SECTION ADP AUTOMATIC DRIVE POSITIONER

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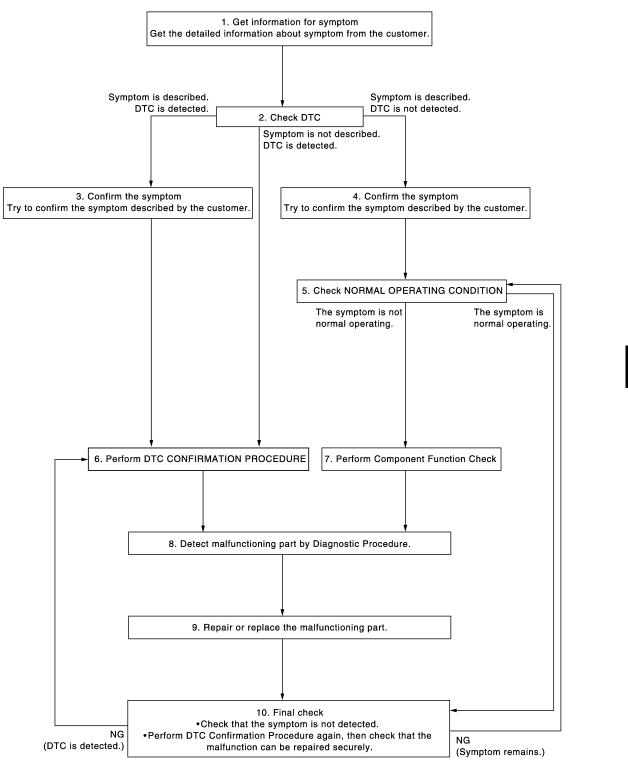
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:0000000003134604 В

OVERALL SEQUENCE



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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 when the incident/malfunction occurred).

>> GO TO 2.

2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT-III. Refer to ADP-140, "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.

CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-207, "Description".

Is the incident normal operation?

>> INSPECTION END YES

NO >> GO TO 7.

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.

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

7 . PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

>> GO TO 9.

$\mathbf{9}.$ repair or replace

Repair or replace the malfunctioning part.

>> GO TO 10.

10. FINAL CHECK

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

Are all malfunctions corrected?

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

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

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ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Forter desired	OFF -	Perform initialization
Entry/exit assist		Set slide amount*1
Intelligent Key interlock	Erased	Perform initialization
intelligent key interlock	Eraseu	Perform storing
Seat synchronization	OFF	_

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

NOTE

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-9, "SYSTEM INITIALIZATION: Description".

>> GO TO 2.

2. SYSTEM SETTING

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

>> GO TO 3.

3.MEMORY STORAGE

Perform memory storage. Refer to <u>ADP-10</u>, "<u>MEMORY STORING</u>: <u>Description</u>".

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

INFOID:0000000003134607

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Faturita and at	OFF	Perform initialization
Entry/exit assist	OFF	Set slide amount*1
Intelligent Key interleek	Francis	Perform initialization
Intelligent Key interlock	Erased	Perform storing
Seat synchronization	OFF	_

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

NOTE:

< BASIC INSPECTION > Notice that disconnecting the battery when detected DTC are present will erase the DTC memory. Α ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement INFOID:0000000003134608 В 1. SYSTEM INITIALIZATION Perform system initialization. Refer to ADP-9, "SYSTEM INITIALIZATION: Description". >> GO TO 2. 2.system setting Perform system setting. Refer to ADP-11, "SYSTEM SETTING: Description". >> GO TO 3. Е 3.MEMORY STORAGE Perform memory storage. Refer to ADP-10, "MEMORY STORING: Description". F >> END SYSTEM INITIALIZATION SYSTEM INITIALIZATION: Description INFOID:0000000003134609 Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced. The entry/exit assist function and Intelligent Key interlock function will not operate normally if no initialization is performed. SYSTEM INITIALIZATION: Special Repair Requirement INFOID:0000000003134610 ADP INITIALIZATION PROCEDURE 1. CHOOSE METHOD There are two initialization methods. Which method do you use? With door switch>>GO TO 2. With vehicle speed>>GO TO 4. 2. STEP A-1 Turn ignition switch from ACC to OFF position. M >> GO TO 3. 3. STEP A-2 Ν Driver door switch is ON (open) \rightarrow OFF (close) \rightarrow ON (open). >> END 4. STEP B-1 Drive the vehicle at more than 25 km/h (16 MPH).

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>> END MEMORY STORING

< BASIC INSPECTION >

MEMORY STORING: Description

INFOID:0000000003134611

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

INFOID:0000000003134612

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 A/T selector lever to P position.

>> 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.

>> 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.
- 2. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.

NOTE:

- To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.
- To modify driver seat positions, memory indicator will be turned OFF for 0.5 second, then turned ON for 5 seconds.

NOTE:

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

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

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

>> GO TO 7.

7.STEP 7

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

< BASIC INSPECTION >

>> END

SYSTEM SETTING

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SYSTEM SETTING: Description

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

Setting Change

					x: Applicable
ltem	Content	CON- SULT -III	Display	Set switch	Factory setting
Amount of seat sliding for entry/exit assist	The amount of seat sliding for entry/exit assist can be selected from 3 items. [40mm/80mm/150mm]	х	_	_	40mm
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	х	х	v	OFF
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	х	х	Х	OFF
Seat synchronization	Seat synchronization can be selected: ON (operated) – OFF (not operated)		NOTE: *1		OFF
Reset custom settings	All settings can be set to default (factory setting).	_	х	_	

^{*1:} If either of entry/exit assist (seat) or entry/exit assist (steering column) is turned OFF, seat synchronization function is also turned

SYSTEM SETTING: Special Repair Requirement

INFOID:0000000003134614

1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

With display>>GO TO 2.

With set switch>>GO TO 4.

With CONSULT-III>>GO TO 6.

$oldsymbol{2}$. WITH DISPLAY - STEP 1

Turn ignition switch ON.

>> GO TO 3.

3. WITH DISPLAY - STEP 2

- Push "SETTING" button.
- Select "Comfort & convenience".
- Select "Lift Steering Wheel ON Exit" or "Slide Driver's Seat Back ON Exit" on display, then push
- Lift Steering Wheel ON Exit: Entry/exit assist (steering column)
- Slide Driver's Seat Back On Exit: Entry/exit assist (seat)

If either of entry/exit assist (seat) or entry/exit assist (steering column) is turned OFF, seat synchronization function is also turned OFF.

>> END

4. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

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< BASIC INSPECTION >

>> GO TO 5.

5. WITH SET SWITCH - STEP 2

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

- Entry/exit assist (seat/steering column) and seat synchronization are ON: Memory switch indicator blink two times.
- Entry/exit assist (seat/steering column) and seat synchronization are OFF: Memory switch indicator blink once.

>> END

6. WITH CONSULT-III - STEP 1

Select "Work support".

>> GO TO 7.

7. WITH CONSULT-III - STEP 2

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

NOTE:

If either of entry/exit assist (seat) or entry/exit assist (steering column) is turned OFF, seat synchronization function is also turned OFF.

>> END

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FUNCTION DIAGNOSIS

AUTOMATIC DRIVE POSITIONER SYSTEM AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM: System Diagram

INFOID:0000000003134615 C Unified meter and A/C amp. AV control unit ZCM BCM D To CAN Е Lifting sensor (front) Lifting motor (front) Lifting motor (rear) Lifting sensor (rear) Reclining sensor CAN communication Reclining motor Sliding sensor Sliding motor F Driver seat control unit Driver seat Н Lifting switch (front) Lifting switch (rear) Power seat switch Reclining switch Sliding switch ADP K UART communication Telescopic sensor Telescopic motor Detent switch Mirror sensor Mirror motor A/T device Door mirror Tilt sensor Tilt motor M positioner control unit Automatic Ν drive 0 Door mirror remote control Tilt & telescopic switch Seat memory switch Changeover switch Telescopic switch Memory switch Mirror switch Tilt switch Set switch Indicator Ρ

< FUNCTION DIAGNOSIS >

AUTOMATIC DRIVE POSITIONER SYSTEM: System Description

INFOID:0000000003134616

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.

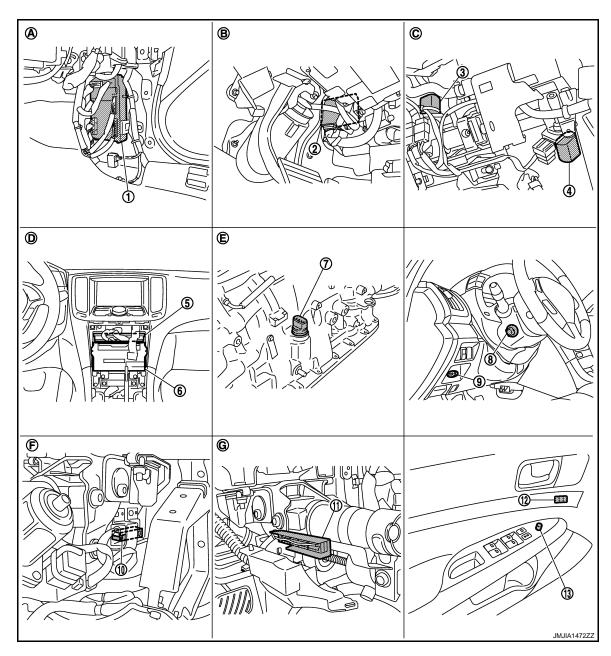
Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch.
Seat synchronization function		The positions of the steering column and door mirror are adjusted to the proper position automatically 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).
Entry/Exit assist function	Exit	On exit, the seat moves backward and the steering column moves upward and forward.
Litti y/Lxit assist furiction	Entry	On entry, the seat and steering column returns from exiting position to the previous driving position.
Intelligent Key interlock function	on	Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.

NOTE:

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

< FUNCTION DIAGNOSIS >

AUTOMATIC DRIVE POSITIONER SYSTEM: Component Parts Location INFOID:00000003134617



- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- 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. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit
 With NAVI M87, M88
 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed

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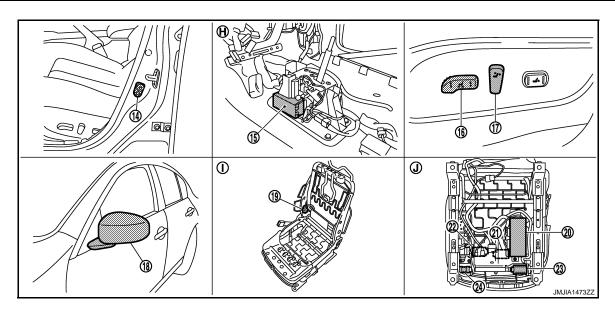
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- 14. Front door switch (driver side) B16
- 15. Control device (detention switch)
- 16. Sliding, lifting switch (Power seat switch B459)

- 17. Reclining switch (power seat switch 18.
- Door mirror (driver side) D3
- 19. Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 22. Lifting motor (rear) B456

- 23. Sliding motor B461
- 24. Sliding sensor B453
- H. View with center console assembly I. removed
- View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

AUTOMATIC DRIVE POSITIONER SYSTEM: Component Description

INFOID:0000000003134618

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 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.
ВСМ	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 communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
ТСМ	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

< FUNCTION DIAGNOSIS >

Item	Function
Key slot	The key switch is installed to detect the key inserted/removed status.
Front door switch (driver side)	Detect front door (driver side) open/close status.
Control device (detention switch)	Detect the P range position of A/T selector lever.
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.
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

ltem	Function
Door mirror sensor (driver side/passenger side)	Detect the up/down and left/right position of outside mirror face.
Tilt and telescopic sensor	Detect the up/down and left/right position of steering column.
Lifting sensor (front)	Detect the up/down position of seat lifting (front).
Lifting sensor (rear)	Detect the up/down position of seat lifting (rear).
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the front/rear 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 and 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 frontward/rearward.	
Memory indicator	Illuminates or flashes according to the registration/operation status.	

MANUAL FUNCTION

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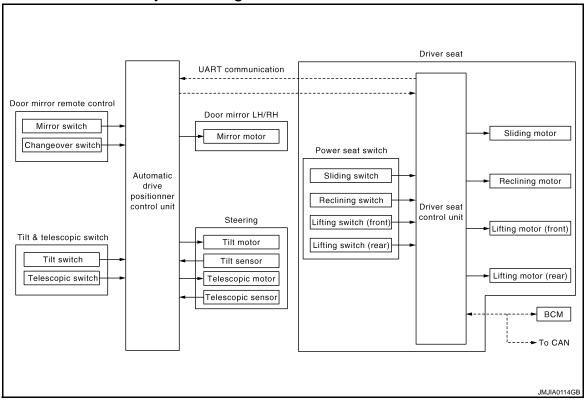
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< FUNCTION DIAGNOSIS >

MANUAL FUNCTION: System Diagram

INFOID:0000000003134619



MANUAL FUNCTION: System Description

INFOID:0000000003134620

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

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

Tilt & Telescopic

Order	Input	Output	Control unit condition
1	Tilt & telescopic switch	_	The tilt & telescopic switch signal is inputted to the automatic drive positioner control unit when the tilt & telescopic switch is operated.

< FUNCTION DIAGNOSIS >

Order	Input	Output	Control unit condition
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 operation 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 volume is less than 1.2 V, tilt does not operate downward when the sensor value is bigger than 3.4 V. Telescopic does not operates backward when telescopic sensor value is less than 0.8 V, telescopic does not operate forward when the sensor value is bigger than 3.4 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 automatic drive positioner control unit when the door mirror remote control switch is operated.
2	_	Motors (Door mirror motor)	The automatic drive positioner control unit actuates each motor according to the operation of the door mirror remote control switch.

NOTE:

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

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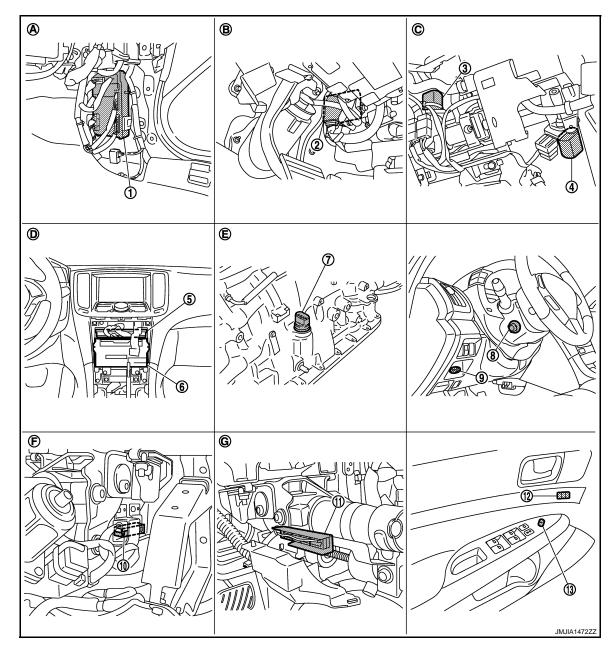
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MANUAL FUNCTION: Component Parts Location

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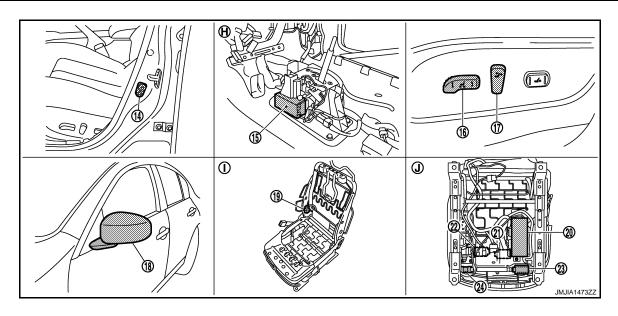


- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. M51, M52
- 5. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed

< FUNCTION DIAGNOSIS >



- 14. Front door switch (driver side) B16
- 15. Control device (detention switch)
- 16. Sliding, lifting switch (Power seat switch B459)
- 17. Reclining switch (power seat switch 18. Door mirror (driver side) D3
- 19. Reclining motor B454

- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 22. Lifting motor (rear) B456

- 23. Sliding motor B461
- 24. Sliding sensor B453
- View with center console assembly I. removed
- View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

MANUAL FUNCTION: Component Description

INFOID:0000000003134622

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 m 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.

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< FUNCTION DIAGNOSIS >

Item	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
Tilt and telescopic sensor	Detect the up/down and left/right position of steering column.

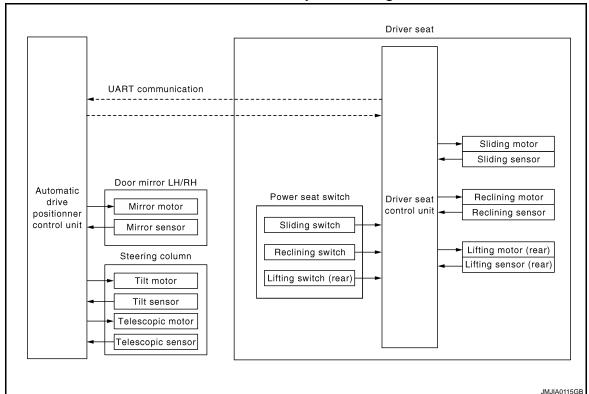
OUTPUT PARTS

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 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 frontward/rearward.	

SEAT SYNCHRONIZATION FUNCTION

SEAT SYNCHRONIZATION FUNCTION : System Diagram

INFOID:0000000003134623



SEAT SYNCHRONIZATION FUNCTION : System Description

INFOID:0000000003134624

< FUNCTION DIAGNOSIS >

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).
- This function can be stopped by turning both or either of the entry/exit assist function (seat) and the entry/exit assist function (steering) OFF.

For the system setting procedure. Refer to ADP-11, "SYSTEM SETTING: Description".

OPERATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Adjust seat position [sliding, reclining, lifting (rear)].
- The steering and outside mirror is adjusted automatically.

NOTE

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

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

- The seat synchronization function will not operate if the steering column or door mirror moves to the operating end while this function is operating. Perform memory function or drive the vehicle at vehicle speed of 7 km/h or more once to activate this function again.
- If the seat position is uncomfortable after the adjustment, seat position can be adjusted easily by memory operation.

OPERATION CONDITION

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

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

DETAIL FLOW

Order	Input	Output	Control unit condition
1	_	_	Perform Manual operation [Sliding, reclining or lifting (rear)].
2	Sensors [Sliding, reclining, lifting (rear)]	_	The driver seat control unit judges the direction and distance of seat movement according to the signal input from each seat sensor during manual operation.
3	_	Motors (Tilt, telescopic, outside mirror)	Driver seat control unit requests the operation to position according to the direction and distance of seat movement to the automatic 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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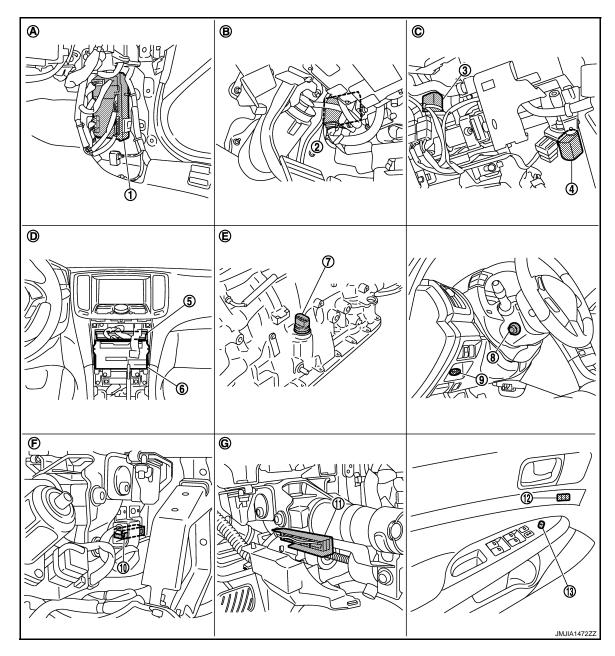
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SEAT SYNCHRONIZATION FUNCTION: Component Parts Location

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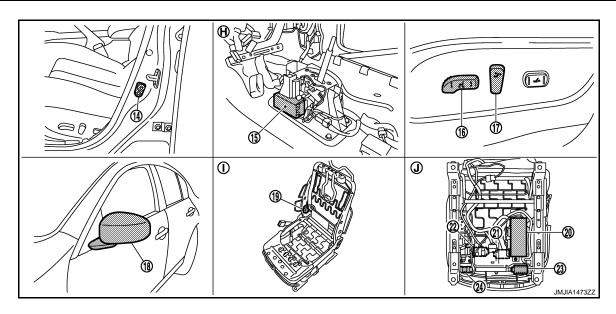


- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. M51, M52
- 5. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed

< FUNCTION DIAGNOSIS >



- 14. Front door switch (driver side) B16
- 15. Control device (detention switch)

Door mirror (driver side) D3

16. Sliding, lifting switch

17. Reclining switch (power seat switch 18.

- (Power seat switch B459)
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 19. Reclining motor B454

- 23. Sliding motor B461
- 24. Sliding sensor B453
- 22. Lifting motor (rear) B456

- View with center console assembly I. removed
- View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

SEAT SYNCHRONIZATION FUNCTION: Component Description

INFOID:0000000003134626

CONTROL UNITS

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

Sensors

Item	Function
Door mirror sensor (driver side/passenger side)	Detect the up/down and left/right position of outside mirror face.
Tilt and telescopic sensor	Detect the up/down and left/right position of steering column.
Lifting sensor (rear)	Detect the up/down position of seat lifter (rear).

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< FUNCTION DIAGNOSIS >

Item	Function
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the front/rear position of seat.

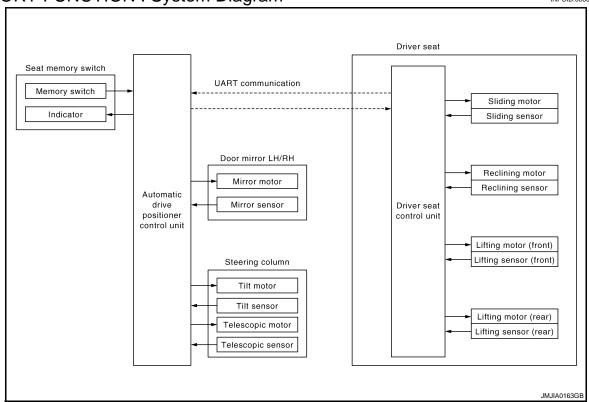
OUTPUT PARTS

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 (rear)	Move the seat lifter (rear) upward/downward.
Reclining motor	Tilt and raise up the seatback.
Sliding motor	Slide the seat frontward/rearward.

MEMORY FUNCTION

MEMORY FUNCTION: System Diagram

INFOID:0000000003134627



MEMORY FUNCTION: System Description

INFOID:0000000003134628

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 storage procedure. Refer to <u>ADP-10, "MEMORY STORING: Description"</u>.

OPERATION PROCEDURE

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

OPERATION CONDITION

< FUNCTION DIAGNOSIS >

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

Item	Request status
Ignition position	ON
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch	OFF (Not operated)
A/T selector lever	P position

However, the memory operation can be performed for 45 seconds after opening the driver door (driver door switch OFF \rightarrow ON) even if the IGN position is in OFF position.

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 input 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 recognizes 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 operates each motor.	
		Memory switch Indicator	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 control unit illuminates the memory indicator.
3	Sensors (Seat, steering col- umn, door mirror)	_	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirror are monitored with each sensor signal 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 reaches the recorded address.
4	_	Memory switch Indicator	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.

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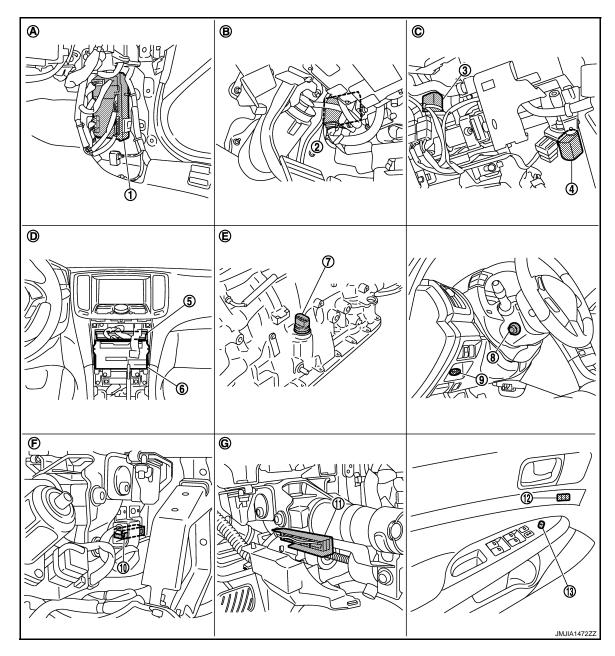
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MEMORY FUNCTION: Component Parts Location

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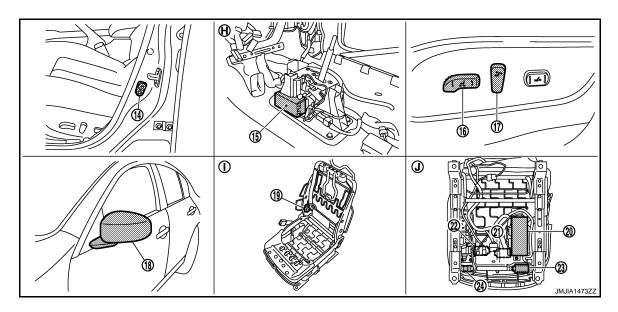


- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. M51, M52
- 5. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed

< FUNCTION DIAGNOSIS >



- 14. Front door switch (driver side) B16
- 15. Control device (detention switch) Door mirror (driver side) D3
- 16. Sliding, lifting switch (Power seat switch B459)

17. Reclining switch (power seat switch

- 19. Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 22. Lifting motor (rear) B456

- 23. Sliding motor B461
- 24. Sliding sensor B453
- Backside of the seat cushion

- View with center console assembly I. removed
- View with seat cushion pad and seat- J. back pad removed

MEMORY FUNCTION: Component Description

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CONTROL UNITS

Item	Function
Driver seat control unit	 The address of each part is recorded. Operates each motor of seat to the registered position. Requests the operations of steering column and door mirror to automatic drive positioner control unit
Automatic drive positioner control unit	Operates the steering column and door mirror with the instructions from the driver seat control.

INPUT PARTS

Switches

Item	Function
Memory switch 1/2	The registration and memory function can be performed with its operation.

Sensors

Item	Function
Door mirror sensor (driver side/passenger side)	Detect the up/down and left/right position of outside mirror face.
Tilt & telescopic sensor	Detect the up/down and left/right position of steering column.
Lifting sensor (front)	Detect the up/down position of seat lifting (front).
Lifting sensor (rear)	Detect the up/down position of seat lifting (rear).
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the front/rear position of seat.

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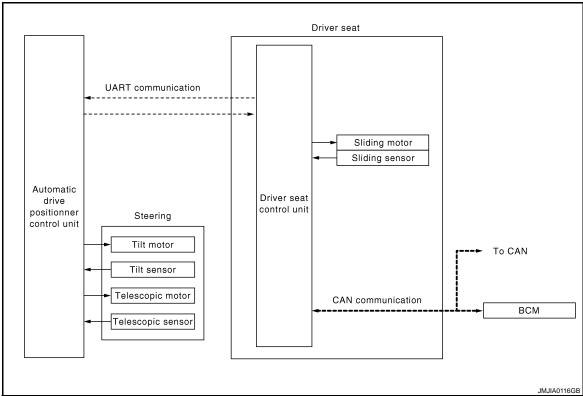
OUTPUT PARTS

Item	Function
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.
Tilt and telescopic motor	Move the steering column upward/downward and frontward/rearward.
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 frontward/rearward.
Memory indicator	Illuminates or blinks according to the registration/operation status.

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION: System Diagram

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EXIT ASSIST FUNCTION: System Description

INFOID:0000000003134632

OUTLINE

When exiting, the condition is satisfied, the seat is moved backward 40 mm (1.57 in) from normal sitting position and the steering is moved to the most upper position and front position.

The seat slide amount and the steering operation at entry/exit operation can be changed.

NOTE

- This function is set to OFF before delivery (initial setting).
- Further information for the system setting procedure. Refer to <u>ADP-11, "SYSTEM SETTING: Description"</u>.

OPERATION PROCEDURE

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

OPERATION CONDITION

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

< FUNCTION DIAGNOSIS >

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

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Door switch (Driver side)	_	Driver seat control unit receives door switch signal (driver side/open) from BCM via CAN communication.
2	_	Motors (Seat sliding, tilt, telescopic)	Driver seat control unit operates the seat sliding motor, which recognizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor and telescopic motor to auto drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor for a constant amount.

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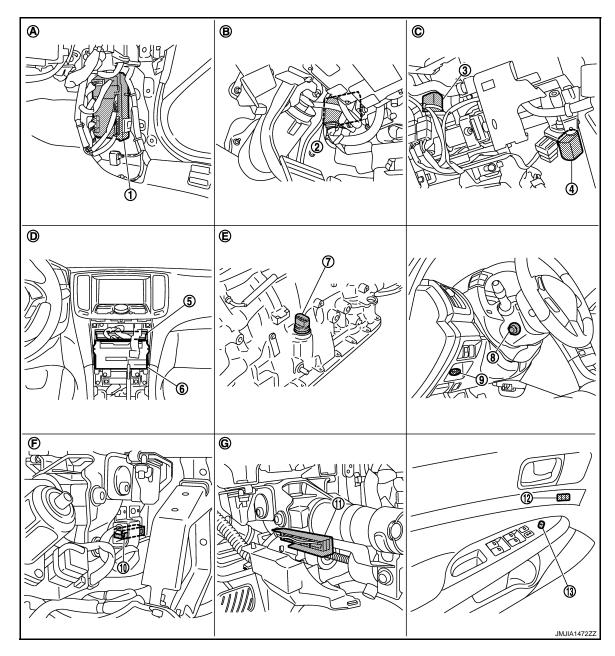
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EXIT ASSIST FUNCTION: Component Parts Location

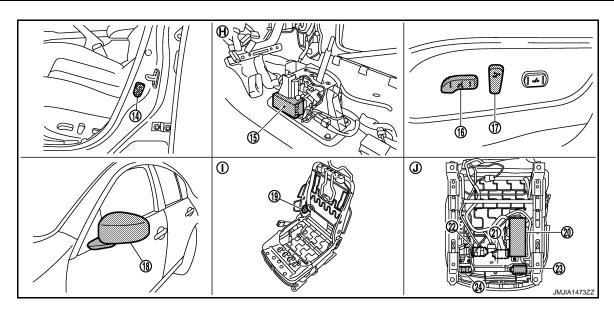
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- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. M51, M52
- Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed



- 14. Front door switch (driver side) B16
- 15. Control device (detention switch)
- 16. Sliding, lifting switch (Power seat switch B459)

- 17. Reclining switch (power seat switch 18.
- Door mirror (driver side) D3 19. Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 22. Lifting motor (rear) B456

- 23. Sliding motor B461
- 24. Sliding sensor B453
 - View with seat cushion pad and seat- J. Backside of the seat cushion
- View with center console assembly I. removed
 - back pad removed

EXIT ASSIST FUNCTION: Component Description

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CONTROL UNITS

Item	Function	
Driver seat control unit	 Operates the seat sliding motor for a constant amount. Requests the operations of tilt motor and telescopic motor to automatic drive positioner control unit. 	
Automatic drive positioner control unit	Operates the tilt motor and telescopic motor with the request from the driver seat control.	
ВСМ	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. • Driver door: OPEN/CLOSE	

INPUT PARTS

Switches

Item	Function
Front door switch (driver side)	Detect front door (driver side) open/close status.

Sensors

Item	Function
Tilt and telescopic sensor	Detect the up/down and left/right position of steering column.
Sliding sensor	Detect the front/rear position of seat.

OUTPUT PARTS

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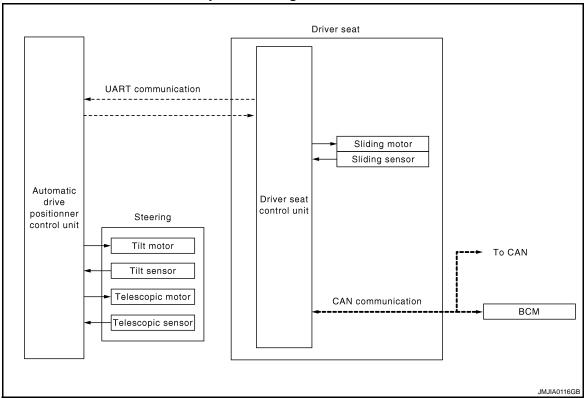
< FUNCTION DIAGNOSIS >

Item	Function	
Tilt and telescopic motor	Move the steering column upward/downward and frontward/rearward.	
Sliding motor Slide the seat frontward/rearward.		

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION: System Diagram

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ENTRY ASSIST FUNCTION: System Description

INFOID:0000000003134636

OUTLINE

The seat is in the exiting position when either following condition (A or B) is satisfied, the seat returns from exiting position to the previous driving position.

NOTE:

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

OPERATION PROCEDURE

- 1. A: Turn the ignition switch ON.
 - B: Turn the ignition switch from OFF to ACC after closing the driver door.
- 2. Driver seat and steering column will return from the exiting position to entry position.

OPERATION CONDITION

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

< FUNCTION DIAGNOSIS >

Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch	OFF (Not operated)
A/T selector lever	P position

DETAIL FLOW

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

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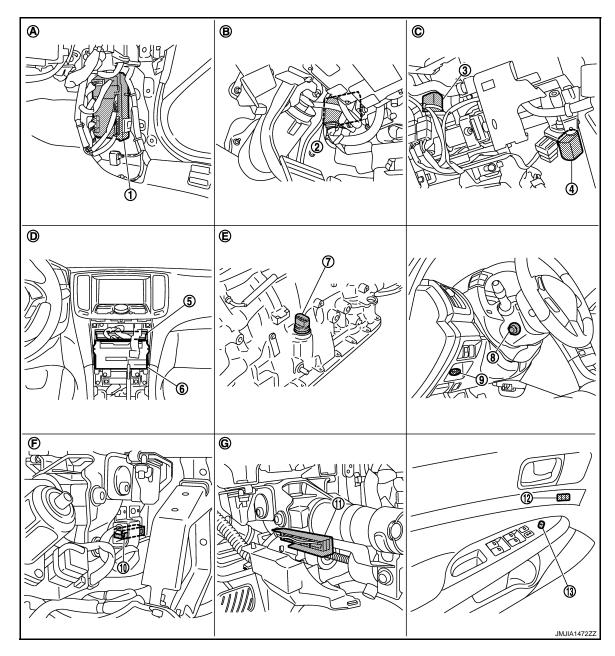
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ENTRY ASSIST FUNCTION: Component Parts Location

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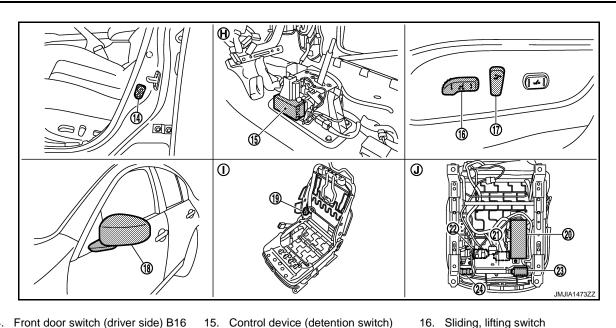
- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. M51, M52
- 5. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed

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F. View with instrument driver lower panel removed



- 14. Front door switch (driver side) B16

16. Sliding, lifting switch (Power seat switch B459)

17. Reclining switch (power seat switch 18.

- 19. Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455

Door mirror (driver side) D3

22. Lifting motor (rear) B456

- 23. Sliding motor B461
- 24. Sliding sensor B453
- View with center console assembly I. removed
- View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

ENTRY ASSIST FUNCTION: Component Description

INFOID:0000000003134638

CONTROL UNITS

Item	Function
Driver seat control unit	According to the ignition signal and door switch signal (driver side) from BCM, Operates the seat sliding motor for a constant amount. Requests the operations of tilt motor and telescopic motor to automatic drive positioner control unit.
Automatic drive positioner control unit	Operates the tilt motor and telescopic motor with the instructions from the driver seat control.
ВСМ	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. • Driver door: OPEN/CLOSE • Ignition switch position: ACC/ON

INPUT PARTS

Switches

Item	Function
Front door switch (driver side)	Detect front door (driver side) open/close status.

Sensors

Item	Function
Tilt & telescopic sensor	Detect the up/down and left/right position of steering column.
Sliding sensor	Detect the front/rear position of seat.

OUTPUT PARTS

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AUTOMATIC DRIVE POSITIONER SYSTEM

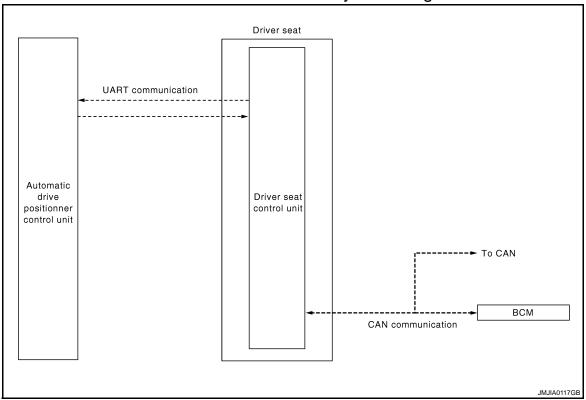
< FUNCTION DIAGNOSIS >

Item	Function
Tilt & telescopic motor	Move the steering column upward/downward and frontward/rearward.
Sliding motor	Slide the seat frontward/rearward.

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION: System Diagram

INFOID:0000000003134639



INTELLIGENT KEY INTERLOCK FUNCTION: System Description

INFOID:0000000003134640

OUTLINE

When unlocking doors by using Intelligent Key or driver side door request switch, the system performs memory operation, exiting operation then entry 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:**

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

OPERATION CONDITION

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

Item	Request status
Ignition position	OFF
System setting [Entry/exit function (seat/steering)]	ON
Key switch	OFF (Key is removed.)

AUTOMATIC DRIVE POSITIONER SYSTEM

< FUNCTION DIAGNOSIS >

Item	Request status
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch	OFF (Not operated)
AT selector lever	P position

DETAIL FLOW

Order	Input	Output	Control unit condition
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.
2	_	_	Driver seat control unit performs the memory function.
3	_	_	Driver seat control unit performs the exit assist function after performing the memory function.
4	_	_	Driver seat control unit performs the entry assist function.

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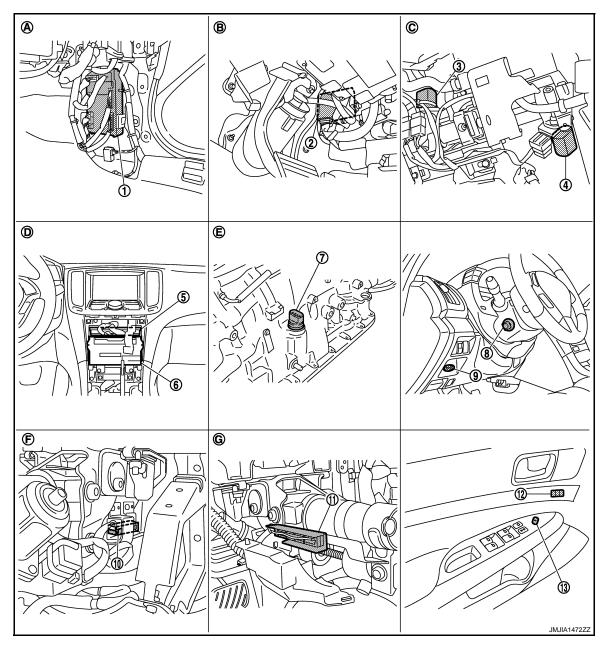
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INTELLIGENT KEY INTERLOCK FUNCTION: Component Parts Location INFOID:0000000035889971



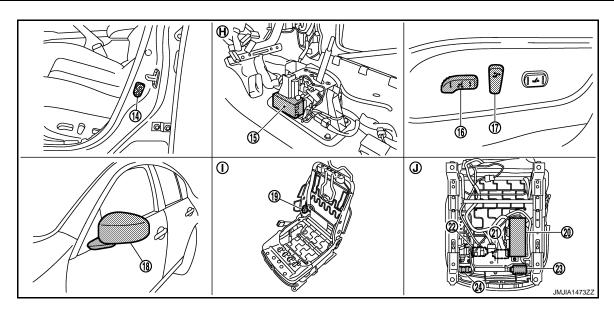
- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- Automatic drive positioner control unit 3. M51, M52
- 5. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- 6. AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed

AUTOMATIC DRIVE POSITIONER SYSTEM

< FUNCTION DIAGNOSIS >



- 14. Front door switch (driver side) B16
- 15. Control device (detention switch)

Door mirror (driver side) D3

16. Sliding, lifting switch (Power seat switch B459)

17. Reclining switch (power seat switch 18.

- 19. Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455

24. Sliding sensor B453

22. Lifting motor (rear) B456

View with center console assembly I.

23. Sliding motor B461

- View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

INTELLIGENT KEY INTERLOCK FUNCTION: Component Description

INFOID:0000000003134642

CONTROL UNITS

removed

Item	Function		
Driver seat control unit	It performs memory function and entry/exit assist 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 switch)		

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DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

Diagnosis Description

INFOID:0000000003134643

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

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

CONSULT-III Function

INFOID:0000000003134644

SELF-DIAGNOSIS RESULTS Refer to <u>ADP-140</u>, "DTC <u>Index"</u>.

DATA MONITOR

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

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

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< FUNCTION DIAGNOSIS >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (up) signal.
TILT SW-DOWN	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (backward) signal.
DETENT SW	"ON/OFF"	×	×	The selector lever position "OFF (P position) / ON (other than P position)" judged from the detention switch signal.
STARTER SW	"ON/OFF"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SLIDE PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U-D	"V"	-	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R-L	"V"	_	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U-D	"V"	-	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R-L	"V"	-	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT SEN	"V"	_	×	Voltage input from tilt sensor is displayed.
TELESCO SEN	"V"	_	×	Voltage input from telescopic sensor is displayed.

ACTIVE TEST CAUTION:

When driving vehicle, do not perform active test.

Test item	Description
SEAT SLIDE	Activates/deactivates the sliding motor.
SEAT RECLINING	Activates/deactivates the reclining motor.
SEAT LIFTER FR	Activates/deactivates the lifting motor (front).
SEAT LIFTER RR	Activates/deactivates the lifting motor (rear).
TILT MOTOR	Activates/deactivates the tilt motor.
TELESCO MOTOR	Activates/deactivates the telescopic motor.
MIRROR MOTOR RH	Activates/deactivates the mirror motor (passenger side).

Revision: 2007 November ADP-43 2008 EX35

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< FUNCTION DIAGNOSIS >

Test item	Description
MIRROR MOTOR LH	Activates/deactivates the mirror motor (driver side).
MEMORY SW INDCTR	Turns ON/OFF the memory indicator.

WORK SUPPORT

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

U1000 CAN COMM CIRCUIT

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description INFOID:0000000003134645

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 INFOID:0000000003134646

DTC DETECTION LOGIC

DTC	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

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-45, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

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

Special Repair Requirement

Refer to ADP-9, "SYSTEM INITIALIZATION: Description".

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ADP-45 Revision: 2007 November

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B2112 SLIDING MOTOR

< COMPONENT DIAGNOSIS >

B2112 SLIDING MOTOR

Description INFOID:000000003134648

- 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:000000003134650

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. RERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-46, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

NOTE:

First perform diagnosis for B2126 if B2126 is detected.

Diagnosis Procedure

INFOID:0000000003757155

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- Perform DTC confirmation procedure. Refer to <u>ADP-46, "DTC Logic"</u>.

Is the DTC displayed again?

YES >> GO TO 2.

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

2.check sliding motor circuit (power short)

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

(+)		(-)	Voltage (V) (Approx.)
Sliding motor			
Connector	Terminals	(477)	
B461	35	Ground	0
D401	42	Giouna	U

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

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

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

B2112 SLIDING MOTOR

< COMPONENT DIAGNOSIS >

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminals		('FF')	
B451	35 42	- Ground	0	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation"

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

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B2113 RECLINING MOTOR

< COMPONENT DIAGNOSIS >

B2113 RECLINING MOTOR

Description INFOID:000000003134652

- 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:000000003134653

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. REFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-48, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

NOTE:

First perform diagnosis for B2126 if B2126 is detected.

Diagnosis Procedure

INFOID:0000000003757156

${f 1}$.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-48, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.

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

2.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+) Reclining motor		(–)	Voltage (V) (Approx.)
Connector	Terminals	(Аррго.	
B454	36	Ground	0
D-10-1	44	Giodila	O O

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

B2113 RECLINING MOTOR

< COMPONENT DIAGNOSIS >

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(11 . 5)	
B451	36 44	Ground	0	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

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B2118 TILT SENSOR

< COMPONENT DIAGNOSIS >

B2118 TILT SENSOR

Description INFOID.000000003134655

- 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

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 0.1Vor 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. RERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-50, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000003134657

1. CHECK TILT SENSOR SIGNAL

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

Monitor item	Condition	Value
TILT SEN	Tilt position	Change between 1.2 [V] (close to top) 3.4 [V] (close to bottom)

Is the value normal?

YES >> GO TO 6.

NO >> GO TO 2.

2. CHECK TILT SENSOR CIRCUIT

- Turn ignition switch OFF.
- Disconnect automatic drive positioner control unit and tilt & telescopic sensor 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		
M51	7	M48	3	Existed

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

B2118 TILT SENSOR

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Connector Terminal		Continuity
M51	7		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

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

- 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 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 po	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 ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

5.CHECK TILT SENSOR GROUND 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 po	sitioner control unit	Tilt & teleso	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 or connector.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

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B2118 TILT SENSOR

>> INSPECTION END

B2119 TELESCOPIC SENSOR

< COMPONENT DIAGNOSIS >

B2119 TELESCOPIC SENSOR

Description INFOID:0000000003134658

- 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

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 sensor power supply circuit is opened/shorted.) Telescopic sensor

DTC CONFIRMATION PROCEDURE

1. RERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-53, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK TELESCOPIC SENSOR SIGNAL

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

Monitor item	Condition	Value
TELESCO SEN	Telescopic position	Change between 0.8 [V] (close to top) 3.4 [V] (close to bottom)

Is the valve normal?

YES >> GO TO 6.

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		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.

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B2119 TELESCOPIC SENSOR

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Connector Terminal		Continuity
M51	23		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC 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	Connector Terminal		
M48	1	Ground	5

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

- 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 po	sitioner control unit	Tilt & teleso	copic 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 Terminal		Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK TELESCOPIC 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 positioner control unit		Tilt & telescopic 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".

B2119 TELESCOPIC SENSOR

>> INSPECTION END

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B2126 DETENT SW

Description INFOID:0000000003134661

- Detention switch is installed on control device. 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 and the vehicle speed of 7±4 km/h is detected.	Harness and connectors (Detention switch circuit is opened/shorted.) Detention switch Unified meter and A/C amp. (CAN communication)

DTC CONFIRMATION PROCEDURE

1. RERFORM DTC CONFIRMATION PROCEDURE

- 1. Drive the vehicle at 7±4 km/h or more.
- 2. Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-56, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000003134663

1. CHECK DTC WITH "BCM"

Check "Self diagnostic result" for BCM with CONSULT-III.

Is the either DTC B2601, B2602, B2603, B2604 or B2605 detected?

YES >> Check the DTC. Refer to ADP-192, "DTC Index".

NO >> GO TO 2.

2. CHECK DTC WITH "METER/M&A"

Check "Self diagnostic result" for METER/M&A with CONSULT-III.

Is the DTC detected?

YES >> Check the DTC. Refer to MWI-84, "DTC Index".

NO >> GO TO 3.

3.check detention switch signal

- 1. Turn ignition switch ON.
- Select "DETENT SW" in "Data Monitor" mode with CONSULT-III.
- 3. Check detention switch signal under the following condition.

Monitor item	Condition		Status
DETENT SW	soloctor lovor	P position	OFF
	selector lever	Other than above	ON

Is the status normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK DETENTION SWITCH CIRCUIT

1. Turn ignition switch OFF.

B2126 DETENT SW

< COMPONENT DIAGNOSIS >

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

Driver seat	Driver seat control unit		Control device	
Connector	Terminal	Connector	Terminal	Continuity
B451	21	M137	11	Existed

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

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

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

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B2128 UART COMMUNICATION LINE

< COMPONENT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description INFOID:000000003134668

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

DTC CONFIRMATION PROCEDURE

1. RERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-58, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000003134670

1. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit		Automatic drive positioner control unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	1	M51	10	Existed
D431	17	1 Civi	26	LAISIEU

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

Driver seat control unit			Continuity	
Connector	Terminal	Ground	Continuity	
B451	1	Ground	Not existed	
D431	17		Not existed	

Is the inspection result normal?

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

NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM: Diagnosis Procedure

INFOID:0000000003134671

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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	
battery power suppry	10	

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

- Turn ignition switch OFF.
- 2. Disconnect BCM connectors.
- Check voltage between BCM harness connector and ground.

(+) BCM		(–)	Voltage (Approx.)	
Connector	Terminal		(-FF / 5/4)	
M118	1	Ground	Battery voltage	
M119	11	Ground	Battery Voltage	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			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:0000000003134673

NOTE:

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

1. CHECK POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Check voltage between driver seat control unit harness connector and ground.

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ADP-59

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B452	33	Cround	Pottony voltago	
D402	40	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following.

- Repair or replace harness between driver seat control unit and fuse block (J/B).
- · Circuit breaker.

2.CHECK GROUND CIRCUIT

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

Driver seat control unit			Continuitu
Connector	Terminal	— Continuity Ground	Continuity
B451	32	Ground	Existed
B452	48		Existed

Is the inspection result normal?

YES >> Driver seat control unit power supply and ground circuit are OK.

NO >> Repair or replace harness between driver seat control unit and ground.

DRIVER SEAT CONTROL UNIT: Special Repair Requirement

INFOID:0000000003134674

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to <u>ADP-8</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL</u> : Description".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000003134675

NOTE:

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

1. CHECK POWER SUPPLY CIRCUIT

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

(+) Automatic drive positioner control unit Connector Terminal		(-)	Voltage (V) (Approx.)
		()	
M52	34	Ground	Pattony voltago
IVI32	39	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness between automatic drive positioner control unit and fuse block (J/B).

2. CHECK GROUND CIRCUIT

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

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M52	40	Ground	Existed	
	48		Existed	

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Is the inspection result normal?

- YES >> Automatic drive positioner control unit power supply and ground circuit are OK.
- NO >> Repair or replace harness between automatic drive positioner control unit and ground.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Special Repair Requirement

INFOID:0000000003134676

1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to <u>ADP-8</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL</u>
: <u>Description"</u>.

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SLIDING SWITCH

Description INFOID:000000003134677

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

Component Function Check

INFOID:0000000003134678

1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134679

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.

(+) Power seat switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(/ .pp. 0/)	
B459	11 26	- Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

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

Driver seat	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	11	B459	11	Existed
D431	26	D-109	26	LAISIGU

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

SLIDING SWITCH

< COMPONENT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	11	Giouna	Not existed
D+31	26		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK SLIDING SWITCH

Refer to ADP-63, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-212</u>, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK SLIDING SWITCH

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

Power seat switch Terminal		Condition		Continuity
32		Oliding Switch (backward)	Release	Not existed
32	26	Sliding switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

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RECLINING SWITCH

< COMPONENT DIAGNOSIS >

RECLINING SWITCH

Description INFOID:0000000003134681

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

Component Function Check

INFOID:0000000003134682

1. CHECK FUNCTION

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

Monitor item	Condition	Status	
RECLINE SW-FR	Reclining switch (forward)	Operate	ON
RECLINE SW-FR	Reclining switch (lorward)	Release	OFF
RECLINE SW-RR	Reclining switch (backward)	Operate	ON
NEGLINE SW-INI	Trecining Switch (backward)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134683

1. CHECK RECLINING SWITCH SIGNAL

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

(+) Power seat switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(, .FP10/ii)	
B459	12	Ground	Rattony voltago	
D439	27	Ground	- Ground Battery Vol	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK RECLINING SWITCH CIRCUIT

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

Driver seat	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	12	B459	12	Existed
D431	27	D409	27	LXISIEU

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

RECLINING SWITCH

< COMPONENT DIAGNOSIS >

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	12	Ground	Not existed
D431	27		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK RECLINING SWITCH

Refer to ADP-65, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-212, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK RECLINING SWITCH

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

Power seat switch		Condition		Continuity
Terminal				
	12	Reclining switch (backward)	Operate	Existed
32	12 Reclining Switch (backward)	Release	Not existed	
32	27	Declining quitab (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 ADP-212, "Removal and Installation".

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LIFTING SWITCH (FRONT)

< COMPONENT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description INFOID:000000003134685

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

Component Function Check

INFOID:0000000003134686

1. CHECK FUNCTION

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

Monitor item	Condition		Status
LIFT FR SW-UP	Lifting switch front (up)	Operate	ON
LIFT FR SW-OP	Litting Switch Horit (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
EII TTR SW-DIN	Litting Switch from (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134687

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.)	
	(/ .pp. 3/)	
Ground	Battery voltage	
	Ground	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

Driver seat	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	13	B459	13	Existed
D431	28	D409	28	LXISIEG

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

LIFTING SWITCH (FRONT)

< COMPONENT DIAGNOSIS >

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	13	Ground	Not existed
D+31	28		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-67, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-212, "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				
	13	Lifting switch front (down)	Operate	Existed
32	13	Litting Switch from (down)	Release	Not existed
32	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 ADP-212, "Removal and Installation".

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LIFTING SWITCH (REAR)

< COMPONENT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description INFOID:000000003134689

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

Component Function Check

INFOID:0000000003134690

1. CHECK FUNCTION

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

Monitor item	Condition		Status
LIFT RR SW-UP	Lifting quitab roor (up)	Operate	ON
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
LII I IXIX SVV-DIN	Litting Switch rear (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134691

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.

	+) eat switch	(-)	Voltage (V) (Approx.)	
Connector	Terminal		(· ·pp· · · · ·)	
B459	14	Ground	Pottory voltage	
6409	29	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seat	control unit	Power sear switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	14	B459	14	Existed
D40 I	29	D-100	29	LAISIEU

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

LIFTING SWITCH (REAR)

< COMPONENT DIAGNOSIS >

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	14	Ground	Not existed
D+31	29		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-69, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-212</u>, "Removal and Installation".

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 seat switch		Condition		Continuity
Terminal				
	14	Lifting switch rear (up)	Operate	Existed
32	14 Litting		Release	Not existed
32	29 Lifting switch rear (dov	Lifting quitab roor (down)	Operate	Existed
		Litting Switch rear (down)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

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TILT SWITCH

Description INFOID.000000003134693

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

Component Function Check

INFOID:0000000003134694

1. CHECK FUNCTION

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

Monitor item	Condition		Status
TILT SW-UP	Tilt switch (up)	Operate	ON
TILI SW-UP	The Switch (up)	Release	OFF
TILT SW-DN	Tilt switch (down)	Operate	ON
TIET SW-DIN	Till Switch (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134695

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.)	
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M31	4	Ground	Rattony voltago	
IVIST	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TILT SWITCH CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M51	1	M31	4	Existed
	17	IVIOT	5	LAISIEU

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

TILT SWITCH

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M51	1	Giouria	Not existed	
I CIVI	17	'	inot existed	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210. "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK TILT SWITCH

Refer to ADP-71, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-213, "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 & telescopic switch		Condition		Continuity
Terminal				
1	4	Tilt switch (up)	Operate	Existed
			Release	Not existed
	5	Tilt switch (down)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-213, "Removal and Installation".

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TELESCOPIC SWITCH

< COMPONENT DIAGNOSIS >

TELESCOPIC SWITCH

Description

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

Component Function Check

INFOID:0000000003134698

1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134699

1. CHECK TELESCOPIC SWITCH SIGNAL

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

(+) Tilt & telescopic switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		()	
M31	2	Ground	Pattory voltage	
IVIST	3	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check telescopic switch circuit

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

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

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

TELESCOPIC SWITCH

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Terminal	Cround	Continuity
M51	11	— Ground	Not existed
I GIVI	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK TELESCOPIC SWITCH

Refer to ADP-73, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-213, "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 & telescopic switch Terminal		Condition		Continuity
1	2	relescopic switch (lorward)	Release	Not existed
	3	Telescopic switch (backward)	Operate	Existed
	3	relescopic switch (backward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-213, "Removal and Installation".

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SEAT MEMORY SWITCH

< COMPONENT DIAGNOSIS >

SEAT MEMORY SWITCH

Description INFOID:000000003134701

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

Component Function Check

INFOID:0000000003134702

1. CHECK FUNCTION

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

Monitor item	Conc	Condition	
SET SW	SET SW	Push	ON
	SL1 3W	Release	OFF
MEMORY SW 1	Memory switch 1	Push	ON
	Memory Switch	Release	OFF
MEMORY SW 2	Memory switch 2	Push	ON
	Wellioly Switch 2	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134703

1. CHECK SEAT MEMORY SWITCH SIGNAL

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

(+)			Voltage (V) (Approx.)	
Seat memory switch		(–)		
Connector	Terminal		(* * * * * * * * * * * * * * * * * * *	
	3			
D5	1	Ground	5	
	2			

Is the inspection result normal?

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

2. CHECK MEMORY SWITCH CIRCUIT

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

SEAT MEMORY SWITCH

< COMPONENT DIAGNOSIS >

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

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

Automatic drive positioner 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 ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.check memory switch ground circuit

- Turn ignition switch OFF.
- Check continuity between seat memory switch harness connector and ground.

Seat memory switch Connector Terminal			Continuity
		Ground	Continuity
D5	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK SEAT MEMORY SWITCH

Refer to ADP-75, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to ADP-211, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK SEAT MEMORY SWITCH

- Turn ignition switch OFF.
- Disconnect seat memory switch connector. 2.
- Check continuity between seat memory switch terminals.

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SEAT MEMORY SWITCH

< COMPONENT DIAGNOSIS >

Seat memory switch		Condition		Continuity	
Teri	minal		ondition	Continuity	
	3	Set switch	Push	Existed	
	3	Set Switch	Release	Not existed	
4	4	Memory switch 1	Push	Push	Existed
4	I		Release	Not existed	
	2	Memory switch 2	Push	Existed	
2	2		Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch.Refer to <u>ADP-211, "Removal and Installation"</u>.

< COMPONENT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

INFOID:0000000003134705

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CHANGEOVER SWITCH : Description

Changeover switch is integrated into door mirror remote control switch.

Changeover switch has three positions (L, N and R).

It changes door mirror motor operation by transmitting control signal to automatic drive positioner control unit.

CHANGEOVER SWITCH: Component Function Check

INFOID:0000000003134706

1. CHECK CHANGEOVER SWITCH FUNCTION

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

Refer to ADP-42, "CONSULT-III Function".

Is the inspection result normal?

YES >> Changeover switch function is OK.

NO >> Refer to ADP-77, "CHANGEOVER SWITCH: Diagnosis Procedure".

CHANGEOVER SWITCH: Diagnosis Procedure

INFOID:0000000003134707

1. CHECK CHANGEOVER SWITCH SIGNAL

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

(+) Automatic drive positioner control unit		(-) Con		Condition	
Connector	Terminal				(Approx.)
	M51 18	Ground	Ground Change over switch	RIGHT	0
ME4				Other than above	5
I GIVI				LEFT	0
				Other than above	5

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

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2. CHECK HARNESS CONTINUITY

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

Automatic drive po	Automatic drive positioner control unit		ote control switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	2	D17	11	Existed
IVIO	18	DII	10	LXISIGU

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M51	2	Ground	Not existed
M51	18	-	ivoi existed

Is the inspection result normal?

< COMPONENT DIAGNOSIS >

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch			Continuity
Connector	Terminal	Ground	Continuity
D17	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

(+) Automatic drive positioner control unit		(-)	Voltage (V) (Approx.)
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M51	2	Ground	5
I CIVI	18	Ground	3

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

5.CHECK CHANGEOVER SWITCH

Check changeover switch.

Refer to ADP-78, "CHANGEOVER SWITCH: Component Inspection".

Is the inspection result normal?

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

NO >> Replace door mirror remote control switch. Refer to MIR-56, "Removal and Installation".

6. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-38, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

CHANGEOVER SWITCH: Component Inspection

INFOID:0000000003134708

1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

Door mirror remote control switch		Condition		Continuity
Terr	Terminal		Condition	
10			LEFT	Existed
10	7	Change over switch	Other than above	Not existed
44	11		RIGHT	Existed
			Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

< COMPONENT DIAGNOSIS >

NO >> Replace door mirror remote control switch. Refer to MIR-56, "Removal and Installation".

MIRROR SWITCH

MIRROR SWITCH: Description

INFOID:0000000003134709

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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

INFOID:0000000003134710

1. CHECK MIRROR SWITCH FUNCTION

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

Refer to ADP-42, "CONSULT-III Function".

Is the inspection result normal?

YES >> Mirror switch function is OK.

NO >> Refer to ADP-79, "MIRROR SWITCH: Diagnosis Procedure".

MIRROR SWITCH: Diagnosis Procedure

INFOID:0000000003134711

1. CHECK MIRROR SWITCH FUNCTION

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

(+) Automatic drive positioner control unit		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				1
	3	Ground		UP	0
	3		Mirror switch	Other than above	5
	4			LEFT	0
M51	4			Other than above	5
I GIVI	19			DOWN	0
	19			Other than above	5
	20			RIGHT	0
	20			Other than above	5

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

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2.CHECK HARNESS CONTINUITY

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

Automatic drive po	Automatic drive positioner control unit Door mirror remote control sw		ote control switch	Continuity
Connector	Terminal	Connector Terminal		Continuity
	3		15	
M51	4	D17	13	Existed
IVIST	19		12	LXISted
	20		4	

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

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< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Terminal		Continuity
	3	Ground	
M51	4		Not existed
	19		NOT existed
	20		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

Door mirror remote control switch			Continuity
Connector	Terminal	Ground	Continuity
D17	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

(+)			V-16 0.0
Automatic drive	Automatic drive positioner control unit		Voltage (V) (Approx.)
Connector	Terminal		(. 44)
	3	Ground	5
M51	4		
IVIO I	19		
	20		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

5. CHECK MIRROR SWITCH

Check mirror switch

Refer to ADP-81, "MIRROR SWITCH: Component Inspection".

Is the inspection result normal?

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

NO >> Replace door mirror remote control switch. Refer to MIR-56, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-38, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

< COMPONENT DIAGNOSIS >

MIRROR SWITCH: Component Inspection

INFOID:0000000003134712

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1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Door mirror rem	Door mirror remote control switch Terminal		Condition		
Terr					
4			RIGHT	Existed	
4			Other than above	Not existed	
13				LEFT	Existed
13	7	Mirror switch	Other than above	Not existed	
15		Mirror switch	UP	Existed	
15			Other than above	Not existed	
40	12		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 MIR-56. "Removal and Installation".

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POWER SEAT SWITCH GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000003134713

1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

Power seat switch			Continuity
Connector	Terminal	Ground	Continuity
B459	32		Existed

Is the inspection result normal?

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

NO >> Repair or replace harness.

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000003715415

1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

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

Tilt & telescopic switch			Continuity
Connector	Terminal	Ground	Continuity
M31	1		Existed

Is the inspection result normal?

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

NO >> Repair or replace harness.

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< COMPONENT DIAGNOSIS >

DETENTION SWITCH

Description INFOID:000000003134714

Detention switch is installed on control device. 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

INFOID:0000000003134715

1. CHECK FUNCTION

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

Monitor item	Condition		Status
		P position	OFF
DETENT SW	Selector lever	Other than above	ON

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134716

1. CHECK DTC WITH "BCM"

Check "Self Diagnostic Result" for BCM with CONSULT-III.

Is the either DTC B2601, B2602, B2603, B2604 or B2605 detected?

YES >> Check the DTC. Refer to ADP-192, "DTC Index".

NO >> GO TO 2.

2. CHECK DETENTION SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- Disconnect control device harness connector.
- Turn ignition switch ON.
- 4. Check voltage between control device harness connector and ground.

(+) Control device		(-)	Voltage (V) (Approx.)
M137	11	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.check detention switch circuit

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

Driver seat	t control unit	Contro	l device	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	21	M137	11	Existed

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

DETENTION SWITCH

< COMPONENT DIAGNOSIS >

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

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

4. CHECK DETENTION SWITCH

Refer to ADP-85, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

>> Replace control device. Refer to TM-156, "2WD : Removal and Installation". NO

5. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK DETENTION SWITCH

- Turn ignition switch OFF.
- Disconnect control device connector.
- Check control device terminals.

Control device		Condition		Continuity
Terminal				
10 11		Selector lever	P position	Existed
	Selector lever	Selector level	Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace control device. Refer to TM-156, "2WD: Removal and Installation". ADP

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FRONT DOOR SWITCH (DRIVER SIDE)

< COMPONENT DIAGNOSIS >

FRONT DOOR SWITCH (DRIVER SIDE)

Description INFOID:000000003134721

Detects front door (driver side) open/close condition.

Component Function Check

INFOID:0000000003134722

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "DOOR SW-DR" in "Data monitor" mode with CONSULT-III.
- 3. Check the front door switch (driver side) signal under the following conditions.

Monitor item	Condition		Status
DOOR SW-DR	Front door switch	Open	ON
DOOK SW-DK	(driver side)	Close	OFF

Is the inspection result normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134723

1.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect front door switch (driver side) connector.
- 3. Check signal between front door switch (driver side) connector and ground with oscilloscope.

	(+) Front door switch (driver side) Connector Terminal		Voltage (V) (Approx.)
B16	2	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check front door switch (driver side) circuit

- 1. Disconnect BCM connector.
- 2. Check continuity between BCM connector and front door switch (driver side) connector.

В	BCM Front door sw		itch(driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	150	B16	2	Existed

3. Check continuity between BCM connector and ground.

ВСМ			Continuity	
Connector	Connector Terminal		Continuity	
M123	150		Not existed	

FRONT DOOR SWITCH (DRIVER SIDE)

< COMPONENT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-84, "Exploded View".

NO >> Repair or replace harness or connector.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Refer to ADP-87, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front door switch (driver side). Refer to <u>DLK-257, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

- 1. Turn ignition switch OFF.
- 2. Disconnect front door switch (driver side) connector.
- 3. Check continuity between front door switch (driver side) terminals.

Front door switch (driver side)		Condition		Continuity
Terminal				Continuity
2	Ground part of door	Front door switch	Pushed	Not existed
	switch	(driver side)	Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door switch (driver side). Refer to <u>DLK-257, "Removal and Installation"</u>.

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SLIDING SENSOR

Description INFOID:000000003134725

- The sliding sensor is installed to the seat slide cushion frame.
- The pulse signal is inputted to the driver seat control unit when sliding is performed.
- The driver seat control unit counts the pulse and calculates the sliding amount of the seat.

Component Function Check

INFOID:0000000003134726

1. CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000003134727

1. CHECK SLIDING SENSOR SIGNAL

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

	+) control unit	(-)	Cond	dition	Voltage (V) (Approx.)
Connector	Terminal				
B451	24	Ground	Seat sliding	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> GO TO 2.

2.CHECK SLIDING SENSOR CIRCUIT

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

SLIDING SENSOR

< COMPONENT DIAGNOSIS >

Driver seat control unit		Sliding	g sensor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	24	B453	24	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	24		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SENSOR POWER SUPPLY

- Connect driver seat control unit connector.
- 2. Turn ignition switch ON.
- 3. Check voltage between sliding sensor harness connector and ground.

(+) Sliding sensor			V 16 (A.A.)	
		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(11 -)	
B453	16	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect driver seat control unit connector.
- 3. Check continuity between driver seat control unit harness connector and sliding sensor harness connec-

Driver seat control unit		Sliding sensor		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B451	16	B453	16	Existed	

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

Driver seat	Driver seat control unit		Continuity
Connector	Connector Terminal		Continuity
B451	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

5.CHECK SLIDING SENSOR GROUND

- Turn ignition switch OFF.
- 2. Disconnect driver seat control unit connector.
- 3. 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
B451	31	B453	31	Existed

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SLIDING SENSOR

< COMPONENT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace sliding sensor.

NO >> Repair or replace harness or connector.

RECLINING SENSOR

< COMPONENT DIAGNOSIS >

RECLINING SENSOR

Description INFOID:0000000003134728

- The reclining motor is installed to the seatback frame.
- The pulse signal is inputted 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 "Data monitor" mode with CONSULT-III.
- 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 ADP-91, "Diagnosis Procedure".

Diagnosis Procedure

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.

Oriver seat	r) control unit	(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
B451	9	Ground	Seat reclining	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> GO TO 2.

2. CHECK RECLINING SENSOR CIRCUIT

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

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RECLINING SENSOR

< COMPONENT DIAGNOSIS >

Driver seat	Driver seat control unit		Reclining motor		
Connector	Terminal	Connector Terminal		Continuity	
B451	9	B454	9	Existed	

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

Driver seat control unit			Continuity	
Connector	Connector Terminal		Continuity	
B451	9		Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SENSOR POWER SUPPLY

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

(+) Reclining motor		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(+)	
B454	16	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and reclining motor harness connector.

Driver seat	Driver seat control unit		Reclining motor	
Connector	Terminal	Connector Terminal		Continuity
B451	16	B454	16	Existed

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

Driver seat control unit			Continuity	
Connector Terminal		Ground	Continuity	
B451	B451 16		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK RECLINING SENSOR GROUND

- 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.

Driver seat	Driver seat control unit		Reclining motor	
Connector	Terminal	Connector Terminal		Continuity
B451	31	B454	31	Existed

RECLINING SENSOR

< COMPONENT DIAGNOSIS >

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YES >> Replace reclining motor.

NO >> Repair or replace harness or connector.

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LIFTING SENSOR (FRONT)

< COMPONENT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Description INFOID:000000003134731

- The lifting sensor (front) is installed to the seat slide cushion frame.
- The pulse signal is inputted 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:0000000003134732

1. CHECK FUNCTION

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

Monitor item	Condition		Value
		Operate (Up)	Change (increase)*1
LIFT FR PULSE	Seat lifting (front)	Operate (Down)	Change (decrease)*1
		Release	No change ^{*1}

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-94, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000003134733

1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

	(+) Driver seat control unit		Condition		Voltage (V) (Approx.)
Connector	Terminal				, , ,
B451	25	Ground	Seat Lifting (front)	Operate	10mSec/div 2V/div JMJIA0119ZZ
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> GO TO 2.

2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

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

LIFTING SENSOR (FRONT)

< COMPONENT DIAGNOSIS >

Driver seat control unit		Lifting motor (front)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B451	25	B455	25	Existed	

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground		
B451	25		Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

- 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		,	
B455	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

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

Driver seat	control unit	Lifting motor (front) Connector Terminal		Continuity
Connector	Terminal			Continuity
B451	16	B455	16	Existed

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B451	16		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (FRONT) GROUND

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

Driver seat	Driver seat control unit		Lifting motor (front)		
Connector	Terminal	Connector Terminal		Continuity	
B451	31	B455	31	Existed	

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LIFTING SENSOR (FRONT)

< COMPONENT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace lifting motor (front).

NO >> Repair or replace harness.

LIFTING SENSOR (REAR)

< COMPONENT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description INFOID:0000000003134734

- The lifting sensor (rear) is installed to the seat slide cushion frame.
- The pulse signal is inputted 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 "Data monitor" mode with 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 (rear)	Operate (Down)	Change (decrease)*1
		Release	No change ^{*1}

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-97, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003134736

INFOID:0000000003134735

1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

	+) control unit	(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
B451	10	Ground	Seat Lifting (rear)	Operate Other than above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

NO >> GO TO 2.

2.check lifting sensor (rear) circuit

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

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LIFTING SENSOR (REAR)

< COMPONENT DIAGNOSIS >

Driver seat	Driver seat control unit		Lifting motor (rear)	
Connector	Terminal	Connector Terminal		Continuity
B451	10	B456	10	Existed

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

Driver seat control unit			Continuity	
Connector	Terminal	Ground	Continuity	
B451	10		Not Existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.check lifting sensor (rear) power supply

- 1. Connect driver seat control unit connector.
- 2. Turn ignition switch ON.
- 3. Check the voltage between lifting motor (rear) harness connector and ground.

Lifting m	(+) notor (rear)	(-)	Voltage (V) (Approx.)	
Connector	Terminal		(+	
B456	16	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seat	control unit	Lifting motor (rear)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B451	16	B456	16	Existed	

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (REAR) GROUND

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

Driver seat	t control unit	Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	31	B456	31	Existed

LIFTING SENSOR (REAR)

< COMPONENT DIAGNOSIS >

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YES >> Replace lifting motor (rear).

NO >> Repair or replace harness or connector.

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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.

Component Function Check

INFOID:0000000003134738

1. CHECK FUNCTION

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

Monitor item	Condition	Value
TILT SEN	Tilt position	Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom)

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-100, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003134739

1. CHECK TILT SENSOR SIGNAL

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

	+) ositioner control unit	(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
M51	7	Ground	Tilt position	Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom)

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

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

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

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

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

Is the inspection result normal?

TILT SENSOR

< COMPONENT DIAGNOSIS >

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK TILT SENSOR POWER SUPPLY

- 1. Connect automatic drive positioner control unit connector.
- Turn ignition switch ON. 2.
- Check voltage between tilt & telescopic sensor harness connector and ground.

	+)		Voltage (V)	
Tilt & telescopic sensor		(–)	Voltage (V) (Approx.)	
Connector	Terminal		,	
M48	1	Ground	Battery voltage	

Is the inspection result normal?

>> GO TO 5. YES

NO >> GO TO 4.

4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

- 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 po	ositioner 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 Terminal		Ground	Continuity	
M52		33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

CHECK TILT SENSOR GROUND CIRCUIT

- Turn ignition switch OFF.
- 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 >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness or connector.

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TELESCOPIC SENSOR

< COMPONENT DIAGNOSIS >

TELESCOPIC SENSOR

Description INFOID:000000003134740

- 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.

Component Function Check

INFOID:0000000003134741

1. CHECK FUNCTION

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

Monitor item	Condition	Value
TELESCO SEN	Telescopic position	Change between 0.8 [V] (close to top) 3.4 [V] (close to bottom)

Is the indication normal?

YES >> INSPECTION END.

NO >> Perform diagnosis procedure. Refer to ADP-102, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003134742

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			(11 - /
M51	23	Ground	Telescopic position	Change between 0.8 [V] (close to top) 3.4 [V] (close to bottom)

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect automatic drive positioner control unit and tilt & telescopic sensor 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
M51	23	M48	2	Existed

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

TELESCOPIC SENSOR

< COMPONENT DIAGNOSIS >

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC 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			(77.0/11)	
M48	2	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

- 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	Automatic drive positioner control unit		Tilt & telescopic sensor	
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 ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK TELESCOPIC SENSOR GROUND 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 po	sitioner control unit	Tilt & teleso	Tilt & telescopic sensor	
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.

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MIRROR SENSOR DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000003134743

- 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 operated.
- 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

INFOID:0000000003134744

1. CHECK FUNCTION

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

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)
MIR/SEN LH R-L	- Door militor (univer side)	Change between 0.6 [V] (close to left edge) 3.4 [V] (close to right edge)

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-104, "DRIVER SIDE: Diagnosis Procedure"</u>.

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000003134745

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

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

(- Door mirror	+) (driver side)	(-)	Voltage (V) (Approx.)
Connector Terminal			(* * * * * * * * * * * * * * * * * * *
D3	23	Ground	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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

- 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 (driver side) harness connector.

Automatic drive positioner control unit connector	Terminal	Door mirror (driver side) connector	Terminal	Continuity
M52	33	D3	23	Existed

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

< COMPONENT DIAGNOSIS >

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 ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.check door mirror (driver side) sensor ground

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

Automatic drive po	sitioner control unit	Door mirror (driver side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M52	41	D3	24	Existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

f 4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

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

Automatic drive po	ositioner control unit	Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	6	D3	21	Existed
I CIVI	22	DS	22	Existed

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

Automatic drive	Automatic drive positioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
ME4	6	Ground	Not evieted	
M51	22		Not existed	

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE: Description

The mirror sensor (passenger side) is installed to the door mirror (passenger side).

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

PASSENGER SIDE : Component Function Check

1. CHECK FUNCTION

- Turn ignition switch ON.
- Select "MIR/SEN RH U-D", "MIR/SEN RH R-L" in "Data monitor" with CONSULT-III.
- Check the mirror sensor (passenger side) signal under the following conditions.

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< COMPONENT DIAGNOSIS >

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-106, "PASSENGER SIDE: Diagnosis Procedure"</u>.

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000003134748

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

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

(+) Door mirror (passenger side)		(-)	Voltage (V) (Approx.)
Connector	Terminal		(+ +
D33	23	Ground	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.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.

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	33	D33	23	Existed

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

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

Is the inspection result normal?

YES >> Replace automatic driver positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

$3. \mathrm{CHECK}\ \mathrm{DOOR}\ \mathrm{MIRROR}\ \mathrm{(PASSENGER}\ \mathrm{SIDE)}\ \mathrm{SENSOR}\ \mathrm{GROUND}$

- 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) connector.

< COMPONENT DIAGNOSIS >

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	41	D33	24	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

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

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

Automatic drive po	sitioner control unit	Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	5	D33	21	Existed
I CIVI	21	D33	22	LAISIEU

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M51	5	Ground	Not existed
I CIVI	21		Not existed

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

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SLIDING MOTOR

< COMPONENT DIAGNOSIS >

SLIDING MOTOR

Description INFOID:000000003134749

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

Component Function Check

INFOID:0000000003134750

1. CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-108, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000003134751

1. CHECK SLIDING MOTOR POWER SUPPLY

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

(+) Sliding motor		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(11 - 7
	35	- Ground	SEAT SLIDE	OFF	0
				FR (forward)	Battery voltage
B461				RR (backward)	0
D401	42			OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage

Is the inspection result normal?

YES >> Replace sliding motor. (Built in seat slide cushion frame.)

NO >> GO TO 2.

2.CHECK SLIDING MOTOR CIRCUIT

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and sliding motor harness connector.

SLIDING MOTOR

< COMPONENT DIAGNOSIS >

Driver sea	t control unit	Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	35	B461 35		Existed
B452	42	D401	42	Existed

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	35	Giodila	Not existed
D402	42		Not existed

Is the inspection result normal?

YES >> Replace driver control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

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RECLINING MOTOR

< COMPONENT DIAGNOSIS >

RECLINING MOTOR

Description INFOID:000000003134752

- 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

INFOID:0000000003134753

1. CHECK FUNCTION

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

Test item		Description	
	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-110, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000003134754

1. CHECK RECLINING MOTOR POWER SUPPLY

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

	(+) Reclining motor		Condition		Voltage (V) (Approx.)
Connector	Terminal				
				OFF	0
	36	36 Ground	SEAT RECLINING	FR (forward)	Battery voltage
B454				RR (backward)	0
D434				OFF	0
	44			FR (forward)	0
			RR (backward)	Battery voltage	

Is the inspection result normal?

YES >> Replace reclining motor. (Built in seat back frame.)

NO >> GO TO 2.

2.check reclining motor circuit

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector.
- 3. Check continuity between driver seat control unit harness connector and reclining motor harness connector.

RECLINING MOTOR

< COMPONENT DIAGNOSIS >

Driver sea	t control unit	Reclining motor Connector Terminal		Continuity
Connector	Terminal			Continuity
B452	36	B454	B454 36	
B452	44	D404	44	Existed

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	36	Ground	Not existed	
D432	44		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

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LIFTING MOTOR (FRONT)

< COMPONENT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Description INFOID:000000003134755

- 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

INFOID:0000000003134756

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT LIFTER FR" in "Active test" mode with CONSULT-III.
- 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 ADP-112, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003134757

1. CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

	(+) Lifting motor (front)		(-) Cond		Voltage (V) (Approx.)	
Connector	Terminal				(44.5)	
		Ground		OFF	0	
	37		SEAT LIFTER FR	UP	0	
B455				DWN (down)	Battery voltage	
B400				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.)

NO >> GO TO 2.

2.check lifting motor (front) circuit

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

LIFTING MOTOR (FRONT)

< COMPONENT DIAGNOSIS >

Driver sea	at control unit	Lifting motor (front)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B452	37	B455	37	Existed	
D432	45	D433	45	LXISIEU	

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

Driver seat	control unit		Continuity	
Connector Terminal		Ground	Continuity	
B452	37	Ground	Not existed	
D432	45			

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

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LIFTING MOTOR (REAR)

< COMPONENT DIAGNOSIS >

LIFTING MOTOR (REAR)

Description INFOID:000000003134758

- 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

INFOID:0000000003134759

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT LIFTER RR" in "Active test" mode with CONSULT-III.
- 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-114, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000003134760

1. CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

	(+) Lifting motor (rear)		(-) Condition		Voltage (V) (Approx.)
Connector	Connector Terminal				,
			SEAT LIFTER RR	OFF	0
	38			UP	Battery voltage
B456		Ground		DWN (DOWN)	0
B430		39		OFF	0
	39			UP	0
			DWN (DOWN)	Battery voltage	

Is the inspection result normal?

YES >> Replace lifting motor (rear). (Built in seat slide cushion frame.)

NO >> GO TO 2.

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

- Turn ignition switch OFF.
- 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.

LIFTING MOTOR (REAR)

< COMPONENT DIAGNOSIS >

Driver sea	at control unit	Lifting motor (rear)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B452	38	B456	38	Existed	
B432	39	- 5450	39	Existed	

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	38	Ground	Not existed
5432	39		INOL EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-209</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

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TILT MOTOR

Description INFOID:000000003134761

- 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

INFOID:0000000003134762

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TILT MOTOR" in "Active test" mode with CONSULT-III.
- 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-116, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000003134763

1. CHECK TILT MOTOR POWER SUPPLY

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

	(+) Tilt & telescopic motor		Condition		Voltage (V) (Approx.)
Connector	Connector Terminal				,
		3 Ground		OFF	0
	3		TILT MOTOR	UP	0
M49				DWN (down)	Battery voltage
10149	10149			OFF	0
	4			UP	Battery voltage
				DWN (down)	0

Is the inspection result normal?

YES >> Replace tilt motor. (Built in steering column assembly.)

NO >> GO TO 2.

2. CHECK TILT MOTOR CIRCUIT

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

TILT MOTOR

< COMPONENT DIAGNOSIS >

Automatic drive p	Automatic drive positioner control unit		Tilt & telescopic motor		
Connector	Terminal	Connector Terminal		Continuity	
M52	35	M49	4	Existed	
IVIJZ	42	10143	3	LXISIGU	

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

Automatic drive po	ositioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M52	35	Giodila	Not existed	
IVIOZ	42		Not existed	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-210, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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TELESCOPIC MOTOR

< COMPONENT DIAGNOSIS >

TELESCOPIC MOTOR

Description INFOID:000000003134764

- 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

INFOID:0000000003134765

1. CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-118, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000003134766

1. CHECK TELESCOPIC MOTOR POWER SUPPLY

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

	(+) Tilt & telescopic motor		Condition		Voltage (V) (Approx.)
Connector	Connector Terminal				(11 /
				OFF	0
	1		TELESCOPIC MOTOR	FR (forward)	0
M49		Ground		RR (backward)	Battery voltage
10149	W49	2 Ground		OFF	0
	2			FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace telescopic motor. (Built in steering column assembly.)

NO >> GO TO 2.

2.CHECK TELESCOPIC MOTOR CIRCUIT

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

TELESCOPIC MOTOR

< COMPONENT DIAGNOSIS >

Automatic drive p	positioner control unit	Tilt & teles	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M52	36	M49	2	Existed
IVIJZ	44	10149	1	LXISIEU

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	36	Ground	Not existed
WIJZ	44		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-210, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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DOOR MIRROR MOTOR

< COMPONENT DIAGNOSIS >

DOOR MIRROR MOTOR

Description INFOID:000000003134767

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:0000000003134768

1. CHECK DOOR MIRROR MOTOR FUNCTION

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

Refer to ADP-42, "CONSULT-III Function".

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to ADP-120, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000003134769

1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+) Door mirror		(–)	Con	Condition	
Connector Terminal					(Approx.)
	12			UP	Battery voltage
D3 (Driver side) D33 (Passenger side) 11	12		Door mirror remote	Other than above	0
	11	0		LEFT	Battery voltage
	Ground	control switch	Other than above	0	
			DOWN / RIGHT	Battery voltage	
	10			Other than above	0

Is the inspection result normal?

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

2. CHECK HARNESS CONTINUITY

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

[Door mirror driver side]

Automatic drive po	Automatic drive positioner control unit		Door mirror (driver side)		
Connector	Terminal	Connector Terminal		Continuity	
	16		10		
M51	31	D3	12	Existed	
	32		11		

[Door mirror passenger side]

Automatic drive po	ive positioner control unit Door mirror (passenger side)		Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M51	14	D33	12		
	15		11	Existed	
	30		10		

DOOR MIRROR MOTOR

< COMPONENT DIAGNOSIS >

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

[Door mirror driver side]

				[Door militor driver side]
	Continuity		Automatic drive positioner control unit	
	Continuity		Terminal	Connector
		Ground	16	M51
	Not existed		31	
			32	
_	Not existed	Ground	16 31	

[Door mirror passenger side]

Automatic drive positioner control unit			Continuity
Connector	Terminal		Continuity
	14	Ground	
M51	15		Not existed
	30		

Is the inspection result normal?

YFS >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to ADP-121, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace door mirror. Refer to MIR-52, "DOOR MIRROR ASSEMBLY: Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK DOOR MIRROR MOTOR-I Check that door mirror motor does not trap foreign objects and does not have any damage.

Refer to MIR-52, "DOOR MIRROR ASSEMBLY: Exploded View".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.Refer to MIR-52, "DOOR MIRROR ASSEMBLY: Removal and Installation".

2.CHECK DOOR MIRROR MOTOR-II

Turn ignition switch OFF.

Disconnect door mirror connector. 2.

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

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

Is the inspection result normal?

YES >> INSPECTION END

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DOOR MIRROR MOTOR

< COMPONENT DIAGNOSIS >

NO >> Replace door mirror. Refer to MIR-52, "DOOR MIRROR ASSEMBLY: Removal and Installation".

SEAT MEMORY INDICATOR

< COMPONENT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description INFOID:0000000003134771

 Memory switch 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

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

Test item	า	Description	
	OFF		OFF
MEMORY SW INDCTR	ON-1	Memory switch indicator	Indicator 1: ON
	ON-2		Indicator 2: ON

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-123, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+) Seat memory switch		(-)	Voltage (V) (Approx.)
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
D5	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

>> Check the following. NO

- 10A fuse [No.10 located in fuse block (J/B)].
- Harness for open or short between memory indicator and fuse.

2.CHECK MEMORY INDICATOR CIRCUIT

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

Automatic drive po	Automatic drive positioner control unit		Seat memory switch		
Connector	Terminal	Connector	Terminal	Continuity	
M51	12	D5	6	Existed	
I GIVI	I CIVI	13	טט	7	LAISIEU

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

Automatic drive po	sitioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M51	12	Ground	Not existed	
	13	_	Not existed	

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INFOID:0000000003134773

SEAT MEMORY INDICATOR

< COMPONENT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK MEMORY INDICATOR

Refer to ADP-124, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch. Refer to ADP-211, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000003134774

1. CHECK SEAT MEMORY INDICATOR

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

Seat men		
Teri	Continuity	
(+)	(-)	
-	6	Existed
5	7	LAISIGU

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to <u>ADP-211, "Removal and Installation"</u>.

< ECU DIAGNOSIS >

ECU DIAGNOSIS

DRIVER SEAT CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III I	MONITOR	ITEM
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Monitor Item	Condit	ion	Value/Status
SET SW	Set switch	Push	ON
3E1 3W	Set Switch	Release	OFF
MEMORY SW1	Mamany quitab 1	Push	ON
	Memory switch 1	Release	OFF
MEMORY CWO	Mamany avvitab 2	Push	ON
MEMORY SW2	Memory switch 2	Release	OFF
CLIDE CW ED	Cliding quitab (frant)	Operate	ON
SLIDE SW-FR	Sliding switch (front)	Release	OFF
CLIDE CW DD	Olidina quitab (roos)	Operate	ON
SLIDE SW-RR	Sliding switch (rear)	Release	OFF
DECLN OW ED	De clinica e evitale (forest)	Operate	ON
RECLN SW-FR	Reclining switch (front)	Release	OFF
DECLN CW DD	Declining quittle ()	Operate	ON
RECLN SW-RR	Reclining switch (rear)	Release	OFF
LIET ED OW LID	Lifting switch front (up)	Operate	ON
LIFT FR SW-UP		Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting quitab roor (down)	Operate	ON
	Lifting switch rear (down)	Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
		Other than above	OFF
MIR CON SW-DN	Mirror quitab	Down	ON
WIR CON SW-DIN	Mirror switch	Other than above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
WIR CON SW-RH	WIIITOI SWILCIT	Other than above	OFF
MIR CON SW-LH	N.C	Left	ON
WIIIX COIN SVV-LIT	Mirror switch	Other than above	OFF
MID CHNC SW D	Changeover switch	Right	ON
MIR CHNG SW-R	Changeover switch	Other than above	OFF
MIR CHNG SW-L	Changeover switch	Left	ON
WIIIX CHING 3VV-L	Changeover switch	Other than above	OFF
TILT SW-UP	Tilt switch	Up	ON
TILI SVV-UP	THE SWILCH	Other than above	OFF
TILT SW-DOWN	Tilt switch	Down	ON
TILI SVV-DOVVIN	THE SWILCH	Other than above	OFF

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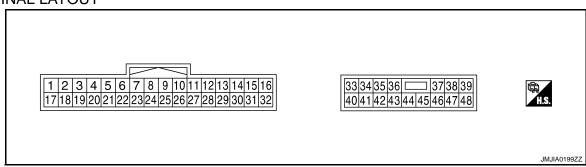
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< ECU DIAGNOSIS >

Monitor Item	Co	ndition	Value/Status
TELESCO SW ED	Tologopia quitab	Forward	ON
TELESCO SW-FR	Telescopic switch	Other than above	OFF
TELESCO SW-RR	Tilt switch	Backward	ON
TELESCO SW-KK	THE SWILCH	Other than above	OFF
DETENT SW	AT selector lever	P position	OFF
DETENT OW	At selector level	Other than above	ON
STARTER SW	Ignition position	Cranking	ON
- OTARTER OW	ignition position	Other than above	OFF
		Forward	The numeral value decreases *1
SLIDE PULSE	Seat sliding	Backward	The numeral value increases *1
		Other than above	No change to numeral value*1
		Forward	The numeral value decreases *1
RECLN PULSE	Seat reclining	Backward	The numeral value increases *1
		Other than above	No change to numeral value*1
		Up	The numeral value decreases *1
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *1
		Other than above	No change to numeral value*1
		Up	The numeral value decreases *1
LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *1
		Other than above	No change to numeral value*1
MIR/SEN RH U-D	Door mirror (passenger	side)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger	side)	Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)	Change between 0.6 (close to left edge) 3.4 (close to right edge)
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:} The value at the position attained when the battery is connected is regarded as 32768.

TERMINAL LAYOUT



PHYSICAL VALUES

< ECU DIAGNOSIS >

Term	ninal No.	Wire	Description				\/oltogo (\/\
+	-	color	Signal name	Input/ Output	Condition	1	Voltage (V) (Approx)
1	Ground	L/W	UART communication (RX)	Input	Ignition switch ON		2mSec/div = 2V/div JMJIA0118ZZ
3	_	R/Y	CAN-H	_	_		_
9	Ground	W/G	Reclining sensor sig- nal	Input	Seat reclining	Operate	10mSec/div 2V/div JMJIA0119ZZ
						Stop	0 or 5
10	Ground	P/B	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div 2V/div JMJIA0119ZZ
						Stop	0 or 5
11	Ground	BR	Sliding switch back- ward signal	Input	Operate (back-ward)		0
						Release	Battery voltage
12	Ground	SB	Reclining switch back- ward signal	Input	Reclining switch	Operate (back- ward)	0
						Release	Battery voltage
13	Ground	LG/R	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	O Pottor visitore
						Release	Battery voltage
14	Ground	G/B	Lifting switch (rear) down signal	Input	Lifting switch (rear) Operate (down)		0 Battery voltage
16	Ground	0	Sensor power supply	Output		Release	5
17	Ground	Y/R	UART communication (TX)	Output	Ignition switch ON		10mSec/div 2V/div JMJIA0121ZZ
19	_	V	CAN-L	_	_		_

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< ECU DIAGNOSIS >

Term	ninal No.		Description				
+	_	Wire color	Signal name	Input/	Condition	า	Voltage (V) (Approx)
	_		Signal Hame	Output			
21	Ground	L/Y	Detention switch	Input	A/T selector lever	Except P position	20mSec/div LLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLLL
24	Ground	R	Sliding sensor signal	Input	Seat sliding	Operate Stop	10mSec/div 2V/div JMJIA0119ZZ
						Сюр	0 01 0
25	Ground	Y/B	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 2V/div JMJIA0119ZZ
						Stop	0 or 5
26	Ground	Υ	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0
			3			Release	Battery voltage
27	Ground	R/G	Reclining switch for- ward signal	Input	Reclining switch	Operate (forward)	0
						Release	Battery voltage
28	Ground	W/B	Lifting switch (front) up signal	Input	Seat lifting switch (front)	Operate (up)	0
			<u> </u>		,	Release	Battery voltage
29	Ground	P/L	Lifting switch (rear) up signal	Input	Seat lifting switch (rear)	Operate (up)	0
			-		(/	Release	Battery voltage
31	Ground	GR	Sensor ground		-		0
32	Ground	B/W	Ground (signal)		-		0
33	Ground	R	Power source (C/B)	Input	_		Battery voltage
35	Ground	W/R	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage
			-			Release Operate	0 Pottory voltage
36	Ground	G/Y	Reclining motor for- ward output signal	Output	Seat reclining	(forward)	Battery voltage
						Release	0

< ECU DIAGNOSIS >

Terr	ninal No.	Wire	Description				Voltage (V)
+	-	color	Signal name	Input/ Output	Conditio	n	(Approx)
37	Ground	G/W	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	Battery voltage
			down output signal			Stop	0
38	Ground	L/Y	Lifting motor (rear) up output signal	Output	Seat lifting (rear)	Operate (up)	Battery voltage
			output signai			Stop	0
39	Ground	R/B	Lifting motor (rear)	Output	Seat lifting (rear)	Operate (down)	Battery voltage
			down output signal			Stop	0
40	Ground	R/W	Power source (Fuse)	Input	_		Battery voltage
42	Ground	W/B	Sliding motor back- ward output signal	Output	Seat sliding	Operate (back- ward)	Battery voltage
						Stop	0
44	Ground	Р	Reclining motor back- ward output signal	Output	Seat reclining	Operate (back- ward)	Battery voltage
						Stop	0
45	Ground	L/R	Lifting motor (front) up output signal	Output	Seat lifting (front)	Operate (up)	Battery voltage
			output signal			Stop	0
48	Ground	В	Ground (power)	_	_		0

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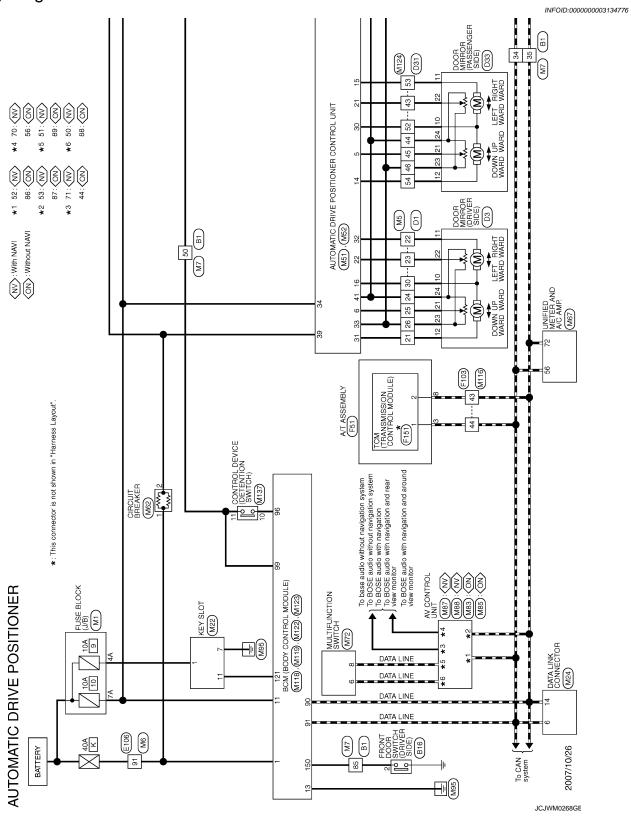
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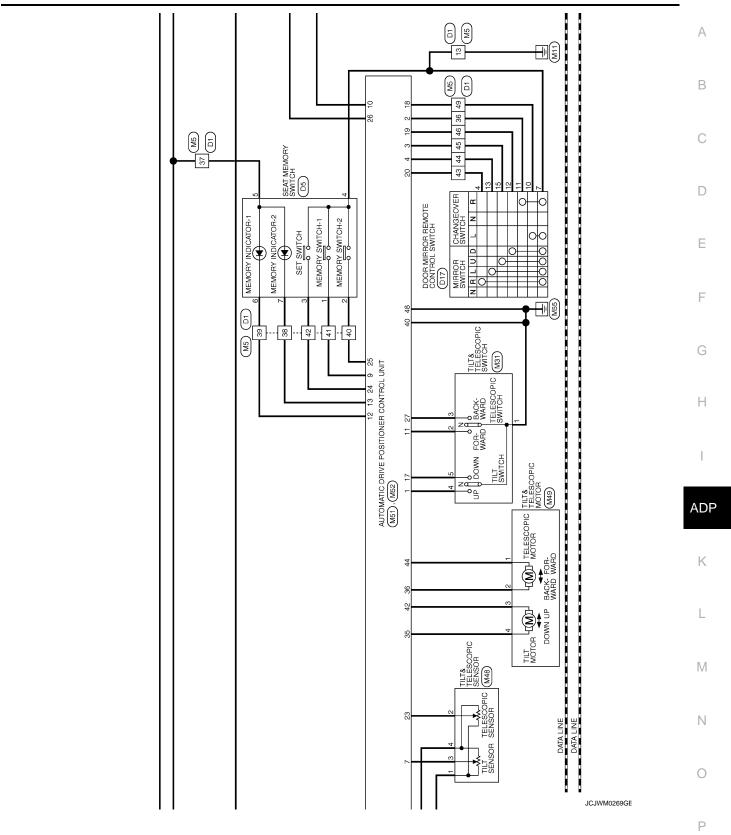
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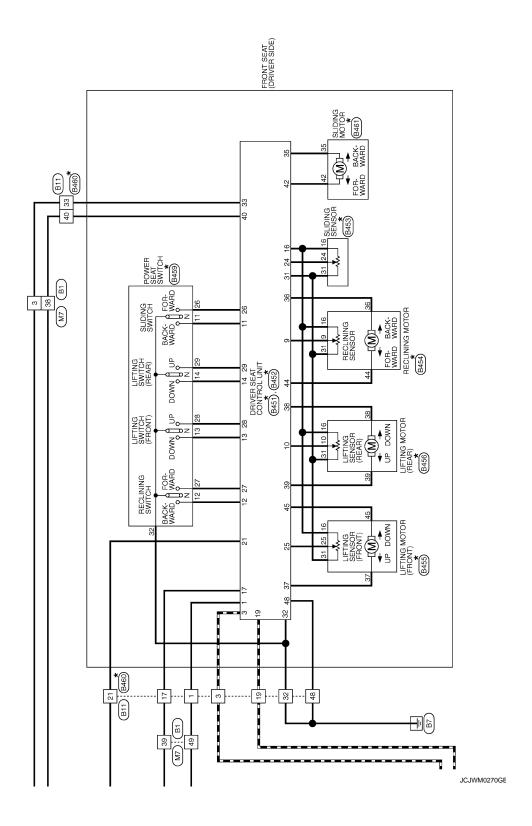
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Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -







★: This connector is not shown in "Harness Layout".

		99]		Α
	G SENSOR	Signal Name [Specification]		В
	8453 SLIDIN 6098 03	Color of Wire Of RR R R R		С
	Connector No. Connector Name Connector Type H.S.	Terminal No. 16. 16. 24 31		D
(DRIVER SIDE)	ROL UNIT 37 38 39 46 47 48	Signal Name [Specification] BATIC/B) BELIC/B) SELIDING MOTORFCPRWARD) RECALLIFING MOTORFCPRWARD) REAR LIFTING MOTORFCORWARD) RECALLIFING MOTORGACKWARD) RECALLIFING MOTORGACKWARD) RECALLIFING MOTORGACKWARD) RECALLIFING MOTORGACKWARD) RECALLIFING MOTORGACKWARD) FRONT LIFTING MOTORICACKWARD) FRONT LIFTING MOTORICACKWARD) FRONT LIFTING MOTORICACKWARD) FRONT LIFTING MOTORICACKWARD)		Е
FRONT DOOR SWITCH (DRIVER SIDE) A03FW Signal Name [Specification]	PENSE NOT THE PROPERS OF THE PROPERS	Signal Name (Specification) BATICA B		F
Connector No. B Connector Name Fi Connector Type A H.S. H.S. Terminal Color No. of Wire 2 V	Connector No. B Connector Name D Connector Type N HS.	Color Colo		G
	(1) (1) (1) (10) (10) (10)			Н
Name	P RANGE SW PULSE/ESLIDING) PULSE/ESLIDING) PULSE/ESLIDING) PULSE/ER LIFTING) PULSE/ER LIFTING) PROJUNIC SW/CPWANAD) REAR LIFTING SW/UPWARD) REAR LIFTI			
WIRE TO DRIVE PO NSI GENY E PO 333				ADP
Connector No.	21 L/Y 24 R 25 Y/B 26 Y/B 27 R/G 27 R/G 28 W/B 29 P/L 31 GR			K
NE SECTION SEC	31 (5) (3) (8) (9)	אין (ט) (איארפט) (ארמט)		L
WIVE POSITION WIRE OSIE-TM4 Signal Name (Specification)	SONTROL UNIT	Signal Name [Specification] RX CAN-H PULSERECLIMNG) BULDING SWIGACKWARD) SLIDING SWIGACKWARD RECLIMING SWIGACKWARD RECLIMING SWICOWWARD REAL LIFTING SWICOWWARD TOTAL TO		M
MARE TO OTHER TO THE STREET OF	B451 TH32FW TH32FW 3 4 5 6 7 8 9 10 11 12 18 30 21 12 12 32 34 5 56 27 788 38			Ν
AUTOMAT Gonnector No. Gonnector Type Gonnector Type 1 SW P 3 SW P 4 SW P 3 SW P 4 SW P 5 SW P	Connector No. Connector Type H.S. H.S.	Color Colo		0
			JCJWM0271GE	

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Connector No. 6459 Connector Name POWER SEAT SWITCH (DRIVER SIDE.) Connector Type NSIOFW-CS MSI 32 12 12 12 17 11 26 11 22 11 22	Terminal Color No. of Wire Signal Name (Specification) 11 BR	29 O	
Connector No. B456 Connector Name LIFTING MOTOR (REAR) (DRIVER SIDE) Connector Type NISOBFBR-CS H.S. The side of	Terminal Color Signal Mame [Specification] No. of Wire D/B -	Connector No. D1 Connector Name WRE TO WIRE Connector Type TH40FW-CS15 H.S.	Terminal Color Signal Name [Specification] No. of Wire - 13 B - 21 0 - 22 P - 23 BR - 24 V - 25 GR - 30 G - 30 G - 37 R - 38 P -
Connector No. 8455 Connector Name LIFTING MOTOR (FRONT) (DRIVER	Terminal Color Signal Name [Specification] OrlVine OrlVine	Connector No. 8461 Connector Name SLIDING MOTOR (DRIVER SIDE) Connector Type 6098-0239 The state of the stat	Terminal Color Signal Name [Specification] No of Wire Sym Name Specification] 42 W/B
AUTOMATIC DRIVE POSITIONER Connector No. 8484 Connector Name RECLINING MOTOR Connector Type NSOFPW-CS MASA H.S. 16319	Terminal Color Signal Name (Specification)	Connector No. B460 Connector Name WIRE TO WIRE Connector Type NS16MW-CS H.S. 19 3 1 1 17 40 59 20 32 48 21 33 60	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 1

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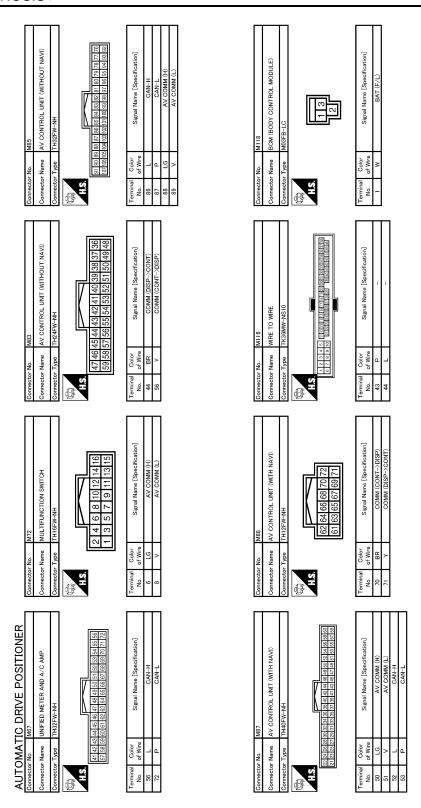
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	WIRE TO WIRE TH40FW-CS15	Signal Name [Specification]	r Name WIRE TO WIRE TYPE TYSERV-NS10	Signal Name [Specification]		В
or No. D31	Connector Name WIRE TO WIRE Connector Type TH40FW-CS15 H.S. IS is is is it in to g is the state of the state	0 C Ool	Corrector No. F103 Connector Type TK36FW-NS10 Connector Type TK36FW-NS10 Connector Type TK36FW-NS10 Connector Type TK36FW-NS10	Objor		С
Connector No.	Connector Type H.S. 15 14	Terminal No. 43. 44. 45. 45. 45. 45. 55. 55. 55. 55. 55	Connector No. Connector Typ	Terminal No. 43 44		D
	1700. RVE POSITIONER 6 7 15 16	oeification]		oseification]		Е
	DOOR MIRROR REMONT CONTROL. TKI GFER 2 3 4 5 6 7 9 10 11 12 13 14 15 16	Signal Name (Specification)	F51 Art Assemery RRIGG-DGY 65 4 3 2 1 1 0 9 8 7 6	Signal Name [Specification]		F
П	Connector Name Surror Connector Type TK16 H.S. 11.2 12.2 13.3	Terminal Color No. of Wire No. of Wire Of	Connector No. F31 Connector Name A/T Connector Type RKI	Color Colo		G
	8 8 8		8 8 8 4			Н
	мтон	Signal Name [Specification]		Signal Name [Specification]	_	I
	SEAT MEMORY SWITCH A08FW	Signal N	E106 TH80PW-CS16-TM4	Signal N		ADP
Connector No. D5	Connector Name SEAT N Connector Type A09FW H.S.	Color Colo	Connector No. E106 Connector Type TH80FF T	Terminal Color No. of Wire 91 W		K
<u>د</u>		La La		Lia Lia		L
AUTOMATIC DRIVE POSITIONER	THZAMW-NH THZAMW-NH 10 9 8 7 6 5 4 3 2 - 22 21 20 19 18 17 16 15 14 1	Signal Name (Specification) With automatic drive positioner With automatic drive positioner	(PASSENGER SIDE)	Signal Name [Specification] With automatic drive positioner] With automatic drive positioner] With automatic drive positioner]		M
MATIC DRIVI		Color Signa Golor		Signa Sign		N
AUTOM Connector No.	Connector Name Connector Type H.S. [24] 2	Terminal O O O O O O O O O O O O O O O O O O O	Connector No. Connector Type Connector Type 12 12 12 12 12 12 12 12	Terminal C No. 04 11 12 22 22 23 23 24		0
					JCJWM0273GE	Р
						-

Connector Name TCM (TRANSMISSION CONTROL MODULE) Connector Type SP10FBGY Connector Type SP10FBGY	Connector No. Connector Name Connector Type H.S.	No. M1 Name FUSE BLOCK (J.B.) Type NSOGFW-NZ 3A 2A 5A 4A	Connector No. M5 Connector Type TH40MW-CSI Connector Type TH40MW-CSI (A) T 2 3 4 5 6 7 1 (B) T 3 4 5 6 7	M5 WRE TO WIRE TH40MM-CS15	39 0 88 0 0 88 0 0 0 0 0 0 0 0 0 0 0 0 0	- - - - - - - - - - - - - - - - - - -	
Terminal Color Signal Name [Specification] Of Wire Signal Name [Specification]	Terminal No. 4A 7A	Color Signal Name [Specification] P R R	Terminal Color No. of Wire 11 LG Color 22 L C 23 LG 24 C C 24 V V V C 25 C C 25 C C 25 C C 25 C C C 25 C C C 25 C C C 25 C C C C	Signal Name [Specification]			
Connector No. M6 Connector Type THEOMY-CSIG-TM4 Connector Type THEOMY-CSIG-TM4 LAS.	Connector No. Connector Name Connector Type	No. M7 Name WIRE TO WIRE Type THEOMY-CS16-TM4	Connector Name KEY SLOT Connector Name KEY SLOT Connector Type THIZPW-WH	OT W-NH 2 3 4 5 6 8 9 1011112	Connector No. M24 Connector Name DATA LIP Connector Type BD16FW HS.	M24 BDISTW BDISTW 9 10 11 12 13 14 15 16 18 19 19 19 19 19 19 19	
Terminal Color Signal Name [Specification] No. of Wire 91 W	Terminal No	Color Signal Name [Spacification]	Terminal Color No. of Wire 1 R R 7 8 B 71 BR	Signal Name [Specification] BAT GND KEY SWITCH SIGNAL	Terminal Color No. of Wire 6 L L P P P	Signal Name [Specification]	

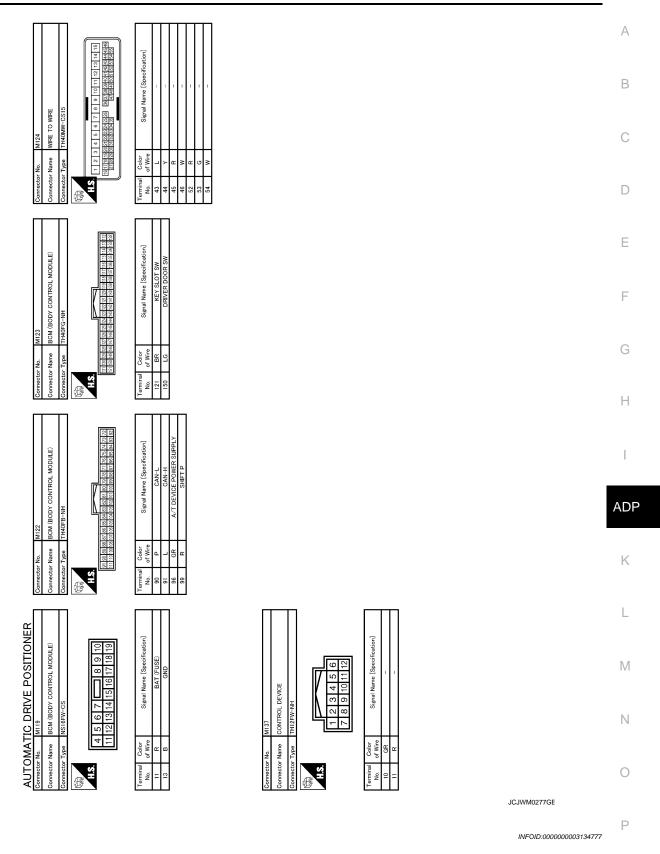
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		Connector No. Connector Type Connector Type H.S. H.S. 1	D
TOR	pecification]	### (198 39) 47 48 47 48	Е
MA9 TILT & TELESCOPIC MOTOR NSO4FW-CS 4321	Signal Name (Specification)	M52	F
Connector No. M Connector Name Ti Connector Type N H.S.	Of GR GR C	Name Type	G
Conn	Terminal No. 0. 1 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Н
IC SENSOR	Signal Name [Specification]	MIRROR MOTOR (BH VERTICAL) MIRROR MOTOR (BH VERTICAL) MIRROR MOTOR (LH COMMUNARD) MIRROR SELECT SW (LLH) MIRROR SENSOR (BH HORIZONTAL) MIRROR SENSOR (BH HORIZONTAL) TELESOPIC SW (BACKWRD) MIRROR SENSOR (BH HORIZONTAL) TELESOPIC SW (BACKWRD) MIRROR MOTOR (LH VERTICAL) MIRROR MOTOR (LH VERTICAL) MIRROR MOTOR (LH HORIZONTAL) MIRROR MOTOR (LH HORIZONTAL) MIRROR MOTOR (LH HORIZONTAL) MIRROR MOTOR (LH HORIZONTAL)	I
MAS TILT & TELESCOPIC SENSOR TROAFW 4 3 2 1	Signal Na	MIRROR MOT MIRROR MOT TILT SI MIRROR MOT MIRROR MOT SELVE MIRROR SELVE MIRROR SELVE MIRROR MOT TELESCOPH MIRROR MOT	NDP
Connector No. M46 Connector Name TIL.1 Connector Type TKO	Terminal Color No. of Wire 1 W		K
RI III		(A)	L
AUTOMATIC DRIVE POSITIONER Somector No. M31 Somector Name TILT & TELESCOPIC SWITCH TILT & TELESCOPIC SWITCH TRUBFGY TRUBFGY TRUBFGY 13 4 1 5 2	Signal Name (Specification)	T T T T T T T T T T T T T T T T T T T	M
TIC DRIV		N N N N N N N N N N	Ν
AUTOMA' Connector No. Connector Type Connector Type H.S.	Color Colo	O N P W W W W W W W W W W W W W W W W W W	0
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JCJWM0276GE



Fail Safe

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

< ECU DIAGNOSIS >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	<u>ADP-45</u>
Only manual functions operate normally.	Tilt sensor	B2118	ADP-50
Only manual functions operate normally.	Telescopic sensor	B2119	<u>ADP-53</u>
	Detent switch	B2126	<u>ADP-56</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-58</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-46</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-48</u>

DTC Index

CONSULT-III	Tim	ing ^{*1}		
display	Current mal- function	Previous mal- function	Item	Reference page
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-45
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-46
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-48
TILT SENSOR [B2118]	0	1-39	Tilt sensor input	ADP-50
TELESCO SENSOR [B2119]	0	1-39	Telescopic sensor input	ADP-53
DETENT SW [B2126]	0	1-39	Detention switch condition	ADP-56
UART COMM [B2128]	0	1-39	UART communication	ADP-58

^{*1.}

^{• 0:} Current malfunction is present

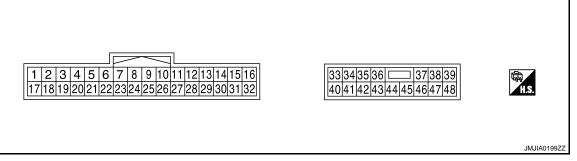
^{• 1-39:} Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset to 1 if any malfunction is detected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

< ECU DIAGNOSIS >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

Terr	minal No.		Description				
+	-	Wire color	Signal name	Input/ Out- put	Conditi	on	Voltage (V) (Approx.)
1	Ground	Y	Tilt switch up signal	Input	Tilt switch	Operate (up)	0
'	Giouna	ī	The switch up signal	iriput	THE SWILCH	Other than above	5
			Changeover switch RH		Changeover	RH	0
2	Ground	LG	signal	Input	switch position	Neutral or LH	5
3	Ground	G	Mirror quitab un aignal	lanut	Mirror quitab	Operated (up)	0
3	Ground	G	Mirror switch up signal	Input	Mirror switch	Other than above	5
4	0	V	NA:	lt	Nai	Operated (left)	0
4	Ground	V	Mirror switch left signal	Input	Mirror switch	Other than above	5
5	Ground	R	Door mirror sensor (RH) up/down signal	Input	Door mirror RH po	osition	Change between 3.4 (close to peak) 0.6 (close to valley)
6	Ground	GR	Door mirror sensor (LH) up/down signal	Input	Door mirror LH po	sition	Change between 3.4 (close to peak) 0.6 (close to valley)
7	Ground	0	Tilt sensor signal	Input	Tilt position		Change between 1.2 (close to top) 3.4 (close to bottom)
						Push	0
9	Ground	L	Memory switch 1 signal	Input	Memory switch 1	Other than above	5
10	Ground	V	UART communication (TX)	Out- put	Ignition switch ON	ı	2mSec/div 2WJananiazz

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			>				
Terr	ninal No.		Description				
+	-	Wire color	Signal name	Input/ Out- put	Condition	on	Voltage (V) (Approx.)
11	Ground	GR	Telescopic switch for-	Input	Telescopic	Operate (forward)	0
	Ground	Oit	ward signal	трис	switch	Other than above	5
				Out-	Memory indictor	Illuminate	0
12	Ground	0	Memory indictor 1 signal	put	1	Other than above	Battery voltage
				Out-	Memory indictor	Illuminate	0
13	Ground	Р	Memory indictor 2 signal	put	2	Other than above	Battery voltage
14	Ground	W	Door mirror motor (RH)	Out-	Door mirror RH	Operate (up)	Battery voltage
	Orouna		up output signal	put		Other than above	0
15	Ground	G	Door mirror motor (RH)	Out-	Door mirror RH	Operate (left)	Battery voltage
10	Cround	Ü	left output signal	put	Boot million (Ki)	Other than above	0
			Door mirror motor (LH)			Operate (down)	Battery voltage
16	Ground	Y	down output signal	Out-	Door mirror (LH)	Other than above	0
10	Ground	'	Door mirror motor (LH)	put	Door Hillion (Ell)	Operate (right)	Battery voltage
			right output signal			Other than above	0
17	Ground	W	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
.,	Ground	• • •	The switch down signal	трис	THE SWITCH	Other than above	5
			Changeover switch LH		Changeover	LH	0
18	Ground	Р	signal	Input	switch position	Neutral or RH	5
19	Ground	SB	Mirror switch down sig-	Input	Mirror switch	Operate (down)	0
10	Cround	OB	nal	трис	Will own on	Other than above	5
20	Ground	BR	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
20	Ground	DI\	winton Switch right Signal	mput	WILLOL SWILOH	Other than above	5
21	Ground	L	Door mirror sensor (RH) left/right signal	Input	Door mirror RH po	osition	Change between 3.4 (close to let edge) 0.6 (close to right edge)
22	Ground	G	Door mirror sensor (LH) left/right signal	Input	Door mirror LH po	sition	Change between 0.6 (close to let edge) 3.4 (close to right edge)
23	Ground	Р	Telescopic sensor signal	Input	Telescopic positio	n	Change between 0.8 (close to top 3.4 (close to bottom)

< ECU DIAGNOSIS >

Torminal No. Description								
Terminal No. Wire		Wiro	Description		-		Voltage (V)	
+	_	color	Signal name	Input/ Out- put	Condition		(Approx.)	
						Push	0	
24	Ground	R	Set switch signal	Input	Set switch	Other than above	5	
-						Push	0	
25	Ground	SB	Memory switch 2 signal	Input	Memory switch 2	Other than	5	
						above	<u> </u>	
26	Ground	Y	UART communication (RX)	Input	Ignition switch ON		10mSec/div 2V/div JMJIA0121ZZ	
27	Ground	G	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (back- ward)	0	
						Other than above	5	
30	Ground	R	Door mirror motor (RH) down output signal	Out- put	Door mirror (RH)	Operate (down)	Battery voltage	
						Other than above	0	
			Door mirror motor (RH) right output signal			Operate (right)	Battery voltage	
						Other than above	0	
31	Ground	LG	Door mirror motor (LH) up output signal	Out- put	Door mirror (LH)	Operate (up)	Battery voltage	
						Other than above	0	
32	Ground	L	Door mirror motor (LH) left output signal	Out- put	Door mirror (LH)	Operate (left)	Battery voltage	
						Other than above	0	
33	Ground	W	Sensor power supply	Input	_		5	
34	Ground	R	Power source (Fuse)	Input	_		Battery voltage	
35	Ground	L	Tilt motor up output sig- nal	Out- put	Steering tilt	Operate (up)	Battery voltage	
						Other than above	0	
36	Ground	GR	Telescopic motor forward output signal	Out- put	Steering tele- scopic	Operate (forward)	Battery voltage	
						Other than above	0	
39	Ground	SB	Power source (C/B)		_		Battery voltage	
40	Ground	В	Ground	_	_		0	
41	Ground	Υ	Sensor ground	_	_		0	

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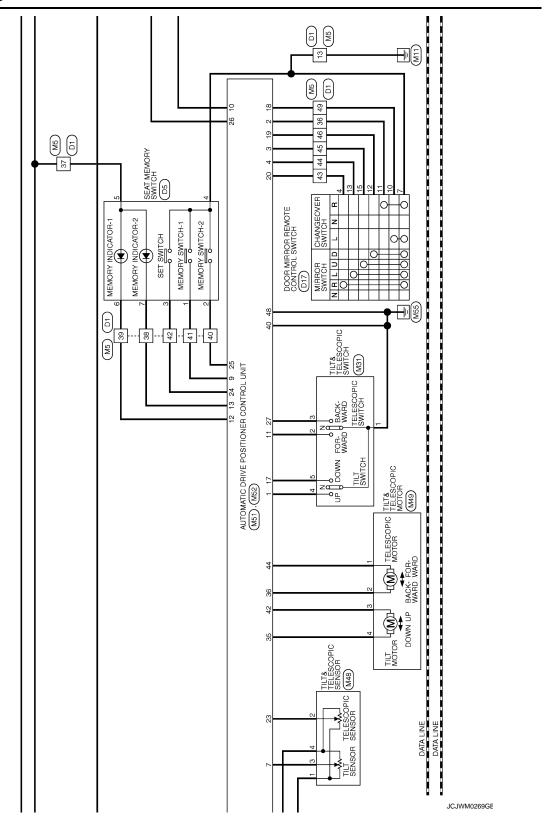
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Terminal No.			Description				
+	-	Wire color	Signal name	Input/ Out- put	Condition		Voltage (V) (Approx.)
42	Ground	0	Tilt motor down output signal	Out- put	Steering tilt	Operate (down)	Battery voltage
						Other than above	0
44	Ground	G	Telescopic motor back- ward output signal	Out- put	Steering tele- scopic	Operate (back- ward)	Battery voltage
						Other than above	0
48	Ground	В	Ground	_			0

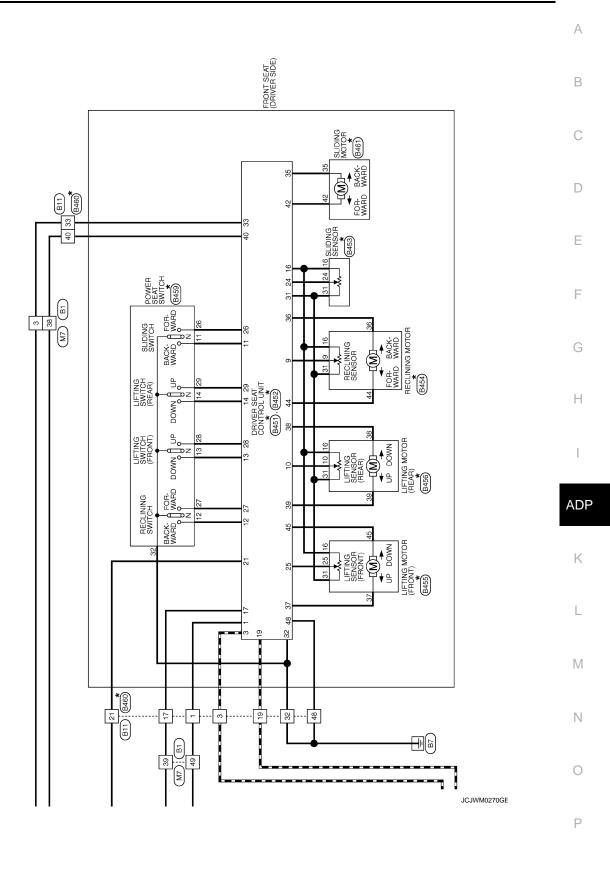
Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -Α INFOID:0000000003733244 35 (D31) В 53 AUTOMATIC DRIVE POSITIONER CONTROL UNIT (M51) · (M52) C 52 44 45 D 46 [5] <u>₹</u> Е ⟨NV⟩: With NAVI ⟨ON⟩: Without NAVI 22 <u>|</u> F DOWN UP WARD WARD UNIFIED METER AND A/C AMP. (M67) 24 25 26 M110 Н TCM (TRANSMISSION CONTROL MODULE) A/T ASSEMBLY (F51) *: This connector is not shown in "Harness Layout". (F151) CONTROL DEVICE (DETENTION SWITCH) To base audio without navigation system
To BOSE audio without navigation system
To BOSE audio with navigation and rear
To BOSE audio with navigation and rear
yew monitor
To BOSE audio with navigation and around
To BOSE audio with navigation and around ADP CIRCUIT BREAKER (M62) K CONTROL 121 BCM (BODY CONTROL MODULE) (M118) (M119) (M122) (M123) FUSE BLOCK (J/B) (M1) **AUTOMATIC DRIVE POSITIONER** MULTIFUNCTION SWITCH (M72) KEY SLOT 40T M DATA LINK CONNECTOR M24 DATA LINE DATA LINE 10A DATA LINE Ν DATA LINE FRONT DOOR SWITCH (DRIVER SIDE) (Me \$ ₹ 0 BATTERY 2007/10/26

Ρ

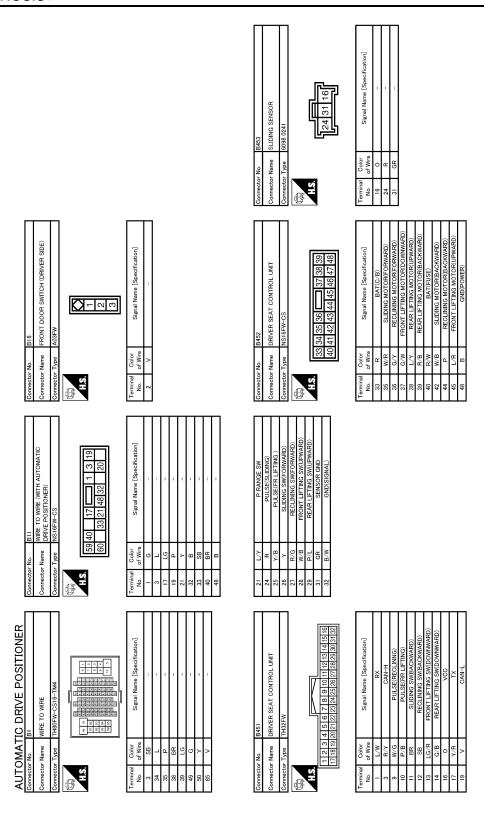
JCJWM0268GE



*: This connector is not shown in "Harness Layout".



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OSTTONER)	'cation]	positioner] positioner] positioner]	А
POWER SEAT SWITCH (DRIVER SIDE) WITH AUTOMATIC DRIVE POSITIONER) NISIOPW-CS 32 11 22 11 26 13 28	Signal Name (Specification)	- With automatic drive positioner] With automatic drive positioner] With automatic drive positioner]	В
ector No. ector Name ector Type	Terminal Color of Wire of Wire 11 BR 11 BR 113 LG/R 113 LG/R Y 27 R/G 27 R/G 29 P/V B 32 B/W	39 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C
Conn	F 7 - 1 - 1 - 1 - 2 - 2 - 3 - 5		D
(DRIVER	ocification]	4 2 2 1	Е
B466 LIFTING MOTOR (REAR) (DRIVER SIDE) NSOBFERF-CS 38 39 10 10	Signal Name (Speoffication)	No. D1	F
ПаП	Golor of Wire PVB OG GR GR GR RVB	No.	G
Connector No. Connector Name Connector Type H.S.	Terminal No. 10 10 16 16 18 38 39 39	Connector No. Connector Name Connector Name (Connector Type (Color No. (Col	Н
			11
(DRIVER	cification	B461 SLIDING MOTOR (ORIVER SIDE) (WITH AUTOMATIC DRIVE POSITIONER) 6086-0239 Signal Name [Specification]	I
HASS LIFTING MOTOR (FRONT) (DRIVER SIDE) NSOGEW-CS 45 31 25 16 31 25	Signal Name (Specification)	MOTOR (DRIVER SIDE) TOWATIC DRIVE POSITION Signal Name [Specification]	
B455 NSOFFW-CS NSOFFW-CS 16 71	<u> </u>	Signal	ADP
П.П	Color of Wire O'N Y/B GR G/W	일 일 기계 기계 기계 기계 기계 기계	K
Connector No. Connector Name Connector Type H.S.	Terminal No. No. 16 25 31 37 45	Connector No. Connector Name Connector Type No. of Wr. 42 W/R	
# T			L
NOITIS	Signal Name [Specification]	-CS	M
MOTOR	gnal Name [S	TRE 17 133 148 17 17 17 17 17 17 17 1	
IC DRIVE P B454 RECLINING MOTOR NSOBEW-CS 16 31 9	<i>उँ</i> । । । । । । । । । । । । । । । । । । ।	B460 WINE TO WINE NS I I MS I I	Ν
AUTOMATIC DRIVE POSITIONER Connector No. B454 Connector Name RECLINING MOTOR Connector Type NSD6FW-CS ALS. 36 19 1	Octor of Wire WG GR	N N N N N N N N N N N N N N N N N N N	
Connect Connect Connect HS	Terminal No. 9 9 9 9 31 36 44	Commetter Commet	0
		JCJVVMU2/2GE	Р

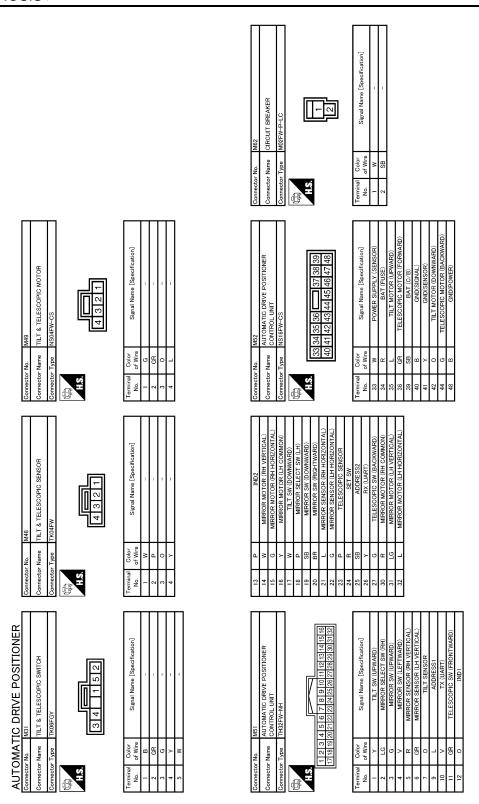
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		M24 DATA LINK CONNECTOR BD16FW 9 10 11 12 13 14 15 16 1 2 3 4 5 6 7 8	Signal Name (Specification)		АВ
39 0 40 SB 41 L L 41 L A 41 L A 44 A 44 A 44 A 44		Cornector No. M24 Connector Name DATA LINK CO Connector Type BD16FW Connector Type BD16FW H.S.	Terminal Color Si No. of Wire Si		C
No. M5 M5 M5 M7 M8 M8 M8 M8 M8 M8 M8		тот м-мн 2 3 4 5 6 8 9 10 11 12	Signal Name (Specification) BAT GND KEY SWITCH SIGNAL		E F
inal Solution	13 B B C C C C C C C C C C C C C C C C C	Cornector No. MZZ Connector Name KEY SLOT Connector Type THIZFW-NN H.S.	Color Colo		G
MI NSOEPH-MZ Separal Name (Specification)		W-CSI6-TM4	Signal Name (Specification) [With automatic drive positioner]		ADP
ctor No.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Connector No. M7 Connector Type TH80MM-CS16	Terminal Color of Wire of Wire 2 S S S S S S S S S S S S S S S S S S		K
IC DRIVE POSITIONER F151 TOM (TRANSMISSION CONTROL MODULE) SPIGFBGY SPIGFBGY Signal Name [Specification]	CAN-H	WW-CSI6-TM4	Signal Name [Specification]		M
	2 − 2 − 2 − 2 − 2 − 2 − 2 − 2 − 2 − 2 −	Connector No. MS Connector Name WIRE TO WIRE Connector Type TH80MW-CSI 6	Terminal Color Sign of Wire 91 W		N O
				JCJWM0274GE	Р

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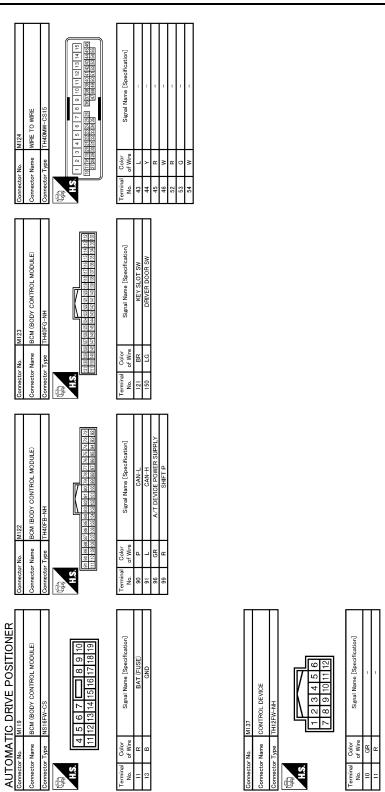


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AV CONTROL UNIT (WITHOUT NAVI) TH32FW-NH SS 57 86 65 94 63 92 61 80 79 65 77 78 10 10 10 10 10 10 10 10 10 10 10 10 10	Signal Name [Specification] CAN+H CAN+L CAN+L AV COMM (I) AV COMM (L)	MIIB BCM (BODY CONTROL MODULE) MOSFB-LC	Signal Name [Specification] BAT (F/L)		АВ
Connector No. M65 Connector Type TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH	Terminal Color Signal No. of Wire Signal Signal	Corrector No. MI18 Connector Name BCM (BODY CO Corrector Type M03FB-LC M18 11.8	Terminal Color No. of Wire T W		C
No. M83 Name AV CONTROL UNIT (WITHOUT NAV)) Type TH24FW-NH 47 46 45 44 43 42 41 40 39 38 37 36 59 58 57 56 55 54 53 52 51 50 49 48	Signal Name [Specification] COMM (CONT~>DISP) COMM (CONT~>DISP)	r Name WIRE TO WIRE r Type TxG36MW-NS10	Signal Name (Specification)		E F
Connector No. M83 Connector Name AV CONTRO Connector Type TH24FW-NH M.S. 47 46 45 44 43 4 59 58 57 56 55 55	Terminal Color Sig No. of Wire Sig S	Connector No. MI16 Connector Name WIRE TO WIRE Connector Type ITGSBMW-NS10 H.S. H.S. I. P. 14 D. INGSEREDER	Terminal Color No. of Wire 43 P 44 L		G H
MULTIFUNCTION SWITCH THISFW-NH 2 4 6 8 10 12 14 16 1 3 5 7 9 11 13 15	Signal Name [Specification] AV COMM (L) AV COMM (L)	M88 AV CONTROL UNIT (WITH NAVI) THIZFW-NH 62 64 66 68 70 72 61 63 65 67 69 71	Signal Name [Specification] COMM (CONT->DISP) COMM (DISP->CONT)		ADP
Connector No. M72 Connector Name MULTIFUNC Connector Type THIFFW-NH MS 1 8 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	Terminal Color S No. of Wire S LG 8 V	Connector No. M88 Connector Name H1/2FW-NH M.S. E2 64 6	Terminal Color No. Oliver S No. Oliver Oliver No. Oliver Oliver No. Oliver Olive		K
IC DRIVE POSITIONER M87 INNITED METER AND A/C AMP. THRZEW-NH 44 G. G. T. R. R. G.	Signal Name [Specification] CAN-H CAN-L	M67 TH40FW-NH TH40FW-NH TH0FW-NH TH0FW-NH TH10FW-NH TH10FW-NH	Signal Name [Specification] AV COMM (H) AV COMM (L) CAN-H CAN-L		M
AUTOMATIC DRIVE POSITIONER Connector Name UNIPED METER AND A/C AMP. Connector Type TH32FW-NH LL Connector Type TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH TH32FW-NH	Terminal Color Si, of Wire 56 L 72 P	Connector No. M67 Connector Name AV CONTRC Connector Type TH40PV-NH MACHINE THAN THAN THAN THAN THAN THAN THAN THAN	Terminal Color Signature of Wire Signature Sig		N O
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< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE)

Α Reference Value INFOID:0000000003773294

В

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
-D \\/\ DFD	Other than front wiper switch HI	Off
R WIPER HI	Front wiper switch HI	On
	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
ED MACHED OM	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
ED WIDED INT	Other than front wiper switch INT	Off
FR WIPER INT	Front wiper switch INT	On
ED WIDED STOD	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
DD WIDED ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
RR WIPER INT	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
DD WIDED CTOD	Rear wiper is in STOP position	Off On Off On Wiper intermittent dial position Off On
RR WIPER STOP	Rear wiper is not in STOP position	On
TUDNI CIONAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMP CVAL	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LI DEAM CM	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
LEAD FAINL 200 J	Lighting switch 2ND	On
JEAD LAMB OW 2	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DARRING CVV	Other than lighting switch PASS	Off On Off
PASSING SW	Lighting switch PASS	
NUTO LIGHT CW	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On Off Off On On Off On Off On On On Off On On On Off On On Off On On On Off On
ED EOO 0141	Front fog lamp switch OFF	On Off Off On Off
FR FOG SW	Front fog lamp switch ON	
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off

Monitor Item	Condition	Value/Status
DOOD CW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOD SW AS	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOD OW DD	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
DOOD OW DI	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On
DOOD OW DIX	Back door closed	Off
DOOR SW-BK	Back door opened	On
	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	REAR DEF SW NOTE: The item is indicated, but not monitored.	
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TD/DD ODEN OW	Back door opener switch OFF	Off
TR/BD OPEN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
DIVE I COL	LOCK button of the key is not pressed	Off
RKE-LOCK	LOCK button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On
	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
ODTION: 07:17.7	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V

Monitor Item	Condition	Value/Status	
DEO SW. DD	Driver door request switch is not pressed	Off	
REQ SW -DR	Driver door request switch is pressed	On	
250.004.40	Passenger door request switch is not pressed	Off	
REQ SW -AS	Passenger door request switch is pressed	Off 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	
REQ SW -BD/TR	Back door request switch is not pressed	Off	
NEQ 3W -BD/TK	Back door request switch is pressed	On	
DUCLION	Push-button ignition switch (push switch) is not pressed	Off	
PUSH SW	Push-button ignition switch (push switch) is pressed	On	
ION DIVO E/D	Ignition switch in OFF or ACC position	Off	
IGN RLY2 -F/B	Ignition switch in ON position	On	
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off	
BRAKE SW 1	The brake pedal is not depressed	oressed Off sed On not pressed Off pressed Off pressed Off pressed Off pressed Off sittored. Off oressed Off ed On switch) is not pressed Off switch) is pressed Off on on off off or than P On Off Off On Off Off On Off Off On Off Off	
SKAKE SW I	The brake pedal is depressed		
DETE/CANCL CW			
DETE/CANCL SW	Selector lever in any position other than P	Off On Off On Off On Off Off Off Off Off	
CET DNI/NI CVA/	Selector lever in any position other than P and N	Off	
SFT PN/N SW	Selector lever in P or N position	On	
2/1 1 0 0 1 /	Steering is locked	Off	
S/L -LOCK	Steering is unlocked	On	
2/1 LINII 0014	Steering is unlocked	Off	
S/L -UNLOCK	Steering is locked	On	
2/L DEL AV E/D	Ignition switch in OFF or ACC position	Off	
S/L RELAY-F/B	Ignition switch in ON position	On	
INUX OFNI DD	Driver door is unlocked	Off	
UNLK SEN -DR	Driver door is locked	On	
DUOLLOW IDDM	Push-button ignition switch (push-switch) is not pressed	Off	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On	
1011 01114 5/0	Ignition switch in OFF or ACC position	Off	
GN RLY1 -F/B	Ignition switch in ON position	On	
DETE ON IDEA	Selector lever in P position	Off	
DETE SW -IPDM	Selector lever in any position other than P	On	
25T DN 1221	Selector lever in any position other than P and N	Off	
SFT PN -IPDM	Selector lever in P or N position	On	
	Selector lever in any position other than P	Off	
SFT P -MET	Selector lever in P position	On	
	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
	At engine cranking	Crank
	Engine running	Run
0// L 00// IDDM	Steering is locked	Off
S/L LOCK-IPDM	Steering is unlocked	On
0// 1// 1// 10014	Steering is unlocked	Off
S/L UNLK-IPDM	Steering is locked	On
0/ DEL AV DE 0	Ignition switch in OFF or ACC position	Off
S/L RELAY-REQ	Ignition switch in ON position	On
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
	Ignition switch in ACC or ON position	Reset
ID OK FLAG	Ignition switch in OFF position	Set
	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
CONFRM ID ALL	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE
CONFIDMID 4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIDM ID2	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
CONFIRM ID3	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIDMIDS	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet
CONFIRM ID2	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE

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Monitor Item	Condition	Value/Status
CONFIDM ID4	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet
CONFIRM ID1	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	Yet
174	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	Yet
1173	The ID of third key is registered to BCM	DONE
TD 0	The ID of second key is not registered to BCM	Yet
TP 2	The ID of second key is registered to BCM	DONE
TP 1	The ID of first key is not registered to BCM	Yet
IPI	The ID of first 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 DECET EL 1	ID of front LH tire transmitter is registered	DONE
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet
ID DECOT ED4	ID of front RH tire transmitter is registered	DONE
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
ID DECCE DD4	ID of rear RH tire transmitter is registered	DONE
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
ID DECCT DI 4	ID of rear LH tire transmitter is registered	DONE
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
AAAA DAHAAC LAAAD	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

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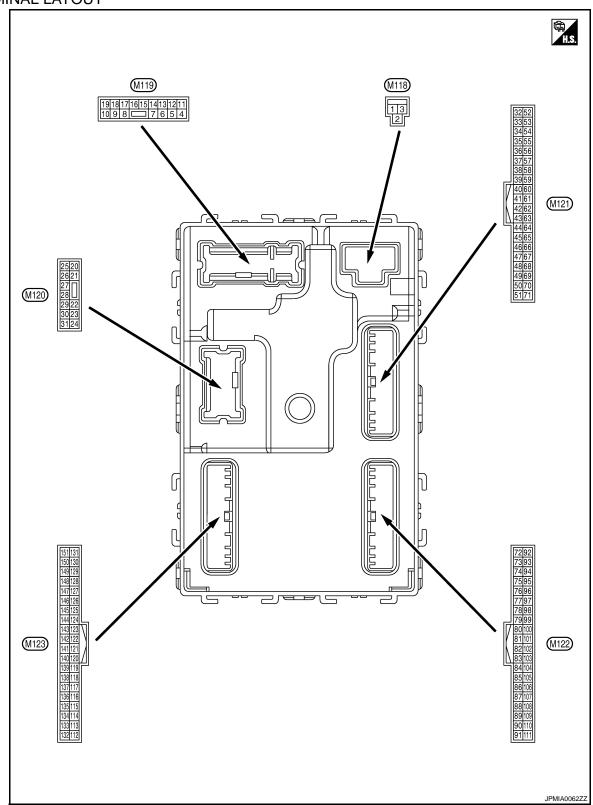
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TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. Descr (Wire color)		Description				Value	
+	e color)	Signal name	Input/ Output	Condition		(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage	
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch ON	I	Battery voltage	
				Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V	
4 (LG)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activator room lamp power supply)	Battery voltage	
5	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage	
(L)	Giound	LOCK	Output	r assenger door	Other than UNLOCK (Actuator is not activated)	0 V	
7	Ground	Step lamp	Output	Step lamp	ON	0 V	
(Y)	Giodila	otep tamp	Output	Olep lamp	OFF	Battery voltage	
8	Ground	All doors, fuel lid	Outout	All doors	LOCK (Actuator is activated)	Battery voltage	
(V)	Ground	LOCK	Output	All doors	Other than LOCK (Actuator is not activated)	0 V	
9	Crawad	Driver door, fuel lid		Driver deer	UNLOCK (Actuator is activated)	Battery voltage	
(G)	Ground	UNLOCK	Output	t Driver door	Other than UNL	Other than UNLOCK (Actuator is not activated)	0 V
10	Ground	Rear RH door and rear LH door UN-	()LITOLIT	Outout	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(BR)	Giodila	LOCK		and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V	
11 (R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage	
13 (B)	Ground	Ground		Ignition switch ON	I	0 V	
					OFF	0 V	
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms JSNIA0010GB	
15	_		_		OFF or ON	Battery voltage	
(Y)	Ground	ACC indicator lamp	Output	Ignition switch ACC		0 V	

	inal No. e color)	Description		Condition		Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
17	Ground	Turn signal RH	Output	Ignition switch	Turn signal switch OFF	(V) 15 10
(W)	Ground	(Front)	Output	ON	Turn signal switch RH	1 s PKID0926E 6.5 V
					Turn signal switch OFF	0 V
18 (O)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
19	Cround	Room lamp timer	Output	Interior room	OFF	Battery voltage
(V)	Ground	control	Output	lamp	ON	0 V
					Turn signal switch OFF	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
23	Ground	Back door opening	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
(G)	Ground	back door opening	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
					Turn signal switch OFF	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V
26					OFF (Stopped)	0.5 V
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage

	ninal No. e color)	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	В
34 (SB)	Ground	Luggage room antenna 1 (–)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	E F
35	O	Luggage room anten-	0.4.4	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB	G H
(V)	Ground	na 1 (+)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	AD K
20		Rear bumper anten-		When the back	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
38 (B)	Ground	na (–)	Output	door request switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	O

	inal No.	Description				Value
+	e color) –	Signal name	Input/ Output		Condition	(Approx.)
39	Ground	Rear bumper anten-		When the back door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 11 1 s JMKIA0062GB
(W)	Glound	na (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
47	Cround	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage
(Y)	Ground	E/R) control	Output	ignition switch	ON	0 V
52	Ground	Starter relay control	Output	Ignition switch	When selector lever is in P or N position	Battery voltage
(SB)	Ciouna	Clartor relay control		ON	When selector lever is not in P or N position	0 V
					ON (Pressed)	0 V
61 (W)	Ground	Back door opener request switch	Input	Back door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
64	Ground	Request switch buzz-	Output	Request switch	Sounding	0 V
(V)	Giouna	er	Output	buzzer	Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 0 10 ms JPMIA0016GB
					Not in stop position	0 V

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	inal No. e color)	Description				Value	А
+	- COIOI)	Signal name	Input/ Output		Condition	(Approx.)	Λ
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB	B C D
					ON (Door open)	0 V	
					Pressed	0 V	_
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB	F G
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	11.8 V	H I ADP
					ON (Door open)	0 V	
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB	K L M
					ON (Door open)	0 V	
	ı		ı	ı	1	1	Ν

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	ninal No. e color)	Description	le = : ·/		Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
72	Ground	d Room antenna 2 (–) (Center console)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(R)	Glound			OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
73	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(G)	Ground				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
74	Canada	Passenger door antenna (–)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 1

	ninal No. e color)	Description			One distant	Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
75		Passenger door an-		When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(GR)	tenna (+) tenna (+) quest switch is operated with ignition switch OFF When Inte	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB			
76	Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)	(-round	(-)	Output	switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
77	0	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG) Gro	Ground	(+)	Cuipui	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

	inal No. e color)	Description				Value
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)
78	Ground	Room antenna (–) (Instrument panel)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(Y)				OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
79		Room antenna (+)		Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(BR)	Ground	(Instrument panel)			When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
80 (GR)	Ground	NATS antenna amp (Built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp (Built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82	Ground	Ignition relay [Fuse	Output	Ignition switch	OFF or ACC	0 V
(R)	2.34.14	block (J/B)] control	Janpar	-g	ON	Battery voltage

	inal No. e color)	Description	I .		Condition	Value	
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)	
83 (Y) Ground		Remote keyless entry receiver signal	Input/ Output	During waiting		(V) 15 10 5 1 ms JMKIA0064GB	
				When operating either button on the key		(V) 15 10 5 0 1 ms JMKIA0065GB	
		Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
87	Ground				Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	A
(BR)					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0040GB	

	inal No. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
89		Push-button ignition		Push-button igni-	Pressed	0 V
(BR)	Ground	switch (Push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage
90 (P)	Ground	CAN-L	Input/ Output		_	_
91 (L)	Ground	CAN-H	Input/ Output		_	_

Term	inal No.	Description				V.I	
(Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)	Α
			•		OFF	Battery voltage	D
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 1 s JPMIA0015GB	B C D
					ON	0 V	Е
93	Ground	ON indicator lamp	Output	Ignition quitab	OFF or ACC	Battery voltage	_
(V)	Ground	ON indicator lamp	Output	Ignition switch	ON	0 V	
94	Ground	Duddle lemp central	Output	Duddle leme	OFF	Battery voltage	F
(Y)	Ground	Puddle lamp control	Output	Puddle lamp	ON	0 V	
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V	
(O)	Giodila	ACC relay control	Output	ignition switch	ACC or ON	Battery voltage	G
96 (GR)	Ground	Control device (De- tention switch) power supply	Output		_	Battery voltage	Н
97	97 (L) Ground Steering lock condition No. 1	la a t	Cto oving look	LOCK status	0 V		
(L)		tion No. 1	Input	Steering lock	UNLOCK status	Battery voltage	ı
98	98 (P) Ground Steering lock condition No. 2	Steering lock condi-	Input	Steering lock	LOCK status	Battery voltage	
(P)		tion No. 2		Steering lock	UNLOCK status	0 V	
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V	ADP
(R)	Giodila	tion switch			Any position other than P	Battery voltage	
					ON (Pressed)	0 V	K
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	L
					ON (Pressed)	0 V	Ν
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 10 ms JPMIA0016GB 1.0 V	O P
100		Blower for motor re			OFF or ACC	0 V	
(O)		Blower fan motor re- lay control	Output	Ignition switch	ON	Battery voltage	
(5)				· · ·	-and, ranaga		

	EGG BI//GIVGGIG >										
	inal No.	Description				Value					
+ (vvire	e color)	Signal name	Input/ Output		Condition	(Approx.)					
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage					
106	Ground	Steering wheel lock	Output	Ignition switch	OFF or ACC	Battery voltage					
(W)		unit power supply	'	3	ON	0 V					
		Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB					
	Ground				Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB					
107 (LG)					Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB					
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB					
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V					

Terminal No. Description (Wire color)				Value	
+ -	Signal name	Input/ Output		Condition	(Approx.)
				All switch OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
				Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
108 (R) Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
				Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V
				Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

	inal No.	Description				Value
+ (VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switch OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 2 ms JPMIA0036GB
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB

	inal No.	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	\vdash
					LOCK status	Battery voltage	В
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 5 0 JMKIA0066GB	C
					For 15 seconds after UN- LOCK	Battery voltage	Е
					15 seconds or later after UNLOCK	0 V	
113* (P) Ground	Ground	Optical sensor signal	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V	F
	Oround				When dark outside of the vehicle	Close to 0 V	G
116 (SB)	Ground	Fuse check [Stop lamp switch, ICC brake hold relay (With ICC)]	Input	_		Battery voltage	F
118		Stop lamp switch (Without ICC) Stop lamp switch and ICC brake hold relay (With ICC)	- Input -	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	ı
	Ground -				ON (Brake pedal is depressed)	Battery voltage	
(P)				Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF		0 V	Αľ
				Stop lamp switch ON (Brake pedal is depressed) or ICC brake hold relay ON		Battery voltage	k
119 (SB)	Ground	Front door lock assembly driver side (unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB	L
					UNLOCK status (Unlock switch sensor ON)	1.1 V 0 V	N
121 (BR) Ground		Key slot switch	Input	When the key is inserted into key slot		Battery voltage	
. ,		,	Input	When the key is n	oot inserted into key slot	0 V	C
122 (V)	Ground			Ignition switch	ACC or ON	Battery voltage	
123					OFF or ACC	0 V	F
(W) Ground		IGN feedback signal	Input	Ignition switch	ON	Battery voltage	

Terminal No. (Wire color)		Description				Value	
+ (VVire	e color)	Signal name	Input/ Output	Condition		(Approx.)	
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (Door open)	0 V	
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB	
				Ignition switch OFF or ACC		Battery voltage	
					ON (Tail lamps OFF)	9.5 V	
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5 0 JPMIA0159GB	
					OFF	0 V	
134	Ground	LOCK indicator lamp	Output	LOCK indicator	OFF	Battery voltage	
(GR)		·		lamp	ON	0 V	
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V	
138	Ground	Sensor nower supply	Output	Ignition switch	OFF	0 V	
(Y)	Ground	d Sensor power supply	Output	ignition switch	ACC or ON	5.0 V	

	inal No.	Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	Α
139	Outside	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 + 0.2s OCC3881D	С
(L)		er signal	Output	ÓN	When receiving the signal from the transmitter	(V) 6 4 2 0 •• 0.2s OCC3880D	E
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage	G
(GR)	Cround	position signal	mpat	Colodiol level	Except P and N positions ON	0 V	
141 (G)	Ground	Security indicator signal	Output	Security indicator	Blinking	(V) 15 10 5 0 11.3 V	H I ADP
					OFF	Battery voltage	K
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V (V) 15 10 5 0 2 ms JPMIA0031GB 10.7 V	L M
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	0 V (V) 15 10 2 ms JPMIA0032GB 10.7 V	O

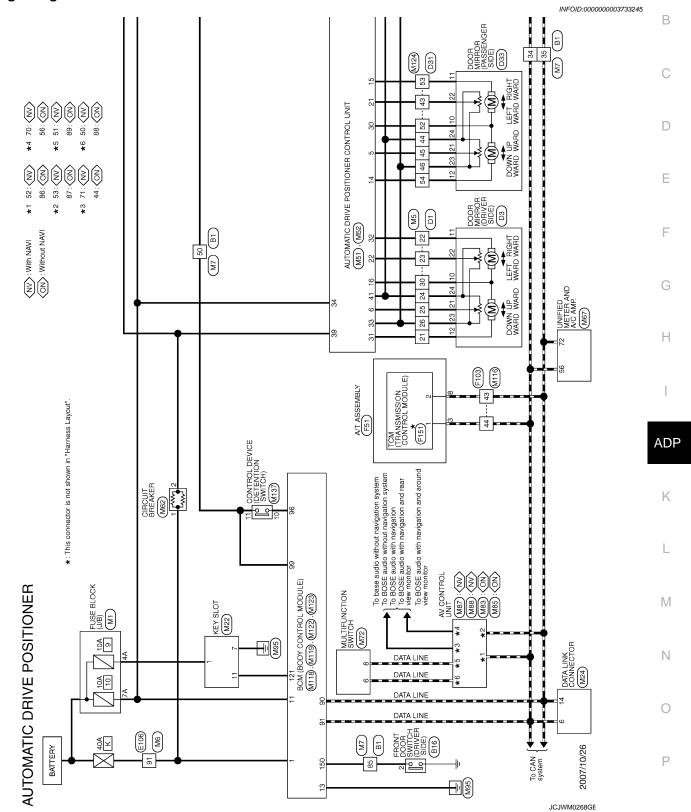
Terminal No. (Wire color)		Description		Condition		Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
					All switch OFF (Wiper intermittent dial 4)	0 V	
					Front washer switch ON (Wiper intermittent dial 4)		
144		Combination switch		Combination	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15	
(G)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	5 0	
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB	
					All switch OFF	0 V	
					Front wiper switch INT		
			Output	Combination switch (Wiper intermit- tent dial 4)	Front wiper switch LO	(V)	
145 (L)	Ground	Combination switch OUTPUT 3			Lighting switch AUTO	10 5 0 2 ms JPMIA0034GB 10.7 V	
					All switch OFF	0 V	
	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	Front fog lamp switch ON	0 0	
					Lighting switch 2ND	(V)	
146					Lighting switch PASS	15	
(SB)					Turn signal switch LH	0	
149 (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		(V) 15 10 5 0 10 ms 10 ms JPMIA0011GB	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (Door open)	0 V	
151	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	Active	0 V	
(G)					Not activated	Battery voltage	

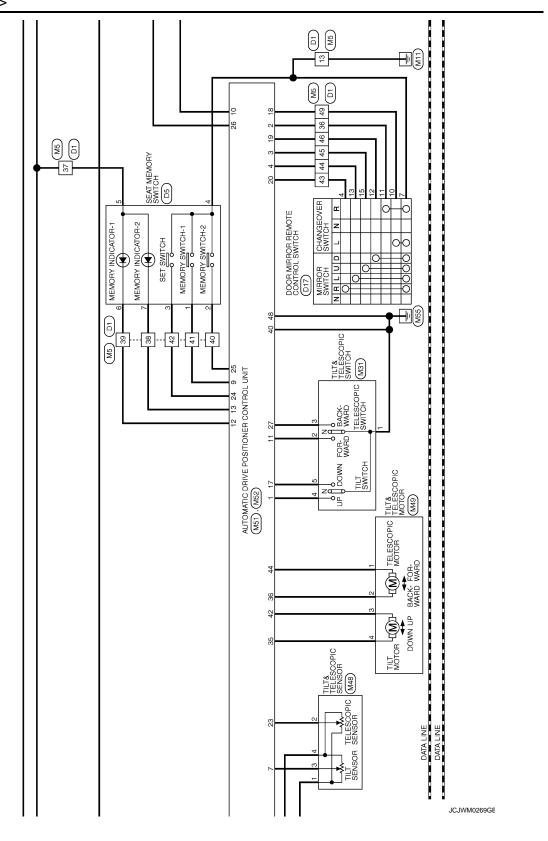
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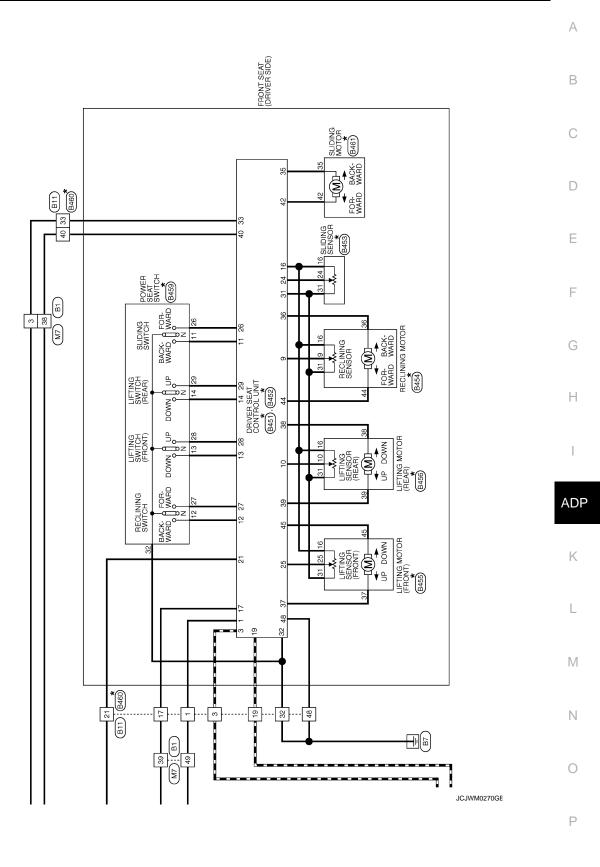
*: With auto light system

Α

Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

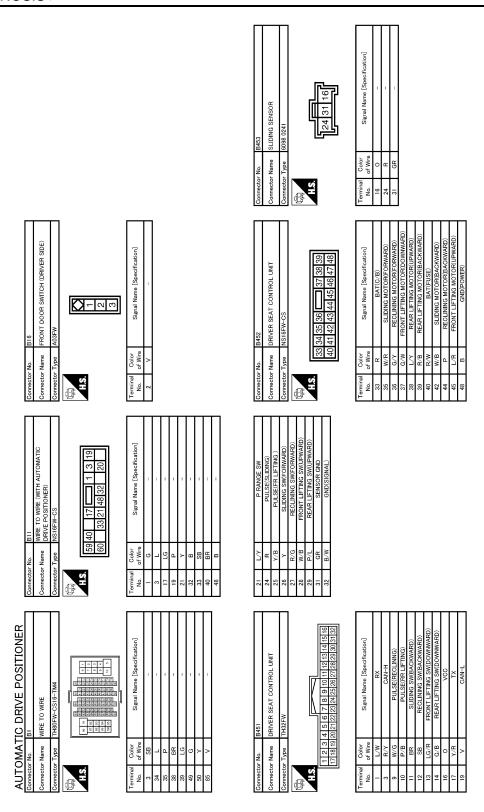






*: This connector is not shown in "Harness Layout".

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SIDE) TONER)	[uo]	idoner]	А
B439 POWER SEAT SWITCH (DRIVER SIDE) WINTH AUTOMATIC DRIVE POSITIONER) NISTOPH-CS 12 27 11 26 13 28	Signal Name (Specification)	With automatic drive positioner] - With automatic drive positioner] - With automatic drive positioner] - With automatic drive positioner]	В
	Color Sign BR BR BR SB CG/B CG/B CG/B CG/B CG/B CG/B CG/B CG/	S	С
Connector No. Connector Name Connector Type H.S.	Terminal OC Of Terminal OC Of Of OC OC OC OC OC	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D
(DRIVER	ecification)	4 2 2 1 2 2 1 2 2 1 2 2	Е
B456 LIFTING MOTOR (REAR) (DRIVER SIDE) NSOBFBR-CS 16 110	Signal Name (Specification)	Name WIRE TO WIRE TH40PW-CS15 S S S S S S S S S	F
or No.	of Wire P/W P P/B P/W O O O O O O O O O O O O O O O O O O O	Connector No. D1	G
Connect Connect Connect H.S.	Terminal 10 0 10 3 3 3 3 3 9 3 9 3 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10		Н
NT) (DRIVER	Signal Name (Specification)	B461 SLIDING MOTOR (DRIVER SIDE) (WITH AUTOMATIC DRIVE POSITIONER) 6098-0239 Signal Name [Specification]	I
B455 LIETING MOTOR (FRONT) (DRIVER SIDE) NSOGFW-CS 145 37 16 31 25	Signal Name	Signal Name	ADP
ector No. ector Name ector Type	Color Colo	ector No. ector Type ector Type of W/R W/R	К
		No Community No. 10 No.	L
SITIONER	Signal Name (Specification)	CSS	M
AUTOMATIC DRIVE POSITIONER Connector No. 1844 Connector Type NISDBFW-CS H.S. 186719 1	Signal Namr		N
AUTOMATIC Connector No. B4 Connector Name RE Connector Type NX LS.	Color of Wire WG	Name 1 Type Color Color V R R Wine R R W R R R R R R R R R R R R R R R R	
Connect Connec	1 Germinal 1 Germinal 1 Germinal 1 G 9 9 9 1 G 3 G 3 G 4 4 4 4 4 4 6 G 5 G 6 G 6 G 6 G 6 G 6 G 6 G 6 G 6 G	Oonmecton Oonmecton Oonmecton Oonmecton A	GE
			D

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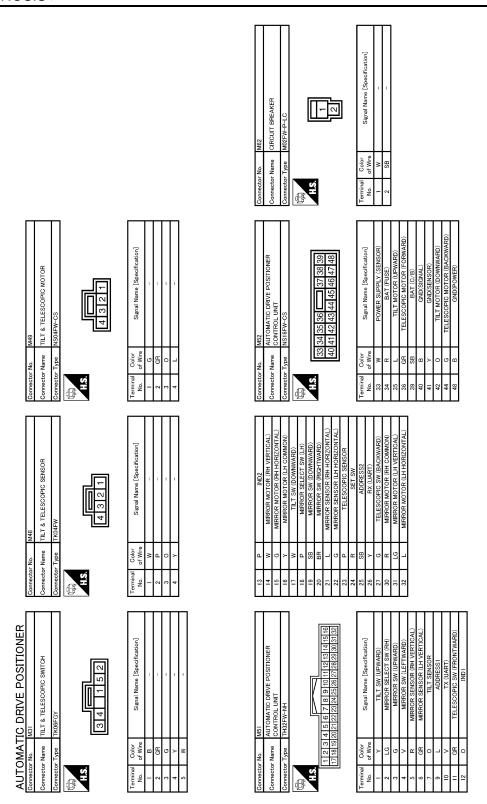
Corrector No. D31 Corrector Name WIRE TO WIRE Corrector Type TH40FW-CS15 (15 14 19 2 11 10 0 6 7 6 4 3 2 1	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 43 Y	Connector No. F103 Connector Name WIRE TO WIRE Connector Type TrX36FW-NS10 M. A.	Terminal Color Signal Name [Specification]
Corrector No. D17 Corrector Name Sonts (with Authorian Discussion Position Programme) Corrector Type TKI OF BR 1 2 3 4	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 1 0 0 0 0 0 0 0 0 0	Connector No. F51 Connector Name A/T ASSEMBLY Connector Type RK10FG-DGY M.S. F51 F51 Connector Type RK10FG-DGY F51 F51 F61 F61 F61 F61 F61 F61	Terminal Color Signal Name [Specification] 3 L 8 P -
Connector No. D5 Connector Name SEAT MEMORY SWITCH Connector Type A03FW H.S. SEAT MEMORY SWITCH TH.S. SEAT MEMORY SWITCH	Terminal Color Signal Name [Specification]	Connector No. E106 Connector Name WIRE TO WIRE Connector Type TH80FW-CS16-TM4 H.S. R.	Terminal Color No. of Wire 91 W
AUTOMATIC DRIVE POSITIONER Connector No. 03 Connector Type ITHZ4MW-NH Connector Type ITHZ4MW-NH (12 11 10 9 8 7 6 5 4 3 2 1 [24 22 22 21 20 19 18 17 16 15 14 13 [24 22 22 22 21 20 19 18 17 16 15 14 13	Terminal Color Signal Name [Specification] Color No. Color Color	Gennector No. D33 Connector Name D00R MIRROR (PASSENGER SIDE) Connector Type Int24MM-NH H.S. Int24MM-NH Int211 10 9 8 7 6 5 4 3 2 1 24 23 22 21 20 19 18 17 16 15 14 13	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 10 Y -[With automatic drive positioner] 11 W -[With automatic drive positioner] 21 P -[With automatic drive positioner] 22 W - - - -

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39 0	Corrector No. M24 Connector Name DATA LINK CONNECTOR	A B C
Ctor No. M5	24	E F G
Connector No. M1	t ctor n	ADP
AUTOMATIC DRIVE POSITIONER Connector No. F151 Connector Type SP10FBGY Terminal Color No. of Wire I BR CANH CANH	Connector No M6 Connector Name WIRE TO WIRE Connector Type TH80MW-CSI6-TM4 H.S. Terminal Color Signal Name (Specification) No of Wire Signal Name (Specification)	M N
		JCJWM0274GE

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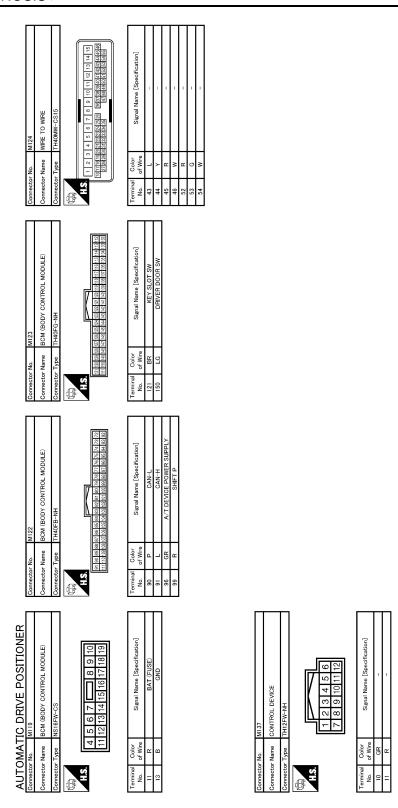


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Connector No. M65 Connector Name AV CONTROL UNIT (WITHOUT NAV)) Connector Type 11432FW-NH H.S.	Terminal Color Signal Name [Specification] Color Signal Name [Specification] CANH CANH Signal Name [Specification] CANH C	Connector No. MIIB Connector Name BCM (BODY CONTROL MODULE) Connector Type MOSTB-LC H.S. 113	Terminal Color Signal Name (Specification) No. of Wire BAT (F/L)		A B C
Connector No. M83 Connector Name AV CONTROL UNIT (WITHOUT NAVI) Connector Type TH24FW-NH 1.S. TH246 45 44 43 42 41 40 39 88 37 36 58 57 56 55 54 53 52 51 50 49 48	Terminal Golor Signal Name [Specification] Mo. of Wire Signal Name [Specification] 44 BR COMM (CONT->DISP) 56 V COMM (CONT->DISP)	Connector No. MI16 Connector Name WRE TO WRE Connector Type TK394W-NS10 TK3 1 2 4 5 1 1 2 4 5 1 1 1 1 1 1 1 1	Terminal Color Signal Name [Specification] 43 P - - -		E F G
Connector No. M72 Connector Name MULTIFUNCTION SWITCH Connector Type THISFW-NH H.S. 2 4 6 8 10 12 14 16 1 3 5 7 9 11 13 15	Terminal Golor Signal Name (Specification) No. of Wire Signal Name (Specification) 6 LG AV COMM (L) 8 V AV COMM (L)	Connector No. M88 Connector Name AV CONTROL UNIT (WITH NAV) Connector Type TH12FW-NH H.S	Terminal Color Signal Name (Specification) No. Of Wire Signal Name (Specification) 70 BR COMM (DISP->CONT) Y COMM (DISP->CONT)		ADP
AUTOMATIC DRIVE POSITIONER Connector No. M67 Connector Name UNIFED METER AND A/C AMP. Connector Type 11425FW-NH M.S. H.S. (1) 22 80 80 61 82 80 95 182	Terminal Color Signal Name (Specification) Signal Name (Sp	Connector No. M87 Connector Name AV CONTROL UNIT (WITH NAVI) Connector Type TH40FW-NH M.S. LOS CONDUCTOR OF STREET	Terminal Color Signal Name (Specification) Signal Name (Specification) Signal Name Colom (H) Signal Name Color (Color H) Signal Name Color H Signal Name		M N
				JCJWM0276GE	Р

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JCJWM0277GE

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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Display contents of CONSULT	Fail-safe	Cancellation	А
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	Е
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	
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals have been 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 has become consistent • Starter control relay signal • Starter relay status signal	Е
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)	F
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 (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more 	G
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 (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V) 	I
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - 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	AD K
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is ful- filled Ignition switch is in the ON position Power position: IGN 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 (battery voltage) PNP switch signal (CAN): ON	N N
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)	F
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become 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 cranking Inhibit 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 (Battery voltage) 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 is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When any of the following conditions is 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: STARTER RELAY CIRC	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 becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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 is fulfilled • Steering condition No. 1 signal: LOCK (0V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

DTC Inspection Priority Chart

INFOID:0000000003773297

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 CIRCUIT U1010: CONTROL UNIT (CAN)
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM

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Priority	DTC	
	B2013: ID DISCORD BCM-S/L	
	B2014: CHAIN OF S/L-BCM	
	B2553: IGNITION RELAY BOSSES OTOD LAMB BO	
	B2555: STOP LAMP B2556: PUSH-BTN IGN SW	
	B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY	
	B2601: SHIFT POSITION	
	B2602: SHIFT POSITION	
	B2603: SHIFT POSI STATUS	
	• B2604: PNP SW	
	• B2605: PNP SW	
	 B2606: S/L RELAY B2607: S/L RELAY 	
	B2608: STARTER RELAY	
	B2609: S/L STATUS	
	B260A: IGNITION RELAY	
4	B260B: STEERING LOCK UNIT	
	B260C: STEERING LOCK UNIT	
	B260D: STEERING LOCK UNIT	
	B260F: ENG STATE SIG LOST B2640: 6/4 STATE SIG LOST	
	B2612: S/L STATUS B2614: ACC RELAY CIRC	
	B2615: BLOWER RELAY CIRC	
	B2616: IGN RELAY CIRC	
	B2617: STARTER RELAY CIRC	
	• B2618: BCM	
	• B2619: BCM	
	B261A: PUSH-BTN IGN SW	
	B261E: VEHICLE TYPE B261	
	B26E1: ENG STATE NO RECIV B26E9: S/L STATUS	
	B26EA: KEY REGISTRATION	_
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED SIG	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR C4707: LOW PRESSURE RI	
	C1707: LOW PRESSURE RL C1708: [NO DATA] FL	
	• C1708: [NO DATA] FL • C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RI	
5	C1715: [CHECKSUM ERR] RL C1716: [PRESSDATA ERR] FL	
J	C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR	
	C1717: [FRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	
	C1723: [CODE ERR] RL C1724: [DATE COME EN	
	C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR	
	C1725: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] RR	
	C1720: [BATT VOLT LOW] RK C1727: [BATT VOLT LOW] RL	
	C1734: CONTROL UNIT	
	B2621: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

< ECU DIAGNOSIS >

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 and IGN Counter, refer to BCS-16, "COMMON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-37
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-38
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-39
B2013: ID DISCORD BCM-S/L	×	×	_	_	SEC-48
B2014: CHAIN OF S/L-BCM	×	×	_	_	SEC-49
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-42
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-45
B2192: ID DISCORD BCM-ECM	×	_	_		SEC-46
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-47
B2553: IGNITION RELAY	_	×	_	_	PCS-49
B2555: STOP LAMP	_	×	_	_	<u>SEC-52</u>
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-54
B2557: VEHICLE SPEED	×	×	×		SEC-56
B2560: STARTER CONT RELAY	×	×	×	_	SEC-57
B2562: LOW VOLTAGE	_	×	_	_	BCS-40
B2601: SHIFT POSITION	×	×	×	_	SEC-58
B2602: SHIFT POSITION	×	×	×		SEC-61
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-63
B2604: PNP SW	×	×	×	_	SEC-66
B2605: PNP SW	×	×	×		SEC-68
B2606: S/L RELAY	×	×	×	_	SEC-70
B2607: S/L RELAY	×	×	×	_	SEC-71
B2608: STARTER RELAY	×	×	×	_	<u>SEC-73</u>
B2609: S/L STATUS	×	×	×	_	<u>SEC-75</u>
B260A: IGNITION RELAY	×	×	×		PCS-51
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-79
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-80
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-81
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-82
B2612: S/L STATUS	×	×	×	_	SEC-86
B2614: ACC RELAY CIRC	_	×	×	_	PCS-53
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-57
B2616: IGN RELAY CIRC	_	×	×	_	PCS-59
B2617: STARTER RELAY CIRC	×	×	×	<u> </u>	SEC-90

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CONSULT display	Fail-safe	Freeze Frame Data	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
B2618: BCM	×	×	×	_	PCS-61	
B2619: BCM	×	×	×	_	SEC-92	
B261A: PUSH-BTN IGN SW	_	×	×	_	SEC-93	
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-96</u>	
B2621: INSIDE ANTENNA	_	×	_	_	DLK-56	
B2622: INSIDE ANTENNA	_	×	_	_	DLK-58	
B2623: INSIDE ANTENNA	_	×	_	_	DLK-60	
B26E1: ENG STATE NO RES	×	×	×	_	SEC-83	
326E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-84</u>	
326EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-85	
C1704: LOW PRESSURE FL	_	_	_	×		
C1705: LOW PRESSURE FR	_	_	_	×	WT 40	
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-16</u>	
C1707: LOW PRESSURE RL	_	_	_	×		
C1708: [NO DATA] FL	_	_	_	×		
C1709: [NO DATA] FR	_	_	_	×	\A/T 40	
C1710: [NO DATA] RR	_	_	_	×	<u>WT-18</u>	
C1711: [NO DATA] RL	_	_	_	×		
C1712: [CHECKSUM ERR] FL	_	_	_	×		
C1713: [CHECKSUM ERR] FR	_	_	_	×	W/T O4	
C1714: [CHECKSUM ERR] RR	_	_	_	×	<u>WT-21</u>	
C1715: [CHECKSUM ERR] RL	_	_	_	×		
C1716: [PRESSDATA ERR] FL	_	_	_	×		
C1717: [PRESSDATA ERR] FR	_	_	_	×	NAT OA	
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-24</u>	
C1719: [PRESSDATA ERR] RL	_	_	_	×		
C1720: [CODE ERR] FL	_	_	_	×		
C1721: [CODE ERR] FR	_	_	_	×	VACT CC	
C1722: [CODE ERR] RR	_	_	_	×	<u>WT-26</u>	
C1723: [CODE ERR] RL	_	_	_	×		
C1724: [BATT VOLT LOW] FL	_	_	_	×		
C1725: [BATT VOLT LOW] FR	_	_	_	×	VACE CO	
C1726: [BATT VOLT LOW] RR	_	_	_	×	<u>WT-29</u>	
C1727: [BATT VOLT LOW] RL	_	_	_	×		
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-32</u>	
C1734: CONTROL UNIT	<u> </u>	_	_	×	WT-33	

SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table INFOID:000000003134786

The diagnostics item numbers show the sequence for inspection. Inspection in order from item 1.

Order	Function	Operation procedure	Symptom	Diagnostic item	Reference page
1		Perform memory storage (Refer to ADP-10.) and	All parts do not operate in memory function.	_	ADP-195
'	Memory function	memory operation (Refer to ADP-26).	Memory indicator 1 or 2 does not operate.	_	ADP-196
2	Manual function	Perform manual function	All components of power seat do not operate.	_	ADP-197
2	Maridai function	(Refer to ADP-18).	All components of tilt & telescopic do not operate.	_	ADP-198
				Sliding	ADP-199
		Perform manual function	Manual function or memory function does not operate. (for specific part)	Reclining	ADP-199
	Manual function			Lifting (front)	ADP-200
3	and	(Refer to <u>ADP-18</u> .) and memory function (Refer to		Lifting (rear)	ADP-201
	memory function	ADP-26.).		Steering tilt	ADP-201
				Steering telescopic	ADP-202
				Door mirror	ADP-203
4	Entry/exit assist function	Perform entry/exit assist function. Exit assist function: Refer to ADP-30 Entry assist function: Refer to ADP-34	Entry/exit assist function does not operate.	_	ADP-205
5	Seat synchrorization function	Perform seat synchronization function (Refer to ADP- 22).	Seat synchronization function does not operate.	_	ADP-204
6	Intelligent Key inter lock function	Perform Intelligent Key inter lock function (Refer to ADP-38).	Intelligent Key inter lock function does not operate.		ADP-206

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

< SYMPTOM DIAGNOSIS >

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION	
Diagnosis Procedure	INFOID:0000000003134787
1. CHECK MEMORY FUNCTION	
Check memory function.	
Refer to <u>ADP-26, "MEMORY FUNCTION: System Description"</u> . <u>Is the inspection result normal?</u>	
YES >> Memory function is normal.	
NO >> GO TO 2. 2.CHECK SEAT MEMORY SWITCH	
Check seat memory switch.	
Refer to ADP-74, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Replace seat memory switch.	
3. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	
Check driver seat control unit power supply and ground circuit.	
Refer to <u>ADP-59, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	
4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GI	ROUND CIRCUIT
Check automatic drive positioner control unit power supply and ground circuit. Refer to ADP-60, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Proces	lure"
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunction parts.	
5. PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE	
 Perform initialization procedure. Refer to <u>ADP-9</u>, "SYSTEM INITIALIZATION: Special Repair Requirement". 	
 Perform memory storing procedure. Refer to ADP-10, "MEMORY STORING: Special Repair Requirement". 	
3. Check memory function.	
Refer to ADP-26, "MEMORY FUNCTION: System Description".	
Is the inspection result normal? YES >> Memory function is normal.	
NO >> GO TO 6.	
6. CHECK DETENTION SWITCH/PARKING SWITCH	
Check detention switch/parking switch. Refer to ADP-84, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 7.	
NO >> Repair or replace the malfunction parts. 7.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.	

MEMORY INDICATE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000003134788

1. CHECK MEMORY INDICATOR

Check memory indicator.

Refer to ADP-123, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

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

NO >> GO TO 1.

ALL COMPONENTS OF POWER SEAT DO NOT OPERATE

< SYMPTOM DIAGNOSIS > ALL COMPONENTS OF POWER SEAT DO NOT OPERATE		
		А
Diagnosis Procedure	INFOID:0000000003134789	
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT		В
Check power seat switch ground circuit. Refer to ADP-82, "Diagnosis Procedure".		
Is the inspection result normal?		C
YES >> GO TO 2.		
NO >> Repair or replace harness or connector. 2.CONFIRM THE OPERATION		
Confirm the operation again.		
Is the result normal?		Е
YES >> Check intermittent incident. Refer to <u>GI-38, "Intermittent Incident"</u> . NO >> GO TO 1.		
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ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000003744074

1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Check tilt & telescopic switch ground circuit.

Refer to ADP-83, "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 GI-38, "Intermittent Incident".

NO >> GO TO 1.

< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

SEAT SLIDING	
SEAT SLIDING : Diagnosis Procedure	INFOID:000000000313479
1.CHECK SLIDING MECHANISM	
Check for the following. • Mechanism deformation or pinched foreign materials.	
 Interference with other parts because of poor installation. 	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	
2. CHECK SLIDING SWITCH	
Check sliding switch.	
Refer to ADP-62, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	
3. CHECK SLIDING MOTOR	
Check sliding motor.	
Refer to ADP-108, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	
4. CHECK SLIDING SENSOR	
Check sliding sensor.	
Refer to ADP-88, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunction parts.	
5.CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-38. "Intermittent Incident"</u> .	
NO >> GO TO 1. SEAT RECLINING	
SEAT RECLINING : Diagnosis Procedure	INFOID:000000000313479
1. CHECK RECLINING MECHANISM	
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	
2.CHECK RECLINING SWITCH	
Check reclining switch. Refer to ADP-64, "Component Function Check".	
Is the inspection result normal?	

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< SYMPTOM DIAGNOSIS >

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor.

Refer to ADP-110, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CHECK RECLINING SENSOR

Check reclining sensor.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT): Diagnosis Procedure

INFOID:0000000003134792

1. CHECK LIFTING (FRONT) MECHANISM

Check for the following.

- Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK LIFTING SWITCH (FRONT)

Check lifting switch (front).

Refer to ADP-66, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (FRONT)

Check lifting motor (front).

Refer to ADP-112, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

CHECK LIFTING SENSOR (FRONT)

Check lifting sensor (front).

Refer to ADP-94, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

Check the operation again.

< SYMPTOM DIAGNOSIS > Is the result normal? Α YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) В SEAT LIFTING (REAR): Diagnosis Procedure INFOID:0000000003134793 1. CHECK LIFTING (REAR) MECHANISM Check for the following. Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. Е 2.CHECK LIFTING SWITCH (REAR) Check lifting switch (rear). F Refer to ADP-68, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK LIFTING MOTOR (REAR) Check lifting motor (rear). Refer to ADP-114, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. **4.**CHECK LIFTING SENSOR (REAR) ADP Check lifting sensor (rear). Refer to ADP-97, "Component Function Check". Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace the malfunction parts. CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1. STEERING TILT Ν STEERING TILT : Diagnosis Procedure INFOID:0000000003134794 1. CHECK STEERING TILT MECHANISM Check for the following. Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. P Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 2.check tilt switch Check tilt switch. Refer to ADP-70, "Component Function Check".

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< SYMPTOM DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3. CHECK TILT MOTOR

Check tilt motor.

Refer to ADP-116, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CHECK TILT SENSOR

Check steering tilt sensor.

Refer to ADP-100, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC: Diagnosis Procedure

INFOID:0000000003134795

1. CHECK STEERING TELESCOPIC MECHANISM

Check for the following.

- · Mechanism deformation or pinched foreign materials.
- Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK TELESCOPIC SWITCH

Check telescopic switch.

Refer to ADP-72, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3. CHECK TELESCOPIC MOTOR

Check telescopic motor.

Refer to ADP-118, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

Refer to ADP-102, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

< SYMPTOM DIAGNOSIS >	
Check the operation again.	Δ.
Is the result normal?	Α
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1.	
DOOR MIRROR	В
DOOR MIRROR : Diagnosis Procedure	
1. CHECK DOOR MIRROR MECHANISM	С
Check for the following.	Б
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	D
Is the inspection result normal?	
YES >> GO TO 2.	Е
NO >> Repair or replace the malfunction parts.	
2.CHECK MIRROR SWITCH	_
Check mirror switch.	F
Refer to ADP-79, "MIRROR SWITCH: Component Function Check".	
Is the inspection result normal? YES >> GO TO 3.	G
NO >> Repair or replace the malfunction parts.	
3. CHECK MIRROR MOTOR	Н
Check mirror motor.	П
Refer to ADP-120, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts. 4.CHECK MIRROR SENSOR	ADP
	אטו
Check mirror sensor. Refer to ADP-104, "DRIVER SIDE: Component Function Check". (Driver side)	
Refer to ADP-105, "PASSENGER SIDE: Component Function Check". (Passenger side)	K
Is the inspection result normal?	
YES >> GO TO 5.	I
NO >> Repair or replace the malfunction parts.	_
5.CONFIRM THE OPERATION	
Check the operation again.	\mathbb{M}
Is the result normal?	
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident". NO >> GO TO 1.	NI
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SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000003134797

1. CHECK SYSTEM SETTING

Check system setting.

Refer to ADP-11, "SYSTEM SETTING: Special Repair Requirement".

Is the inspection result normal?

YES >> Synchronization function is normal.

NO >> GO TO 2.

2.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS > ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE		
Diagnosis Procedure	INFOID:0000000003134798	Α
1.check system setting		В
Check system setting. Refer to <u>ADP-11, "SYSTEM SETTING : Special Repair Requirement"</u> .		
Check the operation. <u>Is the inspection result normal?</u>		С
YES >> Entry/Exit function is OK. NO >> GO TO 2.		D
2. PERFORM SYSTEM INITIALIZATION		
 Perform system initialization. Refer to <u>ADP-9</u>. "SYSTEM INITIALIZATION: Special Repair Requirement". Check the operation. 		Е
Is the inspection result normal?		F
YES >> Entry/Exit function is OK. NO >> GO TO 3.		
3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)		G
Check front door switch (driver side). Refer to ADP-86, "Component Function Check".		
Is the inspection result normal? YES >> GO TO 4.		Н
NO >> Repair or replace the malfunction parts.		
4.CONFIRM THE OPERATION		I
Confirm the operation again. <u>Is the result normal?</u>		4 D.D
YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident".		ADP
NO >> GO TO 1.		K
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INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000003134799

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 malfunction parts.

2. PERFORM MEMORY STORING PROCEDURE

1. Perform memory storing procedure.

Refer to ADP-10, "MEMORY STORING: Special Repair Requirement".

2. Check Intelligent Key interlock function.

Refer to ADP-38, "INTELLIGENT KEY INTERLOCK FUNCTION: System Description".

Is the inspection result normal?

YES >> Intelligent Key inter lock function is normal.

NO >> Replace driver seat control unit. Refer to <u>ADP-209</u>. "Removal and Installation".

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description A

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

Symptom	Cause	Action to take	Reference page
	No initialization has been performed.	Perform initialization.	ADP-9
Entry/exit assist function and seat synchronization do not operate.	Entry/exit assist function is disabled. NOTE: The entry/exit assist function and seat synchronization function are disabled before delivery (initial setting).	Change the settings.	ADP-11
Entry assist function does not operate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	ADP-22
Seat synchronization function does not operate.	Either the entry/exit assist function (seat) or the entry/exit assist function (steering) is disabled.	Enable both functions.	ADP-11
	The synchronization function will not operate if the steering (tilt, telescopic) or the door mirror moves to the operating end while the seat synchronization function is operating.	Perform the memory function or drive the vehicle at more than 7 km/h (4 MPH).	ADP-22
	Seat adjustment load has exceed any of the volumes below. Seat sliding: 76 mm Seat reclining: 9.1 degrees Seat lifting (rear): 20 mm	_	_
Lumbar support does not perform memory operation.	The lumbar support system are controlled independently with no link to the automatic drive positioner system.	_	Lumbar support system: SE-8
Memory function, entry/exit assist function, seat synchronization function, or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-26
			Exit assist function: <u>ADP-30</u>
			Entry assist function: <u>ADP-34</u>
			Seat synchronization function: <u>ADP-22</u>
			Intelligent Key interlock function: ADP-38

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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 AIRBAG" 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 AIRBAG".
- 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.

Service INFOID:000000003134803

- 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:000000000313480-

- 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.
- 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 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.

DRIVER SEAT CONTROL UNIT

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-87, "Exploded View".

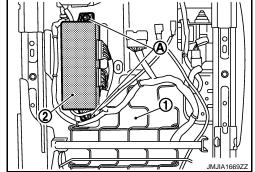
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the driver seat (1). Refer to <u>SE-90, "Removal and Installation"</u>.
- 2. Remove the mounting bolts (A).
- 3. Remove driver seat control unit (2).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to <u>ADP-8</u>, "<u>ADDI-TIONAL SERVICE WHEN REPLACING CONTROL UNIT</u>: <u>Description</u>".

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ON-VEHICLE REPAIR >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

Refer to IP-11, "Exploded View".

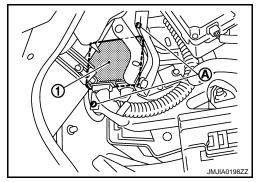
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the instrument driver lower panel. Refer to <u>IP-12.</u> "Removal and Installation".
- 2. Remove the screws (A).
- 3. Remove automatic drive positioner control unit (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description".

SEAT MEMORY SWITCH

< ON-VEHICLE REPAIR >

SEAT MEMORY SWITCH

Exploded View

Refer to INT-17, "Exploded View".

Removal and Installation

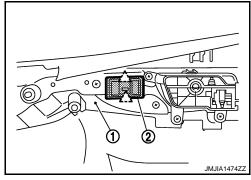
REMOVAL

CAUTION:

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

- Remove the front door finisher (1). Refer to <u>SE-91, "Disassem-bly and Assembly"</u>.
- 2. Press pawls and remove seat memory switch (2) from front door finisher (1).





INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description".

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POWER SEAT SWITCH

< ON-VEHICLE REPAIR >

POWER SEAT SWITCH

Exploded View

Refer to SE-87, "Exploded View".

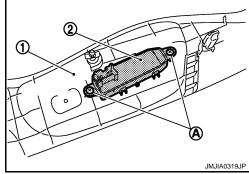
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the seat cushion outer finisher (1). Refer to <u>SE-91</u>, <u>"Disassembly and Assembly"</u>.
- 2. Remove the screws (A).
- 3. Remove the power seat switch (2) from the seat cushion outer finisher (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description".

TILT&TELESCOPIC SWITCH

< ON-VEHICLE REPAIR >

TILT&TELESCOPIC SWITCH

Exploded View

Refer to IP-11, "Exploded View".

Removal and Installation

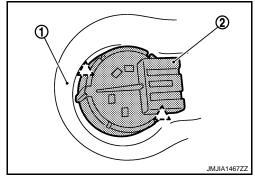
REMOVAL

CAUTION:

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

- 1. Remove the steering column mask (1). Refer to IP-12, "Removal and Installation".
- 2. Press pawls and remove tilt & telescopic switch (2) from the steering column mask (1).





INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description".

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