltage (V)
Connector	Termina	als				(Approx.)
B461	12			Ground		12
			דוווי			
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be	OFF. eat control unit conn tween driver seat co	ector.	arness cor		ding me	otor harness conn
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be	OFF. eat control unit connective of tween driver seat co	ector. ntrol unit h	arness cor Sliding	g motor	ding mo	otor harness conn Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat	OFF. eat control unit connective of tween driver seat co control unit Terminal	ector. ntrol unit ha	arness cor Sliding nector	g motor Terminal	ding mo	Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451	OFF. eat control unit connective etween driver seat control unit Terminal 12	ector. ntrol unit ha Conr B4	arness cor Sliding nector	g motor Terminal 12		
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451	OFF. eat control unit connective of tween driver seat co control unit Terminal	ector. ntrol unit ha Conr B4	arness cor Sliding nector	g motor Terminal 12		Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451 Check continuity be Drive	OFF. eat control unit connective etween driver seat control unit Terminal 12 etween driver seat control unit	ector. Introl unit ha Conr B4 Introl unit h	arness cor Sliding nector I61 arness cor	g motor Terminal 12 nnector and gro		Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451 Check continuity be Drive Connector	OFF. eat control unit connective etween driver seat control unit Terminal 12 etween driver seat control unit Termin	ector. Introl unit ha Conr B4 Introl unit h	arness cor Sliding nector I61 arness cor	g motor Terminal 12		Continuity Existed Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451 Check continuity be Drive Connector B451	OFF. eat control unit connectiveen driver seat control unit Terminal 12 etween driver seat control unit er seat control unit 12	ector. Introl unit ha Conr B4 Introl unit h	arness cor Sliding nector I61 arness cor	g motor Terminal 12 nnector and gro		Continuity Existed
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check scill result r So CHECK SLIDING SE Turn ignition switch	OFF. eat control unit connectiveen driver seat control unit Terminal 12 etween driver seat control unit er seat control unit 12 etween driver seat control unit. pormal? ver seat control unit. eplace harness or co	ector. Introl unit hat Conn B4 Introl unit h al	arness cor Sliding hector I61 arness cor	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check SLIDING SE Turn ignition switch Check continuity be Check continuity	OFF. eat control unit connectiveen driver seat control unit Terminal 12 etween driver seat control unit r seat control unit Terminal 12 etween driver seat control unit. Phormal? ver seat control unit. Splace harness or control unit. Phormal	ector. Introl unit hat Conn B4 Introl unit h al	arness cor Sliding hector I61 arness cor	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Connector B451 Check SLIDING SE Turn ignition switch Check continuity be Check con	OFF. eat control unit connectiveen driver seat control unit Terminal 12 etween driver seat control unit er seat control unit 12 etween driver seat control unit. eplace harness or co ENSOR GROUND Cl OFF. etween sliding sensor	ector. Introl unit ha Conr B4 Introl unit h al INCUIT IRCUIT	arness cor Sliding hector l61 arness cor	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity
CHECK SLIDING SE Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check SLIDING SE Turn ignition switch Check continuity be Check continuity	OFF. eat control unit connectiveen driver seat control unit Terminal 12 etween driver seat control unit r seat control unit Terminal 12 etween driver seat control unit. Phormal? ver seat control unit. Splace harness or control unit. Phormal	ector. Introl unit ha Conr B4 Introl unit h al INCUIT IRCUIT	arness cor Sliding hector l61 arness cor	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity Not existed

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Component Function Check

INFOID:000000009013369

1. CHECK FUNCTION

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

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-84, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009013370

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 control unit (-)		(-) Condition		Signal (Reference value)
Connector	Terminals				
B451	4	Ground	Seat reclining	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

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

2. CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Reclining motor		
Connector	Terminal	Connector	Terminal	Continuity	
B451	4	B454	4	Existed	

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Connector	er seat control unit		Ground		Continuity
B451	4	ai	Ground		Not existed
-	•				NOT EXISTED
the inspection result (ES >> GO TO 3. IO >> Repair or re CHECK RECLINING	eplace harness or cor				
Turn ignition switch	t control unit connecto ON. veen reclining motor h	-	nnector and ground		
	(+)				
R	Reclining motor		(-)		Voltage (V) (Approx.)
Connector	Termina	als			(********)
B454	12		Ground		12
the inspection result YES >> GO TO 5. NO >> GO TO 4.	<u>normal :</u>				
CHECK RECLINING Turn ignition switch Disconnect driver s		ector.		nd reclining	motor harness cc
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor.	OFF.	ector.		nd reclining	
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit conne etween driver seat co	ector.	arness connector an Reclining motor	nd reclining	motor harness cc
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit connective etween driver seat co	ector. ntrol unit ha	Arness connector an Reclining motor ector Te		
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451	OFF. eat control unit connective etween driver seat co control unit Terminal	ector. ntrol unit ha Conne B4	Arness connector al Reclining motor ector Te 54	rminal	Continuity
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Check continuity be	OFF. eat control unit connective etween driver seat co control unit Terminal 12	ector. ntrol unit ha Conne B4	Arness connector al Reclining motor ector Te 54	rminal	- Continuity Existed
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Check continuity be	o OFF. eat control unit connective of the control unit control unit Terminal 12 etween driver seat control unit	ector. ntrol unit ha Conne B4t ntrol unit ha	Arness connector al Reclining motor ector Te 54	rminal	Continuity
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Connector B451 Check continuity be Drive Connector B451	COFF. Seat control unit connective etween driver seat control unit Terminal 12 Etween driver seat control unit Terminal 12 Etween driver seat control unit 12	ector. ntrol unit ha Conne B4t ntrol unit ha	Arness connector an Reclining motor ector Te 54 Arness connector an	rminal	- Continuity Existed
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Connector B451 Check continuity be Ch	control unit connective of the off. control unit connective seat control unit connective seat control unit 12 control unit	ector. ntrol unit ha Conne B4t ntrol unit ha al	Arness connector an Reclining motor Sector Te 54 Arness connector an Ground	rminal 12 nd ground.	Continuity Existed Continuity
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check RECLINING Turn ignition switch Check continuity be Check continu	control unit connective of the off.	ector. ntrol unit ha Conne B4t ntrol unit ha al	Arness connector an Reclining motor Sector Te 54 Arness connector an Ground	rminal 12 nd ground.	Continuity Existed Continuity Not existed
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check continuity be Connector B451 Check RECLINING Turn ignition switch Check continuity be Check continu	control unit connective etween driver seat control unit control unit Terminal 12 etween driver seat control unit rermina 12 etween driver seat control unit 12 etween driver seat control unit 12 normal? iver seat control unit. eplace harness or cor SENSOR GROUND OFF.	ector. ntrol unit ha Conne B4t ntrol unit ha al nnector. O CIRCUIT or harness o	Arness connector an Reclining motor Sector Te 54 Arness connector an Ground	rminal 12 nd ground.	Continuity Existed Continuity

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:000000009013371

1. CHECK FUNCTION

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

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

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

^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013372

1. CHECK LIFTING SENSOR (FRONT) SIGNAL

1. Turn ignition switch ON.

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

(+ Driver seat Connector		(-)	Condition		Voltage (V) (Approx.)
B451	19	Ground	Seat Lifting (front)	Operate	10mSec/div The sec of the sec of
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit.

```
NO >> GO TO 2.
```

2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Lifting motor (front)		
Connector	Terminal	Connector	Terminal	Continuity	
B451	19	B455	19	Existed	

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver s	seat control unit			Continuity
Connector	Termina	al	Ground	
B451	19			Not existed
CHECK LIFTING SEN	lace harness or cor SOR (FRONT) PO ¹	WER SUPPLY		
Connect driver seat c Turn ignition switch C Check voltage betwee	N. en lifting motor (fror	-	tor and ground.	
	(+)			Voltage (V)
	g motor (front)	1-	(-)	(Approx.)
Connector B455	Termina 12	12	Ground	12
the inspection result no			Stouriu	16
(ES >> GO TO 5. NO >> GO TO 4.				
CHECK LIFTING SEN)FF.		CUIT	
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea	PFF. at control unit conne veen driver seat co	ector. ntrol unit harness c		ng motor (front) harness
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector.	PFF. at control unit conne veen driver seat co	ector. ntrol unit harness c	connector and liftin	ng motor (front) harness
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector.	OFF. at control unit conne veen driver seat con untrol unit	ector. ntrol unit harness o Lifting	connector and liftin	
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betv nector. Driver seat co Connector	DFF. at control unit connerveen driver seat con Introl unit Terminal 12	ector. ntrol unit harness o Lifting Connector B455	connector and liftin motor (front) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betv nector. Driver seat co Connector B451 Check continuity betv	OFF. at control unit connerveen driver seat con ontrol unit Terminal 12 veen driver seat con	ector. ntrol unit harness o Lifting Connector B455	connector and liftin motor (front) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betv nector. Driver seat co Connector B451 Check continuity betv	DFF. at control unit connerveen driver seat con Introl unit Terminal 12	ector. ntrol unit harness o Lifting Connector B455 ntrol unit harness o	connector and liftin motor (front) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B451 Check continuity betw Driver seat	DFF. at control unit connerveen driver seat con introl unit Terminal 12 veen driver seat con seat control unit	ector. ntrol unit harness o Lifting Connector B455 ntrol unit harness o	connector and liftin motor (front) Terminal 12 connector and grou	Continuity Existed und.
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B451 Check continuity betw Connector B451 the inspection result no (ES >> Replace drive	DFF. at control unit connerveen driver seat con- mtrol unit Terminal 12 veen driver seat con- seat control unit Termina 12 veen driver seat con- seat control unit 12 veen driver seat con- seat control unit 12 veen driver seat con- seat control unit 12 veen driver seat con- seat control unit	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al	connector and liftin motor (front) Terminal 12 connector and grou	Continuity Existed und. Continuity
.CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity between Driver seat co Connector B451 Check continuity between Connector B451 the inspection result no (ES >> Replace driversed) NO >> Repair or repoint .CHECK LIFTING SEN Turn ignition switch C Check continuity between	DFF. at control unit connerveen driver seat control untrol unit Terminal 12 veen driver seat control seat control unit Terminal 12 veen driver seat control seat control unit 12 veen lifting motor (fill)	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al	connector and liftin	Continuity Existed und. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B451 Check continuity betw Connector B451 Check continuity betw Connector B451 the inspection result no (ES >> Replace drive NO >> Repair or rep CHECK LIFTING SEN Turn ignition switch C Check continuity betw Lifting	DFF. at control unit connerveen driver seat control untrol unit Terminal 12 veen driver seat control seat control unit Termina 12 veen driver seat control seat control unit. lace harness or cort SOR (FRONT) GROP DFF. veen lifting motor (front)	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al nnector. OUND CIRCUIT ront) harness conn	connector and liftin	Continuity Existed und. Continuity
.CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity between Driver seat co Connector B451 Check continuity between Connector B451 the inspection result no (ES >> Replace driversed) NO >> Repair or repoint .CHECK LIFTING SEN Turn ignition switch C Check continuity between	DFF. at control unit connerveen driver seat control untrol unit Terminal 12 veen driver seat control seat control unit Terminal 12 veen driver seat control seat control unit 12 veen lifting motor (fill)	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al nnector. OUND CIRCUIT ront) harness conn	connector and liftin	Continuity Existed und. Continuity Not existed

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Component Function Check

INFOID:000000009013373

1. CHECK FUNCTION

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

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

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

^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000009013374

1.CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.

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

(+ Driver seat Connector		(-)	Condition		Voltage (V) (Approx.)
B451	20	Ground	Seat Lifting (rear)	Operate	10mSec/div
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit.

```
NO >> GO TO 2.
```

2. CHECK LIFTING SENSOR (REAR) CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Lifting motor (rear)		
Connector	Terminal	Connector	Terminal	Continuity	
B451	20	B456	20	Existed	

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver	seat control unit			Continuity
Connector	Termina	l	Ground	Continuity
B451	20			Not existed
the inspection result no 'ES >> GO TO 3. IO >> Repair or rep CHECK LIFTING SEN Connect driver seat of Turn ignition switch O Check the voltage be	blace harness or con ISOR (REAR) POW control unit connecto DN.	ER SUPPLY	ector and ground	
	(+)	(,	<u> </u>	
L iftir	(+) ng motor (rear)		(-)	Voltage (V)
Connector	Terminal	ls l	()	(Approx.)
B456	12	-	Ground	12
ES >> GO TO 5. O >> GO TO 4.				
CHECK LIFTING SEN Turn ignition switch (Disconnect driver se Check the continuity	OFF. at control unit conne	ector.		d lifting motor (rear) harn
CHECK LIFTING SEN Turn ignition switch (Disconnect driver se	DFF. at control unit conne between driver sea	ector. It control unit harne		
CHECK LIFTING SEN Turn ignition switch (Disconnect driver se Check the continuity connector.	DFF. at control unit conne between driver sea	ector. It control unit harne	ss connector and	d lifting motor (rear) harn
CHECK LIFTING SEN Turn ignition switch (Disconnect driver se Check the continuity connector.	DFF. at control unit conne between driver sea	ector. It control unit harne Lifting n	ss connector and	
CHECK LIFTING SEN Turn ignition switch (Disconnect driver sea Check the continuity connector. Driver seat conceptor	DFF. at control unit conne between driver sea ontrol unit Terminal 12	ector. It control unit harne Lifting n Connector B456	notor (rear) Terminal	Continuity Existed
CHECK LIFTING SEN Turn ignition switch (Disconnect driver sea Check the continuity connector. Driver seat continuity B451 Check the continuity	DFF. at control unit conne between driver sea ontrol unit Terminal 12	ector. It control unit harne Lifting n Connector B456	notor (rear) Terminal	Continuity Existed ground.
CHECK LIFTING SEN Turn ignition switch (Disconnect driver set Check the continuity connector. Driver seat continuity B451 Check the continuity	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat	ector. It control unit harne Lifting n Connector B456 t control unit harnes	notor (rear) Terminal	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver set Check the continuity connector. Connector B451 Check the continuity Driver Connector B451	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit Termina 12	ector. It control unit harne Lifting n Connector B456 t control unit harnes	ss connector and notor (rear) Terminal 12 s connector and	Continuity Existed ground.
CHECK LIFTING SEN Turn ignition switch C Disconnect driver set Check the continuity connector. Connector B451 Check the continuity Connector B451 Check the continuity Driver Connector B451 Sthe inspection result no YES >> Replace driv	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit Seat control unit 12 prmal? er seat control unit. place harness or con NSOR (REAR) GROU	ector. It control unit harne Lifting n Connector B456 t control unit harnes I I I I I I I I I I I I I	ss connector and notor (rear) Terminal 12 s connector and Ground	Continuity Existed ground. Continuity Not existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver set Check the continuity connector. Connector B451 Check the continuity Connector B451 Check LIFTING SEN Turn ignition switch C Check the continuity	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit seat control unit 12 ormal? er seat control unit. blace harness or con NSOR (REAR) GROU	ector. It control unit harne Lifting n Connector B456 t control unit harnes I I I I I I I I I I I I I	ss connector and notor (rear) Terminal 12 s connector and Ground	Continuity Existed ground. Continuity Not existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver set Check the continuity connector. Connector B451 Check the continuity Connector B451 Check LIFTING SEN Turn ignition switch C Check the continuity	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit Seat control unit 12 prmal? er seat control unit. place harness or con NSOR (REAR) GROU	ector. t control unit harne Lifting n Connector B456 t control unit harnes in nector. UND CIRCUIT or (rear) harness co	ss connector and notor (rear) Terminal 12 s connector and Ground	Continuity Existed ground. Continuity Not existed

TILT SENSOR

Component Function Check

INFOID:000000009013375

1. CHECK FUNCTION

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

2. Check tilt sensor signal under the following conditions.

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

^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-90, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009013376

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		(-)	Con	dition	Voltage (V) (Approx.)
B451	21	Ground	Steering col- umn	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

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

2. CHECK TILT SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

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

Driver seat	Driver seat control unit		Tilt motor		
Connector	Terminal	Connector	Terminal	Continuity	
B451	21	M116	5	Existed	

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	21		Not existed

TILT SENSOR

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

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

TELESCOPIC SENSOR

Component Function Check

INFOID:000000009013377

1. CHECK FUNCTION

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

2. Check telescopic sensor signal under the following conditions.

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

^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-92, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009013378

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	+) control unit	(-)	Con	dition	Voltage (V) (Approx.)
Connector	Terminals				
B451	5	Ground	Steering col- umn	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit.

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Telescopic motor		
Connector	Terminal	Connector	Terminal	Continuity	
B451	5	M117	5	Existed	

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

	Driver seat	control unit				0	41
Conne	ctor	Termina	al		Ground	Con	itinuity
B45	1	5				Not e	existed
-	TO 3. air or replac	e harness or cor ENSOR POWEF					
Turn ignition Check voltag		telescopic moto	r harness o	connector a	and ground.		
	(+)					
	Telesco	pic motor			(-)		age (V) prox.)
Conne	ctor	Termina	ls				. ,
M11	7	4			Ground		12
Turn ignition	switch OFF automatic dr auity betwee	ENSOR POWER	ontrol unit	connector.	unit harness co	nnector and t	elescopic mo
Automatic	drive positione	er control unit		Telescop	oic motor		
Connecto	r	Terminal	Con	nector	Terminal	(Continuity
M104		27	M	117	4		Existed
Check contir	nuity betwee	en automatic driv	e position	er control u	unit harness cor	nector and g	round.
CHECK COIL							
	omatic drive po	sitioner control unit					
		sitioner control unit Termina		-	Ground	Con	itinuity
Auto Conne M10	octor	Termina 27			Ground		tinuity existed
Auto Conne M10 the inspection YES >> Repl NO >> Repa CHECK TELE Turn ignition Disconnect a	ctor result norm ace automa air or replac SCOPIC SI switch OFF automatic dr nuity betwee	Termina 27 al? tic drive positior e harness or cor ENSOR GROUN	al ner control nnector. ND CIRCU ontrol unit (unit. IT connector.		Not e	existed
Auto Conne M10 the inspection YES >> Repl NO >> Repa CHECK TELE Turn ignition Disconnect a Check contir harness con	ctor result norm ace automa air or replac SCOPIC SI switch OFF automatic dr nuity betwee	Termina 27 al? tic drive positior e harness or cor ENSOR GROUN ENSOR GROUN ive positioner co en automatic driv	al ner control nnector. ND CIRCU ontrol unit (unit. IT connector. er control u		Not o	existed
Auto Conne M10 the inspection YES >> Repl NO >> Repa CHECK TELE Turn ignition Disconnect a Check contir harness con	ctor result norm ace automa air or replac SCOPIC SI switch OFF automatic dr nuity between nector. drive positione	Termina 27 al? tic drive positior e harness or cor ENSOR GROUN ENSOR GROUN ive positioner co en automatic driv	al nector. ND CIRCU ontrol unit o /e position	unit. IT connector. er control u	unit harness co	Not o	existed
Auto Conne M10 the inspection YES >> Repl NO >> Repa O-CHECK TELE CHECK TELE Disconnect a Check contir harness cont Automatic	ctor result norm ace automa air or replac SCOPIC SI switch OFF automatic dr nuity between nector. drive positione	Termina 27 al? tic drive positior e harness or cor ENSOR GROUN E ive positioner co en automatic driv	al nector. ND CIRCU ontrol unit o /e position	unit. IT connector. er control u Telescop	unit harness col	Not o	existed
Auto Conne M10 the inspection YES >> Repl NO >> Repa O-CHECK TELE CHECK TELE Turn ignition Disconnect a Check contir harness con Automatic Connecto M75	ctor result norm ace automa air or replac SCOPIC SI switch OFF automatic dr nuity between nector. drive positioner r	Termina 27 al? tic drive position e harness or cor ENSOR GROUN ive positioner co en automatic driv er control unit Terminal	al nector. ND CIRCU pontrol unit of /e position	unit. IT connector. er control u Telescop nector 117	unit harness col bic motor Terminal 6	Not of the second secon	existed elescopic mot Continuity Existed
Auto Conne M10 the inspection YES >> Repl NO >> Repa CHECK TELE Turn ignition Disconnect a Check contir harness con Automatic Connecto M75 Check contir	ctor result norm ace automa air or replac SCOPIC SI switch OFF automatic dr nuity betwee nector. drive positione r nuity betwee pmatic drive po	Termina 27 al? ttic drive position e harness or cor ENSOR GROUN ive positioner co en automatic driv er control unit Terminal 20	al ner control nnector. ND CIRCU ontrol unit of /e position M /e position	unit. IT connector. er control u Telescop nector 117 er control u	unit harness col bic motor Terminal 6	Not of the second secon	existed elescopic mot Continuity Existed

Is the inspection result normal?

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

DTC/CIRCUIT DIAG	NOSIS >				
IRROR SENS	OR				
RIVER SIDE					
RIVER SIDE : Co	omponent Fund	ction Che	ck		INFOID:000000009013379
.CHECK FUNCTION					
. Select "MIR/SEN L	H U-D". "MIR/SEN I	_H R-L" in "C	Data monit	or" using CONSU	LT.
. Check mirror sense					
Monitor ite	m	Conc	dition		Value
MIR/SEN LH U-D				Change be 3.4 [V] (clos 0.6 [V] (clos	se to peak)
MIR/SEN LH R-L	Door	mirror (driver si	ide)		tween se to left edge) se to right edge)
the indication normal	?				
YES >> INSPECTION	-				and Drandura
	agnosis procedure. I		95, "DRI	VER SIDE : DIAGI	<u>nosis procedure"</u> .
RIVER SIDE : Di	agnosis Proce	dure			INFOID:000000009013380
CHECK DOOR MIR	ROR (DRIVER SIDE	E) SENSOR	POWER	SUPPLY	
Turn ignition switch		-			
Disconnect door mi	irror (driver side) co	nnector.			
		iver side) ha	irness con	nector and ground	1
_ 0		iver side) ha	irness con	nector and ground	d.
Check voltage betw	veen door mirror (dr (+)	iver side) ha	irness con		
Check voltage betw	veen door mirror (dr (+) mirror (driver side)		irness con	nector and ground	d. Voltage (V) (Approx.)
Check voltage betw Door Connector	veen door mirror (dr (+) mirror (driver side) Termir	nals		(-)	Voltage (V) (Approx.)
Check voltage betw Door Connector D3	veen door mirror (dr (+) mirror (driver side) Termir 23	nals			Voltage (V)
Check voltage betw Door Connector D3 the inspection result i	veen door mirror (dr (+) mirror (driver side) Termir 23	nals		(-)	Voltage (V) (Approx.)
Check voltage betw Door Connector D3 the inspection result of YES >> GO TO 3.	veen door mirror (dr (+) mirror (driver side) Termir 23	nals		(-)	Voltage (V) (Approx.)
Check voltage betw Door Connector D3 the inspection result of YES >> GO TO 3. NO >> GO TO 2.	veen door mirror (dr (+) mirror (driver side) Termir 23 normal?	nals		(-) Ground	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of ZES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE	nals		(-) Ground	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result (ES >> GO TO 3. NO >> GO TO 2. .CHECK DOOR MIRI Turn ignition switch Disconnect automa	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of	E) SENSOR	POWER	(-) Ground	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result in (ES >> GO TO 3. NO >> GO TO 2. .CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of petween automatic	E) SENSOR	POWER	(-) Ground	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result YES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of petween automatic	E) SENSOR	POWER	(-) Ground	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of YES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b (driver side) harnes	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of petween automatic	E) SENSOR	POWER connector. oner contr	(-) Ground	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of YES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b (driver side) harnes	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of between automatic ss connector.	E) SENSOR	POWER connector. oner contr	(-) Ground SUPPLY CIRCUIT	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of (ES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b (driver side) harnes Automatic drive po	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of between automatic ss connector. sitioner control unit	E) SENSOR control unit c drive positic	POWER connector. oner contr	(-) Ground SUPPLY CIRCUIT ol unit harness of (driver side)	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of (ES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b (driver side) harnes Automatic drive po Connector M75	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of between automatic ss connector. sitioner control unit Terminal 21	E) SENSOR control unit c drive positic	POWER connector. oner contr Door mirror lector	(-) Ground SUPPLY CIRCUIT Tol unit harness of (driver side) Terminal 23	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of (ES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b (driver side) harnes Automatic drive po Connector M75 Check continuity be	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of between automatic ss connector. sitioner control unit Terminal 21	E) SENSOR control unit c drive position Conn D ive positione	POWER connector. oner contr Door mirror lector	(-) Ground SUPPLY CIRCUIT Tol unit harness of (driver side) Terminal 23	Voltage (V) (Approx.) 5
Check voltage betw Door Connector D3 the inspection result of YES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRI Turn ignition switch Disconnect automa Check continuity b (driver side) harnes Automatic drive po Connector M75 Check continuity be	veen door mirror (dr (+) mirror (driver side) Termir 23 normal? ROR (DRIVER SIDE OFF. tic drive positioner of between automatic ss connector. sitioner control unit Terminal 21 etween automatic dr	E) SENSOR control unit c drive position Conn Drive positione	POWER connector. oner contr Door mirror lector 03 er control o	(-) Ground SUPPLY CIRCUIT Tol unit harness of (driver side) Terminal 23	Voltage (V) (Approx.) 5

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

NO

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

3. check door mirror (driver side) sensor ground circuit

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

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

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

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

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

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

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

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:000000009013381

1.CHECK FUNCTION

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

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

Monitor item	Condition	Value
MIR/SEN RH U-D	Door mirror (popponger side)	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 DIAGNOS	/IO /			
IO >> Perform diagnos	sis procedure. Re	efer to <u>ADP-97, "PA</u>	ASSENGER SIDE : D	iagnosis Procedure".
ASSENGER SIDE : I	Diagnosis Pr	rocedure		INFOID:000000009013382
CHECK DOOR MIRROR	SENSOR (PAS	SENGER SIDE) PC	OWER SUPPLY	
Turn ignition switch OFF Disconnect door mirror (Turn ignition switch ON. Check voltage between	(passenger side)		ss connector and gro	und.
(+)			
	bassenger side)		(-)	Voltage (V)
Connector	Termina	lls		(Approx.)
D23	23		Ground	5
he inspection result norm ES >> GO TO 3. O >> GO TO 2. CHECK DOOR MIRROR	(PASSENGER S	SIDE) SENSOR PC	OWER SUPPLY CIRC	CUIT
senger side) harness co	rive positioner co en automatic driv nnector.	ve positioner contro	l unit harness connec	ctor and door mirror (pas-
Automatic drive positione			(passenger side)	Continuity
Connector	Terminal	Connector	Terminal	Evictorial
M75	21	D23	23	Existed
Check continuity betwee	in automatic unv	e positioner contro		cior and ground.
Automatic drive po	ositioner control unit			Continuity
Connector	Termina	al	Ground	Continuity
M75	21			Not existed
he inspection result norm	<u>al?</u>			
ES >> Replace automa O >> Repair or replac	e harness or cor	ner control unit. Anector.		
CHECK DOOR MIRROR		SIDE) SENSOR GF	ROUND CIRCUIT	
Turn ignition switch OFF Disconnect automatic dr	rive positioner co	ontrol unit connecto	r.	ctor and door mirror (pas-
Turn ignition switch OFF Disconnect automatic dr Check continuity betwee	rive positioner co en automatic driv	ontrol unit connecto ve positioner contro	r.	
Turn ignition switch OFF Disconnect automatic dr Check continuity betwee senger side) connector. Automatic drive positione Connector	rive positioner co en automatic driv er control unit Terminal	ontrol unit connecto ve positioner contro Door mirror Connector	r. I unit harness connec (passenger side) Terminal	ctor and door mirror (pas-
Turn ignition switch OFF Disconnect automatic dr Check continuity betwee senger side) connector. Automatic drive positione	rive positioner co en automatic driv er control unit Terminal 20	ontrol unit connecto ve positioner contro Door mirror Connector D23	r. I unit harness connec (passenger side) Terminal 24	Continuity Existed
Turn ignition switch OFF Disconnect automatic dr Check continuity betweet senger side) connector. Automatic drive positione Connector M75 Check continuity betweet	rive positioner co en automatic driv er control unit Terminal 20 en automatic driv	Door mirror Connector D23	r. I unit harness connec (passenger side) Terminal 24	Continuity Existed
Turn ignition switch OFF Disconnect automatic dr Check continuity betweet senger side) connector. Automatic drive positione Connector M75 Check continuity betweet Automatic drive positione M75 Check continuity betweet Automatic drive positione	rive positioner co en automatic driv er control unit Terminal 20 en automatic driv	Door mirror Connector D23 Ve positioner contro	r. I unit harness connec (passenger side) Terminal 24 I unit harness connec	Continuity Existed
Turn ignition switch OFF Disconnect automatic dr Check continuity betweet senger side) connector. Automatic drive positione Connector M75 Check continuity betweet	rive positioner co en automatic driv er control unit Terminal 20 en automatic driv	Door mirror Connector D23 Ve positioner contro	r. I unit harness connec (passenger side) Terminal 24	Continuity Existed ctor and ground.

YES >> GO 10 4.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

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

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	5	D23	21	Existed
1017 5	17	623	22	LASIEU

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

Automatic drive p	ositioner control unit		Continuity
Connector	Terminal	Ground	Conunaity
M75	5	Ground	Not existed
1017 5	17		NOT EXISTED

Is the inspection result normal?

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

SLIDING MOTOR

Component Fu					INFOID:00000000000013383
1.CHECK FUNCTI	ON				
	LIDE" in "Active te og motor operation		CONSULT.		
	Test item			Description	
	OFF			Stop	
SEAT SLIDE	FR		Seat sliding	Forward	
	RR			Backward	b
1.CHECK SLIDING					
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active 	itch OFF. ng motor connecto	or. DE") using CON		nd.	
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	itch OFF. ng motor connecto itch ON. test" ("SEAT SLID	or. DE") using CON		nd.	
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	itch OFF. ng motor connecto itch ON. test" ("SEAT SLID between sliding mo	or. DE") using CON	nnector and grou	nd. ondition	Voltage (V) (Approx.)
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	itch OFF. ng motor connecto itch ON. test" ("SEAT SLID between sliding mo	or. DE") using CON otor harness co	nnector and grou	ondition	(Approx.)
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	ritch OFF. ng motor connector itch ON. test" ("SEAT SLID between sliding mo +) g motor Terminals	or. DE") using CON otor harness co	nnector and grou	ondition OFF	(Approx.)
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	ritch OFF. ng motor connecto itch ON. test" ("SEAT SLID between sliding mo +)	or. DE") using CON otor harness co	nnector and grou	ondition OFF FR (forward)	(Approx.) 0 12
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	ritch OFF. ng motor connector itch ON. test" ("SEAT SLID between sliding mo +) g motor Terminals	or. DE") using CON otor harness co	nnector and grou	OFF FR (forward) RR (backward)	(Approx.) 0 12 0
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	ritch OFF. ng motor connector itch ON. test" ("SEAT SLID between sliding mo +) g motor Terminals	Dr. DE") using CON otor harness co (-)	c	ondition OFF FR (forward) RR (backward) OFF	(Approx.) 0 12
 Turn ignition sw Disconnect slidi Turn ignition sw Perform "Active Check voltage b 	itch OFF. ng motor connector itch ON. test" ("SEAT SLID between sliding mo +) g motor Terminals 38	Dr. DE") using CON otor harness co (-)	c	OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0

Driver sea	t control unit	Sliding	g motor	Continuity	0
Connector	Terminal	Connector	Terminal	Continuity	
B452	34	B461	34	Existed	Р
D452	38	B401	38	Existed	

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	34	Ground	Not existed
D402	38		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.

RECLINING MOTOR

omponent Fu	nction Chec	:k			INFOID:000000009013385	A
.CHECK FUNCTI						В
		Active test" mor	de using CONSULT.			1
	ning motor opera					_
	Test item			Description		С
	OFF			Stop		
SEAT RECLINING	FR		Seat reclining	Forwar	d	D
	RR			Backwa	ard	
the operation of re		ormal?				Ε
	CTION END	Dofer to		-ia Broodure"		
	- .		ADP-101, "Diagnos	<u>SIS PIOCEdure</u> .		
iagnosis Proc	edure				INFOID:000000009013386	Γ
.CHECK RECLIN	ING MOTOR IN	IPUT SIGNAL				
. Turn ignition sw						G
. Disconnect recl . Turn ignition sw	lining motor coni vitch ON	nector.				
	e test" ("SEAT RE					
						Н
			ing CONSULT. is connector and gro	ound.		Н
	between reclinin			ound.		H
. Check voltage t	between reclinin		s connector and gro	ound.	Voltage (V)	H
. Check voltage t	between reclinin	ng motor harnes	s connector and gro		Voltage (V) (Approx.)	I
. Check voltage k (+ Reclinin	between reclinin +) ng motor	ng motor harnes	s connector and gro			I
. Check voltage k (+ Reclinin	between reclinin +) ng motor	ng motor harnes	s connector and gro	OFF FR (forward)	(Approx.)	I
. Check voltage k (+ Reclinin	between reclinin +) ng motor Terminals	ng motor harnes	s connector and gro	OFF FR (forward) RR (backward)	(Approx.) 0 12 0	I
. Check voltage k	between reclinin +) ng motor Terminals 35	ng motor harnes (-)	Cor	OFF FR (forward) RR (backward) OFF	(Approx.) 0 12 0 0	AD
. Check voltage k	between reclinin +) ng motor Terminals	ng motor harnes (-)	Cor	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0	AD
. Check voltage k (+ Reclinin Connector B454	between reclinin +) ng motor Terminals 35 39	ng motor harnes (-)	Cor	OFF FR (forward) RR (backward) OFF	(Approx.) 0 12 0 0	AD
. Check voltage k (+ Reclinin Connector B454 s the inspection res	between reclinin +) ng motor Terminals 35 39 sult normal?	g motor harnes (-) Ground	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0	AD
. Check voltage k (+ Reclinin Connector B454 s the inspection res	between reclinin +) ng motor Terminals 35 39 sult normal? e reclining motor	g motor harnes (-) Ground	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0	AD
Check voltage k	between reclinin +) ng motor Terminals 35 39 sult normal? e reclining motor 2.	r (built in seat b	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0	I ADF K L
. Check voltage k (+ Reclinin Connector B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN	between reclinin +) ng motor Terminals 35 39 sult normal? e reclining motor 2. IING MOTOR CI	r (built in seat b	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0	I ADR K L M
 Check voltage k (+ Reclinin Connector B454 B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv 	between reclinin +) ng motor Terminals 35 39 Sult normal? e reclining motor 2. IING MOTOR CI vitch OFF. ver seat control u	r (built in seat b	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 0 12	I ADR K L
 Check voltage k (+ Reclinin Connector B454 B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit 	between reclinin +) ng motor Terminals 35 39 Sult normal? e reclining motor 2. IING MOTOR CI vitch OFF. ver seat control u	r (built in seat b	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 0	I ADR K L M
 Check voltage k (+ Reclinin Connector B454 B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv 	between reclinin +) ng motor Terminals 35 39 Sult normal? e reclining motor 2. IING MOTOR CI vitch OFF. ver seat control u	r (built in seat b	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 0 12	I ADI K L M
 Check voltage k (+ Reclinin Connector B454 B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit tor. 	between reclinin +) ng motor Terminals 35 39 Sult normal? e reclining motor 2. IING MOTOR CI vitch OFF. ver seat control u	(-) Ground r (built in seat b IRCUIT unit connector. er seat control u	SEAT RECLINING ack frame).	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 12 12 notor harness connec-	I ADI K L M
 Check voltage k (+ Reclinin Connector B454 B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit tor. 	between reclinin +) ig motor Terminals 35 39 Sult normal? e reclining motor 2. IING MOTOR CI vitch OFF. ver seat control u ty between drive seat control unit Termin	(-) Ground r (built in seat b IRCUIT unit connector. er seat control u	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) RR (backward)	(Approx.) 0 12 0 0 0 0 12	I ADI K L M
 Check voltage k (+ Reclinin Connector B454 B454 B454 Sthe inspection res YES >> Replace NO >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit tor. 	between reclinin +) ng motor Terminals 35 39 Sult normal? e reclining motor 2. IING MOTOR CI vitch OFF. ver seat control unit seat control unit	(-) Ground r (built in seat b IRCUIT unit connector. er seat control u	SEAT RECLINING ack frame).	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) RR (backward)	(Approx.) 0 12 0 0 0 12 12 notor harness connec-	I ADI K L M N

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	35		Not existed
D+02	39		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.

DTC/CIRCUIT	DIAGNOS	SIS >	LIFTING M	IOTOR (FRON	Т)		
IFTING MC	TOR (F	RON	NT)				
omponent F	unction	Chec	:k				INFOID:00000000901338
.CHECK FUNC	TION						
. Select "SEAT . Check the lifti				e using CONSULT.			
	Tes	t item			Descrip	otion	
		OFF			5	Stop	
SEAT LIFTER FR		UP		Seat lifting (front)) [Jpward	
		DWN			E	Downward	
	U		edure. Refer to	ADP-103, "Diagno	sis Procedur	<u>e"</u> .	INFCID:000000000901338
.CHECK LIFTIN	IG MOTO	R (FRO	NT) INPUT SIG	NAL			
Disconnect lif Turn ignition : Perform "Acti	switch ON.	, ,	FTER FR") usir	ig CONSULT.			
Turn ignition s Perform "Acti Check voltage	switch ON. ve test" ("S e between	SEAT LI	notor (front) har	ness connector and			Voltage (V)
Turn ignition s Perform "Acti Check voltage	switch ON. ve test" ("S e between	SEAT LI lifting m		ness connector and	d ground. ndition		Voltage (V) (Approx.)
Turn ignition s Perform "Acti Check voltage Lifting m	switch ON. ve test" ("S e between +) otor (front)	SEAT LI lifting m	notor (front) har	ness connector and			
Turn ignition s Perform "Acti Check voltage Lifting m	switch ON. ve test" ("S e between +) otor (front)	SEAT LI lifting m	notor (front) har	ness connector and	ndition		(Approx.)
Turn ignition s Perform "Acti Check voltage Lifting m Connector	switch ON. ve test" ("S e between +) otor (front) Termin	SEAT LI lifting m	notor (front) har (-)	Co	ndition OFF		(Approx.)
Turn ignition s Perform "Acti Check voltage Lifting m	switch ON. ve test" ("S between (+) otor (front) Termin 36	SEAT LI lifting m	notor (front) har	ness connector and	OFF UP DWN (down) OFF		(Approx.) 0 0 12 0
Turn ignition s Perform "Acti Check voltage Lifting m Connector	switch ON. ve test" ("S e between +) otor (front) Termin	SEAT LI lifting m	notor (front) har (-)	Co	OFF UP DWN (down) OFF UP		(Approx.) 0 0 12 0 12 12
Turn ignition s Perform "Acti Check voltage Lifting m Connector	switch ON. ve test" ("S between (+) otor (front) Termin 36 40	SEAT LI lifting m als	notor (front) har (-)	Co	OFF UP DWN (down) OFF		(Approx.) 0 0 12 0
Turn ignition s Perform "Acti Check voltage Lifting m Connector B455 the inspection r (ES >> Repla NO >> GO T .CHECK LIFTIN Turn ignition s Disconnect de Check contine	switch ON. ve test" ("S e between (+) otor (front) Termin 36 40 esult norm ice lifting n O 2. NG MOTOF switch OFF	EAT LI lifting m als als notor (fr R (FRO	(-) Ground ront) (built in sea NT) CIRCUIT	Co	OFF UP DWN (down) OFF UP DWN (down)	motor (fr	(Approx.) 0 0 12 0 12 0 12 0
Turn ignition s Perform "Acti Check voltage Lifting m Connector B455 the inspection r (ES >> Replate NO >> GO T .CHECK LIFTIN Turn ignition s Disconnect di	switch ON. ve test" ("S e between (+) otor (front) Termin 36 40 esult norm ice lifting n O 2. NG MOTOF switch OFF	EAT LI lifting m als als notor (fr R (FRO	(-) Ground ront) (built in sea NT) CIRCUIT	SEAT LIFTER FR	OFF UP DWN (down) OFF UP DWN (down)	motor (fr	(Approx.) 0 0 12 0 12 0 12 0
Turn ignition s Perform "Acti Check voltage Lifting m Connector B455 the inspection r YES >> Repla NO >> GO T .CHECK LIFTIN Turn ignition s Disconnect di Check continu nector.	switch ON. ve test" ("S e between (+) otor (front) Termin 36 40 esult norm ice lifting n O 2. NG MOTOF switch OFF	SEAT LI lifting m als als notor (fr R (FRO control u control u control u control u	(-) Ground Tont) (built in sea NT) CIRCUIT unit connector. Fr seat control u	SEAT LIFTER FR	ndition OFF UP DWN (down) OFF UP DWN (down) tor and lifting	motor (fr	(Approx.) 0 12 0 12 0 12 0 12 0
Turn ignition s Perform "Acti Check voltage Lifting m Connector B455 the inspection r YES >> Repla NO >> GO T CHECK LIFTIN Disconnect di Check continu nector.	switch ON. ve test" ("S e between (+) otor (front) Termin 36 40 esult norm ice lifting n O 2. IG MOTOP switch OFF ver seat c	EAT LI lifting m als als notor (fr R (FRO control u en drive	(-) Ground Cont) (built in sea NT) CIRCUIT unit connector. er seat control u	SEAT LIFTER FR	ndition OFF UP DWN (down) OFF UP DWN (down)	motor (fr	(Approx.) 0 0 12 0 12 0 12 0

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	36		Not existed
	40		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.

	OR (REAR)				
omponent Fun	ction Check				INFOID:00000000901338
CHECK FUNCTIC	DN				
Select "SEAT LIF Check the lifting			using CONSULT.		
	Test item			Description	n
	OFF			Sto	p
SEAT LIFTER RR	UP		Seat lifting (rear)	Upv	vard
the operation of rel	DWN			Dov	vnward
ES >> INSPEC O >> Perform agnosis Proce	diagnosis proced	dure. Refer to <u>A</u>	DP-105, "Diagnosis	s Procedure".	INFOID:00000000901339
CHECK LIFTING I		INPUT SIGNA	L		
Turn ignition swit Disconnect lifting Turn ignition swit Perform "Active t	ch OFF. 1 motor (rear) cor 1 ch ON.	nnector.			
Check voltage be				round	
				round.	
(+))	, , 			Voltage (V)
)	(-)		ndition	Voltage (V) (Approx.)
(+) Lifting mote	or (rear)	, , 			
(+) Lifting mote	or (rear)	, , 		dition	(Approx.)
(+) Lifting mote Connector	or (rear) Terminals	(-)	Cor	OFF	(Approx.) 0 12
(+) Lifting mote	or (rear) Terminals	, , 		OFF UP	(Approx.) 0 12
(+) Lifting mote Connector	or (rear) Terminals	(-)	Cor	OFF UP DWN (DOWN) OFF UP	(Approx.) 0 12 0 0 0 0 0 0
(+) Lifting mote Connector B456	or (rear) Terminals 41 42	(-)	Cor	OFF UP DWN (DOWN) OFF	(Approx.) 0 12 0 0 0 0 0 0
(+) Lifting moto Connector B456 the inspection resu ES >> Replace O >> GO TO 2 .CHECK LIFTING I	or (rear) Terminals 41 42 <u>Ilt normal?</u> lifting motor (rea 2. MOTOR (REAR)	(-) Ground r) (built in seat o	Cor SEAT LIFTER RR	OFF UP DWN (DOWN) OFF UP	(Approx.) 0 12 0 0 0 0 0 0
(+) Lifting moto Connector B456 B456 ES >> Replace O >> GO TO 2 CHECK LIFTING I Turn ignition swit Disconnect drive	or (rear) Terminals 41 42 <u>Ilt normal?</u> Iifting motor (rea 2. MOTOR (REAR) cch OFF. r seat control un	(-) Ground r) (built in seat CIRCUIT it connector.	Cor SEAT LIFTER RR cushion frame).	OFF UP DWN (DOWN) OFF UP DWN (DOWN)	(Approx.) 0 12 0 0 0 0 0 0
(+) Lifting moto Connector B456 the inspection resu ES >> Replace O >> GO TO 2 CHECK LIFTING I Turn ignition swit Disconnect drive Check continuity nector.	or (rear) Terminals 41 42 <u>Ilt normal?</u> Iifting motor (rea MOTOR (REAR) ch OFF. r seat control unit between driver s	(-) Ground r) (built in seat of CIRCUIT it connector. seat control uni	Cor SEAT LIFTER RR cushion frame).	OFF UP DWN (DOWN) OFF UP DWN (DOWN)	(Approx.) 0 12 0 0 0 0 0 12 0 0 12 0 0 0 0 0 0 0 0 0 0 0 0 0
(+) Lifting moto Connector B456 B456 ES >> Replace O >> GO TO 2 CHECK LIFTING I Turn ignition swit Disconnect drive Check continuity nector.	or (rear) Terminals 41 42 <u>Ilt normal?</u> lifting motor (rea MOTOR (REAR) Ch OFF. r seat control un between driver s	(-) Ground r) (built in seat of CIRCUIT it connector. seat control uni	Cor SEAT LIFTER RR cushion frame).	OFF UP DWN (DOWN) OFF UP DWN (DOWN)	(Approx.) 0 12 0 0 0 0 0 12

LIFTING MOTOR (REAR)

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	41	Ground	Not existed
	42		

Is the inspection result normal?

YES >> Replace driver seat control unit.

TILT MOTOR

< DTC/CIRCUIT DIAGNOS	IS >			
Component Function	Check			INFOID:000000009013391
1. CHECK FUNCTION				
 Select "TILT MOTOR" in Check the tilt motor ope 		ng CONSULT.		
Test	item		Descripti	on
	OFF		St	ор
TILT MOTOR	UP	Steering tilt	Up	pward
	DWN		Do	ownward
 NO >> Perform diagnos Diagnosis Procedure 1. CHECK TILT MOTOR INI 1. Turn ignition switch OFF 2. Disconnect tilt motor cor 3. Turn ignition switch ON. 4. Perform "Active test" ("T 5. Check voltage between 	inector. ILT MOTOR") using CC	NSULT.	osis Procedure	INFOID:00000000000000013392
(+) Tilt motor	(-)	0	Condition	Voltage (V)
	ninals		Sonation	(Approx.)
			OFF	0
	1		UP	0
M116	Ground	TILT MOTOR	DWN (down)	12
	Giouna	TILI MOTOR	OFF	0
	2		UP	12
			DWN (down)	0
NO >> GO TO 2. 2.CHECK TILT MOTOR CII 1. Turn ignition switch OFF 2. Disconnect automatic dr	or (built in steering colur RCUIT : ive positioner control ur	nit.	narness connec	ctor and tilt motor harness

•	Automatic drive positioner control unit Tilt motor			notor	Continuity	•
-	Connector	Terminal	Connector	Terminal	Continuity	D
-	M104	28	M116	1	Existed	
	WI104	29	WITO	2	Existed	

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

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TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M104	28	Ground	Not existed
W104	29	-	NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

TELESCOPIC MOTOR

< DTC/CIRCUIT D						
TELESCOPIC						A
Component Fu	nction Check				INFOID:000000009013393	
1.CHECK FUNCT	ON					E
	CO MOTOR" in "A copic motor opera		using CONSULT.			_
	Test item			Description		C
	OFF			Stop		
TELESCO MOTOR	FR		Steering telescopic	Forw		
	RR	10		Back	ward	
NO >> Perform	CTION END n diagnosis proced		<u> DP-109, "Diagnosis</u>	Procedure".		E
Diagnosis Proc	edure				INFOID:000000000013394	ŀ
1.CHECK TELESC	COPIC MOTOR IN	IPUT SIGNAL				
	scopic motor conr	nector.				(
	e test" ("TELESCO		g CONSULT. connector and gro	ound.		ŀ
(+)					
Telesco	pic motor	(-)	(-) Condition	Voltage (V) (Approx.)		
Connector	Terminals			055		A
	1			OFF FR (forward)	0	/ (
		- Ground	TELESCOPIC MO-	RR (backward)	12	
M117	2		TOR	OFF	0	
				FR (forward)	12	
				RR (backward)	0	
Is the inspection res YES >> Replace NO >> GO TO 2.CHECK TELESC	e telescopic motor 2.		g column assembly	').		[
 Turn ignition sw Disconnect automatical 	vitch OFF. omatic drive positi sy between automa	oner control unit		rness connecto	or and telescopic motor	(
Automatic driv	ve positioner control ur	nit	Telescopic motor	r		
Connector	Terminal	Со	nnector	Terminal	Continuity	1
M75	26 29		W117	1	Existed	1
4. Check continuit	y between automa	atic drive positio	ner control unit har	ness connecto	or and ground.	

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	26	Ground	Not existed
	29	-	NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

NO >> Repair or replace harness or connector.

DTC/CIRCUIT DIAG		DOONN			
OOR MIRROR	MOTOR				
component Function	on Check				INFOID:000000009013395
.CHECK DOOR MIRR					
neck the operation with ONSULT.	n "MIRROR M	MOTOR RH"	and "MIRROR MC	DTOR LH" in "ACTIV	E TEST" mode using
efer to <u>ADP-23, "CONS</u>	SULT Functic	<u>n"</u> .			
the inspection result n					
<pre>/ES >> INSPECTIO IO >> Refer to AD</pre>		nosis Proced	lure"		
iagnosis Procedu	-		<u>.</u>		INFOID:0000000009013396
-					
CHECK DOOR MIRR		INPUT SIG	NAL		
Turn ignition switch Disconnect door mir		r.			
. Turn ignition switch	ON.				
Check voltage betwe	een door miri	or harness of	connector and grou	ind.	
(+)					Voltage (V)
Door mirror		(-)	Co	ndition	(Approx.)
Connector	Terminals			UP	10
	12			OP Other than the above	12 0
D3 (Driver side)			Door mirror remote	LEFT	12
D3 (Driver side) D23 (Passenger side)	11	Ground	control switch	Other than the above	0
	10			DOWN / RIGHT	12
	10			Other than the above	0
the inspection result n YES >> GO TO 3. NO >> GO TO 2. CHECK DOOR MIRR Turn ignition switch Disconnect automat Check continuity be ness connector. [driver side]	OR MOTOR OFF. ic drive posit	ioner control		it harness connector	and door mirror har-
Automatic drive pos	itioner control u	nit	Door mirror (dri	iver side)	
Connector	Termina	I	Connector	Terminal	Continuity
	12			10	
M75	23		D3	12	Existed
	24			11	
[passenger side] Automatic drive pos	itioner control u	nit	Door mirror (pass	enger side)	
[passenger side] Automatic drive pos Connector	itioner control u Termina		Door mirror (pass Connector	enger side) Terminal	Continuity
Automatic drive pos					Continuity
Automatic drive pos	Termina			Terminal	Continuity Existed

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to ADP-112, "Component Inspection".

Is the inspection result normal?

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

Component Inspection

1.CHECK DOOR MIRROR MOTOR 1

Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-23, "Exploded View"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.

2. CHECK DOOR MIRROR MOTOR 2

1. Turn ignition switch OFF.

2. Disconnect door mirror connector.

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror.

SEAT MEMORY INDICATOR < DTC/CIRCUIT DIAGNOSIS > SEAT MEMORY INDICATOR А **Component Function Check** INFOID:000000009013398 **1**.CHECK FUNCTION В 1. Select "MEMORY SW INDCTR" in "Active test" mode using CONSULT. 2. Check the memory indicator operation. Test item Description OFF OFF D MEMORY SW INDCTR ON-1 Indicator 1: ON Memory switch indicator ON-2 Indicator 2: ON Is the operation of relevant parts normal? >> INSPECTION END YES >> Perform diagnosis procedure. Refer to ADP-113, "Diagnosis Procedure". NO Diagnosis Procedure F INFOID:0000000009013399 1. CHECK SEAT MEMORY SWITCH INDICATOR OPERATION Check seat memory switch indicator operation. Which is the malfunctioning indicator? All indicators are NG>>GO TO 2. Н An indicator is NG>>GO TO 4. 2.CHECK FUSE 1. Turn ignition switch OFF. Check that the blown fuse after repairing the affected circuit if a fuse is blown. 2. Signal name Fuse No. ADP Battery power supply 10 (10 A) Is the inspection result normal? Κ YES >> GO TO 3. NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown. ${ m 3.}$ CHECK SEAT MEMORY SWITCH INDICATOR POWER SUPPLY Check voltage between seat memory switch harness connector and ground. (+) Μ Voltage (V) Seat memory switch (-) (Approx.) Connector Terminals D13 5 Ground Ν Battery voltage Is the inspection result normal? YES >> Replace seat memory switch. NO >> Repair or replace harness or connector. ${f 4.}$ CHECK SEAT MEMORY SWITCH INDICATOR CIRCUIT 1. Turn ignition switch OFF. Ρ Disconnect driver seat control unit and seat memory switch connector. 2. 3. Check continuity between driver seat control unit harness connector and seat memory switch harness

connector.

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Seat memory switch		
Connector	Terminal	Connector	Terminal	Continuity	
B451	23	D13	6	Existed	
0401	7	610	7		

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

_	Driver seat control unit			Continuity	
	Connector	Terminal	Ground	Continuity	
_	P451	B451 23 Ground		Not existed	
	B451	7		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit.

NO >> Repair or replace harness or connector.

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

< SYMPTOM DIAGNOSIS >

Is the result normal?

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

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

1.CHECK SLIDING MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK SLIDING SWITCH

Check sliding switch.

Refer to ADP-62, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK SLIDING MOTOR

Check sliding motor. Refer to ADP-99, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1. SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

1.CHECK RECLINING MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK RECLINING SWITCH

Check reclining switch.

Refer to ADP-64, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor. Refer to <u>ADP-101, "Component Function Check"</u>. INFOID:000000009013404

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

< SYMPTOM DIAGNOSIS >

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

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).

Refer to ADP-105, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-43. "Intermittent Incident".

NO >> GO TO 1. STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:000000009013407

1.CHECK STEERING TILT MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK TILT SWITCH

Check tilt switch. Refer to <u>ADP-70, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK TILT MOTOR

Check tilt motor. Refer to ADP-107, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

1. CHECK STEERING TELESCOPIC MECHANISM

Check for the following.

Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

< SYMPTOM DIAGNOSIS >	
NO >> Repair or replace the malfunction parts.	
2.CHECK TELESCOPIC SWITCH	А
Check telescopic switch. Refer to <u>ADP-72, "Component Function Check"</u> .	
Is the inspection result normal?	В
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	С
3.CHECK TELESCOPIC MOTOR	
Check telescopic motor. Refer to <u>ADP-109, "Component Function Check"</u> .	D
Is the inspection result normal?	
YES >> GO TO 4.	_
NO >> Repair or replace the malfunction parts.	E
4.CONFIRM THE OPERATION	
Check the operation again. <u>Is the result normal?</u>	F
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	
NO >> GO TO 1.	G
DOOR MIRROR	
DOOR MIRROR : Diagnosis Procedure	Н
1. CHECK DOOR MIRROR MECHANISM	
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
Is the inspection result normal?	ADF
YES >> GO TO 2.	ADF
NO >> Repair or replace the malfunction parts.	
2.CHECK DOOR MIRROR REMOTE CONTROL SWITCH	Κ
Check door mirror remote control switch. Refer to following. Mirror switch: Refer to <u>ADP-77, "MIRROR SWITCH : Component Function Check"</u>. 	
Changeover switch: Refer to <u>ADP-76, "CHANGEOVER SWITCH : Component Function Check"</u> .	L
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	M
3. CHECK DOOR MIRROR MOTOR	IVI
Check door mirror motor.	Ν
Refer to <u>ADP-111, "Component Function Check"</u> .	
Is the inspection result normal? YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	0
4.CONFIRM THE OPERATION	
Check the operation again.	Ρ
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	

< SYMPTOM DIAGNOSIS >	
MEMORY FUNCTION DOES NOT OPERATE ALL COMPONENT	
ALL COMPONENT : Diagnosis Procedure	NFOID:000000009013410
1.CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	
2. PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE	
 Perform initialization procedure. Refer to <u>ADP-45, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>. 	
2. Perform memory storing procedure.	
Refer to ADP-46, "MEMORY STORING : Special Repair Requirement".	
3. Check memory function.	
Refer to ADP-16, "MEMORY FUNCTION : System Description".	
Is the inspection result normal?	
YES >> Memory function is normal.	
NO >> GO TO 3.	
3.CHECK SEAT MEMORY SWITCH	
Check seat memory switch.	
Refer to ADP-74, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Replace seat memory switch.	
4.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	
NO >> GO TO 1.	
SEAT SLIDING	
SEAT SLIDING : Diagnosis Procedure	NFOID:0000000009013411
1.CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Refer to <u>ADP-116, "SEAT SLIDING : Diagnosis Procedure"</u>	
2. CHECK SLIDING SENSOR	
Check sliding sensor.	
Refer to ADP-82, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	
3.CONFIRM THE OPERATION	
Check the operation again.	

Is the result normal?

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

< SYMPTOM DIAGNOSIS >	
NO >> GO TO 1. SEAT RECLINING	А
SEAT RECLINING : Diagnosis Procedure	
1. CHECK MANUAL OPERATION	В
Check manual operation.	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	С
NO >> Refer to <u>ADP-116, "SEAT RECLINING : Diagnosis Procedure"</u>	
2.CHECK RECLINING SENSOR	D
Check reclining sensor. Refer to <u>ADP-84, "Component Function Check"</u> .	E
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	F
3. CONFIRM THE OPERATION	1
Check the operation again.	C
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	G
NO >> GO TO 1.	
SEAT LIFTING (FRONT)	Н
SEAT LIFTING (FRONT) : Diagnosis Procedure	
1.CHECK MANUAL OPERATION	
Check manual operation.	ADF
<u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Refer to <u>ADP-117. "SEAT LIFTING (FRONT) : Diagnosis Procedure"</u>	K
2.CHECK LIFTING SENSOR (FRONT)	
Check lifting sensor (front). Refer to ADP-86, "Component Function Check".	I
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	5.4
3. CONFIRM THE OPERATION	Μ
Check the operation again.	
Is the result normal?	Ν
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	
SEAT LIFTING (REAR)	0
SEAT LIFTING (REAR) : Diagnosis Procedure	Р
1.CHECK MANUAL OPERATION	-
Check manual operation.	
Is the inspection result normal?	

NO

>> Refer to ADP-117, "SEAT LIFTING (REAR) : Diagnosis Procedure"

< SYMPTOM DIAGNOSIS >

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2. NO >> Refer to ADP-118, "STEERING TILT : Diagnosis Procedure"

2.CHECK TILT SENSOR

Check steering tilt sensor.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 ${f 3.}$ CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2. NO >> Refer to ADP-118, "STEERING TELESCOPIC : Diagnosis Procedure"

2. CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 ${
m 3.}$ CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

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ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

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1	.CHECK SYSTEM SETTING
-	

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

Check front door switch (driver side). Refer to DLK-98, "Component Function Check".

Is the inspection result normal?

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

Confirm the operation again.

Is the result normal?

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

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT O	
ITELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE A agnosis Procedure Perform Intelligent Key INTERLOCK STORING PROCEDURE B Perform Intelligent Key interlock storing procedure. Refer to <u>ADP-47, "INTELLIGENT KEY INTERLOCK STORING : Special Repair Requirement"</u> . C Check the operation. C C the inspection result normal? C C [25] >> Intelligent Key interlock function is normal. C D JO >> GO TO 2. D C .CHECK DOOR LOCK FUNCTION E C C beek door lock function. E F CONFIRM THE OPERATION E CONFIRM THE OPERATION E C C F CONFIRM THE OPERATION G G F offirm the operation again. C G G the result normal? C C C (ES) >> Check the intermittent incident. Refer to GI-43, "Intermittent Incident". G	
1. PERFORM INTELLIGENT KEY INTERLOCK STORING PROCEDURE	В
 Refer to <u>ADP-47, "INTELLIGENT KEY INTERLOCK STORING : Special Repair Re</u> 2. Check the operation. 	
YES >> Intelligent Key interlock function is normal.	D
Check door lock function. Refer to <u>DLK-58, "Work Flow"</u> .	E
NO >> Repair or replace the malfunction parts.	F
Confirm the operation again. Is the result normal?	G
YES >> Check the intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	Н

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< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

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1. CHECK SEAT MEMORY SWITCH INDICATOR

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

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

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

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< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

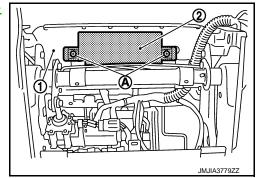
Removal and Installation

REMOVAL

CAUTION:

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

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



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

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

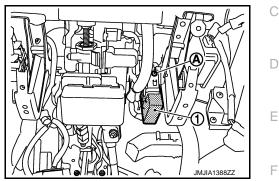
Removal and Installation

REMOVAL

CAUTION:

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

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



INSTALLATION Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

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

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< REMOVAL AND INSTALLATION >

SEAT MEMORY SWITCH

Removal and Installation

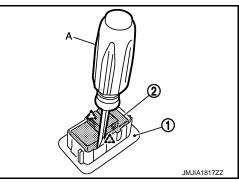
REMOVAL

CAUTION:

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

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

<u>^__:</u> Pawl



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

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

< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

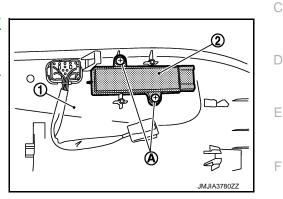
Removal and Installation

REMOVAL

CAUTION:

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

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



INSTALLATION

Install in the reverse order of removal.

CAUTION:

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

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

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TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

Removal and Installation

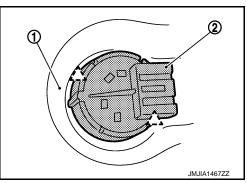
REMOVAL

CAUTION:

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

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

کے : Pawl



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INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

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