SECTION ADP AUTOMATIC DRIVE POSITIONER

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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

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OVERALL SEQUENCE



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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT. Refer to ADP-143, "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-218, "Description".

Is the incident normal operation?

YES >> INSPECTION END

NO >> GO TO 7.

6. PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.

NO >> Check intermittent incident. Refer to GI-42, "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.

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 WORK FLOW

< BASIC INSPECTION >

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

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< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Faturilavit assist	ON	Perform initialization
Entry/exit assist		Set slide amount*
Intelligent Key interlock	Erased	Perform storing
Seat synchronization	OFF	_

^{*:} Default value is 40mm.

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-10, "SYSTEM SETTING: Description".

>> GO TO 3.

3. MEMORY STORAGE

Perform memory storage. Refer to ADP-9, "MEMORY STORING: Description".

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

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Entry/ovit popiet	ON	Perform initialization
Entry/exit assist		Set slide amount*
Intelligent Key interlock	Erased	Perform storing
Seat synchronization	OFF	_

^{*:} Default value is 40mm.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement

1.SYSTEM INITIALIZATION

< BASIC INSPECTION >	
Perform system initialization. Refer to <u>ADP-9, "SYSTEM INITIALIZATION : Description"</u> .	А
>> GO TO 2. 2.SYSTEM SETTING	
	В
Perform system setting. Refer to <u>ADP-10, "SYSTEM SETTING: Description"</u> .	
>> GO TO 3. 3.MEMORY STORAGE	С
Perform memory storage. Refer to ADP-9, "MEMORY STORING : Description".	D
>> END SYSTEM INITIALIZATION	Е
SYSTEM INITIALIZATION : Description	
Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced.	F
The entry/exit assist function will not operate normally if no initialization is performed.	G
SYSTEM INITIALIZATION: Special Repair Requirement	
INITIALIZATION PROCEDURE	Н
1. CHOOSE METHOD	
There are two initialization methods.	
Which method do you use? With door switch>>GO TO 2.	- 1
With vehicle speed>>GO TO 4.	
2. STEP A-1	ADI
Turn ignition switch from ACC to OFF position.	
>> GO TO 3.	K
3. STEP A-2	
Driver door switch is ON (open) \rightarrow OFF (close) \rightarrow ON (open).	L
>> END	M
4. STEP B-1	
Drive the vehicle at more than 25 km/h (16 MPH).	Ν
>> END MEMORY STORING	0
MEMORY STORING : Description	O
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.	Р
MEMORY STORING: Special Repair Requirement	

Memory Storage Procedure

< BASIC INSPECTION >

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:

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).

NOTE:

Memory switch indicator lamp blinks for 5 seconds when registration is complete.

>> GO TO 7.

7.STEP 7

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

>> END

SYSTEM SETTING

SYSTEM SETTING: Description

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

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Setting Change

< BASIC INSPECTION >

				×: Applicable	
Item	Content	CONSULT	Set switch	Factory setting	Α
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	В
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	х		OFF	0
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	х	X	ON	C
Seat synchronization	Seat synchronization can be selected: ON (operated) OFF (not operated)	_	х	OFF	D

SYSTEM SETTING: Special Repair Requirement

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1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

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

$2.\,$ WITH SET SWITCH - STEP 1

- Turn ignition switch OFF.
- Push setting button and hold for more than 10 seconds, then confirm blinking of the memory switch indicator.
- Entry/exit assist (seat/steering column) are ON: Memory switch indicator blink two times.
- Entry/exit assist (seat/steering column) are OFF: Memory switch indicator blink once.

>> GO TO 3.

3. WITH SET SWITCH - STEP 2

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- Turn ignition switch ACC.
- Push setting button and hold for more than 10 seconds, then confirm blinking of the memory switch indicator.
- Synchronization are ON: Memory switch indicator blink two times.
- Synchronization are OFF: Memory switch indicator blink once.

>> END

4. WITH CONSULT - STEP 1

Select "Work support".

>> GO TO 5.

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5. WITH CONSULT - STEP 2

- 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)
- Then touch "OK".

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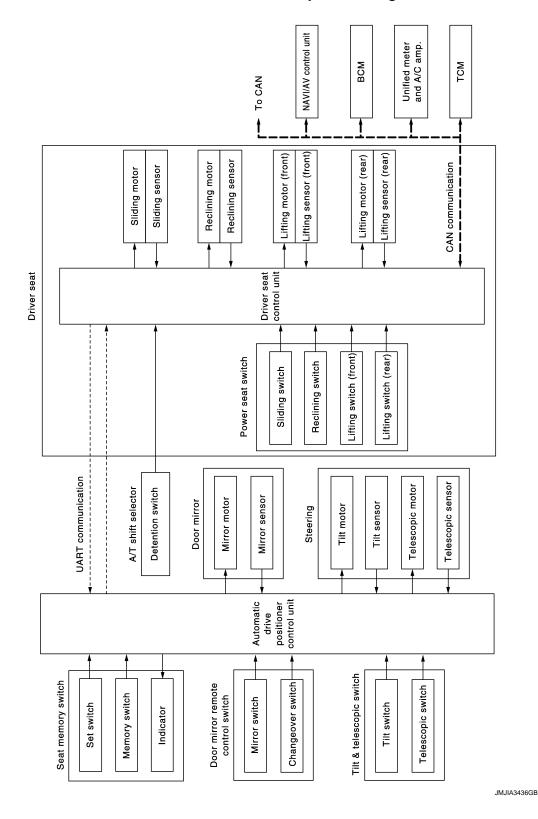
>> END

SYSTEM DESCRIPTION

AUTOMATIC DRIVE POSITIONER SYSTEM AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM: System Diagram

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< SYSTEM DESCRIPTION >

AUTOMATIC DRIVE POSITIONER SYSTEM: System Description

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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	ı	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.
Entry/Exit assist function Entry		On entry, the seat and steering column returns from exiting position to the previous driving position.
Intelligent Key interlock funct	ion	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.

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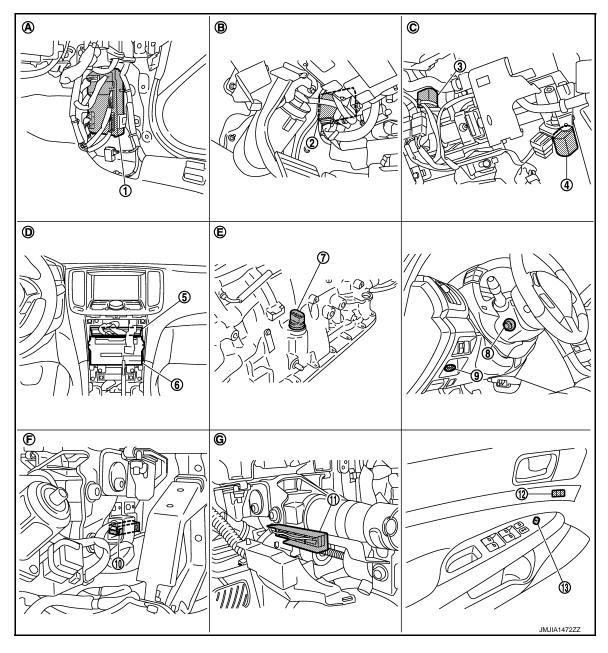
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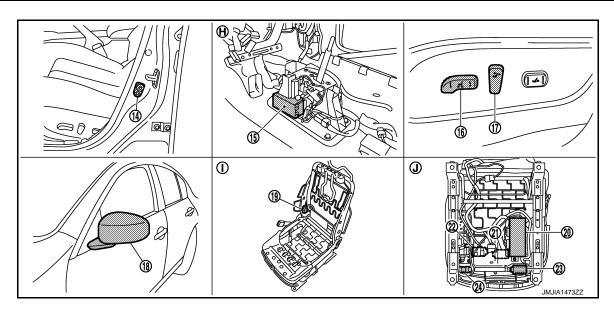
AUTOMATIC DRIVE POSITIONER SYSTEM: Component Parts Location INFOID-0000000002284693



- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- 13. Door mirror remote control switch
- 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



- 14. Front door switch (driver side) B16
- 15. A/T shift selector (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
- back pad removed
- View with seat cushion pad and seat- J. Backside of the seat cushion

AUTOMATIC DRIVE POSITIONER SYSTEM: Component Description

INFOID:0000000008284694

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.
TCM	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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< SYSTEM DESCRIPTION >

Item	Function
Key slot	The key switch is installed to detect the key inserted/removed status.
Front door switch (driver side)	Detect front door (driver side) open/close status.
A/T shift selector (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

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 (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.

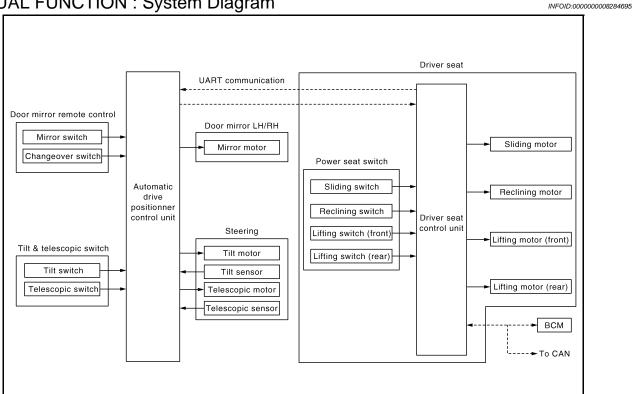
OUTPUT PARTS

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

< SYSTEM DESCRIPTION >

MANUAL FUNCTION: System Diagram



MANUAL FUNCTION: System Description

OUTLINE

The driving position (seat, steering column and door mirror position) can be adjusted manually with power seat switch, tilt & telescopic switch and door mirror remote control switch.

OPERATION PROCEDURE

- 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.

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< SYSTEM DESCRIPTION >

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.

MANUAL FUNCTION: Component Parts Location

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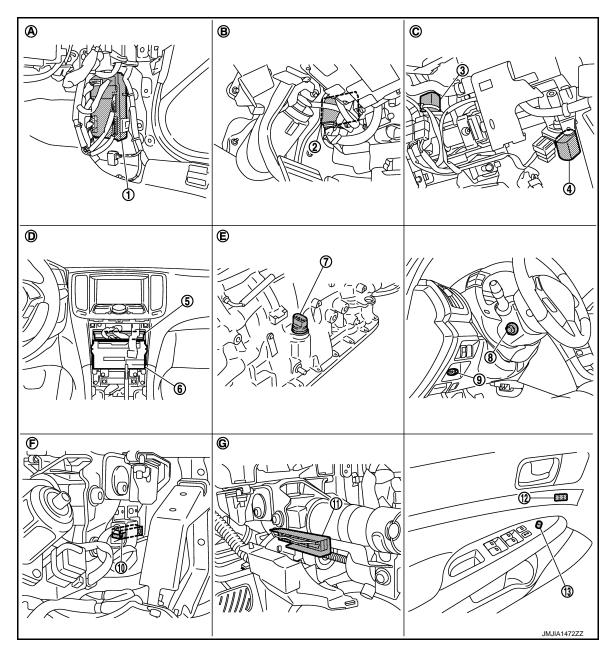
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- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover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

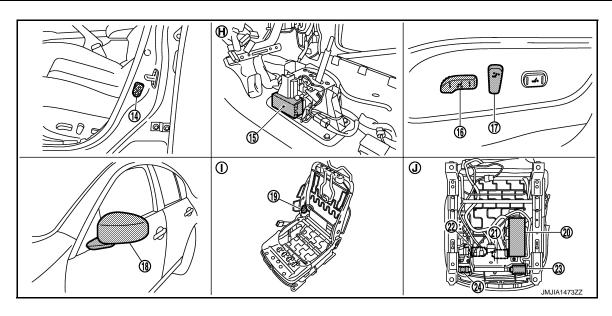
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Revision: 2013 December ADP-19 2013 EX



- 14. Front door switch (driver side) B16
- 15. A/T shift selector (detention switch)
- Sliding, lifting switch (Power seat switch B459)

- 17. Reclining switch (power seat switch 18.
- Door mirror (driver side) D3
- Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
 - 24. Sliding sensor B453
- 22. Lifting motor (rear) B456

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

MANUAL FUNCTION: Component Description

INFOID:0000000008284698

CONTROL UNITS

removed

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 mirror remote control switch.
ВСМ	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.

< SYSTEM DESCRIPTION >

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

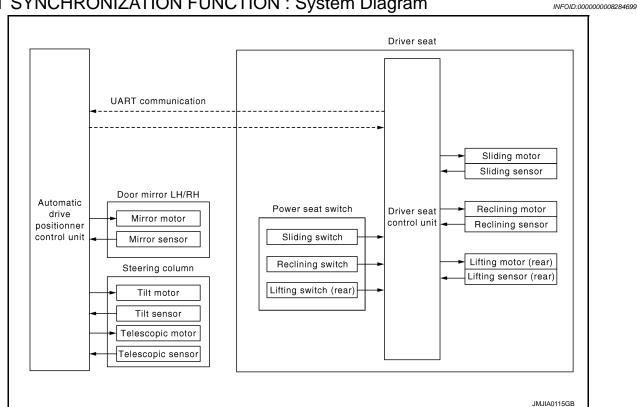
Item	Function
Tilt and telescopic sensor	Detect the up/down and left/right position of steering column.

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



SEAT SYNCHRONIZATION FUNCTION: System Description

INFOID:0000000008284700

OUTLINE

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< SYSTEM DESCRIPTION >

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

NOTE:

- This function is set to OFF before delivery (initial setting).
- For the system setting procedure. Refer to <u>ADP-10, "SYSTEM SETTING: Description"</u>.

OPERATION PROCEDURE

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

NOTE:

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

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	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.

SEAT SYNCHRONIZATION FUNCTION: Component Parts Location

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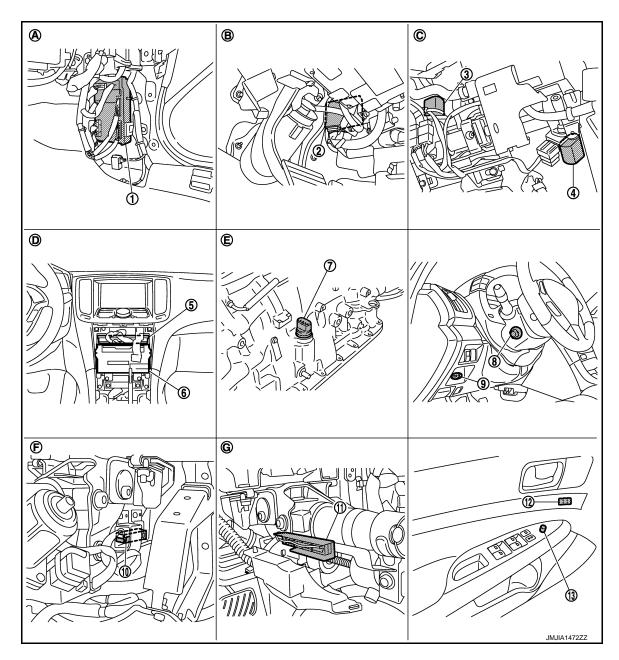
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- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover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

- 2. 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

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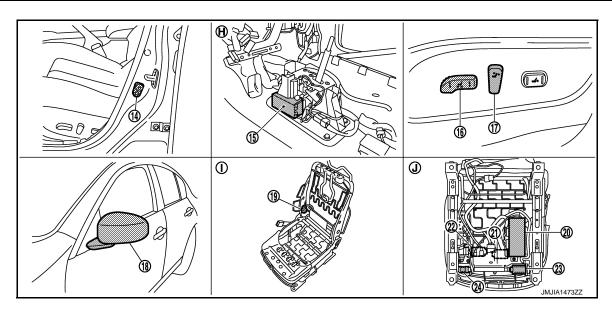
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panel removed



- 14. Front door switch (driver side) B16
- 15. A/T shift selector (detention switch)
- 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

24. Sliding sensor B453

22. Lifting motor (rear) B456

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

SEAT SYNCHRONIZATION FUNCTION : Component Description

INFOID:0000000008284702

CONTROL UNITS

removed

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).

< SYSTEM DESCRIPTION >

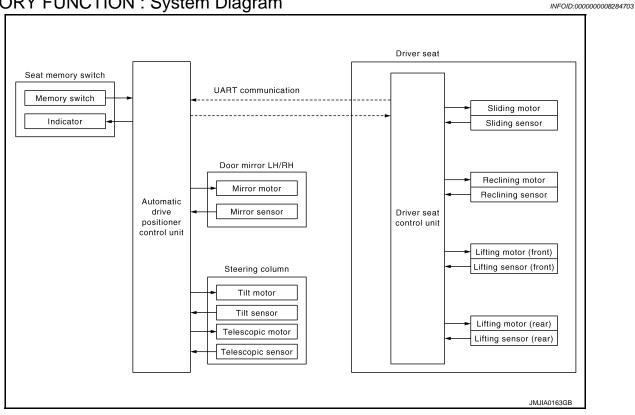
Item	Function
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the front/rear position of seat.

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



MEMORY FUNCTION: System Description

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.

Further information for the memory storage procedure. Refer to ADP-9, "MEMORY STORING: Description".

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

ADP-25 Revision: 2013 December 2013 EX

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< SYSTEM DESCRIPTION >

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

Item	Request status
Ignition position	ON
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	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.

MEMORY FUNCTION: Component Parts Location

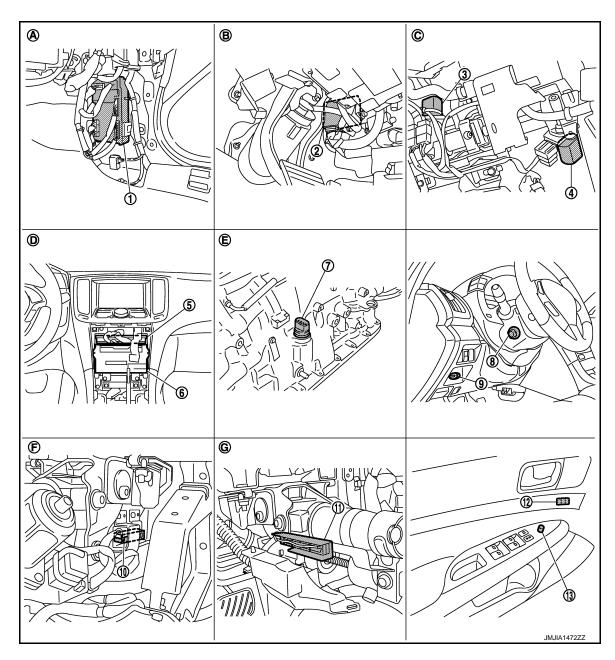
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- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover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

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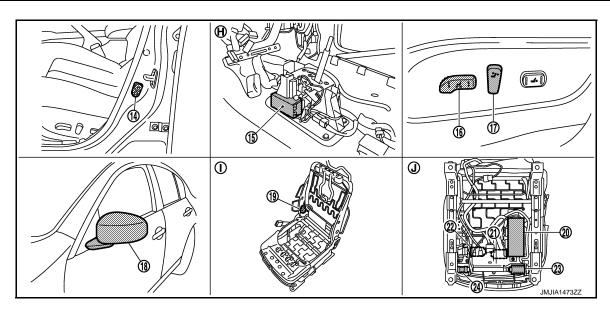
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Revision: 2013 December ADP-27 2013 EX



- 14. Front door switch (driver side) B16
- 15. A/T shift selector (detention switch)
- Sliding, lifting switch (Power seat switch B459)

- 17. Reclining switch (power seat switch 18.
- Door mirror (driver side) D3
 - 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

MEMORY FUNCTION: Component Description

INFOID:0000000008284706

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.

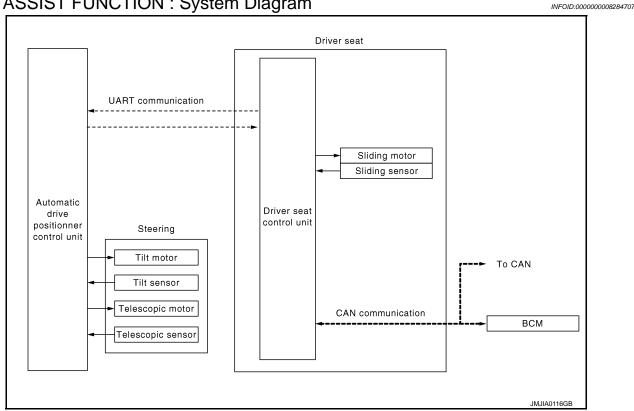
< SYSTEM DESCRIPTION >

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



EXIT ASSIST FUNCTION: System Description

INFOID:0000000008284708

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.

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to <u>ADP-10, "SYSTEM SETTING: Description"</u>.

OPERATION PROCEDURE

- Open the driver door with ignition switch in ON position.
- 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.

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< SYSTEM DESCRIPTION >

Item	Request status
Ignition position	OFF
System setting	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.

EXIT ASSIST FUNCTION: Component Parts Location

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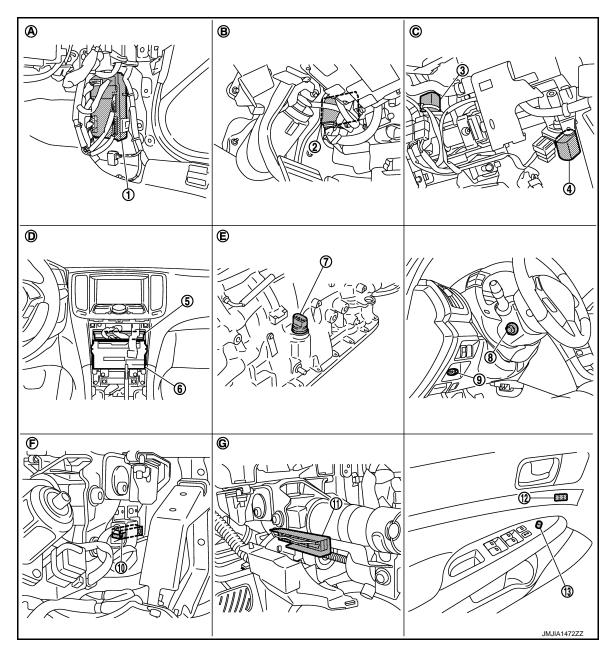
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- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover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

- 2. 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 ivi49
- 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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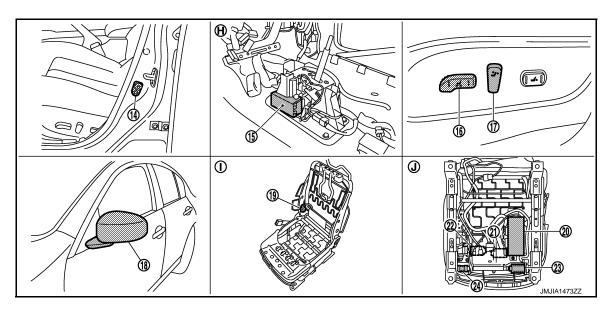
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Revision: 2013 December ADP-31 2013 EX



- 14. Front door switch (driver side) B16
- 15. A/T shift selector (detention switch)
- 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

EXIT ASSIST FUNCTION: Component Description

INFOID:0000000008284710

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.

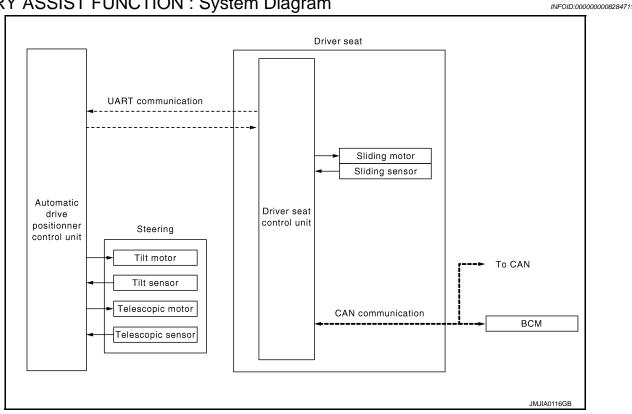
OUTPUT PARTS

< SYSTEM DESCRIPTION >

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



ENTRY ASSIST FUNCTION: System Description

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 ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-10, "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.
- 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.

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< SYSTEM DESCRIPTION >

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.

ENTRY ASSIST FUNCTION: Component Parts Location

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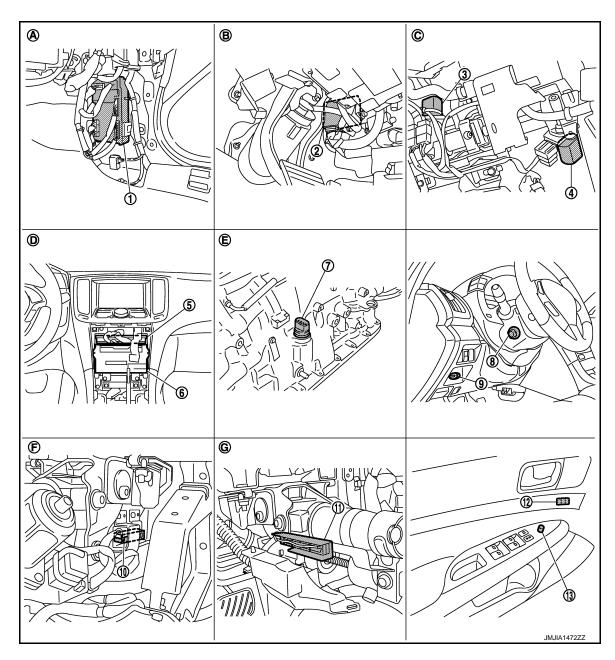
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- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover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

NAVI M87, M88 ut NAVI M83, M85

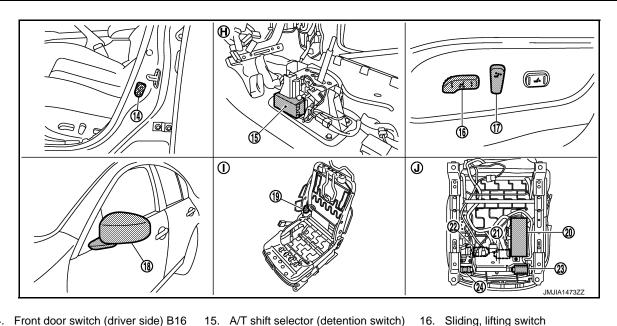
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- 14. Front door switch (driver side) B16
- Sliding, lifting switch (Power seat switch B459)
- 17. Reclining switch (power seat switch 18. Door mirror (driver side) D3
- 19. Reclining motor B454
- 20. Driver seat control unit B451, B452 21. Lifting 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

ENTRY ASSIST FUNCTION: Component Description

INFOID:0000000008284714

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.
BCM	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

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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

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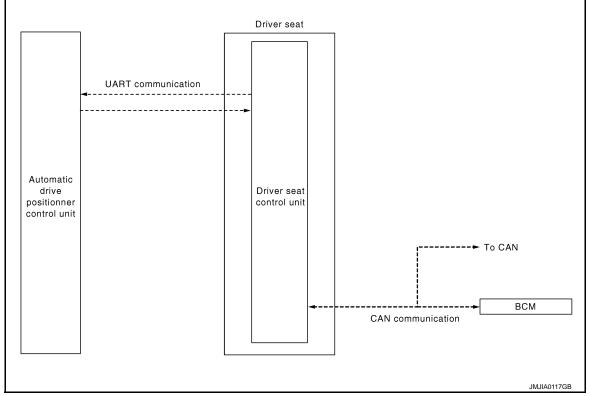
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INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000008284716

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.
- 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 ADP-9, "MEMORY STORING: Description".

OPERATION CONDITION

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

Item	Request status
Ignition position	OFF
System setting	ON
Key switch	OFF (Key is removed.)

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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

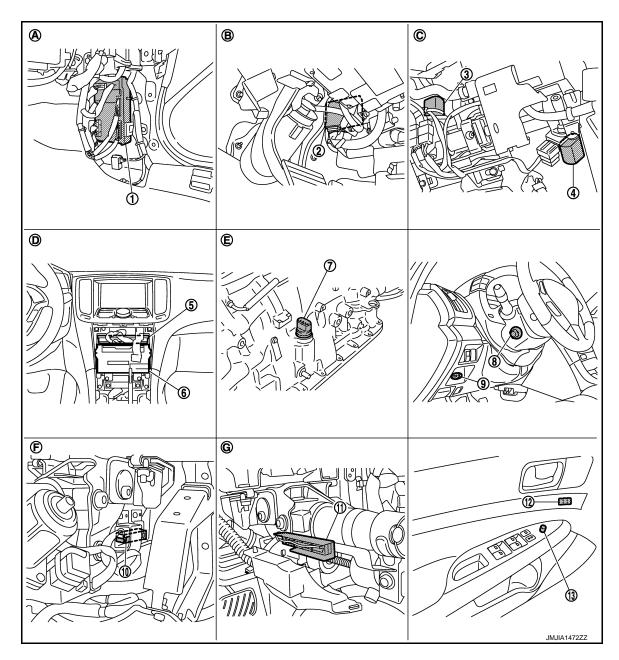
DETAIL FLOW

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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

INTELLIGENT KEY INTERLOCK FUNCTION: Component Parts Location INFOID-000000008284717



- 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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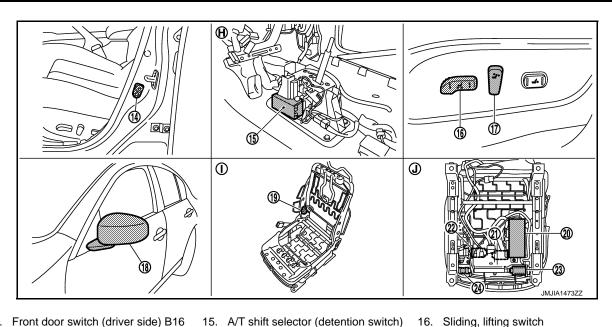
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- 14. Front door switch (driver side) B16

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

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

INTELLIGENT KEY INTERLOCK FUNCTION: Component Description

INFOID:0000000008284718

CONTROL UNITS

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.
ВСМ	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)

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

Diagnosis Description

INFOID:0000000008284719

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

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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 Function

INFOID:0000000008284720

SELF-DIAGNOSIS RESULTS

Refer to ADP-143, "DTC Index".

DATA MONITOR

NOTE:

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

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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.

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DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
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.

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

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

WORK SUPPORT

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

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description INFOID:000000008284721

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

DTC Logic

DTC DETECTION LOGIC

DTC	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.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-44, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000008284723

Refer to LAN-16, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

INFOID:0000000008284724

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

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

Description INFOID:0000000008284725

- 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

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 unitSlide motor harness is power shorted	Е

DTC CONFIRMATION PROCEDURE

1. RERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

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

NO >> INSPECTION END

NOTE:

First perform diagnosis for B2126 if B2126 is detected.

Diagnosis Procedure

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check "Self diagnostic result" with CONSULT.
- Erase the DTC.
- Perform DTC confirmation procedure. Refer to <u>ADP-45, "DTC Logic"</u>.

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

2.check sliding motor circuit (power short)

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

(+) Sliding motor				
		(-)	Voltage (V) (Approx.)	\circ
Connector	Terminals	(O
B461	35	Ground	0	
D40 I	42	Giodila	U	Р

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.

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B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+) Driver seat control unit		(–)	Voltage (V) (Approx.)	
Connector	Connector Terminals		(177)	
B451	35	Ground	0	
D431	42	Giouna	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

Description

- 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

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.
- Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-47, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

NOTE:

First perform diagnosis for B2126 if B2126 is detected.

Diagnosis Procedure

INFOID:0000000008284730

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.
- 3. Erase the DTC.
- Perform DTC confirmation procedure. Refer to <u>ADP-47</u>, "<u>DTC Logic</u>".

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

2.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

-	+)			_
	ng motor	(–)	Voltage (V) (Approx.)	
Connector	Terminals		(44.5)	0
B454	36 44	Ground	0	- D

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

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B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Connector Terminals		('FF')	
B451	36	Ground	0	
D431	44	Giouna	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2118 TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

B2118 TILT SENSOR

Description INFOID:0000000008284731

- 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.
- 2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-49</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK TILT SENSOR SIGNAL

- Turn ignition switch ON.
- Select "TILT SEN" in "Data monitor" mode with CONSULT.
- 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.

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2.CHECK TILT SENSOR CIRCUIT

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

Automatic drive po	ositioner control unit	Tilt & teleso	copic 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.

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B2118 TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner 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.

(+)		Voltage (V)	
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.
- Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic sensor harness connector.

Automatic drive positioner control unit		Tilt & teleso	copic sensor	Continuity
Connector	Terminal	Connector Terminal		
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-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

${f 5.}$ CHECK TILT SENSOR GROUND CIRCUIT

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

Automatic drive po	sitioner control unit	Tilt & 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.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

B2118 TILT SENSOR

>> INSPECTION END

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B2119 TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

B2119 TELESCOPIC SENSOR

Description INFOID:000000008284734

- 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

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

Is the DTC is detected?

YES >> Perform diagnosis procedure. Refer to ADP-52, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure 1. CHECK TELESCOPIC SENSOR SIGNAL

INFOID:0000000008284736

- 1. Turn ignition switch ON.
- Select "TELESCO SEN" in "Data monitor" mode with CONSULT.
- 3. 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

- 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.

B2119 TELESCOPIC SENSOR

< DTC/CIRCUIT 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

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

Tilt & telesc	(+) 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	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	Terminal	Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK TELESCOPIC SENSOR GROUND 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	natic drive positioner control unit Tilt & telescopic sensor		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.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

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B2119 TELESCOPIC SENSOR

>> INSPECTION END

B2126 DETENT SW

Description INFOID:0000000008284737

Detention switch is installed on A/T shift selector. It is turned OFF when the A/T selector lever is in P posi-

 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 INFOID:0000000008284738

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

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-55, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

CHECK DTC WITH "BCM"

Check "Self diagnostic result" for BCM with CONSULT.

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

>> Check the DTC. Refer to BCS-90, "DTC Index". YES

NO >> GO TO 2.

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

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

Is the DTC detected?

YES >> Check the DTC. Refer to ADP-143, "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. 2.
- Check detention switch signal under the following condition.

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

Is the status normal?

YES >> GO TO 5.

>> GO TO 4. NO

4. CHECK DETENTION SWITCH CIRCUIT

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B2126 DETENT SW

< DTC/CIRCUIT DIAGNOSIS >

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

Driver sea	Driver seat control unit		A/T shift selector			
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 ADP-221, "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description INFOID:000000008284740

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

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-57</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat	control unit	Automatic drive po	sitioner control unit	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B451	1	M51	10	Existed	
0401	17	IVIST	26	LAISIEU	

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

Driver seat control unit			Continuity
Connector	Terminal	- Ground	Continuity
B451	1		Not existed
B43 I	17		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> Repair or replace harness.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000008284743

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Pottory power cumply	К	
Battery power supply	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.

(+)	(-)	Voltage
всм			(Approx.)
Connector	Terminal	Ground	
M118	1	Glound	Battery voltage
M119	11		Ballery Vollage

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.

В	СМ		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:0000000008284744

NOTE:

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

1. CHECK POWER SUPPLY CIRCUIT

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+)			Voltage (V) (Approx.)
Driver se	Driver seat control unit		
Connector	Terminal		, , ,
B452	33	Ground	Dottomaveltone
D402	40		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			Continuity
Connector	Terminal	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

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

NOTE:

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

1. CHECK POWER SUPPLY CIRCUIT

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

(+)			Voltage (V) (Approx.)
Automatic drive positioner control unit		(–)	
Connector	Terminal		(TF: 974)
M52	34	Ground	Battery voltage
IVIOZ	39		

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.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

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:0000000008284747

1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Description INFOID:0000000008284748

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:0000000008284749

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1. CHECK FUNCTION

- Turn ignition switch ON.
- 2. Select "SLIDE SW-FR", "SLIDE SW-RR" in "Data monitor" mode with CONSULT.
- 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 GW-IXIX	Siluling Switch (Dackward)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000008284750

1. CHECK SLIDING SWITCH SIGNAL

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

(+) Power seat switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(/ .pp. 0/)	
B459	11	Ground	Pottory voltage	
D439	26	Giouna	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
D+31	26	D433	26	LXISIEU

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

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SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	11 Ground	Not existed	
D401	26		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to ADP-62, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-224, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284751

1. CHECK SLIDING SWITCH

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

Power se	eat switch	Condi	tion	Continuity
Teri	minal	Condition		Continuity
	11	Sliding switch (backward)	Operate	Existed
32	11	Silding Switch (backward)	Release	Not existed
32	26	Cliding quitab (famuard)	Operate	Existed
	20	Sliding switch (forward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-224, "Removal and Installation".

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Description INFOID:0000000008284752

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:0000000008284753

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1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "RECLN SW-FR", "RECLN SW-RR" in "Data monitor" mode with CONSULT.
- 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
KECLINE SW-KK		Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000008284754

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		(/ .pp. 0/)	
B459	12	Ground	Pattony voltago	
D439	27	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK RECLINING SWITCH CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit connector.
- 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	Existed

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

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RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver se	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-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK RECLINING SWITCH

Refer to ADP-64, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-224, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284755

1. CHECK RECLINING SWITCH

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

Power se	eat switch	Condition		Continuity
Terr	minal	Condition		Continuity
	12	Reclining switch (backward)	Operate	Existed
32	12		Release	Not existed
32	27	Declining quitab (farward)	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-224, "Removal and Installation".

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description INFOID:0000000008284756

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:0000000008284757

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1. CHECK FUNCTION

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

Monitor item	Condition		Status
LIFT FR SW-UP	Lifting quitab front (up)	Operate	ON
LIFT FR SW-UP	Lifting switch front (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
LII I I IX SVV-DIN	Litting Switch from (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-65, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000008284758

1. CHECK LIFTING SWITCH SIGNAL

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

(+) Power seat switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(/ .pp. 0/)	
B459	13	Ground	Pottory voltage	
D 4 39	28	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK LIFTING SWITCH (FRONT) 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	13	B459	13	Existed
D431	28	5459	28	LAISIEU

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

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LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B451	13	Giouna	Not existed	
D431	28		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-66, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-224, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284759

1. CHECK LIFTING SWITCH (FRONT)

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

Power seat switch		Condition		Continuity
Terr	minal	Condi	Condition	
	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-224, "Removal and Installation".

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description INFOID:0000000008284760

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:0000000008284761

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1. CHECK FUNCTION

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

Monitor item	Condition		Status
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
LIFT KK SW-OF	Litting Switch real (up)	Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
EII I KK SW-DN	Litting Switch real (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-67, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008284762

1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

(+) Power seat switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(pp. 5/11)	
B459	14	Ground	Pottory voltage	
D409	29	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK LIFTING SWITCH (REAR) 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 sear switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	14	B459	14	Existed
D + 31	29	D-109	29	LAISIEU

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

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LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B451	14	Ground	Not existed	
D431	29		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-68, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284763

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	
Terr	minal	Condi		Continuity	
	14 Lifting switch rear (Lifting switch rear (up)	Operate	Existed	
32	14	Litting Switch rear (up)	Release	Not existed	
32	29 Lifting switch r	Lifting quitab room (down)	Lifting switch rear (down)	Operate	Existed
	29	Litting Switch real (down)	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

TILT SWITCH

Description INFOID:000000008284764

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:0000000008284765

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1. CHECK FUNCTION

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

Monitor item	Condition		Status
TILT SW-UP	Tilt switch (up)	Operate	ON
TILI 3W-OF	The Switch (up)	Release	OFF
TILT SW-DN	Tilt switch (down)	Operate	ON
HEI SW-DIN	The Switch (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-69, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000008284766

1. CHECK TILT SWITCH SIGNAL

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

(+) Tilt & telescopic switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(/ (PP - 0711)	
M31	4	Ground	Pottory voltage	
IVIO I	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.
- 3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic switch harness connector.

Automatic drive po	sitioner control unit	Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	1	M31	4	Existed
	17	IVIOI	5	LAISIEG

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

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TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	Automatic drive positioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M51	1	Ground	Not existed	
IVIO	17		Not existed	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK TILT SWITCH

Refer to ADP-70, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-225, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284767

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)	Tilt switch (up)	Operate	Existed
		Till Switch (up)	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-225, "Removal and Installation".

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Description INFOID:0000000008284768

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

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1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000008284770

1. CHECK TELESCOPIC SWITCH SIGNAL

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

(+) Tilt & telescopic switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(* 455. 57.1)	
M31	2	Ground	Battery voltage	
IVIOI	3			

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TELESCOPIC SWITCH CIRCUIT

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

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

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TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M51	11		Not existed	
	27		Not existed	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK TELESCOPIC SWITCH

Refer to ADP-72, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-225, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284771

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		Condition		Continuity
Terminal				
1	2 T	Telescopic switch (forward)	Operate	Existed
			Release	Not existed
	3 Telescopic switch (bac		Operate	Existed
		relescopic switch (backward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-225, "Removal and Installation".

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Description INFOID:0000000008284772

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

1. CHECK FUNCTION

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

Monitor item	Condition		Status
SET SW	SET SW	Push	ON
SELSW	SET SVV	Release	OFF
MEMORY SW 1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW 2		Push	ON
	Memory switch 2	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1. CHECK SEAT MEMORY SWITCH SIGNAL

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

	(+) Seat memory switch		Voltage (V) (Approx.)
Connector	Terminal		(/ .pp. 0/)
	3		
D5	1	Ground	5
_	2		

Is the inspection result normal?

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

2.CHECK MEMORY SWITCH CIRCUIT

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

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SEAT MEMORY SWITCH

< DTC/CIRCUIT 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	

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.check memory switch ground circuit

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK SEAT MEMORY SWITCH

Refer to ADP-74, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to ADP-223, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284775

1. CHECK SEAT MEMORY SWITCH

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

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Seat mem	Seat memory switch		Condition			
Terr	ninal	Condition		Continuity		
	3	Set switch	Push	Existed		
	3	Set switch	Release	Not existed		
4	4	M 201.4	A Manager switch A		Push	Existed
4	ı	Memory switch 1	Release	Not existed		
			Mamany awitah 2	Push	Existed	
	2	Memory switch 2	Release	Not existed		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to <u>ADP-223, "Removal and Installation"</u>.

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DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH: Description

INFOID:0000000008284776

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:00000000008284777

1. CHECK CHANGEOVER SWITCH FUNCTION

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

Refer to ADP-41, "CONSULT Function".

Is the inspection result normal?

YES >> Changeover switch function is OK.

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

CHANGEOVER SWITCH: Diagnosis Procedure

INFOID:0000000008284778

1. CHECK CHANGEOVER SWITCH SIGNAL

- 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- p. 0/11)
-	2	Ground		RIGHT	0
M51			Change over	Other than above	5
IVIST	18		switch	LEFT	0
				Other than above	5

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

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	ositioner control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	2	D17	11	Existed
IVIST	18	DIT	10	Existed

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

Automatic drive po	sitioner control unit	Continuity	
Connector	Terminal	Ground	Continuity
M51	2	- Ground	Not existed
I CIVI	18		Not existed

Is the inspection result normal?

< DTC/CIRCUIT 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 rem	ote control switch	Continuity	
Connector	Terminal	Ground	Continuity
D17	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

f 4.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

	+) ositioner control unit	(-)	Voltage (V) (Approx.)	
Connector	Terminal			
M51	2	Ground	5	
I CIVI	18	Giouria	3	

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

$oldsymbol{5}$.CHECK CHANGEOVER SWITCH

Check changeover switch.

Refer to ADP-77, "CHANGEOVER SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-42, "Intermittent Incident".

NO >> Replace door mirror remote control switch. Refer to MIR-124, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

>> Repair or replace the malfunctioning parts.

CHANGEOVER SWITCH: Component Inspection

1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

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

Is the inspection result normal?

YES >> INSPECTION END ADP

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< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace door mirror remote control switch. Refer to MIR-124, "Removal and Installation".

MIRROR SWITCH

MIRROR SWITCH: Description

INFOID:0000000008284780

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:0000000008284781

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.

Refer to ADP-41, "CONSULT Function".

Is the inspection result normal?

YES >> Mirror switch function is OK.

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

MIRROR SWITCH: Diagnosis Procedure

INFOID:0000000008284782

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				
	3			UP	0
	3		Ground Mirror switch	Other than above	5
	4			LEFT	0
M51	4	Cround		Other than above	5
IVIS I	10	Ground		DOWN	0
	20			Other than above	5
				RIGHT	0
			Other than above	5	

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

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

Automatic drive po	sitioner control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3		15	
M51	4	D17	13	Existed
IVIOT	19		12	LAISIGU
	20		4	

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

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	Automatic drive positioner control unit		Continuity	
Connector	Terminal		Continuity	
	3	Ground		
M51	4	Giouna	Not existed	
IVIST	19			
	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

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

(+)		(-)	Voltage (V) (Approx.)	
Automatic drive positioner control unit				
Connector	Terminal		(· -FF1-6711)	
	3	Ground	5	
M51	4			
IVIS I	19	Ground		
	20			

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

5. CHECK MIRROR SWITCH

Check mirror switch

Refer to ADP-80, "MIRROR SWITCH: Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-42, "Intermittent Incident".

NO >> Replace door mirror remote control switch. Refer to MIR-124, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-42, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

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NO >> Repair or replace the malfunctioning parts.

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< DTC/CIRCUIT DIAGNOSIS >

MIRROR SWITCH: Component Inspection

INFOID:0000000008284783

1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Door mirror rem	ote control switch		Condition	Continuity
Terr	Terminal		Condition	
4			RIGHT	Existed
4			Other than above	Not existed
13			LEFT	Existed
13	7		Other than above	Not existed
15		Mirror switch	UP	Existed
15			Other than above	Not existed
40			DOWN	Existed
12			Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to MIR-124, "Removal and Installation".

POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000008284784

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-42, "Intermittent Incident".

NO >> Repair or replace harness.

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TILT &TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000008284785

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 & teleso	copic switch		Continuity
Connector	Terminal	Ground	Continuity
M31	1		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> Repair or replace harness.

DETENTION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DETENTION SWITCH

Description

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

Component Function Check

1.check function

- 1. Turn ignition switch ON.
- Select "DETENT SW" signal in "Data monitor" mode with CONSULT.
- 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-83, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK DTC WITH "BCM"

Check "Self Diagnostic Result" for BCM with CONSULT.

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

YES >> Check the DTC. Refer to BCS-90, "DTC Index".

NO >> GO TO 2.

2.CHECK DETENTION SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- Disconnect A/T shift selector harness connector.
- 3. Turn ignition switch ON.
- Check voltage between A/T shift selector harness connector and ground.

(+) A/T shift selector			V-16 0.0	
		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(11 - /	
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.
- Disconnect driver seat control unit.
- Check continuity between driver seat control unit harness connector and A/T shift selector harness connector.

Driver seat	control unit	A/T shift selector		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	21	M137	11	Existed

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

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DETENTION SWITCH

< DTC/CIRCUIT 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-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

4. CHECK DETENTION SWITCH

Refer to ADP-84, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace A/T shift selector. Refer to TM-182, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284789

1. CHECK DETENTION SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect A/T shift selector connector.
- Check A/T shift selector terminals.

A/T shift selector		Condition		Continuity
Terr	Terminal		Condition	
10	11	Selector lever	P position	Existed
10	11	Selector lever	Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector. Refer to TM-182, "Removal and Installation".

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

FRONT DOOR SWITCH (DRIVER SIDE)

Description INFOID:000000008284790

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

Component Function Check

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1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "DOOR SW-DR" in "Data monitor" mode with CONSULT.
- 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 <u>ADP-85. "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000008284792

1.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL

- 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)		Voltage (V) (Approx.)
Connector	Terminal		(+)
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.

ВСМ		Front door switch (driver side)		Continuity
Connector	Terminal	Connector Terminal		Continuity
M123	150	B16	2	Existed

3. Check continuity between BCM connector and ground.

BCM			Continuity	
Connector	Connector Terminal		Continuity	
M123	150		Not existed	

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Exploded View".

NO >> Repair or replace harness or connector.

3.check front door switch (driver side)

Refer to ADP-86, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front door switch (driver side). Refer to <u>DLK-270</u>. "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284793

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
2	switch	(driver side)	Released	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door switch (driver side). Refer to <u>DLK-270</u>. "Removal and Installation".

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Description INFOID:0000000008284794

- 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

1.check function

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

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1. CHECK SLIDING SENSOR SIGNAL

Turn ignition switch ON.

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

(+) Driver seat control unit		(–)	(–) Condition		Voltage (V) (Approx.)
Connector	Terminal				(
B451	24	Ground	Seat sliding	Operate Other than	10mSec/div 2V/div JMJIA0119ZZ
				above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> GO TO 2.

2.CHECK SLIDING SENSOR CIRCUIT

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

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SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

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

Driver seat control unit			Continuity	
Connector	Connector Terminal		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		Voltage (V) (Approx.)	
Connector	Terminal		(11 - 7	
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

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

Driver seat	Driver seat control unit		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 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-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK SLIDING SENSOR GROUND

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

Driver seat	control unit	Sliding	sensor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	31	B453	31	Existed

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

مطهما	inanaatiaa	**************************************	00000010
is the	inspection	resuit	normai?

YES >> Replace sliding sensor.

NO >> Repair or replace harness or connector.

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RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Description INFOID:000000008284797

- 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

INFOID:0000000008284798

1. CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000008284799

1. CHECK RECLINING SENSOR SIGNAL

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

Oriver seat	+) control unit	(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
B451	9	Ground	Seat reclining	Operate Other than	10mSec/div 2V/div JMJIA0119ZZ
				above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "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.
- 3. Check continuity between driver seat control unit harness connector and reclining motor harness connector.

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit Reclining motor		Continuity	
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	Terminal	Ground	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.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

f 4.CHECK RECLINING 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 reclining motor harness connec-

Driver seat	control unit	Reclinia	ng motor	Continuity
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	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

5.CHECK RECLINING SENSOR GROUND

Turn ignition switch OFF.

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

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

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RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace reclining motor.

NO >> Repair or replace harness or connector.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Description INFOID:0000000008284800

- 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

1. CHECK FUNCTION

- Turn ignition switch ON.
- Select "LIFT FR PULSE" in "Data monitor" mode with CONSULT. 2.
- 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

>> Perform diagnosis procedure. Refer to ADP-93, "Diagnosis Procedure". NO

Diagnosis Procedure

INFOID:0000000008284802

INFOID:0000000008284801

1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+) Driver seat control unit		(-)	Con	dition	Voltage (V) (Approx.)
Connector	Terminal				(Αρρίολ.)
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-221, "Removal and Installation".

NO >> GO TO 2.

2.check lifting sensor (front) circuit

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

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LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Lifting motor (front)	
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	Continuity
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

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

,	+) otor (front)	(-)	Voltage (V) (Approx.)	
Connector	Terminal		(11 - 7	
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.
- Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

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

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

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 <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (FRONT) GROUND

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

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

	LIFTING SENSOR (FRONT)	
< DTC/	/CIRCUIT DIAGNOSIS >	
	nspection result normal?	
YES NO	>> Replace lifting motor (front). >> Repair or replace harness.	1
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LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description INFOID:000000008284803

- 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

INFOID:0000000008284804

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "LIFT RR PULSE" in "Data monitor" mode with CONSULT.
- 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 <u>ADP-96, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000008284805

1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

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

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> GO TO 2.

2.check lifting sensor (rear) circuit

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

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Lifting motor (rear)		Continuity
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

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

(+) Lifting motor (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 m	otor (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 ADP-221, "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	control unit	Lifting me	otor (rear)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	31	B456	31	Existed

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LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace lifting motor (rear).

NO >> Repair or replace harness or connector.

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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

1.check function

- 1. Turn ignition switch ON.
- 2. Select "TILT SEN" in "Data monitor" mode with CONSULT.
- 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-99, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK TILT SENSOR SIGNAL

- 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	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-222, "Removal and Installation".

NO >> GO TO 2.

2.check tilt sensor circuit

- Turn ignition switch OFF.
- 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	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?

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TILT SENSOR

< DTC/CIRCUIT 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.
- 2. Turn ignition switch ON.
- 3. Check voltage between tilt & telescopic sensor harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive 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 po	sitioner 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-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

5. CHECK TILT SENSOR GROUND 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 & 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.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Description

- 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:0000000008284810

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1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TELESCO SEN" in "Data monitor" mode with CONSULT.
- 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-101, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008284811

1. CHECK TELESCOPIC SENSOR SIGNAL

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

	(+) Itomatic drive positioner control unit (-)		Condition	Voltage (V) (Approx.)	
Connector	Terminal			(44)	
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-222, "Removal and Installation".

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

- 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	stomatic drive positioner control unit Tilt & telescopic set		Tilt & telescopic sensor	
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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TELESCOPIC SENSOR

< DTC/CIRCUIT 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.

(+)			Voltage (V)	
Tilt & telescopic sensor		(–)	Voltage (V) (Approx.)	
Connector	Terminal		, , ,	
M48	2	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	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	Terminal	Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "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 po	ositioner 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.

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SENSOR DRIVER SIDE

INFOID:0000000008284812

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DRIVER SIDE: Description

- The mirror sensor (driver side) is installed to the door mirror (driver side).
- The resistance of 2 sensors (horizontal and vertical) is changed when the door mirror (driver side) is 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

D INFOID:0000000008284813

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- Select "MIR/SEN LH U-D", "MIR/SEN LH R-L" in "Data monitor" with CONSULT.
- 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 Hillor (driver side)	Change between 0.6 [V] (close to left edge) 3.4 [V] (close to right edge)

Is the indication normal?

YES >> INSPECTION END

>> Perform diagnosis procedure. Refer to ADP-103, "DRIVER SIDE: Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008284814

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

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

(Door mirror	(+) Door mirror (driver side)		Voltage (V) (Approx.)
Connector	Terminal		(, 44, 211)
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.
- 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

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

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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-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

${f 3.}$ CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND

- 1. 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	Automatic drive positioner control unit		Door mirror (driver side)	
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

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

Automatic drive po	Automatic drive positioner control unit		Door mirror (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M51	6	D3	21	Existed
IVIO	22	D3	22	Existed

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

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M51	6	Ground	Not existed	
I GIVI	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

INFOID:0000000008284815

- 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

INFOID:0000000008284816

1. CHECK FUNCTION

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

< DTC/CIRCUIT 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 militor (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-105</u>, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE: Diagnosis Procedure

INFOID:00000000008284817

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

- 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.

(+)			N/ 1/ 0.0
Door mirror (passenger side)		(–)	Voltage (V) (Approx.)
Connector	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

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

Automatic drive po	Automatic drive positioner control unit		Door mirror (passenger side)	
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 positioner 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 <u>ADP-222, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

$3. {\sf CHECK}$ door mirror (passenger side) sensor ground

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

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

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 GIVI	21		inot existed	

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

Description INFOID:000000008284818

- 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

1. CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-107</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK SLIDING MOTOR POWER SUPPLY

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

(+) Sliding motor		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				, , ,
	35	- Ground	SEAT SLIDE	OFF	0
				FR (forward)	Battery voltage
B461				RR (backward)	0
D40 I	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.
- 2. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and sliding motor harness connector.

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SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Sliding motor		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B452	35	B461	35	Existed	
	42	- 5401	42	Existed	

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

Driver sea	t control unit	- Ground	Continuity
Connector	Terminal		
B452	35	Ground	Not existed
	42		

Is the inspection result normal?

YES >> Replace driver control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING MOTOR

Description INFOID:0000000008284821

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

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT RECLINING" in "Active test" mode with CONSULT.
- 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 ADP-109, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK RECLINING MOTOR POWER SUPPLY

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

	+) ng motor Terminal	(-)	Condition		Voltage (V) (Approx.)	
	36 B454 ———————————————————————————————————				OFF	0
		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.
- Check continuity between driver seat control unit harness connector and reclining motor harness connector.

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RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit	Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	36	B454	36	Existed
D402	44	D404	44	Existed

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

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

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Description INFOID:000000008284824

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

Component Function Check

1. CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-111, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

	(+) Lifting motor (front)		Con	dition	Voltage (V) (Approx.)		
Connector	Terminal				, , ,		
				OFF	0		
	37	Ground	SEAT LIFTER FR	UP	0		
B455				DWN (down)	Battery voltage		
D400			Ground	Giodila	Glound SEAT EIL TERTR	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.

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LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	t control unit	Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	37	B455	37	Existed
D4J2	45	- 5400	45	LXISIEU

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

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

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation".

NO >> Repair or replace harness or connector.

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (REAR)

Description INFOID:0000000008284827

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

Component Function Check

1. CHECK FUNCTION

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

Test item		Des	scription
	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 ADP-113, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

	(+) Lifting motor (rear) Connector Terminal		Condition		Voltage (V) (Approx.)	
					OFF	0
	38	- Ground	SEAT LIFTER RR	UP	Battery voltage	
D.450				DWN (DOWN)	0	
D430	B456			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.
- 2. Disconnect driver seat control unit connector and lifting motor (rear) connector.
- Check continuity between driver seat control unit harness connector and lifting motor (rear) harness connector.

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LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	t control unit	Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	38	B456	38	Existed
D 4 32	39	- D430	39	Existed

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

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	38	Ground	Not existed
D 4 32	39		NOI EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

TILT MOTOR

Description

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

Component Function Check

1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TILT MOTOR" in "Active test" mode with CONSULT.
- 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-115, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK TILT MOTOR POWER SUPPLY

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

	(+) Tilt & telescopic motor		Condition		Voltage (V) (Approx.)
Connector	Connector Terminal				(11 -)
				OFF	0
	M49 4	Ground	TILT MOTOR	UP	0
M4O				DWN (down)	Battery voltage
IVI49				OFF	0
				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.
- 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.

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TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Tilt & telescopic motor		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M52	35	M49	4	Existed	
IVIOZ	42	10149	3	Existed	

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

Automatic drive p	Automatic drive positioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	35	Ground	Not existed
IVIOZ	42		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC MOTOR

Description

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

Component Function Check

1.CHECK FUNCTION

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

Test in	tem	Descri	iption
	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 ADP-117, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK TELESCOPIC MOTOR POWER SUPPLY

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

	(+) Tilt & telescopic motor		(-) Condi		Voltage (V) (Approx.)
Connector	Terminal				
				OFF	0
	1	Ground TELESCOP TOR	TELESCOPIC MO-	FR (forward)	0
M49				RR (backward)	Battery voltage
10149			TOR	OFF	0
	2			FR (forward)	Battery voltage
			I		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.

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TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	36	M49	2	Existed
IVIOZ	44	10149	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	Terminal	Ground	Continuity
M52	36	Ground	Not existed
IVIOZ	44		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR MOTOR

Description

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

1. CHECK DOOR MIRROR MOTOR FUNCTION

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

Refer to ADP-41, "CONSULT Function".

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to ADP-119, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

Turn ignition switch ON.

2. Check voltage between door mirror connector and ground.

(+) Door mirror		(–)	Condition		Voltage (V) (Approx.)
Connector Terminal					
	12			UP	Battery voltage
		Ground	Ground Door mirror remote control switch	Other than above	0
D3 (Driver side)	44			LEFT	Battery voltage
side)	D33 (Passenger 11 side)			Other than above	0
10	10			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

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

Check continuity between automatic drive positioner control unit connector and door mirror connector.

[Door mirror driver side]

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

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

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DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

[Door mirror driver side]

[Door militor driver side]			,	
Automatic drive po	ositioner control unit		Continuity	
Connector	Terminal		Continuity	
	16	Ground		
M51	31		Not existed	
	32			
[Door mirror passenger side]				
Automatic drive po	ositioner control unit		Continuity	
Connector	Terminal		Continuity	
	14	Ground		
M51	15		Not existed	
	30	-		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to ADP-120, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace door mirror. Refer to MIR-122, "DOOR MIRROR ASSEMBLY: Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008284839

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-122, "Exploded View".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror. Refer to MIR-122, "DOOR MIRROR ASSEMBLY: Removal and Installation".

2.CHECK DOOR MIRROR MOTOR-II

- Turn ignition switch OFF.
- Disconnect door mirror connector.
- 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?

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS > >> Replace door mirror. Refer to MIR-122, "DOOR MIRROR ASSEMBLY: Removal and Installation". NO Α В С D Е F G Н

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SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description INFOID:000000008284840

• 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

INFOID:0000000008284841

1. CHECK FUNCTION

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

Test item		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-122, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008284842

1. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(Seat mem	+) nory switch	(-)	Voltage (V) (Approx.)
Connector	Terminal		(11 - 7
D5	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO

>> Check the following.

- 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.
- 2. 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	sitioner control unit	Seat men	nory switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	12	D5	6	Existed
ICIVI	13	D5	7	LAISIEU

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

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

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3. CHECK MEMORY INDICATOR

Refer to ADP-123, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch. Refer to ADP-223, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK SEAT MEMORY INDICATOR

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

Seat men	nory switch	
Terr	ninal	Continuity
(+)	(-)	
5	6	Existed
3	7	LAISIEU

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to ADP-223, "Removal and Installation".

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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condit	ion	Value/Status
SET SW	Set switch	Push	ON
SET SW	Set Switch	Release	OFF
MEMORY SW/4	Memory switch 1	Push	ON
MEMORY SW1	Memory Switch 1	Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
WEWORT 3W2	Memory Switch 2	Release	OFF
SLIDE SW-FR	Sliding switch (front)	Operate	ON
SLIDE SW-I K	Silding Switch (Horit)	Release	OFF
SLIDE SW-RR	Sliding switch (rear)	Operate	ON
SLIDE SW-KK	Silding Switch (rear)	Release	OFF
RECLN SW-FR	Reclining switch (front)	Operate	ON
RECLIN SW-FR	Reclining Switch (nont)	Release	OFF
RECLN SW-RR	Declining quitch (rear)	Operate	ON
RECLIN SW-RR	Reclining switch (rear)	Release	OFF
LIFT FR SW-UP	Lifting awitch front (up)	Operate	ON
LIFT FR SW-UP	Lifting switch front (up)	Release	OFF
LIET ED OW DN	Lifting quitab front (days)	Operate	ON
LIFT FR SW-DN	Lifting switch front (down)	Release	OFF
LIFT RR SW-UP	Lifting quitab roor (up)	Operate	ON
LIFT KK SW-UP	Lifting switch rear (up)	Release	OFF
LIET DD CW DN	Lifting quitab roor (down)	Operate	ON
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
WIR CON SW-OF	WIIITOI SWILCII	Other than above	OFF
MIR CON SW-DN	Mirror switch	Down	ON
WIR CON 3W-DIN	WIIITOI SWILCII	Other than above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
WIR CON SW-RH	WIIITOI SWILCII	Other than above	OFF
MID CON SW 1 L	Mirror switch	Left	ON
MIR CON SW-LH	IVIIITOI SWILCIT	Other than above	OFF
MIR CHNG SW-R	Changaayar awitah	Right	ON
IVIIN CHING SVV-K	Changeover switch	Other than above	OFF
MID CHNC SW I	Changeover switch	Left	ON
MIR CHNG SW-L	Changeover switch	Other than above	OFF

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Conditi	ion	Value/Status
TILT SW-UP	Tilt switch	Up	ON
TILI SW-OF	THE SWILCH	Other than above	OFF
TILT SW-DOWN	Tilt switch	Down	ON
	THE CHILOTT	Other than above	OFF
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than above	OFF
TELESCO SW-RR	Tilt switch	Backward	ON
		Other than above	OFF
DETENT SW	AT selector lever	P position	OFF
		Other than above	ON
STARTER SW	Ignition position	Cranking	ON
		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	e)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger side	9)	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)

 $^{^{\}star 1}$: The value at the position attained when the battery is connected is regarded as 32768.

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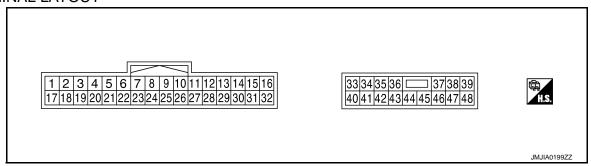
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TERMINAL LAYOUT



PHYSICAL VALUES

Term	ninal No.	100	Description				V. 16 (A.1)
+	1	Wire color	Signal name	Input/ Output	Condition	า	Voltage (V) (Approx)
1	Ground	L/W	UART communication (RX)	Input	Ignition switch ON		2mSec/div 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	Sliding switch	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)	0
			s.ga.		()	Release	Battery voltage

< ECU DIAGNOSIS INFORMATION >

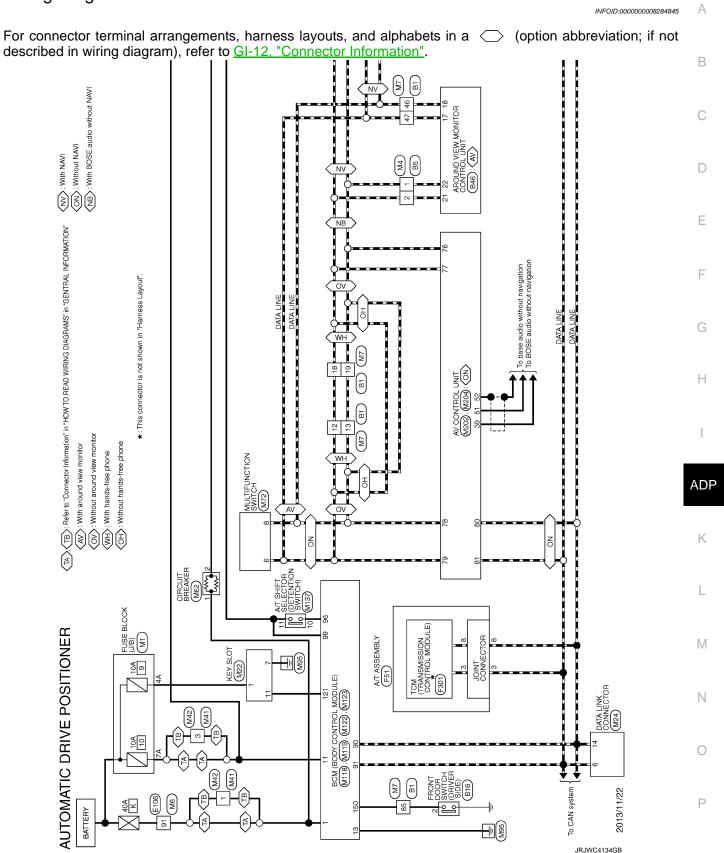
Tern	ninal No.		Description					_
+	-	Wire color	Signal name	Input/	Condition	า	Voltage (V) (Approx)	Α
			Oignai name	Output				
14	Ground	G/B	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0	В
40	0		0	0		Release	Battery voltage	
16	Ground	0	Sensor power supply	Output	_		5	С
17	Ground	Y/R	UART communication (TX)	Output	Ignition switch ON		10mSec/div 2V/div JMJIA0121ZZ	D E
19	_	V	CAN-L	_	_		_	
-						P position	0	F
21	Ground	L/Y	Detention switch	Input	A/T selector lever	Except P position	20mSec/div WWWWWWW SV/div JMJIA0120ZZ	G
24	Ground	R	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div 2V/div JMJIA0119ZZ	ADI
						Stop	0 or 5	11
25	Ground	Y/B	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 2V/div JMJIA0119ZZ	L
						Stop	0 or 5	Ν
26	Ground	Y	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0	
			olgi lai			Release	Battery voltage	0
27	Ground	R/G	Reclining switch for- ward signal	Input	Reclining switch	Operate (forward)	0	
						Release	Battery voltage	Р
28	Ground	W/B	Lifting switch (front) up signal	Input	Seat lifting switch (front)	Operate (up)	0	
			5.g. iai		(IIOIN)	Release	Battery voltage	
29	Ground	P/L	Lifting switch (rear) up signal	Input	Seat lifting switch (rear)	Operate (up)	0	
			Signal		(rour)	Release	Battery voltage	

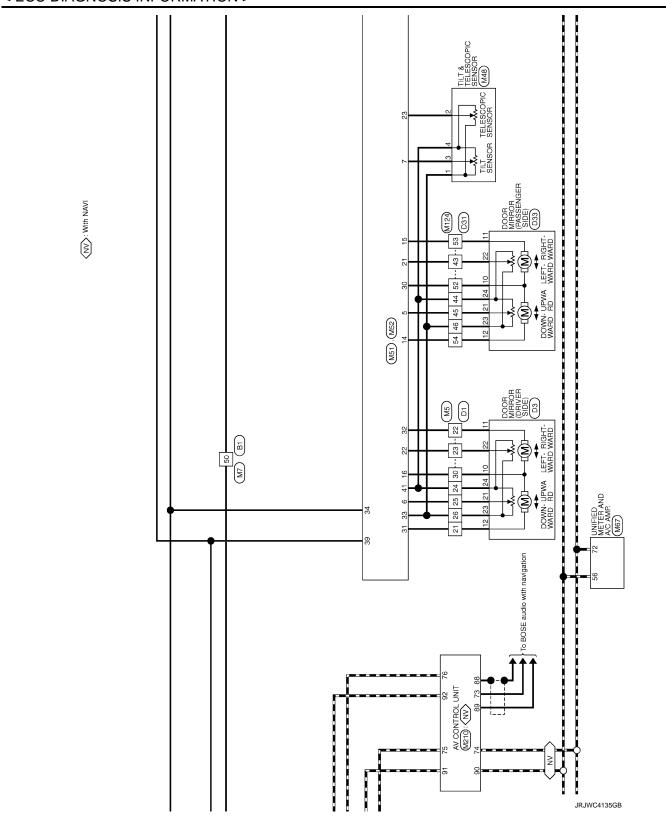
ADP-127 2013 EX Revision: 2013 December

< ECU DIAGNOSIS INFORMATION >

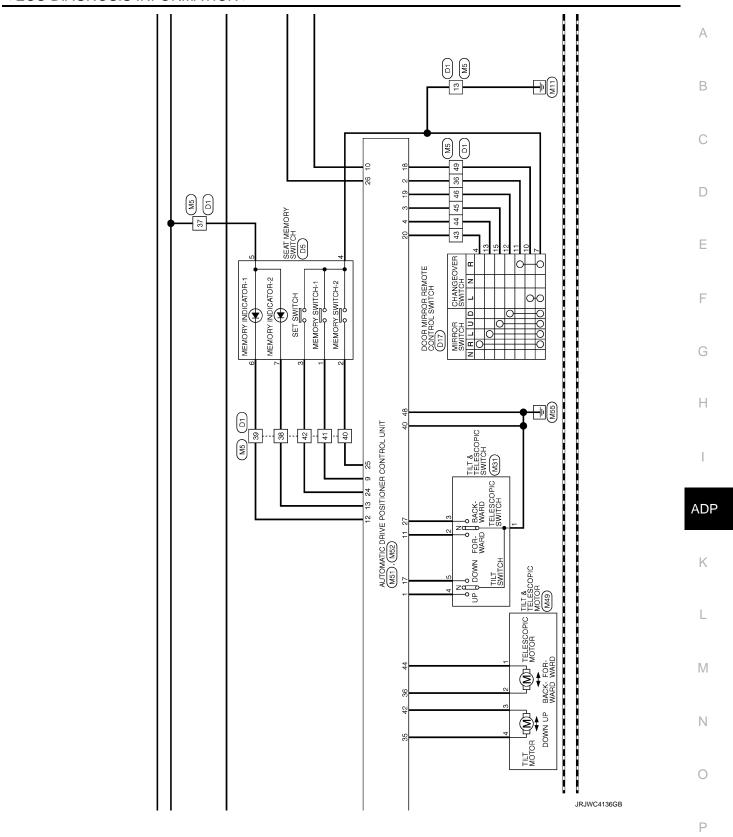
			11 01(11)/(11011)				
Term	ninal No.	Wire	Description		0 !!!		Voltage (V)
+	-	color	Signal name	Input/ Output	Condition	1	(Approx)
31	Ground	GR	Sensor ground		_		0
32	Ground	B/W	Ground (signal)	_	_		0
33	Ground	R	Power source (C/B)	Input	_		Battery voltage
35	Ground	W/R	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage
			output oigna.			Release	0
36	Ground	G/Y	Reclining motor for- ward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
			wara output oignai			Release	0
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 signal			Stop	0
39	Ground	R/B	Lifting motor (rear) down output signal	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 orginal			Stop	0
48	Ground	В	Ground (power)	_	_		0

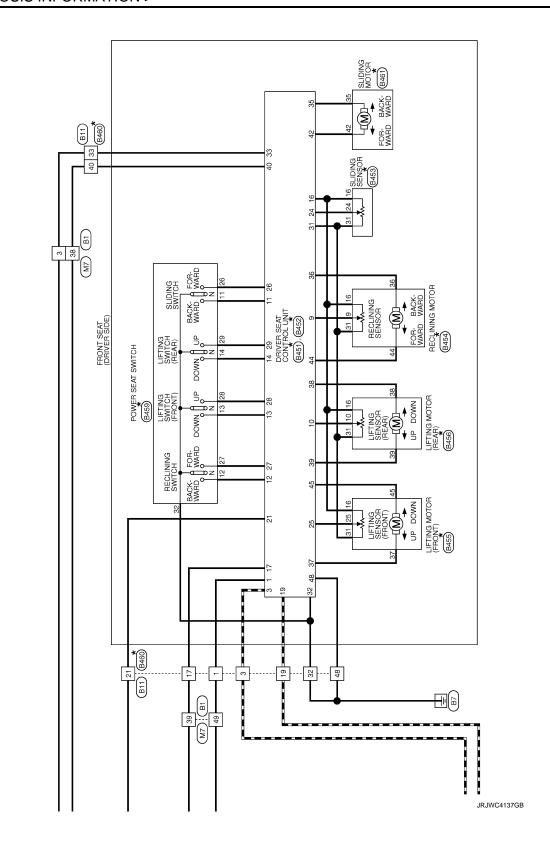
Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -





< ECU DIAGNOSIS INFORMATION >





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

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			2 66 3 18	(DRIVER SIDE)	В
	WIRE TO WIRE	NS16FW-CS	40 17 C	Signal Name (Specification) FRONT DOOR SWITCH (DRIVER SIDE) A03FW Signal Name (Specification)	С
:	Connector Name W		₽ H.S.	No. Wire	D
			13 14 15 16 29 30 31	80	Е
) WIRE	V-NH	4 5 6 7 8 9 10 11 12 23 24 25 25 27 28 29 39 31 45 5	Signal Name [Specification]	F
Γ	ame WIRE TO WIRE	/pe TH32MW-NH	~ ~		G
	Connector Name	Connector Type	H.S.	Terminal Color Of Terminal Color Of No. Noire No. Noire No. Noire No. Noire No. Noire	Н
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					AD
ŀ	-	\neg	64 G G SHELD 65 SHELD 66 W 67 S SHELD 69 SHELD 6	77 75 77 77 77 77 77 77 77 77 77 77 77 7	К
SITIONER				Theation of the state of the st	L
AUTOMATIC DRIVE POSITIONER	WIRE TO WIRE	TH80FW-CS16-TM4		Signal Name (Specification)	N
OMATIC	Connector No. B1		, in	Code or Wire or Code or Wire or Code or Wire or Code or Wire or Code	N
	Connect	Connecto	H.S.	Terminal No. 10 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
					0
				•	JRJWC4222GB

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AUTOMATIC DRIVE P Connector No. B46

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Convector Name FTRAS MOTORS FEAR Convector Name WIRET OWNEE Convector Name WIRET OWNEE Convector Name Conve	WINE TO WINE 398 P 140
Signal Name Specification	THAGFW.CS15
Signat Name Specification Training Convector Name Specification Training T	1 1 1 1 1 1 1 1 1 1
Signat Name Specification Signat Name Signation Signatio	
14 14 14 14 14 14 14 14	Signel Name (Specification) 44 WW 44 WW 45 G 45 G 45 G 45 G 45 G 45
Terminal Characterial No. Wire Specification No. Wire Specif	Signal Name [Specification] 46 V 49 V
Signat Name Specification No. Wire Signat Name Specif	Signal Name (Specification) 46 V V 49 GR 50 B 50
1 1 1 1 1 1 1 1 1 1	S2 R S S S S S S S S S
17 Y Y	SS SB SE ST ST ST ST ST ST ST
19 P	SS SB SE SE SE SE SE SE
1	Cornector Nb. D3
1	Corrector No. D3
10 10 10 10 10 10 10 10	Cornector No. D3
Signal Name Specification Terminal Color of Name Terminal Color of Name Specification Terminal Color of Name Terminal Color of Na	Corrector Name DOOR MIRROR (DRIVER SIDE)
Signal Name (Specification) Terminal Color Of Name Specification) Terminal Color Of Name Specification) Terminal Color Of Name Specification) Terminal Color Of Name Specification Terminal Color Of Name	Corrector Name DOOK MIRKOR (DRIVER SILE)
13 14 23 14 24 24 24 24 24 24 24	Corrector Type Tri2AMV-NH
14 14 15 14 15 15 15 15	1
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12 13 13	12 13 17 16 15 17 18 18 17 18 18 17 18 18
Signal Name [Specification] Corrector Name Sul DilviG MOTOR 18 0 0 0 0 0 0 0 0 0	2 Z Z Z Z R R R R T
Signal Name (Specification) Territinal Codor Of Name Specification) Territinal Codor Of Name Specification) Territinal Codor Of Name Signal Name (Specification) 22 SHELD 24 Name Signal Name (Specification) 25 SHELD 27 Name 27 Name 28 SHELD 28 SHELD 29 LG 27 Name 28 SHELD 28 SHELD 28 SHELD 27 Name 28 SHELD 28 S	Transical Color Col
Signal Name (Specification) Terminal Color Of Wire Signal Name (Specification) Terminal Color Of Wire Signal Name (Specification) Signal Name (S	- Tarminal Color Of
Marie Color Off Signal Name Specification Spec	
Signature Sign	S. C.
LiGR Light	2 0
Color Colo	3 B SIDE CAMERA LH CC
Y Y Y Y Y X	
W/IS - Terminal Color Off Signal Name (Specification) 28 SHELD - 10 G P/L - No. W/IR - 10 - 10 - 11 P 35 W/IR - 10 - 10 - 11 P - 12 42 W/IR - 10 - 10 - 12 - 12 - 12 31 W - 10 - 10 - 12 - 12 - 12 42 W/IR - 10 - 10 - 12 - 12 - 14 - 16 33 G - 10 - 10 - 10 - 10 - 10 - 10 33 G - 10 - 10 - 10 - 10 - 10 - 10 - 10 33 G - 10 <t< th=""><th>6 R SIDE CAMERA LH POWER</th></t<>	6 R SIDE CAMERA LH POWER
P/L No. Write Signal Name (Specimentor) 29 LG 11 P P 35 W/R 31 W 14 LG 42 W/R 31 W 14 LG 33 LG 32 C 18 W	10
W/R : 30 G : 12 O 14 LG 15 W 14 LG 15 W 1	- 11
W/B - 14 LG - 14 LG - 15 LG - 15 LG - 15 LG - 16 LG - 18 LG -	- 12
17 6	- 14 LG
	\(\alpha\)
SB - 19 B	>
- 21	19 B
	B W

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Т	Connector Name DOOK MIRROR (PASSENGER SIDE)	+	PR .
H.S. I FROM WALCH TO THE THOUGHT OF THE THOUGHT.	1.2 1.2 1.3 1.7 1.5 1.7 1.5 1.7 1.5 1.7 1.5 1.7 1.5 1.7 1.5 1.7	+++++	SB SB
No. Wire Signal Name [Specification] 7 R R 8 RD	wire Wire	++++	28 BG
Na	3 8 8 7 6	+++	D
88 88 88 88 88 88 88 88 88 88 88 88 88	O GR G SID	++++	G
B	> m a > ≥ >	11111	R C G C C C C C C C C
W SB SHELD	ctor No. E106 ctor Name WIRE TO WI ctor Type TH80FW-CS	 	W W W W W W W W W W W W W W W W W W W
GR G S Y Y Y Y	w s e s k s s s	++++	- 85 9 9 9 9 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
W W W W W W W W W W W W W W W W W W W	Terminal Color Of Signal Name [Specification] No. Wire No. Wire Signal Name [Specification] 1	 	В В С С С С С С С С С С С С С С С С С С
	Signal Name [Specification of Company of Com		The control of the

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	Connector No. F51	Connector No. M1	12 W
			S.
onnector Name	Connector Name A/T ASSEMBLY	Connector Name FUSE BLOCK (J/B)	T
Connector Tune	PK10EG DGV	Connector Type NS06EW-M2	> >
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金	•		
Ę	<u> </u>	[22 B -
į			23 SHIELD -
	W 1 2 5 5 6 M		24 R
	_	44 HC HO H/ H8	
	3 / 8 / P		+
			Z6 Y
			F
7		30 E	+
_	Signal Name [Specification]	_	- F
No. Wire		No. Wire	
\ \	POWER SUPPLY	1A GR	30 SHELD
o RR	POWER SLIPPLY (MEMORY BACK-LIP)	H	T
į	O VIOLET CONTROL OF THE CONTROL OF T	╀	1
7	CANH		
4 \	K LINE	4A P - [For push button]	
9 2	GROUND	4A R - [For key slot]	Connector No. M5
>	POWER SUPPLY	. V SA V	
ł	A TO GM LOLLY	ł	Connector Name WIRE TO WIRE
+	DACK-UP LAWIP RELAT	4	Т
8 LG	CAN-L	7A K	Connector Type TH40MW-CS15
9 GR	STARTER RELAY		
┞	UNITODO		
1	2500		
		- 1	1 2 3 4 6 6 7 8 9 11 11 2 13 8 15
		Connector No. M4	
Connector No E301			* C * C * C * C * C * C * C * C * C * C
Τ		Connector Name WIRE TO WIRE	38 28 28 28 28 38 38 38 38 38 38 38 38 38 38 38 38 38
Connector Name TCM	TCM (TRANSMISSION CONTROL MODULE)		ľ
		Connector Type TH32FW-NH	
Connector Type SP10FG	MOFG		
		₫.	Torminal Color Of
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	≪	<u> </u>	No. Wire
			ω.
2		16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	ł
	(1) 1 1 E	20 20 20 20 20 20 20 20 20 20 20 20 20 2	┨
	Ŧ		3 BR
	0 0 10		
			+
		Terminal Color Of	0 9
			$^{+}$
耍	Cinnal Mama (Connification)		
No.	orginal realine [obecinication]		W
		$^{+}$	+
	POWER SUPPLY	2 SB -	. 9 6
٠ -	POWER SUPPLY (MEMORY BACK-UP)	· · · · · ·	- 1 10
1	CALLY COLL ET (MEMORY DAGS OF)	+	+
	CAN'H	Α .	
,	LINITA	141	
, ,	IN LINE	+	+
ď	CROLIND		12 B
,	2500	»	1
	POWER SUPPLY	- 2	14 Y
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	BACK-UP LAMP RELAY	nn ===================================	
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	CANEL	4	4
-	STARTER RELAY	- P	_
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	SHIELD -	^	SB .		ſ	No. M7	Name WIRE TO WIRE	+	I HBUMW-CS		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	91	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	32		Color Of Signal Manage (Specification)	Wire Signal Name [Specification]	SB - [With automatic drive positioner]		L	BG			SS	. 91	γ .	. 9		SB -		- PK	SHIELD	·	· ·	,			SHIELD -		Р .	SB .					BR .	Υ .	
	┪	66	100			Connector No.	Connector Name		Connector Type	ąĮ	手	X F S					Terminal C	9 N	3	3	2	9	_	8	12	13	14	15	17	18	19	†	1	77	54	/7	58	7	7	31	32	33	34	35	98	37	38	39	44
						1												1				- [With ICC]	- [Without ICC]		- [Without ICC]	- [With ICC]	- [Without ICC]	- [With ICC]	- [With ICC]	- [Without ICC]	- [Without ICC]	- [with ICC]																	
	g	Μ	_	۵	BR	>	υ <u>;</u>	۸.	ا ر	5	9 (0 00	Α.	œ	SHELD	>	GR	PI	91	>	gg	BR	_	9	GR	W	Ь	ч	-	ď	≥ :	≻ {	9	3	93	>	o	-	۵	Α	GR	SHIELD	Μ	>	BR	Ь	GR	×	_
	43	42	49	20	21	54	22	S S	8 6	5	8 6	25	92	8	49	89	69	20	71	72	73	74	74	75	9/	9/	77	77	78	28	13	€ :	3	50 3	78	22	8	82	98	87	88	06	91	35	93	94	92	96	97
	Connector No. M6	Connector Name WIRE TO WIRE	\neg	Connector Type TH80MW-CS16-TM4			9 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 2 2 2 3 3 3 4 3 4 5 4 5 7	8 f g g g g g g g g g g g g g g g g g g	2 7 2 7 3 7		Terminal Color Of		1 W	2 R	3 B	4 SHIELD -		> 8	9 BR	10 R	H	12 BG -	H	14 R	15 P	16 V -	Ĩ	+	20 BG -	+	+	Z3 P	+	+	+	+	28 G		32 G -	33 B -	34 W	35 R	36 SHIELD -	37 V -	38 BG -	39 BR -	\dashv	42 BG -
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pecification)	Decification	В
WIRE TO WIRE M03FW-LC 1 1 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 2 3 3 2 3 3 2 3	Signal Name (Specification)	С
Connector No. M42 Connector No. M43 H.S. Terminal Cotor Of No. Wire 1 V W 2 Y W Connector No. M48	Terminal Color Of	D
		Е
M31 TILT & TELESCOPIC SWITCH TKGBFGY 3 4 1 5 2 Signal Name (Specification) Signal Name (Specification) WIRE TO WIRE MINAMALIC	Signal Name [Specification]	F
M31 TILT 8 : TKOEFC TKOEFC		G
Corrector No. Corrector Name Corrector Type Terminal Color Of No. Wire 1 2 6 8 3 6 4 V 5 M Corrector No. Corrector No.	Terminal A. S.	Н
NEZ	BD/TALINK CONNECTOR BD/16FW Signal Name Specification	ADP
	Connector Name Conn	K
SITIONER		L
AUTOMATIC DRIVE POSITIONER 45 GR 47 SSB 60 R P 60 R P 60 SHELD 66 SHELD 66 SHELD 66 SHELD 67 V V 68 SHELD 66 SHELD 67 P 68 SHELD 68 SHELD 68 SHELD 68 SHELD 68 SHELD 69 SHELD 67 P 68 SHELD 68 SHELD 68 SHELD 68 SHELD 68 SHELD 68 SHELD 69 SHELD 69 SHELD 68 SHELD 69 SHELD 60 S		M
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98 ·	70 B GROLING GROUND 71 B GROLING FOWER SUPPLY 71 B GROLING	۵	-		COLLEGE ITTOF VV-INT			_		Terminal Color Of Signal Name [Specification]	1 B GROUND	3 V ACC	A R III CONT	SB	97	В	14 Y DISK EJECT SIGNAL 16 G HAZARD ON	- -	١		Connector Name BCM (BODY CONTROL MODULE)	Connector Type M03FB-LC	£		H.S.		2	I	Terminal Color Of Signal Name (Secondination)		Α:	2 W POWER WINDOW POWER SUPPLY(BAT)	
Cornector No. M62	Connector Name CIRCUIT BREAKER Connector Type M02FW-P-LC		L'S'H			Terminal Color Of Signal Name [Specification] No. Wire	- W 1	┨	Connector No. M67	Connector Name UNIFIED METER AND A/C AMP.	Connector Type TH32FW-NH	4	MATA)	HS.	41 42 43 44 45 46 47 53 54 55 56 56	57 58 59 60 61 62 63 66 69 70 71 72		E S	Wire	41 V ACC POWER SUPPLY 42 V FILE LEVEL SENSOR SIGNAL	- œ	97	45 P AMBIENT SENSOR SIGNAL 46 RG STINLOAD SENSOR SIGNAL	G EXHAUS	Н	Y BATTER	В	57 W BRAKE FLUID LEVEL SWITCH SIGNAL	HB	GR	_ ;	61 BR AMBIENT SENSOR GROUND 62 SR STINI DAD SENSOR GROUND	g æ
a {	19 SB MIRROR SW (DOWNWARJ)	0 0 2	SB	G TELESCOF	+	32 L MIRROR MOTOR (LH HORIZONTAL)	Chancerster Nb ME9	e	Connector Type NS16FW-CS			33 34 35 36 🔲 39	40 4142 44 48			la I	No. Wire Solubbly (SENSOR)	: œ	_	36 GR TELESCOPIC MOTOR (FORWARD)	9	>	42 BG TILT MOTOR (DOWNWARD) 44 G TELESCOPIC MOTOR (BACKWARD)	о Ш									
AUTOMATIC DRIVE POSITIONER Connector No. M49	TILT & TELESCOPIC MOTOR NS04FW-CS			4 3 7 1		Signal Name [Specification]	ı			M51	THE MANUE CONTROL INIT	NO CONTROL DAY ET CONTROL CONT	TH32FW-NH				7 2 3 4 5 6 7 9 10 11 12 13 14 15 16 17 17 18 18 19 20 21 22 23 24 25 26 27 20 30 31 32			Signal Name [Specification]	TILT SW (UPWARD)	MIRROR SELECT SW (RH)	MIRROR SW (UPWARD)	MIRROR SENSOR (RH VERTICAL)	MIRROR SENSOR (LH VERTICAL)	TILT SENSOR	ADDRESS1	TX (UART) TELESCOPIC SW (FRONTWARD)	IND1	IND2	MIRROR MOTOR (RH VERTICAL)	MIRROR MOTOR (RH HORIZONTAL)	TILT SW (DOWNWARD)
AUTOMAT Connector No.	Connector Name	偃	S.			Terminal Color Of No. Wire	- c	₩		Connector No.	Complete Nome	COLLECTO RELIE	Connector Type	4		Ž.				Terminal Color Of	T	Н	S >	H	Н	7 BG	+	10 V	Н	Н	+	15 G	17 W

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AUTOMATIC DRIVE POSITIONER	TIONER									
Connector No. M119		81	W	NATS ANT AMP.	140	GR	SHIFT N/P	34	۸ .	
Connector Name BCM (BODY CONTROL MODULE)	ULE)	82	œ	IGN RELAY (F/B) CONT	141	O	SECURITY IND LAMP CONT	32		
100	(88	>-	KEYLESS ENTRY RECEIVER COMM	142	BG	COMBI SW OUTPUT 5	43	٠. ٦	
Connector Type NS16FW-CS		87	H :	COMBI SW INPUT 5	143	а,	COMBI SW OUTPUT 1	4	· ·	
ą.		88	>	COMBI SW INPUT 3	144	₀	COMBI SW OUTPUT 2	45		
唐	[06	Ь	CAN-L	145	7	COMBI SW OUTPUT 3	46		
<u>_</u>		91	-	CAN-H	146	SB	COMBI SW OUTPUT 4	25		
4 2	9 JC	92	re	KEY SLOT ILL CONT	150	ΓG	DRIVER DOOR SW	53		
11 13 14 15 17	48	93	^	ON IND	151	G	REAR WINDOW DEFOGGER RELAY CONT	54		
2 1	2	94	>	PUDDLE LAMP CONT				22	. BG	
		92	BG	ACC RELAY CONT						
		96	GR /	A/T SHIFT SELECTOR POWER SUPPLY	Connector No.		M124			
la I	odion	66	~	SHIFT P	7	-	House Of House	Connector No.	No. M137	
No. Wire Signal realite [Specifics	ationij	100	9	PASSENGER DOOR REQUEST SW	59		WIRE 10 WIRE	30400000	DOTO TO TOTAL SAME AND STATE OF THE CONTRACT O	
	MP POWER SUPPLY	101	SB	DRIVER DOOR REQUEST SW	Connector Type		TH40MW-CS15		Name At Smirt Secesion	
5 L PASSENGER DOOR UNLOC	R UNLOCK OUTPUT	102	BG	BLOWER FAN MOTOR RELAY CONT	4			Connector	Connector Type TH12FW-NH	
7 Y STEP LAMP CONT	ш	103	Pl	KEYLESS ENTRY RECEIVER POWER SUPPLY	B	_		4		
8 V ALL DOOR, FUEL LID LOCI	LID LOCK OUTPUT	107	PC	COMBI SW INPUT 1	Ę			ほ		
DRIVER DOOR, FUEL	LID UNLOCK OUTPUT	108	œ	COMBI SW INPUT 4	2		2 2	ŧ	<u>[</u>	
	DUTPUT	109	Υ	COMBI SW INPUT 2			20 20 20 20 20 20 20 20 20 20 20 20 20 2	Ş	[
11 R BAT (FUSE)		110	9	HAZARD SW			SS 88 88 88 88 88 88 88 88 88 88 88 88 8		1 2 3 4 5	
Н									2 0 0 10 11	
14 W PUSH-BUTTON IGNITION SW ILL GND	SW ILL GND		١							
15 Y ACC IND		Connector No.	- 1	M123	Terminal	Ferminal Color Of	Signal Name [Specification]			
×	(ONT)	Connector Name		BCM (BODY CONTROL MODILLE)	ġ	Wire	I company of a com	Terminal Color Of	Solor Of Signal Name (Specification)	
BG TURN SIGNAL	(ONT)			ou (con course wood)	7	>	1	ě	6	
19 V INT ROOM LAMP CONT	ONT	Connector Type		TH40FG-NH	φ	PI		-		
		Q			o !	>		2	\ \ \	
- 1		至			12	-		m		
Connector No. M122) I			5	>		4	,	
Connector Name BCM (BODY CONTROL MODULE)	(A)	į			14	8		2		
					15	Ņ		_		
Connector Type TH40FB-NH			<u> </u>	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	16	H		®	SB .	
¢					17	В		თ		
					18	œ	-	10	GR -	
		Terminal C	Color Of	Cincal Namo [Consideration]	19	В		11		
		ġ	Wire	orginal realine [obscillication]	20	Μ	- [Without BOSE audio]			
31 31 88 67 50 73 73	E E	113	а	OPLICAL SENSOR	20	٨	- [With BOSE audio]			
135 908 107 118 102	86 86 86	116	SB	STOP LAMP SW 1	21	O	- [With BOSE audio]			
		118	۵	STOP LAMP SW 2	21	_	- [Without BOSE audio]			
		119	ec.	DR DOOR LINEOCK SENSOR	22	S.	,			
Terminal Color Of		121	ä	KEY SLOT SW	23	gR				
No. Wire Signal Name [Specification]	ation]	123	3	IGN E/B	24	ď				
+	TAN	124	: 0	WS GOOD GOVERNOR	1 40	> >				
CP DASSENCEN	ANT.	100	2 8	DOWED WINDOW SW. COMM	3 8					
GR PASSENGER	- VIII+	751	Ť	POWER WINDOW SW COMIN	9 3	۲ ا				
> !		133	+	PUSH-BULLON IGNITION SWILL POWER	53	SHELD SHELD				
S S	±	134	35	LOCK IND	30	Α.				
>		137	S :	RECEIVER/SENSOR GND	<u></u>	g,				
79 BR ROOM ANT1+		138	>	RECEIVER/SENSOR POWER SUPPLY	35	O				
GR		139	_	TIRE PRESSURE RECEIVER COMM	33	BR				

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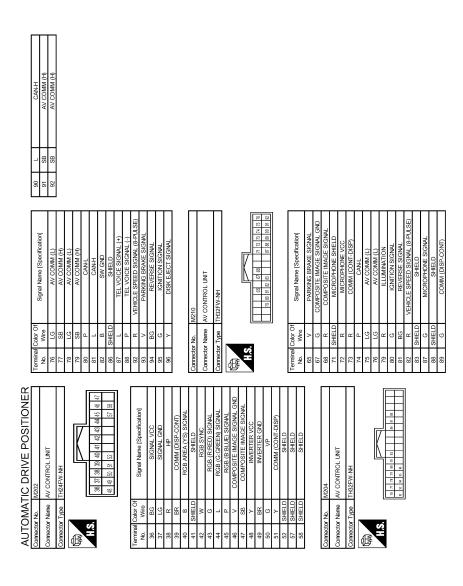
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Fail Safe

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

< ECU DIAGNOSIS INFORMATION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	ADP-44
Only manual functions operate normally.	Tilt sensor	B2118	ADP-49
Only manual functions operate normally.	Telescopic sensor	B2119	<u>ADP-52</u>
	Detention switch	B2126	<u>ADP-55</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-57</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-45
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-47

DTC Index

CONSULT	Tim	ing ^{*1}					
display	Current mal- function	Previous mal- function	Item	Reference page			
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-44			
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-45			
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-47			
TILT SENSOR [B2118]	0	1-39	Tilt sensor input	ADP-49			
TELESCO SENSOR [B2119]	0	1-39	Telescopic sensor input	ADP-52			
DETENT SW [B2126]	0	1-39	Detention switch condition	ADP-55			
UART COMM [B2128]	0	1-39	UART communication	ADP-57			

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^{• 0:} Current malfunction is present

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

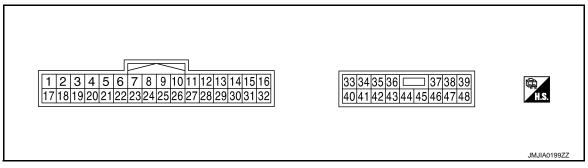
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

Teri	minal No.		Description				
+	-	Wire color	Signal name	Input/ Out- put	Conditi	on	Voltage (V) (Approx.)
1	Ground	Y			gnal Input Tilt switch Ope (up) Oth		0
ı	Giouna	T	Tilt switch up signal	input	Till Switch	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 switch up signal	Input	Mirror switch	Operated (up)	0
3	Ground	G	will of switch up signal	iliput	WIIITOI SWILCIT	Other than above	5
4	Ground	V	Mirror switch left signal	lanut	Mirror switch	Operated (left)	0
4	Ground	V	will of switch left signal	Input	WIIITOI SWILCTI	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	BG	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 2V/div JMJIA0118ZZ

< ECU DIAGNOSIS INFORMATION >

Terr	minal No.		Description				
+	-	Wire color	Signal name	Input/ Out- put	Condition	on	Voltage (V) (Approx.)
11	Ground	GR	Telescopic switch for-	Innut	Telescopic	Operate (forward)	0
11	Ground	GK	ward signal	Input	switch	Other than above	5
				Out-	Memory indictor	Illuminate	0
12	Ground	BG	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
14	Ground	VV	up output signal	put	Door Hillion Kin	Other than above	0
15	Ground	G	Door mirror motor (RH)	Out-	Door mirror RH	Operate (left)	Battery voltage
13	Ground	J	left output signal	put	Door Hillion Kin	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
16	Ground	ř	Door mirror motor (LH)	put	Door militor (LH)	Operate (right)	Battery voltage
			right output signal			Other than above	0
17	Cround	W	Tilt quitch down aignal	loout	Tilt switch	Operate (down)	0
17	Ground	VV	Tilt switch down signal	Input	THE SWILCTI	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
19	Ground	SB	nal	прис	WIIITOI SWIICII	Other than above	5
20	Ground	BR	Mirror switch right signal	Innut	Mirror switch	Operate (right)	0
20	Giodila	DΚ	willor switch right signal	Input	WIIITOL SWILCH	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 left 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 left 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)

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Terr	ninal No.		Description				
+	-	Wire color	Signal name	Input/ Out- put	Condition	on	Voltage (V) (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 above	5
26	Ground	Y	UART communication (RX)	Input	Ignition switch ON	I	10mSec/div
27	Ground	G	Telescopic switch back-	Input	Telescopic	Operate (back- ward)	0
			ward signal		switch	Other than above	5
			Door mirror motor (RH)			Operate (down)	Battery voltage
30	Ground	R	down output signal	Out-	Door mirror (RH)	Other than above	0
			Door mirror motor (RH)	put	,	Operate (right)	Battery voltage
			right output signal			Other than above	0
31	Ground	LG	Door mirror motor (LH)	Out-	Door mirror (LH)	Operate (up)	Battery voltage
			up output signal	put		Other than above	0
32	Ground	L	Door mirror motor (LH) left output signal	Out-	Door mirror (LH)	Operate (left)	Battery voltage
	0 1			put		Other than above	0
33	Ground	R	Sensor power supply	Input	_		5
34	Ground	R	Power source (Fuse)	Input	_	Operate	Battery voltage Battery voltage
35	Ground	L	Tilt motor up output sig- nal	Out- put	Steering tilt	Other than	0
					_	Operate	Battery voltage
	Ground	GR	Telescopic motor for- ward output signal	Out- put	Steering tele- scopic	(forward) Other than above	0
36	Orouna						
36		SB	Power source (C/B)			asovo	Batterv voltage
	Ground	SB B	Power source (C/B) Ground	_		abovo	Battery voltage

< ECU DIAGNOSIS INFORMATION >

Terr	minal No.		Description				
+	-	Wire color	Signal name	Input/ Out- put	Condit	ion	Voltage (V) (Approx.)
42	Ground	BG	Tilt motor down output	Out-	Steering tilt	Operate (down)	Battery voltage
42	Ground	ВС	signal	put	Steering thit	Other than above	0
44	Ground	G	Telescopic motor back- ward output signal	Out-	Steering tele-	Operate (back- ward)	Battery voltage
			waru output Signal	put	Scopic	Other than above	0
48	Ground	В	Ground	_	_	•	0

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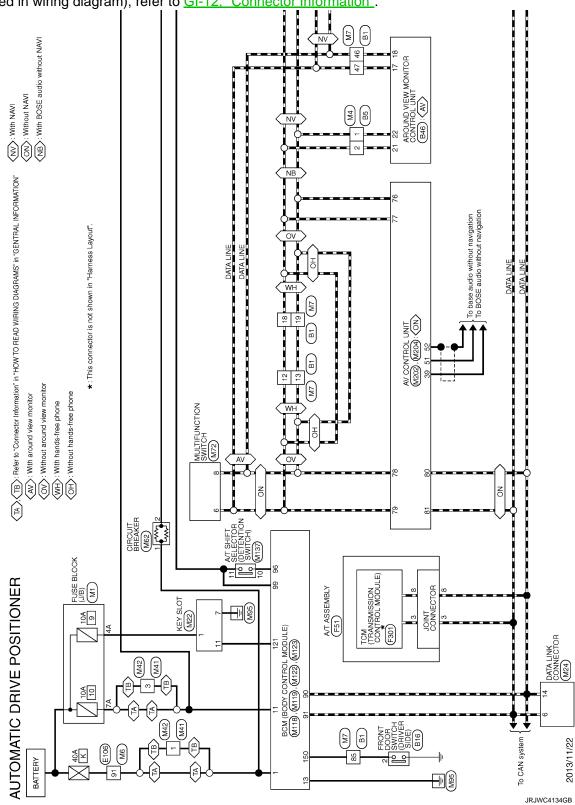
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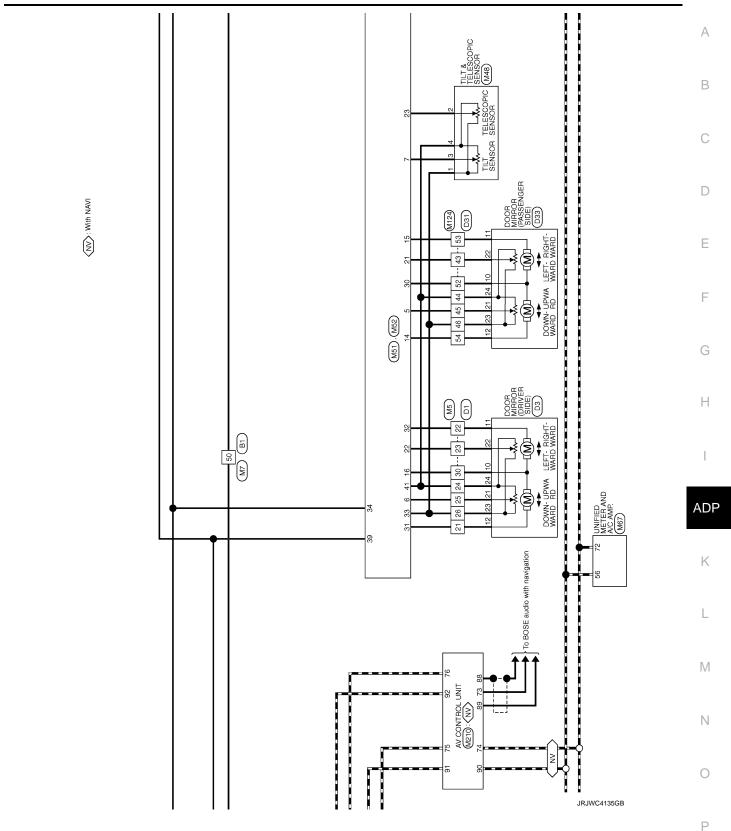
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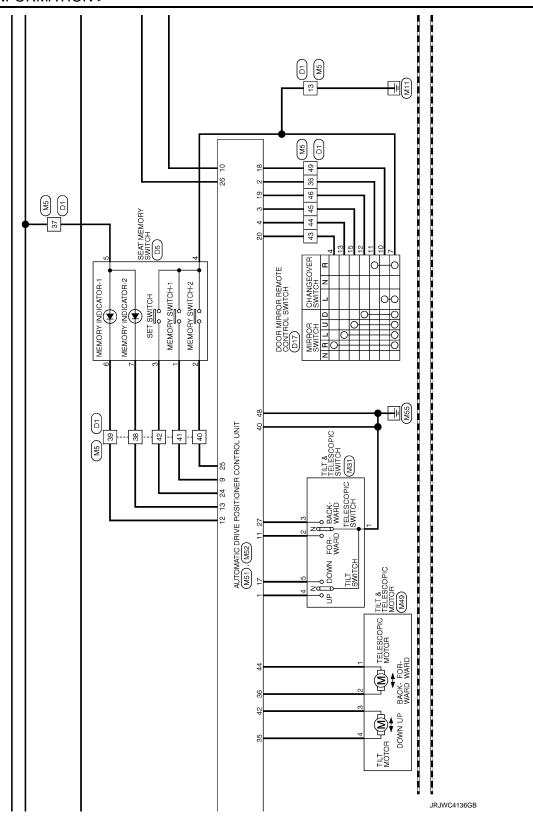
Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

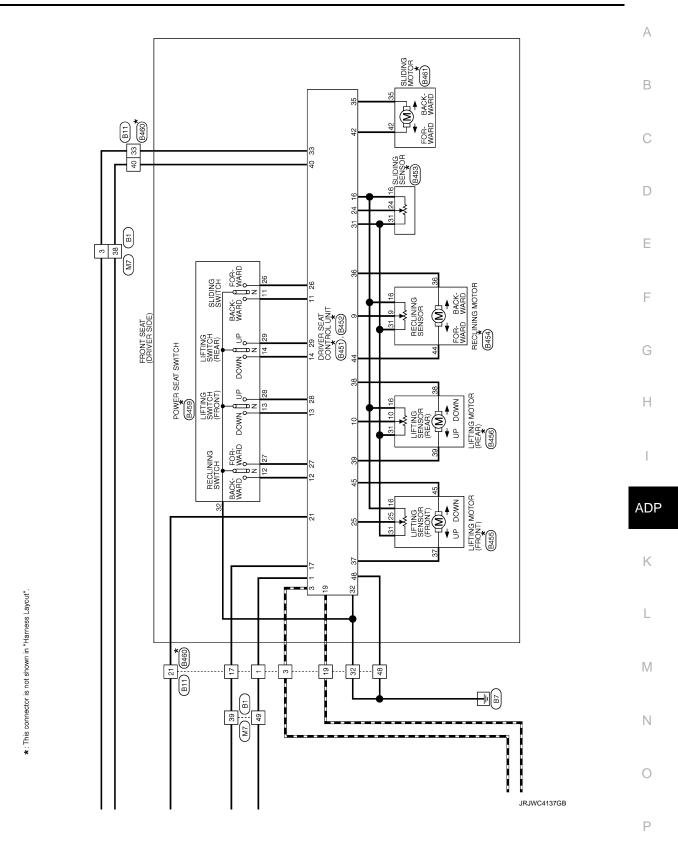
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For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".









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SHELD Corrector Name WIRE TO WIRE Corrector Name Corrector Name	Connector No. B1	Ш	a.			Connector No.	B5	Connector No.	B11	
Convector Type Technology	ro wire		<u>ا</u>		Ö	nector Name		Connector Name	WIRE TO WIRE	
Fig. 10 Fig.	W-CS16-TM4	П	~		Š	mector Type	-	Connector Type	NS16FW-CS	
Fig. 10 10 10 10 10 10 10 10		\Box	G HIELD					Œ		
1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	99	≥ >			H.S.	4	H.S.		
20 Wiles Color Of Color		П	SB		ļ 	l	8 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		1 2 2 2	
77 SW 78 SW 79 SW 70 S	* 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	П	HIELD				27 22 23 24 25 25 27 28 29 39 31		60, 67,33, 27, 48, 32, 66	
Terminal Calon Of Signal Name [Specification] Terminal Calon Of Signal Name [Specification] Terminal Calon Of Signal Name [Specification] No. Wire No. Wire	7 0 4 7	+	≥ 6		_					
1		+	<u>"</u>		<u> </u>		7	F		
1	Signal Name [Specification]	75	٦ M		ō -	minal Color (No. Wire	Signal Name [Specification]	
R R R R R R R R R R	-	H	BR	-	L	1 LG	-	1 0	-	
GR Y Y 17 Y BC W 6 W 13 P LG W 2 W 21 V LG W C 32 B B X W W 40 BR 40 BR X W W C 60 C		2.2	ч		L	H		3 T		
CR CR CR CR CR CR CR CR	-	78	Ь	-		H		H	-	
S		Н	GR			H		L		
V V V V V V V V V V	-	Н	BG			Н		H		
Controller Con	-	85	>		Ш	H		H		
Y 9 B 40 BR B 10 58 - 40 B G 11 68 - 60 6 6 G - - - - 60 6 -	_	98	LG		_	7 LG			-	
R	-	87	Υ				•		•	
11 GR		88	۳			\dashv		\dashv		
BG CR CG CG CG CG CG CG C	•	88	В			\dashv	-	\dashv		
C C C C C C C C C C		06	BG		_	\dashv		\dashv		
BR SB SB SB SB SB SB SB	-	91	Э			H				
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SB CR Corrector No. V V C C C C W C C C C W C C C C W C C C C W C C C C W C C C C W C C C C W C C C C W C C C W C C C W C C C W C C C W C C C W C C C W C C C W C C C W C C C W W C C W W C C W W C C W W C C W W C C W W W C W W W C W W W W W W W W W	-	93	9			Н				
G Connector No. Connector Name Connect	-	94	SB	•		Н	•			
Y C C C C C C C C C		98	9					Connector No.	B16	
W CR Control Nation Control Nati	=	96	Υ	-		Н	-	Connector Name	CEDINI DOOR SIMITCH (DBINGE SIDE)	
SR Connector Type		Н	//			П			TROIN DOON SWITCH (DINIVER SIDE)	
8 B B C	-		GR				- ·	Connector Type	A03FW	
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No. Wire					j			Terminal Color O		
H								No. Wire	Signal Name [Specification]	
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< ECU DIAGNOSIS INFORMATION >

Connector No. B454 Connector Name RECLINING MOTOR Connector Type NS0FW.CS HS. 38 44 16 319	Terminal Color Of Signal Name (Specification) Nune Nune Signal Name (Specification) 16 0 0 0 0 0 0 0 0 0	
Corrector No. B452 Corrector Name BRIVER SEAT CONTROL UNIT Corrector Type NS16PW.CS H.S. 33 36 14 15 18 3	Terminal Coder Of Signal Name (Specification)	
Corrector No. B451 Corrector Name DRIVER SEAT CONTROL UNIT Corrector Type TH32FW	Terminal Color O Signal Name (Specification) No. Wire Wi	A
AUTOMATIC DRIVE POSITIONER Corrector No B46 Corrector Name Arouse vew MONITOR CONTROL UNIT Corrector Type TH40PW.NH CATER IN	Signal Name (Speerination) GROUND GROUND GROUND GROUND BATTERY GATTOR SIGNAL VEHICLE SPEED SIGNAL (S-PULSE) REVERSE SIGNAL AV COMM (1) AV COMM (2) SIDE CAMERA RH GND SIDE CAMERA	ı
AUTOMAT Connector No. Connector Nype Connector Type H.S.	No. With the last control Color of	
		111/0 4000 O.D.

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Connector No. B456	Connector No. B	B460	Connec	Connector No.	D1	37	ď	
Connector Name LIFTING MOTOR (REAR)	Connector Name M	WIRE TO WIRE	Connec	Connector Name	WIRE TO WIRE	88	۵ (
	_			Т		ဇ္ဃ	0	
Connector Type NS06FBR-CS	Connector Type N	NS16MW-CS	Connec	Connector Type	TH40FW-CS15	40	æ	
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		19 3 1		1		? ?	5	PARTITION BURGINGS OF THE POSITION FOR
18 31 10		66 30 48 21 33 67 60		_	_	‡ :	5	- [without autoritatic drive positioner]
-11		00 17 OF 30				44	>	- [With automatic drive positioner]
						45	O	 [Without automatic drive positioner]
						42	>	 [With automatic drive positioner]
Terminal Color Of Sinnal Name [Specification]	Z Z	Signal Name [Specification]	Terminal	O_	Signal Name [Specification]	46	g	 [With automatic drive positioner]
	No. Wire	homomodol ome masso	ġ	Wire	License and License and Control of the Control of t	46	>	 [Without automatic drive positioner]
10 P/B -	1 B/W		-	œ		49	GR	-
\dashv	3		2	В		20	В	
Н	17 Y	-	3	^	-	52	В	
Н	19 P		4	W		53	SB	
39 R/B	21 \		S	_		54	0	
ł	32 B		9	0	,	22	>	
	╁		_	g.				
Connector No B459	40 BB		α	M				
2010	╁		σ	: 0		Compa	Connector No	133
Connector Name POWER SEAT SWITCH	╀		ç	9				
Connector Type NS10FW-CS	╁		2 =	áa		Conne	Connector Name	DOOR MIRROR (DRIVER SIDE)
	ľ		\$			2	Contractor Time	IN WARRENT
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Signal Name [Specification]	qĮ.		₹ 5	≥ <		Termina	20 miles	
44 VIII.0	在方	<u>[</u>	2 8	ء د	'	2	Mira Original	Signal Name [Specification]
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+]	3 8	,		,	، ،	CIDE CAMPER ELIMINACE CIDEN
+			97 5	<u>_</u> (-	۱ ۵	Υ ;	SIDE CAMERA LH POWER SUPPLY
+			7	9			\$	
+	<u>8</u>	Signal Name [Specification]	88	SHELD	•	9	9	
29 P/L -	┪		59	Pl		Ξ	۵	
	35 W/R	-	30	G	-	12	0	-
	42 W/B	-	31	W	-	14	ΓG	-
			32	9		17	9	SIDE CAMERA LH IMAGE GND
			33	7	-	18	W	SIDE CAMERA LH GND
			34	SB		19	В	
			32	æ	-	21	GR	
			36	FIG		22	BR	

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GR	>	æ	BG	SB	BG	-	~	۵	. >	, a	95	> 1	99	-	>	5	۵	>	^	Μ	9	BG	^	۵	œ	9	SHIELD	>	BR	BG	Μ	9	BR	Α	-	д.	-	BG	BR	>	PT	9	SB	Μ	В	9	œ	SHIELD	\	97
5	89	6	10	11	12	13	14	15	16	1	- 5	20 1	20	57	22	23	24	25	26	27	28	31	32	33	34	35	36	37	38	39	41	45	43	42	49	20	51	24	22	29	9	61	62	63	64	92	99	29	89	69
D33		DOOR MIRROR (PASSENGER SIDE)	TH24MW-NH					12 11 10 7 6 5 4 3		24 23 22 21 19 18 17 16			Signal Name [Specification]		SIDE CAMERA RH COMM	SIDE CAMERA RH IMAGE SIGNAL	SIDE CAMERA RH POWER SUPPLY	-	1					SIDE CAMERA RH IMAGE GND	SIDE CAMERA RH GND		1			•			E106	Connector Name WIRE TO WIRE		IH80FW-CS16-IM4		1 X X 1 X X X X X X X X X X X X X X X X				2 2 3 2 3 2 4 2 4 3 2 4 3 3 3 3 4 3 3 4 3 4			Company of Company Company	orginal refine [opecification]	1			
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Connector No.		Connect	Connector Type		1	+	S H						erminal	9	က	4	2	9	7	10	11	12	16	1	18	19	21	22	23	24			Connector No.	Connects	,	Connector Type	ą	季	Į.	Ĭ					Terminal	ġ	-	2	3	4
Connector No. D31	L Control Control	Connector Name WIRE TO WIRE	Connector Type TH40FW-CS15	1		.	5. 14 12 2 8 8 7	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					erminal Color Of Signal Name [Specification]	NO. WITE	+	1	· ^ 6	12 P -	13 LG -	14 B -		H	H	H	H	20 B - IWith BOSE audiol	ac	BR	21 G - [With BOSE audio]	22 V -	+	4	25 SB -	┪	カ	+	+	32 BR	+	Ĭ	35 G -	43 Y -	-	45 P -	46 W	52 G -	53 GR -		H	
	L	<u>ප</u> 1	රි] [_	42	<i>T</i>	_	1				ŀ	9									_		_		<u>L</u>	<u> </u>							1		1											_			
23 Y				D5		Connector Name SEAT MEMORY SWITCH	A08FW				E] 	35 67214				Signal Name [Specification]	No. Wire	1	•		'		-				D17	DOOD MAD DE CONTROL SWITCH		Connector Type TK16FBR				4	8 9 10 11 12 13 15	1			Signal Name [Specification]	5				-				-	-

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| | 151 CONFIGURATION WILL | AT ASSEMBLY Connector Name FUSE BLOCK (JIB) 13 SF | Connected with PUCK (JB) 13 Connected Time Moreoffel 14 Connected Time Moreoffel 14 | Corrector Name FUSE BLOCK (J/B) 13 Corrector Type NS05FW-M/2 15 | Corrector Type NSO6FW-M2 15 | Corrector Name EUSE BLOCK (JIB) 13 Corrector Type NS/06FW-M2 15 Corrector Type AS/06FW-M2 16 Corrector | Corrector Name FUSE BLOCK (JIB) 13 Corrector Type NS06FW-M2 14 Corrector Type NS06FW-M2 14 14 15 15 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15 | Corrector Type NSOGFW-M2 Corrector Type NSOGFW-M2 14 Corrector Type NSOGFW-M2 14 15 14 15 16 17 18 18 18 18 18 18 18 18 18 | Corrector Name FLUSE BLOCK (JIB) 13 Corrector Name FLUSE BLOCK (JIB) 14 Corrector Type NSOFTW-M2 14 3 2 1 15 14 3 2 1 15 15 14 3 2 1 15 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18 | Corrector Name PLOCK (JIB) 13 Corrector Type MS/06FW-M2 14 3 2 7 7 8 7 8 7 8 7 8 8 7 | Corrector Name FUSE BLOCK (JIB) 13 14 15 15 15 15 15 15 15 | Corrector Name FUSE BLOCK (JIB) 13 14 15 15 15 15 15 15 15 | Cornector Name LUSE BLOCK (JIB) 13 14 15 15 15 15 15 15 15 | Corrector Name L/SE BLOCK (JIB) 13 14 15 15 15 15 15 15 15 | Corrector Name Clock (JB) 13 SHELD 14 V 15 SHELD 15 SH | Corrector Name FUSE BLOCK (JIB) 13 14 15 15 15 15 15 15 15 | Corrector Name FUSE BLOCK (JB) 14 V 15 V 15 | Corrector Name Civil E BLOCK (JB) 13 SHELD 14 V 15 V | Corrector Name Finest BLOCK (JB) 13 SHELD | Corrector Name FUSE BLOCK (J/B) 14 V 15 V 1 | Corrector Name FLSE BLOCK (JB) 13 SHELD 14 V 15 SHELD 15 SHELD | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FLUSE BLOCK (JB) 13 SHELD 14 V 15 SHELD 15 SHELD | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 V 15 V | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FUSE BLOCK (JB) 13 SHELD 15 SHEL | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 V | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 15 15 15 15 15 15 | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 V | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 SHELD 15 SHELD | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 | Corrector Name FUSE BLOCK (JB) 13 SHELD 14 V 15 SHELD V V SHELD V SHELD V SHELD V SHELD V SHELD V V SHELD V | Corrector Name Corr |

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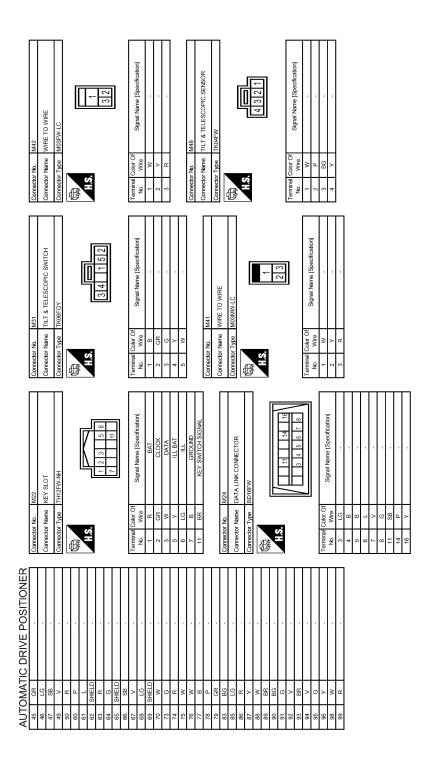
< ECU DIAGNOSIS INFORMATION >

Tive positioner]	В
WIRE TO WIRE THEOMAN-CS16-TMA Signal Name [Specification] - [With automatic drive positioner] - [With	С
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WIRE TO WIRE THEOMAW-CS16-TIMA Signal Name [Specification]	ADP
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AUTOMATIC DRIVE POSITIONER 20	M
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< ECU DIAGNOSIS INFORMATION >

66 BG ECV SIGNAL 69 L ACLAN SIGNAL 70 R FACH DANCTOR POWTER SUPPLY	B P P Sctor No. M72			Terminal Color Of Signal Name (Specification) Nume Nume	H	9 B SW GND 14 Y DISK EJECT SIGNAL 16 G HAZARD ON	Competer No. M118	пе	Connector Type M03FB-LC	S. S			Terminal Color Of Signal Name [Specification] No.	1 W BAT (F/L) 2 W POWER WINDOW POWER SUPPLYBAT)	: >-		
Corrector No. M62 Corrector Name CIRCUIT BREAKER	Corrector Type MOSFW-P-LC	Terminal Color Of Signal Name (Specification)	2 S6	Connector Name UNIFIED METER AND AC AMP. Connector Type TH32FW-NH	42 43 44 45 46 47		No. Wire Signal Name [Specification] No. Wire ACC POWER SUPPLY	Y FUEI	44 LG IN-VEHICLE SENSOR SIGNAL 45 P AMBIENT SENSOR SIGNAL	EXHAUS) > a	L BRAKE FLUID	58 BR FUEL LEVEL SENSOR GROUND 59 GR INTAKE SENSOR GROUND	60 L IN-VEHICLE SENSOR GROUND 61 BR AMBIENT SENSOR GROUND	88	83 R	
18 P MIRROR SELECT SW (LH) 19 SB MIRROR SW (RIGHTWARD) 20 BR MIRROR SW (RIGHTWARD)	G MIRR G MIRR P P Y	27 G TELESCOPIC SW (BACKWARD) 39 R MRRADS NATOR (LH HORIZOMIAL) 31 LG MIRROR MOTOR (LH HORIZOMIAL) 32 L MIRROR MOTOR (LH HORIZOMIAL)	Connector No. M62 Connector Name AutroMatto Delar POSITIONER CONTROL UNIT Connector Type NS16FW-CS	HS. [34 34 34 34 34 34 34 34 34 34 34 34 34 3	40 4142 44 48	nal Color Of Signal I Wire Power	34 R BAT (FUSE) 35 L TILT MOTOR (UPWARD) 36 GR TELESCOPIC MOTOR (FORWARD)	SB 8B	Н	44 G IELESCUPIC MOTOR (BACKWARU) 48 B GND(POWER)							
AUTOMATIC DRIVE POSITIONER Corrector No. M49 Corrector Name TILT & TELESCOPIC MOTOR	Corrector Type INSO4FW.CS	Terminal Color Of Signal Name [Specification]	2 - GR 3 BG	Corrector No. M51 Corrector Name AutroMatro DRIVE POSITIONER CONTROL UNIT	Cornector Type TH32FW-NNH	1 1 2 3 4 5 6 7 7 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Terminal Color Of		9 9 3	4 V MIRROR SENSOR (RH VERTICAL) 6 GR MIRROR SENSOR (IH VERTICAL) 7 GR MIRROR SENSOR (IH VERTICAL)	BG TILT SEN	V TELESCOI	Н	14 W MIRROR MOTOR (RH VERTICAL) 15 G MIRROR MOTOR (RH HORIZONTAL)	>	17 W TILT SW (DOWNWARD)	

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AUTOMA:	AUTOMATIC DRIVE POSITIONER Connector No. M119 Connector Name ROM (RODY CONTROL MODILE)	81	≥ ≃	NATS ANT AMP. IGN RELAY (F/B) CONT	140	S O	SHIFT NP SECURITY IND LAMP CONT	34 V 35 G	
		83	≻ #	KEYLESS ENTRY RECEIVER COMM COMBI SW INPUT 5	142	BG P	COMBI SW OUTPUT 5 COMBI SW OUTPUT 1	43 L 44 Y	
1		88	>	COMBI SW INPUT 3	144	g	COMBI SW OUTPUT 2	45 R	
		06	۵.	CAN-L	145	_ 8	COMBI SW OUTPUT 3		
	4 5 7 8 9 10	5 8		KEY SLOT ILL CONT	9 5	9 5	DRIVER DOOR SW	52 K	
	47	83	}	GNINO	151	9	REAR WINDOW DEFOGGER RELAY CONT	+	
	10 11 0	96	>-	PUDDLE LAMP CONT				H	
		96	BG	ACC RELAY CONT		- 1			
ŀ		98	GR	A/T SHIFT SELECTOR POWER SUPPLY	Connector No.	-	M124	-	
Terminal Color Of	Signal Name [Specification]	99	<u>د</u> ر	SHIFT P	Connecto	Connector Name	WIRE TO WIRE	Connector No. M137	
+	INTERIOR ROOM LAMP POWER SUPPLY	10	88	DRIVER DOOR REQUEST SW	Connector Type	r Type	TH40MW-CS15	Connector Name A/T SHIFT SELECTOR	
╁		102	g	BLOWER FAN MOTOR RELAY CONT	_	ļ,		Connector Type TH12FW-NH	
Н	STEP LAMP CONT	103	97	KEYLESS ENTRY RECEIVER POWER SUPPLY					
Н	ALL DOOR, FUEL LID LOCK OUTPUT	107	97	COMBI SW INPUT 1					
Н	DRIVER DOOR, FUEL LID UNLOCK OUTPUT	108	œ	COMBI SW INPUT 4	Ź		7 1 9 12 13 14 15		
BR	REAR DOOR UNLOCK OUTPUT	109	Y	COMBI SW INPUT 2			80 80 80 80 80 80 80 80 80 80 80 80 80 8		
Н	BAT (FUSE)	110	9	HAZARD SW			8	1 2 3 4 5	
Н	GROUND							0 0 0 7	
Н	PUSH-BUTTON IGNITION SW ILL GND							ᆒ	
Н	ACC IND	Connector No.	or No.	M123	Terminal	Ferminal Color Of	[anithroficon 2] cand A louris		
\dashv	TURN SIGNAL RH (FRONT)	Connector Name	r Name	RCM (BODY CONTRO! MORI!! E)	ġ	Wire	orginal refine [openingation]	Ja	
+	TURN SIGNAL LH (FRONT)			(11000000000000000000000000000000000000	7	> !		_	
۲	INI KOOM LAMP CONI	Connector Type	r lype	I HA0FG-NH	20	97		M :	
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ш	Connector Name BCM (BODY CONTROL MODULE)		l	12-12-12	15	W		7 R	
Connector Type T	TH40FB-NH			SS	16	BR		8 SB	
					17	В	-	- B 6	
					18	В	-	10 GR	
		Terminal	Color Of	9	19	a		11 R	
L	7	Ö.	Wire	orginal realite [opeomoation]	20	Μ	- [Without BOSE audio]		
	91 81 88 67 80 82 81 80 73 32 73 73 73 73 73 73 73 73 73 73 73 73 73	113	۵	OPLICAL SENSOR	20	>	- [With BOSE audio]		
	11 02 02 02 02 02 02 02 02 02 02 02 02 02	116	SB	STOP LAMP SW 1	21	9	- [With BOSE audio]		
		118	۵	STOP LAMP SW 2	21	_	- [Without BOSE audio]		
		119	SB	DR DOOR UNLOCK SENSOR	22	SB			
Terminal Color Of		121	æ	KEY SLOT SW	23	g.			
Wire	Signal Name [Specification]	123	Μ	IGN E/B	24	U			
SB	PASSENGER DOOR ANT-	124	97	PASSENGER DOOR SW	52	>			
GR.	PASSENGER DOOR ANT+	132	띪	POWER WINDOW SW COMM	56	œ			
⊢	DRIVER DOOR ANT-	133	Μ	PUSH-BUTTON IGNITION SW ILL POWER	59	SHIELD			
⊢	DRIVER DOOR ANT+	134	GR	LOCK IND	30	Α			
H	ROOM ANT1-	137	BG	RECEIVER/SENSOR GND	31	97			
RB BB	ROOM ANT1+	138	>	RECEIVER/SENSOR POWER SUPPLY	32	9			
GR	NATS ANT AMP	139	_	TIRE PRESSURE RECEIVER COMM	æ	BR			
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AUT	OMA.	AUTOMATIC DRIVE POSITIONER							
Connector No.	tor No.	M202	Terminal	Ferminal Color Of	Sinnal Namo [Specification]	06	_	CAN-H	П
Compec	Connector Name	AV CONTROL LINIT	ō.	Wire	figure l'équie l'épécification	91	SB	AV COMM (H)	
5			9/	PI	AV COMM (L)	95	SB	AV COMM (H)	
Connec	Connector Type	TH24FW-NH	77	SB	AV COMM (H)				
ą			78	PI	AV COMM (L)				
事	_	<u> </u>	79	gg d	AV COMM (H)				
S	Ø]-	8 2	-	CANL				
	3	36 37 38 39 40 41 42 43 44 45 46 47	5	، ا	CANT				
		1	82	2	SW GND				
		48 49 50 51 52 57 58	98	SHELD	SHIELD				
			87	٦	TEL VOICE SIGNAL (+)				
			88	۵	TEL VOICE SIGNAL (-)				
Terming	Terminal Color Of	f Sirnal Nama [Spacification]	92	ď	VEHICLE SPEED SIGNAL (8-PULSE)				
o N	Wire	Ognari verno Lopozinografia	93	>	PARKING BRAKE SIGNAL				
36	BG	SIGNAL VCC	8	BG	REVERSE SIGNAL				
37	9T	SIGNAL GND	92	9	IGNITION SIGNAL				
38	В	HP	96	٨	DISK EJECT SIGNAL				
39	BR	COMM (DISP-CONT)							
40	В	RGB AREA (YS) SIGNAL							
4	SHIELD	SHIELD	Connector No.	r No.	M210				
42	Α	RGB SYNC		14	The CONTROL SA				
43	Ø	RGB (R:RED) SIGNAL	Colline	CONTRECTOR INSINE	AV CONTROL UNIT				
44	1	RGB (G:GREEN) SIGNAL	Connector Type	r Type	TH32FW-NH				
45	Ь	RGB (B:BLUE) SIGNAL							
46	۸	COMPOSITE IMAGE SIGNAL GND	B						
47	SB	COMPOSITE IMAGE SIGNAL	ŧ						
48	>	INVERTER VCC	Ģ	7					
49	æ	INVERTER GND			67 68				
20	O	VP			79 80 81 82 83 8 87 88 89 90 91 92				
21	>	COMM (CONT-DISP)							
52	SHIELD								
22	SHIELD	SHIELD	Terminal	Color Of	Signal Nama (Spoolfication)				
28	SHIELD	SHIELD	Ŋ.	Wire	orginal realing topechication				
			65	>	PARKING BRAKE SIGNAL				
			29	9	COMPOSITE IMAGE SIGNAL GND				
Connector No.	tor No.	M204	89	ď	COMPOSITE IMAGE SIGNAL				
Connec	Connector Name	AV CONTROL LINIT	7	SHELD	MICROPHONE SHIELD				
			72	ď	MICROPHONE VCC				
Connec	Connector Type	TH32FW-NH	73	۲	COMM (CONT-DISP)				
4	•		74	Ь	CAN-L				
	_		75	FC	AV COMM (L)				
ŧ			9/	97	AV COMM (L)				
Ġ.E	ń		62	Я	ILLUMINATION				
		76 77 78 79 80 81 82 88 88	80	g	IGNITION SIGNAL				
		2 3 3 3 3 3 4 3 4 3 4 3 4 4 4 4 4 4 4 4	81	BG	REVERSE SIGNAL				
			82	ч	VEHICLE SPEED SIGNAL (8-PULSE)				
			83	SHIELD	SHIELD				
			87	O	MICROPHONE SIGNAL				
			88	SHIELD	SHIELD				
			88	9	COMM (DISP-CONT)				

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< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
I IX WIF LIX I II	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
TR WIFER LOW	Front wiper switch LO	On
ED WACHED CW	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
RR WIPER ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
DD WIDED INT	Other than rear wiper switch INT	Off
RR WIPER INT	Rear wiper switch INT	On
DD WACHED OW	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TUDNI CICNIAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI OLONIAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAND CVA	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LU DEAM OW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
LIEAD LAMB OW	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA COINIO OW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
ALITO LIQUIT CIT	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

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Monitor Item	Condition	Value/Status
ED EOC SW	Front fog lamp switch OFF	Off
R FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
JOOR SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOR SW-RK	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
JOOR SW-RL	Rear LH door opened	On
OOD SW DK	Back door closed	Off
DOOR SW-BK	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
DDL LOCK 3VV	Power door lock switch LOCK	On
DDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
(EV CVL LK SW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
TAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
ANL-LOON	LOCK button of the key is pressed	On
DKETINI OCK	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
DKE DVIIC	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

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Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
OF HOAL SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
REQ 3W -DR	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
NEQ OW -AO	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off
DEO SW. DD/TD	Back door request switch is not pressed	Off
REQ SW -BD/TR	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
- USIT SVV	Push-button ignition switch (push switch) is pressed	On
GN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
SKAKE SW Z	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CAINCL SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
OLI FIN/IN OVV	Selector lever in P or N position	On
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
INI K CEN DD	Driver door is unlocked	Off
UNLK SEN -DR	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
CN DI V1 -E/D	Ignition switch in OFF or ACC position	Off
GN RLY1 -F/B	Ignition switch in ON position	On
DETE OW IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
OFT DAL IDDM	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On

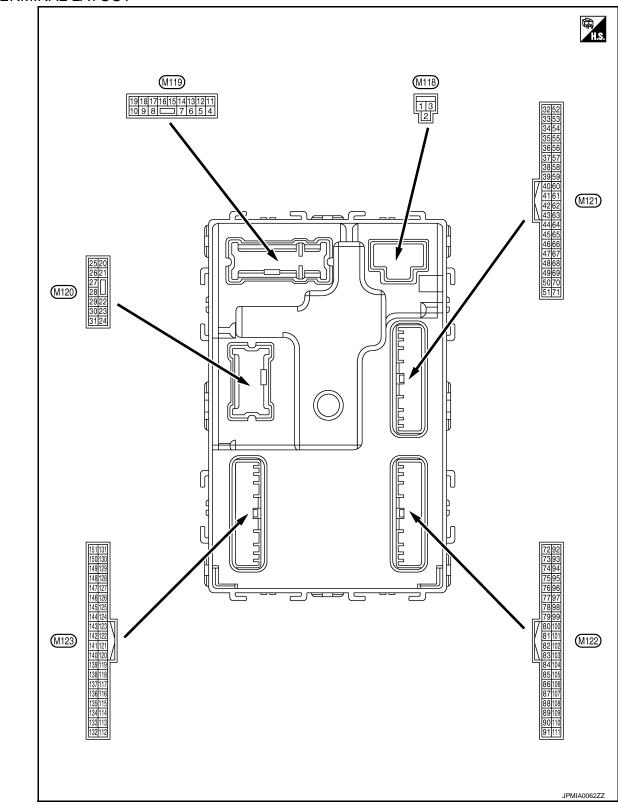
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status			
SET D -MET	Selector lever in any position other than P				
SFI P-WEI	Selector lever in P position	On			
SFT N -MET	Selector lever in any position other than N	Off			
SELIN-MET	Selector lever in N position	On			
	Engine stopped	Stop			
ENGINE STATE	While the engine stalls	Stall			
ENGINE STATE	At engine cranking	Crank			
	Engine running	Run			
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off			
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off			
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off			
VEH SPEED 1	While driving	Equivalent to speed- ometer reading			
VEH SPEED 2	While driving	Equivalent to speed- ometer reading			
	Driver door is locked	LOCK			
DOOR STAT-DR	Wait with selective UNLOCK operation (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			
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset			
	Ignition switch ON	Set			
PRMT ENG STRT	The engine start is prohibited	Reset			
TRWIT LING OTTET	The engine start is permitted	Set			
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset			
KEY SW -SLOT	The key is not inserted into key slot	Off			
	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.	_			
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet			
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done			
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet			
OSA RAWIDT	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done			
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet			
COM INVIDO	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done			

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Monitor Item	Condition	Value/Status
CONFIRM ID2	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
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet
CONFIRM ID I	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done
TD 4	The ID of fourth key is not registered to BCM	Yet
TP 4	The ID of fourth key is registered to BCM	Done
TD 0	The ID of third key is not registered to BCM	Yet
TP 3	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
TD 4	The ID of first key is not registered to BCM	Yet
TP 1	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 REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGGI FLI	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGGI FRI	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
ID REGOT KKT	ID of rear RH tire transmitter is not registered	Yet
ID DECST DL4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
MADNING LAND	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

TERMINAL LAYOUT



PHYSICAL VALUES

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	I NI .	Busines				
	inal No. e color)	Description	1		Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4		Interior room lamp			battery saver is activated. oom lamp power supply)	0 V
(LG)	Ground	power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage
5	Ground	Passenger door UN-	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
(L)	Ground	LOCK	Output	rassenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(Y)	Ground	Зіер іапір	Output	Step lamp	OFF	Battery voltage
8	Ground	All doors, fuel lid	Output All doors	LOCK (Actuator is activated)	Battery voltage	
(V)	Ground	LOCK		All doors	Other than LOCK (Actuator is not activated)	0 V
9	9 Ground D	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground		Output		Other than UNLOCK (Actuator is not activated)	0 V
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(BR)	0.000	LOCK	Carpar	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		0 V
					OFF	0 V
		Push-button ignition				NOTE: When the illumination brightening/dimming level is in the neutral position
14 (W)	Ground	switch illumination ground	Output	Tail lamp	ON	(V) 10 0 2 ms JSNIA0010GB
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage
(Y)	Ciound	7.00 mulcator lamp	Carput	iginion switch	ACC	0 V

Terminal No.		Description				Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	0 V (V) 15 10 5 0 PKID0926E	
					Turn signal switch OFF	6.5 V 0 V	
18 (BG)	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 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF ON	Battery voltage 0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	0 V (V) 15 10 5 0 PKID0926E 6.5 V	
23	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage	
(G)	2.300		Other than OPEN	(Back door opener actuator	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 PKID0926E 6.5 V	
26			•	<u> </u>	OFF (Stopped)	0 V	
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage	

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description			Condition	Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
34		Luggage room anten-		lanition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(SB)	Ground	na (–)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	
35	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)	Clound	na (+)	Cutput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	
38	Ground	Back door antenna (-	Quitout	When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(B)	Ground)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	

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	inal No.	Description				Value	Λ
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
39		Back door antenna		When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(W)	Ground	(+)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E
47		Ignition relay (IPDM	0		OFF or ACC	Battery voltage	G
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V	=
52	Ground	Starter relay control	Cutout	Ignition switch ON	When selector lever is in P or N position	Battery voltage	Н
(SB)	(SB) Ground Starter relay cont	Starter relay control	Output		When selector lever is not in P or N position	0 V	
60	0	Push-button ignition	1	Push-button igni-	Pressed	0 V	- 1
(BR)	Ground	switch (Push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage	400
					ON (Pressed)	0 V	ADP
61 (W)	Ground	Back door opener request switch	Input	Back door opener request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	K
		Intelligent Key were		Intelligent I/o.	Counding	1.0 V	M
64 (V)	Ground	Intelligent Key warn- ing buzzer (Engine	Output	Intelligent Key warning buzzer	Sounding	0 V	=
		room)		(Engine room)	Not sounding	Battery voltage	N
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	(V) 15 10 5 10 10 ms JPMIA0016GB	O P
			l			1.0 V	-
					Not in stop position	0 V	_

	inal No. e color)	Description				Value
+	e color)	Signal name	Input/ Output	Condition		(Approx.)
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
					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 10 ms JPMIA0011GB
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	(V) 15 10 5 0 10 ms 10 ms JPMIA0011GB
					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 10 ms 11.8 V
					ON (Door open)	0 V

	ninal No.	Description				Value	
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
				When the pas-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	В
74 (SB)	Ground	Passenger door antenna (-)	Output	senger door request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	E F
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	G H
(GR)	Ground	tenna (+)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	AD K
				When the driver	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 s JMKIA0062GB	M
76 (V)	Ground	Driver door antenna (-)	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 P

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
77				When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 S S S S S S S S S
(LG)	Ground	Driver door antenna (+)	Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
78	78 Ground Room antenna 1 (–) Output Ignition switch	-) Output Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB		
(Y)	Ground	(Instrument panel)	Output	ŌFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 JMKIA0062GB
(BR)	Ground	(Instrument panel)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description				Value	
		Signal name	Input/ Output	Condition		(Approx.)	
80 (GR)	Ground	NATS antenna amp.	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.	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)	Giouna	block (J/B)] control	Output	ignition switch	ON	Battery voltage	
83	Ground	Remote keyless entry		During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB	
(Y)	Ground	tion		When operating e	either button on the key	(V) 15 10 5 1 ms JMKIA0065GB	

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Terminal No. (Wire color)		Description				Value	
(VVire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
	Ground	Combination switch			All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	
87				Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0037GB	
(BR)				switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB	
					Any of the conditions below with all switches 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.	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	E F
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 1.3 V	G H I
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	ADP K
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB	M
90 (P)	Ground	CAN-L	Input/ Output	_		1.3 V —	0
91 (L)	Ground	CAN-H	Input/ Output	_		_	Р

	inal No.	Description				Value	
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					OFF	Battery voltage	
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB 6.5 V	
					ON	0 V	
93	01	ONL'S Productions	0 1 1	1	OFF or ACC	Battery voltage	
(V)	Ground	ON indicator lamp	Output	Ignition switch	ON	0 V	
94	0	Decidalla la construct	0	Decidally laws	OFF	Battery voltage	
(Y)	Ground	Puddle lamp control	Output	Puddle lamp	ON	0 V	
95	Cround	ACC rolay control	Output	Ignition quitab	OFF	0 V	
(BG)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage	
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	_		Battery voltage	
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V	
(R)	Giound	tion switch	input	Sciedioi ievei	Any position other than P	Battery voltage	
					ON (Pressed)	0 V	
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	
					ON (Pressed)	0 V	
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB 1.0 V	
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V	
(BG)	Ground	lay control	Output	Igililon switch	ON	Battery voltage	
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage	

Terminal No. (Wire color)		Description		0		Value	А
+	e color) -	Signal name	Input/ Output	Condition		(Approx.)	
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	B C D
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB	E F
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	ADP K
					Front washer switch ON	(V) 15 10 5 0 2 ms	M
							0

	inal No. e color)	Description		0		Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 2 ms JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0038GB 1.3 V
108 (R)	Ground	Combination switch INPUT 4	Input	with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5		(V) 15 10 5 0 2 ms JPMIA0036GB
					(V) 15 10 5 0 2 ms JPMIA0040GB	
					Any of the conditions below with all switches 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. e color)	Description			0 100	Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	\wedge
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB	B C
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E F G
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	Н
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	ADF K
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	M
					ON	0 V	0
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	Р

	inal No. e color)	Description	ı			Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(P)	Ground	Option scrisor	прис	ON	When dark outside of the vehicle	Close to 0 V
116 (SB)	Ground	Stop lamp switch 1	Input	_		Battery voltage
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
118	Ground	(Without ICC)	Input	Otop lamp switch	ON (Brake pedal is depressed)	Battery voltage
(P) Ground		Stop lamp switch 2	iliput		OFF (Brake pedal is not de- brake hold relay OFF	0 V
		(With ICC)			ON (Brake pedal is de- rake hold relay ON	Battery voltage
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
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (BR)	Ground	Key slot switch	Input		nserted into key slot ot inserted into key slot	Battery voltage 0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close) ON (Door open)	Battery voltage (V) 15 10 5 0 JPMIA0011GB 11.8 V 0 V
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 JPMIA0013GB 10.2 V Battery voltage

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					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)		-	. 1	lamp	ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(Y)	Ciodila	power supply	Carpat	.g.maon ownon	ACC or ON	5.0 V
139	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch	Standby state	(V) 6 4 2 0 ** 0.2s OCC3881D
(L)	Ground	Selector lever P/N			When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
140	Ground		Input	Selector lever	P or N position	Battery voltage
(GR)		position		-	Except P and N positions	0 V
					ON	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 1 s
						11.3 V
					OFF	Battery voltage

	inal No.	Description				Value
+ (Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	0 V
					Lighting switch 1ST	
				Combination	Lighting switch HI	(V)
142	Ground	Combination switch	Output	switch	Lighting switch 2ND	10
(BG)	Ground	OUTPUT 5	Output	(Wiper intermittent dial 4)	Turn signal switch RH	2 ms JPMIA0031GB
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
143	Ground	Combination switch	Outout	Combination	Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10
(P)	Glound	OUTPUT 1	Output	Combination switch	Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	5 0 2 ms 10.7 V
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
144 (G)		Combination switch	Output	Combination switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10
	Ground	OUTPUT 2			Rear washer switch ON (Wiper intermittent dial 4)	2 ms JPMIA0033GB
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
					All switches OFF	0 V
					Front wiper switch INT	(1.1)
				Combination	Front wiper switch LO	(V) 15
145 (L)	Ground	round Combination switch OUTPUT 3	Combination switch (Wiper intermit- tent dial 4)	Lighting switch AUTO	10 5 0 2 ms JPMIA0034GB 10.7 V	

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value
(Wire	e color) –	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V)
146 (SB)	Ground	Combination switch	Output	switch	Lighting switch PASS	10 5 0 2 ms JPMIA0035GB 10.7 V
(SB)	Ground	Combination switch OUTPUT 4	Output	(Wiper intermit- tent dial 4)	Turn signal switch LH	
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		Rear window defog-		Rear window de-	Active	0 V
(G)	Ground	ger relay control	Output	fogger	Not activated	Battery voltage

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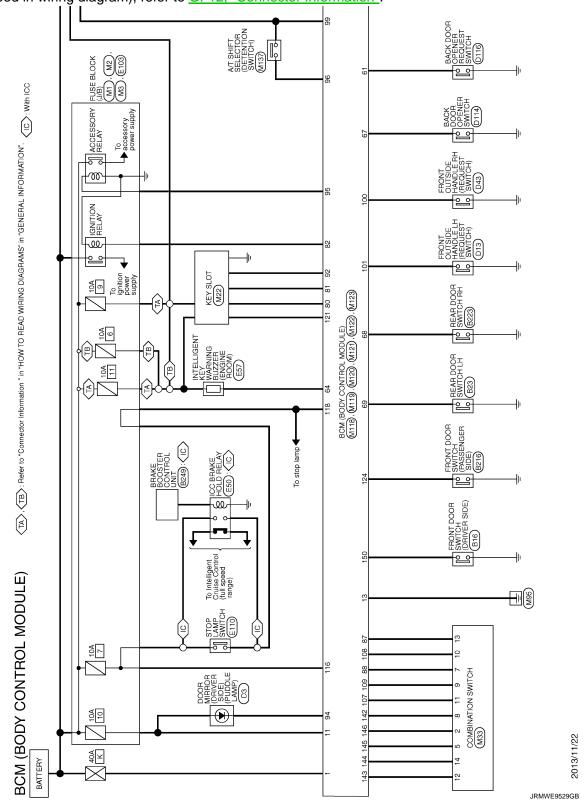
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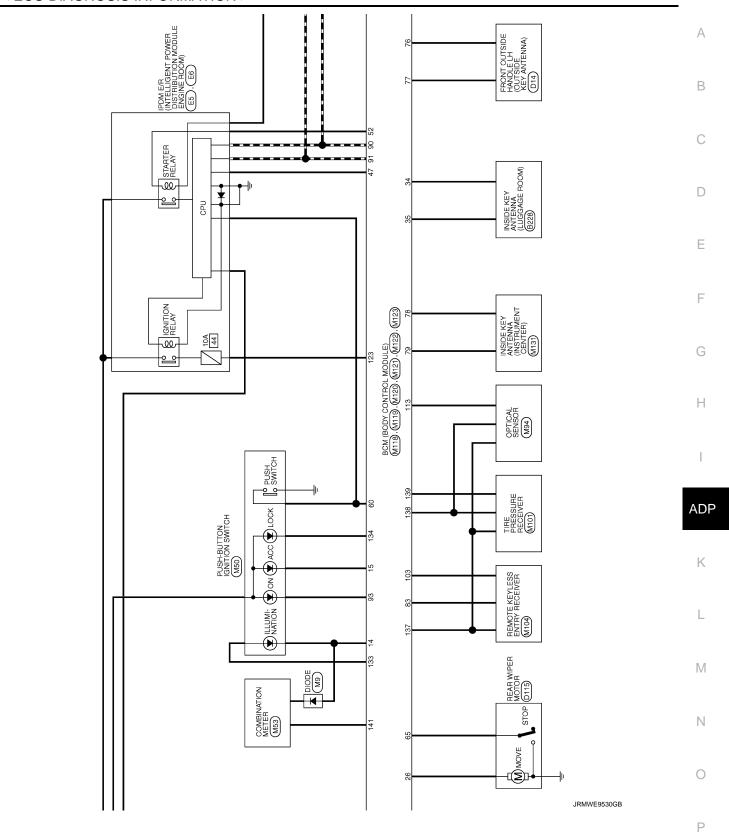
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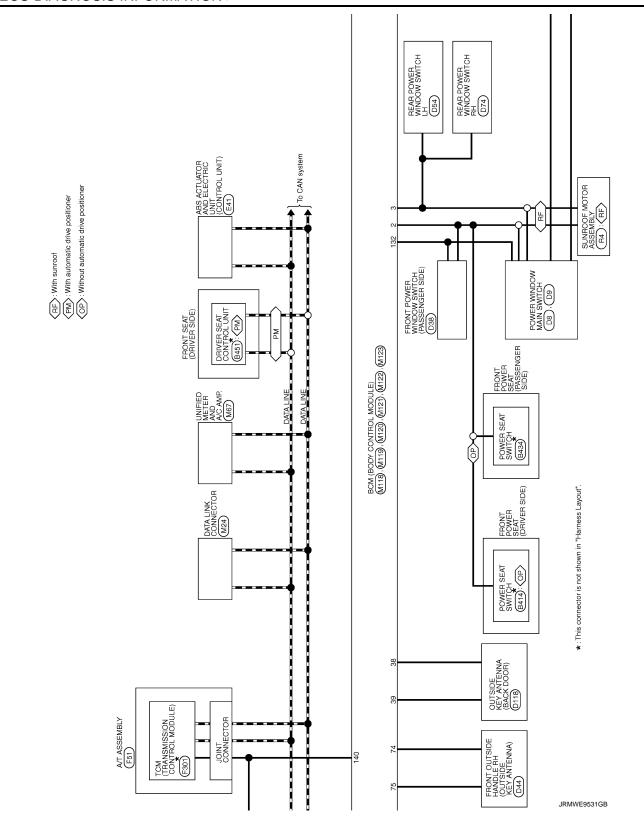
Wiring Diagram - BCM -

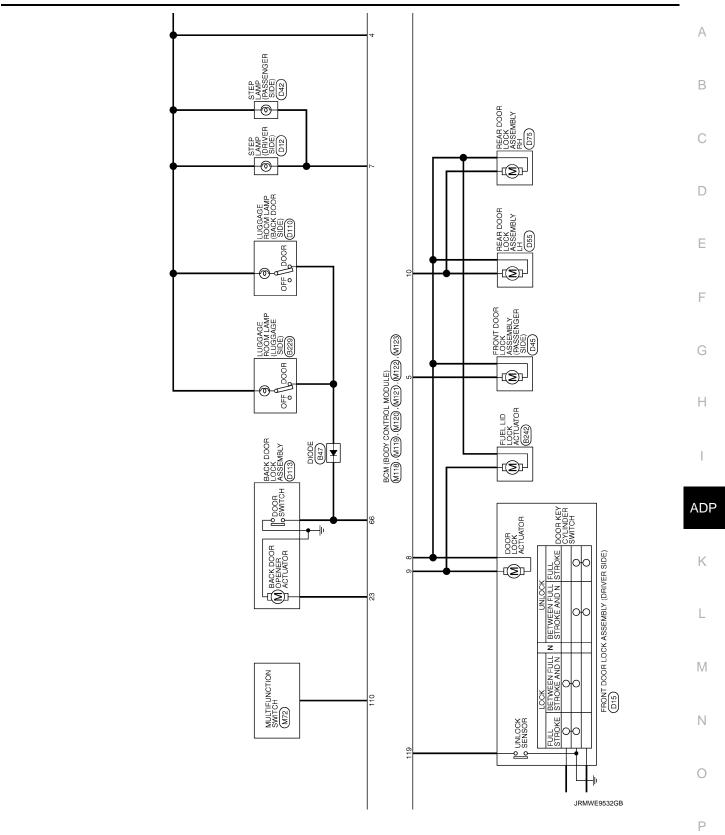
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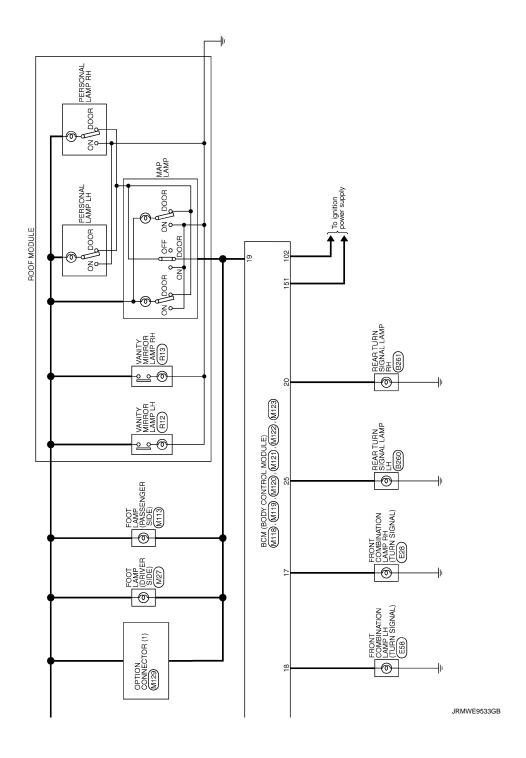
For connector terminal arrangements, harness layouts, and alphabets in a (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".











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< ECU DIAGNOSIS INFORMATION >

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01 RK02FG)	G
Corrector No. 1 Terminal Color Of Virginia Colo	Н
Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	
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Name Name Name Name Name Name Name Name	Κ
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Sign	M
BCM (BODY Corrector No. B16 Corrector No. B16 Corrector No. Wire 2 V V Corrector No. B23 Corrector No. Wire Corrector No. Wire 2 LG Corrector No. Wire 2 LG Corrector No. B47	Ν
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BCM (BODY CONTROL MODULE)										
Connector No. B260	Connector No.	r No. B414		Connector No.	П	B451	Connector No.	П	D3	
Connector Name REAR TURN SIGNAL LAMP LH	Connector Name	r Name POV	POWER SEAT SWITCH	Connect	Connector Name	DRIVER SEAT CONTROL UNIT	Connecto	r Name	Connector Name DOOR MIRROR (DRIVER SIDE)	
Connector Type HS02FG-W	Connecto	Connector Type NS10FW-CS	JFW-CS	Connect	Connector Type	TH32FW	Connecto	r Type	Connector Type TH24MW-NH	
				Œ			Œ.			
IIS.	H.S.		2 1 0 8 7	H.S.			H.S.			
			4 3 6 5 109			1 3 9 21 28 28 27 28 28 31 32 13 14 16			12 11 10 7 6 5 3 2 2 3 2 3 2 3 2 3 3	
Terminal Color Of Signal Name [Specification]	20	Color Of	Signal Name [Specification]	Termina	Ferminal Color Of	Signal Name [Specification]	ᅙ	Color Of	Signal Name [Specification]	
.W.	<u> </u>	ρ α		<u>}</u> -	200	X	- S	C		
2 B	- 2	e 8	,	- 6	ΣV	CAN-H	3 6	В	SIDE CAMERA LH COMM	
	3	G/Y	-	6	M/G	PULSE (RECLINING)	5	>	SIDE CAMERA LH IMAGE SIGNAL	
	4	Ь	1	10	P/B	PULSE (RR LIFTING)	9	ď	SIDE CAMERA LH POWER SUPPLY	
Connector No. B261	2	× :		= 5	BR 6	SLIDING SW (BACKWARD)	7	≥ (1	
Connector Name REAR TURN SIGNAL LAMP RH	9 >	> \		13	S R	FECHINING SW (BACKWARD)	2 =	<u>.</u>		
Connector Type HS02FG-W		-		4	g/B	REAR LIFTING SW (DOWNWARD)	15	. 0		
	0	, Y		16	0	, CCC	14	, S		
	10	G/W	-	17	Y/R	TX	17	Э	SIDE CAMERA LH IMAGE GND	
•				19	۸	CAN-L	18	M	SIDE CAMERA LH GND	
				21	ΛΛ	P RANGE SW	19	В		
(12)	Connector No.	r No. B434	1	24	œ	PULSE (SLIDING)	21	GR		
)	Connector Name		POWER SEAT SWITCH	22	Υ/B	PULSE (FR LIFTING)	22	BR	T.	
				56	>	SLIDING SW (FORWARD)	23	> :		
	Connector Type	7	NS10FW-CS	27	R/G	RECLINING SW (FORWARD)	24	>		
Terminal Color Of Signal Name [Specification]	ąĮ			8 8	W/B	FRONT LIFTING SW (UPWARD)				
+	手			R Z	z (REAK LIFTING SW (UPWARD)		Γ		
+		_	֡֝֞֝֟֝֝֟֝֝֟֝֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟	3	H .	SENSOR GND	Connector No.		88	
2 8 :		_]-	32	D/W	GND (SIGNAL)	Connecto	r Name	Connector Name POWER WINDOW MAIN SWITCH	
		_	6 5 9 10 3 4				Connecto	r Type	Connector Type NS16FW-CS	
		ı					₫.			
	7	0-1-0					李			
	No.	Wire	Signal Name [Specification]				HS		1 2 3 4 0 5 6 7	
	-	ď							200	
	2	В							5 10 11 10 14	
	3	G/Y	-							
	4									
	2	۵					<u>a</u>	Color Of	Signal Name [Specification]	
	9 1	× >	,				Ö.	Wire		
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	ç	, W/E					4	5 >		
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ER SIDE)	RECULEST SWITCH)	В
STEP LAMP (PASSENGER SIDE) TB02FW [12] Storal Name (Scredication)		С
Corrector No. D42 Connector Name STEP LA Corrector Type TB02FW HS	No. Wire 1 SB 2 SB Cornector Name Frox No. Wire No. Wire No. Wire B B B B B B B B B	D
Y (DRAVER SIDE.)	Tification)	Е
FROWT DOOR LOOK ASSEMBLY (DRIVER SUD) EDBF-CV-RS (123456)	1998 NS16FW.CS Signal Name (Specification) Signal Name (Specification)	F
Corrector No. D15 Corrector Name Frox Corrector Type ED68 H.S. H.S.		G
		Н
PRODEIL RRODEIL RRODEIL RRODEIL RRODEIL Stanal Name (Specification)	Signal Name Lisponication) Signal Name Evi (JUTSDE KEY ANTENA) Signal Name [Specification]	1
D13 RROZEL RROZEL OI Sirral II	Signal N Signal N	AD
Corrector No. Corrector Name Corrector Type H.S. Terminal Color Of	No. Wire B. Wire Corrector No. Corrector No. Corrector Type B. No. No. Corrector Type Corrector	К
MODULE	ecification	L
CONTROL	POWER WINDOW MAIN SWITCH INSUGEW.CS Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	M
BCM (BODY CONTROL MODULE) 6		N
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Connector No. D44	Connector No. D54	Connector No. D74	Connector No. D110
Connector Name FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)	Connector Name REAR POWER WINDOW SWITCH LH	Connector Name REAR POWER WINDOW SWITCH RH	Connector Name LUGGAGE ROOM LAMP (BACK DOOR SIDE)
Connector Type RK02MGY	Connector Type NS08FW-CS	Connector Type NS08FW-CS	Connector Type TK03FW
修	香	唇	髩
HS.	H.S. 23 4 5 1	H.S. 2 3 4 7 1	H.S.
)			
Terminal Color Of Signal Name [Specification] No. Wire	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification] No.	Terminal Color Of Signal Name [Specification]
Н	Н	H	> 0
2 V	> 0	> 0	7 7
	+	H	
Connector No. D45	5 W	5 0	Connector No. D113
Connector Name FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)	7 B -	7 B -	Connector Name BACK DOOR LOCK ASSEMBLY
Connector Type E06FGY-RS			Connector Type NS04FW-CS
á	Connector No. D55	Connector No. D75	á
THE STATE OF THE S	Connector Name REAR DOOR LOCK ASSEMBLY LH	Connector Name REAR DOOR LOCK ASSEMBLY RH	
	Connector Type E06FGY-RS	Connector Type E06FGY-RS	
			4 3 2 1
	H.S.	H.S.	
Terminal Color Of Signal Name [Specification]	(12 56)	(5 6 2 1)	Terminal Color Of Signal Name [Specification]
++			++
1	Terminal Color Of Signal Name [Specification]	Terminal Color Of Signal Name [Specification]	Н
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	2 6	2 v	
	+	+	
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FROMT COMBINATION LAMP RH RSOBEB-PR Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] GROLND GRO		С
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Featron)		Е
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Signal Name [Specification]		I
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Corrector No. Corrector Name Corrector Type Terminal Color Of No. Wire Corrector Ne. Corre		K
MODULE) swrrch edification edification		L
DY CONTROL MOD 10114 BACK DOOR OPENER SWITCH THOEMBR-P THOEMBR-P THOEMBR-P THOEMBR-P THOEMBR-P THOEMBR-P THOEMBR-P THOEMBR-P THOEMBR-P Signal Name [Specification]		M
BCM (BODY CONTROL MODULE) Corrector No. D114 Corrector No. D115 Corrector No. No. No. D115 Corrector No.		Ν
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BCM (BO	BCM (BODY CONTROL MODULE)	Γ		
4	BUS-L	Connector No. E58	Connector No. E110	Connector No. F301
26 LG	DP FL	Competior Name FRONT COMBINATION LAMP LH	Connector Name STOP LAMP SWITCH	Connector Name TCM (TRANSMISSION CONTROL MODULE)
27 GR	DS RL			
28 G	Zn	Connector Type RS08FB-PR	Connector Type M04FW-LC	Connector Type SP10FG
L	DS RR			
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╀	1200		c c	
200	HANGO O	2 3 4		(1 2 3 4 5)
┨		5 6 7 8	112	2 0 0 0
Connector No.	E50			
		Terminal Color Of	Terminal Color Of	Terminal Color Of
Connector Name	Connector Name ICC BRAKE HOLD RELAY	No. Wire Signal Name [Specification]	No. Wire Signal Name [Specification]	
Connector Type	Connector Type M06FGY-R-US	2 B		1 - POWER SUPPLY
		3 B/Y	2 W	2 - POWER SUPPLY (MEMORY BACK-UP)
4		4 BW	> >	3 - CAN-H
ALL	2 <u>I</u> I	> >	4 SB	4 · KLINE
HS.	T۰	5		S
	6 / 3	+		
		+	ı	1
	4		Compector No.	- BACK-0
]		Connector Name A/T ASSEMBLY	
		١	- 1	- STA
ē	Of Signal Name [Specification]	Connector No. E103	Connector Type RK10FG-DGY	10 - GROUND
No. Wire		Connector Name FUSE BLOCK (J/B)	Q	
+	-	Т	●	ſ
+		Connector Type NS16FW-CS		Connector No. M1
+		ą	130	Connector Name FUSE BLOCK (J/B)
+		医	ŀ	
д 9		110	(10 9 8 7 8	Connector Type NS06FW-M2
7 R		64 44 24 14		ģ
		8		
			<u>a</u>	
Connector No.	E57		No. Wire]
Connector Name	NITEL IGENT KEY WARNING BLIZZER (FNGINE BOOM)		1 Y POWER SUPPLY	ON 74 64 54 44
		Terminal Color Of	2 BR POWER SUPPLY (MEMORY BACK-UP)	S
Connector Type	RK03FBR	No. Wire Signal Name [Specification]	⊢	
		1F SB	A V	
1		H	5 B GROUND	Terminal Color Of
至了	<	╀	2 >	No Wire Signal Name [Specification]
S I	≪	+	-	t
		6F BK	/ R BACK-UP LAMP RELAY	1A GR
		8F L -	8 LG CAN-L	2A G -
	<u> </u>	- В	9 GR STARTER RELAY	3A L
)		10 B GROUND	4A P - [For push button]
				4A R - [For key slot]
Terminal Color O				> A5
No. Wire	Signal Name [Specification]			- Y 89
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< ECU DIAGNOSIS INFORMATION >

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 15 14 14 15 14 14	С
Connector Nb. Connector Nb. Connector Nb. Connector Nb. Connector Np. Connector Np	D
ation limited and the state of	Е
M27 Signal Name (Specification) Signal Name (Specification)	F
MZZ BD16FY BD16FY A0ZFW A0ZFW	G
Corrector Name Corrector Name Corrector Name No. Wire No. Wire 1 1 8 8 8 8 8 6 7 7 V V V V V S 11 14 P P V V V V V V V V V V V V V V V V V	Н
Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) LEAT LLEAT	ADP
M89 DIODE 24336.	
_	K
NODDULE MODULE MO	L
NSTOFWAGS NSTOFWAGS NSTOFWAGS NSTOFWAGS NSTOFWAGS Signal Name (Specification) Signal Name (Specification)	M
Convector Name FUSE BLOOK (J/B) Convector Name FUSE BLOOK (J/B) Signal Name Specification	Ν
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BCM	(BOL	BCM (BODY CONTROL MODULE)						
7	>		Connector No.	П	M67	Connector No.	M72	Connector No. M101
80	Δ.		Connector Name		UNIFIED METER AND A/C AMP.	Connector Name	MULTIFUNCTION SWITCH	Connector Name TIRE PRESSURE RECEIVER
			Connector Type	Т	TH32FW-NH	Connector Type	TH16FW-NH	Connector Type TK04FW
Connector No.	Н	M53	4			4		4
Connecto	Connector Name	COMBINATION METER	厚			逐		
Connector Type	r Type	TH40FW-NH	E.S.	٤		H.S.		H.S.
€					41 42 43 44 45 48 47 33 54 55 56 57 38 59 60 61 82 65 65 71 72		8 8 9 14 16	1 2 4
				-			000	
		1 2 3 6 6 7 7 8 9 9 15 8 15 8 15 8 15 8 15 8 15 8 15	B	Color Of	Signal Name [Specification]	la I	Of Signal Name [Specification]	la la
			Š.	Wire	A Idding any or over	No.	1	No. Wire
			4 6	> >	FILET LEVEL SENSOR SIGNAL	- ~		
Terminal	Terminal Color Of		43	. ~	INTAKE SENSOR SIGNAL	4 A		4 Y BATTERY
ġ	Wire	Signal Name [Specification]	44	PC	IN-VEHICLE SENSOR SIGNAL	5 Y	ILL CONT	
-	GR	BATTERY POWER SUPPLY	45	۵	AMBIENT SENSOR SIGNAL	e SB		
2	FG	COMMUNICATION SIGNAL (METER-AMP.)	46	BG	SUNLOAD SENSOR SIGNAL	8 LG	AV COMM (L)	Connector No. M104
3	GR	COMMUNICATION SIGNAL (AMPMETER)	47	Э	EXHAUST GAS / OUTSIDE ODOR DETECTING SENSOR SIGNAL	9 B		Connector Name DEMOTE KEYLESS ENTRY DECEIVED
5	В	GROUND	53	G	IGNITION POWER SUPPLY	14 Y	DISK EJECT SIGNAL	
9	Ь	ALTERNATOR SIGNAL	54	>	BATTERY POWER SUPPLY	16 G	HAZARD ON	Connector Type JAB04FB
7	BR	AIR BAG SIGNAL	55	В	GROUND			4
10	9	SECURITY SIGNAL	99	7	CAN-H			
15	В	GROUND	22	W	BRAKE FLUID LEVEL SWITCH SIGNAL	Connector No.	M94	
16	В	METER CONTROL SWITCH GROUND	28	BR	FUEL LEVEL SENSOR GROUND	Connector Name	OPTICAL SENSOR	
19	В	ILL GND	59	GR	INTAKE SENSOR GROUND			1 2 4
20	œ	ILL	9	٦	IN-VEHICLE SENSOR GROUND	Connector Type	= TK03FW	
21	BG	IGNITION SIGNAL	61	BR	AMBIENT SENSOR GROUND	(
22	В	GROUND	62	SB	SUNLOAD SENSOR GROUND	修		
24	BR	COMMUNICATION SIGNAL (LCD-AMP.)	63	ď		Ę		Terminal Color Of Signal Nama (Specification)
25	>	COMMUNICATION SIGNAL (AMPLCD)	65	BG	ECV SIGNAL	Ź	1	No. Wire organical and in a language of the control
26	Ж	VEHICLE SPEED SIGNAL (8-PULSE)	69	٦	A/C LAN SIGNAL		1 2 3	1 BG GROUND
27	^	PARKING BRAKE SWITCH SIGNAL	20	ж	EACH DOOR MOTOR POWER SUPPLY		0 7 1	2 Y SIGNAL OUTPUT
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL	7.1	В	GROUND			4 LG BATTERY
59	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	72	Ь	CAN-L			
30	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)) Jai	Of Signal Mana [Secondination]	
31	7					No. Wire		
33	В	ILLUMINATION CONTROL SIGNAL				1	POWER	
36	PC	SELECT SWITCH SIGNAL				2 P		
37	SB					3 B	GROUND	
38	_	TRIP A/B RESET SWITCH SIGNAL						
39	۵	ILLUMINATION CONTROL SWITCH SIGNAL (-)						
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (+)						

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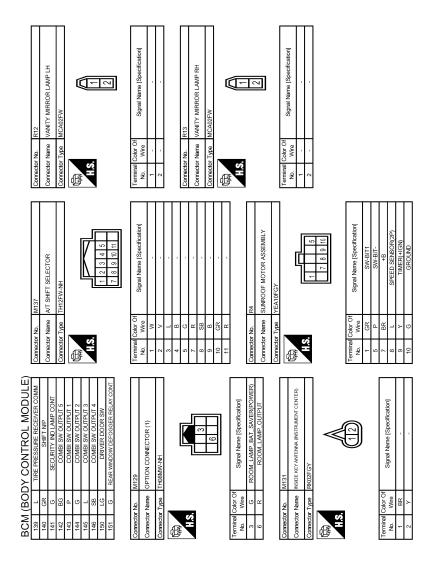
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< ECU DIAGNOSIS INFORMATION >

BI W	Coor Of Coor	
Corrector No. M121 Corrector Name BCM (BODY CONTROL MODULE) Corrector Type TH40FGY-NH H.S.	Terminal Color Of Suprat Name (Specification) No. Wire Sa	
Corrector No. M119 Corrector Type INS16FW-CS H.S. 4 5 7 18 9 10 11 13 14 15 17 18 19 10 10 10 10 10 10 10	Terminal Color Of Signal Name [Specification] No. Wire NITERIOR ROOMLAMP POWER SUPPLY 1	
BCM (BODY CONTROL MODULE) Connector No. M113 Connector Name FOOT LAMP (PASSENGER SIDE) Connector Type A02FW H.S.	Terminal Color Of Signal Name (Specification) 1	

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Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent Starter control relay signal Starter relay status signal
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)
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 are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

- More than 1 minute is passed after the rear wiper stops.
- Turn rear wiper switch OFF.
- Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000008772986

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	N
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)	0
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING 	— О

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< ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	 B2553: IGNITION RELAY B2555: STOP LAMP 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: STARTER RELAY B2607: ENG STATE SIG LOST B2607: ENG STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B261A: PUSH-BTN IGN SW B261A: VEHICLE TYPE B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1734: CONTROL UNIT
6	B2621: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-18, "COMMON ITEM".</u>

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	_	BCS-41
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-42
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-43
B2190: NATS ANTENNA AMP	×	_	_	_	<u>SEC-40</u>

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-43
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-44
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-45
B2195: ANTI SCANNING	×	_	_	_	SEC-46
B2553: IGNITION RELAY	_	×	_	_	PCS-50
B2555: STOP LAMP	_	×	_	_	SEC-47
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-49
32557: VEHICLE SPEED	×	×	×	_	SEC-51
B2560: STARTER CONT RELAY	×	×	×	_	SEC-52
B2562: LOW VOLTAGE	_	×	_	_	BCS-44
B2601: SHIFT POSITION	×	×	×	_	SEC-53
B2602: SHIFT POSITION	×	×	×	_	SEC-56
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-59
32604: PNP SW	×	×	×	_	SEC-62
32605: PNP SW	×	×	×	_	<u>SEC-64</u>
32608: STARTER RELAY	×	×	×	_	SEC-66
3260A: IGNITION RELAY	×	×	×	_	PCS-52
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-68
32614: ACC RELAY CIRC	_	×	×	_	PCS-54
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-57
B2616: IGN RELAY CIRC	_	×	×	_	PCS-60
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-71</u>
B2618: BCM	×	×	×		PCS-63
B261A: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-73</u>
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-76
B2621: INSIDE ANTENNA	_	×	_	_	DLK-58
32623: INSIDE ANTENNA	_	×	_	_	DLK-60
B26E1: ENG STATE NO RES	×	×	×	_	SEC-69
326EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	<u>SEC-70</u>
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	MTCC
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-23</u>
C1707: LOW PRESSURE RL	_	_	_	×	
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	MEG
C1710: [NO DATA] RR	_	_	_	×	<u>WT-25</u>
C1711: [NO DATA] RL	_	_	_	×	-

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-28
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>VV 1-20</u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-30</u>
C1734: CONTROL UNIT	_	_	_	×	<u>WT-32</u>

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS Α MANUAL FUNCTION DOES NOT OPERATE ALL COMPONENT В ALL COMPONENT: Diagnosis Procedure INFOID:0000000008284855 ${f 1}$.CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT Check driver seat control unit power supply and ground circuit. Refer to ADP-58, "DRIVER SEAT CONTROL UNIT: Diagnosis Procedure". D Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. Е 2.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT Check automatic drive positioner control unit power supply and ground circuit. Refer to ADP-59. "AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Procedure". F Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CONFIRM THE OPERATION Confirm the operation again. Н Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". >> GO TO 1. NO POWER SEAT POWER SEAT: Diagnosis Procedure INFOID:0000000008284856 ADP 1. CHECK POWER SEAT SWITCH GROUND CIRCUIT Check power seat switch ground circuit. Refer to ADP-81, "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-42, "Intermittent Incident". NO >> GO TO 1. Ν STEERING POSITION FUNCTION DOES NOT OPERATE STEERING POSITION FUNCTION DOES NOT OPERATE: Diagnosis Procedure INFOID:00000000008284857 1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT Check tilt & telescopic switch ground circuit. Refer to ADP-82, "Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace harness or connector. 2.CONFIRM THE OPERATION

< SYMPTOM DIAGNOSIS >

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING: Diagnosis Procedure

INFOID:0000000008284858

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-61, "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-107, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1. SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000008284859

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-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor.

< SYMPTOM DIAGNOSIS >	
Refer to ADP-109, "Component Function Check".	_
Is the inspection result normal?	Α
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	
4. CONFIRM THE OPERATION	В
Check the operation again.	_
Is the result normal?	С
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".	
NO >> GO TO 1. SEAT LIFTING (FRONT)	
· · · · · · ·	D
SEAT LIFTING (FRONT): Diagnosis Procedure	50
1. CHECK LIFTING (FRONT) MECHANISM	Е
Check for the following.	_
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	F
Is the inspection result normal?	
YES >> GO TO 2.	G
NO >> Repair or replace the malfunction parts.	
2.CHECK LIFTING SWITCH (FRONT)	
Check lifting switch (front). Refer to ADP-65, "Component Function Check".	Н
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	
3.CHECK LIFTING MOTOR (FRONT)	_ ADP
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front).	_ ADP
3.CHECK LIFTING MOTOR (FRONT)	
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111, "Component Function Check". Is the inspection result normal? YES >> GO TO 4.	ADP
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION	
3. CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4. CONFIRM THE OPERATION Check the operation again.	
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal?	
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1.	K
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".	K L M
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1.	K L M
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR)	K L M
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR): Diagnosis Procedure	K L M
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK LIFTING (REAR) MECHANISM Check for the following. • Mechanism deformation or pinched foreign materials.	K L M N N O
3. CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4. CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1. CHECK LIFTING (REAR) MECHANISM Check for the following. • Mechanism deformation or pinched foreign materials. • Interference with other parts because of poor installation.	K L M
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK LIFTING (REAR) MECHANISM Check for the following. • Mechanism deformation or pinched foreign materials. • Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2.	K L M N N O
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK LIFTING (REAR) MECHANISM Check for the following. • Mechanism deformation or pinched foreign materials. • Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	K L M N N O
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK LIFTING (REAR) MECHANISM Check for the following. • Mechanism deformation or pinched foreign materials. • Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 2.CHECK LIFTING SWITCH (REAR)	K L M N N O
3.CHECK LIFTING MOTOR (FRONT) Check lifting motor (front). Refer to ADP-111. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42. "Intermittent Incident". NO >> GO TO 1. SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK LIFTING (REAR) MECHANISM Check for the following. • Mechanism deformation or pinched foreign materials. • Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	K L M N N O

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< SYMPTOM DIAGNOSIS >

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-113, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

f 4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000008284862

1. CHECK STEERING TILT MECHANISM

Check for the following.

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK TILT SWITCH

Check tilt switch.

Refer to ADP-69, "Component Function Check".

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-115, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC: Diagnosis Procedure

INFOID:0000000008284863

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?

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	Α
2.CHECK TELESCOPIC SWITCH	
Check telescopic switch. Refer to ADP-71, "Component Function Check".	В
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	С
3. CHECK TELESCOPIC MOTOR	
Check telescopic motor. Refer to ADP-117, "Component Function Check".	D
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	Е
NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION	
Check the operation again.	F
Is the result normal?	
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".	G
NO >> GO TO 1. DOOR MIRROR	
	Н
DOOR MIRROR: Diagnosis Procedure	11
1.CHECK DOOR MIRROR MECHANISM	
Check for the following.	I
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. Is the inspection result normal? 	ADP
 Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. 	ADP
 Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 	ADP K
 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 MIRROR SWITCH 	
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 MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH : Component Function Check".	
 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 MIRROR SWITCH Check mirror switch. Refer to ADP-78, "MIRROR SWITCH: Component Function Check". Is the inspection result normal? 	
 Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. CHECK MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. 	
 Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. CHECK MIRROR SWITCH Check mirror switch. Refer to ADP-78, "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. 	K
 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 MIRROR SWITCH Check mirror switch. Refer to ADP-78, "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 	K
 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 MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK MIRROR MOTOR Check mirror motor. Refer to ADP-119. "Component Function Check". Is the inspection result normal? 	K L M
 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 MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK MIRROR MOTOR Check mirror motor. Refer to ADP-119. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. 	K L M
 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 MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK MIRROR MOTOR Check mirror motor. Refer to ADP-119. "Component Function Check". Is the inspection result normal? 	K L M
• 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 MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK MIRROR MOTOR Check mirror motor. Refer to ADP-119. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	K L M
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 MIRROR SWITCH Check mirror switch. Refer to ADP-78. "MIRROR SWITCH: Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK MIRROR MOTOR Check mirror motor. Refer to ADP-119. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION	K L M

< SYMPTOM DIAGNOSIS >

MEMORY FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000008284865

1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE

1. Perform initialization procedure.

Refer to ADP-9, "SYSTEM INITIALIZATION: Special Repair Requirement".

2. Perform memory storing procedure.

Refer to ADP-9, "MEMORY STORING: Special Repair Requirement".

3. Check memory function.

Refer to ADP-25, "MEMORY FUNCTION: System Description".

Is the inspection result normal?

YES >> Memory function is normal.

NO >> GO TO 3.

3. CHECK SEAT MEMORY SWITCH

Check seat memory switch.

Refer to ADP-73, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch.

4. CHECK DETENTION SWITCH

Check detention switch.

Refer to ADP-83, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

$\mathbf{5}.\mathsf{confirm}$ the operation

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING: Diagnosis Procedure

INFOID:0000000008284866

1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-206, "SEAT SLIDING : Diagnosis Procedure"

$\mathbf{2}.$ CHECK SLIDING SENSOR

Check sliding sensor.

Refer to ADP-87, "Component Function Check".

Is the inspection result normal?

< SYMPTOM DIAGNOSIS >	_
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	А
3. CONFIRM THE OPERATION	^
Check the operation again.	В
Is the result normal?	D
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	
SEAT RECLINING	C
SEAT RECLINING : Diagnosis Procedure	
1. CHECK MANUAL OPERATION	D
Check manual operation.	Е
Is the inspection result normal? YES >> GO TO 2.	
NO >> Refer to ADP-206, "SEAT RECLINING : Diagnosis Procedure"	F
2.CHECK RECLINING SENSOR	
Check reclining sensor. Refer to ADP-90, "Component Function Check".	G
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	Н
3. CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".	
NO >> GO TO 1.	ADP
SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT): Diagnosis Procedure	⁸ K
1.CHECK MANUAL OPERATION	_
Check manual operation.	L
Is the inspection result normal? YES >> GO TO 2.	
NO >> Refer to ADP-207, "SEAT LIFTING (FRONT) : Diagnosis Procedure"	M
2.CHECK LIFTING SENSOR (FRONT)	_
Check lifting sensor (front). Refer to ADP-93, "Component Function Check".	Ν
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	0
3. CONFIRM THE OPERATION	
Check the operation again.	Р
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	
SEAT LIFTING (REAR)	

< SYMPTOM DIAGNOSIS >

SEAT LIFTING (REAR): Diagnosis Procedure

INFOID:0000000008284869

1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-207, "SEAT LIFTING (REAR) : Diagnosis Procedure"

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).

Refer to ADP-96, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:0000000008284870

1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-208, "STEERING TELESCOPIC : Diagnosis Procedure"

2.CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

Refer to ADP-101, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

${f 3.}$ CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

STEERING TILT

STEERING TILT: Diagnosis Procedure

INFOID:0000000008284871

1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-208, "STEERING TILT : Diagnosis Procedure"

2. CHECK TILT SENSOR

Check steering tilt sensor.

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

< SYMPTOM DIAGNOSIS > Is the inspection result normal? Α YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CONFIRM THE OPERATION Check the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1. DOOR MIRROR D DOOR MIRROR: Diagnosis Procedure INFOID:0000000008284872 1. CHECK MANUAL OPERATION Check manual operation. Is the inspection result normal? YES >> GO TO 2. F NO >> Refer to ADP-209, "DOOR MIRROR : Diagnosis Procedure" 2. CHECK MIRROR SENSOR Check mirror sensor. Refer to ADP-103, "DRIVER SIDE: Component Function Check". (Driver side) Refer to ADP-104, "PASSENGER SIDE: Component Function Check". (Passenger side) Н Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CONFIRM THE OPERATION Check the operation again. Is the result normal? ADP YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1. Ν

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MEMORY INDICATE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008284873

1. CHECK MEMORY INDICATOR

Check memory indicator.

Refer to ADP-122, "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-42, "Intermittent Incident".

NO >> GO TO 1.

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE		
Diagnosis Procedure		Α
1.CHECK SYSTEM SETTING	INFOID:0000000008284874	
Check system setting.		В
Refer to ADP-11, "SYSTEM SETTING: Special Repair Requirement".		С
Is the inspection result normal? YES >> Synchronization function is normal.		
NO >> GO TO 2.		D
2.CONFIRM THE OPERATION		
Check the operation again. <u>Is the result normal?</u>		Е
YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". NO >> GO TO 1.		
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ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008284875

2013 EX

1. CHECK SYSTEM SETTING

1. Check system setting.

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

2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.

NO >> GO TO 2.

2. PERFORM SYSTEM INITIALIZATION

1. Perform system initialization.

Refer to ADP-9, "SYSTEM INITIALIZATION: Special Repair Requirement".

2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.

NO >> GO TO 3.

3. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check front door switch (driver side).

Refer to ADP-85, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE Α **Diagnosis Procedure** INFOID:0000000008284876 1. CHECK DOOR LOCK FUNCTION В Check door lock function. Refer to <u>DLK-7</u>, "Work Flow". C Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. D 2.PERFORM MEMORY STORING PROCEDURE Perform memory storing procedure. Refer to ADP-9, "MEMORY STORING: Special Repair Requirement". Е 2. Check Intelligent Key interlock function. Refer to ADP-37, "INTELLIGENT KEY INTERLOCK FUNCTION: System Description". Is the inspection result normal? F >> Intelligent Key inter lock function is normal. YES >> Replace driver seat control unit. Refer to ADP-221, "Removal and Installation". NO Н ADP K L M Ν

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NORMAL OPERATING CONDITION

Description INFOID:0000000008284877

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

Symptom	Cause	Action to take	Reference page
Entry/exit assist function does not operate.	No initialization has been performed.	Perform initialization.	ADP-25
	Entry/exit assist function is disabled. NOTE: The entry/exit assist function are enabled 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.	<u>ADP-25</u>
Seat synchronization function does not operate.	Seat synchronization function is disabled. NOTE: The entry/exit assist function are disabled before delivery (initial setting).	Change the settings.	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).	<u>ADP-25</u>
	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-10
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-25
			Exit assist function: <u>ADP-29</u>
			Entry assist function: ADP-33
			Seat synchronization function: ADP-21
			Intelligent Key interlock function: ADP-37

PRECAUTION

PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Service INFOID:000000008284879

- 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

- 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.

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ed area.

PRECAUTIONS

< PRECAUTION >

- 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

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-129, "Exploded View".

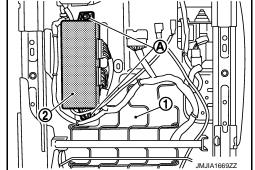
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the driver seat (1). Refer to <u>SE-132, "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

< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

Refer to IP-12, "Exploded View".

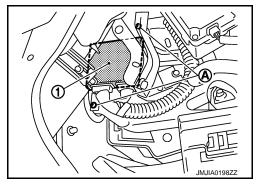
Removal and Installation

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-13.</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

< REMOVAL AND INSTALLATION >

SEAT MEMORY SWITCH

Exploded View

Refer to INT-11, "DRIVER SIDE: Exploded View".

Removal and Installation

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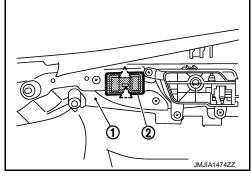
REMOVAL

CAUTION:

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

- 1. Remove the front door finisher (1). Refer to INT-11, "DRIVER SIDE: Removal and Installation".
- 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

< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

Exploded View

Refer to SE-129, "Exploded View".

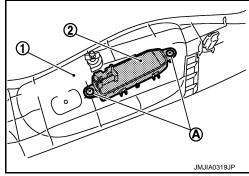
Removal and Installation

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-133</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

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

Exploded View

Refer to IP-12, "Exploded View".

Removal and Installation

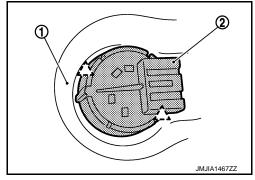
REMOVAL

CAUTION:

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

- 1. Remove the steering column mask (1). Refer to IP-13, "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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