SECTION ADP AUTOMATIC DRIVE POSITIONER

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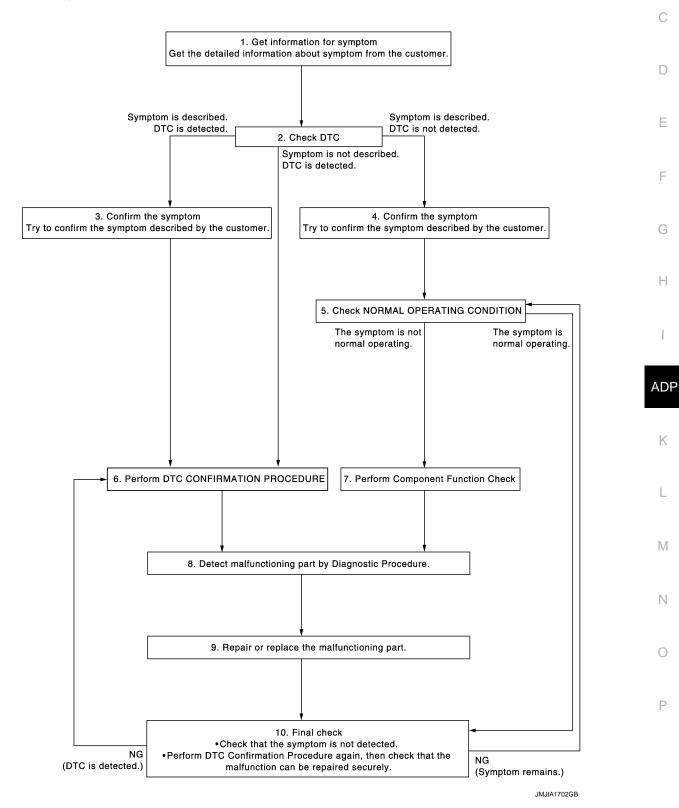
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

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OVERALL SEQUENCE



DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT-III. Refer to ADP-136, "DTC Index"

Is any symptom described and any DTC is displayed?

Symptom is described, DTC is displayed.>>GO TO 3.

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5. CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-198, "Description".

Is the incident normal operation?

>> INSPECTION END YES

NO >> GO TO 7.

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.

NO >> Check intermittent incident. Refer to GI-44, "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.

$9.\mathsf{REPARE}$ OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the malfunctioning part.

>> GO TO 10.

10. FINAL CHECK

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

Are all malfunctions corrected?

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	
	OFF	Perform initialization	
Entry/exit assist	OFF	Set slide amount*1	
Intelligent Key interlock	Erased	Perform initialization	
intelligent key interlock	Eraseu	Perform storing	

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

NOTE:

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement

1.SYSTEM INITIALIZATION

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

>> GO TO 2.

2. SYSTEM SETTING

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

>> GO TO 3.

3.MEMORY STORAGE

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

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

INFOID:0000000006257971

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	
Francisco consist	OFF	Perform initialization	
Entry/exit assist	OFF	Set slide amount ^{*1}	
Intelligent Key interlock	Erased	Perform initialization	
menigent key interiock	Elaseu	Perform storing	

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

NOTE:

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Re-

< BASIC INSPECTION > quirement INFOID:0000000006257972 Α 1.SYSTEM INITIALIZATION Perform system initialization. Refer to ADP-9, "SYSTEM INITIALIZATION: Description". В >> GO TO 2. 2.system setting Perform system setting. Refer to ADP-11, "SYSTEM SETTING: Description". D >> GO TO 3. 3.MEMORY STORAGE Perform memory storage. Refer to ADP-9, "MEMORY STORING: Description". Е >> END SYSTEM INITIALIZATION SYSTEM INITIALIZATION : Description INFOID:0000000006257973 Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced. The entry/exit assist function will not operate normally if no initialization is performed. Н SYSTEM INITIALIZATION: Special Repair Requirement INFOID:0000000006257974 INITIALIZATION PROCEDURE 1. CHOOSE METHOD There are two initialization methods. ADP Which method do you use? With door switch>>GO TO 2. With vehicle speed>>GO TO 4. 2. STEP A-1 Turn ignition switch from ACC to OFF position. >> GO TO 3. 3. STEP A-2 Driver door switch is ON (open) \rightarrow OFF (close) \rightarrow ON (open). N >> END 4. STEP B-1 Drive the vehicle at more than 25 km/h (16 MPH). >> END MEMORY STORING **MEMORY STORING: Description** INFOID:0000000006257975

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.

< BASIC INSPECTION >

MEMORY STORING: Special Repair Requirement

INFOID:0000000006257976

Memory Storage Procedure

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

1.STEP 1

Shift AT selector lever to P position.

>> GO TO 2.

2.STEP 2

Turn ignition switch ON.

>> GO TO 3.

3.STEP 3

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

>> GO TO 4.

4.STEP 4

1. Push set switch.

NOTE:

- Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
- Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second.
- 2. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.

NOTE:

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

NOTE:

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

Do you need linking of Intelligent Key?

YES >> GO TO 6.

NO >> GO TO 5.

5.STEP 5

Confirm the operation of each part with memory operation.

>> END

6.STEP 6

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

>> GO TO 7.

7.STEP 7

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

>> END SYSTEM SETTING

< BASIC INSPECTION >

SYSTEM SETTING: Description

INFOID:0000000006257977

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

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Setting Change

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

SYSTEM SETTING: Special Repair Requirement

INFOID:0000000006257978

1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

With set switch>>GO TO 2

With CONSULT-III>>GO TO 4.

2. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

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>> GO TO 3.

3. WITH SET SWITCH - STEP 2

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

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

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>> END

4. WITH CONSULT-III - STEP 1

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Select "Work support".

>> GO TO 5.

5. WITH CONSULT-III - STEP 2

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

>> END

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Revision: 2011 November ADP-11

SYSTEM DESCRIPTION

AUTOMATIC DRIVE POSITIONER SYSTEM **AUTOMATIC DRIVE POSITIONER SYSTEM**

AUTOMATIC DRIVE POSITIONER SYSTEM: System Diagram

INFOID:0000000006257979 Combination meter AV control unit IPDM E/R BCM TCM ABS ECM ▼ To CAN Lifting sensor (front) Lifting motor (front) Lifting sensor (rear) CAN communication Lifting motor (front) Lifting motor (rear) Lifting motor (rear) Reclining sensor Reclining motor Reclining motor Sliding sensor Sliding motor Sliding motor Driver seat control unit Driver seat Lifting switch (front) Lifting switch (rear) Power seat switch Reclining switch Sliding switch **UART** communication Seat memory switch Telescopic sensor Telescopic motor Telescopic motor Memory switch Mirror sensor Mirror motor Door mirror Tilt sensor Set switch Indicator Tilt motor Tilt motor drive positioner control unit Automatic Door mirror remote control Tilt & telescopic switch Changeover switch Telescopic switch Mirror switch Tilt switch

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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.
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).
	Exit	On exit, the seat moves backward and the steering column moves upward.
Entry/Exit assist function Entry		On entry, the seat and steering column returns from exiting position to the previous driving position.
Intelligent Key interlock functi	on	Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.

NOTE:

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

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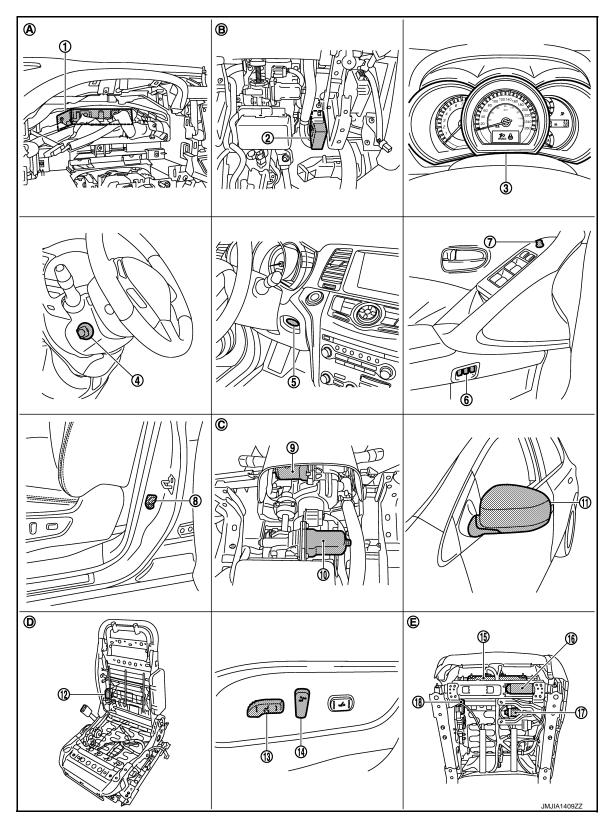
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AUTOMATIC DRIVE POSITIONER SYSTEM: Component Parts Location INFOID:00000000257981



- 1. BCM M118, M119, M122, M123
- 4. Tilt & telescopic switch M102
- 7. Door mirror remote control switch D14
- Automatic drive positioner control unit 3. M75, M104
- 5. Key slot M99
- 8. Front door switch (driver side) B34
- Combination meter
- 6. Seat memory switch D13
- 9. Tilt motor M116

< SYSTEM DESCRIPTION >

10.	Telescopic motor M117	11.	Door mirror (driver side) D3	12.	Reclining motor B461
13.	Sliding, Lifting switch (Power seat switch B459)	14.	Reclining switch (Power seat switch B459)	15.	Driver seat control unit B451,B452
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456
A.	Behind the combination meter	B.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed
D.	View with seat cushion and seatback pad removed	E.	Backside of the seat cushion		

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description INFOID:000000000257982

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 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 • Handle position: LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
TCM	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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.		
CVT 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.		

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< 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
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

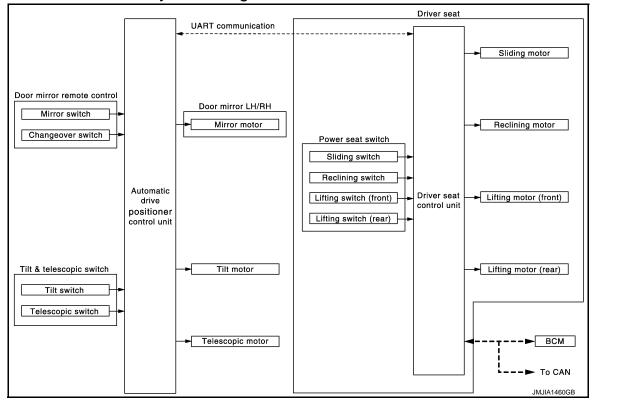
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MANUAL FUNCTION: System Description

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OUTLINE

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

OPERATION PROCEDURE

- 1. Turn ignition switch ON.
- Operate power seat switch, tilt & telescopic switch or door mirror remote control switch.
- The driver seat, steering column or door mirror operates according to the operation of each switch.

Seat operates only up to two places at the same time.

DETAIL FLOW

Seat

Order	Input	Output	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

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< SYSTEM DESCRIPTION >

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

Door Mirror

Order	Input	Output	Control unit condition
1	Door mirror remote control switch	_	The door mirror remote control switch signal is inputted to the 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. UART communication line malfunction and CAN communication line malfunction are detected, the door mirror cannot be operated.

MANUAL FUNCTION: Component Parts Location

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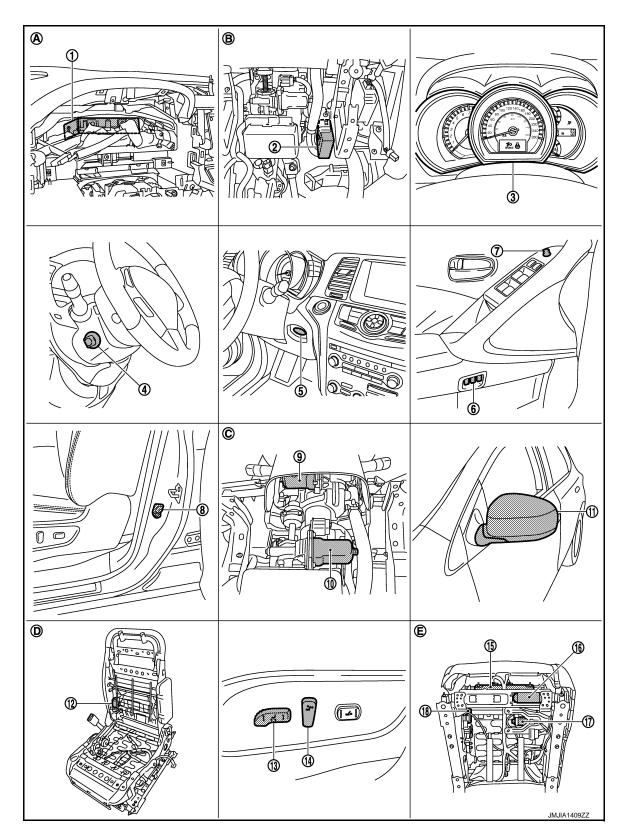
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- 1. BCM M118, M119, M122, M123
- 4. Tilt & telescopic switch M102
- 7. Door mirror remote control switch D14
- 2. Automatic drive positioner control unit 3. M75, M104
- 5. Key slot M99
- 8. Front door switch (driver side) B34
- Combination meter
- 6. Seat memory switch D13
- 9. Tilt motor M116

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Revision: 2011 November ADP-19 2011 MURANO

< SYSTEM DESCRIPTION >

10.	Telescopic motor M117	11.	Door mirror (driver side) D3	12.	Reclining motor B461
13.	Sliding, Lifting switch (Power seat switch B459)	14.	Reclining switch (Power seat switch B459)	15.	Driver seat control unit B451,B452
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456
A.	Behind the combination meter	B.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed
D.	View with seat cushion and seatback pad removed	E.	Backside of the seat cushion		

MANUAL FUNCTION : Component Description

INFOID:0000000006854205

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 switch.
BCM	Transmit the following status to the driver seat control unit via CAN communication. Driver door: OPEN/CLOSE Ignition switch position: ACC/ON Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) Key ID Key switch: Insert/Pull out Intelligent Key Starter: CRANKING/OTHER Handle position: LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
TCM	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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.
CVT 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.

< 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
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.

MEMORY FUNCTION

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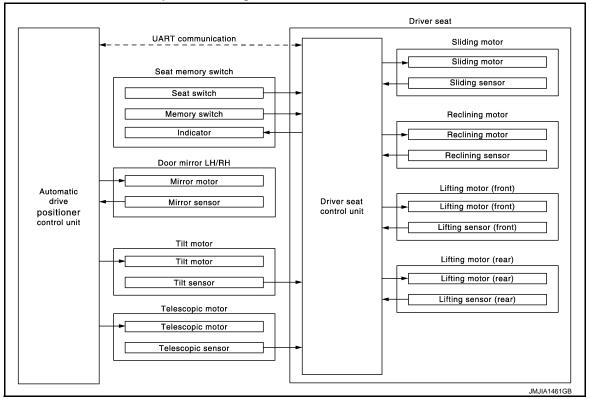
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MEMORY FUNCTION: System Diagram

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MEMORY FUNCTION: System Description

INFOID:0000000006257988

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) operation allows changing to the other driving position.

NOTE:

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

OPERATION PROCEDURE

- Turn ignition switch ON
- 2. Shift position P position
- 3. Press desired memory switch.
- 4. Driver seat, steering and door mirror will move to the memorized position.

OPERATION CONDITION

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

ltem	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 ignition switch position is in OFF position.

DETAIL FLOW

< SYSTEM DESCRIPTION >

Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the driver seat control unit when memory switch 1 or 2 is operated.
2	_	Motors (Seat, Steering, door mirror)	Driver seat control unit operates each motor of seat when it 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 while either of the motors is operating. The driver seat 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. 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 after all motors stop. The driver seat control unit illuminates the memory indicator for 5 seconds.

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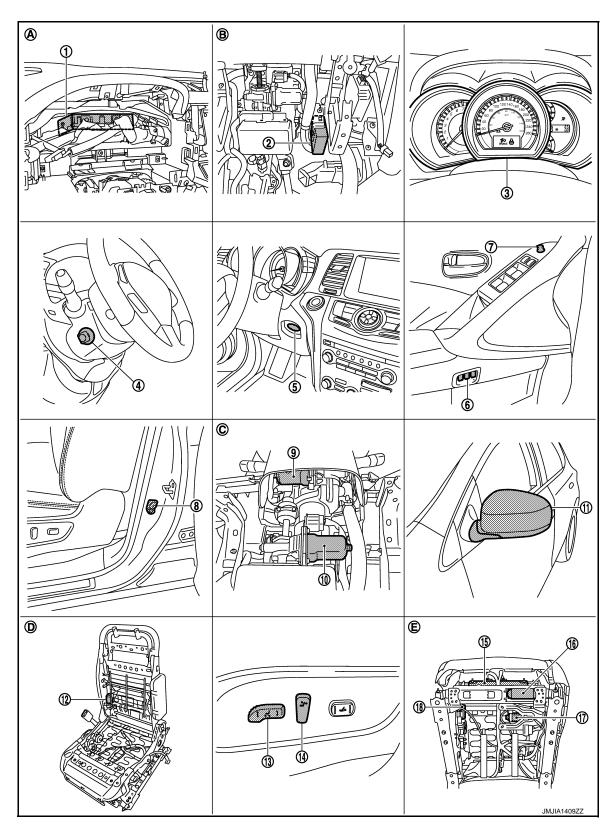
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MEMORY FUNCTION: Component Parts Location

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- 1. BCM M118, M119, M122, M123
- 4. Tilt & telescopic switch M102
- 7. Door mirror remote control switch D14
- Automatic drive positioner control unit 3. M75, M104
- 5. Key slot M99
- 8. Front door switch (driver side) B34
- Combination meter
- 6. Seat memory switch D13
- 9. Tilt motor M116

< SYSTEM DESCRIPTION >

Telescopic motor M117	11.	Door mirror (driver side) D3	12.	Reclining motor B461	
Sliding, Lifting switch (Power seat switch B459)	14.	Reclining switch (Power seat switch B459)	15.	Driver seat control unit B451,B452	Α
Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456	
Behind the combination meter	B.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed	В
	(Power seat switch B459) Sliding motor B461	Sliding, Lifting switch (Power seat switch B459) Sliding motor B461 17.	Sliding, Lifting switch (Power seat switch B459) Sliding motor B461 Behind the combination meter 14. Reclining switch (Power seat switch B459) 17. Lifting motor (front) B455 B. View with instrument driver lower	Sliding, Lifting switch (Power seat switch B459) Sliding motor B461 Behind the combination meter 14. Reclining switch (Power seat switch B459) 15. (Power seat switch B459) 17. Lifting motor (front) B455 18. View with instrument driver lower C.	Sliding, Lifting switch (Power seat switch B459) Sliding motor B461 Behind the combination meter 14. Reclining switch (Power seat switch B459) 15. Driver seat control unit B451,B452 (Power seat switch B459) 18. Lifting motor (rear) B456 C. View with instrument driver lower

MEMORY FUNCTION: Component Description

D. View with seat cushion and seatback E. Backside of the seat cushion

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CONTROL UNITS

pad removed

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 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 Handle position: LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
TCM	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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.	
CVT 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.	

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< 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
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.

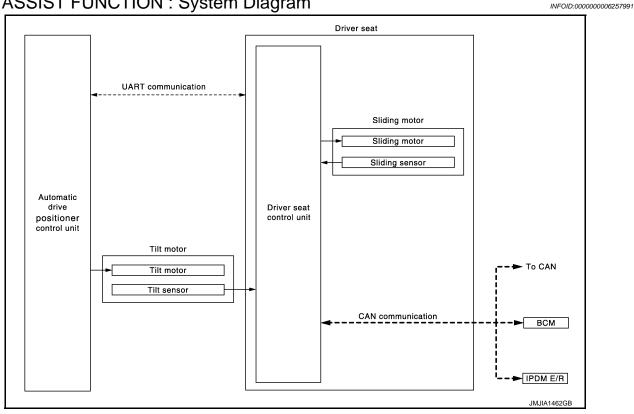
OUTPUT PARTS

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.

EXIT ASSIST FUNCTION

< SYSTEM DESCRIPTION >

EXIT ASSIST FUNCTION: System Diagram



EXIT ASSIST FUNCTION: System Description

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.

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 ADP-9, "SYSTEM INITIALIZATION: Description".

OPERATION PROCEDURE

- Open the driver door with ignition switch in OFF position. (Intelligent Key is not inserted into key slot)
- Driver seat and steering column will move to the exiting position.

OPERATION CONDITION

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

Item	Request status
Ignition position	OFF
System setting [Entry/exit assist function (seat/steering)]	ON
Initialization	Done
Key switch	OFF (Intelligent Key is not inserted into key slot)
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

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< SYSTEM DESCRIPTION >

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)	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 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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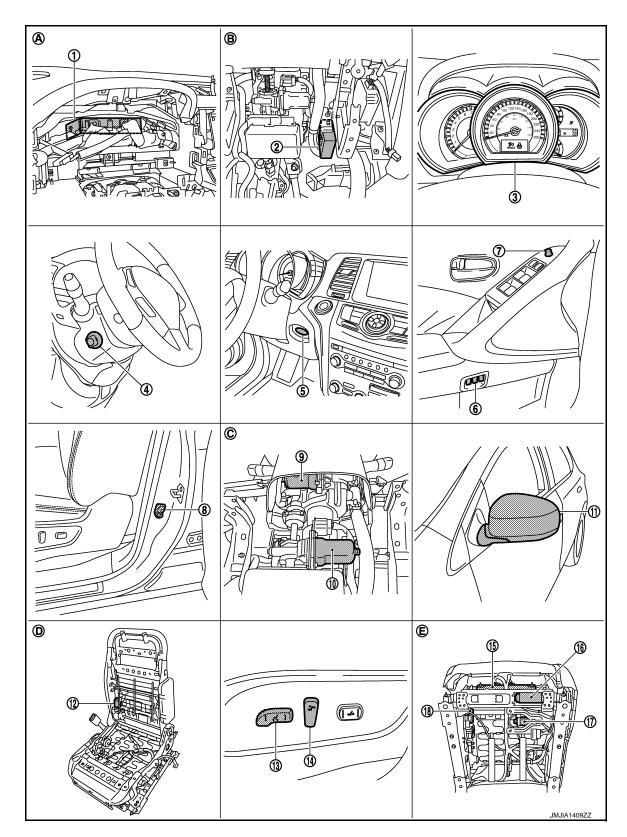
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- BCM M118, M119, M122, M123
- Tilt & telescopic switch M102 4.
- 7. Door mirror remote control switch D14
- Automatic drive positioner control unit 3. M75, M104
- Key slot M99 5.
- 8. Front door switch (driver side) B34
- Combination meter
- 6. Seat memory switch D13
- 9. Tilt motor M116

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ADP-29 Revision: 2011 November **2011 MURANO**

< SYSTEM DESCRIPTION >

10.	Telescopic motor M117	11.	Door mirror (driver side) D3	12.	Reclining motor B461
13.	Sliding, Lifting switch (Power seat switch B459)	14.	Reclining switch (Power seat switch B459)	15.	Driver seat control unit B451,B452
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456
A.	Behind the combination meter	B.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed
D.	View with seat cushion and seatback pad removed	E.	Backside of the seat cushion		

EXIT ASSIST FUNCTION: Component Description

INFOID:0000000006854207

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 switch.
BCM	Transmit the following status to the driver seat control unit via CAN communication. Driver door: OPEN/CLOSE Ignition switch position: ACC/ON Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) Key ID Key switch: Insert/Pull out Intelligent Key Starter: CRANKING/OTHER Handle position: LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
TCM	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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.		
CVT 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.		

< 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
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.	

ENTRY ASSIST FUNCTION

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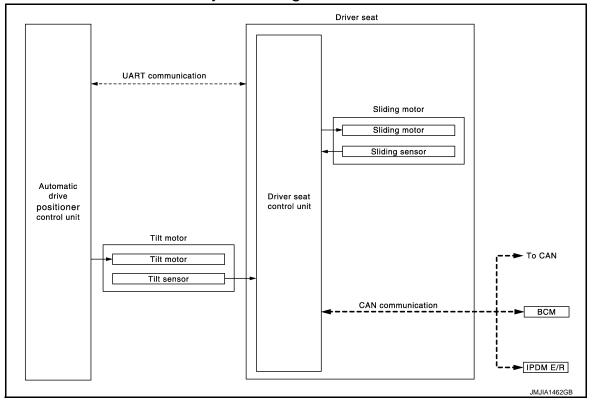
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< SYSTEM DESCRIPTION >

ENTRY ASSIST FUNCTION: System Diagram

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ENTRY ASSIST FUNCTION: System Description

INFOID:0000000006257996

OUTLINE

The seat is in the exiting position when following condition is satisfied, the seat returns from exiting position to the previous driving position.

NOTE:

- This function is set to OFF before delivery (initial setting).
- Further information for the system setting procedure. Refer to <u>ADP-9, "SYSTEM INITIALIZATION: Description"</u>.

OPERATION PROCEDURE

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

OPERATION CONDITION

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

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

DETAIL FLOW

< SYSTEM DESCRIPTION >

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

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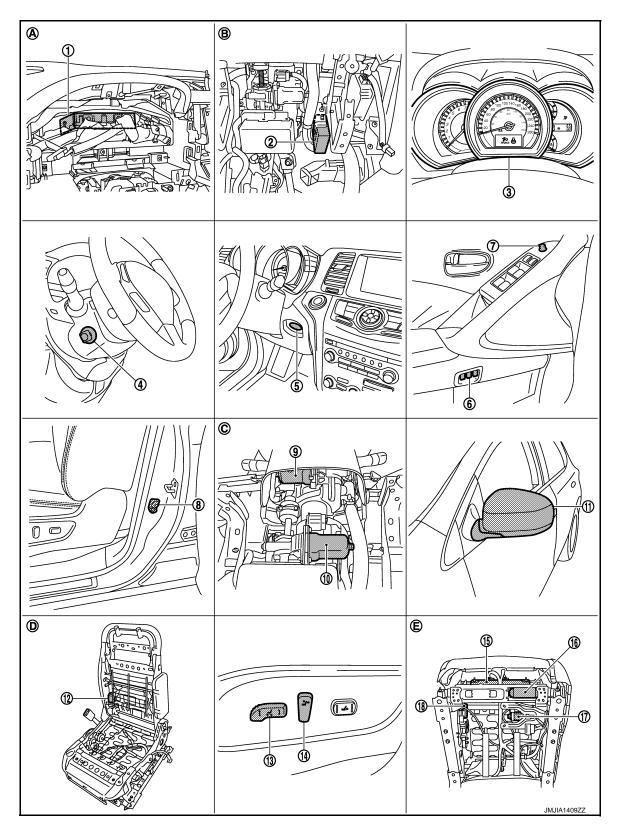
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ENTRY ASSIST FUNCTION: Component Parts Location

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- 1. BCM M118, M119, M122, M123
- 4. Tilt & telescopic switch M102
- 7. Door mirror remote control switch D14
- Automatic drive positioner control unit 3. M75, M104
- 5. Key slot M99
- 8. Front door switch (driver side) B34
- Combination meter
- 6. Seat memory switch D13
- 9. Tilt motor M116

< SYSTEM DESCRIPTION >

10.	Telescopic motor M117	11.	Door mirror (driver side) D3	12.	Reclining motor B461		
13.	Sliding, Lifting switch (Power seat switch B459)	14.	Reclining switch (Power seat switch B459)	15.	Driver seat control unit B451,B452	Α	
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456		
A.	Behind the combination meter	B.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed	В	

ENTRY ASSIST FUNCTION: Component Description

D. View with seat cushion and seatback E. Backside of the seat cushion

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CONTROL UNITS

pad removed

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 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 Handle position: LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
TCM	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

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.		
CVT 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.		

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< 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
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.

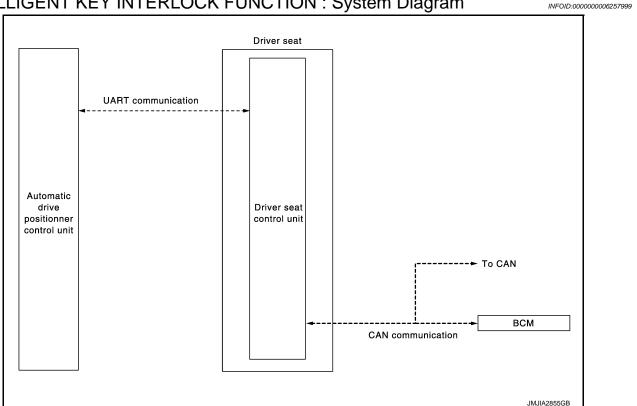
OUTPUT PARTS

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.	

INTELLIGENT KEY INTERLOCK FUNCTION

< SYSTEM DESCRIPTION >

INTELLIGENT KEY INTERLOCK FUNCTION: System Diagram



INTELLIGENT KEY INTERLOCK FUNCTION: System Description

INFOID:0000000006258000

OUTLINE

When unlocking doors by using Intelligent Key or door request switch (driver side), seat slide and steering tilt move directly to the exit assist function.

Other loads move to the exit assist function after performing memory function.

After performs the entry assist function.

OPERATION PROCEDURE

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

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
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

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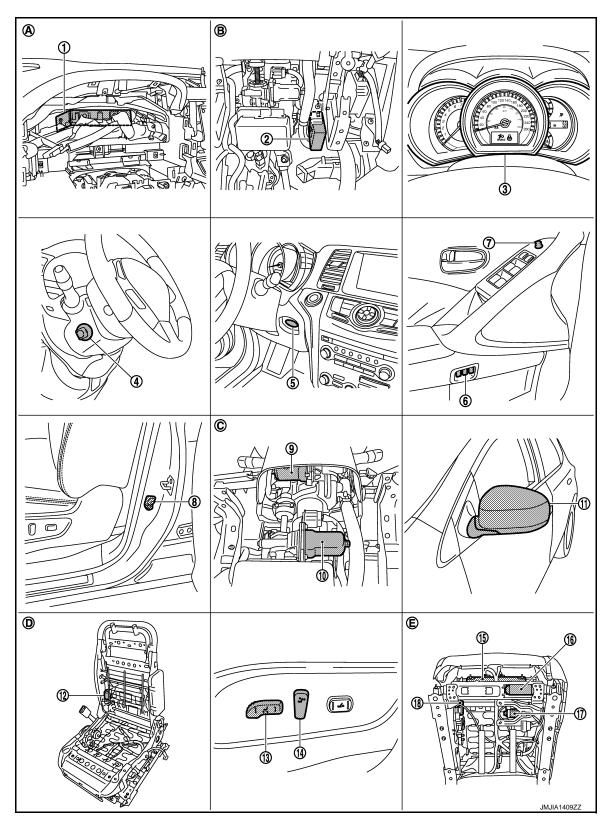
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< SYSTEM DESCRIPTION >

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 seat slide and steering tilt move directly to the exit assist function. Other loads move to the exit assist function after performing memory function.
3	_	_	Driver seat control unit performs the entry assist function.

< SYSTEM DESCRIPTION >

INTELLIGENT KEY INTERLOCK FUNCTION: Component Parts Location INFOID-0000000002550001



- 1. BCM M118, M119, M122, M123
- 4. Tilt & telescopic switch M102
- 7. Door mirror remote control switch D14
- Automatic drive positioner control unit 3. M75, M104
- 5. Key slot M99
- 8. Front door switch (driver side) B34
- Combination meter
- 6. Seat memory switch D13
- 9. Tilt motor M116

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< SYSTEM DESCRIPTION >

10.	Telescopic motor M117	11.	Door mirror (driver side) D3	12.	Reclining motor B461
13.	Sliding, Lifting switch (Power seat switch B459)	14.	Reclining switch (Power seat switch B459)	15.	Driver seat control unit B451,B452
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456
A.	Behind the combination meter	B.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed
D.	View with seat cushion and seatback pad removed	E.	Backside of the seat cushion		

INTELLIGENT KEY INTERLOCK FUNCTION: Component Description INFOID:000000000258002

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) • Key ID signal • Ignition switch signal		

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

Diagnosis Description

INFOID:0000000006258003

The auto drive positioner system can be checked and diagnosed for component operation with CONSULT-III. 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 IDENTIFICATION	Displays part numbers of driver seat control unit parts.		

CONSULT-III Function

INFOID:0000000006258004

SELF-DIAGNOSIS RESULTS Refer to <u>ADP-136</u>, "DTC Index".

DATA MONITOR

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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 (backwar signal.	
LIFT FR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (up) signal.	
LIFT FR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (down) signal.	
LIFT RR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (up) signal.	
LIFT RR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (down) signal.	
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (up) signal.	
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (down) signal.	
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.	
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.	

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.	
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.	
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (up) signal.	
TILT SW-DOWN	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (down) signal.	
TELESCO SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (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	" \ "	_	×	Voltage input from door mirror sensor (passenger side 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	" \ "	1	×	Voltage input from door mirror sensor (driver side) up/down is displayed.	
MIR/SEN LH R-L	" \ "	1	×	Voltage input from door mirror sensor (driver side) left/right is displayed.	
TILT PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.	
TELESCO PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.	
VEHICLE SPEED	_	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].	
P RANG SW CAN	"ON/OFF"	×	×	ON/OFF status judged from the P range switch signal.	
R RANGE (CAN)	"ON/OFF"	×	×	ON/OFF status judged from the R range switch signal.	
DOOR SW-FL	"ON/OFF"	×	×	ON/OFF status judged from the door switch (front driver side) signal.	
DOOR SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the door switch (front passenger side) signal.	
IGN ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ignition switch signal.	
ACC ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ACC switch signal.	
KEY ON SW	"ON/OFF"	×	×	ON/OFF status judged from the key on switch signal.	

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	
KEYLESS ID	_	×	×	Key ID status judged from the key ID signal.	
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock actuator output switch signal.	
VHCL SPEED (ABS)	"ON/OFF"	×	×	ON/OFF status judged from vehicle speed signal.	
HANDLE	"RHD/LHD"	×	×	RHD/LHD status judged from handle position signal.	
TRANSMISSION	"AT or CVT/ MT"	×	×	AT or CVT/MT status judged from transmission.	
STEERING STATUS	NOTE: This item is disp	olayed, but ca	annot monito	red	

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

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

WORK SUPPORT

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

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DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description INFOID:0000000006258005

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

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000006258007

Refer to LAN-15, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

INFOID:0000000006258008

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

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

Description INFOID:0000000006258009

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. CAN Communication Signal Chart, refer to LAN-25, "CAN Communication Signal Chart".

D DTC Logic INFOID:0000000006258010

DTC DETECTION LOGIC

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

Diagnosis Procedure

1. REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.Refer to ADP-201, "Removal and Installation".

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B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000006258013

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

2. REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

>> INSPECTION END

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

Description INFOID:0000000006258014

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

DTC Logic INFOID:0000000006258015

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

2.check sliding motor circuit (power short)

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

	(+)			
Sliding motor		(-)	Voltage (V) (Approx.)	С
Connector	Terminals		(44.5)	
B461	50	Ground	0	 P
D40 I	51	Ground	0	

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.

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B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Driver seat control unit		(–)	Voltage (V) (Approx.)	
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B451	3	Ground	0	
D431	4	Giodila	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

Description INFOID:0000000006258017

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

DTC Logic INFOID:0000000006258018

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- Erase the DTC.
- Perform DTC confirmation procedure. Refer to ADP-49, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

2.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+)			_
Reclining motor		(–)	Voltage (V) (Approx.)	
Connector	Terminals		(11 - 7	
B454	52	Ground	0	 P
D434	53	Giodila	0	

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.

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B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Driver seat control unit		(–)	Voltage (V) (Approx.)
Connector	Terminals		(.FF. 674)
B451	5	Ground	0
D431	6	Ground	U

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

Description INFOID:0000000006258020

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

DTC Logic INFOID:0000000006258021

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2116	STEERING TILT	The automatic drive positioner control unit detects the output of reclining motor output terminal for 0.1 second or more even if the tilt switch is not input.	Automatic drive positioner control unit Tilt motor harness is shorted

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-51, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- Erase the DTC.
- Perform DTC confirmation procedure. Refer to ADP-51, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

2.CHECK TILT MOTOR CIRCUIT (POWER SHORT)

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

	(+)	()	Voltage (V)	
Tilt motor Connector Terminals		(-)	Voltage (V) (Approx.)	
M116	1	Ground	0	F
WITH	2	Ground	U	

ADP-51

Is the inspection result normal?

YES >> GO TO 3.

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NO >> Repair or replace harness or connector.

3.CHECK AUTOMATIC DRIVER POSITIONER CONROL UNIT OUTPUT SIGNAL

Connect automatic drive positioner control unit connector.

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INFOID:0000000006258022

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Automatic drive positioner control unit		(–)	Voltage (V) (Approx.)	
Connector	Connector Terminals		,	
M104	28	Ground	0	
IVI 104	29	Giouna	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2128	UART COMM	The communication between driver seat control unit and auto drive positioner control unit is interrupted for a period of time.	 UART communication line (UART communication line is open or shorted) Driver seat control unit Automatic drive positioner control unit

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.PROCEDURE

Check "Self diagnostic result" with CONSULT-III.

Is the DTC detected?

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

NO >> INSPECTION END

Diagnosis Procedure

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- Perform DTC confirmation procedure. Refer to <u>ADP-51, "DTC Logic"</u>.

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

2.CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver sea	Driver seat control unit		Automatic drive positioner control unit		
Connector	Terminal	Connector Terminal		- Continuity	
B452	32	M75	8	Existed	

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

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B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity	
Connector	Connector Terminal		Continuity	
B452	32		Not existed	

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> Repair or replace harness or connector.

POWER SUPPLY AND GROUND CIRCUIT

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POWER SUPPLY AND GROUND CIRCUIT DRIVER SEAT CONTROL UNIT

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DRIVER SEAT CONTROL UNIT: Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Connector Terminals			
B451 1		Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2.CHECK GROUND CIRCUIT

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

Driver seat control unit			Continuity	
Connector	Connector Terminal		Continuity	
B451 2			Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT: Special Repair Requirement

INFOID:0000000006258027

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Procedure

INFOID:0000000006258028

NOTE:

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

1. CHECK POWER SUPPLY CIRCUIT

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

(+) Automatic drive positioner control unit		(-)	Voltage (V) (Approx.)	
Connector	Connector Terminals			
M104	25	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK GROUND CIRCUIT

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

Automatic drive po	sitioner control unit		Continuity	
Connector Terminal		Ground	Continuity	
M104	M104 30		Existed	

Is the inspection result normal?

YES >> Automatic drive positioner control unit power supply and ground circuit are OK.

NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Special Repair Requirement

INFOID:0000000006258029

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

1. CHECK FUNCTION

Description

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

.

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-57, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK SLIDING 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 Connector Terminals		(-)	Voltage (V) (Approx.)	
		-		
B459	11	Ground	Pottory voltage	
D409	12	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.
- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	11	B459	11	Existed
D432	12	D409	12	LXISIGU

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

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SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity	
Connector	Connector Terminal		Continuity	
B452	11	- Ground	Not existed	
D 4 02	12		NOT EXISTED	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to ADP-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-204, "Removal and Installation"

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258033

1. CHECK SLIDING SWITCH

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

Power seat switch (Sliding switch) Terminal		Condition		Continuity
				Continuity
	11	Sliding switch (backward)	Operate	Existed
35	11		Release	Not existed
30	12	Sliding switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-204, "Removal and Installation".

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Description

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

Component Function Check

Component i unoueri Cricon

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

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

Is the indication normal?

1. CHECK FUNCTION

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-59, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK RECLINING SWITCH SIGNAL

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

((+)		V-14 (V)
Power s	eat switch	(–)	Voltage (V) (Approx.)
Connector	Terminals		
B459	13	Ground	Pottory voltage
D 4 09	14	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK RECLINING SWITCH CIRCUIT

- Turn ignition switch OFF.
- 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 se	eat switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	13	B459	13	Existed
	14	D409	14	LXISTEU

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

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RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	t control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	13	Giodila	Not existed
D402	14		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK RECLINING SWITCH

Refer to ADP-60, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-204, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258037

1. CHECK RECLINING SWITCH

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

Power seat switch (Reclining switch)		Condition		Continuity
Terr	Terminal		Condition	
	13	Reclining switch (backward)	Operate	Existed
35	13	recilling switch (backward)	Release	Not existed
33	14	Reclining switch (forward)	Operate	Existed
	14	Reclining Switch (lonward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-204, "Removal and Installation".

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description INFOID:000000000258038

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

1.check function

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

Monitor item	Co	ondition	Status
LIFT FR SW-UP	Lifting switch front (up)	Operate	ON
LIFT FK SW-OF	Litting Switch from (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
LILI LU OM-DIN	Litting Switch Horit (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1. CHECK LIFTING SWITCH (FRONT) SIGNAL

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

(Power se	(+) Power seat switch		Voltage (V) (Approx.)
Connector	Terminals	1	(πρρίολ.)
B459	17	Ground	Pottory voltage
D409	18	Giouna	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.
- 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 se	eat switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	17	B459	17	Existed
D432	18	D439	18	LAISIEU

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
B452	17	Giodila	Not existed
D+02	18		140t CAISted

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-62, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-204, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258041

1. CHECK LIFTING SWITCH (FRONT)

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

Power seat switch	Power seat switch (lifting switch front) Terminal		Condition	
Terr				
	17	Lifting switch front	Operate	Existed
35	17	(down)	Release	Not existed
33	18	Lifting switch front (up)	Operate	Existed
	10	Litting Switch from (up)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-204, "Removal and Installation".

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description INFOID:0000000006258042

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:0000000006258043

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1. CHECK FUNCTION

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

Monitor item	C	ondition	Status
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
LIFT KK SW-OF	Litting Switch rear (up)	Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
LIFT KK OW-DIN	Litting Switch rear (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000006258044

1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

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(+) Power seat switch		(–)	Voltage (V) (Approx.)	
Connector	Terminals			
B459	15	Ground	Pattory voltage	
D409	16	Giouna	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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2.check lifting switch (rear) circuit

- Turn ignition switch OFF.
- 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
B452	15		15	Existed
D432	16	B459	16	Existed

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

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	15	Giodila	Not existed
D402	16		INOL EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-64, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-204, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258045

1. CHECK LIFTING SWITCH (REAR)

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

Power seat switch (lifting switch rear)		Condition		Continuity
Terminal				
	15	Lifting switch rear (up) Operate Release	Operate	Existed
35	15		Not existed	
33	16	Lifting switch rear (down)	Operate	Existed
	10		Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-204, "Removal and Installation".

TILT SWITCH

Description INFOID:0000000006258046

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

1.CHECK FUNCTION

- 1. Select "TILT SW-UP", "TILT SW-DOWN" in "Data monitor" mode with CONSULT-III.
- Check tilt switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1. CHECK TILT SWITCH SIGNAL

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

(+) Tilt & telescopic switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(· 'PP'O''')	
M102	2	Ground	5	
WITOZ	3	Ground	5 	

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 positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M75	1	M102	2	Existed
Wi7 5	13	WITOZ	3	LAISIEU

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
M75	1	Giodila	Not existed
WITS	13		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK TILT SWITCH

Refer to ADP-66, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-205, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258049

1. CHECK TILT SWITCH

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

Tilt switch Terminal		Condition		Continuity
1 _	2	Release	Not existed	
	3	Tilt switch (downward)	Operate	Existed
	3	The Switch (downward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-205, "Removal and Installation".

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Description

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

Component Function Check

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1. CHECK TELESCOPIC SWITCH SIGNAL

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

(+)				
Tilt & telescopic switch		(–)	Voltage (V) (Approx.)	
Connector	Terminals		, , ,	
M102	5	Ground	5	
WITOZ	4	Ground	5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TELESCOPIC SWITCH CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M75	7	M102	5	Existed
10175	19	WITOZ	4	LAISIEU

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

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TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive	Automatic drive positioner control unit		Continuity
Connector	Connector Terminal		
M75	7	Ground	Not existed
WI7 3	19		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK TELESCOPIC SWITCH

Refer to ADP-68, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-205, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258053

1. CHECK TELESCOPIC SWITCH

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

Telescopic switch Terminal		Condition		Continuity
1011	_	Telescopic switch (for-	Operate	Existed
1	5	ward)	Release	Not existed
4	4	Telescopic switch (backward)	Operate	Existed
	4		Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-205, "Removal and Installation".

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Description INFOID:0000000006258054

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

Component Function Check

1. CHECK FUNCTION

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

Monitor item		Condition	
MEMORY SW 1	Momory quitoh 1	Push	ON
	Memory switch 1	Release	OFF
MEMORY SW 2	Momory switch 2	Push	ON
	Memory switch 2	Release	OFF
SET SW	Cot quitab	Push	ON
	Set switch	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1. CHECK SEAT MEMORY SWITCH SIGNAL

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

(+)		(-)		
Driver seat control unit			Voltage (V) (Approx.)	
Connector	Terminals		(11 - 7	
	27			
B452	28	Ground	5	
	29			

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK MEMORY SWITCH CIRCUIT

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

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SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver se	at control unit	Seat memory switch		control unit Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity		
	27	D13	1			
B452	28		2	Existed		
	29		3			

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

Driver seat control unit			Continuity
Connector	Terminal		Continuity
	27	Ground	
B452	28		Not existed
	29		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3. CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch			Continuity
Connector	Terminal	Ground	Continuity
D13	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-70, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to ADP-203, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258057

1. CHECK SEAT MEMORY SWITCH

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

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Seat memory switch			Condition	
Ter	Terminal		Condition	Continuity
	_	Mamory quitab 1	Push	Existed
ı	Memory switch 1	Release	Not existed	
4	4 2	Mamanu avvitala O	Push	Existed
4		Memory switch 2	Release	Not existed
3	2	O at a witch	Push	Existed
	Set switch	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to <u>ADP-203, "Removal and Installation"</u>.

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DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH: Description

INFOID:0000000006258058

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:0000000006258059

1. CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.

NO >> Refer to ADP-72, "CHANGEOVER SWITCH: Diagnosis Procedure".

CHANGEOVER SWITCH: Diagnosis Procedure

INFOID:0000000006258060

1. CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)			Voltage (V) (Approx.)	
Door mirror remote control switch		(–)		
Connector	Terminal		(+ +	
D14	10	Ground	5	
D14	11	- Ground	3	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.check changeover switch circuit

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

Automatic drive p	Automatic drive positioner control unit Door mirror remote control switch		Continuity	
Connector	Terminal	Connector Terminal		Continuity
M75	2	D14	11	Existed
IVI7 5	14	014	10	LXISIEU

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

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	Automatic drive positioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	2	Ground	Not existed
WI7 3	14	-	Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

NO >> Repair or replace harness.

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

Turn ignition switch OFF.

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

Door mirror remote control switch			Continuity
Connector	Terminal	Ground	Continuity
D14	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch (changeover switch).

Refer to ADP-73, "CHANGEOVER SWITCH: Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace door mirror remote control switch (changeover switch). Refer to MIR-74, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

CHANGEOVER SWITCH: Component Inspection

1. CHECK CHANGEOVER SWITCH

- Turn ignition switch OFF.
- Disconnect door mirror remote control switch connector. 2.
- Check continuity between door mirror remote control switch terminals.

Door	Door mirror remote control switch		Condition		Continuity
Connector	Terr	minal	Con	Condition	
	10			LEFT	Existed
D14	D14 7	7	Changeover switch	Other than above	Not existed
D14		,		RIGHT	Existed
				Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to MIR-74, "Removal and Installation".

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MIRROR SWITCH: Description

INFOID:0000000006258062

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:0000000006258063

1. CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Mirror switch function is OK.

NO >> Refer to ADP-74, "MIRROR SWITCH: Diagnosis Procedure".

MIRROR SWITCH: Diagnosis Procedure

INFOID:0000000006258064

${f 1}$.CHECK MIRROR SWITCH INPUT SIGNAL

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

	(+)		Voltage (V) (Approx.)
Door mirror re	Door mirror remote control switch		
Connector	Terminal		(. 44.5)
	4	Ground	5
D14	12		
D14	13		
	15		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK MIRROR SWITCH CIRCUIT

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

Automatic drive p	Automatic drive positioner control unit		ote control switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3	D14	15	
M75	4		13	Existed
IVI75	15		12	Existed
	16		4	

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

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	Automatic drive positioner control unit		Continuity
Connector	Terminal		Continuity
	3	Ground	Not existed
M75	4		
IVI75	15		
	16		

Is the inspection result normal?

>> Replace automatic drive positioner control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness.

3.check door mirror remote control switch ground circuit

Turn ignition switch OFF.

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

Door mirror remote control switch			Continuity
Connector	Terminal	Ground	Continuity
D14	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK MIRROR SWITCH

Check door mirror remote control switch (mirror switch).

Refer to ADP-75, "MIRROR SWITCH: Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

>> Replace door mirror remote control switch (mirror switch). Refer to MIR-74, "Removal and Instal-NO lation".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

MIRROR SWITCH: Component Inspection

1. CHECK MIRROR SWITCH

- Turn ignition switch OFF.
- Disconnect door mirror remote control switch connector.
- Check continuity between door mirror remote control switch terminals.

Door mirror remote control switch		Condition		Continuity	
Connector	Terr	minal		oridition	Continuity
	4			RIGHT	Existed
	4			Other than above	Not existed
	13	7	LEFT	Existed	
D14			Other than above	Not existed	
D14	15		Mirror switch	UP	Existed
	12			Other than above	Not existed
				DOWN	Existed
	12			Other than above	Not existed

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< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to MIR-74, "Removal and Installation".

POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000006258066

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	35		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> Repair or replace harness or connector.

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TILT &TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000006258067

1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

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

Tilt & telescopic switch			Continuity
Connector	Terminal	Ground	Continuity
M102	1		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> Repair or replace harness.

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

FRONT DOOR SWITCH (DRIVER SIDE)

Description INFOID:0000000006258068

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

Component Function Check

INFOID:0000000006258069

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1. CHECK FUNCTION

- 1. Select "DOOR SW-DR" in "Data monitor" mode with CONSULT-III.
- 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 OW-DIX	(driver side)	Close	OFF

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-79</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000006258070

1. CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL

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

·	(+) Front door switch(driver side)		Signal (Reference value)
Connector	Terminals		
B34	2	Ground	(V) 15 10 5 0 10 ms JPMIA0011GB

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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2. CHECK FRONT DOOR SWITCH (DRIVER SIDE) CIRCUIT

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

В	BCM		Front door switch(driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M123	150	B34	2	Existed

3. Check continuity between BCM connector and ground.

BCM			Continuity
Connector Terminal		Ground	Continuity
M123	150		Not existed

Is the inspection result normal?

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace BCM. Refer to BCS-85, "Exploded View".

NO >> Repair or replace harness or connector.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Refer to ADP-80, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front door switch (driver side).Refer to <u>DLK-348</u>, "Removal and Installation"

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000006258071

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.

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door switch (driver side). Refer to DLK-348, "Removal and Installation".

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Description

- The sliding sensor is installed to the seat 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. Select "SLIDE PULSE" in "Data monitor" mode with CONSULT-III.
- 2. 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-81</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1. CHECK SLIDING SENSOR SIGNAL

Turn ignition switch ON.

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

(+	+)				Signal
Driver seat	control unit	(-)	Cor	ndition	Signal (Reference value)
Connector	Terminals				, , , , , , , , , , , , , , , , , , , ,
B452	19	Ground	Seat sliding	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> GO TO 2.

2.CHECK SLIDING SENSOR CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect driver seat control unit and sliding sensor connector.
- 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	control unit	Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	19	B461	19	Existed

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

Driver seat control unit			Continuity
Connector Terminal		Ground	Continuity
B452	19		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 motor harness connector and ground.

(+) Sliding motor		(-)	Voltage (V) (Approx.)
Connector	Connector Terminals		(лиргох.)
B461	33	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat	Driver seat control unit		Sliding motor		
Connector	Terminal	Connector Terminal		- Continuity	
B452	33	B461	33	Existed	

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

${f 5.}$ CHECK SLIDING SENSOR GROUND

- 1. Turn ignition switch OFF.
- 2. Check continuity between sliding sensor harness connector and ground.

Sliding motor			Continuity	
Connector	Connector Terminal		Continuity	
B461	45		Existed	

Is the inspection result normal?

YES >> Replace sliding motor.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

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RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Description INFOID:0000000006258075

- 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:0000000006258076

1. CHECK FUNCTION

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

Monitor item	Condition		Value
	Seat reclining	Operate (forward)	Change (increase)*1
RECLN 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-84, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006258077

1. CHECK RECLINING SENSOR SIGNAL

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

	+) t control unit Terminals	(–)	Condition		Signal (Reference value)
B452	20	Ground	Seat reclining	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> GO TO 2.

2.CHECK RECLINING SENSOR CIRCUIT

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

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	20	B454	20	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	20		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.
- Check voltage between reclining motor harness connector and ground.

(+) Reclining motor			V 14 0 0	
		(–)	Voltage (V) (Approx.)	
Connector	Terminals		(
B454	33	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.
- Check continuity between driver seat control unit harness connector and reclining motor harness connec-

Driver sea	Driver seat control unit		Reclining motor	
Connector	Terminal	Connector	Terminal	Continuity
B452	33	B454	33	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

5.CHECK RECLINING SENSOR GROUND

- Turn ignition switch OFF.
- Check continuity between reclining motor harness connector and ground.

Reclining motor			Continuity
Connector	Terminal	Ground	Continuity
B454	46		Existed

Is the inspection result normal?

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RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace reclining motor.

NO >> Repair or replace harness or connector.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Description INFOID:0000000006258078

- The lifting sensor (front) is installed to the seat 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

- Select "LIFT FR PULSE" in "Data monitor" mode with CONSULT-III.
- 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-87, "Diagnosis Procedure". NO

Diagnosis Procedure

1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+	-)				V 16 (0.0)
Driver seat	control unit	(-)	Condition		Voltage (V) (Approx.)
Connector	Terminals				(+)
B452	22	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-201, "Removal and Installation".

NO >> GO TO 2.

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2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

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

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LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit	Lifting mo	otor (front)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	22	B455	22	Existed

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	22		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

${f 3.}$ CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

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

(+) Lifting motor (front)		(–)	Voltage (V) (Approx.)
Connector	Terminals		(11 - 7
B455	33	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	Driver seat control unit		Lifting motor (front)	
Connector	Terminal	Connector Terminal		Continuity
B452	33	B455	33	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (FRONT) GROUND

- Turn ignition switch OFF.
- 2. Check continuity between lifting motor (front) harness connector and ground.

Lifting motor (front)			Continuity
Connector	Terminal	Ground	Continuity
B455	48		Existed

Is the inspection result normal?

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

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

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LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description

- The lifting sensor (rear) is installed to the seat 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:0000000006258082

1. CHECK FUNCTION

- 1. Select "LIFT RR PULSE" in "Data monitor" mode with CONSULT-III.
- 2. Check lifting sensor (rear) signal under the following conditions.

Monitor item	Condition		Value
		Operate (Up)	Change (increase)*1
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-90, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006258083

1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

	+) t control unit Terminals	(-)	Condition		Voltage (V) (Approx.)
B452	21	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 <u>ADP-201, "Removal and Installation"</u>.

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 me	otor (rear)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	21	B456	21	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	21		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.check lifting sensor (rear) power supply

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

(+) Lifting motor (rear)		(-)	Voltage (V) (Approx.)
B456	33	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5. NO >> GO TO 4.

4. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seaf	Driver seat control unit		Lifting motor (rear)		
Connector	Terminal	Connector Terminal		Continuity	
B452	33	B456	33	Existed	

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (REAR) GROUND

- 1. Turn ignition switch OFF.
- 2. Check the continuity between lifting motor (rear) harness connector and ground.

Lifting motor (rear)			Continuity
Connector	Terminal	Ground	Continuity
B456	47		Existed

Is the inspection result normal?

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LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace lifting motor (rear).

NO >> Repair or replace harness or connector.

TILT SENSOR

Description INFOID:0000000006258084

- The tilt sensor is installed to the steering column assembly.
- The pulse signal is inputted to the driver seat control unit when the tilt is operated.
- The driver seat control unit counts the pulse and calculates the tilt amount of the steering column.

Component Function Check

1. CHECK FUNCTION

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

Monitor item	Condition		Value
		Operate (UP-WARD	Change (increase)*1
TILT PULSE	Steering column	Operate (DOWN-WARD)	Change (decrease)
		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-93, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK TILT SENSOR SIGNAL

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

Driver seat Connector		(-)	Condition		Voltage (V) (Approx.)
B452	30	Ground	Steering column	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> GO TO 2.

2.CHECK TILT SENSOR CIRCUIT

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

Driver seat	Driver seat control unit		Tilt motor	
Connector	Terminal	Connector	Terminal	Continuity
B452	30	M116	5	Existed

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TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	5		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.
- Check voltage between tilt motor harness connector and ground.

(+) Tilt motor		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(/\ppiox.)	
M116	4	Ground	Battery voltage	

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 motor harness connector.

Automatic drive po	Automatic drive positioner control unit		Tilt motor	
Connector	Terminal	Connector	Terminal	Continuity
M104	27	M116	4	Existed

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M104	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-202, "Removal and Installation"</u>.

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 motor harness connector.

Automatic drive po	sitioner control unit	Tilt motor		tioner control unit Tilt motor Continuity		Continuity
Connector	Terminal	Connector	Terminal	Continuity		
M75	20	M116	6	Existed		

Is the inspection result normal?

YES >> Replace tilt motor.

NO >> Repair or replace harness or connector.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Description INFOID:0000000006258087

- The telescopic sensor is installed to the steering column assembly.
- The pulse signal is inputted to the driver seat control unit when telescopic is performed.
- The driver seat control unit counts the pulse and calculates the telescopic amount of the steering column.

Component Function Check

1. CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-95, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK TELESCOPIC SENSOR SIGNAL

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

(+ Driver seat		(–) Condition		dition	Voltage (V) (Approx.)
Connector	Terminals				(прргол.)
B452	31	Ground	Steering column	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-201, "Removal and Installation".

NO >> GO TO 2.

2.CHECK TELESCOPIC SENSOR CIRCUIT

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

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TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Telescopic motor	
Connector	Terminal	Connector	Terminal	Continuity
B452	31	M117	5	Existed

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	31		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 driver seat control unit connector.
- 2. Turn ignition switch ON.
- Check voltage between telescopic motor harness connector and ground.

(+) Telescopic motor Connector Terminals		(-)	Voltage (V)	
			(Approx.)	
M117	4	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive po	sitioner control unit	Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M104	27	M117	4	Existed

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

Automatic drive positioner control unit			Continuity
Connector Terminal		Ground	Continuity
M104	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

NO >> Repair or replace harness or connecter.

5. CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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

Automatic drive po	sitioner control unit	Telescopic motor		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	20	M117	6	Existed	

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

1 41		14	
is the	inspection	result	normal?

YES >> Replace telescopic motor.

NO >> Repair or replace harness or connecter.

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< DTC/CIRCUIT DIAGNOSIS >

MIRROR SENSOR DRIVER SIDE

DRIVER SIDE: Description

INFOID:0000000006258090

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

DRIVER SIDE : Component Function Check

INFOID:0000000006258091

1. CHECK FUNCTION

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

Monitor item	Condition	Value
MIR/SEN LH U-D	December (1)	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)
MIR/SEN LH R-L	Door mirror (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

NO >> Perform diagnosis procedure. Refer to <u>ADP-98, "DRIVER SIDE : Diagnosis Procedure".</u>

DRIVER SIDE: Diagnosis Procedure

INFOID:0000000006258092

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

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

(+) Door mirror (driver side)		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(, , , , , , , , , , , , , , , , , , ,	
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.
- 3. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive po	ositioner control unit	Door mirror (driver side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	21	D3	23	Existed	

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

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Terminal	rminal Ground	Continuity
M75	21		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.check door mirror (driver side) sensor ground

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

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

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

Automatic drive pc	ositioner control unit	Door mirror (driver side)		- Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M75	6	- D3	21	Existed	
IVI73	18	Do	22	EXISTEC	

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
MZE	6	Ground	Not existed
M75	18		Not existed

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE: Description

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

PASSENGER SIDE: Component Function Check

1. CHECK FUNCTION

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

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< DTC/CIRCUIT DIAGNOSIS >

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-100, "PASSENGER SIDE : Diagnosis Procedure"</u>.

PASSENGER SIDE: Diagnosis Procedure

INFOID:0000000006258095

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

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

(+) Door mirror (passenger side)		(-)	Voltage (V) (Approx.)	
Connector	Connector Terminals		(· • • • • • • • • • • • • • • • • • • •	
D43	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.
- 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
M75	21	D43	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
M75	21		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

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

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	20	D43	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. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and door mirror (passenger side) connector.
- 3. Check continuity between automatic drive positioner control unit harness connector and door mirror (passenger side) harness connector.

Automatic drive p	ositioner control unit	Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	5	D43	21	Existed
10173	17	043	22	LAISIEU

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	5	5 Ground	
Wi75	17		Not existed

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

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SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

Description

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

Component Function Check

INFOID:0000000006258097

1. CHECK FUNCTION

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

Test 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-102, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006258098

1. CHECK SLIDING MOTOR POWER SUPPLY

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

	(+) Sliding motor		(–) Cor		Voltage (V) (Approx.)
Connector	Terminals				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				OFF	0
	51	Ground	SEAT SLIDE	FR (forward)	Battery voltage
B461				RR (backward)	0
B401	50			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.

Driver seat	control unit	Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	4	B461	51	Existed
D+01	3	D401	50	LAISIEU

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	4	Ground	Not existed
D431	3		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING MOTOR

Description

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

Component Function Check

INFOID:0000000006258100

1. CHECK FUNCTION

- Select "SEAT RECLINING" in "Active test" mode with CONSULT-III.
- Check the reclining motor operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000006258101

1. CHECK RECLINING MOTOR POWER SUPPLY

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

	(+) Reclining motor		Cor	Condition	
Connector	Connector Terminals				(Approx.)
	53	53 Ground	SEAT RECLINING	OFF	0
				FR (forward)	Battery voltage
B454				RR (backward)	0
D434				OFF	0
	52		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.
- 2. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and reclining motor harness connector.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	6	B454	53	Existed
D431	5	D404	52	Existed

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

Driver sea	t control unit	- Continui	Continuity	
Connector	Terminal		Continuity	
B451	6		Not existed	
	5		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

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LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Description

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

Component Function Check

INFOID:0000000006258103

1. CHECK FUNCTION

- Select "SEAT LIFTER FR" in "Active test" mode with CONSULT-III.
- 2. Check the lifting motor (front) operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000006258104

1. CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

	(+) Lifting motor (front)		Cor	Condition	
Connector	Connector Terminals				(Approx.)
	56		SEAT LIFTER FR	OFF	0
		56 Ground		UP	0
B455				DWN (down)	Battery voltage
B433				OFF	0
	57			UP	Battery voltage
			DWN (down)	0	

Is the inspection result normal?

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

NO >> GO TO 2.

2.CHECK LIFTING MOTOR (FRONT) CIRCUIT

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

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector Terminal		Continuity
B451	9	B455	56	Existed
D40 I	10	D400	57	Existed

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

Driver sea	t control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B451	9	Not exis	Not existed	
B451	10		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (REAR)

Description INFOID:0000000000258105

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

Component Function Check

INFOID:0000000006258106

1. CHECK FUNCTION

- 1. Select "SEAT LIFTER RR" in "Active test" mode with CONSULT-III.
- Check the lifting motor (rear) operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:0000000006258107

1. CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

	(+) Lifting motor (rear)		Cor	ndition	Voltage (V) (Approx.)
Connector	Connector Terminals				(, , , , , , , , , , , , , , , , , , ,
	55	55 Ground	SEAT LIFTER RR	OFF	0
				UP	Battery voltage
B456				DWN (DOWN)	0
B430				OFF	0
	54			UP	0
			DWN (DOWN)	Battery voltage	

Is the inspection result normal?

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

NO >> GO TO 2.

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

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

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	t control unit	Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	8	B456	55	Existed
D431	7	D400	54	LXISIEU

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	8	Giodila	Not existed
D40 I	7		INOL EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TILT MOTOR

Description INFOID:0000000000258108

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

Component Function Check

INFOID:0000000006258109

1. CHECK FUNCTION

- 1. Select "TILT MOTOR" in "Active test" mode with CONSULT-III.
- 2. 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-110, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006258110

1. CHECK TILT MOTOR POWER SUPPLY

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

	(+) Tilt motor		Condition		Voltage (V) (Approx.)
Connector	Connector Terminals				(, , , , , , , , , , , , , , , , , , ,
				OFF	0
	1	1 Ground	TILT MOTOR	UP	0
M116				DWN (down)	Battery voltage
WITTO	WITTO			OFF	0
	2			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

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

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M104	28	M116	1	Existed
W104	29	WITO	2	Existed

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

Automatic drive po	sitioner control unit		Continuity	
Connector	Connector Terminal		Continuity	
M104	28	Ground	Not existed	
IVI I O T	29		INOL EXISTEN	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-202. "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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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

INFOID:0000000006258112

1. CHECK FUNCTION

- 1. Select "TELESCO MOTOR" in "Active test" mode with CONSULT-III.
- 2. Check the telescopic motor operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-112, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006258113

1. CHECK TELESCOPIC MOTOR POWER SUPPLY

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

	(+) Telescopic motor		(–) Condition		Voltage (V) (Approx.)
Connector	Connector Terminals				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				OFF	0
	1	Ground	TELESCOPIC MO-	FR (forward)	0
M117				RR (backward)	Battery voltage
IVITI	WITT		TOR	OFF	0
	2			FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

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

NO >> GO TO 2.

2.CHECK TELESCOPIC MOTOR CIRCUIT

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

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	29	M117	2	Existed
IVI/5	26	IVIII/	1	LXISIEU

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

Automatic drive po	ositioner control unit		Continuity
Connector	Connector Terminal		Continuity
M75	29	Ground	Not existed
IVI75	26		Not existed

Is the inspection result normal?

>> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation". YES

NO >> Repair or replace harness or connector.

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DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR MOTOR

Description INFOID:0000000006258114

It makes mirror face operate from side to side and up and down with the electric power that AUTOMATIC DRIVE POSITIONER CONTROL UNIT supplies.

Component Function Check

INFOID:0000000006258115

1. CHECK DOOR MIRROR MOTOR FUNCTION

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

Refer to ADP-41, "CONSULT-III Function".

Is the inspection result normal?

YES >> Door mirror motor function is OK.

NO >> Refer to ADP-114, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006258116

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 Terminals					(11 - 7
	12			UP	Battery voltage
	12	Ground	Door mirror remote control switch	Other than above	0
D3 (Driver side)	11			LEFT	Battery voltage
D43 (Passenger side)				Other than above	0
	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 DOOR MIRROR MOTOR CIRCUIT

10

11

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

[Door mirror driver side]

M75

Automatic drive po	sitioner control unit	Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	12		10	
M75	23	D3	12	Existed
	24		11	
[Door mirror passenger	side]			
Automatic drive po	sitioner control unit	Door mirror (pas	ssenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	22		10	
				

D43

12

11

Existed

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

[Door mirror driver side]

Automatic drive positioner control unit

Connector
Terminal

12
Ground

Not existed

[Door mirror passenger side]

Automatic drive positioner control unit			Continuity
Connector	Terminal		Continuity
	22	Ground	
M75	10		Not existed
	11		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-202, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to ADP-115, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident.Refer to GI-44, "Intermittent Incident".

NO >> Replace door mirror. Refer to MIR-71, "DOOR MIRROR ASSEMBLY: Removal and Installation".

Component Inspection

INFOID:0000000006258117

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-70, "DOOR MIRROR ASSEMBLY: Exploded View".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.Refer to MIR-71, "DOOR MIRROR ASSEMBLY: Removal and Installation".

2.CHECK DOOR MIRROR MOTOR-II

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

Connector	Term	ninal	Operational direction
Connector	(+)	(–)	
	10	11	RIGHT
D3 (Driver side)	11	10	LEFT
D3 (Driver side) D43 (Passenger side)	12	10	UP
	10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror. Refer to MIR-71, "DOOR MIRROR ASSEMBLY: Removal and Installation".

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SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description INFOID:0000000000258118

 Memory switch is equipped on the seat memory switch installed to the driver side door trim. The operation signal is inputted to the driver seat 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:0000000006258119

1. CHECK FUNCTION

- Select "MEMORY SW INDCTR" in "Active test" mode with CONSULT-III.
- 2. 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 <u>ADP-116, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006258120

1. CHECK SEAT MEMORY INDICATOR OPERATION

Check seat memory indicator operation.

Which is the malfunctioning indicator?

All indicators are NG>>GO TO 2.

An indicator is NG>>GO TO 4.

2.CHECK FUSE

- 1. Turn ignition switch OFF.
- Check that the blown fuse after repairing the affected circuit if a fuse is blown.

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

Is the fuse blown?

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

NO >> GO TO 3.

3.CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+) Seat memory switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(· • • • • • • • • • • • • • • • • • • •	
D13	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> Replace seat memory switch. Refer to ADP-203, "Removal and Installation".

NO >> Repair or replace harness or connector.

4. CHECK MEMORY INDICATOR CIRCUIT

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

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

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

Driver seaf	control unit	Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	25	D13	6	Existed
D432	26	013	7	LAISIGU

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	25	Giodila	Not existed	
	26		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit.Refer to ADP-201, "Removal and Installation".

NO >> Repair or replace harness or connector.

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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condi	tion	Value/Status
SET SW	Catawitah	Push	ON
2E1 244	Set switch	Release	OFF
	Manager and the d	Push	ON
MEMORY SW1	Memory switch 1	Release	OFF
MEMORY OWO	Marrie St. O	Push	ON
MEMORY SW2	Memory switch 2	Release	OFF
0.105.077.50	01.1	Operate	ON
SLIDE SW-FR	Sliding switch (forward)	Release	OFF
OLIDE OW DD		Operate	ON
SLIDE SW-RR	Sliding switch (backward)	Release	OFF
	5 " 1 " 1 " 1 " 1 " 1 " 1 " 1 " 1 " 1 "	Operate	ON
RECLN SW-FR	Reclining switch (forward)	Release	OFF
	Reclining switch (back-	Operate	ON
RECLN SW-RR	ward)	Release	OFF
		Operate	ON
LIFT FR SW-UP	Lifting switch front (up)	Release	OFF ON OFF ON OFF ON OFF ON
LIFT FR SW-DN		Operate	ON
	Lifting switch front (down)	Release	
LIFT RR SW-UP		Operate	ON
	Lifting switch rear (up)	Release	OFF
LIET DD OW DN	1.00	Operate	ON
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF
MID OOM OW LID	N.C	Up	ON
MIR CON SW-UP	Mirror switch	Other than above	OFF
		Down	ON
MIR CON SW-DN	Mirror switch	Other than above	OFF
MID OOM OW DIT	N.C	Right	ON
MIR CON SW-RH	Mirror switch	Other than above	OFF
141D 0011 0111 111		Left	ON
MIR CON SW-LH	Mirror switch	Other than above	OFF
		Right	ON
MIR CHNG SW-R	Changeover switch	Other than above	OFF
MID OUNG OW	01	Left	ON
MIR CHNG SW-L	Changeover switch	Other than above	OFF
T!! T 0\\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	-	Upward	ON
TILT SW-UP	Tilt switch	Other than above	OFF
THE OWN DOWN	The state	Downward	ON
TILT SW-DOWN	Tilt switch	Other than above	OFF

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Co	ondition	Value/Status
TEL 5000 0W 5D	T.1	Forward	ON
TELESCO SW-FR	Telescopic switch	Other than above	OFF
TELECCO CW DD	Talagagaia awitah	Backward	ON
TELESCO SW-RR	Telescopic switch	Other than above	OFF
DETENT OW	A/T a da standa da car	P position	OFF
DETENT SW	A/T selector lever	Other than above	ON
STARTER SW	Ignition position	Cranking	ON
STARTER SW	Ignition position	Other than above	OFF
		Forward	The numeral value decreases *
SLIDE PULSE	Seat sliding	Backward	The numeral value increases*
		Other than above	No change to numeral value*
		Forward	The numeral value decreases*
RECLN PULSE	Seat reclining	Backward	The numeral value increases *
		Other than above	No change to numeral value*
		Up	The numeral value decreases *
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *
		Other than above	No change to numeral value*
LIFT RR PULSE		Up	The numeral value decreases *
	Seat lifter (rear)	Down	The numeral value increases *
		Other than above	No change to numeral value*
MIR/SEN RH U-D	Door mirror (passenger	side)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger	side)	Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side))	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
		Upward	The numeral value decreases *
TILT PULSE	Tilt position	Downward	The numeral value increases *
		Other than above	No change to numeral value*
		Forward	The numeral value decreases *
TELESCO PULSE	Telescopic position	Backward	The numeral value increases *
		Other than above	No change to numeral value*
STEERING STATUS	NOTE: This item is displayed, b	out cannot be monitored	
VEHICLE SPEED	The condition of vehicle	speed is displayed	km/h
D DANC CW CAN	A/T aclaster l	P position	ON
P RANG SW CAN	A/T selector lever	Other than above	OFF
D DANGE (CAN')	A/T and so to all	R position	ON
R RANGE (CAN)	A/T selector lever	Other than above	OFF
DOOD CW EI	Driver de-	Open	ON
DOOR SW-FL	Driver door	Close	OFF

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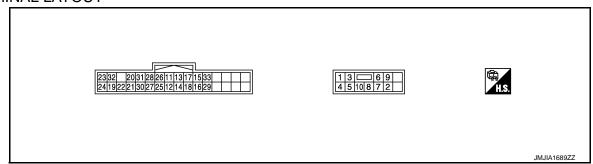
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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cond	lition	Value/Status
DOOR SW-FR	December door	Open	ON
DOOK SW-FK	Passenger door	Close	OFF
IGN ON SW	Ignition switch	ON position	ON
IGIN ON SW	ignition switch	Other than above	OFF
ACC ON SW	Ignition quitab	ACC or ON position	ON
ACC ON SW	Ignition switch	Other than above	OFF
KEY ON SW	Intelligent Koy	Inserted is key slot	ON
KET ON SW	Intelligent Key	Inserted is not key slot	OFF
KEYLESS ID	UNLOCK button of Intellige	ent Key is pressed	1,2,3,4or5
KYLS DR UNLK	Intelligent Key or driver	ON	ON
KILS DK UNLK	side door request switch	OFF	OFF
VHCL SPEED (ABS)	Can signal from ABS	Received	ON
VHCL SPEED (ABS)	Can signal from ABS	Not received	OFF
HANDLE	The PCM for handle position	on is displayed	LHD
HANDLE	The BCM for handle position	on is displayed	RHD
TRANSMISSION	Transmission type is displa	avod	AT or CVT
I MANSIMISSION	Transmission type is displa	ayeu	MT

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

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)	Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Cond	dition	(Approx)	
1 (R)	Ground	Power source	Input	-	_	Battery voltage	
2 (B)	Ground	Ground (power)	_	_		0	
3 (G)	Ground	Sliding motor backward output signal	Output	Output	Seat sliding	Operate (backward)	Battery voltage
(0)		output signal			Stop	0	
4 (G/R)	Ground	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage	
(G/14)		put signal			Release	0	
5 (V)	Ground	Ground Reclining motor backward output signal Output	Output Sea	Seat reclining	Operate (backward)	Battery voltage	
(•)		output digital			Stop	0	

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Com	dition	Voltage (V)
+	-	Signal name	Input/ Output	Condition		(Approx)
6 (R/L)	Ground	Reclining motor forward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
(102)		output digital			Release	0
7 (L)	Ground	Lifting motor (rear) down output signal	Output	Seat lifting (rear)	Operate (down)	Battery voltage
(L)		output signal			Stop	0
8 (L/W)	Ground	Lifting motor (rear) up out- put signal	Output	Seat lifting (rear)	Operate (up)	Battery voltage
(L/VV)		put signal			Stop	0
9 (L/R)	Ground	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	Battery voltage
(L/11)		output signal			Stop	0
10 (L/B)	Ground	Lifting motor (front) up out- put signal	Output	Seat lifting (front)	Operate (up)	Battery voltage
(L/D)		put signal			Stop	0
11 (G/B)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0
(0/5)		Signal			Release	Battery voltage
12 (G/W)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0
(0/11)		IIdi			Release	Battery voltage
13 (R/G)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0
(100)		oignai		Relea	Release	Battery voltage
14 (R/W)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
(. 0)		olgridi			Release	Battery voltage
15 (Y/B)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0
(.,_,		o.ga.		(. 50.)	Release	Battery voltage
16 (Y/R)	Ground	Lifting switch (rear) up sig- nal	Input	Seat lifting switch (rear)	Operate (up)	0
· · · · · /				(2-2)	Release	Battery voltage
17 (LG/B)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0
,/		- 0		(3)	Release	Battery voltage
18 (LG/R)	Ground	Lifting switch (front) up sig-	Input	Seat lifting switch (front)	Operate (up)	0
,				V - 7	Release	Battery voltage
19 (G/Y)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div 2V/div JMJIA0119ZZ
					Stop	0 or 5

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< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		0-11	dia:	Voltage (V)
+	-	Signal name	Input/ Output	Conc	dition	(Approx)
20 (R/Y)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	10mSec/div
					Stop	0 or 5
21 (L/Y)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div
					Stop	0 or 5
22 (BR/Y)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div
					Stop	0 or 5
23 (P)	_	CAN-H	_	_	_	_
24 (P/L)	_	CAN-L	_	_	_	_
25 (G/O)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Illuminate Other than above	1 Battery voltage
26					Illuminate	1
(L/O)	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Other than above	Battery voltage
27	Cround	Mamany switch 1 signal	Innut	Mamany awitah 1	Press	0
(V)	Ground	Memory switch 1 signal	Input	Memory switch 1	Other than above	5
28 (V/W)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press Other than above	0 5
29					Press	0
(O/L)	Ground	Set switch signal	Input	Set switch	Other than above	5
30 (BR)	Ground	Tilt sensor signal	Input	Tilt	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ
					Ouner man above	0 01 5

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Con	dition	Voltage (V)
+	-	Signal name	Input/ Output	Con	uition	(Approx)
31	Ground	Tologopio concor signal	Innut	Tologgania	Operate	
(BR/W)	Ground	Telescopic sensor signal	Input	Telescopic	Other than above	0 or 5
32 (W/L)	Ground	UART communication (TX/RX)	Input	Ignition s	witch ON	10msec/div 5V/div JMJIA1391ZZ
33 (W)	Ground	Sensor power supply	Output	-	_	Battery voltage

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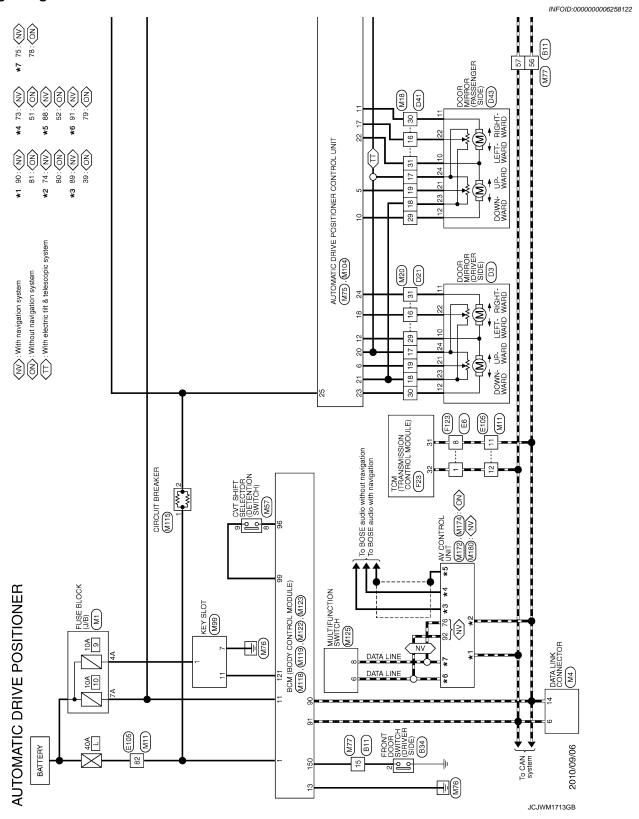
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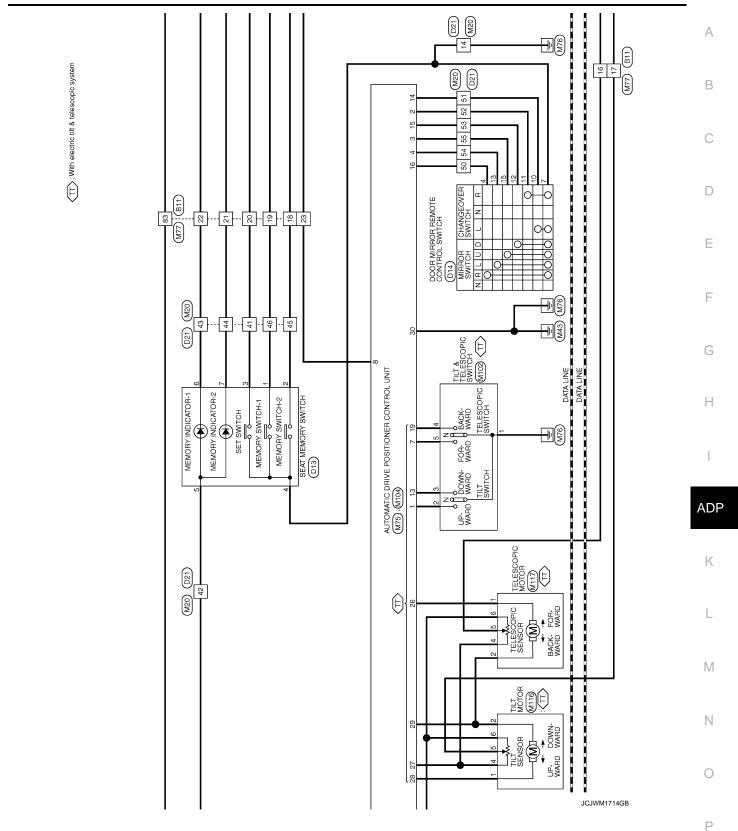
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Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

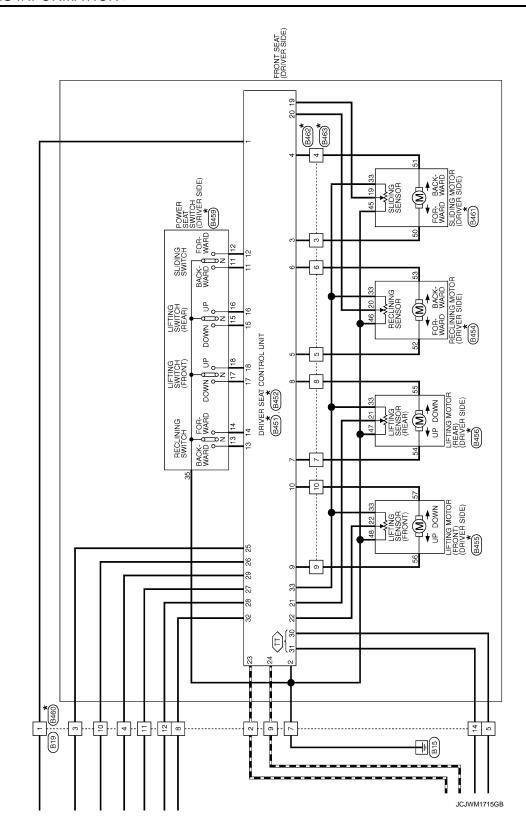


< ECU DIAGNOSIS INFORMATION >



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

TT : With electric tilt & telescopic system



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< ECU DIAGNOSIS INFORMATION >

Signal Name Specification	A B
Connector Name Connector Name Connector Name Connector Type NS12FW-CS NS12FW-C	D
offication] offication] offication]	Е
B19 WIRE TO WIRE NSI 16 FW - CS B B 10 11 12 13 14 15 16 7 16 16 16 16 16 16	F
ctor Name ctor Type BR BR BR GBR Color ctor Name ctor Type Ctor Name ctor Type SB BR Color ctor Name ctor Type SB BR Color ctor Name ctor Type	G
Conne Conn	Н
	ADP
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4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	L
AUTOMATIC DRIVE POSITIONER Journector Nume Wife TO WIFE Journector Type II Hasoww-CS19 Truminal Color Signal Name (Specification) 1 SHELD 2 SHELD 1 SHELD 1 SHELD 2 SHELD 2 SHELD 2 SHELD 2 SHELD 3 SHELD 3 SHELD 4 SS SHELD 5 SHELD 6 SS SHELD 7 V 8 SHELD 7 V 8 SHELD 8 SHELD 9 SHELD 10 VAI 11 VAI 12 WA 13 CR 14 SS SHELD 15 SS SHELD 16 SS SHELD 17 VAI 18 SS SHELD 19 CR 10 CR 10 CR 11 CR 11 CR 12 CR 13 CR 14 CR 15 SS SHELD 16 SS SHELD 17 CR 18 SS SHELD 19 CR 10 CR 10 CR 11 CR 11 CR 12 CR 13 CR 14 CR 15 SS SHELD 16 SS SHELD 17 CR 18 SS SHELD 18 SS SHELD 19 CR 10 CR 10 CR 11 CR 11 CR 11 CR 12 CR 13 SS SHELD 14 CR 15 SS SHELD 16 CR 17 CR 18 SS SHELD 18 SS SHELD 19 CR 10 CR 10 CR 11 CR 11 CR 11 CR 11 CR 12 CR 13 SS SHELD 14 CR 15 SS SHELD 16 CR 17 CR 18 SS SHELD 18 SS SHELD 18 SS SHELD 19 CR 10 CR 10 CR 10 CR 10 CR 10 CR 11 CR 11 CR 12 CR 13 SS SHELD 14 CR 15 SS SHELD 16 CR 17 CR 18 SS SHELD 19 CR 10 CR 10 CR 10 CR 10 CR 11 CR 11 CR 12 CR 13 SS SHELD 14 CR 15 CR 16 CR 17 CR 18 SS SHELD 19 CR 10	M
No No No No No No No No	
AUTOMA Connector Name Connec	0
JCJWM1716GB	
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14 BR/W -	Terminal Color Signal Name [Specification] 19 G/V	Comector No. 8462 Comector Type WIRE Comector Type NISTONNY-CS H.S. R 7	Terminal Color Signal Name [Specification] Color Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name Specification] Signal Name Specification] Signal Name Specification] Signal Name Signal Name
Ocurrector No. 8459 Connector No. 8459 Connector Type NSIDFW-GS #18 13 14 11 12 17 18	Terminal Color Signal Name [Specification] 11 G/B	Connector No. B480 Connector Name WIRE TO WIRE Connector Type NS16MW-CS 7 6 5	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] No. of Wire Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name Signal Name
	Connector Name Lin TINA MOTOR 4; ROWT) DIRPORT SIZE:	48 P./8	HS
AUTOMATIC DRIVE POSITIONER Connector Name DRIVER SEAT CONTROL UNIT Connector Type I H32FW H32 L13 E23 E23 E2130 E2130 E113 F115 E3		21 L/Y	Connector No. 8454 Connector No. 8454 Connector No. 8454 Connector Type F 6098-0344 E 6098-0344

JCJWM1717GB

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sitioner] Constitoner] Continuer] Continuer] Continuer] Continuer] Continuer] Continuer]	А
Color Colo	В
Color Colo	С
1 1 1 1 1 1 1 1 1 1	D
5 4 3 2 1 350 13 05 05 1 350 13 05 05 1 350 13 05 05 1 350 13 05 1 350 1	Е
No. D21 Name WIRE TO WIRE	F
	G
Oomnect Connect Connec	Н
SEAT MEMORY SWITCH	I
Signal Name [Strong Name [Stron	ADP
Connector Name SEA	К
	L
Name (Specification (ORIVER SIDE) 18 7 8 4 9 10	M
No. B483 No. Signal Name No. N	N
AUTOMAT Connector Name Conne	0
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	٦Į					_					-
Connector No.	yr No. D43	Connector No.	tor No.	E105	72	>	1	32	_	CAN-H	_
Connector Name	or Name DOOR MIRROR (PASSENGER SIDE)	Connect	Connector Name	WIRE TO WIRE	73	-	1	33	9 E	PRI SPEED SENSOR	_
Connector Type	Type TH24MW-NH	Connect	Connector Type	TH70MW-CS10-M3	75	≥ 8	1 1	37 5	Y/R	SEC SPEED SENSOR	_
	1			200 2120	78	i e	1	3 8	W	L/OS SEL CIN SEL	_
13		13			77	60	1	3 8	M/B	SEC-LINEAR SOL	_
ŧ		ŧ			78	>-	- [With navigation system]	40	Σ	PL LINEAR SOL	_
Ź		2	_	2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	78	g	- [With iPod without navigation system]	42	æ	GND	_
	5 4 3 2				78	>	- [Without iPod and navigation system]	46	>	NIGN	_
	24 23 22 21 20 19 18 17 16 15 14 13			# 2 # 2 # 3 # 3 # 3 # 3	79	>	1	47	L/R	BATT	_
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7		ဗ	>	П				Connec	Connector Name	WIRE TO WIRE	
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12		80	G	T	Connec	Connector Name	TCM (TRANSMISSION CONTROL MODULE)	ą			
19		Ξ	۵	I				厚			
21	BR -	12	_	1	Connec	Connector Type	RH40FB-RZ8-L-RH		Į.		
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23	GR	14	0	1	厚				<u> </u>	16 15 1/1 13 12 11 10 0 8	
24	λ	15	BR	-	<u> </u>	34	32 33 34 35 36 37 38 39 40 47 48		الت	14 13 14 10 3	
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Į.	L	47	۵	1	2	P/L	INH SW 3	9	L/R	1	
Ź	1 2 3 4 5 6 7	48	7	1	8	0/5	INH SW 4	∞	۵	1	
	1 2 2	49	SB	1	4	GR	INH SW 3 MON	10	Y/B	1	_
	8 9 10 11 12 13 14 15 16	20	æ	1	9	В	GND	Ξ	BR/W	1	_
		51	57	1	7	×	SENSOR GND	12	BR	1	_
		52	>	1	∞	M/5	CLOCK (SEL 2)	13	g	1	
Terminal	Color Sizzel Name (Szezelezelezel	53	GR	=	6	L/R	CHIP SELECT (SEL 1)	14	В	-	
No		54	BR	-	10	BR/R	DATA I/O (SEL 3)				
-		22	>	_	=	BR/W	INH SW I				
3	Α	99	M/L	-	13	^	ATF TEMP SENSOR				
4		09	>	-	14	R/W	PRI PRESS SENSOR				
5	GR -	19	BR	-	15	M/A	SEC PRESS SENSOR				
9	- Λ	62	0	=	19	g/B	REV LAMP RELAY				
8		63	0/7	-	20	R/B	STARTER RELAY				
10		64	SHIELD	1	25	W/R	SENSOR GND				
Ξ		99	≯	ı	56	9	SENSOR POWER SOURCE (5V)				
12	BR	67	æ	ı	27	R/G	S/M-D				
13	SB	89	>	1	28	~	S/M-C				
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< ECU DIAGNOSIS INFORMATION >

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NSOGFW-M2 NSOGFW-M2 Signal Name [Sp.	N
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Revision: 2011 November ADP-131 2011 MURANO

-	7 P	∞ 9		2 A B B	13	14 0	15 L	۸ 91	17 W MIR SENS LEFT & RIGHT (RH)	L MIR SEN	5	20 Y SENS GND	V MIR MT	7	24 SB MIR MTR LEFT (LH)											T	7			Livi					[i	12									Γ
	- [With automatic drive positioner,	- [Without automatic drive positioner	- [Mither accompace any posicioner]	- With automatic drive positioner	- Without automatic drive positioner	- [With automatic drive positioner]	- [Without automatic drive positioner			M57	CVT SHIFT SELECTOR	TK10FW				1 3 7 9	2 4 5 6 8			Simul Name [Secondination	olgiai Name Lopecinication	1	1	1	1	1	1		M75	ALITOMATIC DDIVE DOSTITONED CONTED! INIT	TOWNER OF THE PROPERTY OF THE	TH24FW-NH				3 4 5 6 7 8 9 10 11		19 19 17 19 19 29 21 22		3	Signal Name [Specification]	UPWARD	SELECT RH	UPWARD	LEFTWARD
[GR	∝ .	7	٥,	c	SB	0			· No.	Name	Type								Color	of Wire	LG	В	۵	в:	>	^			Namo	Name	Type				1 2	13 1/	2		Color	of Wire	>	GR	SB	9
	52	52	20	54	54	55	55			Connector No.	Connector Name	Connector Type		F) III					Terminal	No.	-	4	9	7	8	D.		Connector No.	Connector Mana	000	Connector Type	1	事	H.S.					Terminal	No.	-	2	3	4
¥	p. M20	ame WIRE TO WIRE	TU4OMM-CC16	1			1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1617181920212222242828 363738384041424844848				Color Signal Name [Specification]	^	- 5	_	R - [With iPod without BOSE system]	t	- [W	>	BR -	- 0	SB -	T	- 5	- B	GR				SB		- ^		± -		- T		- 4	1	- 51	- TO	- 0	-	-	-
MOT	Connector No.	Connector Name	Connector Time	1	Œ		4		_	J	L	No. of	Ė	H		7	Ŧ	F	Ĺ	E	_	8	10	+	+	+	2 9	+	╀	20 S	24	-	+	+	+	5 6	╀	+	╀	╀	╀	H	┞	L	46

JCJWM1721GB

< ECU DIAGNOSIS INFORMATION >

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AUTOMATIC DRIVE POSITIONER Connector Name WIRE TO WIRE		K
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Connector No.	M-18	Connector No.	Γ	M122	Connector No.	No.	M123	
	Т		Γ					
Connector Name	ne BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)	Connec	Connector Name	BCM (BODY CONTROL MODULE)	
Connector Typ	e M03FB-LC	Connector 1	П	H0FB-NH	Connec	tor Type	TH40FG-NH	
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Ħ.S.		E.S.			Ĕ			
	13	61	1 90 89 88 87	868 85 84 83 82 81 80 79 78 77 76 75 74 73 72 7106 105 104 108 102 100 100 99 98 97 96 95 94 93 92		131 130 129	128 127 128 125 124 125 122 121 120 118 118 117 118 115 114 113 112 112 113 113 113 113 113 113 113	
]	ļ						
le l	lor Signal Name [Specification]	-a-	Color of Wire	Signal Name [Specification]	Termin	⊢	Signal Name [Specification]	
t	V BAT (F/L)	t	<u>_</u>	ROOM ANT 2-	112	~	RAIN SENSOR SERIAL LINK	
2 (R POWER WINDOW POWER SUPPLY (BAT)	73	W	ROOM ANT 2+	113	0	OPTICAL SENSOR	
3	- POWER WINDOW POWER SUPPLY (RAP)	74	>	PASSENGER DOOR ANT-	116	GR	FUSE CHECK	
		75	ΓC	PASSENGER DOOR ANT+	118	_	STOP LAMP SW	
		92	>	DRIVER DOOR ANT-	119	*	DR DOOR UNLOCK SENSOR	
Connector No.	M119	77	<u> </u>	DRIVER DOOR ANT+	121	>	KEY SLOT SW	
Connector Nar		80	SB	IMMOBI ANTENNA CONTROL	123	g	IGN F/B	
	╗	81	0	IMMOBI ANTENNA SIGNAL	124	œ	PASSENGER DOOR SW	
Connector Typ	П	82	BR	IGN RELAY (F/B) CONT	130	BR	REAR DEFOGGER SW	
þ		83	Ъ	KEYLESS ENTRY RECEIVER SIGNAL	132	9	POWER WINDOW SW COMM	
厚		87	œ	COMBI SW INPUT 5	133	Μ	PUSH-BUTTON IGNITION SW ILL POWER	
Ę		88	GR	COMBI SW INPUT 3	134	œ	LOCK IND	
	4 5 6 7 8 9 10	06	а	CAN-L	137	ď	RECEIVER / SENSOR GND	
	13 1/ 15 16 17 18	91	٦	CAN-H	138	>	RECEIVER / SENSOR POWER SUPPLY	
		92	œ	KEY SLOT ILL	139	0	TIRE PRESS RECEIVER SIGNAL	
		93	Ь	ON IND	140	GR	SHIFT N/P	
		92	٦	ACC RELAY CONT	141	0	SECURITY INDICATOR OUTPUT	
la l		96	Υ.	CVT SHIFT SELECTOR POWER SUPPLY	142	٦	COMBI SW OUTPUT 5	
		66	^	SHIFT P	143	Μ	COMBI SW OUTPUT 1	
4	Н	100	۵	PASSENGER DOOR REQUEST SW	144	а.	COMBI SW OUTPUT 2	
2	+	101	Μ	DRIVER DOOR REQUEST SW	145	>	COMBI SW OUTPUT 3	
	STEP LAMP OUTPUT	102	Υ	BLOWER FAN MOTOR RELAY CONT	146	Υ	COMBI SW OUTPUT 4	
8	/ ALL DOOR, FUEL LID LOCK OUTPUT	103	L KE	YLESS ENTRY RECEIVER POWER SUPPLY	150	SB	DRIVER DOOR SW	
6	DRIVE	107	0	COMBI SW INPUT 1	151	g	REAR WINDOW DEFOGGER RELAY	
01		108	Ь	COMBI SW INPUT 4				
1 11	G BAT (FUSE)	109	SB	COMBI SW INPUT 2				
13	3 GND	110	9	HAZARD SW				
14	PUSH-BUTTON IGNITION SW ILL GND							
15	ACC IND							
\dashv								
\dashv	4							
61	ROOM LAMP TIMER CONTROL							
	Terminal Co No. O O O O O O O O O	┪ ═┪	M03FB-LC	Connector Type Conn	Connector Type TH40FB-NH	MOSTE-LC	MO3FB-LC Connector Type TH40FB-NH Connector Type TH40FB-NH	Mighte-LC

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AUTOMATIC DRIVE POSITIONER Connector Name MuLTIFUNCTION SWITCH Connector Type THIGFY-NH Terminal Color No. of Wire Signal Name [Specification] 1 B CON 3 W CONTROL UNIT 6 SB AV COMM (L) 9 V SW GMM (L) 9 W SW GMM (L)		VI
MIZS MULTIFUNCTION SWITCH		V
Connector Name Connector Name Connector Type ILS I B S B B B B B B B B B B B B B B B B B	<u> </u>	С
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The fail-safe mode may be activated if the following symptoms are observed.

Fail Safe

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< ECU DIAGNOSIS INFORMATION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	<u>ADP-44</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	ADP-45
	EEPROM	B2130	ADP-46
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-53</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-47
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-49
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-51

DTC Index

CONSULT-III	Tim	ing ^{*1}		Reference page	
display	Current mal- function	Previous mal- function	Item		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-44	
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-45	
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-47	
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-49	
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-51	
UART COMM [B2128]	0	1-39	UART communication	ADP-53	
EEPROM [B2130]	0	1-39	EEPROM	ADP-46	

^{*1.}

^{• 0:} Current malfunction is present

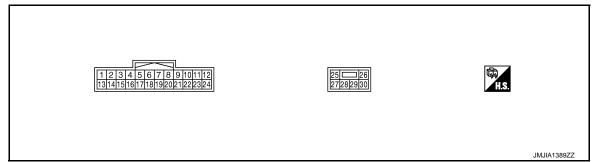
^{• 1-39:} Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset to 1 if any malfunction is detected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

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description	Condition		Voltage (V)			
+	-	Signal name	Input/ Output	Condition		(Approx.)		
1	1 0	Tile avvidala var airmal	lanut	Tilt switch	Operate (up)	0		
(Y) Ground	Tilt switch up signal	Input	THE SWILCH	Other than above	5			
2		01		Changeover	RH	0		
(GR)	Ground	Changeover switch RH signal	Input	switch position	Neutral or LH	5		
3 (SB) Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0			
			WIITOT SWITCH	Other than above	5			
4 (LG) Ground	Mirror switch left signal	Input		Operated (left)	0			
			Mirror switch	Other than above	5			
5 (R)	Ground	Door mirror sensor (pas- senger side) up/down signal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)		
6 (Y)	Ground	Door mirror sensor (driver side) up/down signal	Input	Door mirror LH position		Change between 3.4 (close to peak) 0.6 (close to valley)		
7	Ground	Telescopic switch for-	Input	Telescopic	Operate (forward)	0		
(P) Ground	ward signal	mput	switch	Other than above	5			
8 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		10msec/div		

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< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description	O o littor		Voltage (V)			
+	-	Signal name	Input/ Output	Conditi	on	(Approx.)		
10		Door mirror motor (pas- senger side) up output signal	Output	Door mirror RH	Operate (up)	Battery voltage		
(O)	Oround			Boot millor Ret	Other than above	0		
11		Door mirror motor (passenger side) left output	Output	Door mirror RH	Operate (left)	Battery voltage		
(G)		signal	,		Other than above	0		
		Door mirror motor (driver side) down output sig-			Operate (down)	Battery voltage		
12	Ground	nal	Output	Door mirror (LH)	Other than above	0		
(R)	(R) Glouild	Door mirror motor (driver side) right output signal			Operate (right)	Battery voltage		
					Other than above	0		
13	Ground	Tilt switch down signal Changeover switch LH signal Mirror switch down signal	Input	Tilt switch Changeover switch position	Operate (down)	0		
(LG)					Other than above	5		
14 (O)	(-iround				LH Neutral or	5		
					RH Operate	0		
15 (L)	Ground				(down) Other than	5		
					Operate	0		
16 (V)	Ground	Mirror switch right signal	Input	Mirror switch	(right) Other than	5		
17 (W)	Ground	Door mirror sensor (pas- senger side) left/right signal	Input	Door mirror RH position		Change between 3.4 (close to le edge) 0.6 (close to right edge)		
18 (L)	Ground	Door mirror sensor (driver side) left/right signal	Input	Door mirror LH po	sition	Change between 0.6 (close to left edge) 3.4 (close to right edge)		
19 (G)	Ground	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (back- ward)	0		
00					Other than above	5		
20 (Y)	Ground	Ground	_	_		0		0
21 (W)	Ground	Door mirror motor sen- sor power supply	Input	_		5		

< ECU DIAGNOSIS INFORMATION >

	inal No. color)	Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output		on	(Approx.)	
	22 (V) Ground	Door mirror motor (passenger side) down output signal Door mirror motor (passenger side) right output	- Output	Door mirror (RH)	Operate (down)	Battery voltage	
					Other than above	0	
(V)					Operate (right)	Battery voltage	
		signal			Other than above	0	
23	Ground	Door mirror motor (driv-	Output	Door mirror (LH)	Operate (up)	Battery voltage	
(L)		er side)up output signal		,	Other than above	0	
24	Ground	Door mirror motor (driv-	Output	Door mirror (LH)	Operate (left)	Battery voltage	
(SB)		er side)left output signal		,	Other than above	0	
25 (W)	Ground	Power source	Input	_		Battery voltage	
26 (L)		Telescopic motor back- ward output signal	Output	Steering tele- scopic	Operate (back- ward)	Battery voltage	
					Other than above	0	
27 (P)	Ground	Tilt&telescopic motor power source		_		Battery voltage	
28	Ground	Tilt motor down output signal	Output	Steering tilt	Operate (down)	Battery voltage	
(G)				out in g	Other than above	0	
		Telescopic motor for-	Output -	Steering tilt	Operate (up)	Battery voltage	
29	29 (LG) Ground				Other than above	0	
(LG)				Steering tele- Operate (forward)		Battery voltage	
		ward output signal		scopic	Other than above	0	
30 (B)	Ground	Ground	_	_		0	

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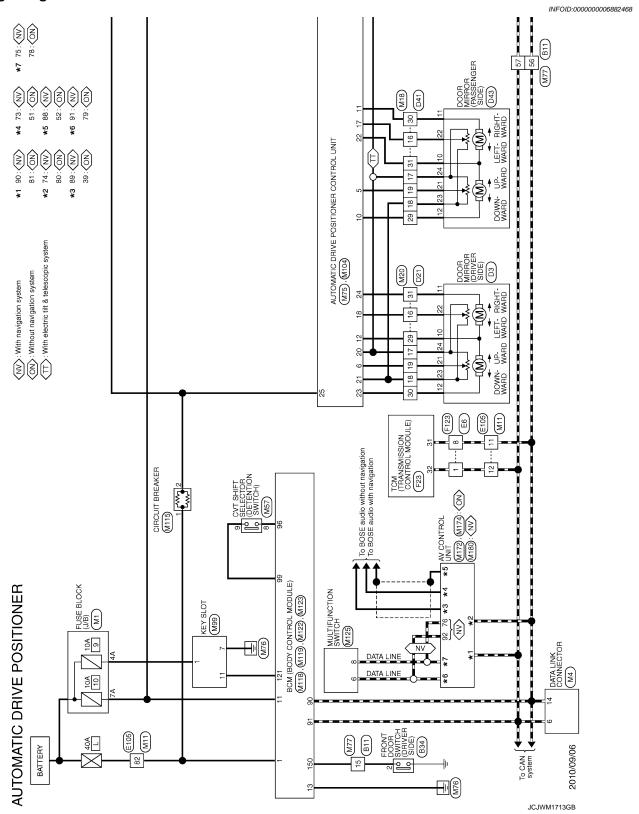
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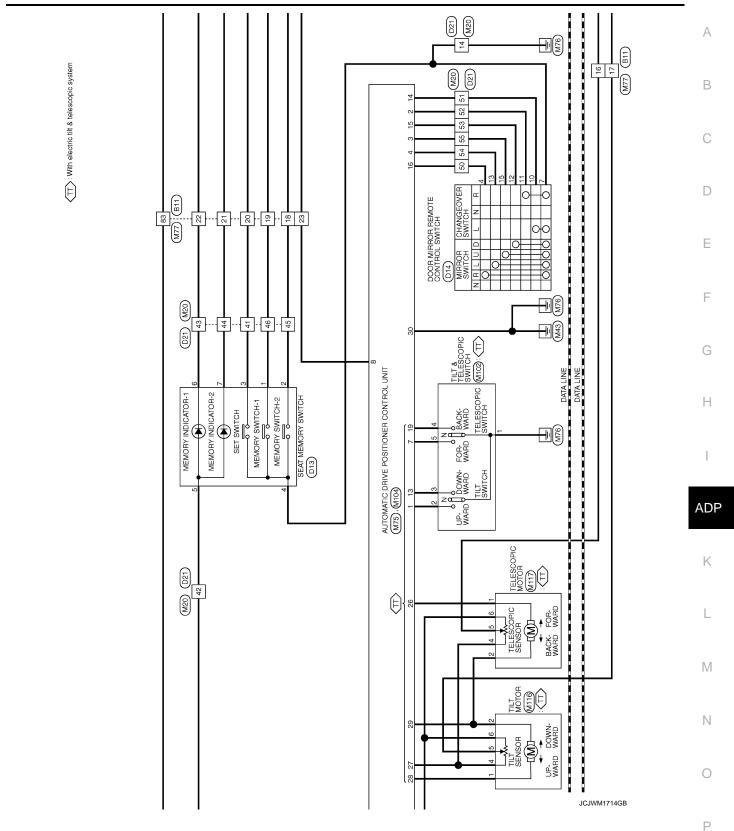
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Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

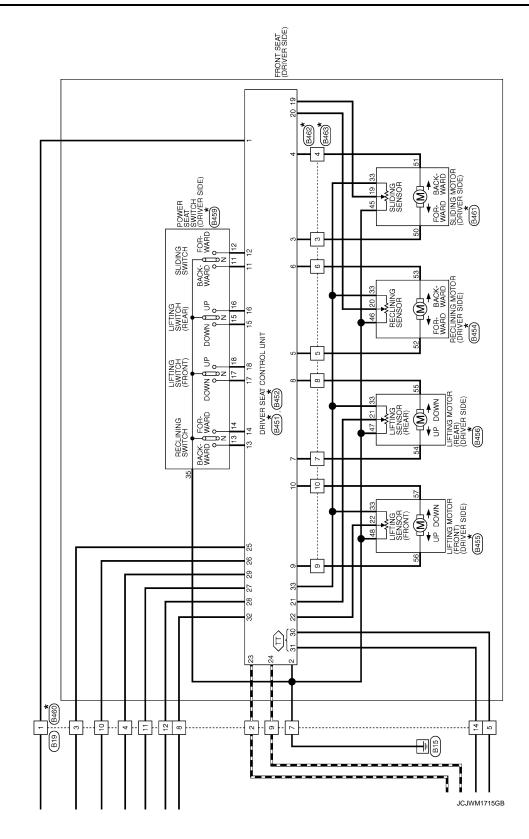


< ECU DIAGNOSIS INFORMATION >



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

TT : With electric tilt & telescopic system



< ECU DIAGNOSIS INFORMATION >

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DRIVER SEAT CONTROL UNIT NSI 2Prw-CS	В
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Name [Speed 12] 14 15 15 15 15 15 15 15	F
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Connector Name Conn	Н
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AUTOMATIC DRIVE POSITIONER Journector Name WIRE TO WIRE JOURNELLO BILL 1 SHELD 1 SHELD 1 SHELD 1 SHELD 1 SHELD 2 SS	M
WWRE CS19 Signal Name (Specification) Signal Name (Specification)	IVI
Signal of the control	N
Color Colo	
Connector No.	0
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< ECU DIAGNOSIS INFORMATION >

Herspanish Her	35 1 1 1 1 1 1 1 1 1	Signal Name (Specification) [513345 1950]	Terminal Color Signal Name [Specification]	H	Connector No. B462	4 3 2 1		5 V 6 R/L 7 L	2 VW	┨
Color Signal Mame [Specification] Connector No. Connector No. Connector No. Connector Name R.Y. Connector Name R.Y.	B455 LIFTING MOTOR (FRONT) (DRIVER SIDE.)	F 6098-0344 Terminal Golor No. of Wise 11 G/B 12 G/W 12 G/W 12 G/W 14 G/B 15 G/W 1	57563348 22 14 R.W 157563348 22 15 V/R 17 LG/R 17 LG/R 16 R.W 17 LG/R 18 LG/R 16 R.W 19 LG/R 1	of Wire Signal Name (Specification) 35 BR/Y	Corrector Name Corrector Name Corrector Type	or No. 8456 or Name Lirrinki Motor (rec.Ni) (praven side) or Type F 6096-0344	Terminal Color Signal N	НН	33 W - 7 7 8 8 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 9 7 7 8 7 7 8 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7 7 7 8 7	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \
AUTOMATIC DRIVE POSITIONER Connector No. B452 Connector Name DRIVER SEAT CONTROL UNIT Connector Type THRZFW	23 22 20 20 20 20 20 20 20 20 20 20 20 20	of Wire Signal Name (Specification) G/W	N.G	6/Y RY LY RR/Y RR/Y RR/Y	7.4 - 0.75 - 1.4	28 V/V 2 2 0/L 2 0 0/L	to to	Connector Type F 6095-0344	[53 52 33 46 20]	

JCJWM1717GB

< ECU DIAGNOSIS INFORMATION >

Dictionary Statement State		А
Color Colo		В
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Connector No. Connector No		D
1 2 2 1 1 1 1 1 1 1		Е
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Connector No. D21		G
Connector No. Connector No. Connector No. Connector Try No. Connec		Н
Signal Name [Specification] Sign		 ADP
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Connector Name	00-11	1				ŀ	CAN-H
nector Nar	Г	73		1	33	P	PRI SPEED SENSOR
		74	W	1	34	LG/R	SEC SPEED SENSOR
Connector Type	De TH70MW-CS10-M3	75	BR BR	-	37	N/R	L/U & SEL-ON/OFF SOL
		76	3 GR	-	38	M/٦	L/U & SEL LINEAR SOL
修		77	0 4	-	39	M/B	SEC-LINEAR SOL
Ę		78	٨ - 8	- [With navigation system]	40	R/Y	PL LINEAR SOL
2		78	9 G	 [With iPod without navigation system] 	42	В	GND
	X X X X X X X X X X X X X X X X X X X	78	>	 [Without iPod and navigation system] 	46	>	VIGN
		79	۸	-	47	L/R	BATT
		80	Н	1	48	٨	VIGN
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No.	of Wire	82	2 0		Conne	Connector No	E123
t		٥	┨				671
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. 22	_	_	BR/W	INH SW 1			
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\dashv	^	Ť	\dashv	PRI PRESS SENSOR			
61 E	3R	=	M//N	SEC PRESS SENSOR			
9	1	ا ت	┝	REV LAMP RELAY			
H	- 0/	ă	┝	STARTER RELAY			
64 SHI	ELD -	2	5 W/R	SENSOR GND			
99	- ~	ة ق	9/1	SENSOR POWER SOURCE (5V)			
Н	3R -	2.	7 R/G	S/M-D			
Н		21	3 R	S/M-C			
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TIC DRIVE P MI INSOGRIV-MZ Signal Nam Signal Nam	10 10 10 10 10 10 10 10 10 10 10 10 10 1	N
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AUTOM Connector No.	No.	AUTOMATIC DRIVE POSITIONER	52	GR	- [With automatic drive positioner]	7	۵	FORWARD	Г
		LOWN CT LOWN	52	œ	- [Without automatic drive positioner]	8	57	RX/TX	Г
necto	Connector Name	WIRE TO WIRE	53	7	- [With automatic drive positioner]	10	0	MIR MTR UP (RH)	Т
ector	Connector Type	TH40MW-CS15	53	٨	- [Without automatic drive positioner]	1.1	5	MIR MTR LEFT (RH)	П
			54	PΠ	 [With automatic drive positioner] 	12	Я	MIR MTR DOWN RIGHT (LH)	П
₹			54	G	 [Without automatic drive positioner] 	13	LG	DOWNWARD	
ď			55	SB	 [With automatic drive positioner] 	14	0	SELECT LH	
	- 2	2 6 7	55	0	 [Without automatic drive positioner] 	15	٦	DOWNWARD	Т
	272829303132	92021222222444546 930313233435 47484950515253455				16	> 3	RIGHTWARD	Т
_			Connector No.	No.	M57	- 81	- 1	MIR SENS LEFT & RIGHT (LH)	Т
			,		dotor its tring the	19	9	BACKWARD	Т
Ferminal	Color	Simal Name [Sparification]	Connector Name	Name	CVI SHIFT SELECTOR	20	\	SENS GND	П
O	of Wire		Connector Type	Type	TK10FW	21	W	SENS POWER	П
T	>	1	ą			22	>	MIR MTR DOWN RIGHT (RH)	Т
Ī	9	-	唐			23	7	MIR MTR UP (LH)	Т
<u>"</u>	Λ	1	8			24	SB	MIR MIR LEFT (LH)	٦
Ţ	2 0	- [With IPod without BUSE system]			ヿ				
T	ی د	- [With ipod without BOSE evetern]			2 4 5 6 8				
2	, _	- [With BOSE system and base audio without iPod]							
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Γ	BR	1	Terminal	Color	3				
8	0	-	No.	of Wire	Signal Name [Specification]				
6	SB	-	-	LG	_				
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Ω;	38	1	Connector Name	Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT				
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34	BR	_							
35	В	-							
41	ΓG	-	Terminal	Color	Signal Name Supplied				
42	LG		No.	of Wire	Olgiai ivalile Lopeciilcauoi.u				
43	0	1	-	>	UPWARD				
4	>	1	2	GR	SELECT RH				
45	۵	1	3	SB	UPWARD				
46	۵	1	4	FC	LEFTWARD				
50	٨	-	5	R	MIR SENS UP DOWN (RH)				
	0	_	9	Υ	MIR SENS UP DOWN (LH)				
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S CONTROL UNIT	offication] Offication] Offication]	А	l
M104 AUTOMATIC DRIVE POSITIONER CONTROL UNIT	NSOBFW-CS 25 28 29 30 27 28 29 30 27 28 29 30 27 28 29 30 27 28 29 30 27 28 29 30 27 28 29 30 27 28 29 30 38 38 38 38 38 38 38	В	
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AUTOMATIC DRIVE POSITIONER	N separate			N response	0071	N. september	SN 30	S A	
Τ	500	Τ	T	2000	1011.22		2	WILES	
Connector Name TILT MOTOR	Connector Name	ame BCM (BODY CONTROL MODULE)	Conn	Connector Name	BCM (BODY CONTROL MODULE)	Connect	Connector Name	BCM (BODY CONTROL MODULE)	
Connector Type NS06FW-CS	Connector Type	/pe M03FB-LC	Conn	Connector Type	TH40FB-NH	Connect	Connector Type	TH40FG-NH	
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Terminal Color Signal Name [Specification]	Terminal O	Golor Signal Name [Specification]	Terminal	inal Color of Wire	Signal Name [Specification]	Terminal No.	I Color of Wire	Signal Name [Specification]	
- 0	-	W BAT (F/L)	72	В	ROOM ANT 2-	112	۳	RAIN SENSOR SERIAL LINK	
2 LG –	2	GR POWER WINDOW POWER SUPPLY (BAT)	73	H	ROOM ANT 2+	113	0	OPTICAL SENSOR	
\dashv	3	L POWER WINDOW POWER SUPPLY (RAP)	74	\dashv	PASSENGER DOOR ANT-	116	땅	FUSE CHECK	
5 \			75	E E	PASSENGER DOOR ANT+	118	-	STOP LAMP SW	
- Д		-[9/	\dashv	DRIVER DOOR ANT-	119	>	DR DOOR UNLOCK SENSOR	
	Connector No.	o. M119	77	+	DRIVER DOOR ANT+	121	≻	KEY SLOT SW	
١	Connector Name	ame BCM (BODY CONTROL MODULE)	8	+	IMMOBI ANTENNA CONTROL	123	G	IGN F/B	
Connector No. M117		╗	<u>8</u>	+	IMMOBI ANTENNA SIGNAL	124	œ	PASSENGER DOOR SW	
Goppector Name TELESCOPIC MOTOR	Connector Type	/pe NS16FW-CS	82	_	IGN RELAY (F/B) CONT	130	BR	REAR DEFOGGER SW	
	þ		83	\dashv	KEYLESS ENTRY RECEIVER SIGNAL	132	9	POWER WINDOW SW COMM	
Connector Type NS06FW-CS	厚		87	\dashv	COMBI SW INPUT 5	133	м	PUSH-BUTTON IGNITION SW ILL POWER	
ą	E.		88	_	COMBI SW INPUT 3	134	œ	LOCK IND	
医		4 5 6 7 8 9 10	06	В	CAN⁻L	137	a.	RECEIVER / SENSOR GND	
		11 12 12 17 15 16 17 18 10	91	٦ ا	CAN-H	138	>	RECEIVER / SENSOR POWER SUPPLY	
2 1			92	\dashv	KEY SLOT ILL	139	0	TIRE PRESS RECEIVER SIGNAL	
2 7 3			93	В	ON IND	140	GR	SHIFT N/P	
t 1			95	5 L	ACC RELAY CONT	141	0	SECURITY INDICATOR OUTPUT	
	leu	Color Simal Name [Specification]	96	<u>۲</u>	CVT SHIFT SELECTOR POWER SUPPLY	142	٦	COMBI SW OUTPUT 5	
	No. of	of Wire	66	>	SHIFT P	143	М	COMBI SW OUTPUT 1	
la l	4	P INTERIOR ROOM LAMP POWER SUPPLY	100	0 P	PASSENGER DOOR REQUEST SW	144	а	COMBI SW OUTPUT 2	
No. of Wire	2	G PASSENGER DOOR UNLOCK OUTPUT	101	1 W	DRIVER DOOR REQUEST SW	145	>	COMBI SW OUTPUT 3	
1 L -	7	Y STEP LAMP OUTPUT	102	2 Y	BLOWER FAN MOTOR RELAY CONT	146	>	COMBI SW OUTPUT 4	
2 LG -	8	V ALL DOOR, FUEL LID LOCK OUTPUT	103	3 L	KEYLESS ENTRY RECEIVER POWER SUPPLY	120	SB	DRIVER DOOR SW	
4 P -	6	G DRIVER DOOR, FUEL LID UNLOCK OUTPUT	T 107	0 /	COMBI SW INPUT 1	151	9	REAR WINDOW DEFOGGER RELAY	
5 R	10	P REAR DOOR UNLOCK OUTPUT	108	8 B	COMBI SW INPUT 4				
- J J	11	LG BAT (FUSE)	109	as 6	COMBI SW INPUT 2				
	13	B GND	110	0 G	HAZARD SW				
	14	O PUSH-BUTTON IGNITION SW ILL GND							
	15	L ACC IND							
	17								
	\dashv	BR TURN SIGNAL LH	_						
	19	Y ROOM LAMP TIMER CONTROL	_						

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M 80 AV CONTROL UNIT BE 63 64 65 66 67 68 69 70 77 72 73 74 75 76 72 70 80 61 82 63 64 65 86 87 68 89 90 91 92	Signal Name (Specification) PARKING BRAKE COMPOSITE INAGE SIGNAL GND COMPOSITE INAGE SIGNAL SHIELD MITERIANDENDIS VICE	COMM (CONT->DISP) CAN-L AV COMM (L) AV COMM (L) ILLUMINATION SIGNAL IGNITION	REVERSE VEHICLE SPEED SIGNAL (9-PULSE) SHELD MICROPHONE SIGNAL SHELD COMM (DISP->CONT) CAN-H AV COMM (H) AV COMM (H)	
The. M180 AV CO Type TH32P	Color of Wire LG BR GR SHIELD	R G LG R	SB SHIELD G G C C S SB SB SB	
Connector No. Connector Name Connector Type H.S. 6102	Terminal No. 65 67 68 71 71	73 74 75 76 79 80	81 83 87 88 89 90 90	
Si	7.5. 7.6 7.7 7.8 7.9 80 81 92 83 84 85 86 87 88 89 90 91 82 83 84 85 86 96 97 88 89 100 101 101 102 102 103 103 103 103	Color Colo	C	96 W DISK EJECT SIGNAL 102 W AUX SOUND SIGNAL CND 104 R AUX SOUND SIGNAL RH (+) 105 AUX SOUND SIGNAL RH (+)
C Con Con Con Con Con Con Con Con Con Co	E	Ten 7		
AUTOMATIC DRIVE POSITIONER Domector No. M125 Domector Type THISTW-NH Connector Type THISTW-NH TIS 5 7 9 1111315	Signal Name [Specification] GND GND GND ILL ILL AAV COMM (4)	AV COMM (L) SW GND SW GND EJECT SIGNAL	AV CONTROL UNIT PRE TH24FW-NH 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Signal Name [Specification]
AUTOMA' Connector No. Connector Name Connector Type H.S.	of Wire	ctor Nc		of Wire Color of SB
Connections of the Connection of the Connections of the Connection of t	Terminal No.	9 9 14 Connec	Connecto	Terminal No.

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BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
FR WIPER III	Front wiper switch HI	On
ED WIDED I OW	Other than front wiper switch LO	Off
FR WIPER LOW	Front wiper switch LO	On
ED WACHED OW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
ED WIDED INT	Other than front wiper switch INT/AUTO	Off
FR WIPER INT	Front wiper switch INT/AUTO	On
ED WIDED CTOD	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 dia position
DD WIDED 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 WAGUED OW	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
DD WIDED OTOD	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TUDNI CIONIAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI CIONAL I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAND CV	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
LILDE AM CW	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
HEAD LAMD CW/4	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
HEAD LAIVIP SVV 2	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
FASSING SW	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
AUTO LIGITI SW	Lighting switch AUTO	On
ED EOG SW	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off

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Monitor Item	Condition	Value/Status
DOOR SW-DR	Driver door closed	Off
JOON JVV-DIN	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
JOON SW-AS	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
JOOR SW-RL	Rear LH door opened	On
DOOD SW BY	Back door closed	Off
DOOR SW-BK	Back door opened	On
CDL LOCK CW	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
WEN ON THE OWN	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
NOTE: For models with BOSE audio system this item is not monitored.	Rear window defogger switch ON	On
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TD/DD ODEN CW	Back door opener switch OFF	Off
TR/BD OPEN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
DKE LOOK	LOCK button of Intelligent Key is not pressed	Off
RKE-LOCK	LOCK button of Intelligent Key is pressed	On
DVE LINI OOK	UNLOCK button of Intelligent Key is not pressed	Off
RKE-UNLOCK	UNLOCK button of Intelligent Key is pressed	On
	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is pressed	On
DIVE DANIO	PANIC button of Intelligent Key is not pressed	Off
RKE-PANIC	PANIC button of Intelligent Key is pressed	On
	UNLOCK button of Intelligent Key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of Intelligent Key is pressed and held	On
	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On

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Monitor Item	Condition	Value/Status
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
JPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
NEQ 3W -DK	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
NEQ 3W -A3	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
VEQ 3W -DD/TK	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
OGITOW	Push-button ignition switch (push switch) is pressed	On
GN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
GIN INLIZ -F/D	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE:	Off
	The item is indicated, but not monitored.	
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No.	Off
	7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
510 title 511 E	Stop lamp switch 1 signal circuit is normal	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
51 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	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
JNLK SEN -DR	Driver door is unlocked	Off
JALINOLIN DIN	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
CRINETT I/D	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
DETE 300 FIEDIN	Selector lever in P position	On
SET DN JDDM	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On
CET D. MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On

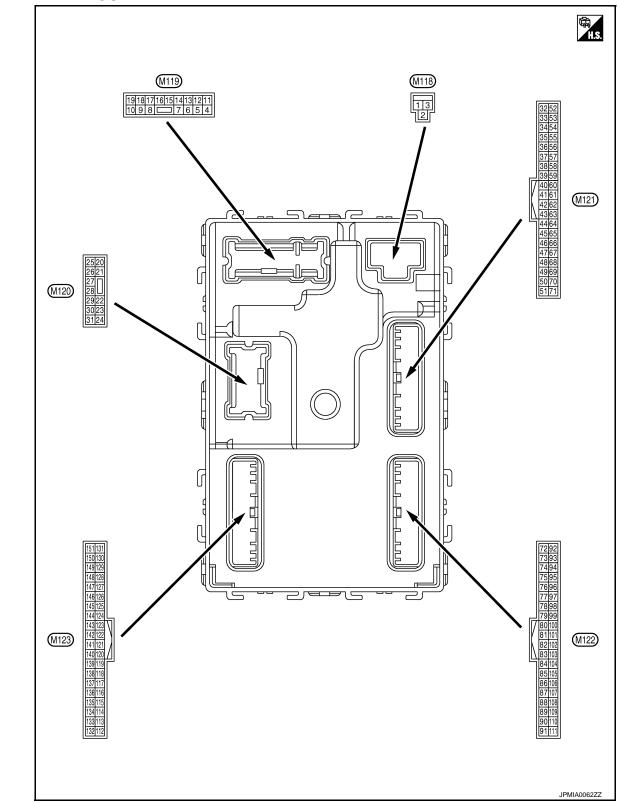
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Monitor Item	Condition	Value/Status
SET N. MET	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
ENGINE STATE	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine 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	21101 2001 10 100100	
Passenger door is locked		LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK EL AO	Power supply position in LOCK position	Reset
ID OK FLAG	Power supply position in any position other than LOCK	Set
DDMT FNO OTDT	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEV CW. CLOT	Intelligent Key is not inserted into key slot	Off
KEY SW -SLOT	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONFRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
CONFRIVI ID ALL	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
OOM INWI ID4	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
CONFIRM ID3	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done

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Monitor Item	Condition	Value/Status
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet
CONTINUID2	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet
CONFINITION	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done
TD 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
TP 4	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
1173	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
IP Z	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
IFI	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGOT PLT	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 REGGI KKI	ID of rear RH tire transmitter is not registered	Yet
ID DECCT DL4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	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

Α

В

С

D

Е

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ADP

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Р

Term	inal No.	Description				
	e color)		Input/		Condition	Value
+	_	Signal name	Output			(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4		lataria a sana la sana		Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
4 (P)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage
5	Ground	Passenger door UN-	Output	Passanger door	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(Y)	Ground	этер таптр	Output	Step lamp	OFF	Battery voltage
8	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
(V)	Ground	All doors LOCK	Output	All doors	Other than LOCK (Actuator is not activated)	0 V
9	Cround	Driver deer LINI OCK	Output		UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	Driver door UNLOCK	Output	Driver door	Other than UNLOCK (Actuator is not activated)	0 V
10	Crownd	Rear RH door and	Outenit	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(P)	Ground	rear LH door UN- LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON	ı	0 V
					OFF	0 V
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 2 ms
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
					ACC	0 V

	inal No.	Description				Value
(Wir	e color)	Signal name	Input/ Output		Condition	(Approx.)
					Turn signal switch OFF	0 V
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 5 0 1 s
					Turn signal switch OFF	6.5 V 0 V
					ram signal simon si	
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0
						6.5 V
19	Ground	Room lamp timer	Output	Interior room	OFF	Battery voltage
(Y)	(Y) Ground control	1	lamp	ON	0 V	
22	00		n Output		OPEN (Back door opener actuator is activated)	Battery voltage
23 (BR)	Ground	Back door open		Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
(G)	Giodila	iteai wipei	Output	iseai wipei	ON (Operated)	Battery voltage
34	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
34 (B) Gro	Giouna	na (-)	Saiput	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
35	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(W)	Glound				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
38	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(L)	Glound				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
39	Ground	Rear bumper anten-	Output	When the back door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)	Sidurid	na (+)	•		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
(-)		2/11/ 00111101			ON	0 V

	inal No.	Description				Value
(Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)
				Ignition switch	When selector lever is in P or N position	Battery voltage
52 (R)	Ground	Starter relay control	Output	ŌN	When selector lever is not in P or N position	0.3 V
				Ignition switch OF	F	0 V
60		Push-button ignition		Push-button igni-	Pressed	0 V
(BR)	Ground	switch (push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage
				·	ON (Pressed)	0 V
61 (R)	Ground	Back door request switch	Input	Back door request switch	OFF (Not pressed)	(V) 15 10 5 0 JPMIA0016GB 1.0 V
0.4					Sounding	0 V
64 (GR)	Ground	Warning buzzer	Output	Warning buzzer	Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop position	osi- Input	Rear wiper	In stop position	10 5 0 10 ms JPMIA0016GB
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When back door opens)	0 V
					Pressed	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB

	ninal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When rear LH door opens)	0 V
72	Ground	Room antenna (-)	Outout	Output Ignition switch OFF Where in the	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(B)	Ground	(Center console) Outp	Output		When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB

	ninal No. e color)	Description			On a disting	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	7.
73		Room antenna (+)		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(W) Ground	Ground	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	E
74	Ground	Passenger door an-		When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 1 1 s JMKIA0062GB	G H
(Y)	Glound	tenna (-)			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	ADF K
75		Passenger door an-		When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	M
(LG)	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 1 s JMKIA0063GB	O P

	ninal No. re color)	Description	I		• ""	Value
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)
76	Ground	Driver door antenna (-)	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(V)				switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
77		Driver door antenna (+)	Output	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 11 1 s JMKIA0062GB
(P)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent 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
(BR)	Cidana	block (J/B)] control	Caipai	Igrillori Switch	ON	Battery voltage

	ninal No. e color)	Description			On a distant	Value	
+	- Color)	Signal name	Input/ Output		Condition	(Approx.)	
83	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB	
(P)	Glound			When operating either button on Intelligent Key		(V) 15 10 5 0 1 ms JMKIA0065GB	
		Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	
87 (R)	Ground				Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	A
(14)					Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0039GB 1.3 V	
					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. e color)	Description			Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0036GB 1.3 V
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0039GB 1.3 V
					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
90 (P)	Ground	CAN - L	Input/ Output		_	_
91 (L)	Ground	CAN - H	Input/ Output		_	_

	inal No.	Description				V-I
(Wir	e color)	Signal name	Input/ Output		Condition	Value (Approx.)
					OFF	0 V
92 (R)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 1 s JPMIA0015GB
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(L)	Ciodila	7.00 Iciay control	Output	igilition switch	ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output		_	Battery voltage
99	Ground	Selector lever P posi-	Input	Selector lever	P position	0 V
(V)	Ground	tion switch	IIIput	Selector level	Any position other than P	Battery voltage
	, ,				ON (Pressed)	0 V
100 (P)	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 (W)	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
(Y)	Giodila	lay control	Output	Igillion Switch	ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OF	F	Battery voltage

	inal No.	Description	T			Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
107 (O)	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
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	А
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	^
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	ВС
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V	E
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V	G H I
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0040GB 1.3 V	ADP K
					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	M

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	inal No.	Description				V-I
(Wire	e color)	Signal name	Input/ Output		Condition	Value (Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch INT/ AUTO	(V) 15 10 5 0 2 ms JPMIA0038GB 1.3 V
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 JPMIA0012GB 1.1 V

< ECU DIAGNOSIS INFORMATION >

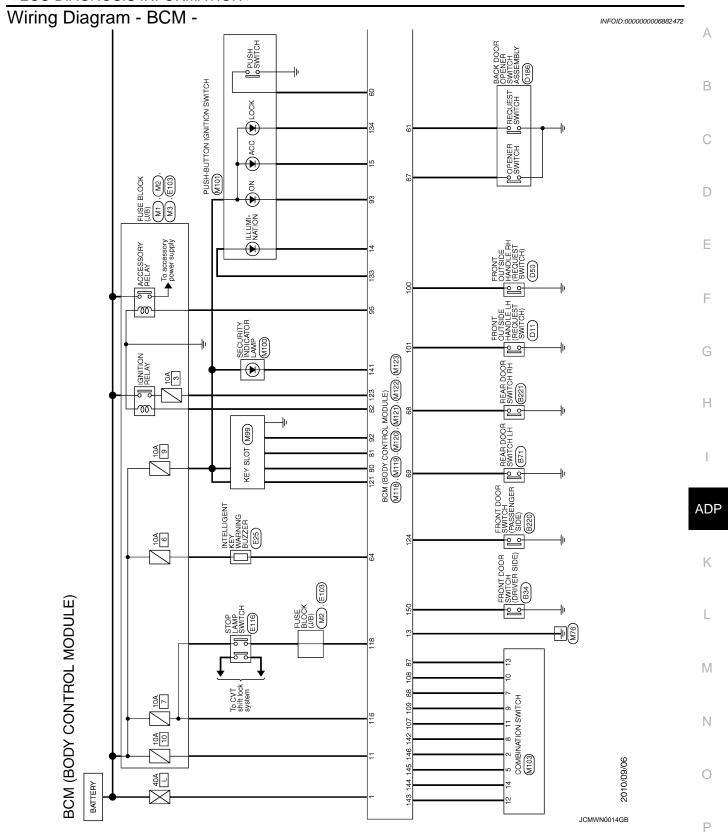
	inal No.	Description				Value
+	e color)	Signal name	Input/ Output		Condition	(Approx.)
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 JPMIA0156GB 8.7 V
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Giodila	Optical serisor	input	ON	When dark outside of the vehicle	Close to 0 V
116 (GR)	Ground	Stop lamp switch 1	Input		_	Battery voltage
118	Ground	Stop Jamp quitch 2	Innut	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
(L)	Giouria	Stop lamp switch 2	Input	Stop lamp switch	ON (Brake pedal is de- pressed)	Battery voltage
119 (W)	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 sensor switch ON)	0 V
121 (Y)	Ground	Key slot switch	Input		ey is inserted into key slot ey is not inserted into key slot	Battery voltage 0 V
123					OFF or ACC	0 V
(G)	Ground	IGN feedback	Input	Ignition switch	ON	Battery voltage
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When passenger door opens)	0 V

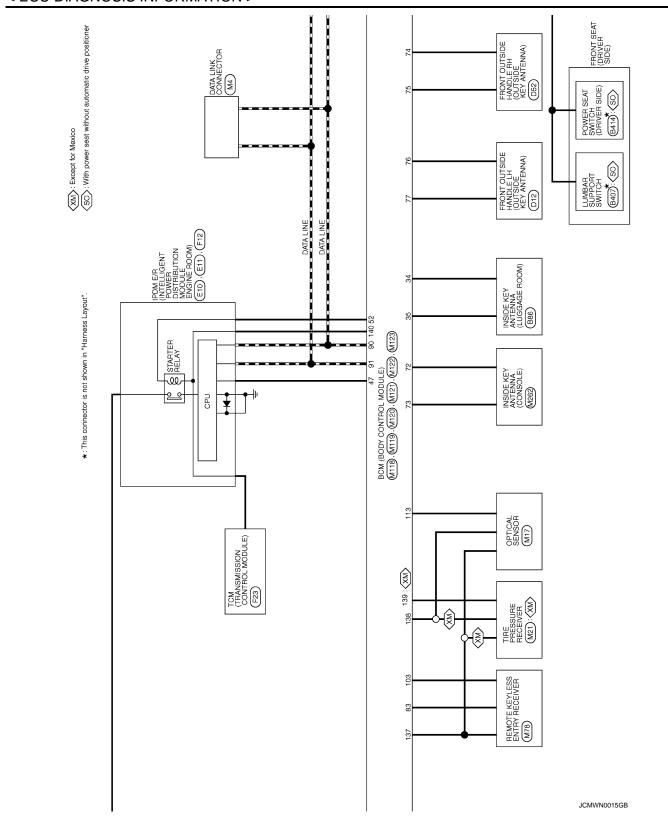
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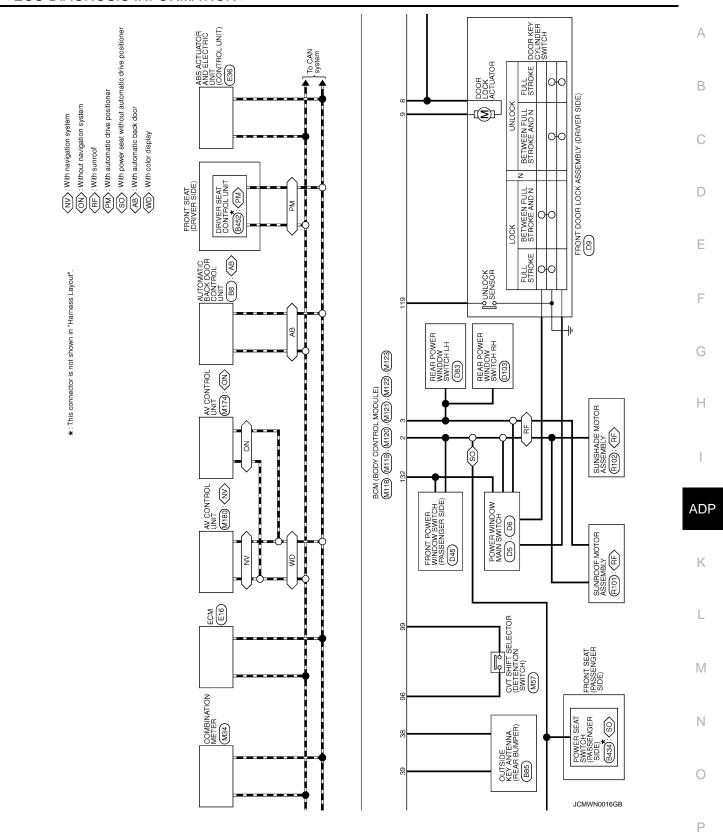
	inal No.	Description				Value
+	e color) –	Signal name	Input/ Output		Condition	(Approx.)
130 (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 10 5 0 10 ms JPMIA0012GB
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB 10.2 V
				Ignition switch OF	F or ACC	Battery voltage
					ON (When tail lamps OFF)	9.5 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5
					OFF	JPMIA0159GB
					OFF (ACC and ON indica-	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	tor lamps are not illuminated.)	Battery voltage
		D			ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V
(V)	Cidana	power supply	Calput	.5	ACC or ON	5.0 V

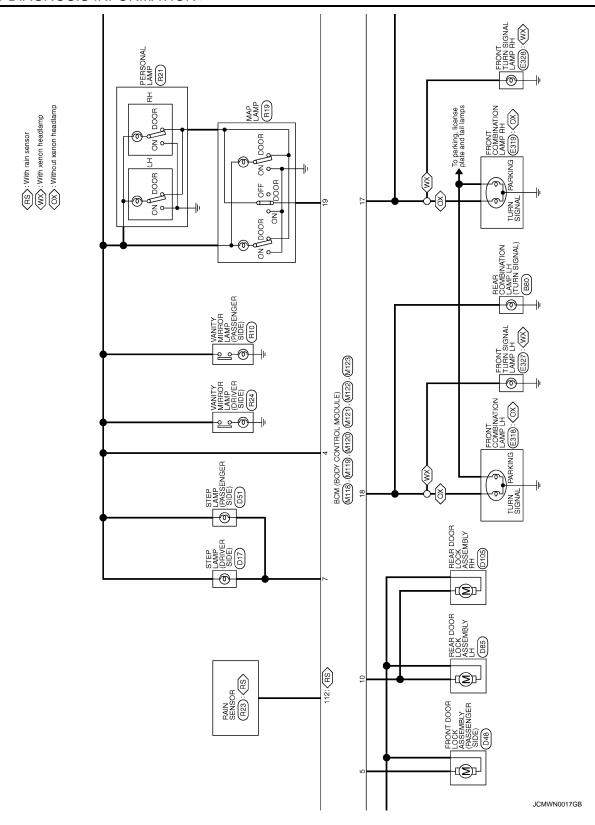
	inal No. e color)	Description	T		0 100	Value
+	- COIOT)	Signal name	Input/ Output		Condition	(Approx.)
139		Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 *** 0.2s OCC3881D
(O)	Ground	er communication	Output	ŎN	When receiving the signal from the transmitter	(V) 6 4 2 0 0 0.2s
140		Selector lever P/N			P or N position	Battery voltage
(GR)	Ground	position	Input	Selector lever	Except P and N positions	0 V
					ON	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	Blinking	11.3 V Battery voltage
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V (V) 15 10 2 ms JPMIA0031GB
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7	0 V (V) 15 10 2 ms JPMIA0032GB 10.7 V

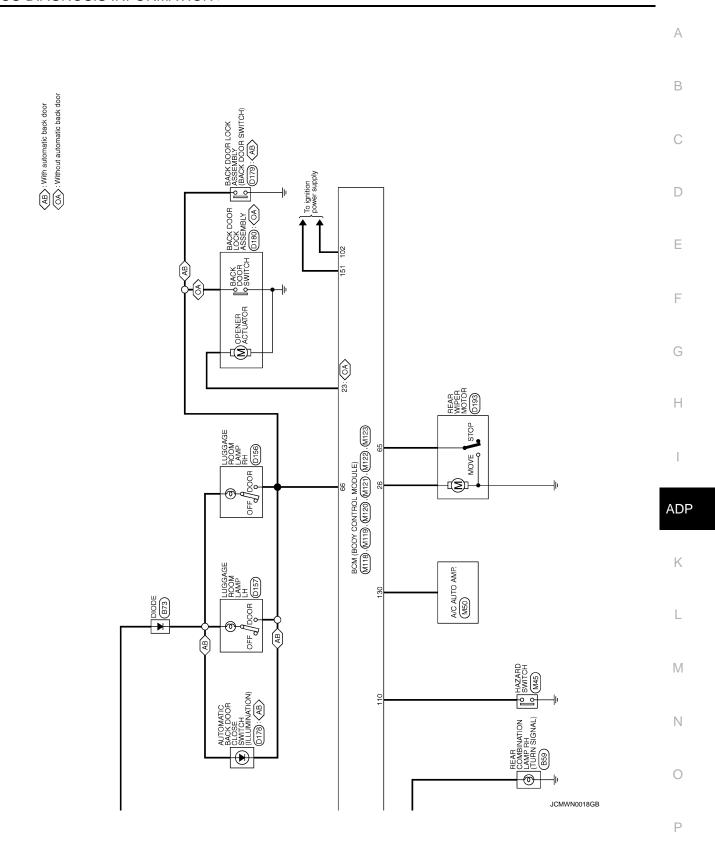
	inal No.	Description				Val.
(Wire	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)
					All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
144		Combination switch	0 1 1	Combination	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15
(P)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	5 0
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB
					All switches OFF	0 V
145		Combination switch		Combination switch	Front wiper switch INT/ AUTO Front wiper switch LO	(V) 15 10
(V)	Ground	OUTPUT 3	Output	(Wiper intermit- tent dial 4)	Lighting switch AUTO	10 5 0 2 ms JPMIA0034GB 10.7 V
					All switches OFF	0 V
					Front fog lamp switch ON	
				Combination	Lighting switch 2ND	(V)
146	Ground	Combination switch	Output	switch	Lighting switch PASS	10
(Y)		OUTPUT 4	·	(Wiper intermit- tent dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (When driver door opens)	0 V
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V
(G)	Ground	ger relay control	Output	fogger	Not activated	Battery voltage











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읾		:					
Connector No. M103	Connector No. M119	Connector No.	M121	82	H (IGN RELAY (F/B) CONT	
Connector Name COMBINATION SWITCH	Connector Name BCM (BODY CONTROL MODULE)	Connector Name	BCM (BODY CONTROL MODULE)	83	a a	COMBI SW INDIT 5	
Connector Type TH16FW-NH	Connector Type NS16FW-CS	Connector Type	TH40FGY-NH	88	- E	COMBI SW INPUT 3	
1	1			06	۵	CAN-L	
	Œ	Œ		16	٦	CAN-H	
7		Ě		92	ч	KEY SLOT ILL	
	4 5 6 7 0 8 9 10	2		93	Ь	ON IND	
2 3 4	11 12 13 14 15 16 17 18 19	51 50 49	48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32	92	٦	ACC RELAY CONT	
7 8 9 10 11 12 13 14	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	80 07 17	00 00 00 00 00 00 00 00	96	≻ :	CVT SHIFT SELECTOR POWER SUPPLY	
				g 5	> 0	SHIFT P	
Torminal	Torminal Color	Torminal		3 5	1 3	PASSENGER DOOR REGUEST SW	
	_	_	Signal Name [Specification]	9	>	BI OWER FAN MOTOR REI AY CONT	
T	t	t	LUGGAGE ROOM ANT 1-	103	ŀ	KEYLESS ENTRY RECEIVER POWER SUPPLY	
.no	5 G PASSENGER DOOR UNLOCK OUTPUT	H	LUGGAGE ROOM ANT 1+	107	0	COMBI SW INPUT 1	
3 0 FR	7 Y STEP LAMP OUTPUT	38 L	REAR BUMPER ANT-	108	Ь	COMBI SW INPUT 4	
	8 V ALL DOOR, FUEL LID LOCK OUTPUT	39 BR	REAR BUMPER ANT+	109	SB	COMBI SW INPUT 2	
01	G DRIVE	47 L	IGN RELAY IPDM E/R CONT	110	g	HAZARD SW	
В	10 P REAR DOOR UNLOCK OUTPUT	\dashv	STARTER RELAY CONT				
GR	LG BA	7	EXTRA IN 2				
-	В	+	BACK DOOR OPENER REQUEST SW				
+	O PUSH-BUTTO	+	REQUEST SW BUZZER				
	7	+	KEAK WIPER STOP POSITION				
0 ;	9 E	+	BACK DOOR SW				
+	¥ :	+	BACK DOOR OPENER SW				
	19 Y ROOM LAMP TIMER CONTROL	+	REAR RH DOOR SW				
14 P OUIPUL 2		H 69	REAR LH DOOR SW				
	Connector No. M120						
Connector No. M118	Т	Connector No.	M122				
L	Connector Name BCM (BODY CONTROL MODULE)	Oceanostor Namo	BCM (BODY CONTBOL MOBILE)				
	Connector Type NS12FW-CS	Connector Name	BOM (BODT CONTROL MODULE)				
Connector Type M03FB-LC	₫.	Connector Type	TH40FB-NH				
4	AHT	Ą.					
- Arts		4					
E.	21 7 22 23	H.S.					
13	[25]26[27]28[29]30[31]	91 90 89	08 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 08 107 108 105 104 108 109 100 89 98 97 86 85 84 83 92				
	L						
rolo2	Terminal Color Signal Name [Specification]	Tarminal					
No. of Wire Signal Name [Specification]	t	_	Signal Name [Specification]				
1 W BAT (F/L)	9	72 B	ROOM ANT 2-				
2 GR POWER WINDOW POWER SUPPLY (BAT)		73 W	ROOM ANT 2+				
3 L POWER WINDOW POWER SUPPLY (RAP)		74 Y	PASSENGER DOOR ANT-				
		75 LG	PASSENGER DOOR ANT+				
		> 6	DRIVER DOOR ANT				
		+	IMMOBI ANTENNA CONTROL				
		╀	IMMOBI ANTENNA SIGNAL				
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Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM (BODY CONTROL MODULE)

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

< ECU DIAGNOSIS INFORMATION >

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 $ON \rightarrow OFF$
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
B2607: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)
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

HIGH FLASHER OPERATION

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

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

NOTE:

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

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF \Rightarrow ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

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

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

< ECU DIAGNOSIS INFORMATION >

DTC Inspection Priority Chart

INFOID:0000000006882474

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

Priority	DTC	В
1	B2562: LOW VOLTAGE	
2	U1000: CAN COMM U1010: CONTROL UNIT(CAN)	C
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING 	D
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 B260A: IGNITION RELAY B260F: 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 B261E: VEHICLE TYPE B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR 	F G H
	U0415: VEHICLE SPEED SIG C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR	K
-	 C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR 	L
5	 C1710: [NO DATA] RR C1711: [NO DATA] RL C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1734: CONTROL UNIT 	M
6	B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA	0

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</u>, "COM-MON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi-	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected.		tion			
further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-38
U1010: CONTROL UNIT(CAN)	_	_	_	_	BCS-39
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-40
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-42
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-45
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-46
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-48
B2195: ANTI SCANNING	×	_	_	_	SEC-49
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP	_	×	_	_	SEC-50
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-52
B2557: VEHICLE SPEED	×	×	×		SEC-54
B2560: STARTER CONT RELAY	×	×	×	_	SEC-55
B2562: LOW VOLTAGE	_	×	_	_	BCS-41
B2601: SHIFT POSITION	×	×	×		SEC-56
B2602: SHIFT POSITION	×	×	×	_	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-61
B2604: PNP SW	×	×	×	_	SEC-64
B2605: PNP SW	×	×	×	_	SEC-66
B2608: STARTER RELAY	×	×	×	_	SEC-68
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-70
B2614: ACC RELAY CIRC	_	×	×	_	PCS-52
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-55
B2616: IGN RELAY CIRC	_	×	×	_	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-72
B2618: BCM	×	×	×	_	PCS-61
B261A: PUSH-BTN IGN SW	_	×	×	_	SEC-75
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-78
B2622: INSIDE ANTENNA		×		_	DLK-91
B2623: INSIDE ANTENNA	_	×	_	_	DLK-93
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-71
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	-
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-23</u>
C1707: LOW PRESSURE RL		_	_	×	-

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	WT-25
C1710: [NO DATA] RR	_	_	_	×	<u>W1-23</u>
C1711: [NO DATA] RL	_	_	_	×	
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-29</u>
C1734: CONTROL UNIT	_	_	_	×	<u>WT-30</u>

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SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table

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

Order	Function	Operation procedure	Symptom	Diagnostic item	Reference page
1	Memory function	Perform memory storage (Refer to <u>ADP-10</u> .) and	All parts do not operate in memory function.	_	ADP-187
'	Memory function	memory operation (Refer to ADP-22).	mory operation (Refer to Memory indicator 1 or 2 does not oper-		ADP-188
2	Manual function	Perform manual function	All components of power seat do not operate.	_	ADP-189
2	Mariuai furiciiori	(Refer to ADP-17).	All components of tilt&telescopic do not operate.	_	ADP-197
				Sliding	ADP-190
		Perform manual function (Refer to <u>ADP-17</u> .) and memory function (Refer to <u>ADP-22</u> .).	Manual function or memory function does not operate. (for specific part)	Reclining	ADP-190
	3 and (Remove function me			Lifting (front)	ADP-191
3				Lifting (rear)	ADP-192
				Steering tilt	ADP-192
				Steering telescopic	ADP-193
				Door mirror	ADP-194
4	Entry/exit assist function	Perform entry/exit assist function. Exit assist function: Refer to ADP-27 Entry assist function: Refer to ADP-32	Entry/exit assist function does not operate.	_	ADP-195
5	Intelligent Key inter lock function	Perform Intelligent Key inter lock function (Refer to ADP-37).	Intelligent Key inter lock function does not operate.	_	ADP-196

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

< SYMPTOM DIAGNOSIS >

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION	Λ
Diagnosis Procedure	А
1. CHECK MEMORY FUNCTION	В
Check memory function. Refer to ADP-22, "MEMORY FUNCTION: System Description". Is the inspection result normal?	С
YES >> Memory function is normal. NO >> GO TO 2.	
2.CHECK SEAT MEMORY SWITCH	D
Check seat memory switch. Refer to ADP-69, "Component Function Check".	Е
Is the inspection result normal? YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	F
3. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	
Check driver seat control unit power supply and ground circuit. Refer to ADP-55, "DRIVER SEAT CONTROL UNIT: Diagnosis Procedure".	G
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	Н
4. 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-55, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Procedure".	I
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunction parts.	ADP
5. PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE	
Perform initialization procedure. Perform initialization procedure.	K
Refer to <u>ADP-9, "SYSTEM INITIALIZATION: Special Repair Requirement"</u> . 2. Perform memory storing procedure.	
Refer to <u>ADP-10</u> , " <u>MEMORY STORING</u> : <u>Special Repair Requirement</u> ". 3. Check memory function.	L
Refer to ADP-22, "MEMORY FUNCTION: System Description".	
Is the inspection result normal? YES >> Memory function is normal.	\mathbb{M}
YES >> Memory function is normal. NO >> GO TO 6.	
6.CONFIRM THE OPERATION	Ν
Confirm the operation again.	
Is the result normal? YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".	0
YES >> Check intermittent incident. Refer to <u>GI-44, "Intermittent Incident"</u> . NO >> GO TO 1.	
	Р

MEMORY INDICATE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000006258134

1. CHECK MEMORY INDICATOR

Check memory indicator.

Refer to ADP-116, "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-44, "Intermittent Incident".

NO >> GO TO 1.

ALL COMPONENTS OF POWER SEAT DO NOT OPERATE

< SYMPTOM DIAGNOSIS > ALL COMPONENTS OF POWER SEAT DO NOT OPERATE		
		А
Diagnosis Procedure	INFOID:0000000006258135	
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT		В
Check power seat switch ground circuit. Refer to ADP-77, "Diagnosis Procedure".		
Is the inspection result normal?		С
YES >> GO TO 2. NO >> Repair or replace harness or connector.		
2.CONFIRM THE OPERATION		D
Confirm the operation again.		
Is the result normal?		Е
YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1.		
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< SYMPTOM DIAGNOSIS >

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000006258136

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-57, "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-102, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CHECK SLIDING SENSOR

Check sliding sensor.

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING: Diagnosis Procedure

INFOID:0000000006258137

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-59, "Component Function Check".

Is the inspection result normal?

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts. 3. CHECK RECLINING MOTOR	Α
Check reclining motor.	
Refer to ADP-104, "Component Function Check".	В
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	С
4.CHECK RECLINING SENSOR	
Check reclining sensor.	D
Refer to ADP-84, "Component Function Check".	
Is the inspection result normal?	_
YES >> GO TO 5. NO >> Repair or replace the malfunction parts.	Е
5.CONFIRM THE OPERATION	
Check the operation again.	F
Is the result normal?	
YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1.	G
SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT): Diagnosis Procedure	Н
1.CHECK LIFTING (FRONT) MECHANISM	
 Check for the following. Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	'
Is the inspection result normal?	ADF
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts. 2.CHECK LIFTING SWITCH (FRONT)	K
Check lifting switch (front).	
Refer to ADP-61, "Component Function Check".	L
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	M
3.CHECK LIFTING MOTOR (FRONT)	
Check lifting motor (front).	N
Refer to ADP-106, "Component Function Check".	IN
Is the inspection result normal? YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	0
4.CHECK LIFTING SENSOR (FRONT)	
Check lifting sensor (front). Refer to ADP-87, "Component Function Check".	Р
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunction parts.	
5. CONFIRM THE OPERATION	
Check the operation again.	

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Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR): Diagnosis Procedure

INFOID:0000000006258139

1. CHECK LIFTING (REAR) MECHANISM

Check for the following.

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK LIFTING SWITCH (REAR)

Check lifting switch (rear).

Refer to ADP-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).

Refer to ADP-108, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4. CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).

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

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1. STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000006258140

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-65, "Component Function Check".

Is the inspection result normal?	
YES >> GO TO 3.	Α
NO >> Repair or replace the malfunction parts.	
3.CHECK TILT MOTOR	В
Check tilt motor.	
Refer to ADP-110, "Component Function Check". Is the inspection result normal?	
YES >> GO TO 4.	С
NO >> Repair or replace the malfunction parts.	
4.CHECK TILT SENSOR	D
Check steering tilt sensor.	
Refer to ADP-93, "Component Function Check".	
Is the inspection result normal?	Е
YES >> GO TO 5.	
NO >> Repair or replace the malfunction parts.	F
5.CONFIRM THE OPERATION	1
Check the operation again.	
Is the result normal?	G
YES >> Check intermittent incident. Refer to <u>GI-44, "Intermittent Incident"</u> . NO >> GO TO 1.	
STEERING TELESCOPIC	Н
	11
STEERING TELESCOPIC : Diagnosis Procedure	
1.CHECK STEERING TELESCOPIC MECHANISM	I
Check for the following.	
Mechanism deformation or pinched foreign materials.	
	ADP
Interference with other parts because of poor installation.	ADP
 Interference with other parts because of poor installation. Is the inspection result normal? 	ADP K
 Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. 	
Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch.	
Interference with other parts because of poor installation. Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 2.CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "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 TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? 	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. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "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. 2.CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "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. CHECK TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. CHECK TELESCOPIC MOTOR 	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 TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK TELESCOPIC MOTOR Check telescopic motor. 	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 TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-112. "Component Function Check". 	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 TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK TELESCOPIC MOTOR Check telescopic motor. 	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 TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-112, "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 TELESCOPIC SWITCH Check telescopic switch. Refer to ADP-67, "Component Function Check". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3.CHECK TELESCOPIC MOTOR Check telescopic motor. Refer to ADP-112, "Component Function Check". Is the inspection result normal? YES >> GO TO 4. 	K L M
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< SYMPTOM DIAGNOSIS >

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR: Diagnosis Procedure

INFOID:0000000006258142

1. CHECK DOOR MIRROR MECHANISM

Check for the following.

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK MIRROR SWITCH

Check mirror switch.

Refer to ADP-74, "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-114, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CHECK MIRROR SENSOR

Check mirror sensor.

Refer to ADP-98, "DRIVER SIDE: Component Function Check". (Driver side)

Refer to ADP-99, "PASSENGER SIDE: Component Function Check". (Passenger side)

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS > ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE	
Diagnosis Procedure	Α
1.CHECK SYSTEM SETTING	В
Check system setting. Refer to ADP-11, "SYSTEM SETTING: Special Repair Requirement". Check the operation. Is the inspection result normal?	С
YES >> Entry/Exit function is OK. NO >> GO TO 2. 2.PERFORM SYSTEM INITIALIZATION	D
 Perform system initialization. Refer to <u>ADP-9</u>, "SYSTEM INITIALIZATION: Special Repair Requirement". Check the operation. 	Е
Is the inspection result normal? YES >> Entry/Exit function is OK. NO >> GO TO 3.	F
3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)	G
Check front door switch (driver side). Refer to DLK-97 , "WITH AUTOMATIC BACK DOOR: Component Function Check". Is the inspection result normal? YES >> GO TO 4.	Н
NO $>>$ Repair or replace the malfunction parts. f 4. CONFIRM THE OPERATION	I
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1.	ADP
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INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000006258144

1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Refer to DLK-10, "Work Flow".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. PERFORM MEMORY STORING PROCEDURE

1. Perform memory storing procedure.

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

2. Check Intelligent Key interlock function.

Refer to ADP-37, "INTELLIGENT KEY INTERLOCK FUNCTION: System Description".

Is the inspection result normal?

YES >> Intelligent Key inter lock function is normal.

NO >> Replace driver seat control unit. Refer to <u>ADP-201, "Removal and Installation"</u>.

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE Α Diagnosis Procedure INFOID:0000000006258145 1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT В Check tilt & telescopic switch ground circuit. Refer to ADP-78, "Diagnosis Procedure". C Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace harness or connector. 2.CONFIRM THE OPERATION D Confirm the operation again. Is the result normal? Е YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident". NO >> GO TO 1. F Н ADP K L M Ν 0 Р

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description INFOID:00000000006258146

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

Symptom	Cause	Action to take	Reference page
	No initialization has been performed.	Perform initialization.	ADP-9
Entry/exit assist function and seat synchronization do not operate.	Entry/exit assist function is disabled. NOTE: The entry/exit assist function and seat synchronization function are disabled before delivery (initial setting).	Change the settings.	ADP-11
Entry assist function does not operate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	<u>ADP-32</u>
Lumbar support does not perform memory operation.	The lumbar support system are controlled independently with no link to the automatic drive positioner system.	_	Lumbar support system: SE-8
			Memory function: ADP-22
Memory function, entry/exit assist function, or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Exit assist function: <u>ADP-27</u>
			Entry assist function: ADP-32
			Intelligent Key interlock function: ADP-37

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

FOR USA AND CANADA: 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.

FOR MEXICO

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

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PRECAUTIONS

< PRECAUTION >

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.

DRIVER SEAT CONTROL UNIT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-90, "Exploded View".

Removal and Installation

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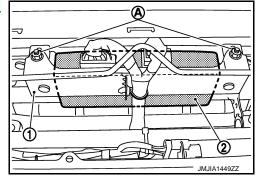
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REMOVAL

CAUTION:

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

- Remove the driver seat (1). Refer to <u>SE-97, "Removal and Installation"</u>.
- 2. Remove the mounting nut (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".

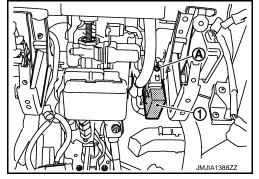
Removal and Installation

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-12, "FRONT DOOR FINISHER: Exploded View".

Removal and Installation

emoval and installation

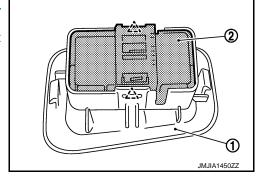
REMOVAL

CAUTION:

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

- 1. Remove the seat memory finisher (1). Refer to <u>INT-12</u>, "FRONT <u>DOOR FINISHER</u>: Removal and Installation".
- 2. Press pawls and remove seat memory switch (2) from seat memory 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-90, "Exploded View".

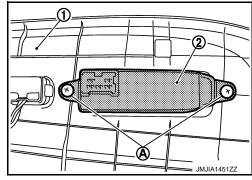
Removal and Installation

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-97</u>, "Removal and Installation".
- 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 <u>ADP-8</u>, "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

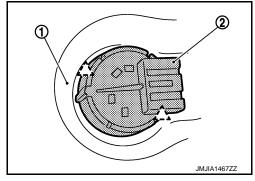
REMOVAL

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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