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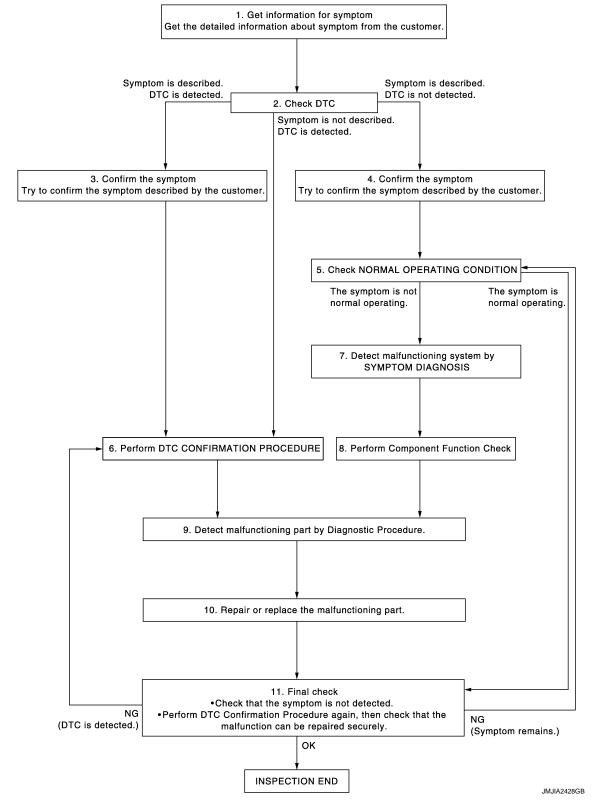
< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000005654085

OVERALL SEQUENCE



DETAILED FLOW

Revision: 2009 November

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM	
Get the detailed information from the customer about the symptom (the condition and the environment whe the incident/malfunction occurred).	en
>> GO TO 2.	
2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM	
Check "Self Diagnostic Result" with CONSULT-III. Refer to ADP-166, "DTC Index"	_
Is any symptom described and any DTC is displayed?	
Symptom is described, DTC is displayed.>>GO TO 3. Symptom is not described, DTC is displayed.>>GO TO 6. Symptom is described, DTC is not displayed.>>GO TO 4.	
3. CONFIRM THE SYMPTOM	
Try to confirm the symptom described by the customer.	_
>> GO TO 6.	
4.CONFIRM THE SYMPTOM	
Try to confirm the symptom described by the customer.	
>> GO TO 5.	
5. CHECK NORMAL OPERATING CONDITION	
Check normal operating condition. Refer to <u>ADP-231</u> , "Description".	
Is the incident normal operation? YES >> INSPECTION END NO >> GO TO 7.	
6. PERFORM DTC CONFIRMATION PROCEDURE	A
Perform the confirmation procedure for the detected DTC.	
Is the DTC displayed?	
YES >> GO TO 8. NO >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	
7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS	
Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in ste 4, and determine the trouble diagnosis order based on possible causes and symptom.	p
>> GO TO 8.	
8. PERFORM COMPONENT FUNCTION CHECK	
Perform the component function check for the isolated malfunctioning point.	_
>> GO TO 9.	
9. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE	
Isolate the malfunctioning point by performing the diagnosis procedure relevant to the symptom during the component diagnosis.	ie
>> GO TO 10.	
10.repare or replace	

Repair or replace the malfunctioning part.

< BASIC INSPECTION >

>> GO TO 11.

11.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?

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

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

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

Function	Condition	Procedure	
Memory (Seat, steering, mirror)	Erased	Perform memory storing	
Intelligent Key interlock	Erased	Perform memory storing	
Seat synchronization	OFF	-	

NOTE:

When disconnecting the battery terminal or replacing the driver seat control unit, DTC, registered items of memory storing, and details of system setting detected in the past are erased. Perform operation after checking the contents.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-10, "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2.SYSTEM SETTING

Perform system setting. Refer to ADP-11, "SYSTEM SETTING : Description".

>> GO TO 3.

3.MEMORY STORING

Perform memory storing. Refer to ADP-10, "MEMORY STORING : Description".

>> END ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

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

Function	Condition	Procedure	N
Memory (Seat, steering, mirror)	Erased	Perform memory storing	
Intelligent Key interlock	Erased	Perform memory storing	
Seat synchronization	OFF	-	0

NOTE:

When disconnecting the battery terminal or replacing the driver seat control unit, DTC, registered items of memory storing, and details of system setting detected in the past are erased. Perform operation after checking the contents.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

1.SYSTEM INITIALIZATION

< BASIC INSPECTION >

Perform system initialization. Refer to ADP-10. "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2.system setting

Perform system setting. Refer to ADP-11, "SYSTEM SETTING : Description".

>> GO TO 3.

3.MEMORY STORING

Perform memory storing. Refer to ADP-10, "MEMORY STORING : Description".

>> END SYSTEM INITIALIZATION

SYSTEM INITIALIZATION : Description

When disconnecting battery negative terminal or replacing control unit, always perform the system initialization. Otherwise, the backward operation for power walk-in function does not activate normally.

SYSTEM INITIALIZATION : Special Repair Requirement

INITIALIZATION PROCEDURE

1. STEP-1

Slide the seat to the front edge.

NOTE:

- STEP-1 is the initialization procedure for power walk-in function.
- If the seat sliding position is already at the front edge, slide the seat rearward once, and then slide it to the front edge again.

>> END MEMORY STORING

MEMORY STORING : Description

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

MEMORY STORING : Special Repair Requirement

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

Shift AT selector lever to P position (AT model) or applied parking brake (MT model).

>> GO TO 2.

2.STEP 2

Turn ignition switch ON.

>> GO TO 3.

3.STEP 3

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

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< BASIC INSPECTION > >> GO TO 4. **4**.STEP 4 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. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch. NOTE: If memory is stored in the same memory switch, the previous memory will be deleted. Do you need linking of Intelligent Key? YES >> GO TO 6. NO >> GO TO 5. **5.**STEP 5 Confirm the operation of each part with memory operation. >> END **6.**STEP 6 Turn ignition switch OFF (LOCK). >> GO TO 7. 7.STEP 7 Press and release set switch. Memory switch indicator is illuminated for 5 seconds. During memory switch indicator is illuminated, press Intelligent Key unlock button while pressing memory switch 1 or 2. NOTE: Memory switch indicator lamp blinks for 5 seconds when registration is complete. >> GO TO 8. 8.STEP 8 Confirm the operation of each part with memory operation and Intelligent Key interlock operation. >> END SYSTEM SETTING SYSTEM SETTING : Description INFOID:00000005654094 The setting of the automatic driving positioner system can be changed using the set switch. SYSTEM SETTING : Special Repair Requirement INFOID:000000005654095 SETTING PROCEDURE **1**.STEP-1 Set the vehicle to the following condition. Ignition position: ACC A/T selector lever: P position (A/T models) • Parking brake: Applied only (M/T models) >> GO TO 2.

2.STEP-2

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

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< BASIC INSPECTION >

- Seat synchronization are ON : Memory switch indicator blink two times.
- Seat synchronization are OFF : Memory switch indicator blink once.

NOTE:

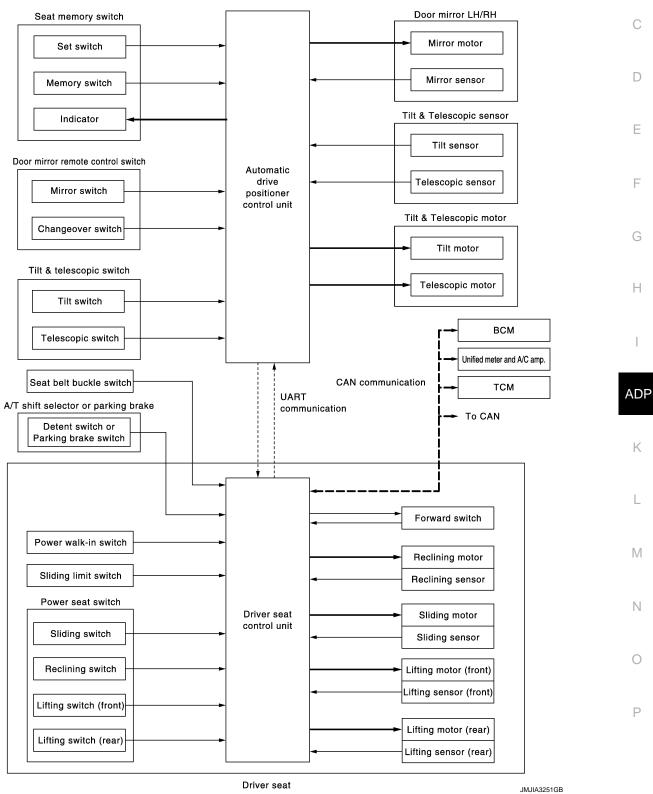
• After memory setting registration, by pushing set switch for approximately 10 seconds, memory switch indicator lamp turns 4 seconds. turns OFF, blinks 1 or 2 times, and then the switching operation is complete. Push and hold set switch during the switching operation.

>> END.

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION AUTOMATIC DRIVE POSITIONER SYSTEM AUTOMATIC DRIVE POSITIONER SYSTEM





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< SYSTEM DESCRIPTION >

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

OUTLINE

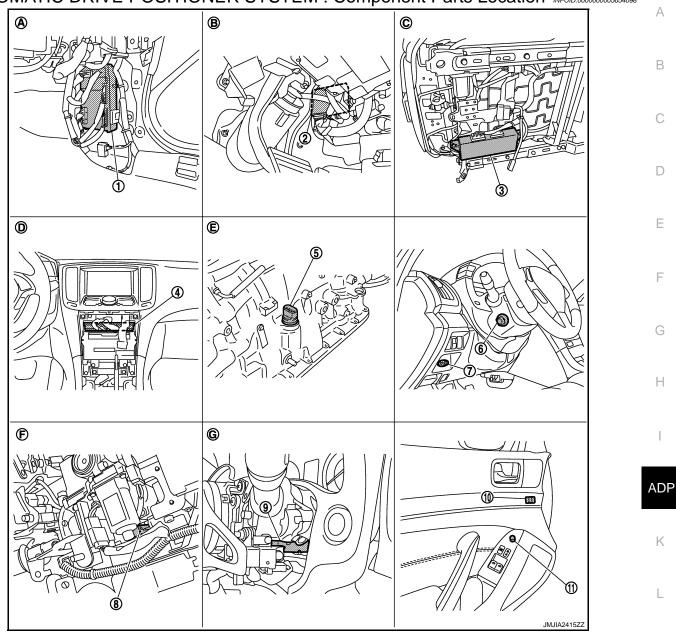
The system automatically moves the driver seat, steering column and door mirror position by the driver seat control unit and the automatic drive positioner control unit. The driver seat control unit corresponds with the automatic drive positioner control unit by UART communication.

Function	Description
Manual function	The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch.
Seat synchronization function	The positions of the steering column and door mirror are adjusted to the proper position automat- ically while linking with manual operation [seat sliding, seat lifting (rear) or seat reclining].
Memory function	The seat, steering column and outside mirror move to the stored driving position by pressing seat memory switch (1 or 2).
Power walk-in function	The seat is made to advance when the seat back of driver seat is folded down and press the walk- in switch. The seat is made to retreat to former position when the seat back of driver seat is folded up and press the walk-in switch.
Intelligent Key interlock function	Perform memory operation, exiting operation and entry operation by Intelligent Key unlock opera- tion or driver side door request switch unlock operation.

NOTE:

The lumbar support system and the side support system are controlled independently with no link to the automatic drive positioner system.

< SYSTEM DESCRIPTION >



- BCM M118, M119, M122, M123 1.
- Unified meter and A/C amp. M67 4.
- Key slot M22 7.
- 10. Seat memory switch D5
- Dash side lower (passenger side) Α.
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

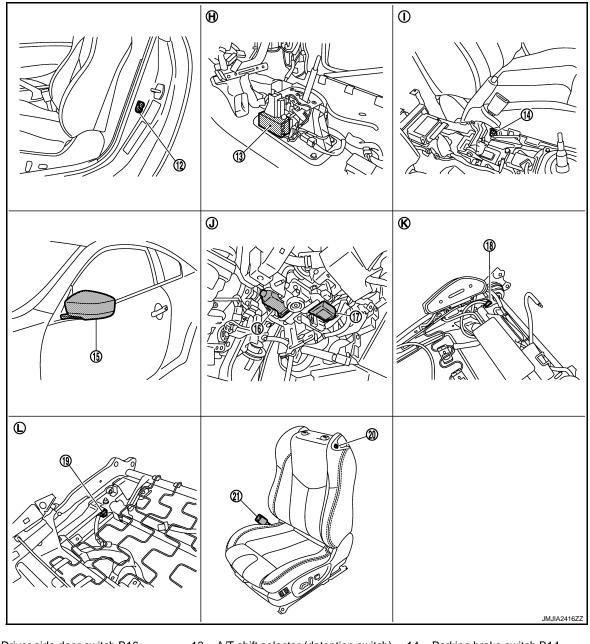
- Automatic drive positioner control unit 3. Driver seat control unit B503, B504 2. M51, M52 A/T assembly F51
- 5.
- Tilt sensor M48 8.
- 11. Door mirror remote control switch D17
- Β. View with instrument driver lower panel removed (Remove 4WAS front control unit with 4WAS models)
- E. A/T assembly (TCM is built in A/T assembly)
- 6. Tilt & telescopic switch M31 Telescopic sensor M48 9.
 - C. Backside of seat cushion (driver side)
 - F. View with instrument driver lower panel removed

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< SYSTEM DESCRIPTION >



- 12. Driver side door switch B16
- 15. Door mirror (driver side) D3
- 18. Forward switch B512
- 21. Seat belt buckle switch (driver side) B13
- H. View with center console assembly ١. is removed.
- K. View with seat back pad is removed. L.

- 13. A/T shift selector (detention switch) 14. Parking brake switch B14 M137
- 16. Telescopic motor M49
- 19. Sliding limit switch B514
 - View with center console assembly is removed.
 - View with seat cushion pad is removed.

- 17. Tilt motor M49
- 20. Power walk-in switch B513
- J. View with instrument driver lower panel is removed.

< SYSTEM DESCRIPTION >

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22.	Reclining motor B523	23.	Reclining switch (Power seat switch) B510	24.	Sliding, lifting switch (Power seat switch) B510	
25.	Sliding sensor B526	26.	Lifting motor (front) B527	27.	Sliding motor B525	G
28.	Lifting motor (rear) B529					
M.	View with seat cushion pad and seat- back pad are removed.	N.	Backside of seat cushion			Н

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description

CONTROL UNITS

Item	Function
Driver seat control unit	 Main units of automatic drive positioner system. It is connected to the CAN. It communicates with the automatic drive positioner control unit via UART communication.
Automatic drive positioner control unit	 It communicates with the driver seat control unit via UART communication. Perform various controls with the instructions of driver seat control unit. Perform the controls of the tilt & telescopic, door mirror and the seat memory switch.
BCM	 Transmit the following status to the driver seat control unit via CAN communication Driver door: OPEN/CLOSE Ignition switch position: ACC/ON Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) Key ID Key switch: Insert/Pull out Intelligent Key Starter: CRANKING/OTHER
Unified meter and A/C amp.	Transmit the vehicle speed signal to the driver seat control unit via CAN communi- cation.
ТСМ	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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< SYSTEM DESCRIPTION >

Item	Function
Key slot	The key switch is installed to detect the key inserted/removed status.
Driver side door switch	Detect front door (driver side) open/close status.
A/T shift selector (detention switch)	Detect the P range position of A/T selector lever. (A/T models)
Parking break switch	Detect the parking brake status. (M/T models)
Set switch	The registration and system setting can be performed with its operation.
Memory switch 1/2	The registration and operation can be performed with its operation.
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch.
Power walk-in switch	Perform the power walk-in operation by operating the power walk-in switch.
Sliding limit switch	Detect the front end position of seat sliding during the power walk-in function front- ward operation.
Seat belt buckle switch	Detect the seat belt fastening/releasing condition.
Forward switch	Detect the folded up/folded down condition of seatback that is the operation condi- tion of power walk-in function.
Tilt & telescopic switch	 The following switch is installed. Tilt switch Telescopic switch The specific parts can be operated with the operation of each switch.
Door mirror remote control switch	 The following switch is installed. Mirror switch Changeover switch The specific parts can be operated with the operation of each switch.

Sensors

Item	Function
Door mirror sensor (driver side/passenger side)	Detect the upward/downward and leftward/rightward position of outside mirror face.
Tilt & telescopic sensor	Detect the upward/downward and forward/backward position of steering column.
Lifting sensor (front)	Detect the upward/downward position of seat lifting (front).
Lifting sensor (rear)	Detect the upward/downward position of seat lifting (rear).
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the forward/backward position of seat.

OUTPUT PARTS

Item	Function
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.
Tilt & telescopic motor	Move the steering column upward/downward and frontward/rearward.
Lifting motor (front)	Move the seat lifting (front) upward/downward.
Lifting motor (rear)	Move the seat lifting (rear) upward/downward.
Reclining motor	Tilt and raise up the seatback.
Sliding motor	Slide the seat forward/backward.
Memory indicator	Illuminates or blinks according to the registration/operation status.

SLEEP MODE

• The seat control unit adopts the sleep mode to reduce the electric power consumption.

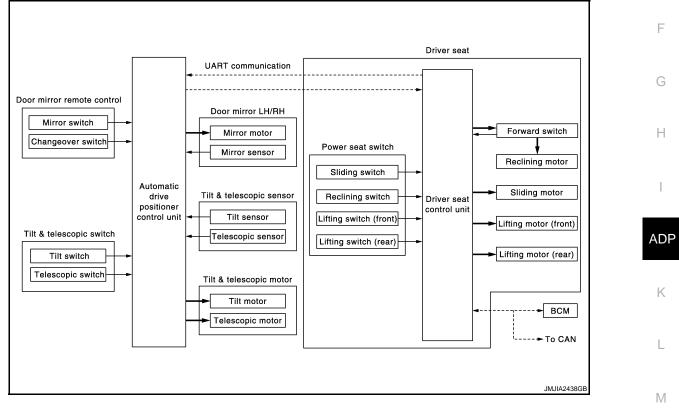
< SYSTEM DESCRIPTION >

- The sleep mode is activated when all of the following condition are fulfilled. Ignition switch turn OFF (steering LOCK position) 1. No load is applied to the seat control 2. The seat control unit 45seconds timer in not activated 3. Set switch and memory switch (1 and 2) turn OFF 4. WAKE-UP MODE The sleep mode is cancelled when any status change is detected for the followings. CAN communication 1 2. Power seat switch 3. Set switch and memory switch (1 and 2) 4. Power walk-in switch
- 5. Door mirror switch

6. Steering column switch

MANUAL FUNCTION

MANUAL FUNCTION : System Diagram



MANUAL FUNCTION : System Description

OUTLINE

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.

DETAIL FLOW

Seat

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

Tilt & Telescopic

Order	Input	Output	Control unit condition
1	Tilt & telescopic switch	_	The tilt & telescopic switch signals are inputted to the automatic drive positioner control unit when the tilt & telescopic switch are operated.
2	_	Motors (Tilt, telescopic)	The automatic drive positioner control unit actuates each motor according to the operation of the tilt & telescopic switch.
3	Sensors (Tilt, telescopic)	_	The automatic drive positioner control unit recognizes any oper- ation limit of each actuator via each sensor and will not operate the actuator anymore at that time.*

*: Tilt does not operates upward when tilt sensor value is less than 1.1 V, tilt does not operate downward when the sensor value is more than 3.9 V. Telescopic does not operates backward when telescopic sensor value is less than 0.5 V, telescopic does not operate forward when the sensor value is more than 4.5 V.

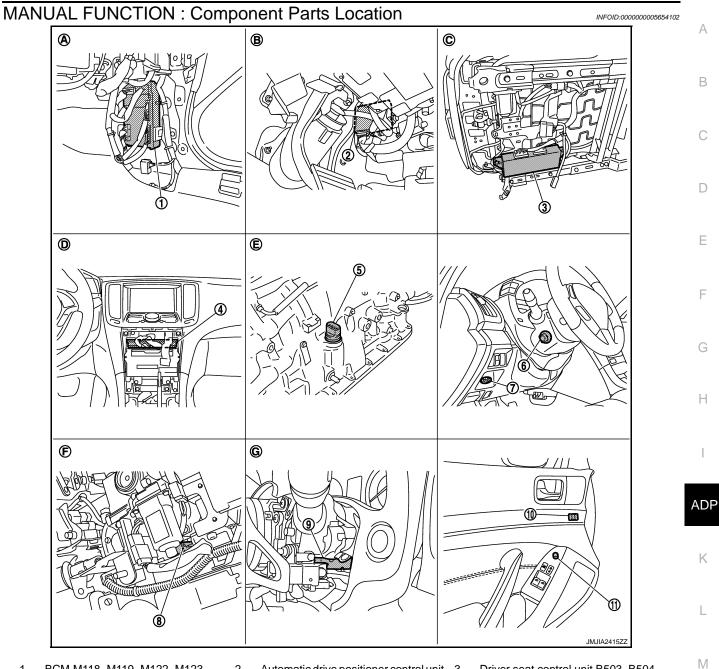
Door Mirror

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 signal from the door mirror remote control switch.
3	Sensors (Mirror)	_	The automatic drive positioner control unit monitors the input of mirror sensor. It stops the operation if the input reaches the operation limit.

NOTE:

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

< SYSTEM DESCRIPTION >



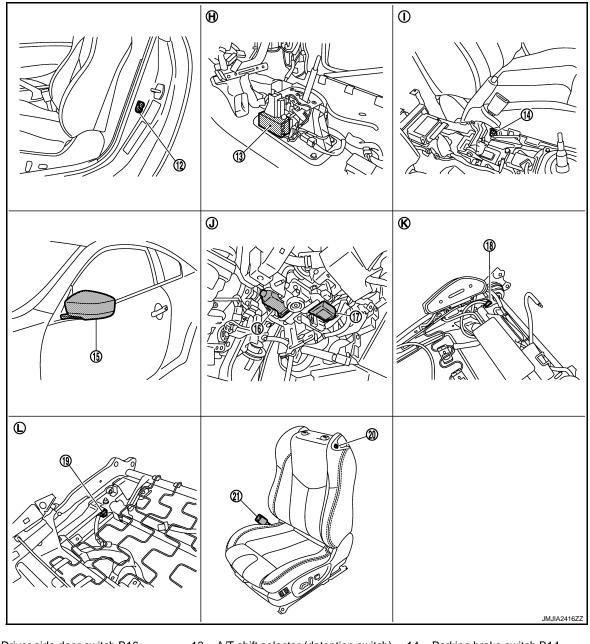
- BCM M118, M119, M122, M123 1.
- Unified meter and A/C amp. M67 4.
- Key slot M22 7.
- 10. Seat memory switch D5
- Dash side lower (passenger side) Α.
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. Driver seat control unit B503, B504 2. M51, M52 5. A/T assembly F51 6. Tilt & telescopic switch M31
 - Tilt sensor M48
- 8. 11. Door mirror remote control switch D17
- Β. View with instrument driver lower panel removed (Remove 4WAS front control unit with 4WAS models)
- E. A/T assembly (TCM is built in A/T assembly)
- 9. Telescopic sensor M48
- C. Backside of seat cushion (driver side)
- F. View with instrument driver lower panel removed

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< SYSTEM DESCRIPTION >



- 12. Driver side door switch B16
- 15. Door mirror (driver side) D3
- 18. Forward switch B512
- 21. Seat belt buckle switch (driver side) B13
- H. View with center console assembly ١. is removed.
- K. View with seat back pad is removed. L.

- 13. A/T shift selector (detention switch) 14. Parking brake switch B14 M137
- 16. Telescopic motor M49
- 19. Sliding limit switch B514
 - View with center console assembly is removed.
 - View with seat cushion pad is removed.

- 17. Tilt motor M49
- 20. Power walk-in switch B513
- J. View with instrument driver lower panel is removed.

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22.	Reclining motor B523	23.	Reclining switch (Power seat sw B510		24.	Sliding, lifting switch (Power seat switch) B510		0
25.	Sliding sensor B526	26.	Lifting motor (fro	ont) B527	27.	Sliding motor B525		G
28.	Lifting motor (rear) B529							
М.	View with seat cushion pad and seat- back pad are removed.	N.	Backside of sea	at cushion				Н
MAN	UAL FUNCTION : Com	por	ent Descr	iption			INFOID:000000005654103	I

CONTROL UNITS

Item	Function
Driver seat control unit	 Operates the specific seat motor with the signal from the power seat switch. Transmits the ignition switch signal (ACC/ON) via UART communication to the automatic drive positioner control unit.
Automatic drive positioner control unit	Operates the specific motor with the signal from tilt & telescopic switch or door mir- ror remote control switch.
BCM	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. Ignition position: ACC/ON

INPUT PARTS

Switches

Item	Function	_
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch. 	F
Tilt & telescopic switch	 The following switch is installed. Tilt switch Telescopic switch The specific parts can be operated with the operation of each switch. 	_

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< SYSTEM DESCRIPTION >

Item	Function	
Forward switch	Detect folded down or folded up of the seat back.	
Door mirror remote control switch	 The following switch is installed. Mirror switch Changeover switch The specific parts can be operated with the operation of each switch. 	

Sensors

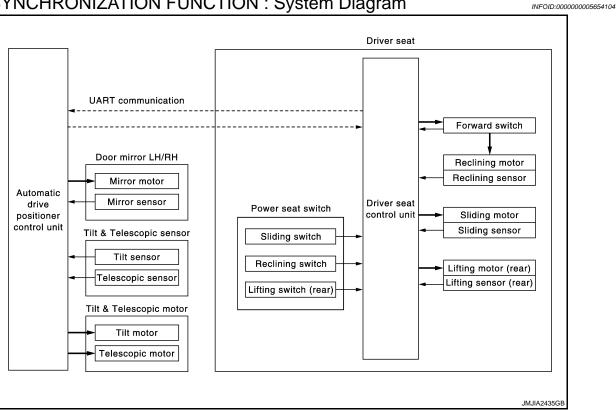
Item	Function	
Tilt & telescopic sensor	Detect the upward/downward & forward/backward position of steering column.	
Door mirror sensor (driver side / passenger side)	Detect the upward/downward and leftward/rightward position of outside mirror face.	

OUTPUT PARTS

Item	Function	
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.	
Tilt & telescopic motor	Move the steering column upward/downward and forward/backward.	
Lifting motor (front)	Move the seat lifter (front) upward/downward.	
Lifting motor (rear)	Move the seat lifter (rear) upward/downward.	
Reclining motor	Tilt and raise up the seatback.	
Sliding motor	Slide the seat forward/backward.	

SEAT SYNCHRONIZATION FUNCTION

SEAT SYNCHRONIZATION FUNCTION : System Diagram



SEAT SYNCHRONIZATION FUNCTION : System Description

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OUTLINE

Revision: 2009 November

< SYSTEM DESCRIPTION >

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

This function is set to OFF before delivery. (initial setting) For the system setting procedure. Refer to ADP-11, "SYSTEM SETTING : Description".

OPERATION PROCEDURE

1. Turn ignition switch ON.

Adjust seat position [sliding, reclining, lifting (rear)]. 2.

The steering and outside mirror is adjusted automatically. 3.

NOTE:

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

ltem	Limit value	
Seat sliding	76 mm	E
Seat reclining	9.1 degrees	-
Seat lifter (rear)	20 mm	F

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

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

OPERATION CONDITION

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

Item	Request status	
System setting	ON	
Ignition position	ON	
Seat back	Folded up	
A/T selector lever (A/T models)	P position	
Parking break (M/T models)	Applied	
Switch inputs Power seat switch Tilt & telescopic switch Door mirror remote control switch Set switch Memory switch 	OFF (Not operated)	

DETAIL FLOW

When performing the sliding, reclining or lifting (rear) operation in manual function, the driver seat control unit performs the seat synchronization function as follows.

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

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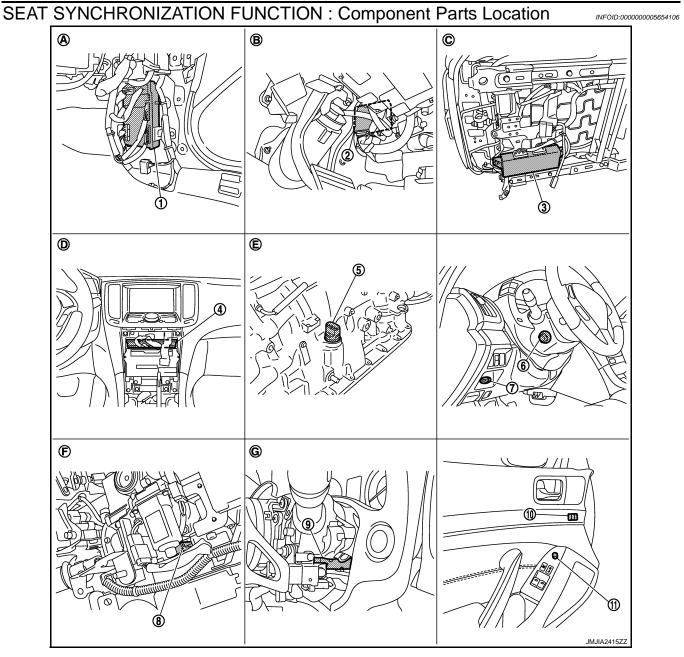
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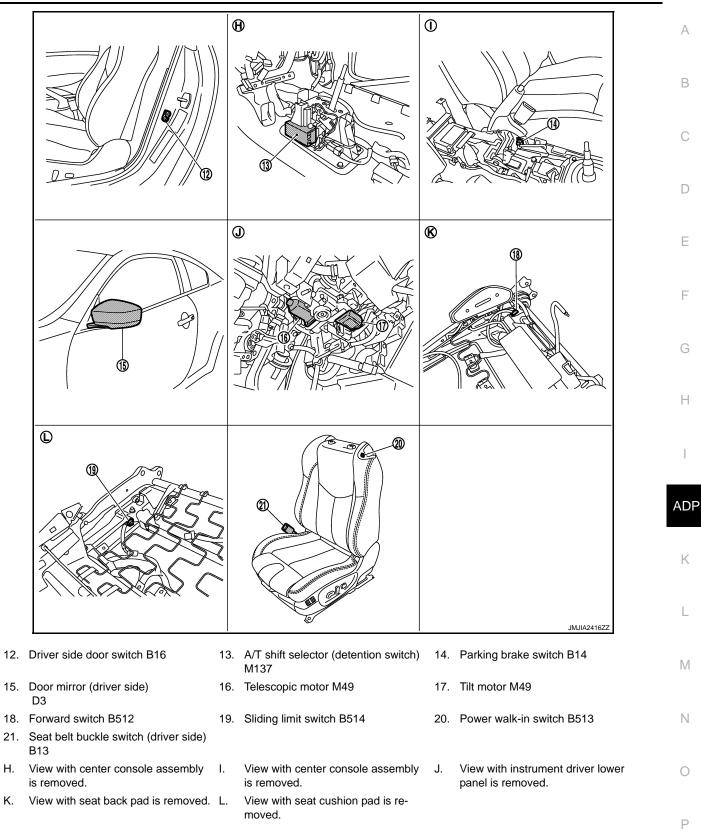


- 1. BCM M118, M119, M122, M123
- 4. Unified meter and A/C amp. M67
- 7. Key slot M22
- 10. Seat memory switch D5
- A. Dash side lower (passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

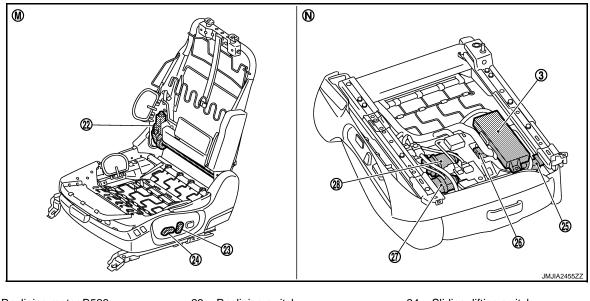
- Automatic drive positioner control unit 3. M51, M52
- 5. A/T assembly F51
- 8. Tilt sensor M48
- 11. Door mirror remote control switch D17
- B. View with instrument driver lower panel removed (Remove 4WAS front control unit with 4WAS models)
- E. A/T assembly (TCM is built in A/T assembly)

- Driver seat control unit B503, B504
- 6. Tilt & telescopic switch M31
- 9. Telescopic sensor M48
- C. Backside of seat cushion (driver side)
- F. View with instrument driver lower panel removed

< SYSTEM DESCRIPTION >



< SYSTEM DESCRIPTION >



22. Reclining motor B523

25. Sliding sensor B526

- 23. Reclining switch (Power seat switch) B510
- 26. Lifting motor (front) B527
- 24. Sliding, lifting switch (Power seat switch) B510
- 27. Sliding motor B525

- 28. Lifting motor (rear) B529
- M. View with seat cushion pad and seat- N. Backside of seat cushion back pad are removed.

SEAT SYNCHRONIZATION FUNCTION : Component Description

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CONTROL UNITS

Item	Function	
Driver seat control unit Operates the specific seat motor with the signal from the power seat sw		
Automatic drive positioner control unit	Operates the steering motor and door mirror with the signal from the driver seat control unit.	

INPUT PARTS

Switches

Item	Function	
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch. 	
Forward switch	Detect folded down or folded up of the seat back.	

Sensors

Item	Function
Door mirror sensor (driver side/passenger side)	Detect the upward/downward and leftward/rightward position of outside mirror face.
Tilt & telescopic sensor	Detect the upward/downward and forward/backward position of steering column.
Lifting sensor (rear)	Detect the upward/downward position of seat lifter (rear).

< SYSTEM DESCRIPTION >

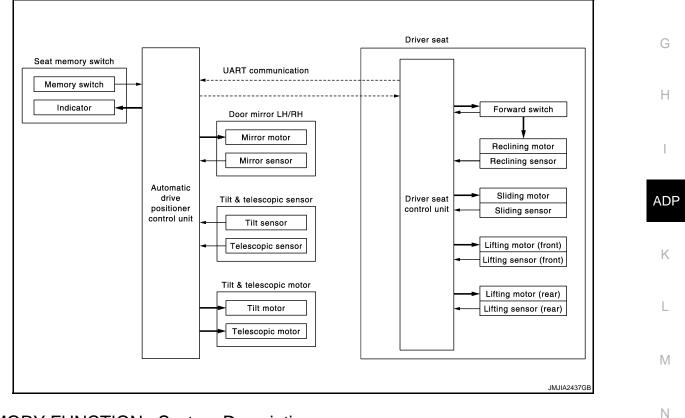
Item	Function	^
 Reclining sensor	Detect the tilt of seatback.	A
 Sliding sensor	Detect the frontward/rearward position of seat.	

OUTPUT PARTS

Item	Function
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.
Tilt & telescopic motor	Move the steering column upward/downward and forward/backward.
Lifting motor (rear)	Move the seat lifter (rear) upward/downward.
Reclining motor	Tilt and raise up the seatback.
Sliding motor	Slide the seat forward/backward.

MEMORY FUNCTION

MEMORY FUNCTION : System Diagram



MEMORY FUNCTION : System Description

INFOID:000000005654109

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INFOID:000000005654108

OUTLINE

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 for more than 0.5 second) operation allows changing to the other driving position. **NOTE:**

Further information for the memory storing procedure. Refer to <u>ADP-10, "MEMORY STORING : Description"</u>.

OPERATION PROCEDURE

- 1. Turn ignition switch ON
- 2. Press desired memory switch for more than 0.5 second.
- 3. Driver seat, steering and door mirror will move to the memorized position.

OPERATION CONDITION

Revision: 2009 November

ADP-29

< SYSTEM DESCRIPTION >

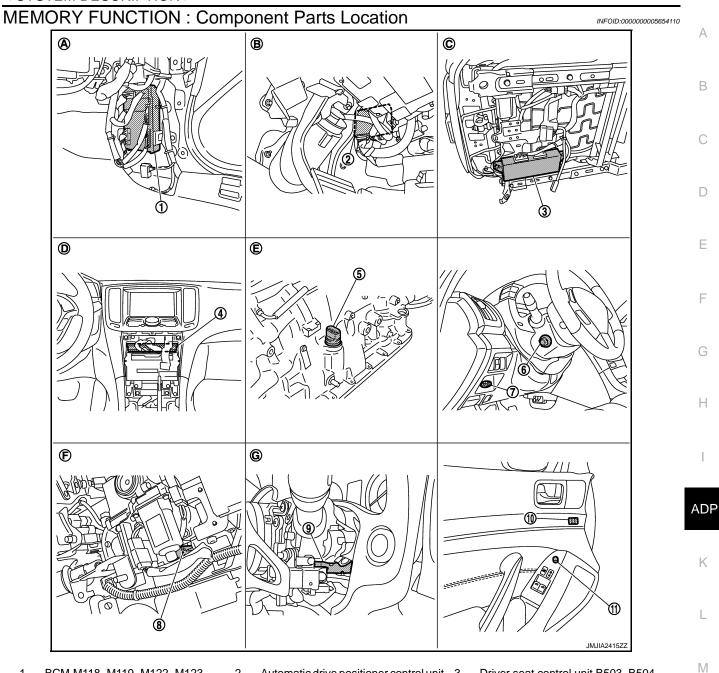
Satisfy all of the following items. The memory function is not performed if these items are not satisfied.

Item	Request status
Ignition position	ON
Seat back	Folded up
A/T selector lever (A/T models)	P position
Parking break (M/T models)	Applied
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch 	OFF (Not operated)

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the automatic drive positioner control unit when memory switch 1 or 2 is operated. Memory switch signal is output to driver seat control unit via UART communication.
2	_	Motors (Seat, steering, door mirror)	Driver seat control unit operates each motor of seat when it recogniz- es the memory switch pressed for 0.5 second or more and requests each motor operation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit op- erates each motor.
		Memory switch Indica- tor	Driver seat control unit requests the flashing of memory indicator to automatic drive positioner control unit via UART communication while either of the motors is operating. The automatic drive positioner con- trol unit illuminates the memory indicator.
3	Sensors (Seat, steering, 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 that is input from auto drive positioner control unit via UART communication. Driver seat control unit stops the operation of each motor when each part reach- es the recorded address.
4	_	Memory switch Indica- tor	Driver seat control unit requests the illumination of memory indicator to auto drive positioner control unit via UART communication after all motors stop. The auto driving positioner control unit illuminates the memory indicator for 5 seconds.

< SYSTEM DESCRIPTION >



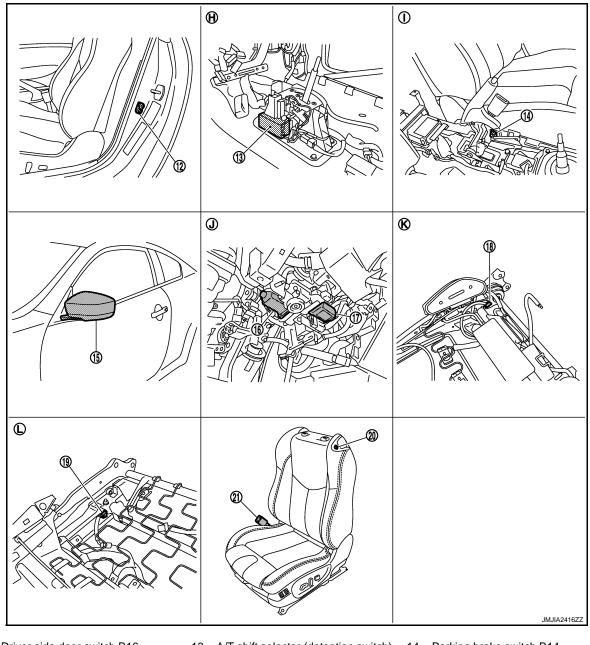
- BCM M118, M119, M122, M123 1.
- Unified meter and A/C amp. M67 4.
- Key slot M22 7.
- 10. Seat memory switch D5
- Dash side lower (passenger side) Α.
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. Driver seat control unit B503, B504 2. M51, M52 A/T assembly F51
- 5.
- Tilt sensor M48 8.
- 11. Door mirror remote control switch D17
- Β. View with instrument driver lower panel removed (Remove 4WAS front control unit with 4WAS models)
- E. A/T assembly (TCM is built in A/T assembly)
- 6. Tilt & telescopic switch M31 9. Telescopic sensor M48
 - C. Backside of seat cushion (driver side)
 - F. View with instrument driver lower panel removed

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< SYSTEM DESCRIPTION >



- 12. Driver side door switch B16
- 15. Door mirror (driver side) D3
- 18. Forward switch B512
- 21. Seat belt buckle switch (driver side) B13
- H. View with center console assembly ١. is removed.
- K. View with seat back pad is removed. L.

- 13. A/T shift selector (detention switch) 14. Parking brake switch B14 M137
- 16. Telescopic motor M49
- 19. Sliding limit switch B514
 - View with center console assembly is removed.
 - View with seat cushion pad is removed.

- 17. Tilt motor M49
- 20. Power walk-in switch B513
- J. View with instrument driver lower panel is removed.

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		e e e e e e e e e e e e e e e e e e e	23		9		(2) AJIA2455ZZ	E
22.	Reclining motor B523		Reclining switch (Power seat sw B510		24.	Sliding, lifting switch (Power seat switch) B510		F
25.	Sliding sensor B526	26.	Lifting motor (fro	ont) B527	27.	Sliding motor B525		G
28.	Lifting motor (rear) B529							
М.	View with seat cushion pad and seat- back pad are removed.	N.	Backside of sea	at cushion				Н
MEMORY FUNCTION : Component Description								I

CONTROL UNITS

INPUT PARTS

Switches

Item	Function	
Memory switch 1/2	The registration and memory function can be performed with its operation.	N
Forward switch	Detect folded down or folded up of the seat back.	-

Sensors

Item	Function
Door mirror sensor (driver side/passenger side)	Detect the upward/downward and leftward/rightward position of outside mirror face.
Tilt & telescopic sensor	Detect the upward/downward and forward/backward position of steering column.
Lifting sensor (front)	Detect the upward/downward position of seat lifting (front).
Lifting sensor (rear)	Detect the upward/downward position of seat lifting (rear).

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< SYSTEM DESCRIPTION >

Item	Function	
Reclining sensor	Detect the tilt of seatback.	
Sliding sensor	Detect the forward/backward position of seat.	

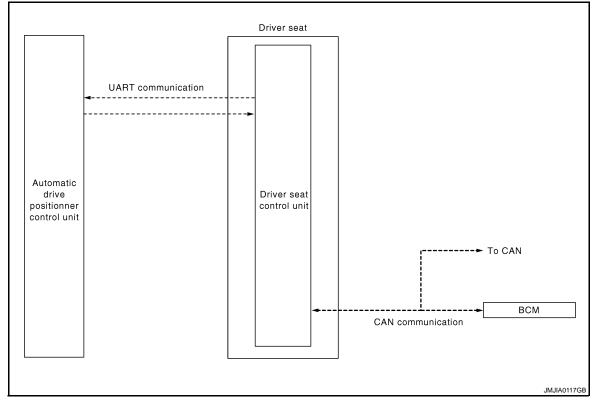
OUTPUT PARTS

Item	Function		
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.		
Tilt & telescopic motor	Move the steering column upward/downward and forward/backward.		
Lifting motor (front)	Move the seat lifter (front) upward/downward.		
Lifting motor (rear)	Move the seat lifter (rear) upward/downward.		
Reclining motor	Tilt and raise up the seatback.		
Sliding motor	Slide the seat forward/backward.		
Memory indicator	Illuminates or blinks according to the registration/operation status.		

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

INFOID:000000005654112



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:000000005654113

OUTLINE

When unlocking doors by using Intelligent Key or driver side door request switch, the system performs memory operation.

OPERATION PROCEDURE

- 1. Unlock doors by using Intelligent Key or driver side door request switch.
- 2. The system performs memory operation, and then performs exit assist operation.

NOTE:

If the seat position is in memorized position before unlocking doors, memory operation does not perform. **NOTE:**

ADP-34

< SYSTEM DESCRIPTION >

Further information for Intelligent Key interlock function. Refer to <u>ADP-10. "MEMORY STORING : Descrip-</u>tion".

OPERATION CONDITION

Satisfy all of the following items. The Intelligent Key interlock function is performed if these items are satisfied.

Item	Request status
Key switch	OFF (Key is removed.)
gnition position	LOCK
Seat back	Folded up
A/T selector lever (A/T models)	P position
Parking break (M/T models)	Applied
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch	OFF (Not operated)
 Set switch Memory switch 	

DETAIL FLOW

-	Order	Input	Output	Control unit condition	G
-	1	 Door unlock signal (CAN) Key ID signal (CAN) 	_	Driver seat control unit receives the door unlock signal and the key ID signal from BCM when unlocking the door with Intelligent Key or driver side door request switch.	Н
-	2	—	—	Driver seat control unit performs the memory function.	

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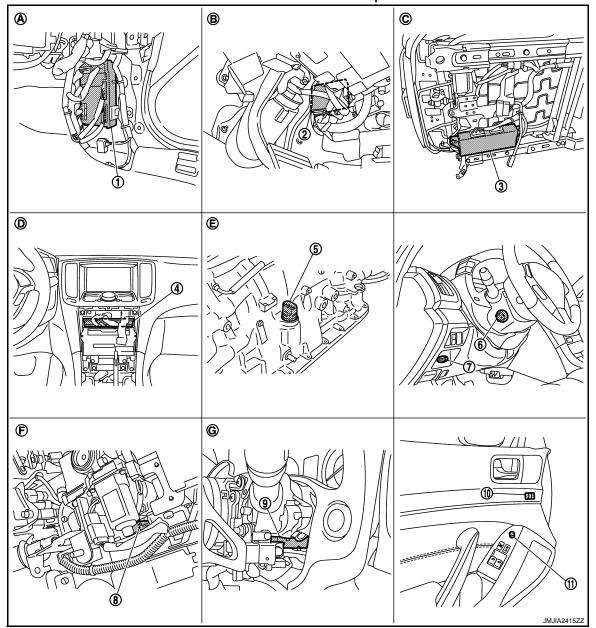
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< SYSTEM DESCRIPTION >

INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location INFOID:000000005654114



- 1. BCM M118, M119, M122, M123
- 4. Unified meter and A/C amp. M67
- 7. Key slot M22
- 10. Seat memory switch D5
- A. Dash side lower (passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

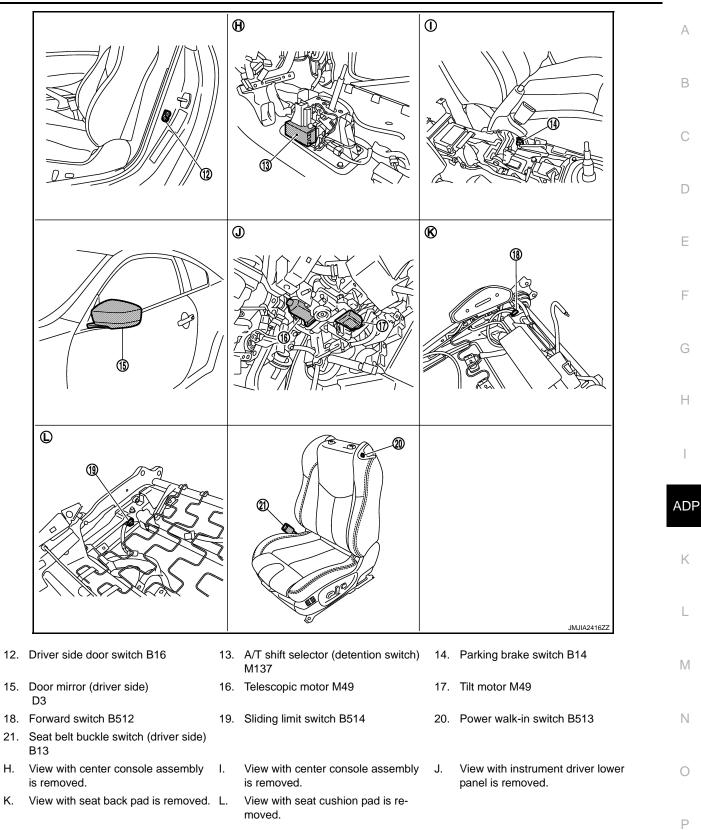
- Automatic drive positioner control unit 3. M51, M52
- 5. A/T assembly F51
- 8. Tilt sensor M48
- 11. Door mirror remote control switch D17
- B. View with instrument driver lower panel removed (Remove 4WAS front control unit with 4WAS models)
- E. A/T assembly (TCM is built in A/T assembly)

- Driver seat control unit B503, B504
- 6. Tilt & telescopic switch M31
 - Telescopic sensor M48

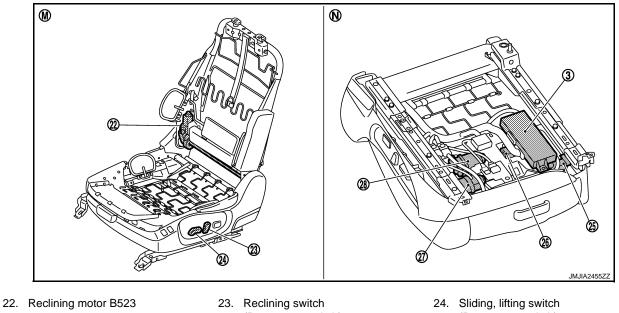
9.

- C. Backside of seat cushion (driver side)
- F. View with instrument driver lower panel removed

< SYSTEM DESCRIPTION >



< SYSTEM DESCRIPTION >



- 23. Reclining switch (Power seat switch) B510
- 26. Lifting motor (front) B527
- 24. Sliding, lifting switch (Power seat switch) B510
- 27. Sliding motor B525

28. Lifting motor (rear) B529

25. Sliding sensor B526

M. View with seat cushion pad and seat- N. Backside of seat cushion back pad are removed.

INTELLIGENT KEY INTERLOCK FUNCTION : Component Description

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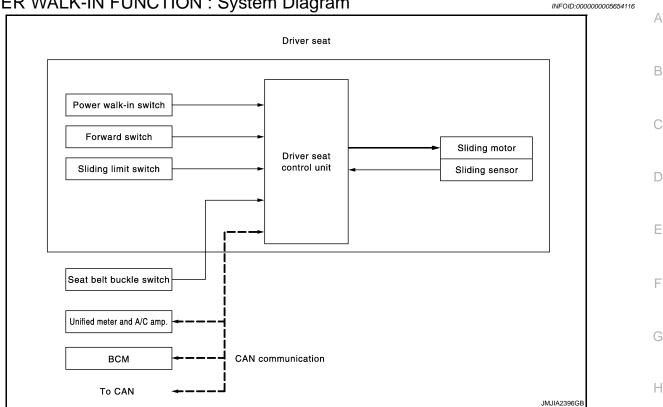
CONTROL UNITS

Item	Function
Driver seat control unit	It performs memory function after receiving the door unlock signal from BCM.
Automatic drive positioner control unit	Operates the steering column and door mirror with the instructions from the driver seat control unit.
BCM	 Recognizes the following status and transmits it to the driver seat control unit via CAN communication. Door lock: UNLOCK (with Intelligent Key or driver side door request swtich)

POWER WALK-IN FUNCTION

< SYSTEM DESCRIPTION >

POWER WALK-IN FUNCTION : System Diagram



POWER WALK-IN FUNCTION : System Description

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OUTLINE

Slide the driver seat automatically with the power walk-in switch operation so as to easily facilitate the entry to ADP the rear seat.

Forward Operation

Slide (forward) the driver seat to the front end position (sliding limit switch: ON) by operating the power walk-in Κ switch when the seatback is folded down.

The forward operation is stopped by folding the seatback (forward switch: OFF) during the forward operation.

Backward Operation

The seat back is folded up after performing the forward operation of power walk-in function. Slide (backward) it to the position before performing the forward operation by operating the power walk-in switch. If the manual operation, memory operation, and Intelligent Key interlock operation are performed after per-Μ forming the forward operation, do not perform the backward operation.

OPERATION PROCEDURE

Forward Operation	Ν
1. Open driver door.	

- 2. Pull the walk-in lever on the upper part of seatback, and then the seatback is folded down.
- Press the power walk-in switch.
- Slide the seat to the front end position.

Backward Operation

- 1. Open driver door.
- 2. Fold up the seatback after performing the forward operation.
- 3. Press the power walk-in switch.
- 4. Slide the seat to the previous position before the forward operation was performed.

OPERATION CONDITION

Perform the power walk-in function when the following conditions are satisfied.

Revision: 2009 November

ADP-39

< SYSTEM DESCRIPTION >

Forward Operation

Item	Request status
Driver side door	Open
Driver side seat belt	Not fastened
Power seat switch (sliding)	Not operated
Vehicle speed	0 km/h
Seat position (sliding)	Other than front end
Seat back	Folded down

Backward Operation

Item	Request status
Initialize	Done
Driver side seat belt	Not fastened
Switch inputs Power seat switch (sliding) Set switch Memory switch 	Not operated
Vehicle speed	0 km/h
Seat position (sliding)	The seat sliding position will not move after per- forming the forward operation.
Seat back	Folded up

DETAIL FLOW

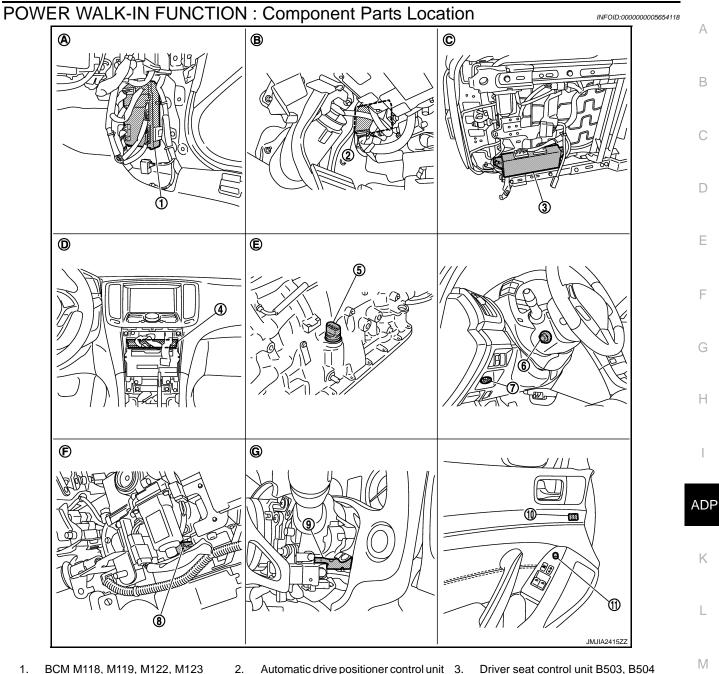
Forward Operation

Order	Inputs	Outputs	Control unit condition	
1	Forward switch	_	Driver seat control unit detects that the seatback is folded down by the signal from the forward switch.	
2	Power walk-in switch	_	The operation signal is inputted to the driver seat control unit when the power walk-in switch is oper- ated.	
3	_	Sliding motor (forward)	Driver seat control unit operates the seat sliding motor forward when it detects that the power walk- in switch is operated.	
4	Sliding limit switch	_	Driver seat control unit stops the seat sliding motor when it detects that the seat sliding reaches the front end position by the sliding limit switch.	

Backward Operation

Order	Inputs	Outputs	Control unit condition
1	Forward switch	_	Driver seat control unit detects that the seatback is folded up by the signal from the forward switch.
2	Power walk-in switch	-	The operation signal is inputted to the driver seat control unit when the power walk-in switch is oper- ated.
3	_	Sliding motor (backward)	Driver seat control unit operates the sliding motor backward when it detects that the power walk-in switch is operated.
4	Sliding sensor	_	Driver seat control unit stops the seat sliding motor when the seat sliding position reaches the position before performing the forward operation by the signal from sliding sensor.

< SYSTEM DESCRIPTION >



- BCM M118, M119, M122, M123 1.
- Unified meter and A/C amp. M67 4.
- Key slot M22 7.
- 10. Seat memory switch D5
- Dash side lower (passenger side) Α.
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

Automatic drive positioner control unit 3. Driver seat control unit B503, B504 M51, M52 5. A/T assembly F51 6. Tilt & telescopic switch M31

9.

- Tilt sensor M48
- 11. Door mirror remote control switch D17

8.

- Β. View with instrument driver lower panel removed (Remove 4WAS front control unit with 4WAS models)
- E. A/T assembly (TCM is built in A/T assembly)
- C. Backside of seat cushion (driver side)

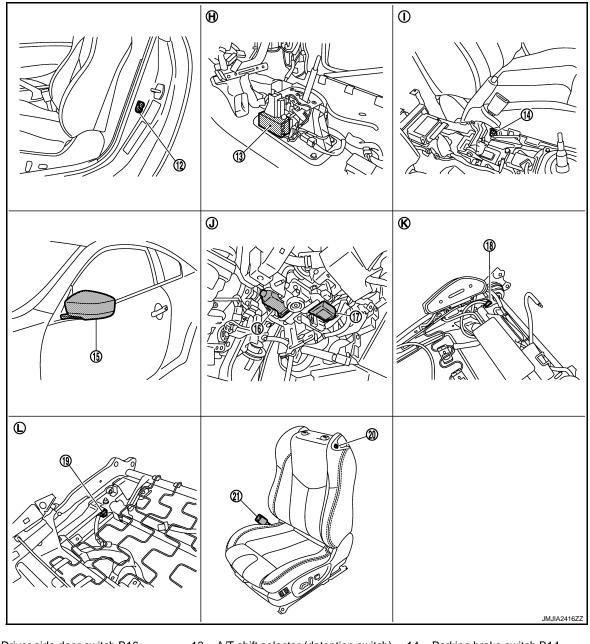
Telescopic sensor M48

F. View with instrument driver lower panel removed

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< SYSTEM DESCRIPTION >



- 12. Driver side door switch B16
- 15. Door mirror (driver side) D3
- 18. Forward switch B512
- 21. Seat belt buckle switch (driver side) B13
- H. View with center console assembly ١. is removed.
- K. View with seat back pad is removed. L.

- 13. A/T shift selector (detention switch) 14. Parking brake switch B14 M137
- 16. Telescopic motor M49
- 19. Sliding limit switch B514
 - View with center console assembly is removed.
 - View with seat cushion pad is removed.

- 17. Tilt motor M49
- 20. Power walk-in switch B513
- J. View with instrument driver lower panel is removed.

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22.	Reclining motor B523	23.	Reclining switcl (Power seat sw B510		24.	Sliding, lifting switch (Power seat switch) B510		0
25.	Sliding sensor B526	26.	Lifting motor (fr	ont) B527	27.	Sliding motor B525		G
28.	Lifting motor (rear) B529							
М.	View with seat cushion pad and seat- back pad are removed.	N.	Backside of sea	at cushion				Η
POW	/ER WALK-IN FUNCTIC)N :	Compone	nt Descriptio	n		INFOID:000000005654119	

CONTROL UNITS

Item	Function
Driver seat control unit	 Main units of automatic drive positioner system It is connected to the CAN. It communicates with the automatic drive positioner control unit via UART communication.
BCM	Transmit the following status to the driver seat control unit via CAN communication Driver door: OPEN/CLOSE Starter: CRANKING/OTHER
Unified meter and A/C amp.	Transmit the vehicle speed signal to the driver seat control unit via CAN communi- cation.

INPUT PARTS

Switches

Item	Function
Front door switch (driver side)	Detect front door (driver side) open/close status.
Power walk-in switch	Perform the power walk-in operation by operating the power walk-in switch.
Sliding limit switch	Detect the front end position of seat sliding during the power walk-in function front- ward operation.
Seat belt buckle switch	Detect the seat belt fastening/releasing condition.
Forward switch	Detect the folded up/folded down condition of seatback that is the operation condi- tion of power walk-in function.

Sensors

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< SYSTEM DESCRIPTION >

Item	Function
Sliding sensor	Detect the forward/backward position of seat.

OUTPUT PARTS

Item	Function
Sliding motor	Slide the seat forward/backward.

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

Diagnosis Description

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

DIAGNOSTIC MODE

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

CONSULT-III Function

SELF DIAGNOSTIC RESULTS Refer to <u>ADP-166, "DTC Index"</u>.

DATA MONITOR

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.	
MEMORY SW 1	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 1 signal.	
MEMORY SW 2	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 2 signal.	
SLIDE SW-FR* ³	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.	
SLIDE SW-RR* ³	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward) signal.	
RECLN SW-FR* ³	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward) signal.	
RECLN SW-RR* ³	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.	
LIFT FR SW-UP* ³	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (upward) signal.	
LIFT FR SW-DN* ³	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (downward) signal.	
LIFT RR SW-UP* ³	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (upward) signal.	
LIFT RR SW-DN* ³	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (downward) signal.	
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (upward) signal.	
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (downward) 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 switc (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.	

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DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (upward) signal.
TILT SW-DOWN	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (downward) signal.
TELESCO SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (backward) signal.
FORWARD SW*3	"ON/OFF"	×	×	ON/OFF status judged from the forward switch signal.
WALK-IN SW* ³	"ON/OFF"	×	×	ON/OFF status judged from the power walk-in switch signal.
FWD LIMIT SW*3	"ON/OFF"	×	×	ON/OFF status judged from the sliding limit switch signal.
SEAT BELT SW* ³	"ON/OFF"	×	×	ON/OFF status judged from the seat belt buckle switch signal.
DETENT SW ^{*1}	"ON/OFF"	×	×	The selector lever position "OFF (P position) / ON (other than the P position)" judged from the detention switch signal.
PARK BRAKE SW ^{*2}	"ON/OFF"	×	×	The parking brake condition "ON (applied) / OFF (release)" judged from the parking brake switch signal.
STARTER SW	"ON/OFF"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SLIDE PULSE*3	-	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULS*4	-	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE*4	-	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE*4	-	-	×	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	" \ "	-	×	Voltage input from door mirror sensor (passenger side) upward/ downward is displayed.
MIR/SEN RH R-L	" \ "	-	×	Voltage input from door mirror sensor (passenger side) leftward/ rightward is displayed.
MIR/SEN LH U-D	" \ "	-	×	Voltage input from door mirror sensor (driver side) upward/down- ward is displayed.
MIR/SEN LH R-L	" \ "	-	×	Voltage input from door mirror sensor (driver side) leftward/right- ward is displayed.
TILT SEN	"V"	_	×	Voltage input from tilt sensor upward/downward is displayed.
TELESCO SEN	"√"	_	×	Voltage input from telescopic sensor forward/backward is displayed.

*1: M/T models display all item except this item.

*2: A/T models display all item except this item.

*³: Only this item is displayed for driver seat without automatic drive positioner system.

*⁴: It is displayed but is not operated for models with driver seat without automatic driver positioner system.

ACTIVE TEST

CAUTION:

When driving vehicle, never perform active test.

Test item	Description	
SEAT SLIDE	Activates/deactivates the sliding motor.	
SEAT RECLINING	Activates/deactivates the reclining motor.	

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

Test item	Description	
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.	E
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.	

*: Does not display without automatic driver position system.

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DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
U1000	CAN COMM CIR- CUIT	 Driver seat control unit cannot communicate to other control units. Driver seat control unit cannot communicate for more than the specified time. 	Harness or connectors (CAN communication line is open or shorted)

DTC CONFIRMATION PROCEDURE

1.STEP 1

- 1. Turn ignition switch ON and wait for 3 seconds or more.
- 2. Check "Self diagnostic result" using CONSULT-III.

Is the DTC detected?

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

Diagnosis Procedure

Refer to LAN-18, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

Refer to ADP-10, "SYSTEM INITIALIZATION : Description".

INFOID:000000005654124

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

Description INFOID:000000005654126 The seat sliding motor is installed to the seat cushion frame. The seat sliding motor is installed with the driver seat control unit. Slides the seat frontward/ rearward by changing the rotation direction of sliding motor. DTC Logic INFOID:000000005654127 DTC DETECTION LOGIC NOTE: First perform diagnosis for B2126 if B2126 is detected. Trouble diagnosis DTC No. DTC detecting condition Possible cause name The driver seat control unit detects the output of slid-Driver seat control unit SEAT SLIDE B2112 ing motor output terminal for 0.1 second or more Slide motor harness is power even if the sliding switch is not input. shorted DTC CONFIRMATION PROCEDURE **1**.PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. 1. Check "Self diagnostic result" using CONSULT-III. 2. Н Is the DTC detected? >> Perform diagnosis procedure. Refer to ADP-49, "Diagnosis Procedure". YES NO >> INSPECTION END Diagnosis Procedure INFOID:000000005654128 1. CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) ADP 1. Turn ignition switch OFF. Disconnect sliding motor and driver seat control unit connector. 2. Check voltage between sliding motor harness connector and ground. 3. (+) Voltage (V) Sliding motor (-) (Approx.) Connector Terminals 35 Ground 0 Μ B525 42 Is the inspection result normal? YES >> GO TO 2. Ν NO >> Repair or replace harness. 2.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL Connect driver seat control unit connector. 1. 2. Check voltage between driver seat control unit harness connector and ground.

P (+)Voltage (V) Driver seat control unit (-) (Approx.) Terminals Connector 35 B525 Ground 0 42

Is the inspection result normal?

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< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "Removal and Installation"

3.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Description INFOID:000000005654129 The seat reclining motor is installed to the seatback frame. The seat reclining motor is activated with the driver seat control unit. Tilts the seatback frontward/rearward by changing the rotation direction of reclining motor. DTC Logic INFOID:000000005654130 DTC DETECTION LOGIC NOTE: D First perform diagnosis for B2126 if B2126 is detected. Trouble diagnosis Е DTC No. DTC detecting condition Possible cause name The driver seat control unit detects the output of re-Driver seat control unit SEAT RECLINING B2113 clining motor output terminal for 0.1 second or more Reclining motor harness is pow-F even if the reclining switch is not input. er shorted DTC CONFIRMATION PROCEDURE 1.PEFORM DTC CONFIRMATION PROCEDURE 1. Turn ignition switch ON. 2. Check "Self diagnostic result" using CONSULT-III. Н Is the DTC detected? YES >> Perform diagnosis procedure. Refer to ADP-51, "Diagnosis Procedure". >> INSPECTION END NO Diagnosis Procedure INFOID:000000005654131 1.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT) ADP 1. Turn ignition switch OFF. 2. Disconnect reclining motor and driver seat control unit connector. 3. Check voltage between reclining motor harness connector and ground. Κ (+) Voltage (V) Reclining motor (-) (Approx.) Connector Terminals 15 B523 0 Ground Μ 71 Is the inspection result normal? YES >> GO TO 2. Ν NO >> Repair or replace harness. 2.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL 1. Connect driver seat control unit connector. 2. Check voltage between driver seat control unit harness connector and ground. (+)Ρ Voltage (V) Driver seat control unit (-) (Approx.) Connector Terminals 15

Is the inspection result normal?

B523

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Ground

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< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "Removal and Installation".

3.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

B2118 TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

B2118 TILT SENSOR

Description

• The tilt sensor is installed to the steering column assembly.

- 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.

DTC Logic

INFOID:000000005654133

INFOID:000000005654134

INFOID:000000005654132

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DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2118	TILT SENSOR	The input voltage of tilt sensor is less then 0.1V or more than 4.9V.	 Harness and connectors (Tilt sensor circuit is opened/ shorted, tilt sensor power supply circuit is opened/shorted.) Tilt sensor 	

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to ADP-53. "Diagnosis Procedure".
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK TILT SENSOR SIGNAL

- 1. Turn ignition switch ON.
- 2. Select "TILT SEN" in the "Data monitor" mode using CONSULT-III.
- 3. Check tilt sensor signal under the following condition.

Monitor item	Condition	Value	
TILT SEN	Tilt position	Change between 1.1 V (close to top) 3.9 V (close to bottom)	— L
the value normal?			M

YES >> GO TO 6.

NO >> GO TO 2.

2. CHECK TILT SENSOR CIRCUIT

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

Automatic drive po	ositioner control unit	Tilt & telescopic sensor Connector Terminal		Continuity	
Connector	Terminal			Continuity	
M51	7	M48	3	Existed	

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

B2118 TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity	
Connector Terminal		Ground	Continuity	
M51	7		Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK TILT SENSOR POWER SUPPLY

1. Connect automatic drive positioner control unit connector.

2. Turn ignition switch ON.

3. Check voltage between tilt & telescopic sensor harness connector and ground.

(+)	-	Voltage (V/)	
Tilt & teleso Connector	Tilt & telescopic sensor Connector Terminal		Voltage (V) (Approx.)	
Connector	Termina			
M48	M48 1		5	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive po	ositioner control unit	Tilt & telescopic sensor		ontrol unit Tilt & telescopic sensor Continuity		Continuity
Connector	Terminal	Connector	Terminal	Continuity		
M52	33	M48	1	Existed		

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

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M52	33		Not existed	

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>.
- NO >> Repair or replace harness.

5.CHECK TILT 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 tilt & telescopic sensor harness connector.

Automatic drive po	sitioner control unit Tilt & telesc		copic sensor	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M52	41	M48	4	Existed	

Is the inspection result normal?

YES >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

< DTC/CIRCUIT	DIAGNOSIS >
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B2119 TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

B2119 TELESCOPIC SENSOR

Description

INFOID:000000005654135

- The telescopic sensor is installed to the steering column assembly.
- 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.

DTC Logic

INFOID:000000005654136

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2119	TELESCOPIC SEN- SOR	The input voltage of telescopic sensor is less than 0.1V or more than 4.9V.	 Harness and connectors (Telescopic sensor circuit is opened/shorted, telescopic sen- sor power supply circuit is opened/shorted.) Telescopic sensor

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-56, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000005654137

1.CHECK TELESCOPIC SENSOR SIGNAL

- 1. Turn ignition switch ON.
- 2. Select "TELESCO SEN" in the "Data monitor" mode using CONSULT-III.
- 3. Check the tilt sensor signal under the following condition.

Monitor item	Condition	Value
TELESCO SEN	Telescopic position	Change between 0.5 V (close to top) 4.5 V (close to bottom)

Is the valve normal?

YES >> GO TO 6.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Automatic drive po	ositioner control unit	Tilt & telescopic sensor Connector Terminal		Continuity	
Connector	Terminal				
M51	23	M48	2	Existed	

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

B2119 TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic d	rive positioner control unit			С	ontinuity
Connector	Termina	al	Ground		-
M51	23			No	ot existed
CHECK TELESCOP Connect automatic Turn ignition switch	eplace harness. IC SENSOR POWEF drive positioner contr ON.	rol unit con			
Check voltage betw	veen tilt & telescopic s	sensor harr	ness connector and gro	und.	
	(+)				
Tilt &	telescopic sensor		(-)		oltage (V) Approx.)
Connector	Termina	al			
M48 the inspection result	1		Ground		5
0 >> GO TO 4.					
CHECK TELESCOP Turn ignition switch Disconnect automa	OFF. tic drive positioner co etween automatic driv	ontrol unit c		connector ar	nd tilt & teles
CHECK TELESCOP. Turn ignition switch Disconnect automa Check continuity be sensor harness cor	OFF. tic drive positioner co etween automatic dri nnector.	ontrol unit c	onnector. er control unit harness	connector ar	nd tilt & teles
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor	OFF. tic drive positioner co etween automatic driv	ontrol unit c	onnector. er control unit harness Tilt & telescopic sensor		nd tilt & teles Continuity
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po	OFF. tic drive positioner co etween automatic dri nnector. sitioner control unit	ontrol unit c ve position	onnector. er control unit harness Tilt & telescopic sensor ector Termina		
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52	OFF. tic drive positioner co etween automatic dri nector. sitioner control unit Terminal 33	ontrol unit c ve position Conn M ²	onnector. er control unit harness Tilt & telescopic sensor ector Termina	al	Continuity Existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be	OFF. tic drive positioner co etween automatic driv nector. sitioner control unit Terminal 33 etween automatic driv	ontrol unit c ve position Conn M ² ve positione	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1	al	Continuity Existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be	OFF. tic drive positioner co etween automatic dri nector. sitioner control unit Terminal 33	ontrol unit c ve position Conn M ² ve positione	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1	al onnector and	Continuity Existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic d	OFF. tic drive positioner co etween automatic driven nector. sitioner control unit Terminal 33 etween automatic driven rive positioner control unit	ontrol unit c ve position Conn M ² ve positione	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1 er control unit harness c	al onnector and	Continuity Existed ground.
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic d Connector M52	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 20 33	ontrol unit c ve position Conn M ² ve positione	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1 er control unit harness c	al onnector and	Continuity Existed I ground. ontinuity
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic d Connector M52 Check continuity be Automatic d Connector M52 the inspection result YES >> Replace au NO >> Repair or re CCHECK TELESCOP Turn ignition switch Disconnect automa	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven positioner control unit Terminal 33 normal? tomatic drive positioner place harness. PIC SENSOR GROUN OFF. tic drive positioner co etween automatic driven tomatic drive positioner co	ontrol unit c ve position Conn M ² ve positione al ner control unit c	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1 er control unit harness c Ground unit. Refer to <u>ADP-235</u> , T	al onnector and C No "Removal an	Continuity Existed I ground. ontinuity ot existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic d Connector M52 Check continuity be the inspection result f YES >> Replace au NO >> Repair or re CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven positioner control unit Terminal 33 normal? tomatic drive positioner place harness. PIC SENSOR GROUN OFF. tic drive positioner co etween automatic driven tomatic drive positioner co	ontrol unit c ve position Conn M ² ve positione al ner control unit c	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1 er control unit harness c Ground unit. Refer to <u>ADP-235</u> , T	al onnector and C No "Removal an	Continuity Existed I ground. ontinuity ot existed ad Installation
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic d Connector M52 Check continuity be Automatic d Connector M52 the inspection result f YES >> Replace au NO >> Repair or re CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven itomatic drive positioner eplace harness. PIC SENSOR GROUN OFF. tic drive positioner co etween automatic driven tic drive positioner co	ontrol unit c ve position Conn M ² ve positione al ner control unit c	onnector. er control unit harness Tilt & telescopic sensor ector Termina 18 1 er control unit harness c Ground unit. Refer to <u>ADP-235</u> , T onnector. er control unit harness Tilt & telescopic sensor	al C onnector and C <u>Removal an</u> connector ar	Continuity Existed I ground. ontinuity ot existed

Revision: 2009 November

Refer to GI-38, "Intermittent Incident".

< DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

B2126 DETENT SW

< DTC/CIRCUIT DIAGNOSIS >

B2126 DETENT SW

Description

- Detention switch is installed on A/T shift selector. It is turned OFF when the A/T selector lever is in P position.
- The driver seat control unit judges that the A/T selector lever is in P position if continuity does not exist in this circuit.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting	condition	Possible cause
B2126	DETENT SW	Selector lever is in P position of 7±4 km/h is detected.	and the vehicle speed	 Harness and connectors (Detention switch circuit is opened/shorted.) Detention switch Unified meter and A/C amp. (CAN communication)
	IRMATION PROC	EDURE		
1.PERFORM	M DTC CONFIRMA	TION PROCEDURE		
	-	h or more. t" using CONSULT-III.		
	Perform diagnosis p NSPECTION END	rocedure. Refer to <u>ADP-59</u>), "Diagnosis Proce	edure".
Diagnosis	Procedure			INF0ID:00000005654
1.снеск р	TC WITH "BCM"			
	0	r BCM using CONSULT-III.		
		B2603, B2604 or B2605 d er to BCS-73, "DTC Index		
NO >> (GO TO 2.		<u></u> .	
2.CHECK D	TC WITH "METER	/M&A"		
	•	r METER/M&A using CON	SULT-III.	
<u>Is the DTC de</u> YES >> 0		er to <u>MWI-101, "DTC Inde</u>	x".	
NO >> (GO TO 3.		_	
3. CHECK D	ETENTION SWITC	H SIGNAL		
2. Select "D		"Data Monitor" mode using al under the following cond		
1	Monitor item	Con	dition	Status
	DETENT SW	selector lever	P position	OFF
	-		Other than above	ON

<u>Is the status normal?</u> YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK DETENTION SWITCH CIRCUIT

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INFOID:000000005654138

B2126 DETENT SW

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit and A/T shift selector connector.
- 3. Check continuity between driver seat control unit harness connector and A/T shift selector harness connector.

Driver seat	control unit	A/T shift selector Connector Terminal		Continuity
Connector	Terminal			Continuity
B503	21	M137	11	Existed

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

Driver seat control unit			Continuity
Connector	Connector Terminal		Continuity
B503	21		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS >

B2127 PARKING BRAKE SWITCH

Description

Parking brake switch is installed on parking brake lever. It is turned ON when the parking brake is applied.

The driver seat control unit judges that the parking brake is engaged if continuity exists in this circuit.

DTC Logic

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INFOID:000000005654141

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DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2127	PARKING BRAKE	Parking brake is engaged and the vehicle speed of 7 km/h (4MPH) or more is detected.	 Harness and connectors (Parking brake switch circuit is opened/shorted.) Parking brake switch Combination meter (CAN communication) Driver seat control unit 	E

DTC CONFIRMATION PROCEDURE

1.STEP 1

- 1. Drive the vehicle at 7 km/h (4 MPH) or more.
- Check "Self Diagnostic Result" using CONSULT-III. 2.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-61, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1. CHECK PARKING BRAKE SWITCH SIGNAL

- 1. Turn ignition switch ON.
- Select "PARK BRAKE SW" in the "Data Monitor" mode using CONSULT-III. 2.
- Check parking brake switch signal under the following condition. 3.

Monitor item		Condition	Status	
	Darkin a kaska	Applied	ON	
PARK BRAKE SW	Parking brake	Release	OFF	
the status normal?				
(ES >> GO TO 5.				
NO >> GO TO 2.				
.CHECK PARKING BR	AKE SWITCH INPUT	SIGNAL		

2. CHECK PARKING BRAKE SWITCH INPUT SIGNAL

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

(-	+)			Р
Parking br	ake switch	(-)	Voltage (V) (Approx.)	
Connector	Terminal		(, ++, -, .,)	
B14	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

B2127 PARKING BRAKE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

$\overline{\mathbf{3.}}$ CHECK PARKING BRAKE SWITCH HARNESS CONTINUITY

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

Driver seat	t control unit	Parking bi	rake switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	8	B14	1	Existed

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	8		Not existed

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "Removal and Installation".
- NO >> Repair or replace harness.

4.CHECK PARKING BRAKE SWITCH

Refer to ADP-62, "Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Adjust or replace parking brake switch.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:000000005654144

1.CHECK PARKING BRAKE SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect parking brake switch connector.
- 3. Check continuity between parking brake switch terminal and ground part of parking brake switch.

Те	erminal	Condition		Continuity
Parking	brake switch	Condition	1	Continuity
1	Ground part of	Parking brake	Applied	Existed
I	parking brake switch	Faiking blake	Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Adjust or replace parking brake switch.

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

Driver seat control unit performs UART communication with the automatic drive positioner control unit using 2 communication lines, TX and RX line. Driver seat control unit receives the operation signals of tilt & telescopic switch, door mirror remote control switch, set switch and memory switch and the position signals of tilt & telescopic sensor and door mirror sensor from the automatic drive positioner control unit and transmits the operation request signal.

DTC Logic

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
C CONFL	RMATION PROCE	NIRE	

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Operate tilt & telescopic switch for more than 2 seconds.
- 3. Check "Self diagnostic result" using CONSULT-III.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-63. "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1. CHECK UART COMMUNICATION LINE CONTINUITY

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

	Continuity	ositioner control unit	Automatic drive po	control unit	Driver seat
M	Continuity	Terminal	Connector	Terminal	Connector
	Eviated	10	M51	1	B503
N	Existed	26		17	D303

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

Driver sea	t control unit		Continuity	0
Connector	Terminal	Ground	Continuity	0
B503	1	Ground	Not existed	-
	17		Not existed	Р

Is the inspection result normal?

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

NO >> Repair or replace harness.

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INFOID:000000005654147

INFOID:000000005654145

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT BCM

BCM : Diagnosis Procedure

INFOID:000000005654148

1.CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Battery power supply	К (40А)
	10 (10A)

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect BCM connectors.
- 3. Check voltage between BCM harness connector and ground.

, i i i i i i i i i i i i i i i i i i i	+) CM	(-)	Voltage (Approx.)
Connector	Terminal		
M118	1	Ground	Pottory voltago
M119	11	Giouna	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

 $\mathbf{3.}$ CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

ВС	CM		Continuity
Connector	Terminal	Ground	Continuity
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000005654149

NOTE:

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

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Driver se	at control unit	()	Voltage (V)
Connector	Terminal		(Approx.)
DE0 (33		D <i>u u</i>
B504	40	Ground	Battery voltage
Circuit breake HECK GROUND CIRC	lowing. lace harness between drive er. :UIT		, <i>·</i>
K continuity between t	he driver seat control unit ha	arness connector and gro	und.
Driver sea	at control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	32	Cround	Existed
B504	48		
ERFORM ADDITIONA	ce harness. ROL UNIT : Special L SERVICE when removing battery nega	ative terminal.	
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to <u>ADP-6</u> OMATIC DRIVE OMATIC DRIVE	ce harness. TROL UNIT : Special I L SERVICE	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos	cedure". sis Procedure
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to <u>ADP-6</u> OMATIC DRIVE OMATIC DRIVE E: ot disconnect the batt d using CONSULT-III. HECK POWER SUPP	ce harness. ROL UNIT : Special I L SERVICE when removing battery nega 4. "DRIVER SEAT CONTR POSITIONER CONT POSITIONER CONTI POSITIONER CONTI ery negative terminal and t _Y CIRCUIT	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos	cedure". sis Procedure
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to ADP-6 OMATIC DRIVE OMATIC DRIVE COMATIC DRIVE E: ot disconnect the batt d using CONSULT-III. HECK POWER SUPPl furn ignition switch OF	ce harness. ROL UNIT : Special I L SERVICE when removing battery nega 4. "DRIVER SEAT CONTR POSITIONER CONT POSITIONER CONTI POSITIONER CONTI ery negative terminal and t _Y CIRCUIT	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos he driver seat control uni	cedure". sis Procedure INFOID:0000000 t connector until DTC is
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to ADP-6 OMATIC DRIVE OMATIC DRIVE COMATIC DRIVE E: ot disconnect the batt d using CONSULT-III. HECK POWER SUPPl furn ignition switch OF	ce harness. ROL UNIT : Special I L SERVICE when removing battery nega 4. "DRIVER SEAT CONTR POSITIONER CONT POSITIONER CONTI POSITIONER CONTI Ery negative terminal and t LY CIRCUIT F.	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos he driver seat control uni	cedure". sis Procedure <i>INFOID:0000000</i> t connector until DTC is ector and ground.
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to ADP-6 OMATIC DRIVE OMATIC DRIVE COMATIC DRIVE E: ot disconnect the batt d using CONSULT-III. HECK POWER SUPPl ourn ignition switch OF Check voltage betweer	ce harness. ROL UNIT : Special I L SERVICE when removing battery nega 4, "DRIVER SEAT CONTR POSITIONER CONT POSITIONER CONTI ery negative terminal and t LY CIRCUIT F. a automatic drive positioner	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos he driver seat control uni	cedure". sis Procedure INFOID:0000000 t connector until DTC is
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to ADP-6 OMATIC DRIVE OMATIC DRIVE COMATIC DRIVE E: ot disconnect the batt d using CONSULT-III. HECK POWER SUPPl ourn ignition switch OF Check voltage betweer	ce harness. ROL UNIT : Special I L SERVICE when removing battery nega 4. "DRIVER SEAT CONTR POSITIONER CONT POSITIONER CONTI POSITIONER CONTI Ery negative terminal and t _Y CIRCUIT F. a automatic drive positioner (+)	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos he driver seat control uni control unit harness conn	cedure". sis Procedure <i>INFOID-0000000</i> t connector until DTC is ector and ground. Voltage (V)
>> Repair or repla VER SEAT CONT ERFORM ADDITIONA orm additional service of >> Refer to <u>ADP-6</u> OMATIC DRIVE OMATIC DRIVE E: ot disconnect the batt d using CONSULT-III. HECK POWER SUPPL furn ignition switch OF Check voltage betweer	ce harness. ROL UNIT : Special I L SERVICE when removing battery nega 4, "DRIVER SEAT CONTR POSITIONER CONT POSITIONER CONTI ery negative terminal and t LY CIRCUIT F. a automatic drive positioner (+) positioner control unit	ative terminal. <u>OL UNIT : Diagnosis Pro</u> TROL UNIT ROL UNIT : Diagnos he driver seat control uni control unit harness conn	cedure". sis Procedure <i>INFOID-0000000</i> t connector until DTC is ector and ground. Voltage (V)

2.CHECK GROUND CIRCUIT

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	40	Ground	Existed
10152	48		LXISIEG

Is the inspection result normal?

YES >> INSPECTION END NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:000000005654152

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to <u>ADP-9</u>, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Description

Sliding switch is equipped to the power seat switch on the seat cushion side surface. The operation signal is input to the driver seat control unit when the sliding switch is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SLIDE SW-FR", "SLIDE SW-RR" in the "Data monitor" mode using CONSULT-III.
- 3. Check sliding switch signal under the following conditions.

Monitor item	Conditio	n	Status	
	Operate Operate	Operate	ON	
SLIDE SW-FR	Sliding switch (forward)	Release	OFF	
		Operate Release	ON	
SLIDE SW-RR	Sliding switch (backward)		OFF	
the indication normal?				
'ES >> INSPECTION E	END			
NO >> Perform diagno	sis procedure. Refer to ADP-67, "Dia	<u>anosis Procedure".</u>		

Diagnosis Procedure

1.CHECK SLIDING SWITCH SIGNAL

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

	(+) seat switch	()	Voltage (V)	K
Connector	Terminal		(Approx.)	
B510	11	Cround	Pottony voltage	-
BOTU	26	Ground	Battery voltage	L

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.
- 3. 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	Р
B503	11	B510	11	Existed	-
6003	26	B310	26	Existed	

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

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SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	11	Ground	Not existed
500	26		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3. CHECK SLIDING SWITCH

Refer to ADP-68, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK SLIDING SWITCH

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Check continuity between power seat switch terminals.

Power seat switch		Condition		Continuity
 Terr	minal	Condi		Continuity
	11	Cliding quitch (healquerd)	Operate	Existed
32		Sliding switch (backward)	Release	Not existed
52	26	Sliding owitch (forward)	Operate	Existed
	20	Sliding switch (forward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Description

Reclining switch is equipped to the power seat switch on the seat cushion side surface. The operation signal is input to the driver seat control unit when the reclining switch is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "RECLN SW-FR", "RECLN SW-RR" in the "Data monitor" mode using CONSULT-III.
- 3. Check reclining switch signal under the following conditions.

Monitor item	Condition		Status	Ε
		Operate	ON	
RECLINE SW-FR	Reclining switch (forward)	Release	OFF	
		Operate	ON	F
RECLINE SW-RR	Reclining switch (backward)	Release	OFF	
<u>s the indication normal?</u> YES >> INSPECTION END NO >> Perform diagnosis pro	cedure. Refer to <u>ADP-69, "Diag</u>	nosis Procedure".		G
)iagnosis Procedure				Н

Diagnosis Procedure

1. CHECK RECLINING SWITCH SIGNAL

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

	(+)		Voltage (V)	
Power	seat switch	(-)	(Approx.)	K
Connector	Terminal		()	
B510	12	Ground	Pottony voltago	- I
BSTU	27	Ground	Battery voltage	

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

 Driver seat	control unit	Power se	eat switch	Continuity	
 Connector	Terminal	Connector	Terminal	Continuity	Р
 B503	12	B510	12	Existed	
6505	27	6510	27	LAISIEU	

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

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RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	12	Ground	Not existed
	27		INDI EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3. CHECK RECLINING SWITCH

Refer to ADP-70, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK RECLINING SWITCH

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Check continuity between power seat switch terminals.

Power seat switch		Condition		Continuity
 Terr	ninal	Condit		Continuity
	12	Reclining switch (backward)	Operate	Existed
32	12	Trechning Switch (backward)	Release	Not existed
52	27	Paolining switch (forward)	Operate	Existed
	21	Reclining switch (forward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description

Lifting switch (front) is equipped to the power seat switch on the seat cushion side surface. The operation sig-В nal is input to the driver seat control unit when the lifting switch (front) is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- Select "LIFT FR SW-UP", "LIFT FR SW-DN" in the "Data monitor" mode using CONSULT-III. 2.
- Check lifting switch (front) signal under the following conditions. 3.

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

>> Perform diagnosis procedure. Refer to ADP-71, "Diagnosis Procedure". NO

Diagnosis Procedure

1.CHECK LIFTING SWITCH SIGNAL

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

(+)			Voltage (V) (Approx.)	-
Power	Power seat switch			K
Connector	Terminal		(+++)	
B510	13	Ground	Battery voltage	
5010	28	Glound Ballery vollage		

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

optiquity	Continuity	Power seat switch		t control unit	Driver sea
P		Terminal	Connector	Terminal	Connector
Existed	Existed	13	B510	13	B503
		28		28	

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

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LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity	
Connector	Terminal	Ground	Continuity	
B503	13	Ground	Not existed	
	28		NUT EXISTED	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-72, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK LIFTING SWITCH (FRONT)

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

Power seat switch		Condition		Continuity
Terminal				
32	10	13 Lifting switch front (down)	Operate	Existed
	15		Release	Not existed
	28	Lifting switch front (up)	Operate	Existed
	20		Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description

Lifting switch (rear) is equipped to the power seat switch on the seat cushion side surface. The operation signal is input to the driver seat control unit when the lifting switch (rear) is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "LIFT RR SW-UP", "LIFT RR SW-DN" in the "Data monitor" mode using CONSULT-III.
- 3. Check lifting switch (rear) signal under the following conditions.

Monitor item	Condition	1	Status	
		Operate	ON	_
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF	
		Operate	ON	
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF	

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-73, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK LIFTING SWITCH (REAR) SIGNAL

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

	(+)		Voltage (V)	
Powers	seat switch	()	(Approx.)	K
Connector	Terminal			
B510	14	Ground	Battery voltage	- I
	29	Ground	Dattery Voltage	L

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.

	Continuity	ear switch	Power se	control unit	Driver seat
Р	Continuity	Terminal	Connector	Terminal	Connector
	Existed	14	B510	14	B503
	LAISIEU	29		29	6303

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

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LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	14	Gibunu	Not existed
B503	29		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-74, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-237, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK LIFTING SWITCH (REAR)

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

Power s	Power seat switch		Condition	
Ter	Terminal		Condition	
	14	Lifting switch rear (down)	Operate	Existed
32	14		Release	Not existed
52			Operate	Existed
		Lifting switch rear (up)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-237</u>, "Removal and Installation".

FORWARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

FORWARD SWITCH

Forward switch is installed on the seat back frame. Forward switch detects condition of seat back.

Component Function Check

1.CHECK FUNCTION

1. Select "FORWARD SW" in the "Data Monitor" mode using CONSULT-III.

2. Check the forward switch signal under the following condition.

Test item	Cor	dition	Status	
FORWARD SW	Driver side seat back	Folded up	ON	_
FORWARD SW	Driver side seat back	Folded down	OFF	E
Is the indication normal?				

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-75, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK FORWARD SWITCH SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect forward switch harness connector.
- 3. Check voltage between forward switch harness connector and ground.

-	(+) d switch	(-)	Condition	Voltage (V) (Approx.)	
-	Connector	Terminal			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
_	B512	41	Ground	Seat back is folded up and power walk-in switch pressed	5	ADP

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK FORWARD SWITCH CIRCUIT

- 1. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and forward switch harness connector.

_	Driver seat	control unit	Forwar	d switch	Continuity	-
	Connector	Terminal	Connector	Terminal	Continuity	Ν
_	B504	41	B512	41	Existed	_

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground	Continuity	_
B504	41		Not existed	P

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "Removal and Installation"

NO >> Repair or replace harness.

3.FORWARD SWITCH GROUND CIRCUIT

Check continuity between forward switch harness connector and ground.

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FORWARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Forward switch			Continuity
Connector	Terminal	Ground	Continuity
B512	32	-	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK FORWARD SWITCH

Refer to ADP-76, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace forward switch (Built in seat back frame). Refer to SE-188. "Exploded View".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK FORWARD SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect forward switch connector.
- 3. Check continuity between forward switch terminals.

Forward switch		Condition		Continuity		
Connector	Terr	ninal	Condition		Continuity	
B512	41	22	Driver side seat	Folded up	Not existed	
0012	41	32	back	Folded down	Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-188, "Exploded View"</u>.

Revision: 2009 November

SEAT BELT BUCKLE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH

Description

Seat belt buckle switch is installed in seat belt buckle. Seat belt buckle switch detects condition of seat belt.

Component Function Check

1.CHECK FUNCTION

1. Select "SEAT BELT SW" in the "Data Monitor" mode using CONSULT-III.

2. Check the seat belt buckle switch signal under the following condition.

Test item	Condition		Test item Condition Status		
SEAT BELT SW	Driver side seat helt	Fastened	ON		
	Driver side seat belt	Released	OFF	- E	

Is the indication normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-77, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK SEAT BELT BUCKLE SWITCH SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect seat belt buckle switch harness connector.
- 3. Check voltage between seat belt buckle switch harness connector harness connector and ground.

	(+) Seat belt buckle switch				-
			()	Voltage (V) (Approx.)	
	Connector	Terminal			
	B13	1	Ground	5	- ADF

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

- 1. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and seat belt buckle switch harness connector.

					M
Driver sea	t control unit	Seat belt buckle switch		Continuity	-
Connector	Terminal	Connector	Terminal	Continuity	
B503	5	B13	1	Existed	N

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

Driver seat control unit			Continuity	0
Connector	Terminal	Ground	Continuity	
B503	5		Not existed	Р

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

$\mathbf{3.}$ CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch harness connector and ground.

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SEAT BELT BUCKLE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Seat belt bu	uckle switch		Continuity
Connector	Terminal	Ground	Continuity
B13	2		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK SEAT BELT BUCKLE SWITCH

Refer to ADP-78. "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat belt buckle switch (Built in seat belt buckle). Refer to <u>SE-188, "Exploded View"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK SEAT BELT BUCKLE SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect seat belt buckle switch connector.
- 3. Check continuity between seat belt buckle switch terminals.

	Seat belt buckle switch			Condition	
Connector	Terr	Terminal		Continuity	
B13	1 2	Driver side seat	Fastened	Not existed	
ВІЗ	1	2	belt	Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat belt buckle switch (Built in seat belt buckle). Refer to SE-188, "Exploded View".

SLIDING LIMIT SWITCH

< DTC/CIRCUIT DIAGNOSIS > SLIDING LIMIT SWITCH А Description INFOID:000000005654177 Sliding limit switch is installed on seat cushion frame. Sliding limit switch detects condition of seat sliding. В **Component Function Check** INFOID:000000005654178 1.CHECK FUNCTION 1. Select "FWD LIMIT SW" in the "Data Monitor" mode using CONSULT-III. 2. Check the sliding limit switch signal under the following condition. D Test item Condition Status ON Front edge FWD LIMIT SW Seat sliding Е Other than above OFF Is the indication normal? YES >> INSPECTION END >> Go to ADP-79, "Diagnosis Procedure". NO Diagnosis Procedure INFOID:000000005654179 1. CHECK SLIDING LIMIT SWITCH SIGNAL 1. Turn ignition switch OFF. Н 2. Disconnect sliding limit switch harness connector. Check voltage between sliding limit switch harness connector and ground. 3. (+) Voltage (V) Sliding limit switch (-) (Approx.) Connector Terminal ADP B514 4 5 Ground Is the inspection result normal? YES >> GO TO 3. Κ NO >> GO TO 2. 2.CHECK SLIDING LIMIT SWITCH CIRCUIT L Disconnect driver seat control unit connector. 1 2. Check continuity between driver seat control unit harness connector and sliding limit switch harness connector. Μ Driver seat control unit Sliding limit switch Continuity Connector Terminal Connector Terminal Ν B503 4 B514 4 Existed Check continuity between driver seat control unit harness connector and ground. 3. Driver seat control unit Continuity Connector Terminal Ground B503 4 Not existed Ρ Is the inspection result normal? YES >> Replace driver seat control unit. Refer to ADP-234, "Removal and Installation" NO >> Repair or replace harness.

3.CHECK SLIDING LIMIT SWITCH GROUND CIRCUIT

Check continuity between sliding limit switch harness connector and ground.

SLIDING LIMIT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Sliding lir	nit switch		Continuity
Connector	Terminal	Ground	Continuity
B514	32		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

CHECK SLIDING LIMIT SWITCH

Refer to ADP-80, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-188, "Exploded View"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK SLIDING LIMIT SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect sliding limit switch connector.
- 3. Check continuity between sliding limit switch terminals.

	Sliding limit switch			Condition	
Connector	Terr	minal			Continuity
B514	4 22 Sect aliding		Seat sliding	Front edge	Existed
B314	4	4 32	Seat silulity	Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-188, "Exploded View"</u>.

POWER WALK-IN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

POWER WALK-IN SWITCH

Description

Power walk-in switch is installed on seat back. The operation signal is input to driver seat control unit when power walk-in switch is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Select "WALK-IN SW" in the "Data Monitor" mode using CONSULT-III.
- 2. Check the power walk-in switch signal under the following condition.

Test item	Condition		Status	
WALK-IN SW	Power walk-in switch	Pressed	ON	E
WALK-IN SW	Fower waik-in Switch	Released	OFF	

Is the indication normal?

- YES >> INSPECTION END
- NO >> Refer to <u>ADP-81, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK POWER WALK-IN SWITCH SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect power walk-in switch harness connector.
- 3. Check voltage between power walk-in switch harness connector and ground.

(.	+)			_
Power walk-in switch		(—)	Voltage (V) (Approx.)	
 Connector	Terminal	-	()	ADP
B513	30	Ground	5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK POWER WALK-IN SWITCH CIRCUIT

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

Driver seat	Driver seat control unit		Power walk-in switch		
Connector	Terminal	Connector	Terminal	Continuity	I
B503	30	B513	30	Existed	

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground	Continuity	D
B503	30		Not existed	P

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

 ${
m 3.}$ CHECK POWER WALK-IN SWITCH GROUND CIRCUIT

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

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POWER WALK-IN SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Power walk-in switch			Continuity
Connector	Terminal	Ground	Continuity
B513	32	_	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK POWER WALK-IN SWITCH

Refer to ADP-82, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power walk-in switch (Built in walk-in lever). Refer to <u>SE-188, "Exploded View"</u>.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK POWER WALK-IN SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect power walk-in switch connector.
- 3. Check continuity between power walk-in switch terminals.

Power walk-in switch			Condition		Continuity
Connector	Terr	minal	Condition		Continuity
B513	30	32	Power walk-in	Pressed	Existed
0010	30	32	switch	Released	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power walk-in switch (Built in walk-in lever). Refer to <u>SE-188, "Exploded View"</u>.

< DTC/CIRCUIT DIAGNOSIS >

TILT SWITCH

Description

Tilt switch is equipped to the steering column. The operation signal is input to the automatic drive positioner B control unit when the tilt switch is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TILT SW-UP", "TILT SW-DN" in the "Data monitor" mode using CONSULT-III.
- 3. Check tilt switch signal under the following conditions.

Monitor item	Con	Condition Status		
		Operate	ON	
TILT SW-UP	Tilt switch (up)	Release	OFF	F
TILT SW-DN		Operate	ON	
	Tilt switch (down)	Release	OFF	
the indication normal? (ES >> INSPECTION EN NO >> Perform diagnosis	D s procedure. Refer to <u>ADP-83, "I</u>	Diagnosis Procedure".		
iagnosis Procedure		INFOID:0000000565-		

1.CHECK TILT SWITCH SIGNAL

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

· · · · · · · · · · · · · · · · · · ·	(+) Tilt & telescopic switch		Voltage (V) (Approx.)	K
Connector	Terminal	_	(Αρριοχ.)	
M31	4	Ground	Battery voltage	1
	5	Ground		L

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

Automatic drive po	ositioner control unit	Tilt & telescopic switch		Continuity	-
Connector	Terminal	Connector	Terminal	Continuity	Р
M51	1	M31	4	Existed	-
	17		5	Existed	

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

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TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	ositioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M51	1	Ground	Not existed
	17		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK TILT SWITCH

Refer to ADP-84, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-239</u>, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK TILT SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect tilt & telescopic switch connector.
- 3. Check continuity between tilt & telescopic switch terminals.

Tilt & telese	Tilt & telescopic switch		Condition		
Terminal		Condition		Continuity	
		Tilt switch (up)	Operate	Existed	
1	4		Release	Not existed	
I		Tilt owitch (down)	Operate	Existed	
	5	Tilt switch (down)	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-239</u>, "Removal and Installation".

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Description

Telescopic switch is equipped to the steering column. The operation signal is input to the automatic drive positioner control unit when the telescopic switch is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TELESCO SW-FR", "TELESCO SW-RR" in the "Data monitor" mode using CONSULT-III.
- 3. Check telescopic switch signal under the following conditions.

Monitor item	Condition		Status	
		Operate	ON	
TELESCO SW-FR	Telescopic switch (forward)	Release	OFF	
		Operate	ON	
TELESCO SW-RR	Telescopic switch (backward)	Release	OFF	
the indication normal?				
'ES >> INSPECTION	END			
IO >> Perform diagn	osis procedure. Refer to ADP-85, "Diagr	nosis Procedure".		

Diagnosis Procedure

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

(+)			K
Tilt & teles	Tilt & telescopic switch		Voltage (V) (Approx.)	K
Connector	Terminal		()	
 M31	2	Ground	Battony voltago	
	3	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TELESCOPIC SWITCH CIRCUIT

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

	Continuity	Tilt & telescopic switch		Automatic drive positioner control unit	
P	Continuity	Terminal	Connector	Terminal	Connector
	Existed	2	M31	11	M51
	Existed	3		27	IND I

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

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TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M51	11	Ground	Not existed
TCIVI	27	-	NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3. CHECK TELESCOPIC SWITCH

Refer to ADP-86, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-239</u>, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK TELESCOPIC SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect tilt & telescopic switch connector.
- 3. Check continuity between tilt & telescopic switch terminals.

Tilt & teles	copic switch	Conditio	on	Continuity
Terr	minal	Condition		Continuity
	2	Telescopic switch (forward)	Operate	Existed
1	2		Release	Not existed
I	3	Telescopic switch (backward)	Operate	Existed
	3		Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-239</u>, "Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Description

Memory switch is equipped on the seat set switch and seat memory switch installed to the driver side door trim. The operation signal is input to the automatic drive positioner control unit when the set switch or memory switch is operated.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "MEMORY SW 1", "MEMORY SW 2" "SET SW" in the "Data monitor" mode using CONSULT-III.
- 3. Check seat memory switch signal under the following conditions.

				E
Monitor item	Condition		Status	
SET SW	SET SW	Push	ON	
SET SW	SETSW	Release	OFF	F
MEMORY SW 1	Memory quitab 1	Push	ON	
MEMORT SW 1	Memory switch 1	Release	OFF	G
MEMORY SW 2	Memory quitab 2	Push	ON	G
MEMORT SW 2	Memory switch 2	Release	OFF	

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-87, "Diagnosis Procedure"</u>.

Diagnosis Procedure

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- 1. Turn ignition switch OFF.
- Disconnect seat memory switch connector.

1.CHECK SEAT MEMORY SWITCH SIGNAL

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

(-	-)			
Seat mem	ory switch	(-)	Voltage (V) (Approx.)	
Connector	Terminal	_	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	3			
D5	1	Ground	5	
	2	-		

NO >> GO TO 2.

2.check memory 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 seat memory switch harness connector.

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Seat men	nory switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	24		3	
M51	9	D5	1	Existed
	25		2	*

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal		Continuity
	24	Ground	
M51	9		Not existed
	25		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>. NO >> Repair or replace harness.

3. CHECK MEMORY SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between seat memory switch harness connector and ground.

Seat men	nory switch		Continuity
Connector	Terminal	Ground	Continuity
D5	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK SEAT MEMORY SWITCH

Refer to ADP-88, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to <u>ADP-236, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.

2. Disconnect seat memory switch connector.

3. Check continuity between seat memory switch terminals.

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Seat merr	ory switch		condition	Continuity
Terr	ninal		onation	Continuity
	3	Set switch	Push	Existed
	5	Set Switch	Release	Not existed
4	1	Mamony owitch 1	Push	Existed
4	I	Memory switch 1	Release	Not existed
	2	Mamany awitch 2	Push	Existed
	2	Memory switch 2	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

>> Replace seat memory switch.Refer to <u>ADP-236, "Removal and Installation"</u>. NO

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< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH MIRROR SWITCH

MIRROR SWITCH : Description

It operates angle of the door mirror face. It transmits mirror face adjust operation to AUTOMATIC DRIVE POSITIONER CONTROL UNIT.

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 the "DATA MONITOR" mode using CONSULT-III.

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

Is the inspection result normal?

- YES >> Mirror switch function is OK.
- NO >> Refer to <u>ADP-90</u>, "<u>MIRROR SWITCH</u> : <u>Diagnosis Procedure</u>".

MIRROR SWITCH : Diagnosis Procedure

1.CHECK MIRROR SWITCH INPUT SIGNAL

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

(-	+)			
Door mirror remo	Door mirror remote control switch		Voltage (V) (Approx.)	
Connector	Terminal		()	
	4			
D17	12	Ground	Б	
	13	Ground	5	
	15			

Is the inspection result normal?

2. CHECK MIRROR SWITCH CIRCUIT

1. Turn ignition switch OFF.

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

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< DTC/CIRCUIT DIAGNOSIS >

Connector Terminal Connector Terminal Terminal M51 3 15 13 Existed M51 19 13 Existed 20 4 13 Existed Check continuity between automatic drive positioner control unit harness connector and ground. Continuity Automatic drive positioner control unit Ground Continuity M51 4 Not existed M51 4 Not existed M51 19 Not existed Not existed 20 Not existed D 20 Not existed M51 4 Not existed M51 5 Seplace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat D >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Ground Continuity D17 7 Existed he inspection resul	Connector	ositioner control unit	DUUI	mirror remot	te control switch	Continuity
M51 4 D17 13 Existed M51 19 20 4 Existed Check continuity between automatic drive positioner control unit harness connector and ground. Automatic drive positioner control unit Continuity 0 19 0 0 M51 4 0 0 0 M51 4 0 0 0 M51 19 0 0 0 M51 19 0 0 0 0 he inspection result normal? ES >> Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat DO >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Ground Continuity D17 7 Existed he inspection result normal? ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH CHECK MIRROR SWITCH Contresult norma		Terminal	Connec	ctor	Terminal	Continuity
M51 19 D17 12 Existed Check continuity between automatic drive positioner control unit harness connector and ground. Automatic drive positioner control unit Continuity Automatic drive positioner control unit a Continuity Continuity M51 3 Ground Continuity M51 4 Not existed Not existed M51 19 Not existed Not existed M51 20 Not existed Not existed M51 20 Not existed Not existed Not existed 20 Not existed Not existed Diff 7 A A Not existed Diff 7 Continuity Continuity Continuity Door mirror remote control switch Ground Continuity Continuity Door mirror remote control switch Ground Continuity Continuity D17 7 Continuity Existed he inspection result normal? Ground Continuity ES > GO TO 4. Control Switch Contron". D >> Repair or rep		3			15	
19 12 20 4 Check continuity between automatic drive positioner control unit harness connector and ground. Automatic drive positioner control unit Continuity Automatic drive positioner control unit Continuity Mathematic drive positioner control unit Continuity M51 3 4 19 20 Not existed he inspection result normal? Removal and Installat ES >> Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat O >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Continuity Dor mirror remote control switch Continuity D17 7 Existed he inspection result normal? Esisted ES >> GO TO 4. Control switch). O >> Repair or replace harness. CHECK MIRROR SWITCH CHECK MIRROR SWITCH Contron switch (mirror switch).		4			13	Evisted.
Check continuity between automatic drive positioner control unit harness connector and ground. Automatic drive positioner control unit Connector Terminal 3 Ground M51 4 19 20 he inspection result normal? S S > Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat O >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Continuity Door mirror remote control switch Continuity ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH Ground Door mirror remote control switch Continuity ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH Component Inspection. ek door mirror remote control switch (mirror switch). Existed he inspection result normal? S S >> GO TO 5.	MD1	19	D17		12	Existed
Automatic drive positioner control unit Continuity Connector Terminal 3 Ground M51 4 19 20 he inspection result normal? Sound ES >> Replace automatic drive positioner control unit. Refer to ADP-235, "Removal and Installat O >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Connector Terminal Ground Continuity ES >> Go TO 4. O >> Repair or replace harness. Check MIRROR SWITCH Existed he inspection result normal? Es S >> Go TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH Component Inspection". eck door mirror remote control switch (mirror switch). Fer to ADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? Es >> GO TO 5.		20	4			
Connector Terminal Continuity 3 4 Not existed 4 19 Not existed 20 20 Not existed he inspection result normal? 20 Removal and Installat 0 >> Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat Installat 0 >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Continuity Door mirror remote control switch Continuity Door mirror remote control switch Continuity ES >> GO TO 4. Control switch). 0 >> Repair or replace harness. CHECK MIRROR SWITCH exck door mirror remote control switch (mirror switch). Error to ADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? Es >> GO TO 5.	Check continuity be	etween automatic driv	/e positioner	control ur	nit harness conn	ector and ground.
Connector Terminal 3 Ground M51 4 19 20 be inspection result normal? 20 ES >> Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat 0 >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Connector Terminal D17 7 ES >> GO TO 4. 0 >> Repair or replace harness. CHECK MIRROR SWITCH Existed be inspection result normal? ES ES >> GO TO 4. 0 >> Repair or replace harness. CHECK MIRROR SWITCH Existed eck door mirror remote control switch (mirror switch). fer to ADP-91, "MIRROR SWITCH : Component Inspection". ter inspection result normal? ES >> GO TO 5.	Automatic d	rive positioner control unit				Continuity
M51 4 Ground 19 20 he inspection result normal? 20 ES >> Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat 0 O >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Door mirror remote control switch D17 7 Connector Terminal Ground Continuity ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH Existed eck door mirror remote control switch (mirror switch). Ere toADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? ES SS >> GO TO 5.	Connector	Termina	al			Continuity
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19 20 he inspection result normal? ES >> Replace automatic drive positioner control unit. Refer to ADP-235, "Removal and Installat O >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Connector Terminal D17 7 ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH eck door mirror remote control switch (mirror switch). fer to ADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? ES >> GO TO 5.		4		G	nouna	Not or detail
he inspection result normal? ES >> Replace automatic drive positioner control unit. Refer to ADP-235. "Removal and Installat O >> Repair or replace harness. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT Turn ignition switch OFF. Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Continuity D17 7 ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH Existed eack door mirror remote control switch (mirror switch). Ere to ADP-91. "MIRROR SWITCH : Component Inspection". he inspection result normal? ES Es >> GO TO 5.	IVI51	19				INOT EXISTED
Solution Solution <td< td=""><td></td><td>20</td><td></td><td></td><td></td><td></td></td<>		20				
Solution Solution <td< td=""><td>e inspection result</td><td>normal?</td><td></td><td></td><td></td><td></td></td<>	e inspection result	normal?				
Check continuity between door mirror remote control switch harness connector and ground. Door mirror remote control switch Continuity Connector Terminal Ground Continuity D17 7 Existed Existed he inspection result normal? ES >> GO TO 4. Existed EXIST O >> Repair or replace harness. CHECK MIRROR SWITCH Existed EXIST eck door mirror remote control switch (mirror switch). Fer to ADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? ES >> GO TO 5. EXIST EXIST EXIST) >> Repair or r CHECK DOOR MIR	eplace harness. ROR REMOTE CON				
Connector Terminal Ground Continuity D17 7 Existed Existed he inspection result normal? ES >> GO TO 4. >> Repair or replace harness. CHECK MIRROR SWITCH CHECK MIRROR SWITCH Eck door mirror remote control switch (mirror switch). Effect to ADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? ES >> GO TO 5. Continuity Eck door normal? Eck door normal?	Check continuity be	etween door mirror re	mote control	l switch ha	arness connecto	r and ground.
D17 7 Existed he inspection result normal? ES >> GO TO 4. >> Repair or replace harness. CHECK MIRROR SWITCH CHECK MIRROR SWITCH Existed				C	Found	Continuity
he inspection result normal? ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH eck door mirror remote control switch (mirror switch). fer toADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? ES >> GO TO 5.			21	G		Eviator
ES >> GO TO 4. O >> Repair or replace harness. CHECK MIRROR SWITCH eck door mirror remote control switch (mirror switch). fer to ADP-91, "MIRROR SWITCH : Component Inspection". he inspection result normal? ES >> GO TO 5.						EXISIED
O >> Replace door mirror remote control switch (mirror switch). Refer to <u>MIR-22, "Removal and</u>						
lation". CHECK INTERMITTENT INCIDENT	S >> GO TO 4. >> Repair or r CHECK MIRROR S eck door mirror remo er toADP-91, "MIRF me inspection result S >> GO TO 5. >> Replace do	WITCH ote control switch (min ROR SWITCH : Comp normal?	onent Inspe		tch). Refer to <u>MI</u>	R-22, "Removal and Ins
eck intermittent incident. fer to <u>GI-38, "Intermittent Incident"</u> .	S >> GO TO 4. >> Repair or r CHECK MIRROR S eck door mirror remo er to <u>ADP-91, "MIRF</u> <u>he inspection result</u> S >> GO TO 5. >> Replace do <u>lation"</u> .	WITCH ote control switch (mir ROR SWITCH : Comp normal? por mirror remote con	onent Inspe		tch). Refer to <u>MI</u>	R-22, "Removal and Ins
>> INSPECTION END	S >> GO TO 4. >> Repair or r CHECK MIRROR S eck door mirror remo er to <u>ADP-91, "MIRF</u> the inspection result S >> GO TO 5. >> Replace do <u>lation"</u> . CHECK INTERMITT eck intermittent incide	WITCH ote control switch (min COR SWITCH : Comp normal? foor mirror remote con FENT INCIDENT dent.	onent Inspe		tch). Refer to <u>MI</u>	R-22, "Removal and Ins
RROR SWITCH : Component Inspection	S >> GO TO 4. >> Repair or r CHECK MIRROR S eck door mirror remo er to <u>ADP-91, "MIRF</u> the inspection result S >> GO TO 5. >> Replace do <u>lation"</u> . CHECK INTERMITT eck intermittent incider to <u>GI-38, "Intermi</u>	WITCH ote control switch (mir <u>ROR SWITCH : Comp</u> normal? oor mirror remote con FENT INCIDENT dent. ittent Incident".	onent Inspe		tch). Refer to <u>MI</u>	R-22, "Removal and Ins
CHECK MIRROR SWITCH	S >> GO TO 4. >> Repair or r CHECK MIRROR S eck door mirror remo er toADP-91, "MIRF ne inspection result S >> GO TO 5. >> Replace do lation". CHECK INTERMITT eck intermittent incid er to GI-38, "Intermit	WITCH ote control switch (min ROR SWITCH : Comp normal? bor mirror remote con FENT INCIDENT dent. ittent Incident".	oonent Inspe		tch). Refer to <u>MI</u>	R-22, "Removal and Ins

2. Disconnect door mirror remote control switch connector.

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

< DTC/CIRCUIT DIAGNOSIS >

Door r	nirror remote contro	l switch		Condition	Continuity	
Connector	Te	rminal		onation	Continuity	
	4			RIGHT	Existed	
	4			Other than above	Not existed	
13	10	7 Mirror switch 15	40		LEFT	Existed
	7			Other than above	Not existed	
	15		15	UP	Existed	
	15			Other than above	Not existed	
	40				DOWN	Existed
	12			Other than above	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to <u>MIR-22, "Removal and Installation"</u>. CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

Changeover switch is integrated into 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.

CHANGEOVER SWITCH : Component Function Check

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.

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

CHANGEOVER SWITCH : Diagnosis Procedure

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)		
Door mirror rem	ote control switch	()	Voltage (V) (Approx.)
Connector	Terminal		
D17	10	Ground	5
	11	Gibana	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK CHANGEOVER SWITCH CIRCUIT

INFOID:000000005654201

INFOID:000000005654202

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic dri	ve positioner	control unit	Do	or mirror rem	ote control switch	Oca-tion it is
Connector		Terminal	Conr	nector	Terminal	Continuity
M51		2	П	17	11	Existed
I CIVI		18	D	17	10	Existed
4. Check continui	ty betweer	n automatic driv	e position	er control (unit harness con	nector and ground.
Autom	atic drive pos	itioner control unit				
Connecto	or	Termina	al		Oraciand	Continuity
M51	_	2 18		Ground		Not existed
Is the inspection re						
	e automati or replace		ner control	unit. Refe	r to <u>ADP-235, "R</u>	emoval and Installation".
3. CHECK DOOR	-		TROL SW	ITCH GRC		
1. Turn ignition sv						
		n door mirror re	mote cont	rol switch ł	narness connect	or and ground.
Door	r mirror remot	te control switch				
Connecto		Termina	al		Ground	Continuity
D17		7				Existed
Is the inspection re	sult norma					
YES >> GO TC		<u></u>				
	or replace	harness.				
4. CHECK CHANG	GEOVER S	WITCH				
Check door mirror i						
Refer to <u>ADP-93, "(</u>			: Compon	ent Inspec	<u>tion"</u> .	
ls the inspection re YES >> GO TC		<u>17</u>				
	-	ror remote con	trol switch	(changeo	ver switch). Ref	er to <u>MIR-22, "Removal a</u>
Installa	<u>ation"</u> .		-	, Ora	, -	
5.CHECK INTERN	VITTENT I	NCIDENT				
Check intermittent						
Refer to <u>GI-38, "Int</u>	ermittent Ir	<u>ncident"</u> .				
>> INSPF	CTION EN	חו				
CHANGEOVE			nent Ins	pection		INFOID:0000000056
1.CHECK CHANG		•		-		
. Turn ignition sw		moto control o	uitab aann	o oto r		

Disconnect door mirror remote control switch connector.
 Check continuity between door mirror remote control switch terminals.

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< DTC/CIRCUIT DIAGNOSIS >

Door mi	rror remote control s	witch	Con	dition	Continuity
Connector	Terr	ninal			Continuity
	10			LEFT	Existed
D17	10	7 (Changeover switch	Other than above	Not existed
יוט	11			RIGHT	Existed
	11			Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to <u>MIR-22, "Removal and Installation"</u>.

POWER SEAT SWITCH GROUND CIRCUIT

F V	JWLK SLAT SWITC		
< DTC/CIRCUIT DIAGNOS			
POWER SEAT SWI	TCH GROUND CI	RCUIT	
Diagnosis Procedure			INFOID:000000005654205
1.CHECK POWER SEAT S	WITCH GROUND CIRCUI	т	
1. Turn ignition switch OFF			
 Disconnect power seat s Check continuity betwee 	switch connector. In power seat switch conne	ector and ground.	
Power sea		5	1
Connector	Terminal	Ground	Continuity
B510	32		Existed
Is the inspection result norm	al?		·
YES >> GO TO 2. NO >> Repair or replace	e harness		
2.CHECK POWER SEAT S		ЛТ	
Check reclining switch.			
Refer to ADP-70, "Compone			
Is the inspection result norm	<u>al?</u>		
YES >> GO TO 3. NO >> Replace power s	seat switch. Refer to ADP-2	237, "Removal and Installa	tion".
3. CHECK INTERMITTENT			
Refer to GI-38, "Intermittent	Incident"		
>> INSPECTION EI	ND		

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TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000005654206

1. CHECK POWER TILT & TELESCOPIC SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power tilt & telescopic switch connector.

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

Tilt & teles	copic switch		Continuity
Connector	Terminal	Ground	Continuity
M31	1		Existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2.CHECK POWER TILT & TELESCOPIC SWITCH INTERNAL CIRCUIT

Check tilt switch.

Refer to ADP-84, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-239</u>, "Removal and Installation".

3.CHECK INTERMITTENT INCIDENT

Refer to GI-38. "Intermittent Incident".

>> INSPECTION END

DETENTION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DETENTION SWITCH

Description

Detention switch is installed on A/T shift selector. It is turned OFF when the Selector lever is in P position. The driver seat control unit judges that the Selector lever is in P position if continuity does not exist in this circuit.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "DETENT SW" signal in the "Data monitor" mode using CONSULT-III.
- 3. Check detention switch signal under the following conditions.

Monitor item		Condition	n	Status
			P position	OFF
DETENT SW		lever	Other than above	ON
the indication normal?				
YES >> INSPECTION NO >> Perform diag		efer to <u>ADP-97, "Diac</u>	gnosis Procedure".	
Diagnosis Procedu	re			INF0ID:000000005654
CHECK DTC WITH "E	3CM"			
Check "Self Diagnostic R	esult" for BCM usin	a CONSULT-III		
s the either DTC B2601,		•	ed?	
YES >> Check the D	TC. Refer to ADP-2			
NO >> GO TO 2.				
CHECK DETENTION	SWITCH INPUT S	IGNAL		
 Turn ignition switch (Disconnect A/T shift Turn ignition switch (Check voltage between 	selector harness co DN.		and ground.	
	(+)			
A/T	shift selector		(-)	Voltage (V) (Approx.)
Connector	Termin	al		
M137	11		Ground	Battery voltage
s the inspection result no YES >> GO TO 4. NO >> GO TO 3.				
 CHECK DETENTION Turn ignition switch (Disconnect driver se Check continuity bet nector. 	DFF. at control unit.		onnector and A/T sh	lift selector harness co
. Turn ignition switch (2. Disconnect driver se 3. Check continuity bet	DFF. at control unit. ween driver seat co	ontrol unit harness co	onnector and A/T sh	lift selector harness co
 Turn ignition switch (Disconnect driver se Check continuity bet nector. 	DFF. at control unit. ween driver seat co	ontrol unit harness co		hift selector harness co

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

21

B503

ADP-97

M137

11

Existed

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INFOID:000000005654207

DETENTION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	Driver seat	t control unit		Continuity
Co	onnector	Terminal	Ground	Continuity
	B503	21		Not existed
Is the inspect	on result norm	al?		
	eplace driver s epair or replac	eat control unit. Refer to <u>Al</u> e harness.	DP-234, "Removal and Ins	tallation".
4.CHECK D	ETENTION SV	VITCH		
	-98, "Compone			
Is the inspect	on result norm	<u>al?</u>		
YES >> G	60 TO 5.			
NO >> R	eplace A/T shi	ft selector. Refer to TM-26	7, "2WD : Removal and Ins	stallation".
5.CHECK IN	ITERMITTENT	INCIDENT		
Refer to GI-38	3, "Intermittent	Incident".		
>>	SPECTION E	ND		
Componer	nt Inspectior	ı		INFOID:00000005654210
1. снеск d	ETENTION SV	VITCH		
2. Disconne	ion switch OFF ct A/T shift sele T shift selector	ector connector.		

	A/T shift selector		Con	dition	Continuity
Connector	Terr	minal			Continuity
M137	10	11	Selector lever	P position	Existed
101137	10		Selector level	Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector. Refer to <u>TM-267, "2WD : Removal and Installation"</u>.

PARKING BRAKE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

PARKING BRAKE SWITCH

Description

Parking brake switch is installed on parking brake lever. It is turned ON when the parking brake is applied. The driver seat control unit judges that the parking brake is engaged if continuity exists in this circuit.

Component Function Check

INFOID:000000005654212

INFOID:000000005654211

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1. CHECK PARKING BRAKE SWITCH INPUT SIGNAL

1. Select "PARK BRAKE SW" in the "Data Monitor" mode using CONSULT-III.

2. Check parking brake switch signal under the following conditions.

Monitor item		Condition		Status
	Dedia e beste	Applied		ON
PARK BRAKE SW	Parking brake	Release		OFF
the indication normal?				
ES >> INSPECTIO				
-	•	efer to <u>ADP-99, "Diag</u> ı	nosis Procedure".	
iagnosis Procedu	re			INFOID:00000000565421
CHECK PARKING BR	AKE SWITCH INPU	JT SIGNAL		
Turn ignition switch (DFF.			
Disconnect A/T shift	selector harness co	nnector.		
Turn ignition switch (Check voltage betwee		witch harness connect	or and ground	
enter venage betwe	on parking brake et		or and ground.	
	(+)			Voltage (V)
Parki	ng brake switch		(-)	(Approx.)
Connector	Termina			
B14	1	G	Ground	Battery voltage
the inspection result no	<u>ormal?</u>			
/ES >> GO TO 3. NO >> GO TO 2.				
CHECK PARKING BR	AKE SWITCH CIR	синт		
Turn ignition switch (
Disconnect driver se		ector.		
	ween driver seat co	ontrol unit harness co	nnector and park	ing brake switch harness
connector.				
Driver seat c	ontrol unit	Parking bra	ke switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	8	B14	1	Existed
2000	woon driver seat co	ntrol unit harness con	nector and ground	
Check continuity bet	ween unver seat co		0	
Check continuity bet	seat control unit			
Check continuity bet			Ground	Continuity

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

PARKING BRAKE SWITCH

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK PARKING BRAKE SWITCH

Refer to ADP-100, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Adjust or replace parking brake switch.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:000000005654214

1.CHECK PARKING BRAKE SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect parking brake switch connector.
- 3. Check continuity between parking brake switch terminal and ground part of parking brake switch.

	Parkin	g brake	Con	dition	Continuity
	Terr	minal	Con		Continuity
1		Ground part of parking	Parking brake	Applied	Existed
		brake switch	Farking bidke	Release	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
- NO-1 >> Adjust or replace parking brake switch (pedal type). Refer to <u>PB-6. "PEDAL TYPE : Exploded</u> <u>View"</u>.
- NO-2 >> Adjust or replace parking brake switch (lever type). Refer to <u>PB-7</u>, "LEVER TYPE : Exploded <u>View</u>".

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS > SLIDING SENSOR

Description					INFOID:000000056542	5
The sliding sensor is The pulse signal is in The driver seat cont	nput to the d	Iriver seat cor	ntrol unit when s	liding is perforn		
component Fund	ction Che	ck			INFOID:000000056542	6
.CHECK FUNCTIO	N					
 Turn ignition switc Select "SLIDE PU Check sliding sen 	ILSE" in the			ONSULT-III.		-
Monitor item		Cond	dition		Valve	
		O	perate (forward)		Change (increase) ^{*1}	
SLIDE PULSE	Seat slidir	ng Op	perate (backward)		Change (decrease) ^{*1}	
		Re	Release		No change ^{*1}	
the indication norma YES >> INSPECT NO >> Perform d	ION END	andura Data	r to ADP-101 "I	Diagnosis Proc	oduro"	
iagnosis Proced CHECK SLIDING S	dure SENSOR SIG	GNAL			INFOID.0000000056542	-
iagnosis Procee CHECK SLIDING S. Turn ignition swite Check voltage sig	dure SENSOR SIG	GNAL			INFOID:000000056542	-
iagnosis Proced CHECK SLIDING S	dure SENSOR SIG ch ON. Inal betweer	GNAL n driver seat c	ontrol unit harne		INFOID:0000000056542	-
CHECK SLIDING S .CHECK SLIDING S . Turn ignition switc . Check voltage sig	dure SENSOR SIG ch ON. Inal betweer	GNAL	ontrol unit harne	ess connector a	INFOID:0000000056542	-
Diagnosis Procee .CHECK SLIDING S . Turn ignition switc . Check voltage sig (+) Driver seat contr	dure SENSOR SI ch ON. Inal betweer	GNAL n driver seat c	ontrol unit harne	ess connector a	INFOID:0000000056542 and ground with oscilloscope. Voltage (V) (Approx.) 10mSec/div 2V/div JMJA0119ZZ	-
Diagnosis Procee .CHECK SLIDING S . Turn ignition swite . Check voltage sig (+) Driver seat contr Connector	dure SENSOR SIC ch ON. Inal between rol unit Terminal	GNAL n driver seat c (–)	ontrol unit harne	ess connector a	INFOID:0000000056542 and ground with oscilloscope. Voltage (V) (Approx.)	7

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Sliding sensor		
Connector	Terminal	Connector Terminal		Continuity	
B503	24	B526	24	Existed	

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	24		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

${\it 3.}$ Check sliding sensor power supply

1. Connect driver seat control unit connector.

2. Turn ignition switch ON.

3. Check voltage between sliding sensor harness connector and ground.

Slidin	(+) Sliding sensor		Voltage (V) (Approx.)
Connector	Terminal		
B526	16	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver seat control unit		Sliding sensor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	16	B526	16	Existed

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

Driver seat	Driver seat control unit		Continuity
Connector	Terminal Ground	Ground	Continuity
B503	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

5.CHECK SLIDING SENSOR GROUND CIRCUIT 1

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver seat	Driver seat control unit		Sliding sensor	
Connector	Terminal	Connector	Terminal	Continuity
B503	31	B526	31	Existed

SLIDING SENSOR

DTC/CIRCUIT DIAGNOS	315 >		
the inspection result norm			
YES >> GO TO 6.			
NO >> Repair or replace	e harness.		
CHECK SLIDING SENS	OR GROUND CIRCUIT 2		
. Connect driver seat con . Check continuity betwee		arness connector and groun	d.
Driver sea	at control unit		
Connector	Terminal	Ground	Continuity
B503	31		Existed
MOTOR : Explo	sensor (Built in seat slide	e cushion frame). Refer to DP-234, "Removal and Insta	

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Description

- The reclining motor is installed to the seatback frame.
- The pulse signal is input to the driver seat control unit when the reclining is operated.
- The driver seat control unit counts the pulse and calculates the reclining amount of the seat.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "RECLN PULSE" in the "Data monitor" mode using CONSULT-III.
- 3. Check reclining sensor signal under the following conditions.

Monitor item	Condition		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-104, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654220

1.CHECK RECLINING SENSOR SIGNAL

1. Turn ignition switch ON.

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

(+) Driver seat cor	ntrol unit	()	Cor	ndition	Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B503	9	Ground	Seat reclining	Operate Other than above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

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.

INFOID:000000005654218

INEOID:000000005654219

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

	t control unit	Reclin	ing motor	Continuity	
Connector	Terminal	Connector	Terminal		
B503	9	B523	9	Existed	
heck continuity b	etween driver seat co	ntrol unit harness co	onnector and groun	d.	
Driv	er seat control unit			Continuity	
Connector	Termina	al	Ground	Continuity	
B503	9			Not existed	
•	<u>normal?</u> eplace harness. G SENSOR POWER S	SUPPLY			
urn ignition switch	at control unit connect n ON. ween reclining motor l		nd ground.		
	(+)				
	Reclining motor		()	Voltage (V) (Approx.)	
Connector	Termina	al			
B523	16		Ground	Battery voltage	
HECK RECLINING					
CHECK RECLINING Turn ignition switch Disconnect driver s		ector.	onnector and reclini	ng motor harness o	
CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity b tor.	n OFF. seat control unit conne	ector. ntrol unit harness co	onnector and reclini	-	
HECK RECLINING Furn ignition switch Disconnect driver s Check continuity b or.	n OFF. seat control unit conne etween driver seat co	ector. ntrol unit harness co		ng motor harness o	
HECK RECLINING Furn ignition switch Disconnect driver s Check continuity b or. Driver sea	n OFF. seat control unit conne etween driver seat co t control unit	ector. ntrol unit harness co Reclin	ing motor	-	
HECK RECLINING Furn ignition switch Disconnect driver s Check continuity b or. Driver sea Connector B503	n OFF. seat control unit conne etween driver seat co t control unit Terminal	ector. ntrol unit harness co Reclin Connector B523	ing motor Terminal 16	Continuity Existed	
HECK RECLINING Furn ignition switch Disconnect driver s Check continuity b or. Driver sea Connector B503 Check continuity b	n OFF. seat control unit connective etween driver seat co t control unit Terminal 16 etween driver seat co	ector. ntrol unit harness co Reclin Connector B523	ing motor Terminal 16	Continuity Existed	
HECK RECLINING Turn ignition switch Disconnect driver s Check continuity b tor. Driver sea Connector B503 Check continuity b	n OFF. seat control unit connective etween driver seat co t control unit Terminal 16 etween driver seat co	ector. ntrol unit harness co Reclin Connector B523 ntrol unit harness co	ing motor Terminal 16 onnector and ground	Continuity Existed	
CHECK RECLINING Turn ignition switch Disconnect driver so Check continuity b tor. Driver sea Connector B503 Check continuity b Driv Connector	n OFF. seat control unit connective etween driver seat control unit t control unit Terminal 16 etween driver seat control unit Terminal	ector. ntrol unit harness co Reclin Connector B523 ntrol unit harness co	ing motor Terminal 16	Continuity Existed d. Continuity	
HECK RECLINING Furn ignition switch Disconnect driver so Check continuity b or. Driver sea Connector B503 Check continuity b Driv Connector B503	t control unit connective control unit control unit t control unit Terminal 16 etween driver seat co rer seat control unit Termina 16 16 16 16 16 16 16 16 16 16	ector. ntrol unit harness co Reclin Connector B523 ntrol unit harness co	ing motor Terminal 16 onnector and ground	Continuity Existed	
CHECK RECLINING Turn ignition switch Disconnect driver so Check continuity b tor. Driver sea Connector B503 Check continuity b Driver Connector B503 Check continuity b Driver Connector B503 Check continuity b Connector B503 Check continuity b Connector B503 Check continuity b Connector Connector B503 Check continuity b Connector B503 Check continuity b Connector Connector B503 Check continuity b Connector Connector Connector Connector Connector Connector Connector B503 Connector Connector Connector Connector Connector Connector Connector Connector Connector Connector Connector Connector Connector B503 Connector Check RECLININC	t control unit connective of the control unit to the control unit	ector. ntrol unit harness co Reclin Connector B523 ntrol unit harness co al Refer to <u>ADP-234, '</u> O CIRCUIT 1 ector.	ing motor Terminal 16 Onnector and ground Ground 'Removal and Insta	Continuity Existed d. Continuity Not existed Ilation".	
CHECK RECLINING Turn ignition switch Disconnect driver so Check continuity bo tor. Driver sea Connector B503 Check continuity bo Driver Connector B503 te inspection result S >> Replace driver so CHECK RECLINING Turn ignition switch Disconnect driver so Check continuity bo tor.	t control unit t control unit Terminal 16 etween driver seat co rer seat control unit 16 etween driver seat co rer seat control unit 16 normal? river seat control unit. eplace harness. SENSOR GROUNE n OFF. seat control unit connection etween driver seat co	ector. ntrol unit harness co Reclin Connector B523 ntrol unit harness co al Refer to <u>ADP-234, '</u> O CIRCUIT 1 ector. ntrol unit harness co	ing motor Terminal 16 onnector and ground Ground 'Removal and Insta	Continuity Existed d. Continuity Not existed Ilation".	
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B503

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B523

31

Existed

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

 $6. {\sf CHECK RECLINING SENSOR GROUND CIRCUIT 2}$

1. Connect driver seat control unit connector.

2. Check continuity between reclining sensor harness connector and ground.

Driver seat	Driver seat control unit		Continuity
Connector	Connector Terminal Ground	Ground	Continuity
B503	31		Existed

Is the inspection result normal?

YES >> Replace reclining motor. Refer to <u>SE-188, "Exploded View"</u>.

NO >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

А Description INFOID:000000005654221 The lifting sensor (front) is installed to the seat slide cushion frame. В The pulse signal is input to the driver seat control unit when the lifting (front) is operated. The driver seat control unit counts the pulse and calculates the lifting (front) amount of the seat. **Component Function Check** INFOID:000000005654222 **1.**CHECK FUNCTION 1. Turn ignition switch ON. D Select "LIFT FR PULSE" in the "Data monitor" mode using CONSULT-III. 2. Check the lifting sensor (front) signal under the following conditions. 3. Condition Value Monitor item Operate (Up) Change (increase)*1 F LIFT FR PULSE Seat lifting (front) Operate (Down) Change (decrease)*1 No change^{*1} Release ^{*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 Н >> Perform diagnosis procedure. Refer to ADP-107, "Diagnosis Procedure". NO Diagnosis Procedure INFOID:000000005654223 1.CHECK LIFTING SENSOR (FRONT) SIGNAL Turn ignition switch ON. 1. Check the voltage signal driver seat control unit harness connector and ground with an oscilloscope. 2. ADP

(+) Driver seat co	ontrol unit	(–) Condition		(–) Condition		trol unit (–)		Voltage (V)
Connector	Terminal	(-)	Condition		(Approx.)			
B503	25	Ground	Seat Lifting (front)	Operate	10mSec/div			
				Other than above	0 or 5			

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "<u>Removal and Installation</u>".

2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit and lifting motor (front) connector.

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

Ρ

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	25	B527	25	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B503	25		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

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

3. Check voltage between lifting motor (front) harness connector and ground.

(+) Lifting motor (front)		(-)	Voltage (V) (Approx.)	
Connector	Terminal		() () () () () () () () () ()	
B527	16	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	16	B527	16	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B503	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

NO >> Repair or replace harness.

5.CHECK LIFTING SENSOR (FRONT) GROUND CIRCUIT 1

1. Turn ignition switch OFF.

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	31	B527	31	Existed

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOS				
Is the inspection result norm	<u>al?</u>			А
YES >> GO TO 6. NO >> Repair or replace	e harness.			
6. CHECK LIFTING SENSO		RCUIT 2		
1. Connect driver seat cont				— В
		ess connector and ground.		
				- C
	control unit Terminal	Ground	Continuity	0
Connector B503	31	Ground	Existed	-
			Existed	D
Is the inspection result norma YES >> Replace lifting m	iotor (front). Refer to <u>SE-1</u>	88 "Exploded View"		
NO >> Replace driver s	eat control unit. Refer to A	DP-234, "Removal and Ins	tallation".	E
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< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description

- The lifting sensor (rear) is installed to the seat slide cushion frame.
- The pulse signal is input to the driver seat control unit when the lifting (rear) is operated.
- The driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "LIFT RR PULSE" in the "Data monitor" mode using CONSULT-III.
- 3. Check lifting sensor (rear) signal under the following conditions.

Monitor item	Condition		Value
		Operate (Up)	Change (increase) ^{*1}
LIFT RR PULSE Seat lifting (re	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-110, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654226

1.CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.

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

(+)					
Driver seat control unit		(–) Condition		Voltage (V) (Approx.)	
Connector	Terminal				(, , , , , , , , , , , , , , , , , , ,
B503	10	Ground	Seat Lifting (rear)	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-234</u>, "Removal and Installation".

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.

INFOID:000000005654224

INEOID:000000005654225

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Connector	Terminal	Connector	Terminal	Continuity
B503	10	B529	10	Existed
Check the continui	ty between driver sea	t control unit harness	s connector and grou	und.
	er seat control unit	-1	Ground	Continuity
Connector B503	Termina 10		Ground	Not Existed
ne inspection result				NOI EXISTED
S >> GO TO 3. >> Repair or r CHECK LIFTING SI Connect driver sea	eplace harness. ENSOR (REAR) POW at control unit connecte			
Turn ignition switch Check the voltage	ו ON. between lifting motor	(rear) harness conne	ector and ground.	
	(+)			Voltage (V)
Lifting r	notor (rear)	()	()	
Connector	Terminal			(Approx.)
B529	16	Groun	d	Battery voltage
Turn ignition owitak	. ,	ER SUPPLY CIRCU	IT	
	. ,	ector.		ing motor (rear) ha
Disconnect driver s Check the continui connector.	n OFF. seat control unit conne	ector. at control unit harnes		
Disconnect driver s Check the continui connector.	n OFF. seat control unit conne ity between driver sea	ector. at control unit harnes	ss connector and lift	ing motor (rear) ha
Disconnect driver s Check the continui connector. Driver sea	n OFF. seat control unit conne ity between driver sea t control unit	ector. at control unit harnes Lifting m	otor (rear)	
Disconnect driver s Check the continuit connector. Driver sea Connector B503	n OFF. seat control unit conne ity between driver sea t control unit Terminal	ector. at control unit harnes Lifting m Connector B529	otor (rear) Terminal	Continuity Existed
Disconnect driver s Check the continuit connector. Driver sea Connector B503 Check the continuit	t COFF. seat control unit connectivy between driver sea t control unit Terminal	ector. at control unit harnes Lifting m Connector B529	otor (rear) Terminal	Continuity Existed
Disconnect driver s Check the continuit connector. Driver sea Connector B503 Check the continuit	n OFF. Seat control unit conne ity between driver sea t control unit Terminal 16 ty between driver sea	ector. at control unit harnes Lifting m Connector B529 t control unit harness	otor (rear) Terminal	Continuity Existed
Disconnect driver s Check the continuit connector. Driver sea Connector B503 Check the continuit Driv	n OFF. seat control unit conne ity between driver sea t control unit Terminal 16 ty between driver sea er seat control unit	ector. at control unit harnes Lifting m Connector B529 t control unit harness	es connector and lift otor (rear) Terminal 16 s connector and grou	Continuity Existed und.
Disconnect driver s Check the continuit connector. Driver seat Connector B503 Check the continuit Drive Connector B503 he inspection result ES >> Replace dr D >> Repair or r	t control unit t control unit Terminal 16 ty between driver sea er seat control unit Termina 16	ector. at control unit harnes Lifting m Connector B529 t control unit harness al Refer to <u>ADP-234, "I</u>	otor (rear) Terminal 16 Connector and grou Ground	Continuity Existed und. Continuity Not existed
Disconnect driver s Check the continuit connector. Driver seat Connector B503 Check the continuit Driv Connector B503 he inspection result S >> Replace dr O >> Repair or r CHECK LIFTING SE Turn ignition switch Disconnect driver s	t control unit t control unit t control unit Terminal 16 ty between driver sea er seat control unit Termina 16 normal? river seat control unit. eplace harness. ENSOR (REAR) GRO	Ector. at control unit harnes Lifting m Connector B529 t control unit harness al Refer to <u>ADP-234, "I</u> PUND CIRCUIT 1	ss connector and lift otor (rear) Terminal 16 s connector and grou Ground Removal and Installa	Continuity Existed und. Continuity Not existed ation".
Disconnect driver s Check the continuit connector. Driver seat Connector B503 Check the continuit Drive Connector B503 he inspection result ES >> Replace dr D >> Repair or r CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continuit connector.	t control unit t control unit t control unit Terminal 16 ty between driver sea er seat control unit rermina 16 normal? tiver seat control unit. eplace harness. ENSOR (REAR) GRO	ector. at control unit harnes Lifting m Connector B529 t control unit harness al Refer to ADP-234, "I PUND CIRCUIT 1 ector. at control unit harnes	ss connector and lift otor (rear) Terminal 16 s connector and grou Ground Removal and Installa	Continuity Existed und. Continuity Not existed ation".

B503

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B529

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Existed

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

 $6. {\sf CHECK\ LIFTING\ SENSOR\ (REAR)\ GROUND\ CIRCUIT\ 2}$

1. Connect driver seat control unit connector.

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

Driver seat control unit			Continuity	
Connector	Connector Terminal		Continuity	
B503	31		Existed	

Is the inspection result normal?

YES >> Replace lifting motor (rear). Refer to <u>SE-188, "Exploded View"</u>.

NO >> Replace driver seat control unit. Refer to <u>ADP-234, "Removal and Installation"</u>.

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TILT SENSOR

А Description INFOID:000000005654227 The tilt sensor is installed to the steering column assembly. В The resistance of tilt sensor changes according to the up/down position of steering column. The terminal voltage of automatic drive positioner control unit changes according to a change of tilt sensor resistance. Automatic drive positioner control unit calculates the tilt position from the voltage. Component Function Check INFOID:000000005654228 1.CHECK FUNCTION D 1. Turn ignition switch ON. Select "TILT SEN" in the "Data monitor" mode using CONSULT-III. 2. 3. Check the tilt sensor signal under the following condition. Monitor item Condition Value Change between TILT SEN Tilt position 1.1 V (Close to top) 3.9 V (Close to bottom) Is the indication normal? >> INSPECTION END YES NO >> Perform diagnosis procedure. Refer to ADP-113, "Diagnosis Procedure". Diagnosis Procedure Н INFOID:000000005654229 **1.**CHECK TILT SENSOR SIGNAL 1 Turn ignition switch ON. 2. Check voltage automatic drive positioner control unit harness connector and ground. ADP (+) Voltage (V) Automatic drive positioner control unit (-) Condition (Approx.) Connector Terminal Change between M51 7 Ground Tilt position 1.1 V (Close to top) 3.9 V (Close to bottom) L Is the inspection result normal? YES >> Replace automatic drive positioner control unit. Refer to ADP-235, "Removal and Installation". NO >> GO TO 2. Μ 2. CHECK TILT SENSOR CIRCUIT 1. Turn ignition switch OFF. Disconnect automatic drive positioner control unit and tilt & telescopic sensor connector. 2. Ν 3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic sensor harness connector. Automatic drive positioner control unit Tilt & telescopic sensor Continuity Connector Terminal Connector Terminal M51 7 M48 3 **Existed** Check continuity between automatic drive positioner control unit harness connector and ground. Δ Automatic drive positioner control unit Continuity Connector Terminal Ground M51 7 Not existed

Is the inspection result normal?

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 3.
- NO >> Repair or replace harness.

3.CHECK TILT SENSOR POWER SUPPLY

- 1. Connect automatic drive positioner control unit connector.
- 2. Turn ignition switch ON.

3. Check voltage between tilt & telescopic sensor harness connector and ground.

(+) Tilt & telescopic sensor		()	Voltage (V) (Approx.)	
Connector	Terminal		()	
M48	1	Ground	5	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic sensor		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M52	33	M48	1	Existed	

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

Automatic drive positioner control unit			Continuity
Connector	Connector Terminal		Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>. NO >> Repair or replace harness.

NO >> Repair of replace namess.

5.CHECK TILT SENSOR GROUND CIRCUIT 1

- 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 sensor harness connector.

Automatic drive positioner control unit		Tilt & telescopic sensor		Continuity
Connector	Terminal	Connector Terminal		Continuity
M52	41	M48	4	Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK TILT SENSOR GROUND CIRCUIT 2

1. Connect automatic drive positioner control unit connector.

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M52	41		Existed

TILT SENSOR

>
>

Is the inspection result normal?

YES	>> Replace tilt & telescopic sensor (Built in steering column assembly). Refer to ST-18, "WITHOUT	А
	ELECTRIC MOTOR : Exploded View".	

NO >> Replace automatic drive positioner control unit. Refer to <u>ADP-235. "Removal and Installation"</u>.

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TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Description

• The telescopic sensor is installed to the steering column assembly.

- The resistance of telescopic sensor changes according to the forward/backward position of steering column.
- The terminal voltage of automatic drive positioner control unit changes according to a change of telescopic sensor resistance. Automatic drive positioner control unit calculates the telescopic position from the voltage.

Component Function Check

INFOID:000000005654231

INFOID:000000005654230

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TELESCO SEN" in the "Data monitor" mode using CONSULT-III.
- 3. Check the tilt sensor signal under the following conditions.

Monitor item	Condition	Value
TELESCO SEN	Telescopic position	Change between 0.5 [V] (close to top) 4.5 [V] (close to bottom)

Is the indication normal?

YES >> INSPECTION END.

NO >> Perform diagnosis procedure. Refer to <u>ADP-116, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654232

1.CHECK TELESCOPIC SENSOR SIGNAL

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

(+) Automatic drive positioner control unit		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			(
M51	23	Ground	Telescopic position	Change between 0.5 [V] (close to top) 4.5 [V] (close to bottor

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>. NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

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

Automatic drive positioner control unit		ontrol unit Tilt & telescopic sensor		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M51	23	M48	2	Existed	

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

Automatic drive po	sitioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M51	23		Not existed	

Is the inspection result normal?

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

. Turn ignition switch	drive positioner contr ON. veen tilt & telescopic :		nector and ground.	
	(+)			
Tilt 8	telescopic sensor		(-)	Voltage (V) (Approx.)
Connector	Termina	al		(/ ())
M48	1		Ground	5
	PIC SENSOR POWER OFF. atic drive positioner co etween automatic dri	ontrol unit connector	·	ector and tilt & telesco
Automatic drive po	ositioner control unit	Tilt & tele	scopic sensor	
Connector	Terminal	Connector	Terminal	Continuity
M52	33	M48	1	Existed
Connector M52	Termina 33	al	Ground	Continuity Not existed
s the inspection result	normal?			
NO >> Repair or ro D.CHECK TELESCOF Turn ignition switch Disconnect automa	atomatic drive position eplace harness. PIC SENSOR GROUN OFF. atic drive positioner co etween automatic dri	ND CIRCUIT 1	·.	noval and Installation". ector and tilt & telesco
YES >> Replace au NO >> Repair or ro D.CHECK TELESCOF Turn ignition switch Disconnect automa Check continuity b sensor harness co	atomatic drive position eplace harness. PIC SENSOR GROUN OFF. atic drive positioner co etween automatic dri	ND CIRCUIT 1 ontrol unit connector ve positioner contro	·.	ector and tilt & telesco
YES >> Replace au NO >> Repair or ro OCHECK TELESCOF Turn ignition switch Disconnect automa Check continuity b sensor harness co	utomatic drive position eplace harness. PIC SENSOR GROUN OFF. atic drive positioner co etween automatic dri nnector.	ND CIRCUIT 1 ontrol unit connector ve positioner contro	r. ol unit harness conn	
YES >> Replace au NO >> Repair or ro CHECK TELESCOF Turn ignition switch Disconnect automa Check continuity b sensor harness cor Automatic drive po	utomatic drive position eplace harness. PIC SENSOR GROUN o OFF. atic drive positioner co etween automatic dri nnector.	ND CIRCUIT 1 ontrol unit connector ve positioner contro Tilt & tele	r. ol unit harness conn scopic sensor	ector and tilt & telesco
YES >> Replace au NO >> Repair or ro O.CHECK TELESCOF Turn ignition switch Disconnect automa Check continuity b sensor harness cor Automatic drive po Connector M52 s the inspection result YES >> GO TO 6. NO >> Repair or ro O.CHECK TELESCOF Connect automatic	utomatic drive position eplace harness. PIC SENSOR GROUN o OFF. atic drive positioner co etween automatic dri nnector. ositioner control unit Terminal 41 normal? eplace harness.	ND CIRCUIT 1 ontrol unit connector ve positioner contro Tilt & tele Connector M48 ND CIRCUIT 2 rol unit connector.	r. ol unit harness conn scopic sensor Terminal 4	ector and tilt & telesco — Continuity Existed
YES >> Replace au NO >> Repair or m O.CHECK TELESCOF Turn ignition switch Disconnect automa Check continuity b sensor harness con Automatic drive po Connector M52 Sthe inspection result YES >> GO TO 6. NO >> Repair or m O.CHECK TELESCOF Connect automatic Check continuity be	utomatic drive position eplace harness. PIC SENSOR GROUN o OFF. atic drive positioner co etween automatic dri nnector. ositioner control unit Terminal 41 normal? eplace harness. PIC SENSOR GROUN drive positioner contri etween automatic drive	ND CIRCUIT 1 ontrol unit connector ve positioner contro Tilt & tele Connector M48 ND CIRCUIT 2 rol unit connector. ve control unit harne	r. ol unit harness conn scopic sensor Terminal 4	ector and tilt & telesco Continuity Existed
YES >> Replace au NO >> Repair or m O.CHECK TELESCOF Turn ignition switch Disconnect automa Check continuity b sensor harness con Automatic drive po Connector M52 Sthe inspection result YES >> GO TO 6. NO >> Repair or m O.CHECK TELESCOF Connect automatic Connect automatic	utomatic drive position eplace harness. PIC SENSOR GROUN o OFF. atic drive positioner co etween automatic dri nnector. ositioner control unit Terminal 41 normal? eplace harness. PIC SENSOR GROUN drive positioner control	ND CIRCUIT 1 ontrol unit connector ve positioner contro Tilt & tele Connector M48 ND CIRCUIT 2 rol unit connector. ve control unit harne	r. ol unit harness conn scopic sensor Terminal 4	ector and tilt & telesco Continuity Existed

M52

41

Existed

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace tilt & telescopic sensor (Built in steering column assembly). Refer to <u>ST-18, "WITHOUT</u> <u>ELECTRIC MOTOR : Exploded View"</u>.
- NO >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS > MIRROR SENSOR DRIVER SIDE

DRIVER SIDE : Description

- The mirror sensor (driver side) is installed to the door mirror (driver side).
- The resistance of 2 sensors (horizontal and vertical) is changed when the door mirror (driver side) is oper-• ated.
- · Automatic drive positioner control unit calculates the door mirror position according to the change of the voltage of 2 sensor input terminals.

DRIVER SIDE : Component Function Check

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INFOID:000000005654235

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1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- Select "MIR/SEN LH U-D", "MIR/SEN LH R-L" in the "Data monitor" using CONSULT-III. 2.
- Check mirror sensor (driver side) signal under the following condition. 3.

			F
Monitor item	Condition	Value	
MIR/SEN LH U-D	— Door mirror (driver side)	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)	G
MIR/SEN LH R-L		Change between 0.6 [V] (close to left edge) 3.4 [V] (close to right edge)	Н

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-119, "DRIVER SIDE : Diagnosis Procedure"</u>.

DRIVER SIDE : Diagnosis Procedure

1.CHECK DOOR MIRROR SENSOR (DRIVER SIDE) SIGNAL

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

(+) Automatic drive positioner control unit					
		(-)	Condition	Voltage (V) (Approx.)	
Connector	Terminal			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M51	6	Ground	Door mirror (Driver	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)	
	22	Ground	side) position	Change between 3.4 [V] (close to left edge) 0.6 [V] (close to right edge)	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-235, "Removal and Installation". NO >> GO TO 2.

2.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

1. Turn ignition OFF.

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

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	6	D3	9	Existed
	22		10	LAISIEU

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

Automatic drive po	sitioner control unit		Continuity	
Connector			Continuity	
M51	Ground	Not existed		
I GIVI	22	-	NUL EXISIEU	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR POWER SUPPLY

1. Connect automatic drive positioner control unit connector.

2. Turn ignition switch ON.

3. Check voltage between door mirror (driver side) harness connector and ground.

(- Door mirror	+) (driver side)	(-)	Voltage (V) (Approx.)
Connector	Terminal		
D3	11	Ground	5

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

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

Automatic drive po	Automatic drive positioner control unit Door mirror (driver side)		Continuity	
Connector	Terminal	Connector Terminal		Continuity
M52	33	D3	11	Existed

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

Automatic drive po	sitioner control unit		Continuity
Connector	Connector Terminal		Continuity
M52	M52 33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-235, "Removal and Installation".

NO >> Repair or replace harness.

5.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND 1

1. Turn ignition switch OFF.

2. Disconnect automatic drive control unit connector.

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

< DTC/CIRCUIT DIAGNOSIS >

	sitioner control unit	Door mirro	or (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M52	41	D3	12	Existed
CHECK DOOR MIRE	eplace harness.	rol unit connector.		nector and ground.
Automatic dr	rive positioner control unit			
Connector	Termin		Ground	Continuity
M52	41		_	Existed
the inspection result r	normal?	L		
NO >> Replace do	oor mirror sensor (Bu MBLY : Removal an	ilt in passenger side		<u>emoval and Installation"</u> . fer to <u>MIR-19, "DOOR MIR-</u>
ASSENGER SID	E : Description			INFOID:000000005654236
The mirror sensor (pa	ssenger side) is insta	alled to the door mirr	or (passenger sid	e).
The resistance of 2 s				r mirror (passenger side) is
operated. Automatic drive position	oper control unit calc	ulates the door mirro	or position accordi	ng to the change of the volt-
age of 2 sensor input				ng to the onlinge of the volt
ASSENGER SID	E : Component	Function Check	k	INFOID:000000005654237
.CHECK FUNCTION				
	ON			
	H U-D", "MIR/SEN R ensor (passenger sid			
Select "MIR/SEN R	H U-D", "MIR/SEN R ensor (passenger sid			
Select "MIR/SEN R Check the mirror se Monitor iter	H U-D", "MIR/SEN R ensor (passenger sid	e) signal under the f	ollowing condition	S. Value aange between
Select "MIR/SEN R Check the mirror se	H U-D", "MIR/SEN R ensor (passenger sid	e) signal under the f	ollowing condition	S. Value hange between /] (close to peak)
Select "MIR/SEN R Check the mirror se Monitor iter	H U-D", "MIR/SEN R ensor (passenger sid	e) signal under the f	Ollowing condition Cr 3.4 [0.6 [V	S. Value ange between /] (close to peak) /] (close to valley)
Select "MIR/SEN R Check the mirror se Monitor iter	H U-D", "MIR/SEN R ensor (passenger sid	e) signal under the f	Ollowing condition Cr 3.4 [V 0.6 [V Cr 3.4 [V]	S. Value ange between /] (close to peak) /] (close to valley) ange between (close to left edge)
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L	H U-D", "MIR/SEN R ensor (passenger sid m Door m	e) signal under the f	Ollowing condition Cr 3.4 [V 0.6 [V Cr 3.4 [V]	S. Value ange between /] (close to peak) /] (close to valley) ange between
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L the indication normal	H U-D", "MIR/SEN R ensor (passenger sid m Door m	e) signal under the f	Ollowing condition Cr 3.4 [V 0.6 [V Cr 3.4 [V]	S. Value ange between /] (close to peak) /] (close to valley) ange between (close to left edge)
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L the indication normal YES >> INSPECTIO	H U-D", "MIR/SEN R ensor (passenger sid Door m Door m 2 DN END	e) signal under the for Condition	ollowing condition Ch 3.4 [V 0.6 [V Ch 3.4 [V] 0.6 [V]	S. Value ange between /] (close to peak) /] (close to valley) ange between (close to left edge) (close to right edge)
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L the indication normal YES >> INSPECTIO	H U-D", "MIR/SEN R ensor (passenger sid Door m 2 DN END agnosis procedure. R	e) signal under the for Condition irror (passenger side)	ollowing condition Ch 3.4 [V 0.6 [V Ch 3.4 [V] 0.6 [V]	S. Value vange between /] (close to peak) /] (close to valley) vange between (close to left edge) (close to right edge) : Diagnosis Procedure".
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L the indication normal? YES >> INSPECTION NO >> Perform dia	H U-D", "MIR/SEN R ensor (passenger sid Door m 2 DN END agnosis procedure. R E : Diagnosis P	e) signal under the for Condition irror (passenger side) efer to <u>ADP-121, "Pa</u> rocedure	Ollowing condition Ch 3.4 [V 0.6 [V Ch 3.4 [V] 0.6 [V] (ASSENGER SIDE	S. Value vange between /] (close to peak) /] (close to valley) vange between (close to left edge) (close to right edge) : Diagnosis Procedure".
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L the indication normal YES >> INSPECTION NO >> Perform dia ASSENGER SIDI	H U-D", "MIR/SEN R ensor (passenger sid m Door m ? DN END agnosis procedure. R E : Diagnosis P ROR SENSOR (PAS	e) signal under the for Condition irror (passenger side) efer to <u>ADP-121, "Pa</u> rocedure	Ollowing condition Ch 3.4 [V 0.6 [V Ch 3.4 [V] 0.6 [V] (ASSENGER SIDE	S. Value vange between /] (close to peak) /] (close to valley) vange between (close to left edge) (close to right edge) : Diagnosis Procedure".
Select "MIR/SEN R Check the mirror se Monitor iter MIR/SEN RH U-D MIR/SEN RH R-L the indication normal YES >> INSPECTION NO >> Perform dia ASSENGER SIDI .CHECK DOOR MIRF Turn ignition switch	H U-D", "MIR/SEN R ensor (passenger sid m Door m ? DN END agnosis procedure. R E : Diagnosis P ROR SENSOR (PAS	e) signal under the for Condition irror (passenger side) Refer to <u>ADP-121, "Pa</u> rocedure	Ollowing condition Ch 3.4 [V 0.6 [V 0.6 [V] 0.6 [V] 0.6 [V] 0.6 [V]	S. Value Val

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive	(+) Automatic drive positioner control unit		Condition	Voltage (V)	
Connector	-			(Approx.)	
M54	5	Oround	Door mirror (Passenger	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)	
M51	21	- Ground	side) position	Change between 3.4 [V] (close to left edge) 0.6 [V] (close to right edge)	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-235, "Removal and Installation"</u>.

NO >> GO TO 2.

2.CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

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

Automatic drive p	Automatic drive positioner control unit		Door mirror (passenger side)	
Connector	Terminal	Connector	Terminal	Continuity
M51	5	D33	9	Existed
IVIJ I	21		10	LAISIEU

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M51	5	Ground	Not existed
I GIVI	21		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK DOOR MIRROR SENSOR (PASSENGER SIDE) POWER SUPPLY

- 1. Connect automatic drive positioner control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between door mirror (passenger side) harness connector and ground.

((+)		
Door mirror (p	Door mirror (passenger side)		Voltage (V) (Approx.)
Connector	Terminal		
D33	D33 11		5

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR POWER SUPPLY 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 door mirror (passenger side) harness connector.

< DTC/CIRCUIT DIAGNOSIS >

	ositioner control unit		passenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	33	D33	11	Existed
Check continuity b	etween automatic driv	e positioner control	unit harness connec	tor and ground.
Automatic c	lrive positioner control unit			Continuity
Connector	Termina	al	Ground	Continuity
M52	33			Not existed
NO >> Repair or r .CHECK DOOR MIR Turn ignition switch	utomatic driver positio eplace harness. ROR (PASSENGER 3 o OFF.	SIDE) SENSOR GR	OUND 1	noval and Installation'
Check continuity b senger side) conne	atic drive positioner co etween automatic driv ector.	e positioner control		
Connector	Terminal	Connector	Terminal	- Continuity
M52	41	D33	12	Existed
. CHECK DOOR MIR	drive positioner conti	rol unit connector.		
 Check continuity b 	etween automatic driv	e positioner control	unit harness connect	tor and ground.
			unit harness connec	
-	etween automatic driv		unit harness connec	tor and ground.
Automatic c	Irive positioner control unit			
Automatic of Connector M52 the inspection result YES >> Replace at NO >> Replace do	Irive positioner control unit Termina 41	al ner control unit. Refe ilt in passenger side	Ground	Continuity Existed
Automatic of Connector M52 Sthe inspection result YES >> Replace at NO >> Replace do	Irive positioner control unit Termina 41 normal? utomatic drive positior por mirror sensor (Bu	al ner control unit. Refe ilt in passenger side	Ground	Continuity Existed

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

Description

- The seat sliding motor is installed to the seat cushion frame.
- The seat sliding motor is activated with the driver seat control unit.
- The seat is slid frontward/rearward by changing the rotation direction of sliding motor.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT SLIDE" in "Active test" mode using CONSULT-III.
- 3. Check the sliding motor operation.

Test item		Description	
	OFF	Seat sliding	Stop
SEAT SLIDE	FR		Forward
	RR		Backward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-124, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654241

1. CHECK SLIDING MOTOR POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect sliding motor connector.
- 3. Turn the ignition switch ON.
- 4. Perform "Active test" ("SEAT SLIDE") using CONSULT-III
- 5. Check voltage between sliding motor harness connector and ground.

(+) Sliding ma	(+) Sliding motor		Condition		Voltage (V) (Approx.)	
Connector	Terminal				(
				OFF	0	
	35	35 Ground SEAT SLIDE 42		FR (forward)	Battery voltage	
DEOE			Cround		RR (backward)	0
B525			OFF	0		
	42		42		FR (forward)	0
			RR (backward)		Battery voltage	

Is the inspection result normal?

YES >> Replace sliding motor. (Built in seat slide cushion frame.) Refer to <u>SE-188. "Exploded View"</u>. NO >> GO TO 2.

2. CHECK SLIDING MOTOR CIRCUIT

1. Turn ignition switch OFF.

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

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SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Connector			ng motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B504	35	– B525	35	Existed
D304	42		42	LXISIEU
-		ontrol unit harness co	onnector and ground	I.
	er seat control unit			Continuity
Connector	Termir	nal	Ground	
B504	35	Ground		Not existed
the inspection result	42			
CHECK SLIDING Me efer to <u>ADP-125. "Cor</u> the inspection result (ES >> Replace dr	nponent Inspection". normal? ver seat control unit	. Refer to <u>ADP-234,</u>		
CHECK SLIDING M ually check the slidir he inspection result ES >> GO TO 2. O >> Repair or re	OTOR-1 og motor for foreign o normal? eplace seat cushion		at the sliding motor is	INFOID:00000000
OMPONENT INSPECT CHECK SLIDING Me sually check the slidin the inspection result (ES >> GO TO 2. NO >> Repair or re CHECK SLIDING Me Turn ignition switch Disconnect sliding	Ction DTOR-1 og motor for foreign of <u>normal?</u> eplace seat cushion DTOR-2 OFF. motor connector.	object, and check tha	at the sliding motor is	INFOID:00000000
OMPONENT INSPECT CHECK SLIDING Me sually check the slidin the inspection result (ES >> GO TO 2. NO >> Repair or re CHECK SLIDING Me Turn ignition switch Disconnect sliding Supply sliding moto	Ction DTOR-1 g motor for foreign of <u>normal?</u> eplace seat cushion DTOR-2 OFF. motor connector. or terminals with batt	bbject, and check that frame (sliding motor ery voltage and chec	at the sliding motor is	s not broken.
CHECK SLIDING M sually check the slidir the inspection result (ES >> GO TO 2. NO >> Repair or re CHECK SLIDING M Turn ignition switch Disconnect sliding Supply sliding moto (+)	DTOR-1 og motor for foreign of normal? eplace seat cushion DTOR-2 OFF. motor connector. or terminals with batte Terminal (-)	object, and check that frame (sliding motor ery voltage and chec	at the sliding motor is). ck operation. Operatio	s not broken.
CHECK SLIDING Me sually check the slidin the inspection result (ES >> GO TO 2. NO >> Repair or re CHECK SLIDING Me Turn ignition switch Disconnect sliding Supply sliding moto	Ction DTOR-1 g motor for foreign of <u>normal?</u> eplace seat cushion DTOR-2 OFF. motor connector. or terminals with batt	bject, and check that frame (sliding motor ery voltage and check	at the sliding motor is). ck operation.	s not broken.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING MOTOR

Description

- The seat reclining motor is installed to the seat back frame.
- The seat reclining motor is activated with the driver seat control unit.
- The seatback is reclined frontward/rearward by changing the rotation direction of reclining motor.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT RECLINING" in "Active test" mode using CONSULT-III.
- 3. Check the reclining motor operation.

Test ite	Test item		ription
	OFF		Stop
SEAT RECLINING	FR	Seat reclining	Forward
	RR		Backward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-126, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654245

1. CHECK RECLINING MOTOR POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect reclining motor connector.
- 3. Turn the ignition switch ON.
- 4. Perform "Active test" ("SEAT RECLINING") using CONSULT-III
- 5. Check voltage between reclining motor harness connector and ground.

	(+) Reclining motor		Con	dition	Voltage (V) (Approx.)
Connector	Terminal	*			
				OFF	0
	36	Ground		FR (forward)	Battery voltage
DEOD			SEAT RECLINING	RR (backward)	0
B523			SEAT RECLINING	OFF	0
	44			FR (forward)	0
				RR (backward)	Battery voltage

Is the inspection result normal?

YES >> Replace reclining motor. (Built in seat back frame.) Refer to <u>SE-188, "Exploded View"</u>. NO >> GO TO 2.

2. CHECK RECLINING MOTOR CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000005654243

INEOID-000000005654244

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

 YES >> GO TO 3. NO >> Repair or replace harm CHECK RECLINING MOTOR efer to ADP-127. "Component Instant inspection result normal? YES >> Replace driver seat content in the inspection of the provide method of the provide method of the provide method." CHECK RECLINING MOTOR-1 Sually check the reclining motor for the provide method. 	16 B52 4 452 ver seat control unit had 1 1 1	23 Irness connector Ground	al and Installa	
B504 44 Check continuity between drive Driver seat control Connector B504 B504 44 Connector B504 B504 Connector CES S GO TO 3. NO S Repair or replace harm CHECK RECLINING MOTOR CHECK RECLINING MOTOR-1 Stally check the reclining motor for the seat control CHECK RECLINING MOTOR-1	B52 /er seat control unit har of unit Terminal 36 44 hess. Ispection". ontrol unit. Refer to AD or. (Built in seat slide of 1	Ground	44 and ground.	Continuity Not existed
44 Check continuity between drive Driver seat control Connector B504 the inspection result normal? YES YES >> GO TO 3. NO >> Repair or replace harm •.CHECK RECLINING MOTOR efer to ADP-127. "Component Instance the inspection result normal? YES >> Replace driver seat control Omponent Inspection .CHECK RECLINING MOTOR-1 isually check the reclining motor for the search in the inspection for the search in the inspection	4 ver seat control unit have a seat control unit have a seat control unit have a seat seat seat seat seat seat seat s	Ground	and ground.	Continuity Not existed
Driver seat control Connector B504 the inspection result normal? YES >> GO TO 3. NO >> Repair or replace harm CHECK RECLINING MOTOR efer to ADP-127. "Component Inspection result normal? YES >> Replace driver seat control NO >> Replace reclining motor Omponent Inspection CHECK RECLINING MOTOR-1 isually check the reclining motor for the search is the inspection for the search is the inspection	ness.	Ground	al and Installa	Not existed
Connector B504 the inspection result normal? YES >> GO TO 3. NO >> Repair or replace harm •CHECK RECLINING MOTOR efer to ADP-127. "Component Instant the inspection result normal? YES >> Replace driver seat content to the inspection result normal? YES >> Replace driver seat content to the inspection result normal? YES >> Replace driver seat content to the inspection of the inspection is the inspection of the inspection is the inspection result normal? YES >> Replace driver seat content to the inspection of the inspection is the inspection is the inspection of the inspection is the inspection of the inspection is the inspection of the inspectin of the inspection of the inspectin of the inspectin	Terminal 36 44 ness. spection". ontrol unit. Refer to AD or. (Built in seat slide of 1	0P-234, "Remov		Not existed
B504 Sthe inspection result normal? YES >> GO TO 3. NO >> Repair or replace harm CHECK RECLINING MOTOR Refer to ADP-127. "Component Ins Sthe inspection result normal? YES >> Replace driver seat co NO >> Replace reclining motor COMPONENT Inspection CHECK RECLINING MOTOR-1 Tisually check the reclining motor f	36 44 ness. <u>spection"</u> . ontrol unit. Refer to <u>AD</u> or. (Built in seat slide of	0P-234, "Remov		Not existed
s the inspection result normal? YES >> GO TO 3. NO >> Repair or replace harm CHECK RECLINING MOTOR Refer to ADP-127, "Component Inspection result normal? YES >> Replace driver seat control NO >> Replace reclining motor Component Inspection CHECK RECLINING MOTOR-1 //isually check the reclining motor for the search of t	44 ness. spection". ontrol unit. Refer to <u>AD</u> or. (Built in seat slide o	0P-234, "Remov		<u>ition"</u> .
YES >> GO TO 3. NO >> Repair or replace harm CHECK RECLINING MOTOR efer to <u>ADP-127</u> . "Component Ins the inspection result normal? YES >> Replace driver seat co NO >> Replace reclining motor COMPONENT Inspection CHECK RECLINING MOTOR-1 isually check the reclining motor f	ness. I <u>spection"</u> . ontrol unit. Refer to <u>AD</u> or. (Built in seat slide o			
YES >> GO TO 3. NO >> Repair or replace harm CHECK RECLINING MOTOR Refer to <u>ADP-127. "Component Ins</u> the inspection result normal? YES >> Replace driver seat co NO >> Replace reclining motor Component Inspection CHECK RECLINING MOTOR-1	<u>spection"</u> . ontrol unit. Refer to <u>AD</u> or. (Built in seat slide c			
NO >> Repair or replace harm CHECK RECLINING MOTOR Refer to <u>ADP-127</u> , "Component Ins the inspection result normal? YES >> Replace driver seat co NO >> Replace reclining motor COMPONENT Inspection .CHECK RECLINING MOTOR-1 Tisually check the reclining motor f	<u>spection"</u> . ontrol unit. Refer to <u>AD</u> or. (Built in seat slide c			
CHECK RECLINING MOTOR Refer to <u>ADP-127. "Component Ins</u> the inspection result normal? YES >> Replace driver seat co NO >> Replace reclining motor Component Inspection .CHECK RECLINING MOTOR-1	<u>spection"</u> . ontrol unit. Refer to <u>AD</u> or. (Built in seat slide c			
s the inspection result normal? YES >> Replace driver seat co NO >> Replace reclining moto Component Inspection .CHECK RECLINING MOTOR-1 /isually check the reclining motor f	ontrol unit. Refer to <u>AD</u> or. (Built in seat slide o			
s the inspection result normal? YES >> Replace driver seat co	ontrol unit. Refer to <u>AD</u> or. (Built in seat slide o			
YES >> Replace driver seat co NO >> Replace reclining moto Component Inspection .CHECK RECLINING MOTOR-1	or. (Built in seat slide c 1			
COMPONENT INSPECTION	1	cushion frame.)	Refer to <u>SE-1</u>	88, "Exploded View".
CHECK RECLINING MOTOR-1				
CHECK RECLINING MOTOR-1				INFOID:0000000056
isually check the reclining motor f				
	for foreign object, and			
the inspection result normal?		check that the r	eclining moto	r is not broken.
•				
YES >> GO TO 2. NO >> Repair or replace seat	thack frame (reclining)	motor)		
CHECK RECLINING MOTOR-2		motor).		
	2			
. Turn ignition switch OFF. 2. Disconnect reclining motor cor	nnector			
. Supply reclining motor termina		and check ope	ration.	
Termir	nal			
(+)	(-)		Oper	ation
36	()			ward
	44		Forv	
44	44 36		Forv Back	

Ρ

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Description

- The lifting motor (front) is installed to the seat slide cushion frame.
- The lifting motor (front) is activated with the driver seat control unit.
- The lifter (front) is moved upward/downward by changing the rotation direction of lifting motor (front).

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT LIFTER FR" in "Active test" mode using CONSULT-III.
- 3. Check the lifting motor (front) operation.

Test item		Description		
	OFF		Stop	
SEAT LIFTER FR	UP	Seat lifting (front)	Upward	
	DWN		Downward	

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-128, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654249

1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

	(+) Lifting motor (front)		Con	dition	Voltage (V) (Approx.)	
Connector	Terminal					
				OFF	0	
	37			UP	0	
DE07		Ground		SEAT LIFTER FR	DWN (down)	Battery voltage
D327	B527		SEAT LIFTER FR	OFF	0	
	45			UP	Battery voltage	
				DWN (down)	0	

Is the inspection result normal?

YES >> Replace lifting motor (front). (Built in seat slide cushion frame.) Refer to <u>SE-188. "Exploded View"</u>. NO >> GO TO 2.

2.CHECK LIFTING MOTOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.

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

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LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

	Driver seat control unit		Lifting motor (front)					Continuit	tv
	Connector	Terminal	Conr	nector	Terminal		Sommund	.,	
	B504	37	B ⁴	527	37		Existed	-	
	2004	45	DC	45					
Cheo	ck continuity be	etween driver seat co	ontrol unit h	arness co	nnector and gr	ound.			
	Drive	er seat control unit					Continuity		
	Connector	Termin	al	Ground Continuity					
	B504	37							
	B504	45					Not existed		
CHEC	K LIFTING MO	eplace harness. OTOR (FRONT) <u>mponent Inspection"</u> . <u>normal?</u>							
NO OMPO .CHEC sually t the ins /ES NO .CHEC Turn Disco	 >> Replace dri >> Replace lift >> Replace lift >> Replace Market >> CK LIFTING Market >> GO TO 2. >> Repair or repa	OTOR-1 r (front) for foreign ob normal? eplace seat cushion f OTOR-2	pject, and c	lide cushio	on frame.) Refe	er to <u>SE-</u>	188. "Explod	:000000005654	
NO OMPO .CHEC sually t the ins YES NO .CHEC Turn Disco	 >> Replace drives >> Replace lift >> Replace lift >> Replace lift >> CK LIFTING MC CK LIFTING motor >> GO TO 2. >> Repair or replace CK LIFTING MC ignition switch onnect lifting motor 	ing motor (front). (Bu Ction OTOR-1 r (front) for foreign of normal? eplace seat cushion f OTOR-2 notor connector.	pject, and c	heck that g motor).	on frame.) Refe	r (front)	188. "Explod	:000000005654.	
NO OMPO CHEC sually t the ins 'ES NO CHEC Turn Disco	 >> Replace dri >> Replace lift >> Replace lift >> Replace Market >> CK LIFTING Market >> GO TO 2. >> Repair or repa	ing motor (front). (Bu Ction OTOR-1 r (front) for foreign of normal? eplace seat cushion f OTOR-2 notor connector.	pject, and c frame (liftin	heck that g motor).	on frame.) Refe	r (front)	188. "Explod	:0000000056542	
IO OMPO CHEC sually t the ins (ES IO .CHEC Turn Disco Supp	 >> Replace drives >> Replace lift >> Replace lift >> Replace lift >> CK LIFTING MC CK LIFTING motor >> GO TO 2. >> Repair or replace CK LIFTING MC ignition switch onnect lifting motor 	ing motor (front). (Bu ction DTOR-1 r (front) for foreign of normal? eplace seat cushion for DTOR-2 n OFF. notor connector. terminals with batte	pject, and c frame (liftin	heck that g motor).	on frame.) Refe	r (front)	188. "Explod	:0000000056542	

Ρ

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (REAR)

Description

- The lifting motor (rear) is installed to the seat slide cushion frame.
- The lifting motor (rear) is activated with the driver seat control unit.
- The seat lifter (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear).

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT LIFTER RR" in "Active test" mode using CONSULT-III.
- 3. Check the lifting motor (rear) operation.

Test item		Description		
	OFF		Stop	
SEAT LIFTER RR	UP	Seat lifting (rear)	Upward	
	DWN	- -	Downward	

Is the operation of relevant parts normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000005654253

1.CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

	(+) Lifting motor (rear)		Con	dition	Voltage (V) (Approx.)
Connector	Terminal				(
		- Ground SE		OFF	0
	38			UP	Battery voltage
DEOO			SEAT LIFTER RR	DWN (DOWN)	0
B929	B529 39		SEAT LIFTER KK	OFF	0
				UP	0
				DWN (DOWN)	Battery voltage

Is the inspection result normal?

YES >> Replace lifting motor (rear). (Built in seat slide cushion frame.) Refer to <u>SE-188, "Exploded View"</u>. NO >> GO TO 2.

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000005654251

INFOID:000000005654252

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

-		Lifting motor (rear)		Lifting motor Connector		Continuity		
Connector	Terminal	Conr	nector	Terminal	Continuity			
B504	38	BA	529 38		Existed			
0004	39		520	39	39			
Check continuity betw	ween driver seat co	ntrol unit h	arness co	nnector and grou	nd.			
Driver	seat control unit							
Connector	Termin	Terminal				Terminal		Continuity
DF04	38		- Ground					
B504	39		-		Not existed			
the inspection result no	ormal?							
ES >> GO TO 3.								
O >> Repair or rep								
CHECK LIFTING MOT								
fer to <u>ADP-131, "Com</u>								
the inspection result no		Doforto ^		Domovol and last	elletion"			
	er seat control unit. g motor (rear). (Bui				o <u>SE-188, "Exploded \</u>			
omnonent Inspecti	ion							
omponent Inspect	ion				INF01D:000000			
OMPONENT INSPECT					INFOID:000000			
	OR-1	ject, and ch	heck that t	he lifting motor (r				
CHECK LIFTING MOT	FOR-1 rear) for foreign ob	ject, and cł	heck that t	he lifting motor (r				
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2.	FOR-1 rear) for foreign ob <u>prmal?</u>	-		he lifting motor (r				
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. O >> Repair or rep	FOR-1 rear) for foreign ob ormal? lace seat cushion f	-		he lifting motor (r				
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. IO >> Repair or rep CHECK LIFTING MOT	FOR-1 rear) for foreign ob ormal? lace seat cushion f	-		he lifting motor (r				
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. IO >> Repair or rep CHECK LIFTING MOT Turn ignition switch C	FOR-1 rear) for foreign ob ormal? lace seat cushion f FOR-2 DFF.	-		he lifting motor (r				
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. IO >> Repair or rep CHECK LIFTING MOT Turn ignition switch C Disconnect lifting mo	FOR-1 rear) for foreign ob ormal? lace seat cushion f FOR-2 DFF. tor connector.	irame (liftin	g motor).					
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. IO >> Repair or rep CHECK LIFTING MOT Turn ignition switch C	FOR-1 rear) for foreign ob ormal? lace seat cushion f FOR-2 DFF. tor connector.	rame (liftin	g motor). and check					
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. IO >> Repair or rep CHECK LIFTING MOT Turn ignition switch C Disconnect lifting mo	FOR-1 rear) for foreign ob <u>ormal?</u> lace seat cushion f FOR-2 OFF. tor connector. erminals with batter	irame (liftin	g motor). and check					
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. O >> Repair or rep CHECK LIFTING MOT Turn ignition switch C Disconnect lifting motor te	FOR-1 rear) for foreign ob ormal? lace seat cushion f FOR-2 DFF. tor connector. erminals with batter	rame (liftin	g motor). and check		ear) is not broken.			
CHECK LIFTING MOT sually the lifting motor (the inspection result no ES >> GO TO 2. O >> Repair or rep CHECK LIFTING MOT Turn ignition switch C Disconnect lifting motor te	FOR-1 rear) for foreign ob <u>ormal?</u> lace seat cushion f FOR-2 OFF. tor connector. erminals with batter	rame (liftin	g motor). and check		ear) is not broken.			

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TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TILT MOTOR

Description

- The tilt motor is installed to the steering column assembly.
- The tilt motor is activated with the automatic drive positioner control unit.
- The steering column is tilted upward/downward by changing the rotation direction of tilt motor.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TILT MOTOR" in "Active test" mode using CONSULT-III.
- 3. Check the tilt motor operation.

Test item		Description	
	OFF		Stop
TILT MOTOR	UP	Steering tilt	Upward
	DWN		Downward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-132, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654257

1. CHECK TILT MOTOR POWER SUPPLY

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

(+) Tilt & telescopic motor		()	Co	Condition		
Connector	Terminal	•			(Approx.)	
				OFF	0	
	3				UP	0
M40	M49	Cround	TILT MOTOR	DWN (down)	Battery voltage	
10149		Ground		OFF	0	
4	4			UP	Battery voltage	
				DWN (down)	0	

Is the inspection result normal?

YES >> Replace tilt motor. (Built in steering column assembly.) Refer to <u>ST-21, "WITH ELECTRIC</u> <u>MOTOR : Exploded View"</u>.

NO >> GO TO 2.

2. CHECK TILT MOTOR CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000005654255

INEOID:000000005654256

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit	The a lefe	Tilt & telescopic motor					
Connector	Terminal	Connector	Terminal	Continuity				
M52	35 42	- M49	4	Existed				
Check continuity be	etween automatic driv	ve positioner control		ctor and ground.				
Automatic d	rive positioner control unit	t						
Connector	Termin		- Co				Continuity	
	35		Ground					
M52	42			Not existed				
CHECK TILT MOTO fer to <u>ADP-133, "Con</u> he inspection result ES >> Replace au	nponent Inspection". normal? Itomatic drive position	ner control unit. Refe		noval and Installation". T-21, "WITH ELECTRI				
				INFOID:000000005654				
CHECK SLIDING M Turn ignition switch Disconnect tilt moto Supply tilt motor te	OTOR OFF.	voltage and check op	eration.	INFOID:00000005654				
CHECK SLIDING M Turn ignition switch Disconnect tilt moto	OTOR OFF. or connector.	voltage and check op						
CHECK SLIDING M Turn ignition switch Disconnect tilt moto	OTOR OFF. or connector. rminals with battery v	voltage and check op	peration. Operatio					
CHECK SLIDING M Turn ignition switch Disconnect tilt moto Supply tilt motor te	OTOR OFF. or connector. rminals with battery v	voltage and check op						
CHECK SLIDING M Turn ignition switch Disconnect tilt moto Supply tilt motor ter (+) 4 3	OTOR OFF. or connector. rminals with battery v Terminal (-) 3 4	voltage and check op	Operatio	on				
CHECK SLIDING M Turn ignition switch Disconnect tilt moto Supply tilt motor te (+) 4 3 the inspection result 'ES >> Tilt motor is IO >> Replace til	OTOR OFF. or connector. rminals with battery v Terminal (-) 3 4 normal? s OK.		Operatio Up Down	on				
CHECK SLIDING M Turn ignition switch Disconnect tilt moto Supply tilt motor te (+) 4 3 the inspection result 'ES >> Tilt motor is IO >> Replace til	OTOR OFF. or connector. rminals with battery v Terminal (-) 3 (-) 3 4 normal? s OK. t motor. (Built in st		Operatio Up Down	on				
CHECK SLIDING M Turn ignition switch Disconnect tilt moto Supply tilt motor te (+) 4 3 the inspection result ES >> Tilt motor is O >> Replace til	OTOR OFF. or connector. rminals with battery v Terminal (-) 3 (-) 3 4 normal? s OK. t motor. (Built in st		Operatio Up Down	on				

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC MOTOR

Description

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

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TELESCO MOTOR" in "Active test" mode using CONSULT-III.
- 3. Check the telescopic motor operation.

	Description	
OFF		Stop
FR	Steering telescopic	Forward
RR		Backward
	FR	OFF FR Steering telescopic

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-134, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654261

1.CHECK TELESCOPIC MOTOR POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect tilt & telescopic motor connector.
- 3. Turn ignition switch ON.
- 4. Perform "Active test" ("TELESCO MOTOR") using CONSULT-III
- 5. Check voltage between tilt & telescopic motor harness connector and ground.

(+) Tilt & telescopic motor		(-)	Con	dition	Voltage (V) (Approx.)	
Connector	Terminal				(
				OFF	0	
	1		TELESCOPIC MO-	FR (forward)	0	
1440		Orrectored		RR (backward)	Battery voltage	
M49		Ground	TOR	OFF	0	
2			FR (forward)	Battery voltage		
				RR (backward)	0	

Is the inspection result normal?

YES >> Replace telescopic motor. (Built in steering column assembly.) Refer to <u>ST-21, "WITH ELECTRIC</u> <u>MOTOR : Exploded View"</u>.

2. CHECK TELESCOPIC MOTOR CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000005654259

INEOID:000000005654260

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

	Automatic drive posi		11	Tilt & telescopic motor		
	Connector	Terminal	Connecte	or Termina		Continuity
	M52	36	M49	2		Existed
	IVI3Z	44	10149	1		
4. C	heck continuity bet	ween automatic driv	ve positioner o	control unit harness co	onnector and	d ground.
	Automatic driv	ve positioner control unit	t		(Continuity
	Connector	Termin	al	Ground		,
	M52	36			N	ot existed
	inspection result no	44				
Refer <u>Is the</u> YES NO	inspection result no >> Replace auto >> Replace tele	TOR ponent Inspection". ormal? omatic drive position scopic motor. (Built sploded View".	ner control uni	t. Refer to <u>ADP-235,</u> lumn assembly.) Refe		
1. C⊢ 1. T 2. D	IECK SLIDING MO urn ignition switch (isconnect telescopi	TOR-2 DFF. c motor connector.				IN-01D-0000000565
1. C⊢ 1. T 2. D	IECK SLIDING MO urn ignition switch (isconnect telescopi	TOR-2 DFF. ic motor connector. ptor terminals with b	pattery voltage	and check operation		IN-01D-0000000585
1. C⊢ 1. T 2. D	IECK SLIDING MO urn ignition switch (isconnect telescopi upply telescopic mo	TOR-2 DFF. c motor connector. otor terminals with to Terminal	pattery voltage		peration	IN-01D.0000000555
1. C⊢ 1. T 2. D	IECK SLIDING MO urn ignition switch (isconnect telescopi upply telescopic mo (+)	TOR-2 DFF. c motor connector. otor terminals with b Terminal (-)	pattery voltage	0	peration	IN-01D.0000000555
1.c⊦ 1. Ti 2. D 3. S	IECK SLIDING MO urn ignition switch (isconnect telescopi upply telescopic mo	TOR-2 DFF. to motor connector. btor terminals with b Terminal (-) 1 2	battery voltage	O F		

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR MOTOR

Description

INFOID:000000005654263

It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.

Component Function Check

INFOID:000000005654264

1. CHECK DOOR MIRROR MOTOR FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "DOOR MIRROR MOTOR LH" and "DOOR MIRROR MOTOR RH" in "Active test" mode using CONSULT-III.
- 3. Check the door mirror motor operation.

Test	item	Description		
DOOR MIRROR MOTOR LH	OFF		Stop	
	L		Outward	
	R	Door mirror face	Inward	
	UP		Upward	
	DWN		Downward	

Test item		Description	
	OFF		Stop
DOOR MIRROR MOTOR RH	L		Inward
	R	Door mirror face	Outward
	UP		Upward
	DWN		Downward

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-136, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000005654265

1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+) Door mirror		()	Condition		Voltage (V) (Approx.)	
Connector	Terminal				(,	
	5		Door mirror remote control switch	UP	Battery voltage	
	5			Other than above	0	
D3 (Driver side) D33 (Passenger	6	Ground		LEFT	Battery voltage	
side)	0			Other than above	0	
	7			DOWN / RIGHT	Battery voltage	
	I			Other than above	0	

Is the inspection result normal?

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

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit connector.

-	Automatic drive po	sitioner control unit	r control unit		(driver side)	
-	Connector	Terminal	Conr	nector	Terminal	- Continuity
-		16			7	
	M51	31	C	03	5	Existed
		32			6	
	[Door mirror passenger s	ide]				
	Automatic drive po	sitioner control unit	C	Door mirror (pa	assenger side)	Continuity
	Connector	Terminal	Conr	nector	Terminal	Continuity
		14			5	
	M51	15	D	33	6	Existed
_		30			7	
	Check continuity be	etween automatic driv	e position	er control u	init connector and g	ground.
_	[Door mirror driver side]			1		
_	Automatic d	rive positioner control unit				Continuity
_	Connector	Termina	al			,
		16		(Ground	
	M51	31				Not existed
_		32				
-	[Door mirror passenger s					
_		rive positioner control unit	-			Continuity
_	Connector	Termina	al			
	N I I I	14		. (Ground	
	M51	15		-		Not existed
-		30				
Y N 3.	O >> Repair or re CHECK DOOR MIR	itomatic drive position eplace harness. ROR MOTOR	er control	unit. Refer	to <u>ADP-235, "Rem</u>	oval and Installation".
	eck door mirror moto	or. mponent Inspection".				
	he inspection result					
	ES >> GO TO 4.					
		or mirror. Refer to MI	<u>R-19, "DC</u>	OR MIRRO	<u> DR ASSEMBLY : R</u>	emoval and Installation".
1.	CHECK INTERMITT					
	fer to <u>GI-38, "Intermi</u>					
	<u></u>	<u>tterre interaorite</u> .				
	>> INSPECTION	ON END				
Co	mponent Inspec	ction				INFOID:000000005654266
	CHECK DOOR MIR					

Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-18</u>, "<u>DOOR MIRROR ASSEMBLY</u> : <u>Exploded View</u>". А

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.Refer to MIR-19, "DOOR MIRROR ASSEMBLY : Removal and Installation".

2. CHECK DOOR MIRROR MOTOR-II

- 1. Turn ignition switch OFF.
- 2. Disconnect door mirror connector.

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

Connector	Ter	minal	Operational direction
Connector	(+)	(-)	
	7	6	RIGHT
D3 (Driver side)	6	7	LEFT
D3 (Driver side) D33 (Passenger side)	5	7	UP
	7	5	DOWN

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror. Refer to MIR-19, "DOOR MIRROR ASSEMBLY : Removal and Installation".

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description

INFOID:000000005654267

INFOID:000000005654268

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- Memory indicator is equipped on the seat memory switch installed to the driver side door trim. The operation signal is inputted to the automatic drive positioner control unit when the memory switch is operated.
- The status of automatic drive positioner system can be checked according to the illuminating/flashing status.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "MEMORY SW INDCTR" in "Active test" mode using CONSULT-III.
- 3. Check the memory indicator operation.

Test item			Description		
	OFF			OFF	
MEMORY SW INDCTR	ON-1	Memory swite	ch indicator	Indicator 1: ON	
	ON-2			Indicator 2: ON	
the operation of releva	nt parts normal?				
'ES >> INSPECTIO					
IO >> Perform diag	nosis procedure. R	efer to <u>ADP-139, "Dia</u>	agnosis Procedure	<u>e"</u> .	
agnosis Procedu	re			INFOID:00000005654265	
CHECK MEMORY IN					
neck voltage between s	seat memory switch	harness connector a	nd ground.		
	(+)				
Seat	memory switch		()	Voltage (V)	
Connector				(Approx.)	
D5	5		Ground	Battery voltage	
the inspection result no	ormal?				
'ES >> GO TO 2.					
IO >> Check the					
 10A fuse [f Harness for 	No.10 located in fus	e block (J/B)]. ween memory indicate	or and fuse		
CHECK MEMORY IN		•	Ji and iuse.		
Turn ignition switch (ontrol unit and seat m	omory switch con	aactor	
				nector and seat memory	
switch harness conn					
		-			
Automatic drive posi		Seat merr	nory switch	Continuity	
Connector	Terminal	Connector	Terminal	· · · · · · · · · · · · · · · · · · ·	
MEA	12		6		
M51	12	D5	7	Existed	

Automatic drive po	ositioner control unit		Continuity	
 Connector	Terminal	Ground	Continuity	
 N/54	12	Ground	Not existed	
M51	13		NOT EXISTED	

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

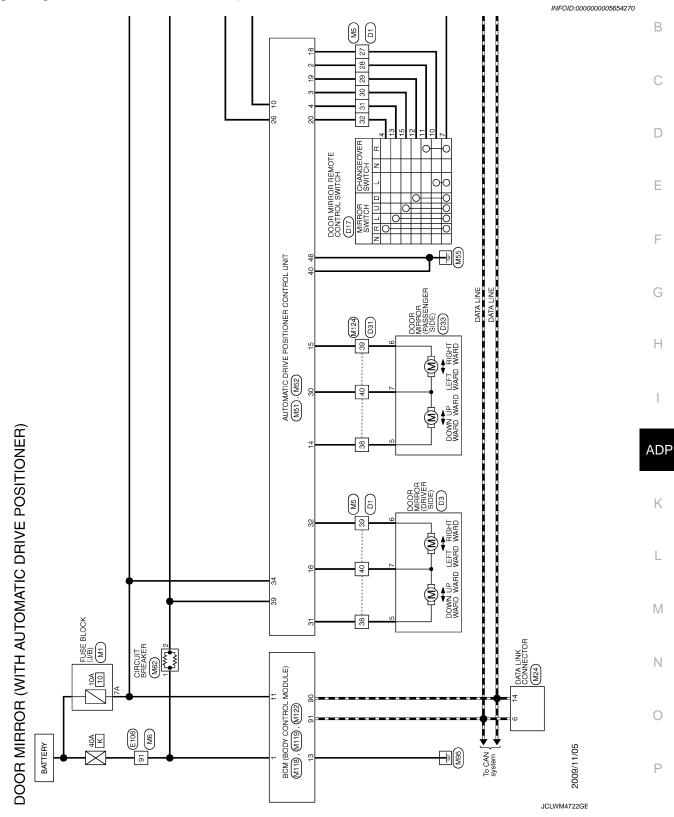
Is the inspection result normal?

- YES >> Replace seat memory switch. Refer to <u>ADP-236, "Removal and Installation"</u>.
- NO >> Repair or replace harness.

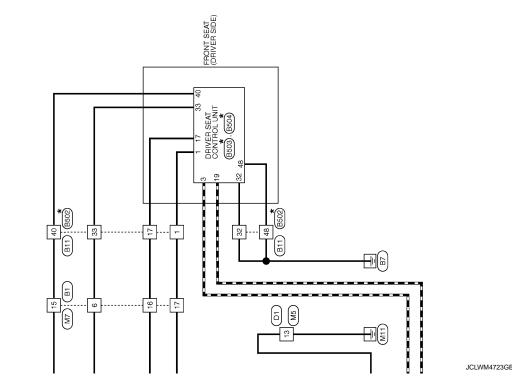
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DOOR MIRROR SYSTEM

Wiring Diagram - DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER) -



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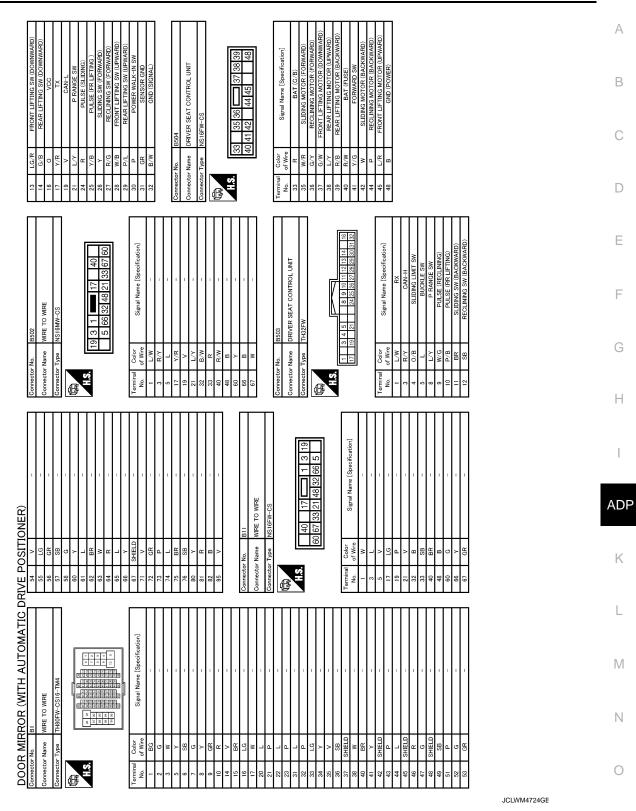




Revision: 2009 November

DOOR MIRROR SYSTEM

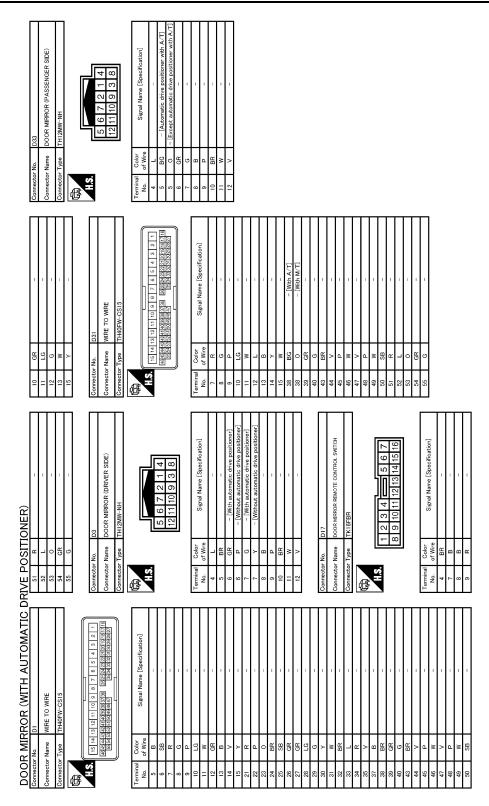
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DOOR MIRROR SYSTEM

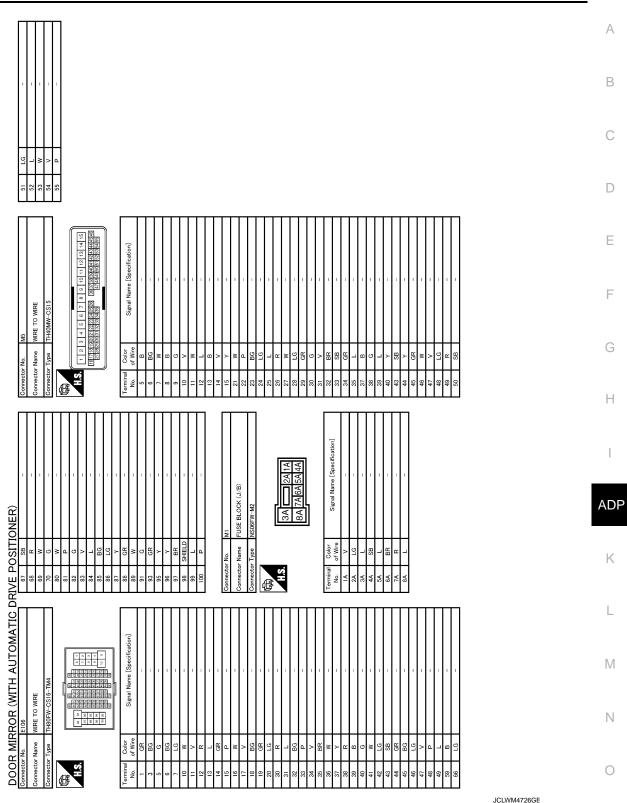
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DOOR MIRROR SYSTEM

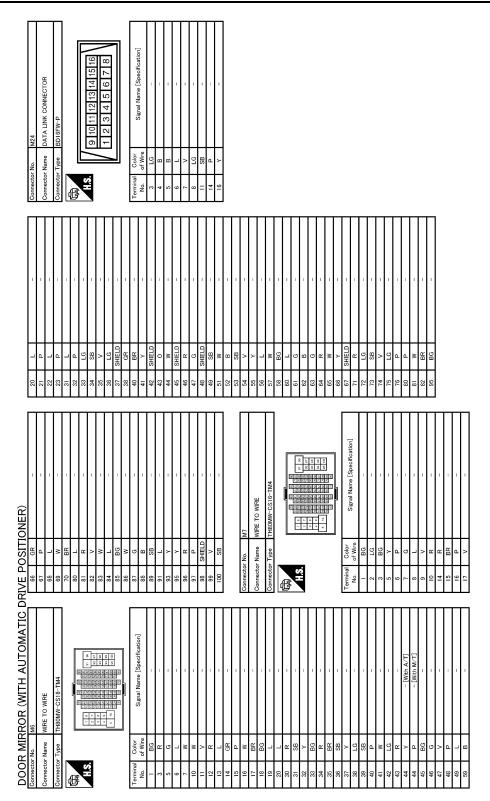
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DOOR MIRROR SYSTEM

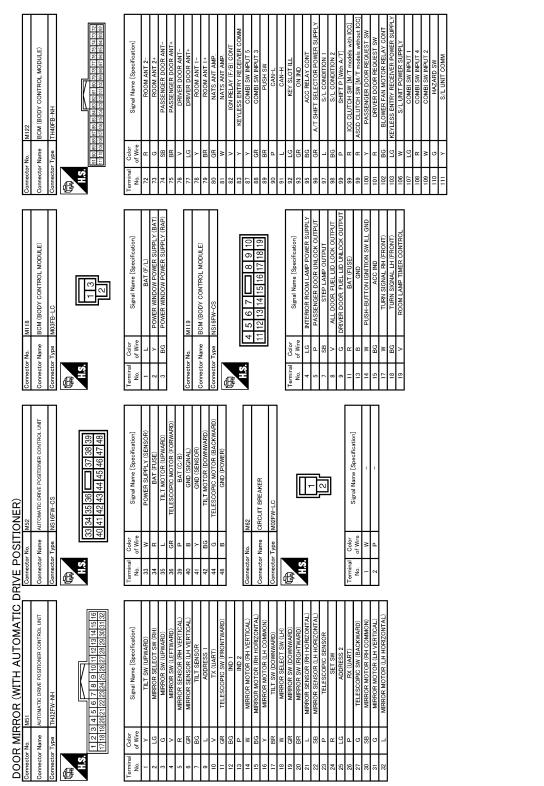
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DOOR MIRROR SYSTEM

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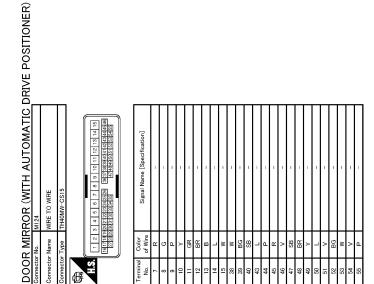
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DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER) < ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER)

Reference Value

INFOID:000000005654271 В

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VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condit	ion	Value/Status	
SET SW	Set switch	Push	ON	
SET SW	Set Switch	Release	OFF	
MEMORY SW1	Momory quitch 1	Push	ON	
WENORT SWI	Memory switch 1	Release	OFF	
MEMORY SW2	Momory switch 2	Push	ON	
WEWORT SW2	Memory switch 2	Release	OFF	
SLIDE SW-FR	Sliding switch (front)	Operate	ON	
SLIDE SW-FR	Silding Switch (nont)	Release	OFF	
SLIDE SW-RR	Cliding owitch (rear)	Operate	ON	
SLIDE SW-RR	Sliding switch (rear)	Release	OFF	
	Declining exitat (frage)	Operate	ON	
RECLN SW-FR	Reclining switch (front)	Release	OFF	
	Declinic	Operate	ON	
RECLN SW-RR	Reclining switch (rear)	Release	OFF	
LIFT FR SW-UP	Lifting owitch front (up)	Operate	ON	
	Lifting switch front (up)	Release	OFF	
LIFT FR SW-DN		Operate	ON	
	Lifting switch front (down)	Release	OFF	
		Operate	ON	
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF	
		Operate	ON	
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF	
		Up	ON	
MIR CON SW-UP	Mirror switch	Other than above	OFF	
		Down	ON	
MIR CON SW-DN	Mirror switch	Other than above	OFF	
		Right	ON	
MIR CON SW-RH	Mirror switch	Other than above	OFF	
		Left	ON	
MIR CON SW-LH	Mirror switch	Other than above	OFF	
		Right	ON	
MIR CHNG SW-R	Changeover switch	Other than above	OFF	
		Left	ON	
MIR CHNG SW-L	Changeover switch	Other than above	OFF	
		Up	ON	
FILT SW-UP	Tilt switch	Other than above	OFF	
		Down	ON	
TILT SW-DOWN	Tilt switch	Other than above	OFF	

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Con	dition	Value/Status
TELESCO SW-FR	Telescopic switch	Forward	ON
TELESCO SW-FR		Other than above	OFF
TELESCO SW-RR	Tilt switch	Backward	ON
		Other than above	OFF
FORWARD SW	Seat back	Folded down	ON
	Ocarback	Other than above	OFF
WALK-IN SW	Power walk-in switch	Pressed	ON
		Other than above	OFF
FWD LIMIT SW	Seat sliding	Front edge	ON
	ocatonang	Other than above	OFF
SEAT BELT SW	Seat belt	Fastened	ON
OLAN BEEN OW		Other than above	OFF
DETENT SW ^{*1}	A/T selector lever	P position	OFF
DETENT SW		Other than above	ON
PARK BRAKE SW ^{*2}	Parking brake	Applied	ON
PARK DRAKE SVI		Release	OFF
STARTER SW	Ignition position	Cranking	ON
	Ignition position	Other than above	OFF
SLIDE PULSE		Forward	The numeral value decreases *3
	Seat sliding	Backward	The numeral value increases *3
		Other than above	No change to numeral value ^{*3}
		Forward	The numeral value decreases *3
RECLN PULSE	Seat reclining	Backward	The numeral value increases *3
		Other than above	No change to numeral value ^{*3}
		Up	The numeral value decreases *3
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *3
		Other than above	No change to numeral value ^{*3}
		Up	The numeral value decreases *3
LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *3
		Other than above	No change to numeral value ^{*3}
MIR/SEN RH U-D	Door mirror (passenger s	ide)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger s	ide)	Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
TILT SEN	Tilt position		Change between 1.2 (close to top) 3.4 (close to bottom)
TELESCO SEN	Telescopic position		Change between 3.4 (close to top) 0.8 (close to bottom)

*1: A/T model

*2: M/T model

^{*3}: The value at the position attained when the battery is connected is regarded as 32768.

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT A 1 2 3 4 5 6 7 8 9 10111213141516 33343536 373839 17181920212223242526272829303132 Image: Constraint of the second second

PHYSICAL VALUES

Termi	nal No.	Description				
+	-	Signal name	Input/ Out- put	Con	dition	Voltage (V) (Approx)
1 L/W	Ground	UART communica- tion (RX)	Input	Ignition switch ON		2mSec/div 2v/div 2V/div
3 R/Y	_	CAN-H	_	-	_	_
4		Sliding limit switch		Seat sliding front e		0
O/B	Ground	signal	Input	Seat switch & pow pressed	er walk-in switch is	5
5	Ground	Seat belt buckle switch signal (driv-	Input	Seat belt fastened pressed	& seat switch	5
L		er side)		Other than above		0
8	Ground	Parking brake	Input	Parking brake	Applied	0
L/Y	Ground	switch signal	input		Release	Battery voltage
9 W/G	Ground	Reclining sensor signal	Input	Seat reclining	Operate	10mSec/div
					Stop	0 or 5
10 P/B	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div
					Stop	0 or 5

DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER) < ECU DIAGNOSIS INFORMATION >

+ - Signal name Input put Condition Voltage (V) (Approx) 11 (BR) Ground Siding switch backward signal Input Siding switch (Backward) 0 12 (SB) Ground Battery soltage 0 13 (LG/R) Ground Battery soltage 0 14 (BR) Ground Battery soltage 0 13 (LG/R) Ground Lifting switch (front) Input Enciring switch (front) 0 14 (CB) Ground Lifting switch (front) (front) Input Lifting switch (front) 0 14 (CB) Ground Lifting switch (front) (front) Input Lifting switch (front) Operate (downward) 0 16 (CD) Ground Lifting switch (front) (front) Out- put	Termir	nal No.	Description				
11 (R) Ground Sliding switch backward signal Input Sliding switch (SB) Ground (SB) Ground backward signal Input Reclining switch (Tori SB) 13 (LG/R) Ground Bactining switch downward signal Input Reclining switch (tori SB) Paciase (Dackward) Datery voltage 13 (LG/R) Ground Lifting switch downward signal Input Lifting switch (tori Y) Paciase (downward) Datery voltage 14 (GB) Ground Lifting switch (tori Y) Input Lifting switch (tori Y) Paciase (downward) Datery voltage 16 (O) Ground Lifting switch (tori TX) Dut Dut Paciase (downward) Dut 17 (Y/R) Ground UART communica- tion (TX) Dut put Dut Ignition switch ON Ignition switch ON Ignition switch ON 19 (L/Y) — CAN-L — — — — — 21 (LY) Ground Datention switch switch Input AT selector le- vor P position Quarticle Stop	+	-	Signal name	Out-	Con	dition	Voltage (V) (Approx)
12 (SB) Ground Reclining switch backward signal Input (LGVR) Reclining switch backward signal Operate (backward) 0 13 (LGVR) Ground Lifting switch (front) downward signal Input (front) Lifting switch (front) Input (front) Lifting switch (front) Operate (downward) 0 14 (GB) Ground Lifting switch (front) downward signal Input (rear) Lifting switch (rear) Release Battery voltage 16 (O) Ground Sensor power sup- ply Out- put — Battery voltage 0 17 (V/R) Ground UART communica- tion (TX) Out- put Ignition switch ON Imput group Imput (rear) Imput Ignition switch ON Imput group		Ground		Input	Sliding switch	(backward)	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							Battery voltage
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Ground		Input	Reclining switch	(backward)	
$ \begin{array}{c c} 1 \\ (LG/R) \\ (LG/R) \\ (LG/R) \\ (LG/R) \\ (LG/R) \\ (LG/R) \\ (CG/R) $							Battery voltage
14 (GB) Ground Lifting switch (rear) downward signal Input Lifting switch (rear) Operate (downward) 0 16 (O) Ground Sensor power sup- ply Out- put — Battery voltage 17 (Y/R) Ground UART communica- tion (TX) Out- put Ignition switch ON Ignition switch ON Ignition switch ON 19 (V) — CAN-L — — — — 19 (L/Y) Ground Defention switch switch Input A/T selector le- ver Position 0 21 (L/Y) Ground Defention switch nal Input A/T selector le- ver Position 0 24 (R Ground Stiding sensor sig- nal Input Seat stiding Operate Imput- Stop Imput- Stop Imput- stop Stop 0 or 5 25 (Y/B) Ground Lifting sensor (front) signal Input Seat lifting (front) Operate Imput- Stop		Ground		Input		(downward)	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			_				Battery voltage
16 Ground Sensor power sup- ply Out- put — Battery voltage 17 Ground UART communica- tion (TX) Out- put Ignition switch ON Ignition switch ON Ignition switch ON 19 — CAN-L — — — — (V) — CAN-L — — — — 21 Ground Detention switch switch Input A/T selector le- ver P position 0 21 Ground Detention switch switch Input A/T selector le- ver Except P position Imput Imput Imput Except P position Imput Imput Imput Imput Except P position Imput <		Ground		Input		(downward)	
(0)Studingplyput			_		()	Release	Battery voltage
$ \begin{array}{c c c c c c c c c } \hline 17 \\ (Y/R) \\ \hline Ground \\ \hline UART communica- \\ ion (TX) \\ \hline ution (TX) \\$		Ground				_	Battery voltage
(V) \square CANCL \square <th< td=""><td></td><td>Ground</td><td></td><td></td><td>Ignition switch ON</td><td>l</td><td></td></th<>		Ground			Ignition switch ON	l	
$\begin{bmatrix} 21\\ (L/Y) \\ R \end{bmatrix} \begin{bmatrix} Ground \\ Betention switch \\ switch \end{bmatrix} \begin{bmatrix} Input \\ ver \end{bmatrix} \begin{bmatrix} A/T selector le-ver \\ ver \end{bmatrix} \begin{bmatrix} Except P position \end{bmatrix} \begin{bmatrix} 20mSec/div \\ uutuutuutuutuutuutuutuutuutuutuutuutuut$		—	CAN-L	—	-	_	_
$\frac{1}{(R)} \begin{bmatrix} 24\\ (R \end{bmatrix} \\ Ground \end{bmatrix} \begin{bmatrix} Sliding sensor sig- \\ nal \end{bmatrix} \\ lnput \end{bmatrix} Beat sliding \\ Seat sliding \\ East sliding \\ Seat sliding \\ Input \end{bmatrix} \\ Seat sliding \\ Seat sliding \\ Beat sliding \\ Stop \\ Operate \\ \hline 10mSec/div \\ 2V/div \\ JMJA011922 \\ \hline Stop \\ 0 or 5 \\ \hline 10mSec/div \\ JMJA011922 \\ \hline Stop \\ Operate \\ \hline 10mSec/div \\ JMJA011922 \\ \hline Stop \\ Operate \\ \hline 10mSec/div \\ JMJA011922 \\ \hline Stop \\ Input \\ Seat lifting (front) \\ \hline Operate \\ \hline 10mSec/div \\ JMJA011922 \\ \hline Stop \\ Input \\ Input \\ Input \\ Seat lifting (front) \\ \hline Operate \\ \hline Input \\ Seat lifting (front) \\ Input \\ In$		Ground		Input			20mSec/div
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
25 (Y/B) Ground Lifting sensor (front) signal Input Seat lifting (front) Operate 10mSec/div Imput		Ground		Input	Seat sliding	Operate	
25 (Y/B) Ground Lifting sensor (front) signal Input Seat lifting (front) Seat lifting (front) Operate						Stop	
Stop 0 or 5		Ground		Input	Seat lifting (front)		
						Stop	0 or 5

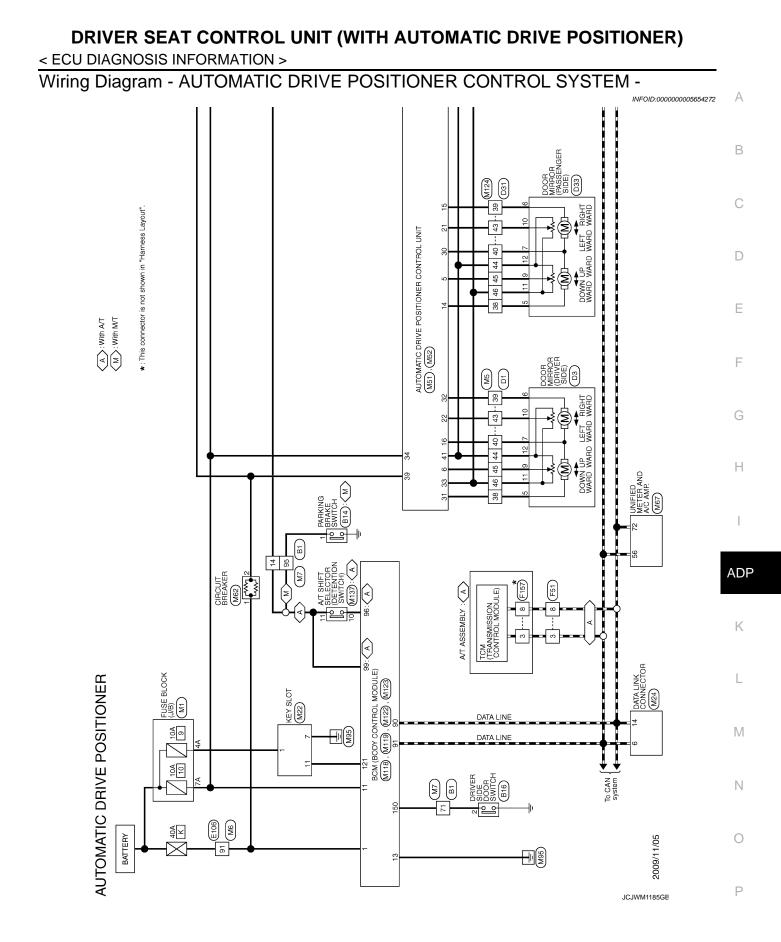
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DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER) < ECU DIAGNOSIS INFORMATION >

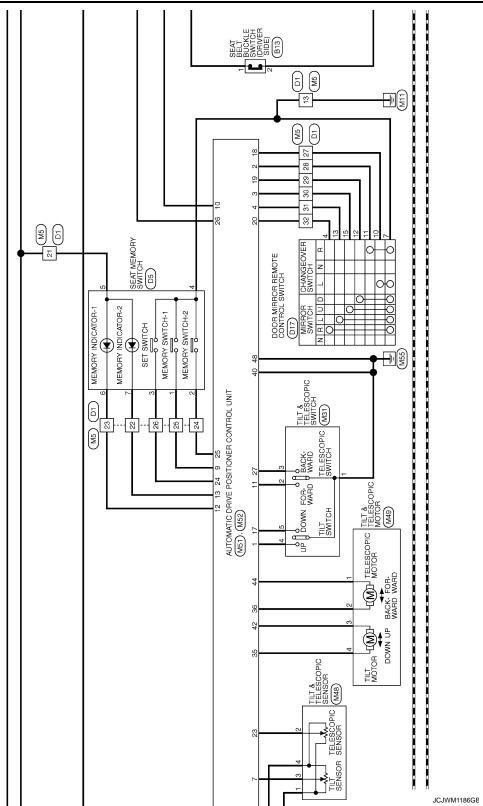
Termi	nal No.	Description				
+	-	Signal name	Input/ Out- put	Con	dition	Voltage (V) (Approx)
26 (Y)	Ground	Sliding switch for- ward signal	Input	Sliding switch	Operate (forward)	0
(-)					Release	Battery voltage
27 (R/G)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
					Release	Battery voltage
28 (W/B)	Ground	Lifting switch (front) upward signal	Input	Seat lifting switch (front)	Operate (upward)	0
· · ·				· · ·	Release	Battery voltage
29 (P/L)	Ground	Lifting switch (rear) upward signal	Input	Seat lifting switch (rear)	Operate (upward)	0
(- , _)				()	Release	Battery voltage
30	Ground	Power walk-in	Input	Power walk-in	Pressed	0
(P)		switch signal		switch	Other than above	Battery voltage
31 (GR)	Ground	Sensor ground	_	-	-	0
32 (B/W)	Ground	Ground (signal)	_	-	_	0
33 (R)	Ground	Power source (C/B)	Input	_		Battery voltage
35 (W/R)	Ground	Sliding motor for- ward output	Out- put	Seat sliding	Operate (forward)	Battery voltage
(**/14)		ward output	put		Release	0
36 (G/Y)	Ground	Reclining motor for- ward output signal	Out- put	Seat reclining	Operate (forward)	Battery voltage
(0,1)		ward output signal	pu		Release	0
37 (G/W)	Ground	Lifting motor (front) downward output	Out- put	Seat lifting (front)	Operate (downward)	Battery voltage
(0/11)		dominala output	put		Stop	0
38 (L/Y)	Ground	Lifting motor (rear) upward output	Out- put	Seat lifting (rear)	Operate (upward)	Battery voltage
(-/ • /			Pur		Stop	0
39 (R/B)	Ground	Lifting motor (rear) downward output	Out- put	Seat lifting (rear)	Operate (downward)	Battery voltage
		asimilard output	Put		Stop	0
40 (R/W)	Ground	Power source (Fuse)	Input	-	_	Battery voltage
				Seat back is flode walk-in switch pre	d down and power ssed	0
41 (Y/G)	Ground	Forward switch sig- nal	Input	Seat back is fold u is operation	p and seat rclining	battery voltage
				Seat back is fold u in switch is presse	up and power walk- ed	5
42 (\\/)	Ground	Sliding motor back- ward output	Out- put	Seat sliding	Operate (backward)	Battery voltage
(W) Ground	พลาน บนเมนเ	pui		Stop	0	

DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER) < ECU DIAGNOSIS INFORMATION >

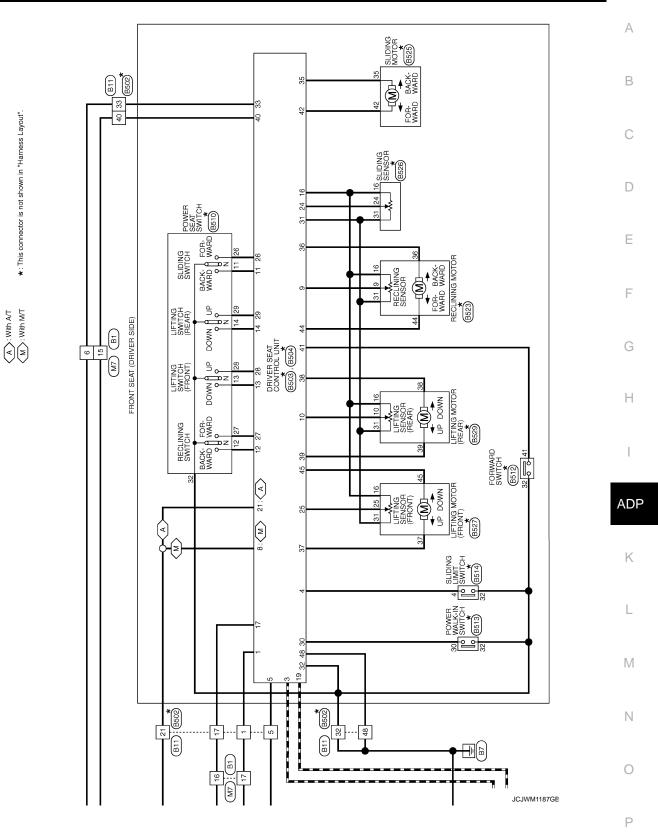
Termi	nal No.	Description				
+	-	Signal name	Input/ Out- put	Cond	dition	Voltage (V) (Approx)
44 (P)	Ground	Reclining motor backward output	Out- put	Seat reclining	Operate (backward)	Battery voltage
(F)		backwaru ouipui	put		Stop	0
45 (L/R)	Ground	Lifting motor (front)	Out- put	Seat lifting (front)	Operate (upward)	Battery voltage
(Ľ/Ҡ)		upwaru output	put		Stop	0
48 (B)	Ground	Ground (power)	_	<u> </u>		0



< ECU DIAGNOSIS INFORMATION >

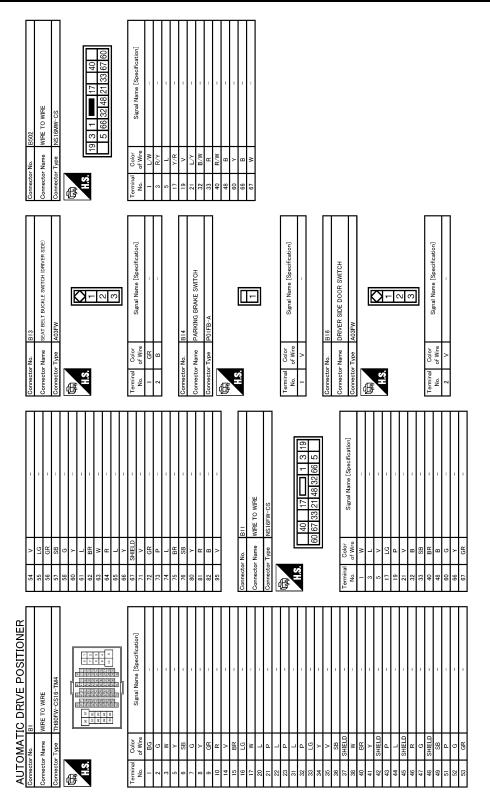


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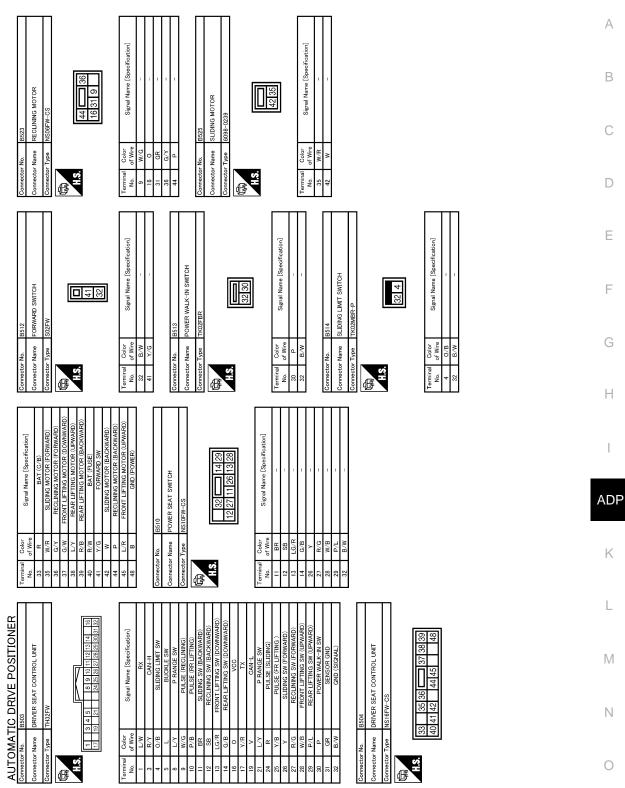
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< ECU DIAGNOSIS INFORMATION >



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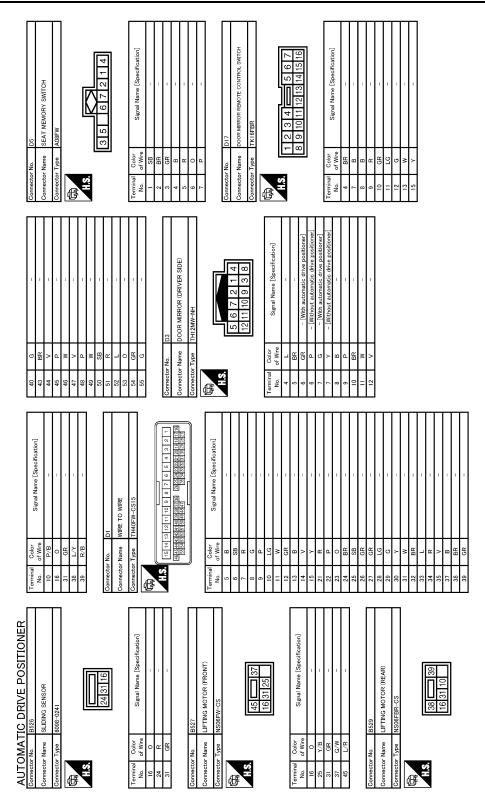
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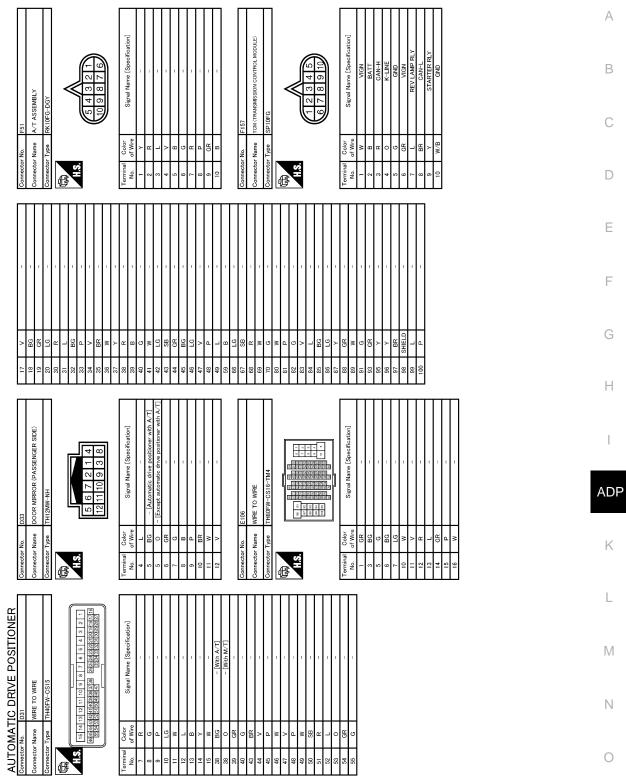
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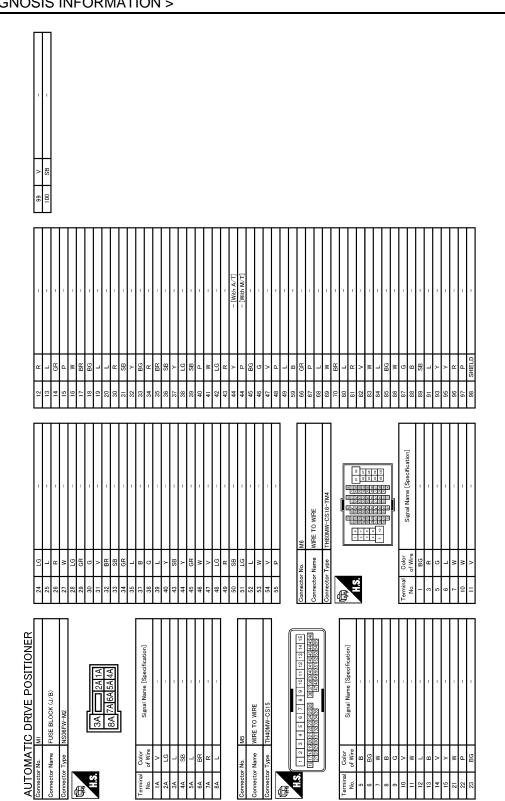
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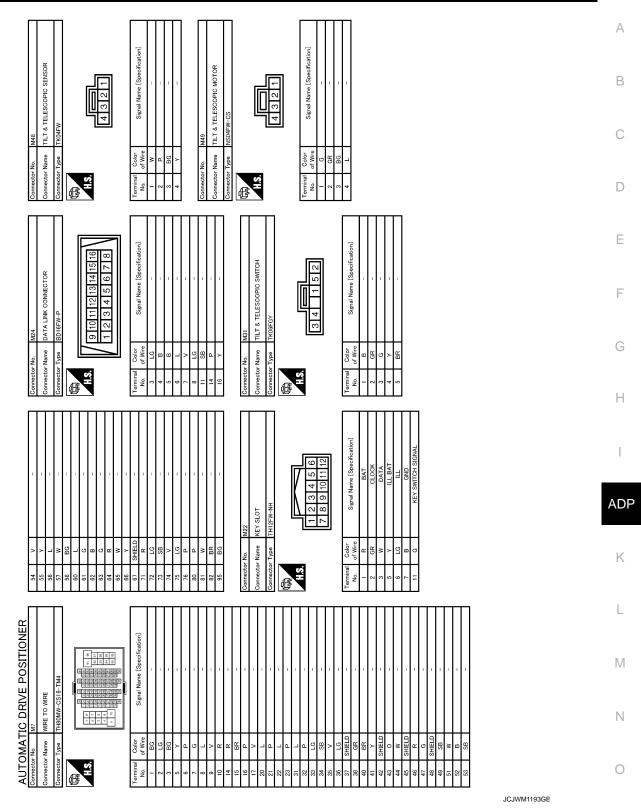
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DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER) < ECU DIAGNOSIS INFORMATION >



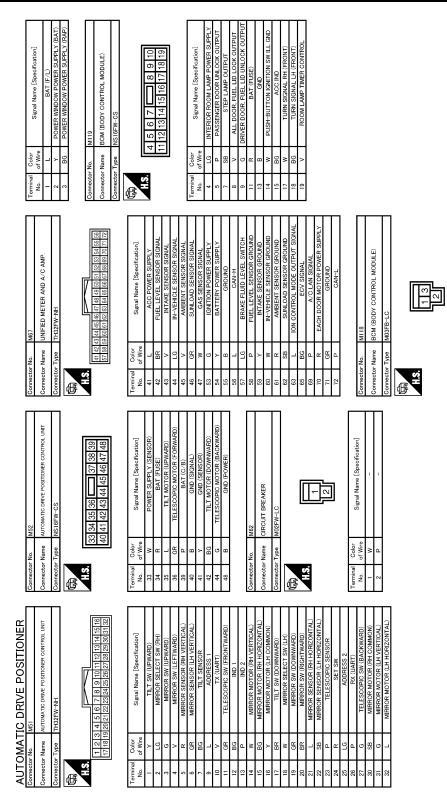
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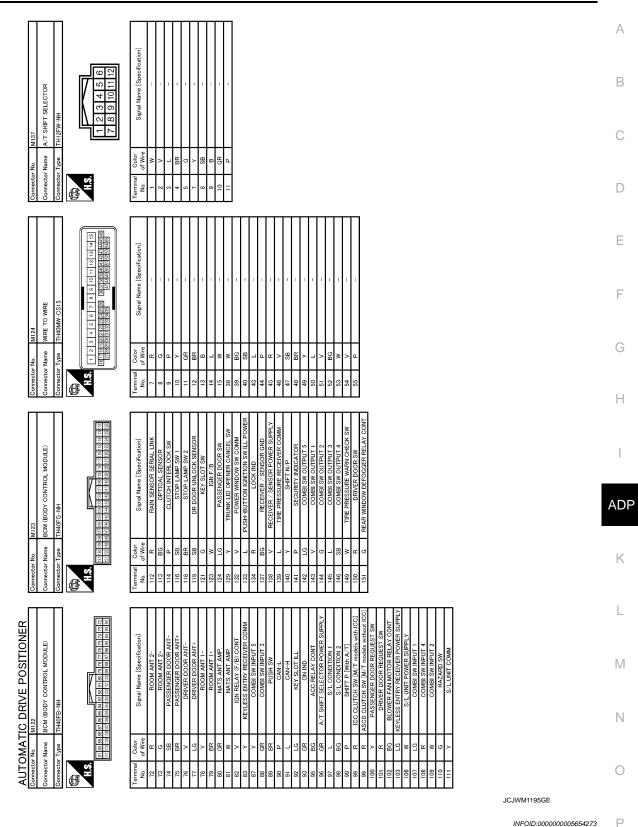
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< ECU DIAGNOSIS INFORMATION >



JCJWM1194GE

< ECU DIAGNOSIS INFORMATION >



Fail Safe

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

< ECU DIAGNOSIS INFORMATION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	0 A.N	U1000	With ADP: <u>ADP-48</u>
	CAN communication*1	01000	Without ADP: <u>ADP-48</u>
Only manual functions operate normally.	Tilt sensor*1	B2118	With ADP: <u>ADP-53</u>
	The sensor	DZIIO	Without ADP: <u>ADP-53</u>
	Telescopic sensor	B2119	<u>ADP-56</u>
	Detent switch	B2126	<u>ADP-59</u>
	Parking brake switch	B2127	<u>ADP-61</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-63</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-49</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-51</u>

*1: Driver seat without automatic driver positioner system display only "U1000 CAN COMM CIRCUIT" and "B2112 SEAT SLIDE".

DTC Index

INFOID:000000005654274

CONSULT-III	Tim	ing ^{*1}		
display	Current mal- function function		Item	Reference page
CAN COMM CIRCUIT*2	0	1-39	CAN communication	With ADP: <u>ADP-48</u>
[U1000]	0	1-39	CAN communication	Without ADP: <u>ADP-48</u>
SEAT SLIDE*2	0	1-39	Sast alida matar autaut	With ADP: ADP-49
[B2112]	0	1-39	Seat slide motor output	Without ADP: <u>ADP-49</u>
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	<u>ADP-51</u>
TILT SENSOR [B2118]	0	1-39	Tilt sensor input	<u>ADP-53</u>
TELESCO SENSOR [B2119]	0	1-39	Telescopic sensor input	<u>ADP-56</u>
DETENT SW* ² [B2126]	0	1-39	Detention switch condition	<u>ADP-59</u>
PARKING BRAKE [B2127]	0	1-39	Parking brake switch condition	<u>ADP-61</u>
UART COMM [B2128]	0	1-39	UART communication	<u>ADP-63</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.

*2: Driver seat without automatic driver positioner system display only "U1000 CAN COMM CIRCUIT" and "B2112 SEAT SLIDE".

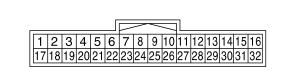
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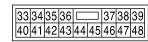
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000005654275

TERMINAL LAYOUT







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А

В

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PHYSICAL VALUES

	nal No. e color)	Description		Conditi	on	Voltage (V)	F
+	-	Signal name	Input/ Output	Contain		(Approx.)	G
1	Ground	Tilt switch upward signal	Input	Tilt switch	Operate (upward)	0	
(Y)	Ground	The switch upward signal	input		Other than above	5	Н
		Changeswar switch DLL		Changesver	RH	0	
2 (LG)	Ground	Changeover switch RH signal	Input	Changeover switch position	Neutral or LH	5	I
3	Ground	Mirror switch upward sig-	Input	Mirror switch	Operated (upward)	0	ADP
(G)	Ciouna	nal	mput	WINTON SWITCH	Other than above	5	
4	Ground	Mirror switch leftward sig-	loout	Input Mirror switch	Operated (leftward)	0	K
(V)	Giouna	nal	input	WINTON SWITCH	Other than above	5	L
5 (R)	Ground	Door mirror sensor (RH) upward/downward signal	Input	Mirror face (door n	nirror RH)	Change between 3.4 (close to peak) 0.6 (close to valley)	
6 (GR)	Ground	Door mirror sensor (LH) upward/downward signal	Input	Mirror face (door n	nirror LH)	Change between 3.4 (close to peak) 0.6 (close to valley)	M
7 (O)	Ground	Tilt sensor signal	Input	Tilt position		Change between 1.2 (close to top) 3.8 (close to bottom)	Ν
9					Press	0	
(L)	Ground	Memory switch 1 signal	Input	Memory switch 1	Other than above	5	0
10 (V)	Ground	UART communication (TX)	Output	Ignition switch ON		2mSec/div	Ρ

< ECU DIAGNOSIS INFORMATION >

	nal No. e color)	Description		Conditio		Voltage (V)
+	_	Signal name	Input/ Output	Conditio	ווכ	(Approx.)
11	Ground	Telescopic switch forward	Input	Telescopic switch	Operate (forward)	0
(GR)		signal			Other than above	5
12			0.1.1		Illuminate	1
(O)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Other than above	Battery voltage
13	Ground	Memory indictor 2 signal	Output	Momony indictor 2	Illuminate	1
(P)	Ground	Memory Indictor 2 signal	Output	Memory indictor 2	Other than above	Battery voltage
14	Ground	Door mirror motor (RH)	Output	Door mirror RH	Operate (upward)	Battery voltage
(W)	Cround	upward output	Output		Other than above	0
15	Crowned	Door mirror motor (RH)	Output	Door mirror RH	Operate (leftward)	Battery voltage
(O)	Ground	leftward output	Output		Other than above	0
		Door mirror motor (LH)		Door mirror (LH)	Operate (down- ward)	Battery voltage
16	Ground	downward output	Output		Other than above	0
(Y)		Door mirror motor (LH)			Operate (rightward)	Battery voltage
		rightward output			Other than above	0
17 (BR)	Ground	Tilt switch downward sig-	Input	Tilt switch	Operate (down- ward)	0
(BR)		nal			Other than above	5
18		Changeover switch LH		Changeover	LH	0
(P)	Ground	signal	Input	switch position	Neutral or RH	5
19	Ground	Mirror switch downward	Input	Mirror switch	Operate (down- ward)	0
(SB)		signal			Other than above	5
20		Mirror switch rightward			Operate (rightward)	0
(BR)	Ground	signal	Input	Mirror switch	Other than above	5
21 (L)	Ground	Door mirror sensor (RH) leftward/rightward signal	Input	Door mirror RH pos	sition	Change between 3.4 (close to left edge) 0.6 (close to right edge)
22 (SB)	Ground	Door mirror sensor (LH) leftward/rightward signal	Input	Door mirror LH pos	sition	Change between 0.6 (close to left edge) 3.4 (close to right edge)
23 (P)	Ground	Telescopic sensor signal	Input	Telescopic position	1	Change between 0.8 (close to top) 4.4 (close to bottom)

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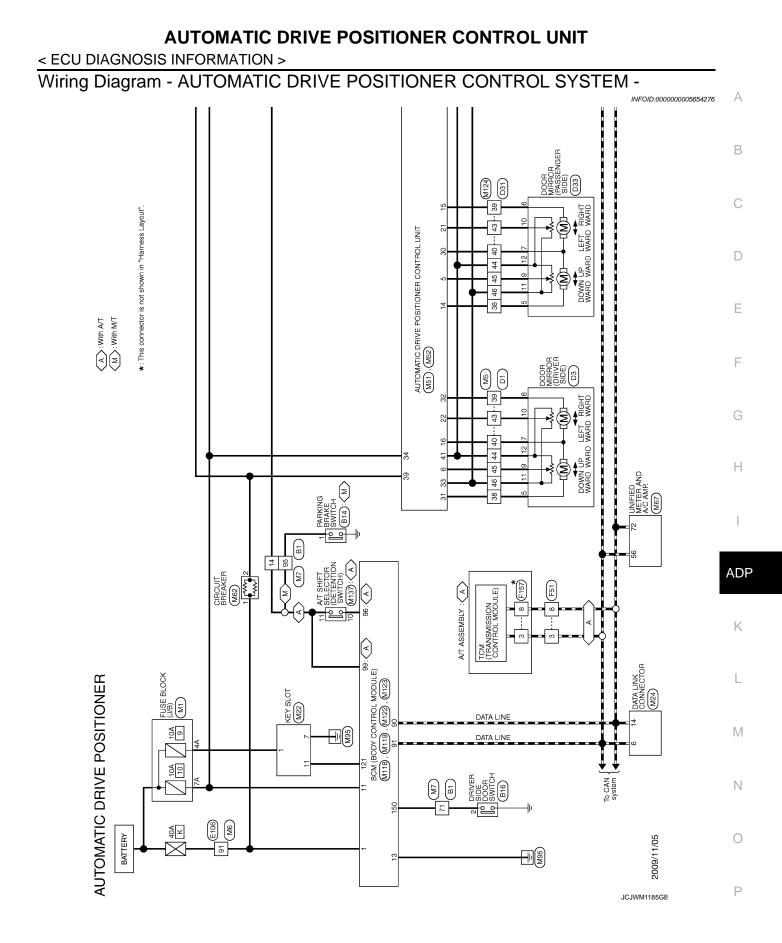
< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Conditio	on	Voltage (V)	А
+	_	Signal name	Input/ Output	Condition	UII	(Approx.)	
24 (R)	Ground	Set switch signal	Input	Set switch	Press Other than above	0 5	В
25 (LG)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press Other than above	0 5	С
26 (P)	Ground	UART communication (RX)	Input	Ignition switch ON		10mSec/div	E
27	0	Telescopic switch back-		-	Operate (backward)	0	
(G)	Ground	ward signal	Input	Telescopic switch	Other than above	5	G
		Door mirror motor (RH)			Operate (down- ward)	Battery voltage	Η
30	Ground	downward output	Output	Door mirror (RH)	Other than above	0	
(SB)		Door mirror motor (RH)			Operate (rightward)	Battery voltage	
		rightward output			Other than above	0	ADP
31	Oraciand	Door mirror motor (LH)	Outrast		Operate (upward)	Battery voltage	K
(G)	Ground	upward output	Output	Door mirror (LH)	Other than above	0	-
32	Ground	Door mirror motor (LH)	Output	Door mirror (LH)	Operate (leftward)	Battery voltage	L
(L)	Ground	leftward output	Output	Door mirror (LH)	Other than above	0	M
33 (W)	Ground	Sensor power supply	Input	_		5	-
34 (V)	Ground	Power source (Fuse)	Input	_		Battery voltage	Ν
35	Ground	Tilt motor upward output	Output	Steering tilt	Operate (upward)	Battery voltage	0
(L)	Ground		Output	Steering tilt	Other than above	0	-
36	Oraciand	Telescopic motor forward	Outrut	Steering telescop-	Operate (forward)	Battery voltage	Ρ
(GR)	Ground	output signal	Output	ic	Other than above	0	-
39 (W)	Ground	Power source (C/B)	Input	_	1	Battery voltage	-
40 (B)	Ground	Ground	_	_		0	-

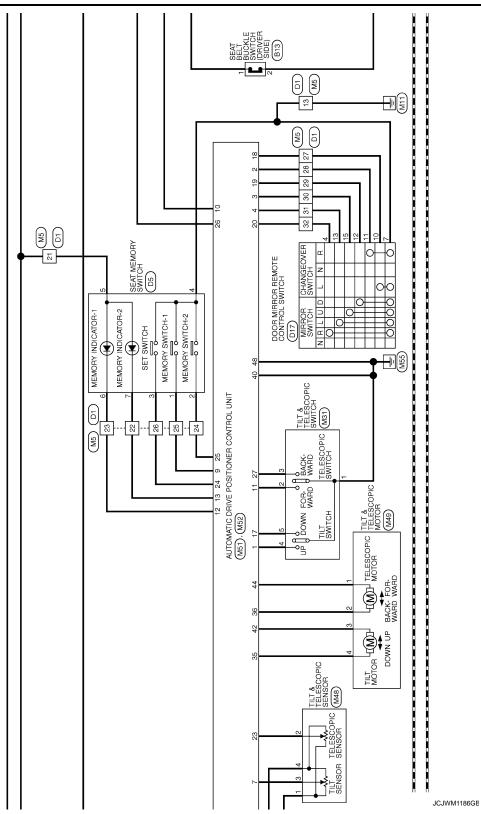
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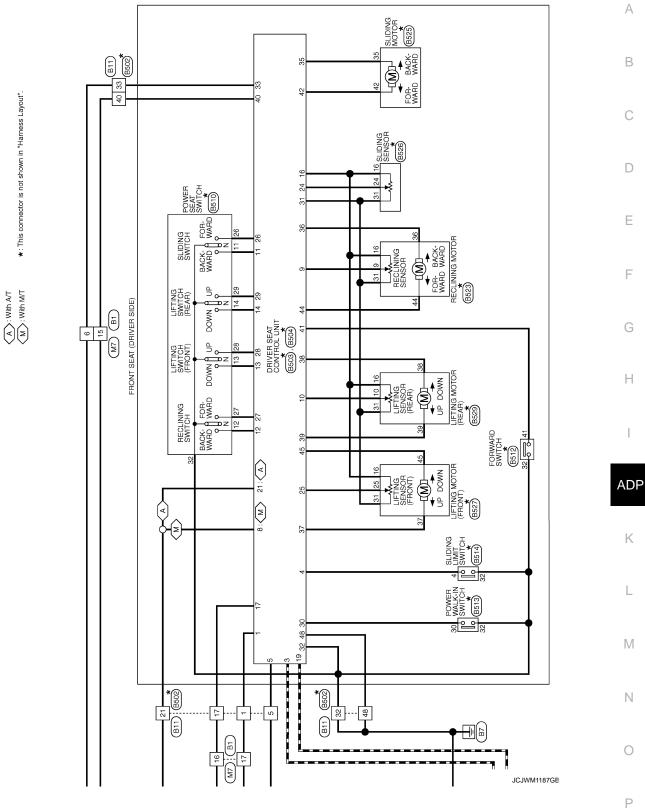
	inal No. e color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Condition		(Approx.)
41 (Y)	Ground	Sensor ground	_	_		0
42 (O)	Ground	Tilt motor downward out- put	Output	Steering tilt	Operate (down- ward)	Battery voltage
					Other than above	0
44	(-round	Telescopic motor back- ward output	Output	Steering telescop- ic	Operate (backward)	Battery voltage
(G)					Other than above	0
48 (B)	Ground	Ground	_	_		0



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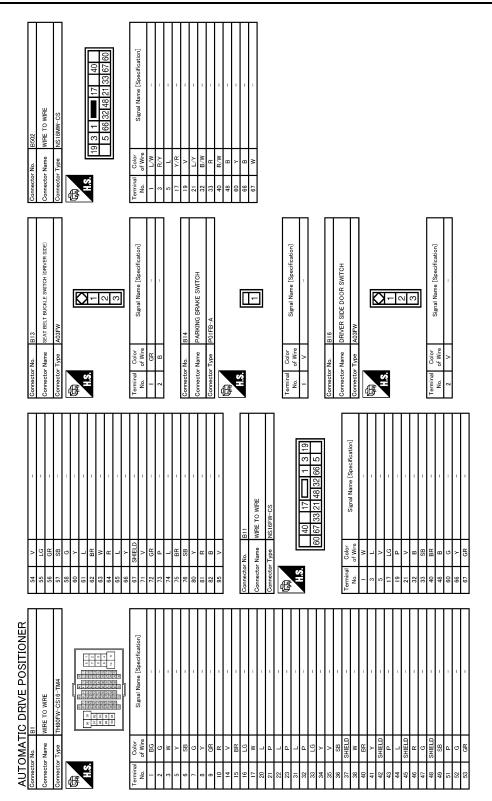


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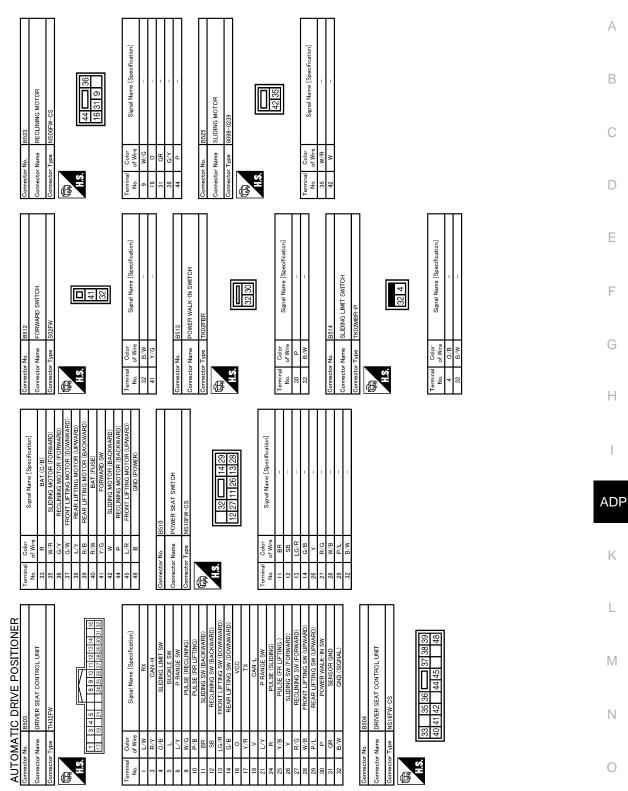
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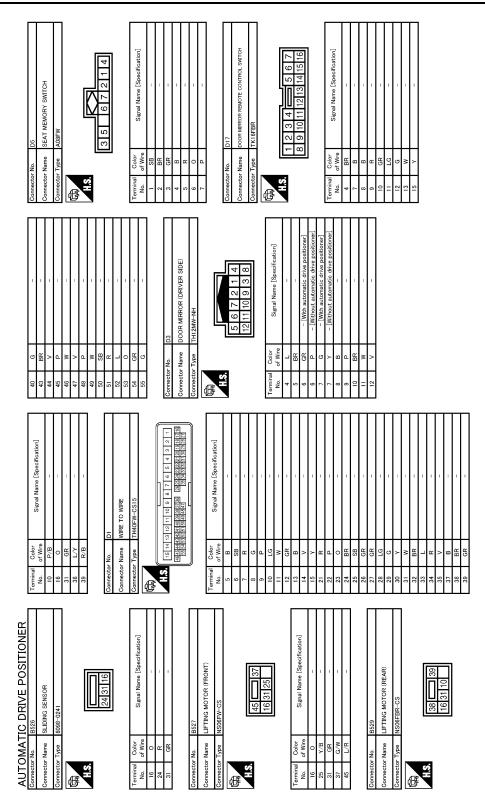
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JCJWM1189GE

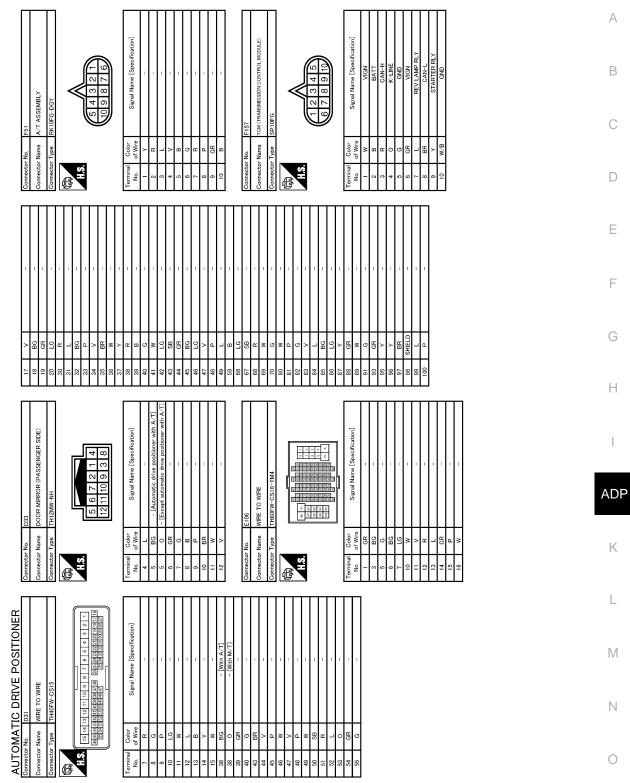
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JCJWM1190GE

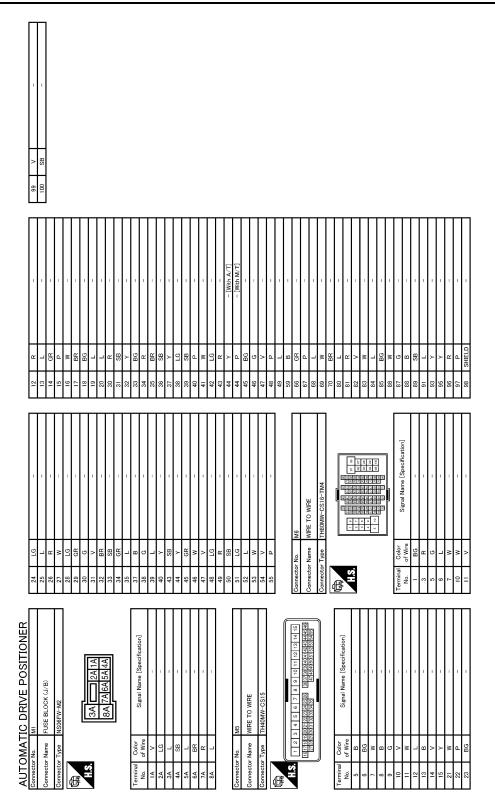
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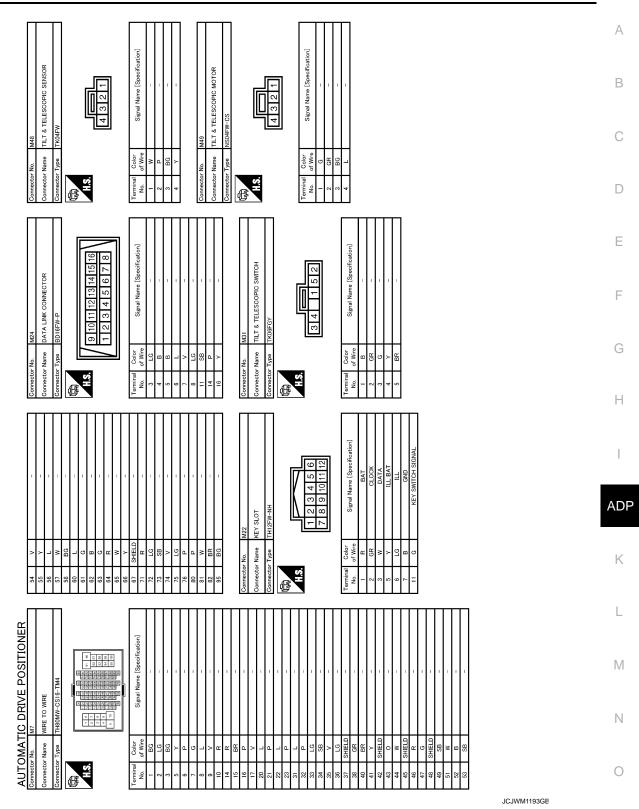
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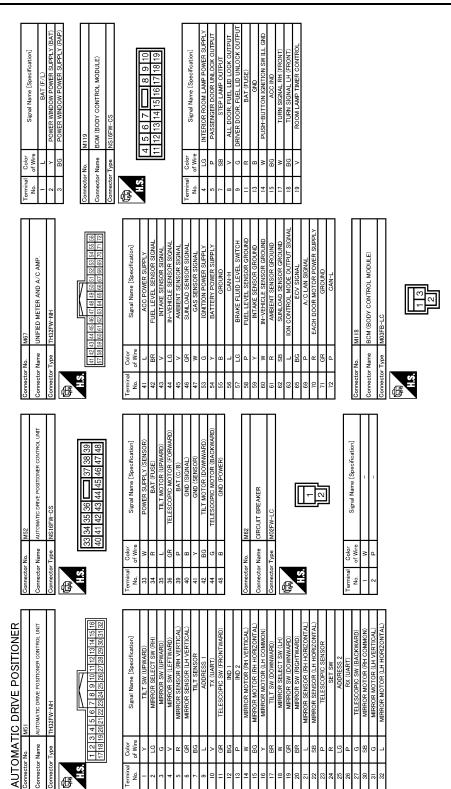


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< ECU DIAGNOSIS INFORMATION >

JCJWM1194GE

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

T 3ELECTOR	A
Connector Nu M137 Connector Nume A/T SHIFT SELECTOR Connector Nume A/T SHIFT SELECTOR Connector Nume A/T SHIFT SELECTOR Million Connector Nume A/T SHIFT SELECTOR Million Connector Nume A/T SHIFT SELECTOR Million Connector Nume Signal Nume (No. G G Signal Nume (I P P P P I B B B P P I G G Signal Nume (Signal Nume (C
No. MI24 Nume WIRE TO WIRE Nume WIRE TO WIRE Topological Topological Topological Signal Name [Specification] of Wire Signal Name [Specification]	E
Commetor No. M124 Connector Nume WITE No. of Wite 9 Connector Nume 43 F 44 P 64 V 63 K 64 V 65 V 64 V 65 V 66 V 67 V 68 V 69 V 61 V 65 V 66 V 67 V 68 V 69 V 61 V 65 V	G
Mo. M123 Nume EOM (BODY CONTROL MODULE) Type HudDFC-HI Type HudDFC-HI Eld and michalization of the section of the se	ADP
Connector No. M123 Connector Name EXIII Connector Name EXIII Connector Type TH400 Connector Type EXIII ExiII EXIIII EXIIII EXIIII EXIIII EXIIII EXIIII EXIIII EXIIII EXIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	K
IC DRIVE POSITIONER MI22 Edw (Boby CONTROL MODUE) THAGED-NH THAGFE-NH Signal Name [Specification] Signal Name [Specification] ROOM MIT 2- PASSENGER DOOR ANT- PASSENGER	L
AUTOMATIC DRIVE DOSITIONER formeter Nu. AUTOMATIC DRIVE DOSITIONER formeter Nu. Connector Nue. Presenter Door Anti- Connector Nue. Connector Nue. Connector Nue. Sun Auti- Connector Nue. Presenter Door Auti- Connector Nue. Sun Auti- <td>N</td>	N

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< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000005887713

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT/AUTO	Off
	Front wiper switch INT/AUTO	On
	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi- tion
	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOR SW-RR	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-RL	NOTE: The item is indicated, but not monitored.	Off

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off	
	Other than power door lock switch LOCK	Off	_
CDL LOCK SW	Power door lock switch LOCK	On	_
	Other than power door lock switch UNLOCK	Off	-
CDL UNLOCK SW	Power door lock switch UNLOCK	On	_
	Other than driver door key cylinder LOCK position	Off	_
KEY CYL LK-SW	Driver door key cylinder LOCK position	On	
	Other than driver door key cylinder UNLOCK position	Off	
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On	_
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off	
	Hazard switch is OFF	Off	-
HAZARD SW	Hazard switch is ON	On	
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off	_
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off	-
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off	_
TR CANCEL SV	Trunk lid opener cancel switch ON	On	
	Trunk lid opener switch OFF	Off	
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	On	_
	Trunk lid closed	Off	_
TRNK/HAT MNTR	Trunk lid opened	On	_
	LOCK button of the Intelligent Key is not pressed	Off	-
RKE-LOCK	LOCK button of the Intelligent Key is pressed	On	
	UNLOCK button of the Intelligent Key is not pressed	Off	-
RKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On	
	TRUNK OPEN button of the Intelligent Key is not pressed	Off	-
RKE-TR/BD TRUNK OPEN button of the Intelligent Key is not pressed TRUNK OPEN button of the Intelligent Key is pressed		On	
	PANIC button of the Intelligent Key is not pressed	Off	-
RKE-PANIC	PANIC button of the Intelligent Key is pressed	On	-
	UNLOCK button of the Intelligent Key is not pressed	Off	
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On	
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simulta- neously	Off	
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On	_
	Bright outside of the vehicle	Close to 5 V	_
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V	-
	Driver door request switch is not pressed	Off	_
REQ SW -DR	Driver door request switch is pressed	On	—
	Passenger door request switch is not pressed	Off	-
REQ SW -AS	Passenger door request switch is pressed	On	-
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	_
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	

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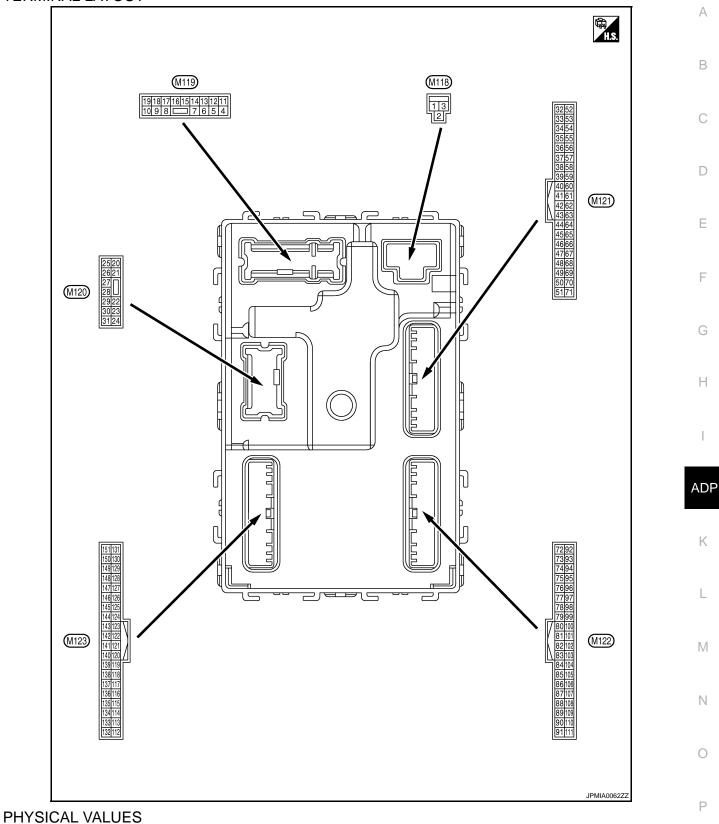
Monitor Item	Condition	Value/Status
REQ SW -BD/TR	Trunk lid opener request switch is not pressed	Off
	Trunk lid opener request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
10311300	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	The clutch pedal is not depressed	Off
	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is nor- mal	On
	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
DETE/CANCL SW	 Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models) 	Off
DETE/CANCE SW	Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models)	On
	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
S/L-LUCK	Steering is locked	On
	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
S/L RELAT-F/D	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
UNER SEN-DR	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
F 0311 3W - IF DW	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
DETE SW -IF DW	Selector lever in P position	On
SFT PN -IPDM	 Selector lever in any position other than P and N (Except M/T models) The clutch pedal is not depressed (M/T models) 	Off
	Selector lever in P or N position The clutch pedal is depressed	On
SET D MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
OFT N. MET	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
	Steering is unlocked	Off
S/L LOCK-IPDM	Steering is locked	On
	Steering is locked	Off
S/L UNLK-IPDM	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
3/L RELAT-REQ	Steering lock system are not the LOCK condition or the changing condition from LOCK to UNLOCK	On
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
D OK FLAG	Steering is locked	Reset
	Steering is unlocked	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID reg- istered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRM ID1	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
1P 4	The ID of fourth Intelligent Key is registered to BCM	Done
	The ID of third Intelligent Key is not registered to BCM	Yet
TP 3	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
TP 2	The ID of second Intelligent Key is registered to BCM	Done
TD 4	The ID of first Intelligent Key is not registered to BCM	Yet
TP 1	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
	ID of front LH tire transmitter is registered	Done
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



	nal No.	Description			-	Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
1 (L)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (DFF	12 V
3 (BG)	Ground	P/W power supply (RAP)	Output	Ignition switch (N	12 V
					np battery saver is activated. or room lamp power supply)	0 V
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V
5	Ground	Passenger door UN-	Outrout	Passenger	UNLOCK (Actuator is activated)	12 V
(P)	Ground	LOCK	Output	door	Other than UNLOCK (Ac- tuator is not activated)	0 V
7	Ground	Stan Jama	0.1.1	Stop Jamp	ON	0 V
(SB)	Ground	Step lamp	Output	Step lamp	OFF	12 V
8	Ground	All doors, fuel lid	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V
(V)	Ground	LOCK	Output		Other than LOCK (Actuator is not activated)	0 V
9	Ground	Driver door, fuel lid	Output	Driver door,	UNLOCK (Actuator is activated)	12 V
(G)	Ground	UNLOCK	Output	fuel lid	Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch (N	0 V
					OFF	0 V
14	Ground	Push-button ignition switch illumination	Output	Tail lamp		NOTE: When the illumination brighten- ing/dimming level is in the neutral position.
(W)	Clouid	ground	Output		ON	10 0 2 ms JSNIA0010GB
15 (BC)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(BG)	(BG) Ground Accenticator ramp		Calput	-	ACC	0 V

	nal No. color)	Description			O	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 10 15 15 15 15 15 15 15 15 15 15
					Turn signal switch OFF	0.0 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	
19		Room lamp timer		Interior room	OFF	6.5 V 12 V
(V)	Ground	control	Output	lamp	ON	0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	lgnition switch ON	Turn signal switch RH	(V) 15 10 5 0
					OPEN	6.5 V
23		T 1 (1)		-	(Trunk lid opener actuator is activated)	12 V
(L)	Ground	Trunk lid open	Output	Trunk lid	Other than OPEN (Trunk lid opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 15 10 5 0 15 15 15 15 15 15 15 15 15 15 15 15 15
30				Trunk room	ON	6.5 V 0 V
(P)	Ground	Trunk room lamp	Output	lamp	OFF	12 V

	nal No.	Description				Value			
(Wire +	color)	Signal name	Input/ Output		Condition	(Approx.)			
34	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB			
(SB)		()	Output	Output	OFF		When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB	
35	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB			
(V)		(+)	OFF	Uuput	Output	Cupu	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1
38	Ground	Rear bumper anten-			When the trunk lid opener re- quest switch is operated with ignition switch OFF	Output lid opener re- quest switch is - operated with ignition switch	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(B)	Ground	na (–)	Culput	quest switch is operated with ignition switch			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s 1 5 0 5 0 5 0 5 0 5 0 5 1 5 0 5 0 5 0 5	

	nal No. color)	Description			0	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	\cap
39		Rear bumper anten-		When the trunk lid opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(W)	Ground	na (+)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E F
47		Ignition relay (IPDM	0.1.1		OFF or ACC	12 V	G
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V	
50 (G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 10 10 11.8 V	H I AD
					ON (Trunk lid is opened)	0 V	
				Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V	K
52	Ground	Starter relay control	Output	els)	When selector lever is not in P or N position	0 V	L
(SB)	Croana		ouput	Ignition switch ON (M/T mod-	When the clutch pedal is depressed	Battery voltage	
				els)	When the clutch pedal is not depressed	0 V	M
					ON (Pressed)	0 V	
61 (SB)	Ground	Trunk lid opener re- quest switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V	N O P
64		Intelligent Key warn-		Intelligent Key	Sounding	0 V	
(P)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	12 V	

< ECU DIAGNOSIS INFORMATION > Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name Output + _ Pressed 0 V (V) 15 10 67 Trunk lid open-Trunk lid opener Ground Input 5 0 (GR) switch er switch Not pressed 10 ms JPMIA0011GB

BCM (BODY CONTROL MODULE)

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						11.8 V
72	Ground	Room antenna 2 (-)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)		(Center console)	Guiput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1
73	Ground	Room antenna 2 (+)	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 10 10 10 10 10 10 10 10 10 10 10 10
73 (G)	Ground	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 s JMKIA0063GB

	erminal No. Description				Value			
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)	A	
74		Passenger door an-		When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 10 15 15 15 15 15 15 15 15 15 15 15 15 15	B C D	
(SB)	Ground	tenna (–)	Output	t quest switch is operated with ignition switch OFF	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
75	Ground	Passenger door an-	Output	When the pas- senger door re-	senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(BR)		tenna (+)	Cupu	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	ADP K	
76	Ground	Driver door antenna	Output	When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M	
(V)	Ground	()		ated with igni- tion switch	When Intelligent Key is not in the antenna detection area	(V) 15 10 50 1 s JMKIA0063GB	P	

	nal No.	Description				Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
77	Ground	Driver door antenna	Output	Output When the driv- er door request switch is oper- ated with igni- tion switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 s JMKIA0062GB
(LG)		(+)	Cutput		When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s 0 JMKIA0063GB
78	Ground	und Room antenna 1 (–) Output	t Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(Y)		(Instrument panel)		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB
79	79 Cround Room antenna 1 (+)		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(BR) Gr	Ground	(Instrument panel) Outp		OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s 1 JMKIA0063GB

	nal No.	Description				Value	
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)	
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
82 (V)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V 12 V	
83 Cround Remote keyless entry	Input/	During waiting		(V) 15 10 5 0 10 10 10 10 10 10 10 10 10			
(Y)		Output	When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 1 1 ms JMKIA0065GB		
						All switches OFF (Wiper volume dial 4)	(V) 15 0 5 0 2 ms JPMIA0041GB 1.4 V
	nd Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V		
			Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7	(V) 15 0 2 ms JPMIA0040GB 1.3 V			

Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + _ Output (V 15 10 5 All switches OFF Õ (Wiper volume dial 4) 2 ms JPMIA0041GB 1.4 V (V 15 10 Lighting switch HI 0 (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V 88 Combination switch Combination Ground Input (GR) **INPUT 3** switch 15 10 Lighting switch 2ND n (Wiper volume dial 4) 2 ms JPMIA0037GB 1.3 V 15 Any of the conditions be-10 low with all switches OFF n • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 2 ms JPMIA0040GB 1.3 V Push-button ig-0 V Pressed 89 Push-button ignition Ground Input nition switch (BR) switch (Push switch) Not pressed Battery voltage (push switch) 90 Input/ Ground CAN-L ____ (P) Output 91 Input/ CAN-H Ground (L) Output OFF 0 V (V 15 10 92 Key slot illumin Ground Key slot illumination Output Blinking (LG) nation 1 s JPMIA0015GB 6.5 V ON 12 V

BCM (BODY CONTROL MODULE)

	nal No. color)	Description			O and lititian	Value		
+	-	Signal name	Input/ Output		Condition	(Approx.)		
93 (GR)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage		
(GK)					ON	0 V		
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V		
(BG)	Ground	Acc relay control	Output	Ignition switch	ACC or ON	12 V		
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output		_	12 V		
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V		
(L)	0.00.00	tion No. 1	put	g.co.t	UNLOCK status	12 V		
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V		
(BG)		tion No. 2		g	UNLOCK status	0 V		
		Selector lever P posi-		Selector lever	P position	0 V		
		tion switch			Any position other than P	12 V		
99	9 ASCD clutch switch (M/T models without		ASCD clutch	OFF (Clutch pedal is de- pressed)	0 V			
(P) ^{*1} Ground (R) ^{*2}	`	Input	switch ON (Clutch pedal is not depressed)	12 V				
	ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is de- pressed)	0 V			
	T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V			
							ON (Pressed)	0 V
100 (Y)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 0 10 10 ms JPMIA0016GB 1.0 V		
					ON (Pressed)	0 V		
						0 V		
101 (R)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 10 10 10 10 10 10 10 10 10 10		
102		Blower fan motor re-			OFF or ACC	1.0 V 0 V		
(BG)	Ground	lay control	Output	Ignition switch	ON	12 V		
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch (12 V		
106	Ground	Steering lock unit	Output	Ignition switch	OFF or ACC	12 V		
(W) Ground power supply	.g.m.orr ownorr	ON	0 V					

	nal No.	Description				Value
+	color) –	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2.ms JPMIA0041GB 1.4 V
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V
107 (LG)	Ground	Combination switch INPUT 1	vitch Input	Combination switch (Wiper volume dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3 V
			Front wiper switch LO	(V) 15 0 2 ms JPMIA0038GB 1.3 V		
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

nal No.	Description				Value	А
color)	Signal name	Input/ Output		Condition	(Approx.)	A
				All switches OFF (Wiper volume dial 4)	(V) 15 10 2 ms JPMIA0041GB 1.4 V	B C D
	Combination switch		Combination	Lighting switch AUTO (Wiper volume dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3 V	E
Ground	INPUT 4	Πραι	switch	Lighting switch 1ST (Wiper volume dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V	G H I
				Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	ADF K
	color)	color) Signal name	Cround Combination switch	Crowned Combination switch	color) Signal name Input/ Output Condition - Signal name Input/ Output All switches OFF (Wiper volume dial 4) Ground Combination switch INPUT 4 Input Combination switch Lighting switch AUTO (Wiper volume dial 4) Ground Combination switch INPUT 4 Input Combination switch Lighting switch AUTO (Wiper volume dial 4) Any of the conditions be- low with all switches OFF • Wiper volume dial 5 Any of the conditions be- low with all switches OFF • Wiper volume dial 5	Color) Signal name Input Output Condition Value (Approx.) - Signal name Input Output All switches OFF (Wiper volume dial 4) (W) (Wiper volume dial 4) Image: Condition of the condit of the condition of the condition of the condition of

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Terminal No. Description Value (Wire color) Condition Input/ (Approx.) Signal name + _ Output (V) 15 10 5 Õ All switches OFF 2 ms JPMIA0041GB 1.4 V (V 15 10 5 õ Lighting switch PASS 2 ms JPMIA0037GB 1.3 V (V 15 10 Combination 109 Combination switch switch Ō Lighting switch 2ND Ground Input INPUT 2 (W) (Wiper volume dial 4) 2 ms JPMIA0036GB 1.3 V (V 15 10 Front wiper switch INT/ 0 AUTO 2 ms JPMIA0038GB 1.3 V (V 15 10 ŏ Front wiper switch HI 2 ms JPMIA0040GB 1.3 V ON 0 V 110 Ground Hazard switch Input Hazard switch (G) ŏ OFF 10 ms JPMIA0012GB 1.1 V

BCM (BODY CONTROL MODULE)

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	Terminal No. Description					Value	
(Wire +	e color)	Signal name	Input/ Output		Condition	(Approx.)	A
					LOCK status	12 V	В
111 (Y)	Ground	Ind Steering lock unit Input/ communication Output St	nput/	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB	C	
					For 15 seconds after UN- LOCK	12 V	E
					15 seconds or later after UNLOCK	0 V	F
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch (DN	(V) 15 10 10 10 10 10 10 10 10 10 10	G
			Input		When bright outside of the	8.7 V	
113 (BG)	Ground	Optical sensor		Ignition switch ON	vehicle When dark outside of the	Close to 5 V Close to 0 V	
114 (P)	Ground	Clutch interlock switch	Input	Clutch interlock switch	vehicle OFF (Clutch pedal is not depressed) ON (Clutch pedal is de- pressed)	0 V Battery voltage	ADF K
116 (SB)	Ground	Stop lamp switch 1	Input			Battery voltage	
()		Stop lamp switch 2		Stop lamp	OFF (Brake pedal is not depressed)	0 V	L
118	Ground	(Without ICC)	Input	switch	ON (Brake pedal is de- pressed)	Battery voltage	M
(BR)	Ground	Stop lamp switch 2	Input		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V	
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage	Ν
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 10 ms JPMIA0012GB 1.1 V	O P
					UNLOCK status (Unlock switch sensor ON)	0 V	

	nal No.	Description				Value
(Wire +	color) –	Signal name	Input/ Output		Condition	(Approx.)
121	Ground	Key slot switch	Input	slot	gent Key is inserted into key	12 V
(G)		·		When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC ON	0 V Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close) ON (Door open)	(V) 15 10 10 10 ms JPMIA0011GB 11.8 V 0 V
129 (Y)	Ground	Trunk lid opener can- cel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 50 10 ms 10 ms JPMIA0012GB 1.1 V 0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C		(V) 15 10 10 10 10 10 10 10 10 10 10
					ON (Tail lamps OFF)	9.5 V
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.
134				LOCK indicator	OFF OFF	0 V Battery voltage
(R)	Ground	LOCK indicator lamp	Output	lamp	ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C	DN	0 V

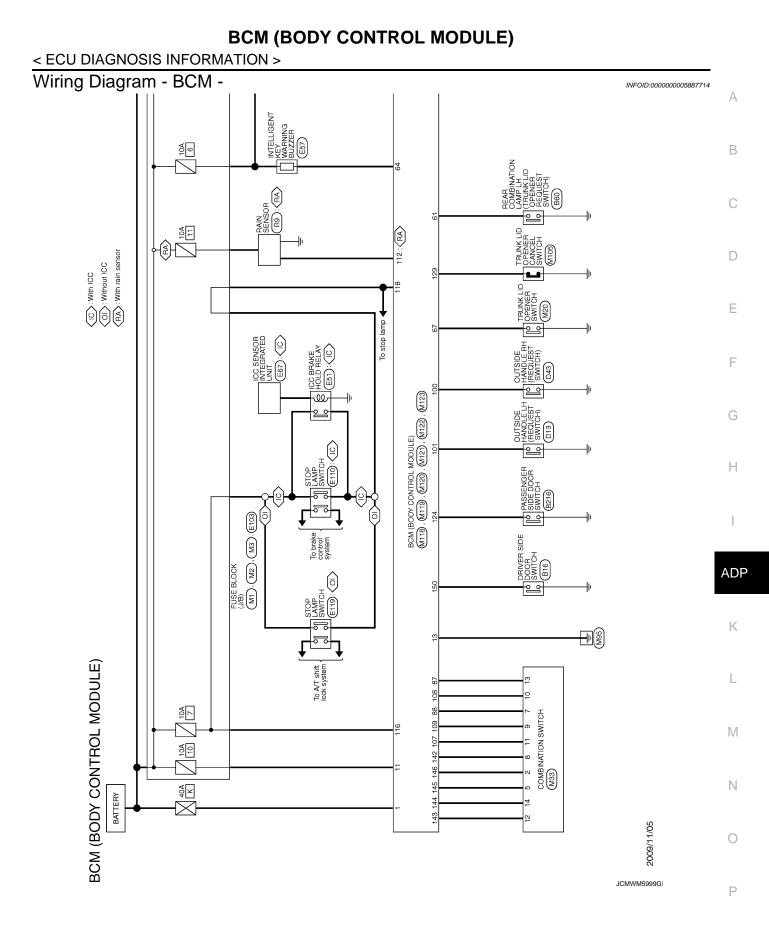
	nal No.	Description			0	Value
(vvire +	color)	Signal name	Input/ Output		Condition	(Approx.)
138		Receiver and sensor			OFF	0 V
(V)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 4 2 0 → ↓ 0.2s OCC3881D
(L)	Sidura	er communication	Output ON	When receiving the signal from the transmitter	(V) 6 4 2 0 + 0.2s - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	
140	Ground	Selector lever P/N	Innut	Selector lever	P or N position	12 V
(Y)	Ground	position (A/T models)	Input		Except P and N positions	0 V
					ON	0 V
141 (P)	Ground	Security indicator	Output	Security indica- tor	Blinking	(V) 15 10 5 0 1 s
					OFF All switches OFF	JPMIA0014GB 11.3 V 12 V 0 V
					Lighting switch 1ST	
142 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper volume	Lighting switch HI Lighting switch 2ND	(V) 15 10 5 0
				dial 4)	Turn signal switch RH	2 ms JPMIA0031GB 10.7 V
					All switches OFF (Wiper volume dial 4)	0 V
143 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Front wiper switch HI (Wiper volume dial 4) Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 2	(V) 15 10 5 0
				Wiper volume dial 3Wiper volume dial 6Wiper volume dial 7	2 ms	

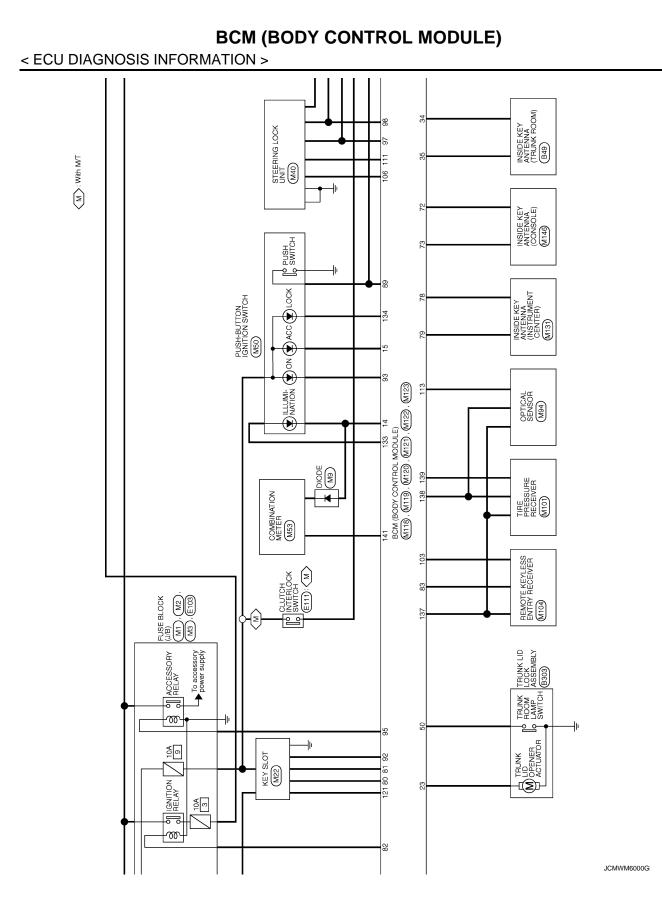
< ECU DIAGNOSIS INFORMATION >

Terminal No. Description (Wire color)		Description				Value	
(vvire +		Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper volume dial 4)	0 V	
					Front washer switch ON (Wiper volume dial 4)	(V) 15	
144 (G)	Ground	Combination switch OUTPUT 2	Output Combination switch	Combination switch	Any of the conditions be- low with all switches OFF • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6	10 5 0 2 ms 10.7 V	
					All switches OFF	0 V	
					Front wiper switch INT/ AUTO	(V)	
145		Combination switch		Combination switch	Front wiper switch LO		
(L)	Ground	OUTPUT 3		(Wiper volume dial 4)	Lighting switch AUTO	5 0 2.ms 10.7 V	
				All switches OFF Front fog lamp switches	All switches OFF	0 V	
					Front fog lamp switch ON		
			Output		Combination	Lighting switch 2ND	(V) 15
146	Ground	Combination switch		switch	Lighting switch PASS		
(SB)	Clouid	OUTPUT 4	Cupu	(Wiper volume dial 4)	Turn signal switch LH	0 2 ms 10.7 V	
149 (W)	Ground	Tire pressure warning check switch	Input		_	12 V	
150 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V	
					ON (Door open)	0 V	
151	Ground	Rear window defog-	Output	Rear window	Active	0 V	
(G)	modele	ger relay control		defogger	Not activated	Battery voltage	

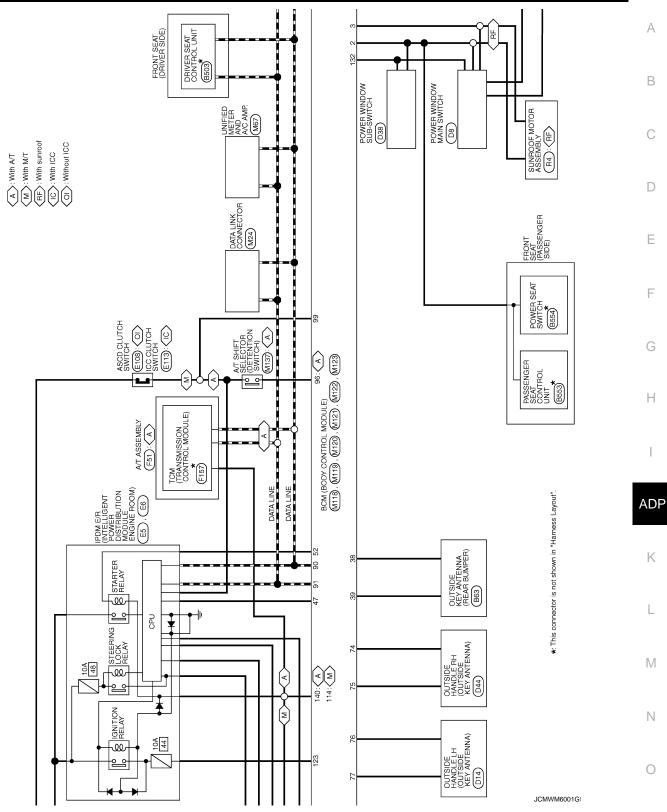
• *1: A/T models

• *2: M/T models

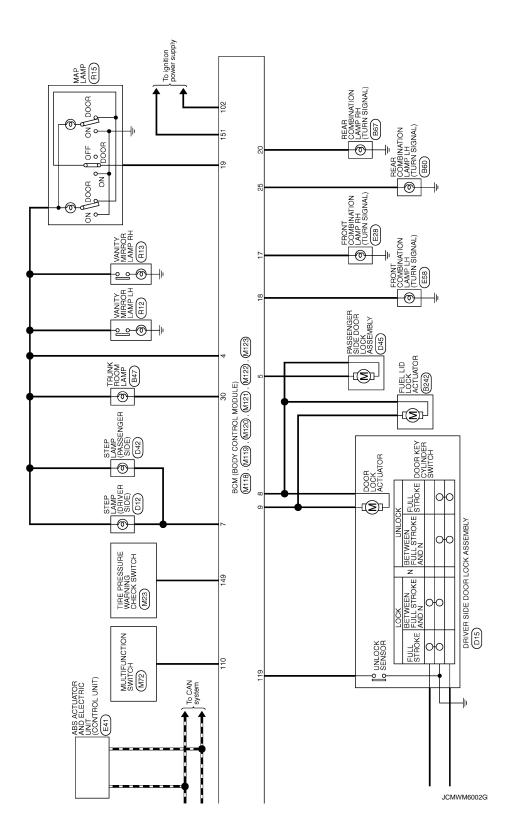




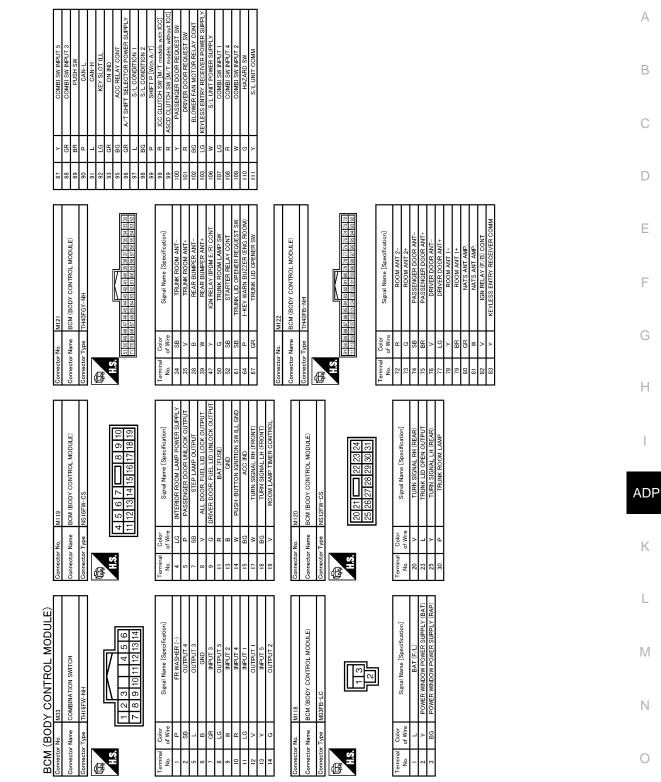
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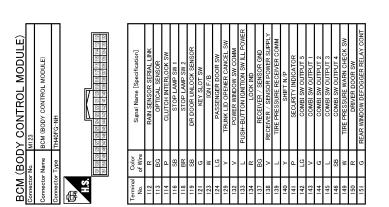
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JCMWM6004G

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Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status be- comes consistent Starter control relay signal Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (12 V) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP/CLUTCH SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) Interlock/PNP switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (12 V) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status has becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)

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Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	 500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (12 V) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	 Inhibit engine cranking Inhibit steering lock 	 When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: BCM	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	 When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage)
B26E9: S/L STATUS	 Inhibit engine cranking Inhibit steering lock 	 When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No. 1 signal: LOCK (0 V) Steering condition No. 2 signal: LOCK (12 V)

DTC Inspection Priority Chart

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If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	B2562: LOW VOLTAGE
2	U1000: CAN COMM U1010: CONTROL UNIT(CAN)
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING

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Priority	DTC	
	B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM	
	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW 	
	 B2550: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY 	
	 B2601: SHIFT POSITION B2602: SHIFT POSITION 	
	B2603: SHIFT POSI STATUSB2604: PNP/CLUTCH SW	
4	 B2605: PNP/CLUTCH SW B2606: S/L RELAY D2607: S/L DELAY 	
	 B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS 	
	 B260A: IGNITION RELAY B260B: STEERING LOCK UNIT 	
	B260C: STEERING LOCK UNIT B260D: STEERING LOCK UNIT	
	 B260F: ENG STATE SIG LOST B2612: S/L STATUS B2614: BCM 	
	 B2615: BCM B2616: BCM 	
	B2617: BCMB2618: BCM	
	 B2619: BCM B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE 	
	 B26E8: CLUTCH SW B26E9: S/L STATUS 	
	B26EA: KEY REGISTRATIONC1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED C1704: LOW PRESSURE FL	
5	 C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL 	
	 C1708: [NO DATA] FL C1709: [NO DATA] FR 	
	 C1710: [NO DATA] RR C1711: [NO DATA] RL 	
	C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [DRESSDATA ERR] PR	
	 C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT 	
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA	
č	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

The details of time display are as follows.

CRNT: A malfunction is detected now.

• PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-14. "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page	
No DTC is detected. further testing may be required.	_	_	_	_	_	
U1000: CAN COMM	—	—	—	—	BCS-33	
U1010: CONTROL UNIT(CAN)	—	—	—	_	BCS-34	
U0415: VEHICLE SPEED		—	—	_	BCS-35	
B2013: ID DISCORD BCM-S/L	×	×	—	_	<u>SEC-55</u>	
B2014: CHAIN OF S/L-BCM	×	×	—	—	<u>SEC-56</u>	
B2190: NATS ANTENNA AMP	×	_			<u>SEC-47</u>	
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-50	
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-51	
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-53	
B2195: ANTI-SCANNING	×	_	_	_	<u>SEC-54</u>	
B2553: IGNITION RELAY		×	_	_	PCS-48	
B2555: STOP LAMP	_	×	_	_	<u>SEC-59</u>	
B2556: PUSH-BTN IGN SW		×	×	_	SEC-61	
B2557: VEHICLE SPEED	×	×	×	_	SEC-63	
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-64</u>	
B2562: LOW VOLTAGE		×			BCS-36	
B2601: SHIFT POSITION	×	×	×	_	SEC-65	
B2602: SHIFT POSITION	×	×	×		SEC-68	
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-70	
B2604: PNP/CLUTCH SW	×	×	×	_	SEC-73	
B2605: PNP/CLUTCH SW	×	×	×	_	<u>SEC-75</u>	
B2606: S/L RELAY	×	×	×	_	<u>SEC-77</u>	
B2607: S/L RELAY	×	×	×	_	SEC-78	
B2608: STARTER RELAY	×	×	×	_	<u>SEC-80</u>	
B2609: S/L STATUS	×	×	×	_	SEC-82	
B260A: IGNITION RELAY	×	×	×	_	PCS-50	
B260B: STEERING LOCK UNIT		×	×	_	<u>SEC-86</u>	
B260C: STEERING LOCK UNIT		×	×	_	SEC-87	
B260D: STEERING LOCK UNIT		×	×	_	SEC-88	
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-89	
B2612: S/L STATUS	×	×	×	_	SEC-94	
B2614: BCM		×	×		PCS-52	
B2615: BCM		×	×		PCS-54	
B2616: BCM		×	×		PCS-56	
B2617: BCM	×	×	×		SEC-98	
B2618: BCM	×	×	×		PCS-58	
B2619: BCM	×	×	×		SEC-100	
B261A: PUSH-BTN IGN SW		×	×		PCS-59	
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-101</u>	

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< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page	A
B2621: INSIDE ANTENNA	—	×	—	—	DLK-55	В
B2622: INSIDE ANTENNA		×	—	—	DLK-57	
B2623: INSIDE ANTENNA	—	×	—	—	DLK-59	
B26E8: CLUTCH SW	×	×	×		<u>SEC-90</u>	С
B26E9: S/L STATUS	×	×	× × (Turn ON for 15 <u>SEC-</u>		<u>SEC-92</u>	_
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-93</u>	D
C1704: LOW PRESSURE FL	: LOW PRESSURE FL — — — ×			Е		
C1705: LOW PRESSURE FR		—		×		
C1706: LOW PRESSURE RR		—		×	<u>WT-26</u>	
C1707: LOW PRESSURE RL	—	—	—	×		F
C1708: [NO DATA] FL	—	—	—	- ×		
C1709: [NO DATA] FR	—	—	—	×		
C1710: [NO DATA] RR		—	—	×	<u>WT-28</u>	G
C1711: [NO DATA] RL	[NO DATA] RL — —		—	×		
C1716: [PRESSDATA ERR] FL		—		×		
C1717: [PRESSDATA ERR] FR	—	—		×	WT 24	
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u>WT-31</u>	
C1719: [PRESSDATA ERR] RL	_	_		×		
C1729: VHCL SPEED SIG ERR	—	—		×	<u>WT-33</u>	
C1734: CONTROL UNIT		—		×	<u>WT-35</u>	AD

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MANUAL FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

MANUAL FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Description

All functions do not operate when manually operated.(power seat, tilt & telescopic, and door mirror.

ALL COMPONENT : Diagnosis Procedure

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

Check driver seat control unit power supply and ground circuit. Refer to <u>ADP-64, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. Check automatic drive positioner control unit power supply and ground circuit

Check automatic drive positioner control unit power supply and ground circuit. Refer to <u>ADP-65. "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

POWER SEAT

POWER SEAT : Description

Power seat does not operate when manually operated.

POWER SEAT : Diagnosis Procedure

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check power seat switch ground circuit. Refer to ADP-95, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

STEERING POSITION FUNCTION DOES NOT OPERATE

STEERING POSITION FUNCTION DOES NOT OPERATE : Description

Tilt & telescopic do not operate when manually operated.

INFOID:000000005654284

INFOID:000000005654285

INEOID:000000005654283

INFOID:000000005654282

< SYMPTOM DIAGNOSIS >		
STEERING POSITION FUNCTION DOES NOT OPERATE : Diagno		Δ
1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT	INFOID:000000005654287	~
		В
Check tilt & telescopic switch ground circuit. Refer to <u>ADP-96, "Diagnosis Procedure"</u> .		D
Is the inspection result normal?		
YES >> GO TO 2.		С
NO >> Repair or replace harness or connector.		
2.CONFIRM THE OPERATION		D
Confirm the operation again. <u>Is the result normal?</u>		
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .		
NO >> GO TO 1.		
SEAT SLIDING		
SEAT SLIDING : Description	INFOID:000000005654288	F
Seat sliding alone does not operate when manually operated.		
SEAT SLIDING : Diagnosis Procedure	INFOID:000000005654289	G
1.CHECK SLIDING MECHANISM		Н
Check for the following.		
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 		
Is the inspection result normal?		I
YES >> GO TO 2.		
NO >> Repair or replace the malfunctioning parts.		AD
2.CHECK SLIDING SWITCH		
Check sliding switch. Refer to <u>ADP-67, "Component Function Check"</u> .		Κ
Is the inspection result normal?		
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.		L
3. CHECK SLIDING MOTOR		
Check sliding motor.		\mathbb{M}
Refer to <u>ADP-124, "Component Function Check"</u> . <u>Is the inspection result normal?</u>		
YES $>>$ GO TO 4.		Ν
NO >> Repair or replace the malfunctioning parts.		IN
4.CONFIRM THE OPERATION		
Check the operation again.		0
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-38. "Intermittent Incident"</u> .		Ρ
NO >> GO TO 1. SEAT RECLINING		
SEAT RECLINING : Description	INFOID:000000005654290	

Seat reclining only does not operate when manually operated.

< SYMPTOM DIAGNOSIS >	
SEAT RECLINING : Diagnosis Procedure	INFOID:000000005654291
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 malfunctioning parts.	
2.CHECK RECLINING SWITCH	
Check reclining switch. Refer to <u>ADP-104, "Component Function Check"</u> .	
Is the inspection result normal? YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK RECLINING MOTOR	
Check reclining motor. Refer to <u>ADP-126, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4.CONFIRM THE OPERATION	
Check the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident</u> ".	
NO >> GO TO 1. SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT) : Description	INFOID:000000005654292
Seat lifting (front) only does not operate when manually operated.	
SEAT LIFTING (FRONT) : Diagnosis Procedure	INFOID:000000005654293
1.CHECK LIFTING (FRONT) MECHANISM	
Check for the following.Mechanism deformation or pinched foreign materials.Interference with other parts because of poor installation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.CHECK LIFTING SWITCH (FRONT)	
Check lifting switch (front). Refer to <u>ADP-71, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CHECK LIFTING MOTOR (FRONT)	
Check lifting motor (front). Refer to <u>ADP-128, "Component Function Check"</u> .	
le the inspection result normal?	

Is the inspection result normal?

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	А
4. CONFIRM THE OPERATION	1
Check the operation again.	В
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident</u> ".	
NO >> GO TO 1.	С
SEAT LIFTING (REAR)	0
SEAT LIFTING (REAR) : Description	D
Seat lifting (rear) only does not operate when manually operated.	
SEAT LIFTING (REAR) : Diagnosis Procedure	Е
1.CHECK LIFTING (REAR) MECHANISM	
Check for the following.	F
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
Is the inspection result normal?	G
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2. CHECK LIFTING SWITCH (REAR)	Н
Check lifting switch (rear).	
Refer to <u>ADP-73, "Component Function Check"</u> . Is the inspection result normal?	I
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	ADP
Check lifting motor (rear). Refer to <u>ADP-130, "Component Function Check"</u> .	LZ.
Is the inspection result normal?	K
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	
4. CONFIRM THE OPERATION	L
Check the operation again.	
Is the result normal?	Μ
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	
STEERING TILT	Ν
STEERING TILT : Description	
Steering tilt only does not operate when manually operated.	0
STEERING TILT : Diagnosis Procedure	
1.CHECK STEERING TILT MECHANISM	Ρ
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
Is the inspection result normal?	
YES >> GO TO 2.	

MANUAL FUNCTION DOES NOT OPERATE	
< SYMPTOM DIAGNOSIS >	
NO >> Repair or replace the malfunctioning parts.	
2.CHECK TILT SWITCH	
Check tilt switch.	
Refer to <u>ADP-83, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	
3.CHECK TILT MOTOR	
Check tilt motor. Refer to <u>ADP-132, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.	
4.CONFIRM THE OPERATION	
Check the operation again.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	
STEERING TELESCOPIC	
STEERING TELESCOPIC : Description	005654298
Steering telescopic only does not operate when manually operated.	
STEERING TELESCOPIC : Diagnosis Procedure	005654299
1. CHECK STEERING TELESCOPIC MECHANISM	
Check for the following. Mechanism deformation or pinched foreign materials. 	
Check for the following.	
 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. 	
 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 malfunctioning parts. 	
 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. 	
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 malfunctioning parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch.	
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 malfunctioning parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to <u>ADP-85, "Component Function Check"</u>. 	
Check for the following. Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. Sthe inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85, "Component Function Check". Is the inspection result normal?	
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 malfunctioning parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85, "Component Function Check".	
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 malfunctioning parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85, "Component Function Check". Is the inspection result normal? YES >> GO TO 3.	
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 malfunctioning parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3.CHECK TELESCOPIC MOTOR Check telescopic motor.	
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 malfunctioning parts. 2. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to <u>ADP-134</u> , "Component Function Check".	
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 malfunctioning parts. 2. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134, "Component Function Check". Is the inspection result normal?	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	
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 malfunctioning parts. 2. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134, "Component Function Check". Is the inspection result normal? YES >> GO TO 4.	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	
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 malfunctioning parts. 2. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. CONFIRM THE OPERATION Check the operation again. Is the result normal?	
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 malfunctioning parts. 2. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-38. "Inter	
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 malfunctioning parts. 2. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-85. "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-134, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts. 4. CONFIRM THE OPERATION Check the operation again. Is the result normal?	

< SYMPTOM DIAGNOSIS >	
DOOR MIRROR : Description	А
Door mirror does not operate when manually operated.	/ \
DOOR MIRROR : Diagnosis Procedure	В
1.CHECK DOOR MIRROR MECHANISM	
Check for the following. Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	С
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2. CHECK MIRROR SWITCH	Е
Check mirror switch. Refer to <u>ADP-90, "MIRROR SWITCH : Component Function Check"</u> . <u>Is the inspection result normal?</u>	F
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. 3. CHECK MIRROR MOTOR	G
Check mirror motor. Refer to ADP-136, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	Н
4.CONFIRM THE OPERATION	I
Check the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.	ADP
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< SYMPTOM DIAGNOSIS >

MEMORY FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Description

All functions do not operate when memory operated. (power seat, tilt & telescopic, and door mirror)

ALL COMPONENT : Diagnosis Procedure

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to <u>ADP-216</u>, "ALL COMPONENT : Diagnosis Procedure"

2. PERFORM MEMORY STORING PROCEDURE

Perform memory storing procedure. Refer to ADP-10, "MEMORY STORING : Special Repair Requirement".

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-87, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch.

4.CHECK DETENTION SWITCH

Check detention switch. Refer to <u>ADP-97, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Description

Seat sliding only does not operate when memory operated.

SEAT SLIDING : Diagnosis Procedure

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2. NO >> Refer to <u>ADP-217, "SEAT SLIDING : Diagnosis Procedure"</u> 2.CHECK SLIDING SENSOR

Check sliding sensor.

INFOID:000000005654304

INFOID:000000005654305

INFOID:000000005654303

< SYMPTOM DIAGNOSIS >	_
Refer to ADP-101, "Component Function Check".	
Is the inspection result normal?	A
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	В
Check the operation again. <u>Is the result normal?</u>	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	С
NO >> GO TO 1.	
SEAT RECLINING	D
SEAT RECLINING : Description	5
Seat reclining only does not operate when memory operated.	E
SEAT RECLINING : Diagnosis Procedure	7
1.CHECK MANUAL OPERATION	F
Check manual operation.	_
<u>Is the inspection result normal?</u> YES >> GO TO 2.	G
NO >> Refer to ADP-218, "SEAT RECLINING : Diagnosis Procedure"	
2. CHECK RECLINING SENSOR	Н
Check reclining sensor. Refer to ADP-104, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	ADP
3.CONFIRM THE OPERATION	
Check the operation again.	K
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".	N
 YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u>. NO >> GO TO 1. 	
SEAT LIFTING (FRONT)	L
SEAT LIFTING (FRONT) : Description	3
Seat lifting (front) only does not operate when memory operated.	Μ
SEAT LIFTING (FRONT) : Diagnosis Procedure)
1. CHECK MANUAL OPERATION	Ν
Check manual operation.	
Is the inspection result normal?	0
YES >> GO TO 2. NO >> Refer to ADP-218, "SEAT LIFTING (FRONT) : Diagnosis Procedure"	
2. CHECK LIFTING SENSOR (FRONT)	Ρ
Check lifting sensor (front).	
Refer to ADP-107. "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	

< SYMPTOM DIAGNOSIS >

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3. CONFIRM THE OPERATION	
Check the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1. SEAT LIFTING (REAR)	
SEAT LIFTING (REAR) : Description	INFOID:000000005654310
Seat lifting (rear) only does not operate when memory operated.	
SEAT LIFTING (REAR) : Diagnosis Procedure	INFOID:000000005654311
1.CHECK MANUAL OPERATION	
Check manual operation.	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	
YES >> GO TO 2. NO >> Refer to <u>ADP-219, "SEAT LIFTING (REAR) : Diagnosis Procedure"</u>	
2.CHECK LIFTING SENSOR (REAR)	
Check lifting sensor (rear). Refer to <u>ADP-110, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	
NO >> GO TO 1. STEERING TELESCOPIC	
STEERING TELESCOPIC : Description	
·	INFOID:000000005654312
Steering telescopic only does not operate when memory operated.	
STEERING TELESCOPIC : Diagnosis Procedure	INFOID:000000005654313
1. CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>ADP-220, "STEERING TELESCOPIC : Diagnosis Procedure"</u>	
2. CHECK TELESCOPIC SENSOR	
Check steering telescopic sensor.	
Refer to ADP-116, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.	
3. CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> .	

< SYMPTOM DIAGNOSIS >		
NO >> GO TO 1. STEERING TILT		А
STEERING TILT : Description	INFOID:000000005654314	_
Steering tilt only does not operate when memory operated.		В
STEERING TILT : Diagnosis Procedure	INFOID:000000005654315	
1.CHECK MANUAL OPERATION		С
Check manual operation.		D
Is the inspection result normal?		D
YES >> GO TO 2. NO >> Refer to <u>ADP-219</u> , " <u>STEERING TILT</u> : <u>Diagnosis Procedure</u> "		F
2.CHECK TILT SENSOR		E
Check steering tilt sensor.		
Refer to <u>ADP-113, "Component Function Check"</u> . <u>Is the inspection result normal?</u>		F
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.		G
3. CONFIRM THE OPERATION		
Check the operation again.		Н
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.		
DOOR MIRROR		
DOOR MIRROR : Description	INFOID:000000005654316	ADF
Door mirror does not operate when memory operated.		ושא
DOOR MIRROR : Diagnosis Procedure	INFOID:000000005654317	
1.CHECK MANUAL OPERATION		K
Check manual operation.		1
Is the inspection result normal?		
YES >> GO TO 2. NO >> Refer to <u>ADP-221, "DOOR MIRROR : Diagnosis Procedure"</u>		
2. CHECK MIRROR SENSOR		M
Check mirror sensor.		
 Refer to <u>ADP-119, "DRIVER SIDE : Component Function Check"</u>. (Driver side) 		Ν
• Refer to <u>ADP-121, "PASSENGER SIDE : Component Function Check"</u> . (Passenger side)		
<u>Is the inspection result normal?</u> YES >> GO TO 3.		0
NO >> Repair or replace the malfunctioning parts.		-
3. CONFIRM THE OPERATION		
Check the operation again.		Р
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.		

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT ILLUMINATE

Diagnosis Procedure

1.CHECK MEMORY INDICATOR

Check memory indicator. Refer to <u>ADP-139, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

Diagnosis Procedure	INFOID:000000005654319	А
1.CHECK SYSTEM SETTING		В
Check system setting. Refer to <u>ADP-11, "SYSTEM SETTING : Special Repair Requirement"</u> .		
Is the inspection result normal?		С
YES >> Synchronization function is normal. NO >> GO TO 2.		
2. CHECK ALL FUNCTIONS MAMUAL OPERATION		D
Check all functions manual operation.		
Is the inspection result normal?		Е
YES >> GO TO 3. NO >> Refer to <u>ADP-216, "ALL COMPONENT : Diagnosis Procedure"</u> .		
3. CONFIRM THE OPERATION		F
Check the operation again.		
Is the result normal?		G
 YES >> Check intermittent incident. Refer to <u>GI-38. "Intermittent Incident"</u>. NO >> GO TO 1. 		G

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POWER WALK-IN FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

POWER WALK-IN FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000005654320

1.CHECK POWER WALK-IN FUNCTION Check power walk-in function.

Refer to ADP-39, "POWER WALK-IN FUNCTION : System Description".

Is the inspection result normal?

YES >> Power walk-in function is OK.

NO >> GO TO 2.

2. PERFORM INITIALIZATION PROCEDURE

- Perform initialization procedure. Refer to <u>ADP-10, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>.
- Check power walk-in function. Refer to <u>ADP-39</u>, "POWER WALK-IN FUNCTION : System Description".

Is the inspection result normal?

YES >> Power walk-in function is normal.

- NO >> GO TO 3.
- **3.**CHECK POWER WALK-IN SWITCH

Check power walk-in switch.

Refer to ADP-81. "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK SEAT BELT BUCKLE SWITCH

Check seat belt buckle switch. Refer to ADP-77, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK FORWARD SWITCH

Check forward switch. Refer to ADP-75, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. CHECK SLIDING LIMIT SWITCH

Check sliding limit switch. Refer to <u>ADP-79, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CHECK DRIVER SIDE DOOR SWITCH

Check driver side door switch.

Refer to DLK-62, "Component Function Check"

Is the inspection result normal?

- YES >> GO TO 8.
- NO >> Repair or replace the malfunctioning parts.

 $\mathbf{8}$.confirm the operation

Check the operation again.

< SYN	POWER WALK-IN FUNCTION DOES NOT OPERATE	
	to ADP-39, "POWER WALK-IN FUNCTION : System Description".	
<u>Is the </u>	result normal?	A
YES NO	>> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . >> GO TO 1.	_
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INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000005654321

1. CHECK DOOR LOCK FUNCTION

Check door lock function. Refer to DLK-7, "Work Flow".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. PERFORM MEMORY STORING PROCEDURE

- Perform memory storing procedure. Refer to <u>ADP-10, "MEMORY STORING : Special Repair Requirement"</u>.
- Check Intelligent Key interlock function. Refer to <u>ADP-34</u>, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description".

Is the inspection result normal?

YES >> Intelligent Key inter lock function is normal.

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
Seat synchronization function does not operate.	The synchronization function will not op- erate if the steering (tilt, telescopic) or the door mirror moves to the operating end while the seat synchronization function is operating.	Perform the memory function or drive the vehicle at more than 7km/h (4 MPH).	<u>ADP-24</u>
	Seat adjustment value has exceed any of the values below. • Seat sliding: 76 mm • Seat reclining: 9.1 degrees • Seat lifting (rear): 20 mm	_	_
Side support or lumbar support does not perform memory operation.	The side support and the lumbar support are controlled independently with no link to the automatic drive positioner system.	< —	Side support: <u>SE-23</u>
			Lumbar support: <u>SE-26</u>
Memory function, power walk-in function, seat synchronization function, or Intelligent Key inter- lock function does not operate.	chronization gent Key inter-	ne operating conditions are not fulfilled. Fulfill the operation All Conditions. Seat syn	Memory function: <u>ADP-29</u>
			Power walk-in function: <u>ADP-39</u>
			Seat synchronization function: <u>ADP-24</u>
			Intelligent Key interlock function: ADP-34

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< PRECAUTION >

PRECAUTION PRECAUTIONS

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

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

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

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

Precaution for Battery Service

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

Service

INFOID:000000005654325

INFOID:000000005654324

- When removing or installing various parts, place a cloth or padding onto the vehicle body to prevent scratches.
- Handle trim, molding, instruments, grille, etc. carefully during removing or installing. Be careful not to oil or damage them.
- Apply sealing compound where necessary when installing parts.
- When applying sealing compound, be careful that the sealing compound does not protrude from parts.
- When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust prevention measures.

Work

INFOID:000000005654326

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.

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PRECAUTIONS

< PRECAUTION >

- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
- Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.

Then rub with a soft and dry cloth.

- Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the fouled area.

Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with c a soft and dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol, and gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

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< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-188, "Exploded View".

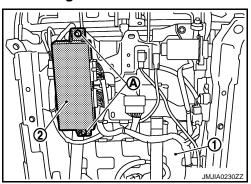
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove driver seat (1). Refer to <u>SE-191, "Removal and Installa-</u> tion".
- 2. Remove mounting bolts (A).
- 3. Remove driver seat control unit (2).



INSTALLATION

Install in reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing driver seat, perform additional service when replacing control unit. Refer to <u>ADP-9</u>, "<u>ADDI-</u><u>TIONAL SERVICE WHEN REPLACING CONTROL UNIT</u>: <u>Special Repair Requirement</u>".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

Refer to IP-12, "A/T MODELS : Exploded View" (A/T models) or IP-22, "M/T MODELS : Exploded View" (M/T models).

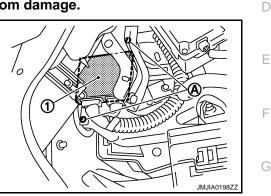
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove instrument driver lower panel. Refer to IP-13, "A/T MODELS : Removal and Installation" (A/T models) or IP-23, "M/ T MODELS : Removal and Installation" (M/T models).
- 2. Remove screws (A).
- 3. Remove automatic drive positioner control unit (1).



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

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< REMOVAL AND INSTALLATION >

SEAT MEMORY SWITCH

Exploded View

Refer to INT-12, "Exploded View"

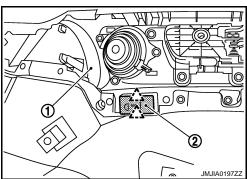
Removal and Installation

REMOVAL

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

- 1. Remove front door finisher (1). Refer to <u>INT-12, "Removal and</u> <u>Installation"</u>.
- 2. Press pawls and remove seat memory switch (2) from front door finisher (1).

<u>ر_:</u> Pawl



INSTALLATION Install in reverse order of removal. CAUTION: Be sure to clump the harness to the right place. INFOID:000000005654331

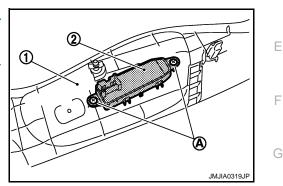
POWER SEAT SWITCH

< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

Exploded View INFOID:00000005654333 Refer to SE-188, "Exploded View". INFOID:00000005654334 Removal and Installation INFOID:00000005654334 REMOVAL CAUTION: When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove seat cushion outer finisher (1). Refer to <u>SE-191</u>, <u>"Removal and Installation"</u>.
- 2. Remove screws (A).
- Remove power seat switch (2) from seat cushion outer finisher (1).



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

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Revision: 2009 November

< REMOVAL AND INSTALLATION >

SIDE SUPPORT SWITCH

Exploded View

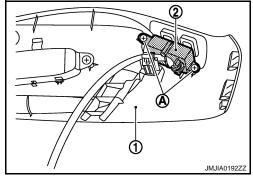
Refer to SE-188, "Exploded View"

Removal and Installation

REMOVAL

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

- 1. Remove seat cushion outer finisher (1). Refer to <u>SE-191, "Removal and Installation"</u>
- 2. Remove screws (A).
- 3. Remove side support switch (2) from seat cushion outer finisher.



INSTALLATION Install in reverse order of removal. CAUTION: Be sure to clump the harness to the right place. INFOID:000000005654335

TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

Exploded View

Refer to IP-12, "A/T MODELS : Exploded View" (A/T models) or IP-22, "M/T MODELS : Exploded View" (M/T models).

Removal and Installation

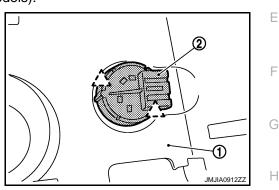
REMOVAL

CAUTION:

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

- 1. Remove steering column mask (1). Refer to <u>IP-13, "A/T MODELS : Removal and Installation"</u> (A/T models) or <u>IP-23, "M/T MODELS : Removal and Installation"</u> (M/T models).
- 2. Press pawls and remove tilt & telescopic switch (2) from steering column mask (1).





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

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