SECTION ADP В AUTOMATIC DRIVE POSITIONER С

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< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000003312315

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OVERALL SEQUENCE



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DETAILED FLOW

Revision: 2008 October

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 <u>ADP-131, "DTC Index"</u>

Is any symptom described and any DTC is displayed?

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5. CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to <u>ADP-202, "Description"</u>.

Is the incident normal operation?

YES >> INSPECTION END

NO >> GO TO 7.

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.

NO >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

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.Repare or replace the malfunctioning parts

Repair or replace the malfunctioning part.

>> GO TO 10.

10.FINAL CHECK

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

Revision: 2008 October

ADP-6

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		
		Perform initialization		
Entry/exit assist	OFF	Set slide amount ^{*1}		
Intelligent Key interlock	Erased	Perform initialization		
intelligent Key interlock	Liaseu	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 <u>ADP-9. "SYSTEM INITIALIZATION : Description"</u>.

>> 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:000000003312318

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
	055	Perform initialization
Entry/exit assist	OFF	Set slide amount ^{*1}
Intelligent Key interlegk	Erased	Perform initialization
Intelligent Key interlock	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-

ADP-8

< BASIC INSPECTION >	
quirement	INFOID:000000003312319
1.SYSTEM INITIALIZATION	
Perform system initialization. Refer to ADP-9, "SYSTEM INITIALIZATION : Description".	
>> GO TO 2.	
2.SYSTEM SETTING	
Perform system setting. Refer to <u>ADP-11, "SYSTEM SETTING : Description"</u> .	
>> GO TO 3.	
3.MEMORY STORAGE	
Perform memory storage. Refer to ADP-9, "MEMORY STORING : Description".	
>> END SYSTEM INITIALIZATION	
SYSTEM INITIALIZATION : Description	INFOID:000000003312320
Always perform the initialization when the battery terminal is disconnected or the driver se replaced.	eat control unit is
The entry/exit assist function will not operate normally if no initialization is performed.	
SYSTEM INITIALIZATION : Special Repair Requirement	INFOID:000000003312321
INITIALIZATION PROCEDURE	
1. CHOOSE METHOD	
There are two initialization methods.	
Which method do you use?	
With door switch>>GO TO 2.	
With vehicle speed>>GO TO 4. 2. STEP A-1	
Turn ignition switch from ACC to OFF position.	
>> GO TO 3.	
3. STEP A-2	
Driver door switch is ON (open) \rightarrow OFF (close) \rightarrow ON (open).	
>> END	
4. STEP B-1	
Drive the vehicle at more than 25 km/h (16 MPH).	
>> END MEMORY STORING	
MEMORY STORING : Description	INFOID:000000003312322

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

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?

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

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

Setting Change

					×: Applicable
Item	Content	CON- SULT –III	Display	Set switch	Factory setting
Amount of seat sliding for entry/exit assist	The amount of seat sliding for entry/exit assist can be selected from 3 items. [40mm/80mm/150mm]	x	_	_	40mm
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	x	x	v	ON
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	х	x	х	ON
Reset custom settings	All settings can be set to default (factory setting).		х	_	_
. CHOOSE METHOD here are three way of se	5				
<u>Which method do you cho</u> With display>>GO TO 2. With set switch>>GO TO	bose?				
With CONSULT-III>>GO					
. WITH DISPLAY - STE	P 1				
urn ignition switch ON.					
>> GO TO 3.					
3. WITH DISPLAY - STE	P 2				
. Push "SETTING" butt					
. Select "Comfort & cor			n dianlay	then nue	h
	Vheel ON Exit"or "Slide Driver's Seat Back C N Exit: Entry/exit assist (steering column)		m aispiay,	then pus	n
	ack On Exit: Entry/exit assist (seat)				
>> END					
	STED 1				
	SIEF I				
urn ignition switch OFF.					
>> GO TO 5.					
. WITH SET SWITCH -	STEP 2				
Entry/exit assist (seat/st	old for more than 10 seconds, then confirm eering column) are ON: Memory switch indic eering column) are OFF: Memory switch ind	cator blinl	k two time		h indicator.

>> END

6. WITH CONSULT-III - STEP 1

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< BASIC INSPECTION >

Select "Work support".

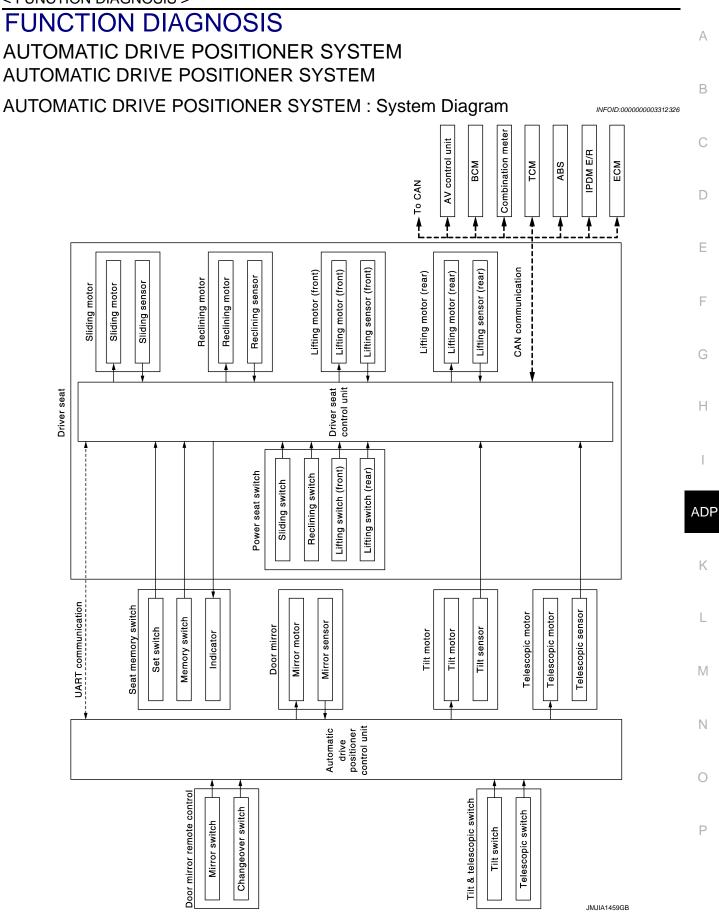
>> GO TO 7.

7. WITH CONSULT-III - STEP 2

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

>> END

< FUNCTION DIAGNOSIS >



< FUNCTION DIAGNOSIS >

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:000000003312327

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.

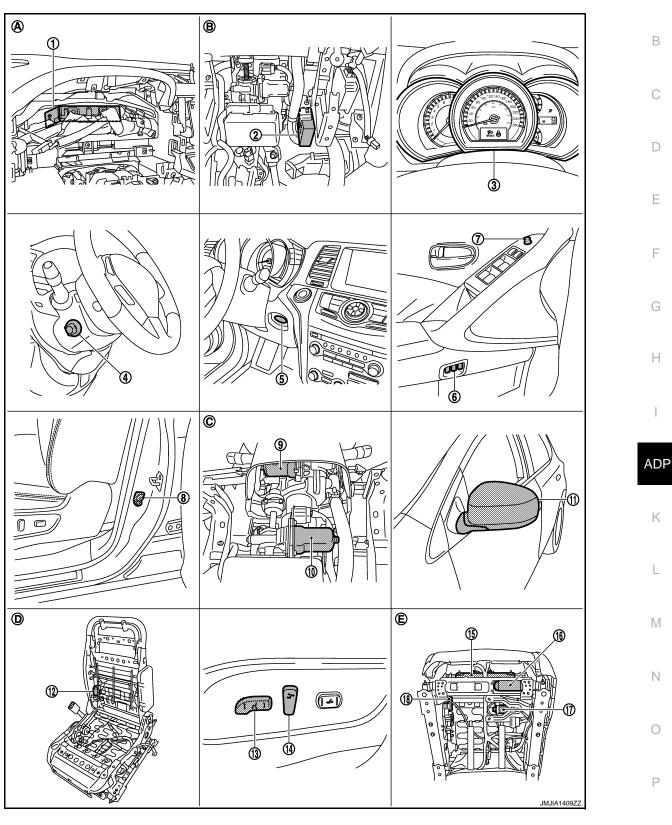
Function		Description	
Manual function		The driving position (seat, steering column and door mirror position) can be adjued by using the power seat switch, tilt & telescopic switch or door mirror remote conswitch.	
Memory function		The seat, steering column and door mirror move to the stored driving 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 funct	on	Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.	

NOTE:

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

< FUNCTION DIAGNOSIS >

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Parts Location INFOLD:000000003312328



- 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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< FUNCTION DIAGNOSIS >

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

INFOID:000000003312329

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description

CONTROL UNITS

Item	Function
Driver seat control unit	 Main units of automatic drive positioner system It is connected to the CAN. It communicates with the automatic drive positioner control 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 Steering lock unit status : Lock/Unlock Handle position : LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communi- cation.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
ТСМ	Transmit the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

Item	Function	
Key slot	The key switch is installed to detect the key inserted/removed status.	
Front door switch (driver side)	Detect front door (driver side) open/close status.	
Control device (detention switch)	Detect the P range position of A/T selector lever.	
Set switch	The registration and system setting can be performed with its operation.	
Memory switch 1/2	The registration and operation can be performed with its operation.	
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch. 	

< FUNCTION DIAGNOSIS >

Item	Function	_
Tilt & telescopic switch	 The following switch is installed. Tilt switch Telescopic switch The specific parts can be operated with the operation of each switch. 	– A B
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. 	С

Sensors

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

OUTPUT PARTS

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

MANUAL FUNCTION

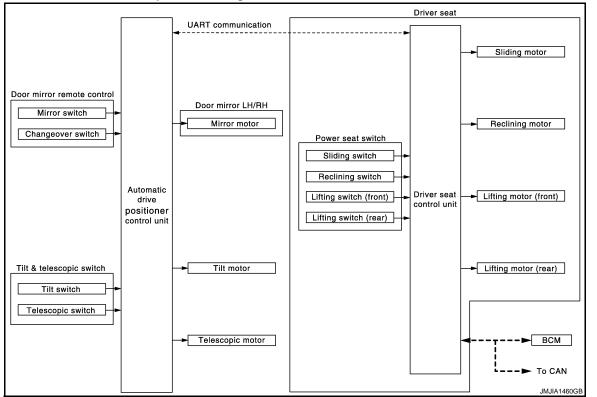
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< FUNCTION DIAGNOSIS >

MANUAL FUNCTION : System Diagram



MANUAL FUNCTION : System Description

INFOID:000000003312331

INFOID:000000003312330

OUTLINE

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

OPERATION PROCEDURE

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

NOTE:

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

DETAIL FLOW

Seat

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

Tilt & Telescopic

< FUNCTION DIAGNOSIS >

	Order	Input	Output	Control unit condition	А
-	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.	В
	2	_	Motors (Tilt, telescopic)	The automatic drive positioner control unit actuates each motor according to the operation of the tilt & telescopic switch.	

Door Mirror

Order	Input	Output	Control unit condition	
1	Door mirror remote control switch	_	The door mirror remote control switch signal is inputted to the au- tomatic drive positioner control unit when the door mirror remote control switch is operated.	D
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.	E

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.

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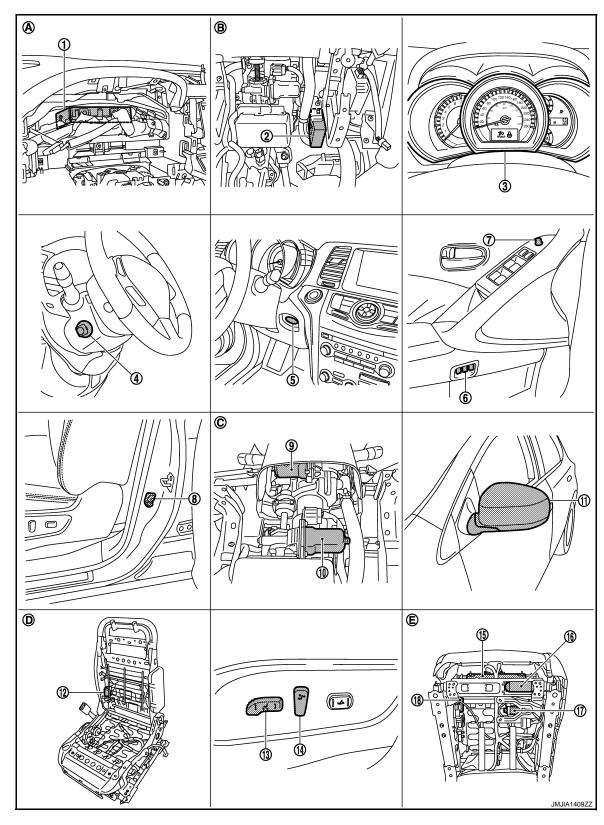
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< FUNCTION DIAGNOSIS >

MANUAL FUNCTION : Component Parts Location

INFOID:000000003465774



- 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

< FUNCTION DIAGNOSIS >

10. Telescopic motor M117 11. Door mirror (driver side) D3 12. Reclining motor B461 13. Sliding, Lifting switch 14. Reclining switch 15. Driver seat control unit B451,B452 (Power seat switch B459) (Power seat switch B459) 16. Sliding motor B461 17. Lifting motor (front) B455 18. Lifting motor (rear) B456

View with instrument driver lower

Backside of the seat cushion

panel removed

- Behind the combination meter В.
- D. View with seat cushion and seatback E. pad removed

MANUAL FUNCTION : Component Description

CONTROL UNITS

Α.

C. View with instrument driver lower panel removed

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

INPUT PARTS

Switches

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

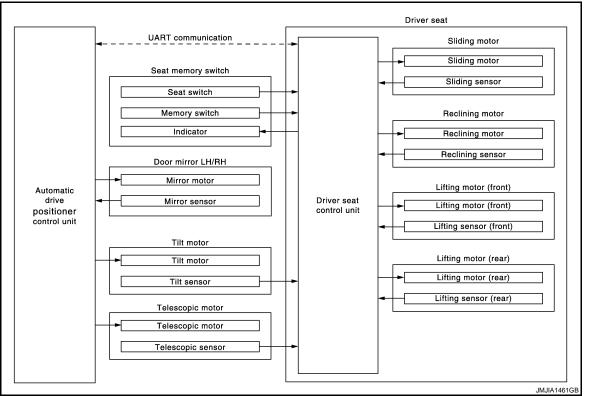
OUTPUT PARTS

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

MEMORY FUNCTION

< FUNCTION DIAGNOSIS >

MEMORY FUNCTION : System Diagram



MEMORY FUNCTION : System Description

INFOID:000000003312339

INFOID:000000003312338

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 <u>ADP-9, "MEMORY STORING : Description"</u>.

OPERATION PROCEDURE

- 1. 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.

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

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

DETAIL FLOW

< FUNCTION DIAGNOSIS >

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 recogniz- es the memory switch pressed for 0.5 second or more and requests each motor operation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit op- erates each motor.
		Memory switch Indica- tor	Driver seat control unit requests the flashing of memory indicator while either of the motors is operating. The driver seat control unit il- luminates the memory indicator.
3	Sensors (Seat, steering col- umn, door mirror)	_	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirror are monitored with each sensor signal. Driver seat control unit stops the operation of each motor when each part reaches the record- ed address.
4	_	Memory switch Indica- tor	Driver seat control unit requests the illumination of memory indicator after all motors stop. The driver seat control unit illuminates the memory indicator for 5 seconds.

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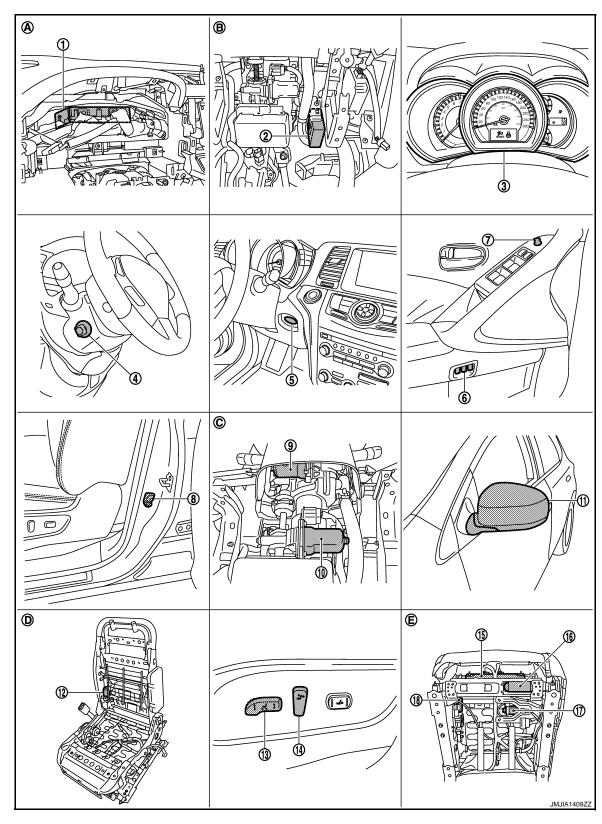
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< FUNCTION DIAGNOSIS >

MEMORY FUNCTION : Component Parts Location

INFOID:000000003465775



- 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

< FUNCTION DIAGNOSIS >

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	A
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456	
Α.	Behind the combination meter	В.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed	В
D.	View with seat cushion and seatback pad removed	E.	Backside of the seat cushion			C
	•					U

MEMORY FUNCTION : Component Description

CONTROL UNITS

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

INPUT PARTS

Switches

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

Sensors

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

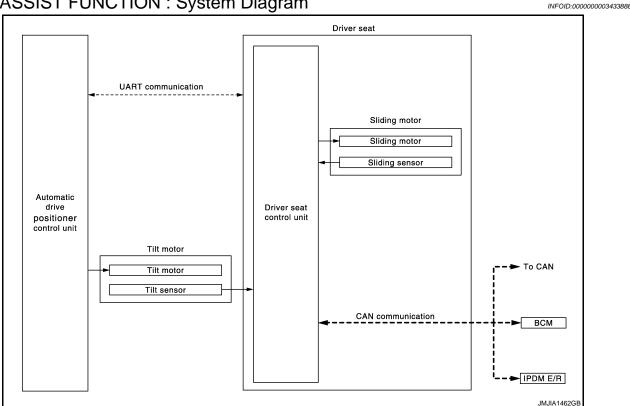
OUTPUT PARTS

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

EXIT ASSIST FUNCTION

< FUNCTION DIAGNOSIS >

EXIT ASSIST FUNCTION : System Diagram



EXIT ASSIST FUNCTION : System Description

INFOID:000000003433889

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. NOTE:

- 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) 1.
- Driver seat and steering column will move to the exiting position. 2.

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

< FUNCTION DIAGNOSIS >

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 recog- nizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor to auto drive positioner control unit via UART communication. The au- tomatic drive positioner control unit operates each motor for a con- stant amount.

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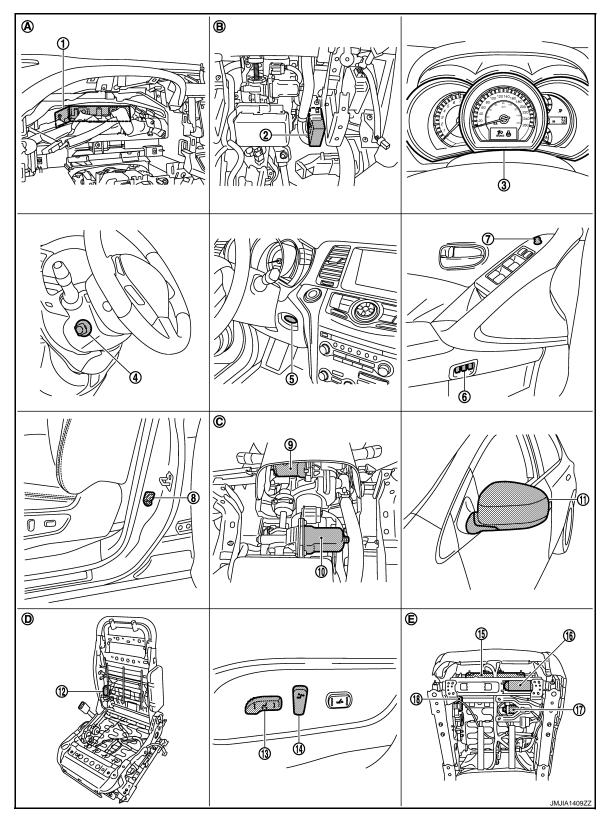
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< FUNCTION DIAGNOSIS >

EXIT ASSIST FUNCTION : Component Parts Location

INFOID:000000003465777



- 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

< FUNCTION DIAGNOSIS >

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

EXIT ASSIST FUNCTION : Component Description

CONTROL UNITS

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Item	Function
Driver seat control unit	 Operates the seat sliding motor for a constant amount. Requests the operations of tilt motor to automatic drive positioner control unit.
Automatic drive positioner control unit	Operates the tilt motor with the request from the driver seat control.
BCM	 Recognizes the following status and transmits it to the driver seat control unit via CAN communication. Door switch signal (front driver side) Key switch signal Ignition switch signal
IPDM E/R	Recognizes the following status and transmits it to the driver seat control unit via CAN communication.Detent switch signal

INPUT PARTS

Switches

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

Sensors

-	Item	Function	
-	Tilt sensor	Detect the up/down position of steering column.	
_	Sliding sensor	Detect the front/rear position of seat.	

OUTPUT PARTS

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

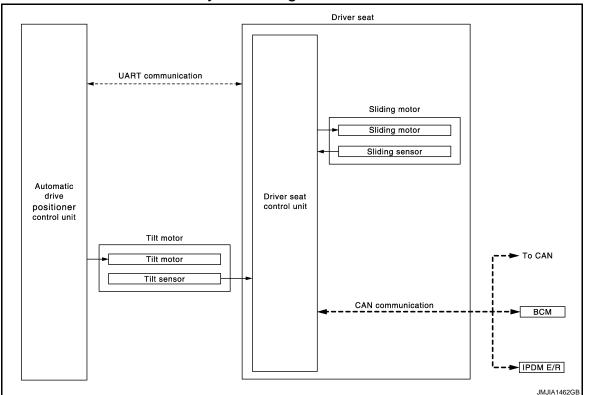
ENTRY ASSIST FUNCTION

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< FUNCTION DIAGNOSIS >

ENTRY ASSIST FUNCTION : System Diagram



ENTRY ASSIST FUNCTION : System Description

INFOID:000000003433893

INFOID:000000003433892

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</u>, "SYSTEM INITIALIZATION : Description".

OPERATION PROCEDURE

- 1. 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 Door mirror control switch Set switch Memory switch 	OFF (Not operated)

DETAIL FLOW

< FUNCTION DIAGNOSIS >

Order	Input	Output	Control unit condition
1	Ignition switch	_	Driver seat control unit receives the signals of [ignition switch signal] from BCM via CAN communication.
2	_	Motors (Sliding, tilt)	Driver side control unit operates the sliding motor when the operating conditions are satisfied and requests the operations of tilt motor to automatic drive positioner control unit via UART communication. The automatic drive positioner operates each motor.
	Sensors	_	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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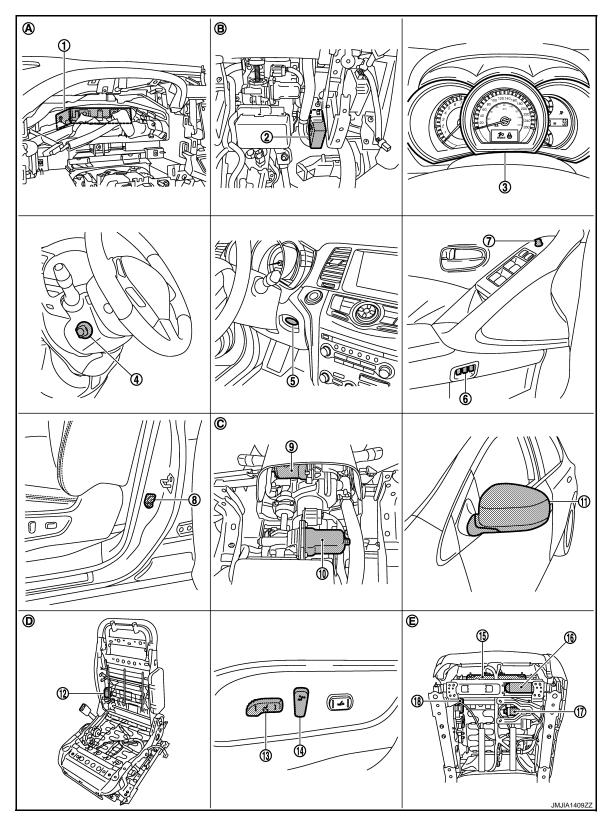
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< FUNCTION DIAGNOSIS >

ENTRY ASSIST FUNCTION : Component Parts Location

INFOID:000000003465778



- 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

ADP-32

< FUNCTION DIAGNOSIS >

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

Backside of the seat cushion

- D. View with seat cushion and seatback E. pad removed
- **ENTRY ASSIST FUNCTION : Component Description**

CONTROL UNITS

INFOID:00000003433895

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

INPUT PARTS

Sensors

Item	Function	1
Tilt sensor	Detect the up/down position of steering column.	
Sliding sensor	Detect the front/rear position of seat.	

OUTPUT PARTS

Item	Function	ĸ
Tilt motor	Move the steering column upward/downward.	
Sliding motor	Slide the seat frontward/rearward.	
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INTELLIGENT KEY INTERLOCK FUNCTION

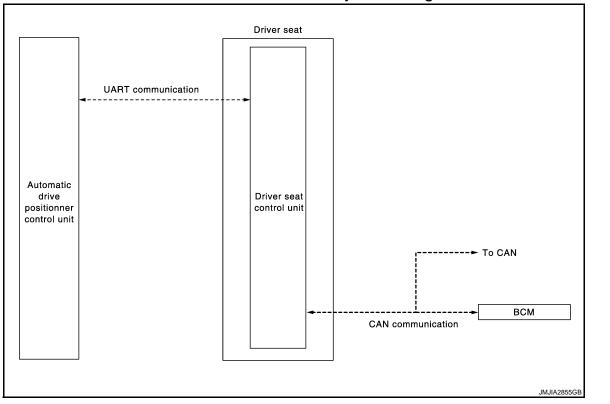
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< FUNCTION DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

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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 <u>ADP-9</u>, "<u>MEMORY STORING</u> : <u>Description</u>".

OPERATION CONDITION

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

Item	Request status
Ignition position	OFF
Steering lock unit	LOCK
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

< FUNCTION DIAGNOSIS >

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.	(

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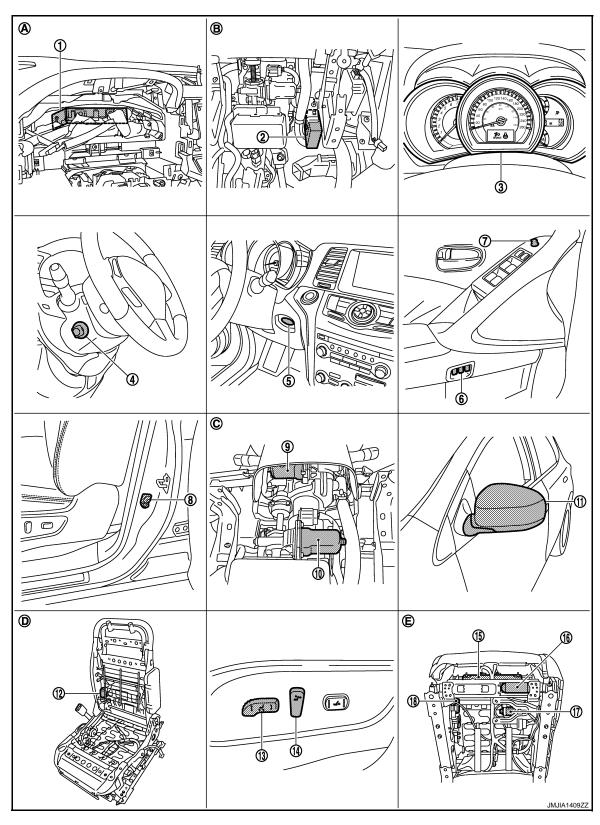
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Revision: 2008 October

< FUNCTION DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location INFOLD.0000003465779



- 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

ADP-36

AUTOMATIC DRIVE POSITIONER SYSTEM

< FUNCTION DIAGNOSIS >

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	А
16.	Sliding motor B461	17.	Lifting motor (front) B455	18.	Lifting motor (rear) B456	
Α.	Behind the combination meter	В.	View with instrument driver lower panel removed	C.	View with instrument driver lower panel removed	В
D.	View with seat cushion and seatback pad removed	E.	Backside of the seat cushion			С

INTELLIGENT KEY INTERLOCK FUNCTION : Component Description

CONTROL UNITS

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

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

Diagnosis Description

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

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

CONSULT-III Function

SELF-DIAGNOSIS RESULTS Refer to <u>ADP-131, "DTC Index"</u>.

DATA MONITOR

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

INFOID:000000003312355

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< FUNCTION DIAGNOSIS >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.	
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.	
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (up) signal.	
TILT SW-DOWN	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (down) signal.	
TELESCO SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (for-ward) signal.	
TELESCO SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (back-ward) 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) sta- tus judged from the ignition switch signal.	
SLIDE PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.	
RECLN PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.	
LIFT FR PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.	
LIFT RR PULSE	_	-	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.	
MIR/SEN RH U-D	"V"	-	×	Voltage input from door mirror sensor (passenger side) up/ down is displayed.	
MIR/SEN RH R-L	"∖"	-	×	Voltage input from door mirror sensor (passenger side) left/ right is displayed.	
MIR/SEN LH U-D	"∨"	-	×	Voltage input from door mirror sensor (driver side) up/down is displayed.	
MIR/SEN LH R-L	"∨"	-	×	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 passen- ger side) signal.	
IGN ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ignition switch signal.	
ACC ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ACC switch signal.	
KEY ON SW	"ON/OFF"	×	×	ON/OFF status judged from the key on switch signal.	

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< FUNCTION DIAGNOSIS >

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 ac- tuator output switch signal.
VHCL SPEED (ABS)	"ON/OFF"	×	×	ON/OFF status judged from vehicle speed signal.
HANDLE	"RHD/LHD"	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	"AT or CVT/ MT"	×	×	AT or CVT/MT status judged from transmission.
STEERING STATUS	"LOCK/UN- LOCK"	×	×	LOCK/UNLOCK status judged from steering lock unit.

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 HEI SETTING	ON (operated) – OFF (not operated)	OFF
EXIT SEAT SLIDE SETTING	Entry/exit assist (seat) can be selected:	ON
EATI SEAT SLIDE SETTING	ON (operated) – OFF (not operated)	OFF

COMPONENT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

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

DTC Logic

DTC DETECTION LOGIC

DTC No.	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)
	IRMATION PROC	EDURE	
1. STEP 1			
Turn ignition	switch ON and wai	t at least 3 seconds.	
	GO TO 2.		
2.STEP 2	30 10 2.		
Check "Self of	diagnostic result" w	ith CONSULT-III.	
Is the DTC de	etected?		
	Perform diagnosis p NSPECTION END	procedure. Refer to <u>ADP-41, "Diagnosis Procedure</u>	<u>ure"</u> .
Diagnosis	Procedure		INFOID:000000003312358
Refer to <u>L</u> AN	-16, "Trouble Diagr	nosis Flow Chart".	
	epair Requirem		INFOID:00000003312359
•			
	-9, 3131 EIVI INI I	ALIZATION : Description".	

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INFOID:000000003312356

INFOID:000000003312357

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U1010 CONTROL UNIT (CAN)

Description

INFOID:000000003515303

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".

DTC Logic

INFOID:000000003515304

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:000000003515305

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.Refer to ADP-204, "Removal and Installation".

B2130 EEPROM

< COMPONENT DIAGNOSIS >

B2130 EEPROM

DTC Logic

INFOID:000000003515825

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DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2130	EEPROM	Driver seat control unit detected CPU malfunction.	Driver seat control unit	
C CONF	IRMATION PROC	EDURE		
rn ignition	switch ON.			
~~ (GO TO 2.			
STEP 2	30 10 2.			
	diagnostic result" wit	h CONSULT-III	<u> </u>	
t <u>he DTC d</u> ES >> I	etected?	ocedure. Refer to <u>ADP-43, "Diagnosis Proc</u>	edure".	
agnosis	Procedure		INFOID:000000003515836	
PERFOR	M DTC CONFIRMA	TION PROCEDURE		
Turn ign	tion switch ON.			
Check "S Erase th	Self diagnostic result e DTC.	" with CONSULT-III.		
	•	ocedure. Refer to <u>ADP-43, "DTC Logic"</u> .		A
	<u>isplayed again?</u> GO TO 2.			
0 >> 0	Check intermittent in	cident. Refer to GI-40. "Intermittent Incident"	2	
REPLACE	E DRIVER SEAT CC	NTROL UNIT		
place driv	er seat control unit.	Refer to ADP-204. "Removal and Installation	<u>"</u> .	
>>	NSPECTION END			

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B2112 SLIDING MOTOR

Description

• 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

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2112	SEAT SLIDE	The driver seat control unit detects the output of sliding motor output terminal for 0.1 second or more even if the sliding switch is not input.	Driver seat control unitSlide motor harness is 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 <u>ADP-44, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-44, "DTC Logic"</u>.
- Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-40, "Intermittent Incident".

2. CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)

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

	(+)		Voltage (V) (Approx.)
Slidir	Sliding motor		
Connector	Terminals		
B461	50	Ground	0
B401	51	Giodila	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

 ${\it 3.}$ check driver seat control unit output signal

1. Connect driver seat control unit connector.

INFOID:000000003312360

INFOID:000000003312361

INFOID:000000003312362

B2112 SLIDING MOTOR

< COMPONENT 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
D451	4	Glound	0
-		ADP-204, "Removal and In	stallation"
NO >> Replace driver •.CHECK INTERMITTEN	seat control unit. Refer to INCIDENT	ADP-204, "Removal and In	stallation"
NO >> Replace driver	seat control unit. Refer to INCIDENT	ADP-204, "Removal and In	stallation"
NO >> Replace driver •.CHECK INTERMITTEN	seat control unit. Refer to I INCIDENT t Incident".	ADP-204, "Removal and In	stallation"

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Revision: 2008 October

B2113 RECLINING MOTOR

Description

- 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

DTC DETECTION LOGIC

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

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 <u>ADP-46, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-46, "DTC Logic"</u>.
- Is the DTC displayed again?
- YES >> GO TO 2.
- NO >> Check intermittent incident. Refer to GI-40, "Intermittent Incident".

2.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

	(+) Reclining motor		Voltage (V) (Approx.)
Connector	Terminals		(° 'F (° ' ° ' ')
B454	52	Ground	0
D404	53	Giouna	U

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

 ${\it 3.}$ check driver seat control unit output signal

1. Connect driver seat control unit connector.

INFOID:000000003312363

INFOID-000000003312364

INFOID:000000003312365

B2113 RECLINING MOTOR

< COMPONENT DIAGNOSIS >

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

Driver seat contr Connector B451 the inspection result normal? YES >> GO TO 4. NO >> Replace driver seat	ol unit Terminals 5 6	(–) — Ground	Voltage (V) (Approx.) 0
B451 the inspection result normal? YES >> GO TO 4.	5	Ground	
the inspection result normal? YES >> GO TO 4.		Ground	0
the inspection result normal? YES >> GO TO 4.	6	Giodila	0
YES >> GO TO 4.			
•CHECK INTERMITTENT INC efer to GI-40, "Intermittent Inci			
	<u>uent</u> .		
>> INSPECTION END			

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Revision: 2008 October

B2116 TILT MOTOR

< COMPONENT DIAGNOSIS >

B2116 TILT MOTOR

Description

INFOID:000000003515832

- 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:000000003515833

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.	

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 <u>ADP-48, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT-III.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-48, "DTC Logic"</u>.
- Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-40. "Intermittent Incident".

2. CHECK TILT MOTOR CIRCUIT (POWER SHORT)

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

	(+) Tilt motor		Voltage (V) (Approx.)
Connector	Terminals		(FP (P)
M116	1	Ground	0
WITTO	2	Ground	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

 ${\it 3.}$ CHECK AUTOMATIC DRIVER POSITIONER CONROL UNIT OUTPUT SIGNAL

1. Connect automatic drive positioner control unit connector.

INFOID:000000003515834

B2116 TILT MOTOR

< COMPONENT DIAGNOSIS >

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

(•	+)			
Automatic drive po	sitioner control unit	()	Voltage (V) (Approx.)	
Connector	Terminals		(++)	В
M104	28	Orregal	0	
IVI 104	29	Ground	0	C
s the inspection result norr	nal?			0

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to <u>ADP-205</u>, "<u>Removal and Installation</u>".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-40, "Intermittent Incident".

>> INSPECTION END

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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

INFOID:000000003312380

INFOID:00000003312379

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-50, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003312381

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

2.CHECK UART COMMUNICATION LINE CONTINUITY

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit and automatic drive positioner control unit connector.
- 3. Check continuity between driver seat control unit harness connector and automatic drive positioner control unit harness connector.

Driver seat	t control unit	Automatic drive po	sitioner control unit	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	32	M75	8	Existed

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

ADP-50

B2128 UART COMMUNICATION LINE

< COMPONENT DIAGNOSIS >

Driver seat c	ontrol unit		Continuity
Connector	onnector Terminal Ground		Continuity
B452	32		Not existed
the inspection result normal	?		
ES >> Check intermitten	t incident. Refer to <u>GI-4</u>	0, "Intermittent Incident".	
IO >> Repair or replace	harness or connector.		

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000003312384

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

(· Driver seat	(+) Driver seat control unit		Voltage (V) (Approx.)	
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	B451 2		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:000000003312385

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000003312386

NOTE:

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

1.CHECK POWER SUPPLY CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Automatic drive posi	itioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M104	30	_	Existed
NO >> Repair or replace	positioner control unit po e harness.	wer supply and ground circui	
1.PERFORM ADDITIONAL			INFOID:000000003312387
Perform additional service w			
	hen removing battery neg	WHEN REMOVING BATTE	ERY NEGATIVE TERMINAL
>> Refer to <u>ADP-8.</u>			ERY NEGATIVE TERMINAL
>> Refer to <u>ADP-8.</u>			ERY NEGATIVE TERMINAL
>> Refer to <u>ADP-8.</u>			ERY NEGATIVE TERMINAL

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SLIDING SWITCH

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.CHECK FUNCTION

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
SLIDE SW-FR		Release	OFF
SLIDE SW-RR	Sliding switch (backword)	Operate	ON
SLIDE SW-RR	Sliding switch (backward)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-54, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000003312390

1.CHECK SLIDING SWITCH SIGNAL

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Turn ignition switch ON.

4. Check voltage between power seat switch harness connector and ground.

	(+) Power seat switch		Voltage (V) (Approx.)
Connector	Terminals		(, , , , , , , , , , , , , , , , , , ,
B459	11	Ground	Potton woltage
D439	12	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

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

Driver sea	t control unit	Power seat switch Connector Terminal		Continuity
Connector	Terminal			Continuity
B452	11	B459	11	Existed
D402	12	B439	12	Existed

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

INFOID:000000003312388

INFOID:000000003312389

SLIDING SWITCH

< COMPONENT DIAGNOSIS >

Driver	seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	11	Gibulid	Not existed
D+02	12		NOT EXISTED
Is the inspection result n	ormal?		
	/er seat control unit. place harness or cor	Refer to <u>ADP-204, "Removal and Ins</u> inector.	stallation".
3.CHECK SLIDING SV	/ITCH		
Refer to ADP-55, "Comp	onent Inspection".		
Is the inspection result n	ormal?		
YES >> GO TO 4. NO >> Replace pov	war agat gwitch Dafe	to ADD 207 "Removal and Install	ation"
4.CHECK INTERMITTE		er to ADP-207, "Removal and Installa	
Refer to GI-40, "Intermit	tent Incident".		
>> INSPECTIO	N END		
Component Inspec	tion		INFOID:00000003312391
1.CHECK SLIDING SW	/ITCH		
1. Turn ignition switch	OFF.		
2. Disconnect power s	eat switch (sliding sw	vitch) connector. vitch (sliding switch) terminals.	
Power seat switch	(Sliding switch)	Condition	Continuiti
Termir	al	Condition	Continuity

Power seat swit	Power seat switch (Sliding switch)		Condition			
Ter	minal			Continuity	ADP	
	11	Sliding switch (backward)	Operate	Existed		
35	11	Sliding switch (backward)	Release	Not existed	—	
			Operate	Existed	K	
	12	Sliding switch (forward)	Release	Not existed	-	
le the increation requi					-	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u>.

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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

1.CHECK FUNCTION

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 (Release	OFF
	RECLINE SW-RR Reclining switch (backward)	Operate	ON
REGLINE SW-RR		Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000003312394

1.CHECK RECLINING SWITCH SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect power seat switch connector.

3. Turn ignition switch ON.

4. Check voltage between power seat switch harness connector and ground.

Powers	(+) Power seat switch		Voltage (V) (Approx.)	
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B459	13	Ground	Potton / voltage	
D409	14	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK RECLINING SWITCH CIRCUIT

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

Driver seat	control unit	Power seat switch Connector Terminal		Continuity
Connector	Terminal			Continuity
B452	13	B459	13	Existed
D402	14	B439	14	Existed

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

INFOID:000000003312392

INFOID:000000003312393

RECLINING SWITCH

< COMPONENT DIAGNOSIS >

Connector Terminal Ground B452 13 Not existed 14 Not existed Not existed s the inspection result normal? YES >> Replace driver seat control unit. Refer to ADP-204, "Removal and Installation". NO >> Repair or replace harness or connector. Scheck RECLINING SWITCH Refer to ADP-57, "Component Inspection". s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to ADP-207, "Removal and Installation". 4. CHECK INTERMITTENT INCIDENT Refer to GI-40, "Intermittent Incident". >> INSPECTION END Component Inspection Component Inspection 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 Condition Continuity	Driv	er seat control unit			Continuity
Not existed	Connector	Termina		nd	Continuity
14 14 s the inspection result normal? YES >> Replace driver seat control unit. Refer to ADP-204, "Removal and Installation". NO >> Repair or replace harness or connector. 3.CHECK RECLINING SWITCH Refer to ADP-57, "Component Inspection". s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to ADP-207, "Removal and Installation". 4.CHECK INTERMITTENT INCIDENT Refer to GI-40, "Intermittent Incident". >> INSPECTION END Component Inspection 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 Condition Continuity 13 Reclining switch (backward) Operate	B452	13	Giùu	nu	Not existed
YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u> . NO >> Repair or replace harness or connector. 3.CHECK RECLINING SWITCH Refer to <u>ADP-57, "Component Inspection"</u> . s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u> . 4.CHECK INTERMITTENT INCIDENT Refer to <u>GI-40, "Intermittent Incident"</u> . >> INSPECTION END Component Inspection Component Inspection 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 Terminal Condition 13 Reclining switch (backward)	0452	14			Notexisted
NO >> Repair or replace harness or connector. 3.CHECK RECLINING SWITCH Refer to ADP-57. "Component Inspection". s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to ADP-207. "Removal and Installation". 4.CHECK INTERMITTENT INCIDENT Refer to GI-40, "Intermittent Incident". >> INSPECTION END Component Inspection 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 Terminal Condition 13 Reclining switch (backward)	Is the inspection resu	lt normal?			
3. CHECK RECLINING SWITCH Refer to ADP-57. "Component Inspection". s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to ADP-207. "Removal and Installation". 4. CHECK INTERMITTENT INCIDENT Refer to GI-40. "Intermittent Incident". >> INSPECTION END Component Inspection 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) Terminal 13 Reclining switch (backward)				oval and Installation	<u>on"</u> .
Refer to ADP-57. "Component Inspection". s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to ADP-207. "Removal and Installation". 4. CHECK INTERMITTENT INCIDENT Refer to GI-40, "Intermittent Incident". >> INSPECTION END Component Inspection 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 Condition Continuity 13 Reclining switch (backward)	• '	•			
s the inspection result normal? YES >> GO TO 4. NO >> Replace power seat switch. Refer to <u>ADP-207. "Removal and Installation"</u> . 4. CHECK INTERMITTENT INCIDENT Refer to <u>GI-40. "Intermittent Incident"</u> . >> INSPECTION END Component Inspection 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 Condition Continuity 13 Reclining switch (backward)					
YES >> GO TO 4. NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u> . 4. CHECK INTERMITTENT INCIDENT Refer to <u>GI-40, "Intermittent Incident"</u> . >> INSPECTION END Omponent Inspection I.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 13 Reclining switch (backward) Operate Existed Release Not existed					
NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u> . 4. CHECK INTERMITTENT INCIDENT Refer to <u>GI-40, "Intermittent Incident"</u> . >> INSPECTION END INSPECTION END INFORCEMENT Operate Colspan="2">Component Inspection INFORCEMENT 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 13 Reclining switch (backward)					
4. CHECK INTERMITTENT INCIDENT Refer to GI-40, "Intermittent Incident". >> INSPECTION END Component Inspection 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) Terminal 13 Reclining switch (backward) Operate Existed Release Not existed			er to ADP-207 "Removal	and Installation"	
Refer to GI-40, "Intermittent Incident". >> INSPECTION END Component Inspection 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 13 Reclining switch (backward) Operate Existed Release Not existed			er to <u>ADI -201, Removal</u>	and motaliation.	
>> INSPECTION END Component Inspection INFOLD:00000003312395 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 Image: Power seat switch (Reclining switch) Reclining switch (backward) Operate Existed Image: Power seat switch (backward) Image: Power seat switch (backward) Operate Existed					
Component Inspection INFOID-00000003312395 1. CHECK RECLINING SWITCH Infoint Switch OFF. 2. Disconnect power seat switch (reclining switch) connector. Switch (reclining switch) terminals. 3. Check continuity between power seat switch (reclining switch) terminals. Condition Power seat switch (Reclining switch) Condition Terminal Condition 13 Reclining switch (backward) Operate Existed Release Not existed	Refer to <u>GI-40, "Interr</u>	<u>nittent Incident"</u> .			
Component Inspection INFOID-00000003312395 1. CHECK RECLINING SWITCH Infoint Switch OFF. 2. Disconnect power seat switch (reclining switch) connector. Switch (reclining switch) terminals. 3. Check continuity between power seat switch (reclining switch) terminals. Condition Power seat switch (Reclining switch) Condition Terminal Condition 13 Reclining switch (backward) Operate Existed Release Not existed					
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) Terminal 13 Reclining switch (backward) Operate Existed Not existed		-			
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) Terminal 13 Reclining switch (backward) Operate Existed Not existed	Component Insp	ection			INFOID:00000003312395
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) Terminal 13 Reclining switch (backward) Operate Existed Not existed		IG SWITCH			
2. Disconnect power seat switch (reclining switch) connector. 3. Check continuity between power seat switch (reclining switch) terminals. Condition Continuity Power seat switch (Reclining switch) Condition Continuity Terminal 13 Operate Existed Not existed					
3. Check continuity between power seat switch (reclining switch) terminals. Power seat switch (Reclining switch) Condition Continuity Terminal 13 Reclining switch (backward) Operate Existed			switch) connector		
Terminal Condition Continuity 13 Reclining switch (backward) Operate Existed Release Not existed				minals.	
Terminal Condition Continuity 13 Reclining switch (backward) Operate Existed Release Not existed	•	·			
Terminal Operate Existed 13 Reclining switch (backward) Release Not existed	Power seat switch	n (Reclining switch)	Condition Continuity		Continuity
13 Reclining switch (backward) Release Not existed	Ter	minal			
Release Not existed		13	Reclining switch (backward)	Operate	Existed
	35	10		Release	Not existed

Reclining switch (forward)

Operate

Release

Is the inspection result normal?

35

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u>.

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Existed

Not existed

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LIFTING SWITCH (FRONT)

Description

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

Component Function Check

INFOID:000000003312397

INFOID:00000003312396

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	Condition		Status
LIFT FR SW-UP	Lifting switch front (up)	Operate	ON
	Litting Switch Holit (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-58, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000003312398

1.CHECK LIFTING SWITCH (FRONT) SIGNAL

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

(+) Power seat switch		()	Voltage (V) (Approx.)	
Connector	Terminals			
B459	17	Ground	Pottony voltago	
D439	18	Giouna	Battery voltage	

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

Driver sea	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	17	B459	17	Existed
0402	18	0409	18	LAISIEU

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

LIFTING SWITCH (FRONT)

< COMPONENT DIAGNOSIS >

Dri	ver seat control unit			Continuity
Connector	Termir	nal	Ground	Continuity
B452	17		Ground	Not existed
D432	18			NULEXISTED
Is the inspection resu	<u>ılt normal?</u>			
	driver seat control uni r replace harness or c	t. Refer to <u>ADP-204, "I</u>	Removal and Installa	<u>tion"</u> .
3. CHECK LIFTING	•			
	omponent Inspection".			
Is the inspection resu YES >> GO TO 4				
		efer to ADP-207, "Rem	oval and Installation'	
4. CHECK INTERMI				
Refer to <u>GI-40, "Inter</u>				
	<u>Initionit inoldent</u> .			
>> INSPEC	TION END			
Component Insp	ection			INFOID:000000003312399
	000001			INFOID.000000003312399
1.CHECK LIFTING				
1. CHECK LIFTING 1. Turn ignition swit	SWITCH (FRONT) tch OFF.			
1. CHECK LIFTING 1. Turn ignition swit 2. Disconnect powe	SWITCH (FRONT) tch OFF. er seat switch (lifting sv		unt) torminala	
1. CHECK LIFTING 1. Turn ignition swit 2. Disconnect powe	SWITCH (FRONT) tch OFF. er seat switch (lifting sv	witch front) connector. switch (lifting switch fro	ont) terminals.	
1. CHECK LIFTING 1. Turn ignition swit 2. Disconnect powe 3. Check continuity	SWITCH (FRONT) tch OFF. er seat switch (lifting sv	switch (lifting switch fro		
 CHECK LIFTING Turn ignition swit Disconnect powe Check continuity Power seat switch 	SWITCH (FRONT) tch OFF. er seat switch (lifting sv between power seat s	switch (lifting switch fro	ont) terminals.	Continuity
 CHECK LIFTING Turn ignition swit Disconnect powe Check continuity Power seat switch 	SWITCH (FRONT) tch OFF. er seat switch (lifting sy between power seat s h (lifting switch front) rminal	switch (lifting switch fro		Continuity Existed
1.CHECK LIFTING 1. Turn ignition swit 2. Disconnect powe 3. Check continuity Power seat switch Ten	SWITCH (FRONT) tch OFF. er seat switch (lifting sy between power seat s h (lifting switch front)	switch (lifting switch fro	ndition	
 CHECK LIFTING Turn ignition swit Disconnect powe Check continuity Power seat switch 	SWITCH (FRONT) tch OFF. er seat switch (lifting sy between power seat s h (lifting switch front) rminal	switch (lifting switch fro Cor	odition Operate	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u>.

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LIFTING SWITCH (REAR)

Description

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:000000003312401

INFOID:00000003312400

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	Condition		Status
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
	Lining Switch lear (up)	Release	OFF
LIFT RR SW-DN Lift	Lifting switch rear (down)	Operate	ON
	Linning Switch redi (dowit)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-60, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000003312402

1.CHECK LIFTING SWITCH (REAR) SIGNAL

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Turn ignition switch ON.

4. Check voltage between power seat switch harness connector and ground.

Power	(+) Power seat switch		Voltage (V) (Approx.)	
Connector	Terminals		(********)	
B459	15	Ground	Potton woltage	
6459	16	Giouna	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver sea	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	15	B459	15	Existed
D402	16	6439	16	Existed

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

LIFTING SWITCH (REAR)

< COMPONENT DIAGNOSIS >

Dri	ver seat control unit			Continuity
Connector	Termin	al	Ground	Continuity
B452	15		Ground	Not existed
D432	16			NOT EXISTED
Is the inspection resu	<u>ult normal?</u>			
	driver seat control unit		Removal and Inst	allation".
^	r replace harness or co	onnector.		
3.CHECK LIFTING				
	omponent Inspection".			
Is the inspection resu				
YES >> GO TO 4 NO >> Replace	1. power seat switch. Re	fer to ADP-207 "Rem	oval and Installati	on"
4.CHECK INTERMI		er to <u>ADF-207, Kenn</u>	oval and installati	<u>on</u> .
Refer to GI-40, "Inter	mittent Incident".			
>> INSPEC				
	-			
Component Insp	ection			INFOID:00000003312403
1.CHECK LIFTING	SWITCH (REAR)			
1. Turn ignition swit	, ,			
	er seat switch (lifting sv	witch rear) connector.		
	between power seat s		ar) terminals.	
Dower cost owite				
	h (lifting switch rear)	- Con	dition	Continuity
Iei	rminal		Onorreto	Eviated
	15	Lifting switch rear (up)	Operate	Existed
35			Release	Not existed
	16	Lifting switch rear (down)	Operate	Existed

Lifting switch rear (down)

Release

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-207, "Removal and Installation"</u>.

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Not existed

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TILT SWITCH

Description

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.
- 2. Check tilt switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000003312406

1.CHECK TILT SWITCH SIGNAL

1. Turn ignition switch OFF.

2. Disconnect tilt & telescopic switch connector.

3. Turn ignition switch ON.

4. Check voltage between tilt & telescopic switch harness connector and ground.

(+) Tilt & telescopic switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals			
M102	2 3	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TILT SWITCH CIRCUIT

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

Automatic drive po	sitioner control unit	Tilt & telescopic switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M75	1	M102	2	Existed
1017 5	13	IVITUZ	3	LAISIEU

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

INFOID:000000003312404

INEOID:000000003312405

TILT SWITCH

< COMPONENT DIAGNOSIS >

Connector						
Connector	Te	rminal	Cround	Continuity		
MZE		1	Not existed		Ground	Not evicted
M75		13				
s the inspection resu	It normal?					
NO >> Repair of	replace harness o	sitioner control unit. Refe or connector.	er to <u>ADP-205, "Re</u>	emoval and Installation".		
3. CHECK TILT SWI	ТСН					
Refer to <u>ADP-63, "Co</u>	mponent Inspectio	<u>n"</u> .				
s the inspection resu						
YES >> GO TO 4		itab Dafar ta ADD 200 "	Domoval and last	allation"		
NO >> Replace 4.CHECK INTERMI	•	itch. Refer to <u>ADP-208, "</u>	Removal and Inst	<u>anation</u> .		
Refer to <u>GI-40, "Inter</u>	mittent Incident".					
>> INSPEC						
Component Insp				INFOID:0000000033124		
Component Insp	ection			INFOID:0000000033124		
Component Insp 1.check tilt swi	ection тсн			INFOID:0000000033124		
Component Insp .CHECK TILT SWI . Turn ignition swit . Disconnect tilt &	ection TCH ch OFF. telescopic switch c			INFOID:0000000033124		
COMPONENT INSP .CHECK TILT SWI . Turn ignition swit . Disconnect tilt &	ection TCH ch OFF. telescopic switch c	connector. scopic switch terminals.		INFOID:0000000033124		
Component Insp .CHECK TILT SWI . Turn ignition swit Disconnect tilt & . Check continuity	ection TCH ch OFF. telescopic switch c	scopic switch terminals.				
Component Insp 1.CHECK TILT SWI 1. Turn ignition swit 2. Disconnect tilt & 3. Check continuity Tilt	ection TCH ch OFF. telescopic switch c between tilt & teles	scopic switch terminals.	ndition	INFOID:0000000033124		
Component Insp CHECK TILT SWI Turn ignition swit Disconnect tilt & Check continuity	ection TCH ch OFF. telescopic switch c between tilt & teles switch minal	Cor	ndition			
Component Insp CHECK TILT SWI Turn ignition swit Disconnect tilt & Check continuity Tilt Ter	ection TCH ch OFF. telescopic switch c between tilt & teles switch	scopic switch terminals.		Continuity		
Component Insp .CHECK TILT SWI . Turn ignition swit . Disconnect tilt & . Check continuity	ection TCH ch OFF. telescopic switch c between tilt & teles switch minal	Cor	Operate	Continuity Existed		

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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	R Telescopic switch (forward)	Operate	ON
TELEOUO SW-TR	Telescopic switch (forward)	Release	OFF
TELESCO SW-RR	Tologoopia quitab (boolguard)	Operate	ON
TELESCO SW-RR	ELESCO SW-RR Telescopic switch (backward)		OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000003312410

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	Battery voltage	
IVI TOZ	4	Giouna	Dallery Vollage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TELESCOPIC SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

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

Automatic drive po	ositioner control unit	Tilt & telescopic switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M75	7	M102	5	Existed
1017 5	19	IVI I UZ	4	LAISIEU

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

INFOID:000000003312408

INFOID:000000003312409

TELESCOPIC SWITCH

< COMPONENT DIAGNOSIS >

	Irive positioner control unit			Continuity	
Connector	Termina		Ground	Continuity	
M75	7		Ground	Not existed	
1017 5	19			NOT EXISTED	
s the inspection resul	It normal?				
YES >> Replace a	automatic drive positio	oner control unit. Refer	to <u>ADP-205, "Re</u>	moval and Installation".	
	replace harness or co	onnector.			
$B.CHECK TELESCO$	PIC SWITCH				
Refer to <u>ADP-65, "Co</u>	mponent Inspection".				
s the inspection resul					
YES >> GO TO 4.			Semented and the fi	lletien "	
4		. Refer to <u>ADP-208, "F</u>	Removal and Insta	<u>allation"</u> .	
1. CHECK INTERMIT					
Optor to CL 40 "Intern	nittent Incident"				
Refer to <u>GI-40, "Intern</u>	internet moldorite.				
>> INSPECT	ION END				
	ION END			INFOID:00000003312411	
>> INSPECT Component Inspe	TION END ection			INFOID:000000003312411	
>> INSPECT Component Inspe .CHECK TELESCC	TION END ection OPIC SWITCH			INFOID:000000003312411	
>> INSPECT Component Inspe .CHECK TELESCO	TION END ection OPIC SWITCH ch OFF.	ector		INFOID:00000003312411	
>> INSPECT Component Inspect .CHECK TELESCO . Turn ignition swite 2. Disconnect tilt & t	TION END ection OPIC SWITCH			INFOID:000000003312411	
>> INSPECT Component Inspect .CHECK TELESCO . Turn ignition swite 2. Disconnect tilt & t 3. Check continuity I	TION END ection PPIC SWITCH ch OFF. elescopic switch conn between tilt & telescop			INFOID:00000003312411	
>> INSPECT Component Inspect .CHECK TELESCO . Turn ignition swite . Disconnect tilt & t . Check continuity I	TION END ection OPIC SWITCH ch OFF. relescopic switch conn between tilt & telescop	bic switch terminals.	dition	INFOID:00000003312411	
>> INSPECT Component Inspect .CHECK TELESCO . Turn ignition swite . Disconnect tilt & t . Check continuity I	TION END ection PPIC SWITCH ch OFF. elescopic switch conn between tilt & telescop	bic switch terminals.	1	Continuity	
>> INSPECT Component Inspect CHECK TELESCO . Turn ignition swite . Disconnect tilt & t . Check continuity I	TION END ection OPIC SWITCH ch OFF. relescopic switch conn between tilt & telescop	Dic switch terminals. Con Telescopic switch (for-	Operate	Continuity Existed	
>> INSPECT Component Inspect .CHECK TELESCO . Turn ignition swite . Disconnect tilt & t . Check continuity I	TION END ection PPIC SWITCH ch OFF. elescopic switch conn between tilt & telescop pic switch	bic switch terminals.	Operate Release	Continuity Existed Not existed	
>> INSPECT Component Inspect .CHECK TELESCO . Turn ignition swite . Disconnect tilt & t . Check continuity I Telescop Terr	TION END ection PPIC SWITCH ch OFF. elescopic switch conn between tilt & telescop pic switch	Dic switch terminals. Con Telescopic switch (for-	Operate	Continuity Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-208, "Removal and Installation"</u>.

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SEAT MEMORY SWITCH

Description

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

INFOID:000000003312413

INFOID:000000003312412

1.CHECK FUNCTION

- 1. 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	Memory switch 1	Push	ON
	Memory Switch 1	Release	OFF
MEMORY SW 2	Memory switch 2	Push	ON
	Memory Switch 2	Release	OFF
SET SW	Set switch	Push	ON
3E1 3W	Set Switch	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000003312414

1.CHECK SEAT MEMORY SWITCH SIGNAL

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

	(+) Driver seat control unit		Voltage (V) (Approx.)	
Connector	Terminals	_	(αρμιοχ.)	
	27			
B452	B452 28 29		5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK MEMORY SWITCH CIRCUIT

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

SEAT MEMORY SWITCH

< COMPONENT DIAGNOSIS >

Driver seat	control unit	Seat m	nemory switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	27		1	
B452	28	D13	D13 2 Existe	
	29		3	
 Check continuity b 	between driver seat co	ontrol unit harness c	connector and ground	
Drive	er seat control unit			Continuity
Connector	Termina	al		Continuity
	27		Ground	
B452	28			Not existed
	29			
CHECK MEMORY	replace harness or co SWITCH GROUND C een seat memory swit	IRCUIT	tor and ground.	
Sea	at memory switch			Continuity
Connector	Termina	al	Ground	Continuity
D13	4			Existed
s the inspection result YES >> GO TO 4. NO >> Repair or CHECK SEAT MEN Refer to ADP-67, "Cor	replace harness or co MORY SWITCH	nnector.		
s the inspection resul YES >> GO TO 5.	<u>t normal?</u> seat memory switch. R	efer to <u>ADP-206, "F</u>	Removal and Installati	<u>on"</u> .
Refer to <u>GI-40, "Intern</u>				
>> INSPECT				
Component Inspe	ection			INFOID:000000003312415
1 .CHECK SEAT MEN	MORY SWITCH			
	ch OFF. nemory switch connec petween seat memory			

SEAT MEMORY SWITCH

< COMPONENT DIAGNOSIS >

Seat mer	Seat memory switch Terminal		Condition Cont			
Ter						
	1	Momony switch 1	Push	Existed		
	1	Memory switch 1	Release	Not existed		
4		0 M-	Manager 1910	2 Memory switch 2	Push	Existed
4	2	Memory switch 2	Release	Not existed		
		Cat awitch	Push	Existed		
	3	Set switch	Release	Not existed		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to <u>ADP-206, "Removal and Installation"</u>.

< COMPONENT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

Changeover switch is integrated into door mirror remote control switch. Changeover switch has three positions (L, N and R). It changes door mirror motor operation by transmitting control signal to automatic drive positioner control unit.

CHANGEOVER SWITCH : Component Function Check

INFOID:000000003600950

INFOID:000000003600949

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1. CHECK CHANGEOVER SWITCH FUNCTION

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

Monitor item		Condition				
	When operating the changeov	When operating the changeover toward the right or left side. : O				
MIR CHNG SW-R/L	Other than above.		: OFF			
is the inspection result no	rmal?					
	switch function is OK. -69. "CHANGEOVER SWITC	CH : Diagnosis Procedure".				
CHANGEOVER SW	/ITCH : Diagnosis Proc	cedure	INFOID:000000003600951			
1. CHECK CHANGEOVE	R SWITCH INPUT SIGNAL					
3. Turn ignition switch C	or remote control switch conr		and ground.			
	(+)		Voltage (V)			
Door mirror	remote control switch	note control switch (–)				
Connector	Terminal		(Approx.)			
D14	10	Cround	E			
D14		Ground 5				

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK CHANGEOVER SWITCH CIRCUIT

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

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

Automatic drive po	ositioner control unit	Door mirror rem	ote control switch	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	2	D14	11	Existed	P
C /IVI	14	- D14	10	Existed	

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

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M75	2	Ground	Not existed
1017 5	14		NOT EXISTED

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-205, "Removal and Installation"</u>.
- NO >> Repair or replace harness.

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

- 1. Turn ignition switch OFF.
- 2. Check continuity between door mirror remote control switch harness connector and ground.

Door mirror rem	ote 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 <u>ADP-70, "CHANGEOVER SWITCH : Component Inspection"</u>.

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace door mirror remote control switch (changeover switch). Refer to <u>MIR-66, "Removal and</u> <u>Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-40, "Intermittent Incident".

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:000000003600952

1. CHECK CHANGEOVER SWITCH

1. Turn ignition switch OFF.

2. Disconnect door mirror remote control switch connector.

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

Door mirror remote control switch		Condition		Continuity	
Connector	Terminal		Condition		Continuity
D14 10	10	7	Oberneting	LEFT	Existed
	10			Other than above	Not existed
		Changeover switch	RIGHT	Existed	
			Other than above	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to <u>MIR-66, "Removal and Installation"</u>. MIRROR SWITCH

< COMPONENT DIAGNOSIS >

MIRROR SWITCH : Description

INFOID:00000003600953

It operates angle of the door mirror face.

It transmits mirror face adjust operation to AUTOMATIC DRIVE POSITIONER CONTROL UNIT.

MIRROR SWITCH : Component Function Check

1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Mirror switch function is OK.

NO >> Refer to <u>ADP-71, "MIRROR SWITCH : Diagnosis Procedure"</u>.

MIRROR SWITCH : Diagnosis Procedure

1.CHECK MIRROR SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect door mirror remote control switch connector.
- 3. Turn ignition switch ON.

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

(-	+)			
Door mirror remo	ote control switch	(-)	Voltage (V) (Approx.)	ADP
Connector	Terminal	-	(/ () () () () () () () () () () () () ()	
	4			K
D 44	12	- Oracum d	_	
D14	13	- Ground	5	
	15			L

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK MIRROR SWITCH CIRCUIT

1. Turn ignition switch OFF.

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

Automatic drive posi	itioner control unit	Door mirror rem	ote control switch	Continuity	
Connector	Terminal	Connector	Terminal	- Continuity	
	3	- D14 -	15		•
M75	4		13	Existed	
	15		12	EXISIED	
	16	1	4		

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

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INFOID:000000003600954

INFOID:00000003600955

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< COMPONENT DIAGNOSIS >

Automatic drive po	ositioner control unit		Continuity	
Connector	Connector Terminal		Continuity	
	3	Ground		
M75	4	Giouna	Not existed	
1017 5	15		not existed	
	16			

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-204, "Removal and Installation"</u>. NO
- >> Repair or replace harness.

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

- 1. Turn ignition switch OFF.
- Check continuity between door mirror remote control switch harness connector and ground. 2.

Door mirror remo	ote 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-72, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

- YES >> GO TO 5.
- >> Replace door mirror remote control switch (mirror switch). Refer to MIR-66, "Removal and Instal-NO lation".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-40, "Intermittent Incident".

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:00000003600956

1.CHECK MIRROR SWITCH

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

Door mirror remote control switch		Condition		Continuity	
Connector	Terminal		Condition		Continuity
	4			RIGHT	Existed
	4			Other than above	Not existed
D14	13	7 M		LEFT	Existed
	13		Mirror switch	Other than above	Not existed
	15		WINTON SWILCH	UP	Existed
				Other than above	Not existed
	12			DOWN	Existed
	12			Other than above	Not existed

DOOR MIRROR REMOTE CONTROL SWITCH

< COMPONENT DIAGNOSIS >

	nspection result normal?	
YES NO	>> INSPECTION END >> Replace door mirror remote control switch. Refer to <u>MIR-66, "Removal and Installation"</u> .	А
NO		
		В
		С
		0
		D
		Е
		_
		F
		G
		Н
		ADP
		K
		L
		M
		NI
		Ν
		0
		Ρ

POWER SEAT SWITCH GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000003312424

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 se	eat switch		Continuity
Connector	Connector Terminal		Continuity
B459	35		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

COMPONENT DIAGNO	sis > C SWITCH GROUI		
	C SWITCH GROU		
Diagnosis Procedure			INFOID:00000003639906
1.CHECK TILT & TELESC	OPIC SWITCH GROUND	CIRCUIT	
 Turn ignition switch OF Disconnect tilt & telesci Check continuity between 		nd ground.	
Tilt & teleso	copic switch		Continuity
Connector	Terminal	Ground	· · · · · · · · · · · · · · · · · · ·
M102	1		Existed
s the inspection result norr YES >> Check intermitt NO >> Repair or repla	ent incident. Refer to <u>GI-40</u>	<u>, "Intermittent Incident"</u> .	

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FRONT DOOR SWITCH (DRIVER SIDE)

< COMPONENT DIAGNOSIS >

FRONT DOOR SWITCH (DRIVER SIDE)

Description

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

Component Function Check

1.CHECK FUNCTION

1. Select "DOOR SW-DR" in "Data monitor" mode with CONSULT-III.

2. Check the front door switch (driver side) signal under the following conditions.

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-76, "Diagnosis Procedure"</u>.

Diagnosis Procedure

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.

	+) tch(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.

2.check front door switch (driver side) circuit

1. Disconnect BCM connector.

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

В	СМ	Front door swi	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M123	150	B34	2	Existed

3. Check continuity between BCM connector and ground.

В	СМ		Continuity
Connector	Connector Terminal		Continuity
M123	150		Not existed

Is the inspection result normal?

INFOID:000000003312432

INFOID:000000003312433

INFOID:000000003312434

FRONT DOOR SWITCH (DRIVER SIDE)

	FRONT DO	OR SWITCH (L	RIVER SIDE)	
< COMPONENT DI	AGNOSIS >			
	BCM. Refer to BCS-9			
•	r replace harness or co DOOR SWITCH (DRIV			
		ER SIDE)		
Is the inspection resu	omponent Inspection".			
YES >> GO TO 4				
	front door switch (driv	er side).Refer to <u>DLI</u>	K-368, "Removal and	Installation"
4.CHECK INTERMI	TTENT INCIDENT			
Refer to GI-40, "Inter	mittent Incident".			
>> INSPEC				
Component Insp	ection			INFOID:000000003312435
1.CHECK FRONT	DOOR SWITCH (DRIV	ER SIDE)		
1. Turn ignition swit				
	door switch (driver sid		minala	
3. Check continuity	between front door sv	vilch (driver side) ler	minais.	
Ter	rminal		ondition	Continuity
Front door sw	vitch (driver side)		ondition	
2	Ground part of door	Front door switch	Pushed	Not existed
	switch	(driver side)	Released	Existed
Is the inspection resu				
YES >> INSPEC NO >> Replace	front door switch (driv	er side).Refer to DLI	K-368. "Removal and	Installation".

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SLIDING SENSOR

< COMPONENT 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
		Operate (forward)	Change (increase) ^{*1}
SLIDE PULSE	Seat sliding	Operate (backward)	Change (decrease) ^{*1}
		Release	No change ^{*1}

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-78, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000003312438

1.CHECK SLIDING SENSOR SIGNAL

1. Turn ignition switch ON.

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

(+ Driver seat	+) control unit	(-)	Condition		Signal (Reference value)
Connector	Terminals				
B452	19	Ground	Seat sliding	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000003312436

INFOID:000000003312437

SLIDING SENSOR

< COMPONENT DIAGNOSIS >

	control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Termina	l	Continuity
B452	19	B461	19		Existed
Check continuity b	etween driver seat co	ntrol unit harnes	s connector and gro	ound.	
Drive	r seat control unit				Continuity
Connector	Termina	I	Ground		Continuity
B452	19				Not existed
CHECK SLIDING S Connect driver sea Turn ignition switc	replace harness or con ENSOR POWER SUI at control unit connect h ON. ween sliding motor ha	PPLY or.	and ground		
Check voltage bet	Ū		and ground.		
	(+) Sliding motor		()		Voltage (V)
Connector	Terminal	s	Ground		(Approx.)
B461	33	-			Battery voltage
the inspection result	normal?				
Turn ignition switc					
NO >> GO TO 4. CHECK SLIDING S Turn ignition switc Disconnect driver		ector.	s connector and slic	ding mot	tor harness conr
NO >> GO TO 4. CHECK SLIDING S Turn ignition switc Disconnect driver	h OFF. seat control unit conne etween driver seat co	ector. ntrol unit harnes	s connector and slic	ding mot	
NO >> GO TO 4. CHECK SLIDING S Turn ignition switc Disconnect driver Check continuity b	h OFF. seat control unit conne etween driver seat co	ector. ntrol unit harnes		U	tor harness conr Continuity
NO >> GO TO 4. CHECK SLIDING S Turn ignition switch Disconnect driver Check continuity b Driver seat	h OFF. seat control unit connetween driver seat co	ector. ntrol unit harnes	Sliding motor	U	
NO >> GO TO 4. CHECK SLIDING S Turn ignition switch Disconnect driver Check continuity b Driver seat Connector B452	h OFF. seat control unit connective oetween driver seat co control unit Terminal	ector. ntrol unit harnes Connector B461	Sliding motor Termina 33		Continuity
NO >> GO TO 4. CHECK SLIDING S Turn ignition switc Disconnect driver Check continuity b Driver seat Connector B452 Check continuity b	h OFF. seat control unit connective oetween driver seat co control unit Terminal 33	ector. ntrol unit harnes Connector B461	Sliding motor Termina 33		Continuity Existed
NO >> GO TO 4. CHECK SLIDING S Turn ignition switc Disconnect driver s Check continuity b Driver seat of Connector B452 Check continuity b	h OFF. seat control unit connective oetween driver seat co control unit Terminal 33 between driver seat co	ector. ntrol unit harnes Connector B461 ntrol unit harnes	Sliding motor Termina 33		Continuity
NO >> GO TO 4. CHECK SLIDING S Turn ignition switc Disconnect driver Check continuity b Driver seat of Connector B452 Check continuity b Drive	h OFF. seat control unit connective etween driver seat co control unit Terminal 33 between driver seat co	ector. ntrol unit harnes Connector B461 ntrol unit harnes	Sliding motor Termina 33 s connector and gro		Continuity Existed
NO >> GO TO 4. CHECK SLIDING S Turn ignition switch Disconnect driver is Check continuity b Driver seat of Connector B452 Check continuity b Driver Connector B452 Check continuity b Driver Connector B452 Check continuity b Connector B452 Check continuity b Connector B452 Check continuity b Connector B452 Check continuity b Connector Connector B452 Check continuity b Connector Connector Connector CONNECTOR CONNECTO	h OFF. seat control unit connective of driver seat control unit Terminal 33 between driver seat control unit reseat control unit <u>Terminal</u> 33 <u>normal?</u> river seat control unit. replace harness or conserved of the driver seat control unit.	ector. ntrol unit harness Connector B461 Introl unit harnes	Sliding motor Termina 33 s connector and gro Ground D4. "Removal and Ir	bund.	Continuity Existed Continuity Not existed
NO >> GO TO 4. CHECK SLIDING S Turn ignition switch Disconnect driver and Check continuity b Driver seat of Connector B452 Check continuity b Driver Connector B452 the inspection result (ES >> Replace d NO >> Repair or of CHECK SLIDING S Turn ignition switch Check continuity b	h OFF. seat control unit connective of driver seat control unit Terminal 33 between driver seat co or seat control unit Termina 33 <u>normal?</u> river seat control unit. replace harness or cons ENSOR GROUND h OFF. between sliding sensor	ector. ntrol unit harness Connector B461 Introl unit harnes	Sliding motor Termina 33 s connector and gro Ground D4. "Removal and Ir	bund.	Continuity Existed Continuity Not existed
NO >> GO TO 4. CHECK SLIDING S Turn ignition switch Disconnect driver is Check continuity b Driver seat of Connector B452 Check continuity b Driver Connector B452 Check continuity b Connector B452 the inspection result (ES >> Replace d NO >> Repair or is CHECK SLIDING S Turn ignition switch Check continuity b	h OFF. seat control unit connective of driver seat control unit Terminal 33 between driver seat control unit reseat control unit Terminal 33 or seat control unit replace harness or consense ENSOR GROUND h OFF. between sliding sensor	ector. ntrol unit harness Connector B461 Introl unit harnes	Sliding motor Termina 33 s connector and gro Ground 04. "Removal and Ir ctor and ground.	bund.	Continuity Existed Continuity Not existed
NO >> GO TO 4. CHECK SLIDING S Turn ignition switch Disconnect driver and Check continuity b Driver seat of Connector B452 Check continuity b Driver Connector B452 the inspection result (ES >> Replace d NO >> Repair or of CHECK SLIDING S Turn ignition switch Check continuity b	h OFF. seat control unit connective of driver seat control unit Terminal 33 between driver seat co or seat control unit Termina 33 <u>normal?</u> river seat control unit. replace harness or cons ENSOR GROUND h OFF. between sliding sensor	ector. ntrol unit harness Connector B461 Introl unit harnes	Sliding motor Termina 33 s connector and gro Ground D4. "Removal and Ir	bund.	Continuity Existed Continuity Not existed

YES >> Replace sliding motor.

SLIDING SENSOR

< COMPONENT DIAGNOSIS >

RECLINING SENSOR

< COMPONENT DIAGNOSIS >

RECLINING SENSOR Description INFOID:00000003312439 • 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-000000003312440 1.CHECK FUNCTION 1. Select "RECLN PULSE" in "Data monitor" mode with CONSULT-III. Check reclining sensor signal under the following conditions. 2. Monitor item Condition Value Operate (forward) Change (increase)*1 **RECLN PULSE** Seat reclining Operate (backward) Change (decrease)*1 Release No change^{*1} ^{*1}: The value at the seat position attained when the battery is connected is considered to be 32768. Is the indication normal? YES >> INSPECTION END >> Perform diagnosis procedure. Refer to ADP-81, "Diagnosis Procedure". NO Diagnosis Procedure INFOID-00000003312441 1.CHECK RECLINING SENSOR SIGNAL 1. Turn ignition switch ON. 2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

(+	+)					
Driver seat	control unit	(—)	Cor	ndition Signal (Reference value)		
Connector	Terminals					k
B452	20	Ground	Seat reclining	Operate	10mSec/div The sec sec sec sec sec sec sec sec sec se	L
				Other than above	0 or 5	Ν

is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-204, "Removal and Installation".

NO >> GO TO 2.

2. CHECK RECLINING SENSOR CIRCUIT

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

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

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RECLINING SENSOR

< COMPONENT DIAGNOSIS >

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

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

Driver sea	t 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

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

3. Check voltage between reclining motor harness connector and ground.

Reclini	(+) Reclining motor Connector Terminals		Voltage (V) (Approx.)
Connector			
B454	B454 33		Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		ng motor	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B452	33	B454	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-204, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5. CHECK RECLINING SENSOR GROUND

1. Turn ignition switch OFF.

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

Reclinir	ng motor		Continuity	
Connector	Connector Terminal		Continuity	
B454	B454 46		Existed	

Is the inspection result normal?

RECLINING SENSOR

< COM	IPONENT DIAGNOSIS >	
YES NO	>> Replace reclining motor. >> Repair or replace harness or connector.	A
		В
		С
		D
		Е
		F
		G
		Н
		I
		ADP
		K
		L
		M

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LIFTING SENSOR (FRONT)

< COMPONENT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Description

- 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

- 1. 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

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

Diagnosis Procedure

INFOID:000000003312444

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

1. Turn ignition switch ON.

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

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminals				(, PP. CM)
B452	22	Ground	Seat Lifting (front)	Operate Other than	10mSec/div
				above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

NO >> GO TO 2.

2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.

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

INFOID:000000003312442

INFOID:000000003312443

LIFTING SENSOR (FRONT)

< COMPONENT DIAGNOSIS >

2	control unit	Lifting m	notor (front)	
Connector	Terminal	Connector	Terminal	Continuity
B452	22	B455	22	Existed
. Check continuity I	between driver seat co	ontrol unit harness co	nnector and ground	-
	er seat control unit			Continuity
Connector	Termina	al	Ground	,
B452	22			Not existed
CHECK LIFTING S Connect driver se Turn ignition swite	replace harness or co SENSOR (FRONT) PO at control unit connect	WER SUPPLY	or and ground.	
	(+)	-	-	
Lif	ting motor (front)		()	
Connector	Terminal	ls		(Approx.)
B455	33		Ground	Battery voltage
. Turn ignition swite . Disconnect driver	ch OFF. seat control unit conn			
. Turn ignition swite . Disconnect driver	ch OFF.	ector.		notor (front) harness o
 Turn ignition swite Disconnect driver Check continuity I nector. 	ch OFF. seat control unit conn	ector. ontrol unit harness co		
 Turn ignition swite Disconnect driver Check continuity I nector. 	ch OFF. seat control unit conn between driver seat co	ector. ontrol unit harness co	nnector and lifting n	notor (front) harness o
. Turn ignition swite 2. Disconnect driver 3. Check continuity I nector. Driver seat	ch OFF. seat control unit conn- between driver seat co	ector. ontrol unit harness co Lifting m	nnector and lifting n	
. Turn ignition swite . Disconnect driver . Check continuity I nector. Driver seat Connector B452	ch OFF. seat control unit conn- between driver seat co control unit Terminal	ector. ontrol unit harness co Lifting m Connector B455	nnector and lifting n notor (front) Terminal 33	Continuity Existed
Turn ignition swite Disconnect driver Check continuity I nector. Driver seat Connector B452 Check continuity I	ch OFF. seat control unit connected between driver seat co control unit Terminal 33	ector. ontrol unit harness co Lifting m Connector B455	nnector and lifting n notor (front) Terminal 33	Continuity Existed
Turn ignition swite Disconnect driver Check continuity I nector. Driver seat Connector B452 Check continuity I	ch OFF. seat control unit connected between driver seat co control unit Terminal 33 between driver seat co	ector. ontrol unit harness co Lifting m Connector B455 ontrol unit harness co	nnector and lifting n notor (front) Terminal 33	Continuity Existed
. Turn ignition swite Disconnect driver Check continuity I nector. Driver seat Connector B452 Check continuity I Drive	ch OFF. seat control unit connected between driver seat connected control unit Terminal 33 between driver seat control unit	ector. ontrol unit harness co Lifting m Connector B455 ontrol unit harness co	nnector and lifting n notor (front) Terminal 33 nnector and ground	Continuity Existed
 Turn ignition switch Disconnect driver Check continuity in nector. Driver seat Connector B452 Check continuity in Driver Connector Connector B452 Check continuity in Driver Connector C	ch OFF. seat control unit connected between driver seat connected control unit Terminal 33 between driver seat control unit remina 33 t normal? driver seat control unit. replace harness or consensor consensor (FRONT) GR	ector. ontrol unit harness co Lifting m Connector B455 ontrol unit harness co al Refer to <u>ADP-204, "</u> nnector.	nnector and lifting n	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver Check continuity in nector. Driver seat Connector B452 Check continuity in Driver Check continuity in Driver Check continuity in Driver Check continuity in Driver 	ch OFF. seat control unit connected between driver seat connected control unit Terminal 33 between driver seat control unit reseat control unit Terminal 33 t normal? driver seat control unit. replace harness or conserved and the control unit. SENSOR (FRONT) GR ch OFF. between lifting motor (free control unit)	ector. ontrol unit harness co Lifting m Connector B455 ontrol unit harness co al Refer to <u>ADP-204, "</u> nnector.	nnector and lifting n	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver Check continuity in nector. Driver seat Connector B452 Check continuity in Driver Connector Connector B452 Check continuity in Driver Connector Connector B452 Check continuity in Driver 	control unit connection driver seat control unit control unit Terminal 33 between driver seat control unit reseat control unit Terminal 33 between driver seat control unit. replace harness or control unit. ch OFF. between lifting motor (front)	ector. ontrol unit harness co Lifting m Connector B455 ontrol unit harness co al Refer to <u>ADP-204, "</u> nnector. ROUND	nnector and lifting n	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver Check continuity in nector. Driver seat Connector B452 Check continuity in Driver Check continuity in Driver Check continuity in Driver Check continuity in Driver 	ch OFF. seat control unit connected between driver seat connected control unit Terminal 33 between driver seat control unit reseat control unit Terminal 33 t normal? driver seat control unit. replace harness or conserved and the control unit. SENSOR (FRONT) GR ch OFF. between lifting motor (free control unit)	ector. ontrol unit harness co Lifting m Connector B455 ontrol unit harness co al Refer to <u>ADP-204, "</u> nnector. ROUND	nnector and lifting n	Continuity Existed Continuity Not existed ation".

Revision: 2008 October

LIFTING SENSOR (FRONT)

< COMPONENT DIAGNOSIS >

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

LIFTING SENSOR (REAR)

< COMPONENT DIAGNOSIS >

LIFTING SENSOR (REAR)

А Description INFOID:00000003312445 • The lifting sensor (rear) is installed to the seat cushion frame. В 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:000000003312446 1.CHECK FUNCTION Select "LIFT RR PULSE" in "Data monitor" mode with CONSULT-III. D 1. Check lifting sensor (rear) signal under the following conditions. 2. Monitor item Condition Value Operate (Up) Change (increase)*1 LIFT RR PULSE Seat lifting (rear) Operate (Down) Change (decrease)*1 F 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 (REAR) SIGNAL

1. Turn ignition switch ON.

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

(+	+)							
Driver seat control unit		()	Condition		С	ondition	Voltage (V) (Approx.)	
Connector	Terminals				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
B452	21	Ground	Seat Lifting (rear)	Operate	10mSec/div 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-204, "Removal and Installation".

NO >> GO TO 2.

2.CHECK LIFTING SENSOR (REAR) CIRCUIT

Turn ignition switch OFF. 1.

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

ADP-87

INFOID:00000003312447

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LIFTING SENSOR (REAR)

< COMPONENT DIAGNOSIS >

Driver seat	Driver seat control unit		Lifting motor (rear)		
Connector	Terminal	Connector Terminal		Continuity	
B452	21	B456	21	Existed	

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

Driver sea	t 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 me	(+) Lifting motor (rear)		Voltage (V) (Approx.)
Connector	Terminals		
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

1. Turn ignition switch OFF.

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

Driver seat	control unit	Lifting m	otor (rear)	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
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-204, "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 me	Lifting motor (rear)		Continuity
Connector	Terminal	Ground	Continuity
B456	47		Existed

Is the inspection result normal?

	LIFTING SENSOR (REAR)	
< COM	PONENT DIAGNOSIS >	
YES NO	>> Replace lifting motor (rear). >> Repair or replace harness or connector.	A
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TILT SENSOR

< COMPONENT DIAGNOSIS >

TILT SENSOR

Description

- 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

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

Monitor item	Con	Value	
		Operate (UP-WARD	Change (increase)*1
TILT PULSE	Steering column Oper		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-90, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000003312450

1.CHECK TILT SENSOR SIGNAL

1. Turn ignition switch ON.

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

Driver seat	+) control unit	()	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B452	30	Ground	Steering column	Operate Other than above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

NO >> GO TO 2.

2.CHECK TILT SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

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

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

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

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INFOID:000000003312448

INFOID:00000003312449

TILT SENSOR

< COMPONENT DIAGNOSIS >

Driver se	at control unit				
Connector	Termina	al		Ground	Continuity
B452	5				Not existed
s the inspection result no	rmal?				
YES >> GO TO 3.					
	lace harness or co				
\mathbf{B} .CHECK TILT SENSOR	POWER SUPPL	Y			
Connect automatic dr		trol unit con	nector.		
 Turn ignition switch O Check voltage between 		ss connecto	or and arou	Ind	
one on the second			or and groo		
	(+)				Voltage (V/)
Til	t motor			()	Voltage (V) (Approx.)
Connector	Termina	als			
M116	4			Ground	Battery voltage
Is the inspection result no	<u>rmal?</u>				
YES >> GO TO 5. NO >> GO TO 4.					
1. CHECK TILT SENSOR					
. Turn ignition switch O		ontrol unit c	onnector		
. Turn ignition switch O 2. Disconnect automatic	drive positioner c			init harness conn	ector and tilt motor har
 Turn ignition switch O Disconnect automatic 	drive positioner c			init harness conn	ector and tilt motor ha
 Turn ignition switch O Disconnect automatic Check continuity betw connector. 	drive positioner c veen automatic dri		er control u		ector and tilt motor har
 Turn ignition switch O Disconnect automatic Check continuity betw connector. 	e drive positioner c veen automatic driv	ve positione	er control u Tilt r	motor	ector and tilt motor har
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector	e drive positioner c veen automatic driv ner control unit Terminal	ve positione	er control u Tilt r ector	notor Terminal	Continuity
. Turn ignition switch O 2. Disconnect automatic 3. Check continuity betw connector. Automatic drive positior Connector M104	e drive positioner c veen automatic driv ner control unit Terminal 27	ve positione Conn M1	Tilt r ector	motor Terminal 4	Continuity Existed
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector	e drive positioner c veen automatic driv ner control unit Terminal 27	ve positione Conn M1	Tilt r ector	motor Terminal 4	Continuity Existed
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw	e drive positioner c veen automatic driv ner control unit Terminal 27	ve positione Conn M1	Tilt r ector	motor Terminal 4	Continuity Existed ector and ground.
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic dri	ve positione Conn M1 ve positione	Tilt r Tilt r ector 16 er control u	motor Terminal 4	Continuity Existed
 Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p 	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit	ve positione Conn M1 ve positione	Tilt r Tilt r ector 16 er control u	motor Terminal 4 Init harness conn	Continuity Existed ector and ground.
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 s the inspection result no	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv cositioner control unit Termina 27 rmal?	ve positione Conn Ve positione	Tilt r ector 16 er control u	motor Terminal 4 Init harness conn Ground	Continuity Existed ector and ground. Continuity Not existed
1. Turn ignition switch O 2. Disconnect automatic 3. Check continuity betwee Connector M104 4. Check continuity betwee Automatic drive position Connector M104 4. Check continuity betwee Automatic drive position Connector M104 sthe inspection result no YES	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit cositioner control unit 27 rmal? matic drive positio	ve positione Conn We positione al	Tilt r ector 16 er control u	motor Terminal 4 Init harness conn Ground	Continuity Existed ector and ground. Continuity
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 s the inspection result no YES >> Replace auto NO >> Repair or repl	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic dri cositioner control unit cositioner control unit Termina 27 rmal? matic drive positio lace harness or co	ve positione Conn M1 ve positione al	Tilt r ector 16 er control u	motor Terminal 4 Init harness conn Ground	Continuity Existed ector and ground. Continuity Not existed
 Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 Check continuity betw Automatic drive p Connector M104 S the inspection result no YES >> Replace autom NO >> Repair or repl CHECK TILT SENSOR 	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic dri cositioner control unit Termina 27 rmal? matic drive positio lace harness or co	ve positione Conn M1 ve positione al	Tilt r ector 16 er control u	motor Terminal 4 Init harness conn Ground	Continuity Existed ector and ground. Continuity Not existed
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 s the inspection result no YES >> Replace autom NO >> Repair or repl D.CHECK TILT SENSOR Turn ignition switch O	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv cositioner control unit Termina 27 veen automatic driv cositioner control unit Termina 27 rmal? matic drive positio lace harness or co & GROUND CIRCU	ve positione Conn M1 ve positione al oner control p onnector. UIT	er control u Tilt r ector 16 er control u unit. Refer	motor Terminal 4 Init harness conn Ground	Continuity Existed ector and ground. Continuity Not existed
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 s the inspection result no YES >> Replace autom NO >> Repair or repl D.CHECK TILT SENSOR Turn ignition switch O Disconnect automatic	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit Cossitioner control unit Cossiti	ve positione Conn M1 ve positione al oner control o onnector. UIT	Tilt r ector 16 er control u unit. Refer	motor Terminal 4 unit harness conn Ground	Continuity Existed eector and ground. Continuity Not existed
	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit Cossitioner control unit Cossiti	ve positione Conn M1 ve positione al oner control o onnector. UIT	Tilt r ector 16 er control u unit. Refer	motor Terminal 4 unit harness conn Ground	Continuity Existed ector and ground. Continuity Not existed
Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 s the inspection result no YES >> Replace auto NO >> Repair or repl D.CHECK TILT SENSOR Turn ignition switch O Disconnect automatic Connector.	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit cositioner control unit rermina 27 rmal? matic drive positio lace harness or co & GROUND CIRCU OFF. e drive positioner c veen automatic driv	ve positione Conn M1 ve positione al oner control o onnector. UIT	er control u Tilt r ector 16 er control u unit. Refer unit. Refer connector. er control u	motor Terminal 4 unit harness conn Ground to <u>ADP-205, "Re</u> unit harness conn	Continuity Existed eector and ground. Continuity Not existed
1. Turn ignition switch O 2. Disconnect automatic 3. Check continuity betw Connector. Automatic drive position Connector M104 4. Check continuity betw Automatic drive position M104 4. Check continuity betw Automatic drive p Connector M104 s the inspection result no YES NO >> Replace autor NO >> Repair or repl D.CHECK TILT SENSOR 1. Turn ignition switch O 2. Disconnect automatic 3. Check continuity betw connector. Automatic drive position	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit Cositioner control unit	ve positione Conn M1 ve positione al oner control o onnector. UIT control unit c ve positione	er control u Tilt r ector 16 er control u unit. Refer unit. Refer connector. er control u Tilt r	motor Terminal 4 unit harness conn Ground to <u>ADP-205, "Re</u> unit harness conn	Continuity Existed eector and ground. Continuity Not existed
 Turn ignition switch O Disconnect automatic Check continuity betw connector. Automatic drive position Connector M104 Check continuity betw Automatic drive p Connector M104 Check continuity betw Automatic drive p Connector M104 Sthe inspection result no YES >> Replace auto NO >> Repair or repl CHECK TILT SENSOR Turn ignition switch O Disconnect automatic Check continuity betw connector. 	e drive positioner c veen automatic driv ner control unit Terminal 27 veen automatic driv positioner control unit cositioner control unit rermina 27 rmal? matic drive positio lace harness or co & GROUND CIRCU OFF. e drive positioner c veen automatic driv	ve positione Conn M1 ve positione al oner control o onnector. UIT	er control u Tilt r ector 16 er control u unit. Refer unit. Refer connector. er control u Tilt r ector	motor Terminal 4 unit harness conn Ground to <u>ADP-205, "Re</u> unit harness conn	Continuity Existed ector and ground. Continuity Not existed emoval and Installation ector and tilt motor har

TELESCOPIC SENSOR

< COMPONENT DIAGNOSIS >

TELESCOPIC SENSOR

Description

- 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

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

Monitor item	Cor	Valve	
		Operate (forward)	Change (increase) ^{*1}
TELESCO PULSE	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 <u>ADP-92, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000003312453

1.CHECK TELESCOPIC SENSOR SIGNAL

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

	+) control unit Terminals	()	Condition		Voltage (V) (Approx.)
B452	31	Ground	Steering column	Operate Other than above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.

- 2. 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

< COMPONENT DIAGNOSIS >

Diverseat	Driver seat control unit Telescopic motor			
Connector	Terminal	Connector	Terminal	Continuity
B452	31	M117	5	Existed
4. Check continuity	between driver seat co	ontrol unit harness co	onnector and ground	
	er seat control unit			Continuity
Connector	Termina	al	Ground	
B452	31			Not existed
3.CHECK TELESCC 1. Connect driver se 2. Turn ignition swite	replace harness or co DPIC SENSOR POWE eat control unit connec	R SUPPLY tor.	and ground.	
	(+)			
т	elescopic motor		()	Voltage (V)
Connector	Termina	lls	()	(Approx.)
M117	4		Ground	Battery voltage
1. Turn ignition swite	ch OFF.	R SUPPLY CIRCUIT		
 Turn ignition swite Disconnect autom 	ch OFF. natic drive positioner c between automatic dri	ontrol unit connector		ctor and telescopic motor
 Turn ignition swite Disconnect auton Check continuity harness connector 	ch OFF. natic drive positioner c between automatic dri	ontrol unit connector ive positioner contro		·
 Turn ignition swite Disconnect auton Check continuity harness connector 	ch OFF. natic drive positioner c between automatic dri or.	ontrol unit connector ive positioner contro	unit harness conne	ctor and telescopic motor
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive portional 	ch OFF. natic drive positioner c between automatic dri or. psitioner control unit	ontrol unit connector ive positioner contro Teleso	unit harness conne	·
 Turn ignition swite Disconnect autom Check continuity harness connecto Automatic drive po Connector M104 	ch OFF. natic drive positioner c between automatic dri or. ositioner control unit Terminal	ontrol unit connector ive positioner contro Teleso Connector M117	unit harness conne	Continuity Existed
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive por Connector M104 Check continuity 	ch OFF. natic drive positioner c between automatic dri or. ositioner control unit Terminal 27	ontrol unit connector ive positioner contro Teleso Connector M117	unit harness conne	Continuity Existed Ctor and ground.
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive por Connector M104 Check continuity 	ch OFF. natic drive positioner c between automatic dri or. ositioner control unit Terminal 27 between automatic dri	ontrol unit connector ive positioner contro Telesc Connector M117 ve positioner control	unit harness conne	Continuity Existed
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive por Connector M104 Check continuity Automatic do Connector M104 	ch OFF. natic drive positioner c between automatic dri or. ositioner control unit Terminal 27 between automatic dri drive positioner control unit Termina 27	ontrol unit connector ive positioner contro Telesc Connector M117 ve positioner control	unit harness conne	Continuity Existed Ctor and ground.
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive por Connector M104 Check continuity Automatic do Connector Connector M104 Check continuity Connector M104 Connector Connector M104 Turn ignition swite Disconnect autom 	ch OFF. natic drive positioner c between automatic dri or.	ontrol unit connector ive positioner contro Telesc Connector M117 ve positioner control al ner control unit. Refe onnecter. ND CIRCUIT ontrol unit connector	unit harness conne	Continuity Existed Ctor and ground. Continuity
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive potential Connector M104 Check continuity Automatic do Connector M104 Check continuity Automatic do Connector M104 Check continuity Separation results YES >> Replace at NO >> Repair or CHECK TELESCO Turn ignition swite Check continuity Automatic do 	ch OFF. natic drive positioner c between automatic dri pr.	ontrol unit connector ive positioner control Connector M117 ve positioner control al ner control unit. Refe onnecter. ND CIRCUIT	unit harness conne	Continuity Existed Ctor and ground. Continuity Not existed
 Turn ignition swite Disconnect autom Check continuity harness connector Automatic drive potential Connector M104 Check continuity Automatic do Connector M104 Check continuity Automatic do Connector M104 Check continuity Separation results YES >> Replace at NO >> Repair or CHECK TELESCO Turn ignition swite Check continuity Automatic do 	ch OFF. natic drive positioner c between automatic dri or.	ontrol unit connector ive positioner control Connector M117 ve positioner control al ner control unit. Refe onnecter. ND CIRCUIT	unit harness conne	Continuity Existed Ctor and ground. Continuity Not existed

TELESCOPIC SENSOR

< COMPONENT DIAGNOSIS >

Is the inspection result normal?

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

MIRROR SENSOR DRIVER SIDE

DRIVER SIDE : Description

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

1.CHECK FUNCTION

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

Monitor item	Condition	Value	F
MIR/SEN LH U-D	Door mirror (driver side)	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)	(-
MIR/SEN LH R-L	Door 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-95, "DRIVER SIDE : Diagnosis Procedure"</u>.

DRIVER SIDE : Diagnosis Procedure

INFOID:000000003312456

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.

(+)				L
Door mirror (driver side)		()	Voltage (V) (Approx.)	
Connector	Terminals			
D3	23	Ground	5	M

Is the inspection result normal?

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

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

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

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

ADP-95

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INFOID:000000003312454

INFOID:00000003312455

< COMPONENT DIAGNOSIS >

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 <u>ADP-205, "Removal and Installation"</u>. NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

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

Automatic drive po	ositioner control unit	Door mirror (driver side) Connector Terminal		Continuity
Connector	Terminal			Continuity
M75	6	D3	21	Existed
W75	18	5	22	LAISted

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M75	6	Gibana	Not existed
	18		NOI EXISIEU

Is the inspection result normal?

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

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:000000003312457

INFOID:00000003312458

- 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

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

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

ADP-96

< COMPONENT DIAGNOSIS >

	Monitor item		Condition		Value	
MIR/SEN RH U-D		– Door mirror (passenger side)			Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)	
MIR/SEN RH R-L			, ,		Change between 4 [V] (close to left edge) 6 [V] (close to right edge)	
s the indication norm						
YES >> INSPECT NO >> Perform of		edure. Refer to AD	P-97. "PASSE	NGER SIDE :	Diagnosis Procedure".	
PASSENGER SI	•				INFOID:00000000331245	
	-				INFOID.0000000031243	
1.CHECK DOOR MI		OR (PASSENGER	SIDE) POWEF	R SUPPLY		
 Turn ignition swite Disconnect door i 		ger side) connecto	r			
3. Turn ignition swite	ch ON.	- ,		_		
 Check voltage be 	tween door mi	rror (passenger sic	le) harness co	nnector and g	round.	
	(+)					
Door m	nirror (passenger s	ide)	(-	-)	Voltage (V) (Approx.)	
Connector		Terminals			, , , ,	
D43		23	Gro	und	5	
I. Turn ignition swite	RROR (PASSE			R SUPPLY CI	RCUIT	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton	RROR (PASSE ch OFF. natic drive posi between auton	tioner control unit natic drive position	connector.		RCUIT ector and door mirror (pas	
 CHECK DOOR MI Turn ignition swite Disconnect auton Check continuity senger side) harn 	RROR (PASSE ch OFF. natic drive posi between auton ness connector.	tioner control unit natic drive position	connector. er control unit	harness conn		
 CHECK DOOR MI Turn ignition swite Disconnect auton Check continuity senger side) harn Automatic drive point 	RROR (PASSE ch OFF. natic drive posi between auton ness connector.	tioner control unit natic drive position	connector. er control unit Door mirror (passe	harness conn		
 CHECK DOOR MI Turn ignition swite Disconnect auton Check continuity senger side) harn 	RROR (PASSE ch OFF. natic drive posi between auton ness connector.	tioner control unit natic drive position it Coni	connector. er control unit	harness conn enger side)	ector and door mirror (pas	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton 3. Check continuity senger side) harn Automatic drive po Connector M75	RROR (PASSE ch OFF. natic drive posi between auton ness connector. psitioner control un Terminal 21	tioner control unit natic drive position it Coni	connector. er control unit Door mirror (passe nector 43	harness conn enger side) Terminal 23	ector and door mirror (pas Continuity Existed	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton 3. Check continuity senger side) harn Automatic drive po Connector M75 4. Check continuity	RROR (PASSE ch OFF. natic drive posi between auton ness connector. psitioner control un Terminal 21 between auton	tioner control unit natic drive position it Coni Datic drive position	connector. er control unit Door mirror (passe nector 43	harness conn enger side) Terminal 23	ector and door mirror (pas Continuity Existed	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton 3. Check continuity senger side) harn Automatic drive po Connector M75 4. Check continuity	RROR (PASSE ch OFF. natic drive posi between auton ness connector. psitioner control un Terminal 21	tioner control unit natic drive position it Coni Datic drive position	connector. er control unit Door mirror (passe nector 43	harness conn enger side) Terminal 23 harness conn	ector and door mirror (pas Continuity Existed	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton 3. Check continuity senger side) harn Automatic drive po Connector M75 4. Check continuity Automatic c	RROR (PASSE ch OFF. natic drive posi between auton ness connector. psitioner control un Terminal 21 between auton	tioner control unit natic drive position it Con Datic drive position	connector. er control unit Door mirror (passe nector 43 er control unit	harness conn enger side) Terminal 23 harness conn	ector and door mirror (pas <u>Continuity</u> Existed ector and ground.	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton 3. Check continuity senger side) harn 3. Check continuity senger side) harn 4. Automatic drive po Connector M75 4. Check continuity Automatic c Connector M75 s the inspection resul YES >> Replace a NO >> Repair or	RROR (PASSE ch OFF. natic drive posi between auton ress connector. ositioner control un Terminal 21 between auton drive positioner cor <u>lt normal?</u> automatic drive replace harnes	tioner control unit natic drive position it Com natic drive position natic drive position trol unit 21 e positioner control ss or connector.	connector. er control unit Door mirror (passe nector 43 er control unit Gro unit. Refer to	harness conn enger side) Terminal 23 harness conn und	ector and door mirror (pas Continuity Existed ector and ground. Continuity	
2.CHECK DOOR MI 1. Turn ignition swite 2. Disconnect auton 3. Check continuity senger side) harn Automatic drive po Connector M75 4. Check continuity Automatic c Connector M75 s the inspection resul YES >> Replace a	RROR (PASSE ch OFF. natic drive posi between auton ress connector. ositioner control un Termina 21 between auton drive positioner cor drive positioner cor <u>lt normal?</u> automatic drive replace harnes RROR (PASSE	tioner control unit natic drive position it Com natic drive position natic drive position trol unit 21 e positioner control ss or connector.	connector. er control unit Door mirror (passe nector 43 er control unit Gro unit. Refer to	harness conn enger side) Terminal 23 harness conn und	ector and door mirror (pas Continuity Existed ector and ground. Continuity Not existed	

< COMPONENT DIAGNOSIS >

Automatic drive po	sitioner control unit	Door mirror (passenger side) Connector Terminal		Continuity	
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 po	ositioner control unit	Door mirror (passenger side) Connector Terminal		Continuity
Connector	Terminal			Continuity
M75	5	D43	21	Existed
	17	540	22	

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

Automatic drive	positioner control unit		Continuity	
Connector	Terminal	Ground Not existed	Continuity	
M75	5		Not ovisted	
WI75	17			

Is the inspection result normal?

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

SLIDING MOTOR

< COMPONENT DIAGNOSIS >

SLIDING	MOTOR
---------	-------

Description								INFOID:000000003312460
 The sliding moto The sliding moto The seat is slid for the seat is	r is installed with th	ne driver :	seat con	ntrol unit.	tion of	sliding mote	or.	
Component F			-			5		INFOID:000000003312461
1.CHECK FUNCT								
	SLIDE" in "Active t	est" mod	e with C	ONSULT-III				
2. Check the slid	ing motor operatio	n.						
	Test item					Descrip	otion	
	OFF			_		:	Stop	
SEAT SLIDE	FR			Seat sliding			Forward	
	RR					I	Backward	
<u>Is the operation of</u> YES >> INSPE	relevant parts norr	<u>nal?</u>						
	m diagnosis proce	dure. Ref	fer to <u>AD</u>	0P-99, "Diag	nosis	Procedure"		
Diagnosis Pro	cedure							INFOID:000000003312462
1.CHECK SLIDIN		R SUPPI	LY					
 Turn ignition s Disconnect slip 		tor						
 Disconnect sin Turn the ignitic 	ding motor connec on switch ON.	lor.						
 Perform "Ăctiv 	e test" ("SEAT SLI							
5. Check voltage	between sliding m	notor harr	ness con	nector and	ground	l.		
(+	-)							
Sliding	motor	tor (–		(–) Condition		Voltage (V) (Approx.)		
Connector	Terminals							(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
						OFF		0
	51					FR (forward)	Battery voltage
B461		Ground	ound	SEAT SLID	E	RR (backwa	ard)	0
						OFF	N	0
	50		FR (forward)			0		
lo the increation						RR (backwa	ai0)	Battery voltage
<u>Is the inspection re</u> YES >> Replace	esuit normal? ce sliding motor. (E	Ruilt in co	at clida (cushion from	no)			
NO >> GO T(at since t	cusmon nai	ne.)			
2.CHECK SLIDIN	IG MOTOR CIRCL	лт						
1. Turn ignition s								
2. Disconnect dri	ver seat control ur							
3. Check continu	ity between driver	seat cont	trol unit h	harness cor	nector	and sliding	motor ha	arness connector.
Driver	seat control unit			Slidin	g motor			
Connector	Terminal		Con	inector		Terminal		Continuity
D / C /	4		_	4.04		51		
B451	3		В	461		50		Existed

50

3

SLIDING MOTOR

< COMPONENT DIAGNOSIS >

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

Driver sea	t control unit	Ground Not existed	Continuity
Connector	Terminal		Continuity
B451	4		Not ovisted
D401	3		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

RECLINING MOTOR

< COMPONENT DIAGNOSIS > RECLINING MOTOR

RECLINING	MOTO	R					
Description						INFOID:000000003312463	
 The reclining me The reclining me The seatback is 	otor is acti	vated wit	th the driver seat		ection of reclin	ing motor.	
Component F	unction	Check	K			INFOID:00000003312464	
	TION						
Select "SEAT Check the red				with CONSULT-III.			
	Test	item			Description		
		OFF			Stop		
SEAT RECLINING		FR		Seat reclining	Forw	vard	
		RR			Back	kward	
	INING MC switch OFI colining mo ion switch ve test" ("S	F. otor conn ON. SEAT RE	ector.	CONSULT-III connector and grou	nd.	INFOID:000000003312465	ŀ
	(+)						
Reclini	ng motor		(-)	Cor	ndition	Voltage (V) (Approx.)	
Connector	Term	inals			055		
	5	2			OFF FR (forward)	0 Battery voltage	
	5.	0			RR (backward)	0	
B454			Ground	SEAT RECLINING	OFF	0	
	52	2			FR (forward)	0	
					RR (backward)	Battery voltage	
NO >> GO T .CHECK RECL	ace reclinir O 2. INING MC	ng motor. DTOR CII	. (Built in seat bac RCUIT	ck frame.)			
2.CHECK RECL 1. Turn ignition s 2. Disconnect d 3. Check continu	switch OFI river seat o	F. control ui	nit connector.	harness connector	and reclining r	notor harnes	s connec-

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

RECLINING MOTOR

< COMPONENT DIAGNOSIS >

Driver sea	t control unit	Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	6	B454	53	Existed
D401	5	6404	52	LAISIEU

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

Driver sea	t control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	6	Ground	Not existed
B451	5		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

LIFTING MOTOR (FRONT)

< COMPONENT DIAGNOSIS > LIFTING MOTOR (FRONT) А Description INFOID:00000003312466 The lifting motor (front) is installed to the seat cushion frame. В 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:000000003312467 1.CHECK FUNCTION Select "SEAT LIFTER FR" in "Active test" mode with CONSULT-III. 1. D Check the lifting motor (front) operation. 2. Test item Description OFF Stop UP SEAT LIFTER FR Seat lifting (front) Upward DWN Downward Is the operation of relevant parts normal? YES >> INSPECTION END NO >> Perform diagnosis procedure. Refer to ADP-103, "Diagnosis Procedure". Diagnosis Procedure INFOID:00000003312468 Н 1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect lifting motor (front) connector. Turn the ignition switch ON. 3. Perform "Active test" ("SEAT LIFTER FR") with CONSULT-III. 4. Check voltage between lifting motor (front) harness connector and ground. 5. ADP (+) Voltage (V) Lifting motor (front) (-) Condition Κ (Approx.) Connector Terminals OFF 0 L 56 UP 0 DWN (down) Battery voltage B455 Ground SEAT LIFTER FR OFF 0 Μ 57 UP Battery voltage DWN (down) 0 Ν 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 1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Ρ

LIFTING MOTOR (FRONT)

< COMPONENT DIAGNOSIS >

Driver sea	at control unit	Lifting mo	otor (front)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	9	B455	56	Existed
D431	10	D400	57	LAISIEU

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

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

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

LIFTING MOTOR (REAR)

< COMPONENT DIAGNOSIS >	
LIFTING MOTOR (REAR)	

Descrip	n of lifting motor	D:000000003312469 r (rear). D:000000003312470
Descrip	ption Stop Upward	
	ption Stop Upward	D:000000003312470
	Stop Upward	
	Stop Upward	
	Stop Upward	
	Upward	
	•	
	Downward	
nd.		
on		tage (V) pprox.)
)FF		0
P WN (DOV		ry voltage
,		0
		0
PFF	VN) Batter	ry voltage
Ρ		

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

LIFTING MOTOR (REAR)

< COMPONENT DIAGNOSIS >

Driver sea	at control unit	Lifting m	otor (rear)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	8	B456	55	Existed
0401	7	6400	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	- Ground	Not existed
B431	7		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

TILT MOTOR

< COMPONENT DIAGNOSIS >

TILT MOTOR

					INFOID:000000003312472
The tilt motor is ir The tilt motor is a The steering colu	ctivated with the a	utomatic drive	positioner control	unit. tion direction of tilt	motor.
Component Fu	unction Check	,			INF0ID:000000003312473
CHECK FUNCT	ION				
. Select "TILT M	OTOR" in "Active t notor operation.	test" mode with	CONSULT-III.		
	Test item Description				
OFF				Stop	
TILT MOTOR	UP		Steering tilt	Upward	1
	DWN			Downw	ard
 Turn the ignitio Perform "Active 	witch OFF. motor connector.	OR") with CON	ISULT-III. actor and ground.		
 Turn ignition sv Disconnect tilt Turn the ignitio Perform "Active Check voltage 	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor	OR") with CON	SULT-III. ector and ground.		
. Turn ignition sv 2. Disconnect tilt 3. Turn the ignitio 4. Perform "Active 5. Check voltage (+) Tilt me	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor) otor	OR") with CON	ector and ground.	Condition	Voltage (V) (Approx.)
. Turn ignition sv Disconnect tilt Turn the ignitio Perform "Active Check voltage	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor	OR") with CON	ector and ground.		(Approx.)
. Turn ignition sv Disconnect tilt Turn the ignitio Perform "Active Check voltage (+)	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor) otor	OR") with CON	ector and ground.	Condition OFF UP	
Turn ignition sv Disconnect tilt Turn the ignitio Perform "Active Check voltage (+) Tilt me Connector	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor) otor Terminals	OR") with CON harness conne (–)	ector and ground.	OFF	(Approx.) 0
Turn ignition sv Disconnect tilt Turn the ignitio Perform "Active Check voltage (+) Tilt me	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor) otor Terminals	OR") with CON	ector and ground.	OFF UP	(Approx.) 0 0
. Turn ignition sv 2. Disconnect tilt 3. Turn the ignitio 4. Perform "Active 5. Check voltage (+) Tilt me Connector	witch OFF. motor connector. on switch ON. e test" ("TILT MOT between tilt motor) otor Terminals	OR") with CON harness conne (–)	ector and ground.	OFF UP DWN (down)	(Approx.) 0 0 Battery voltage

2. Disconnect automatic drive positioner control unit.

3. Check continuity between automatic drive positioner control unit harness connector and tilt motor harness connector.

Ρ

TILT MOTOR

< COMPONENT DIAGNOSIS >

Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M104	28	M116	1	Existed
101104	29	IVITIO	2	LAISIEU

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M104	28		Not existed
W104	29		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-205, "Removal and Installation".

TELESCOPIC MOTOR

< COMPONENT DIAGNOSIS >

TELESCOPI	C MOTOR						А
Description						INFOID:000000003312475	
 The telescopic m The telescopic m Compresses the 	notor is activated	with the automatic	drive positioner co	ontrol unit. telescopic	motor.		В
Component F	unction Chec	k				INFOID:000000003312476	С
1.CHECK FUNC	ΓΙΟΝ						
	SCO MOTOR" in ' escopic motor ope		with CONSULT-III				D
	Test item			Descri	ption		E
	OFF				Stop		
TELESCO MOTOR	FR		Steering telescopic Forward		Forward		
	RR				Backward		Г
	ECTION END m diagnosis proc		0P-109. "Diagnosis	Procedur	<u>e"</u> .	INF0ID:000000003312477	G
 Turn the ignition Perform "Active 	witch OFF. escopic motor co on switch ON. 'e test" ("TELESC	nnector. O MOTOR") with		und.			H I AD
(-	+)						
Telescop	pic motor	()	Cor	ndition		Voltage (V) (Approx.)	K
Connector	Terminals					(*******)	
				OFF		0	I
	1			FR (forwar	,	0	L
M117		Ground	TELESCOPIC MO- TOR	RR (backw	ard)	Battery voltage	
	2			OFF FR (forwar	d)	0 Battery voltage	M
	2			RR (backw	-	0	
Is the inspection re	esult normal?			(Ν
YES >> Repla NO >> GO TO 2.CHECK TELES 1. Turn ignition s	ce telescopic mot D 2. SCOPIC MOTOR witch OFF.	·	g column assembly	y.)			0
	ity between autor		ner control unit har	ness conn	ector and	telescopic motor	Ρ

TELESCOPIC MOTOR

< COMPONENT DIAGNOSIS >

Automatic drive p	ositioner control unit	Telesco	pic motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	29	M117	2	Existed
1017 5	26		1	LXISIEU

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

Automatic drive p	ositioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	29	Giodila	Not existed
WI75	26		NUL EXISIEU

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-205, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

< COMPONENT DIA		DOC	R M		ΓO	र	
DOOR MIRRO							
Description							A
•					_		INFOID:000000003312478
It makes mirror face of DRIVE POSITIONER				nd up and down	n wi	th the electric pov	ver that AUTOMATIC
Component Func	tion Check						INFOID:00000003312479
1.CHECK DOOR MI	RROR MOTOR	FUNC	TION				C
	NSULT-III Fund t normal? or motor functic ADP-111, "Diagr	<u>ction"</u> . on is Oł	۲.		MO	TOR LH" in "ACTI	VE TEST" mode with
1. CHECK DOOR MI							F
 Turn ignition switc Check voltage bet 	ch ON.						C
(+)							Voltage (V)
Door mirro	-	(-	-)		Condition		(Approx.)
Connector	Terminals					UP	Battery voltage
	12					Other than above	0
D3 (Driver side)				Door mirror remo	ote	LEFT	Battery voltage
D43 (Passenger side)	11	Gro	ound		Other than above		
	10					DOWN / RIGHT	Battery voltage
	10					Other than above	0 k
3. Check continuity to [Door mirror driver side	RROR MOTOR ch OFF. natic drive posit petween autom	ioner co atic driv	ontrol u			door mirror connec connector and door	
Automatic drive po		t		Door mirror	(driv		Continuity
Connector	Terminal			Connector		Terminal	
M75	12 23			D3		10	Existed
IVI7 J	23			00		12	LAISIGU
[Door mirror passenger	side]						F
Automatic drive po	-	t		Door mirror (p	assei	nger side)	Continuity
Connector	Terminal			Connector		Terminal	Continuity
	22					10	
M75	10			D43		12	Existed
	11					11	

DOOR MIRROR MOTOR

< COMPONENT DIAGNOSIS >

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

[Door mirror driver side]			
Automatic drive pos	sitioner control unit		Continuity
Connector	Terminal		Continuity
	12	Ground	
M75	23	-	Not existed
	24		
[Door mirror passenger side]			
[Door mirror passenger side] Automatic drive pos	sitioner control unit		Continuity
	sitioner control unit Terminal	-	Continuity
Automatic drive pos		Ground	Continuity
Automatic drive pos	Terminal	Ground	Continuity Not existed

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-205, "Removal and Installation"</u>.
- NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor. Refer to <u>ADP-112, "Component Inspection"</u>.

Is the inspection result normal?

- YES >> Check intermittent incident.Refer to <u>GI-40, "Intermittent Incident"</u>.
- NO >> Replace door mirror. Refer to <u>MIR-63</u>, "DOOR MIRROR ASSEMBLY : Removal and Installation".

Component Inspection

INFOID:000000004778793

1.CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-62, "DOOR MIRROR ASSEMBLY : Exploded View"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.Refer to MIR-63, "DOOR MIRROR ASSEMBLY : Removal and Installation".

2. CHECK DOOR MIRROR MOTOR-II

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

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

Connector	Terr	minal	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-63, "DOOR MIRROR ASSEMBLY : Removal and Installation".

SEAT MEMORY INDICATOR

< COMPONENT DIAGNOSIS >

Description

INFOID:000000003312482

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- 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

1.CHECK FUNCTION

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

MEMORY SW INDCTR	Test item		Description	
MEMORY SW INDCTR	OFF		OFF	
	ON-1	Memory switch indicator	Indicator 1: ON	
	ON-2		Indicator 2: ON	
is the operation of relevant	t parts normal?			
YES >> INSPECTION				
-	osis procedure. Refer to <u>Al</u>	DP-113, "Diagnosis Proced	<u>dure"</u> .	
Diagnosis Procedure	9		INFOID:0000000033124	
1. CHECK SEAT MEMOR	Y INDICATOR OPERATIO	N		
Check seat memory indica	tor operation.			
Which is the malfunctionin	-			
All indicators are NG>>G An indicator is NG>>G				
2. CHECK FUSE	10 4.			
 Turn ignition switch OI Check that the blown f 	FF. fuse after repairing the affe	cted circuit if a fuse is blow	'n	
	aller repairing the ane		•••	
Signal	name	Fuse	No.	
	I name wer supply	Fuse 10 (1	-	
Battery po			-	
Battery po		10 (1	0A)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3.	wer supply	10 (1 e affected circuit if a fuse is	0A)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND	wer supply lown fuse after repairing the	10 (1 e affected circuit if a fuse is	0A)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness	10 (1 e affected circuit if a fuse is	0A)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness (+)	10 (1 e affected circuit if a fuse is connector and ground.	oA) s blown.	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se Seat men	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness (+) mory switch	10 (1 e affected circuit if a fuse is	0A)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se Seat men Connector	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness (+) mory switch Terminals	10 (1) e affected circuit if a fuse is connector and ground.	0A) s blown. Voltage (V) (Approx.)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se Seat men Connector D13	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness (+) mory switch Terminals 5	10 (1 e affected circuit if a fuse is connector and ground.	0A) s blown. Voltage (V)	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se Seat men Connector D13 Is the inspection result nor	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness (+) mory switch Terminals 5 mal?	10 (1) e affected circuit if a fuse is connector and ground. (-) 	0A) s blown. Voltage (V) (Approx.) Battery voltage	
Battery po Is the fuse blown? YES >> Replace the b NO >> GO TO 3. 3.CHECK MEMORY IND Check voltage between se Connector D13 Is the inspection result nor YES >> Replace seat	wer supply lown fuse after repairing the ICATOR POWER SUPPLY eat memory switch harness (+) mory switch Terminals 5	10 (1) e affected circuit if a fuse is connector and ground. (-) 	0A) s blown. Voltage (V) (Approx.) Battery voltage	

2. Disconnect driver seat control unit and seat memory switch connector.

ADP-113

SEAT MEMORY INDICATOR

< COMPONENT DIAGNOSIS >

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

Driver sea	t control unit	Seat men	nory switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	25	D13	6	Existed
D+J2	26		7	LAISIEU

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

Driver seat	t control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	25	Ground	Not existed
D452	26		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.Refer to <u>ADP-204</u>, "Removal and Installation".

NO >> Repair or replace harness or connector.

ECU DIAGNOSIS DRIVER SEAT CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condi	tion	Value/Status	
SET SW	Set switch	Push	ON	
3ET 3W	Set Switch	Release	OFF	
	Maman awitch 1	Push	ON	
MEMORY SW1	Memory switch 1	Release	OFF	E
	Maman awitch 2	Push	ON	
MEMORY SW2	Memory switch 2	Release	OFF	
		Operate	ON	
SLIDE SW-FR	Sliding switch (forward)	Release	OFF	
		Operate	ON	(
SLIDE SW-RR	Sliding switch (backward)	Release	OFF	(
		Operate	ON	
RECLN SW-FR	Reclining switch (forward)	Release	OFF	
	Reclining switch (back-	Operate	ON	
RECLN SW-RR	ward)	Release	OFF	
	Lifting switch front (up)	Operate	ON	
LIFT FR SW-UP		Release	OFF	
		Operate	ON	A
LIFT FR SW-DN	Lifting switch front (down)	Release	OFF	
		Operate	ON	
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF	
		Operate	ON	
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF	
		Up	ON	
MIR CON SW-UP	Mirror switch	Other than above	OFF	
		Down	ON	
MIR CON SW-DN	Mirror switch	Other than above	OFF	
		Right	ON	
MIR CON SW-RH	Mirror switch	Other than above	OFF	
		Left	ON	
MIR CON SW-LH	Mirror switch	Other than above	OFF	
		Right	ON	
MIR CHNG SW-R	Changeover switch	Other than above	OFF	
		Left	ON	
MIR CHNG SW-L	Changeover switch	Other than above	OFF	
		Upward	ON	
TILT SW-UP	Tilt switch	Other than above	OFF	
		Downward	ON	
TILT SW-DOWN	Tilt switch	Other than above	OFF	

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TELESCO SW-FR Telescopic switch Forward ON TELESCO SW-RR Telescopic switch Backward ON DETENT SW ArT selector lever Position OFF DETENT SW ArT selector lever Position OFF STARTER SW Ignition position Granking ON SLIDE PULSE Seat sliding Envarid The numeral value increases SLIDE PULSE Seat sliding Backward The numeral value increases Other than above No change to numeral value The numeral value increases SLIDE PULSE Seat sliding Backward The numeral value increases Backward The numeral value increases Other than above No change to numeral value LIFT RPULSE Seat lifter (front) Up The numeral value decreases LIFT RPULSE Seat lifter (roar) Down The numeral value decreases MIR/SEN RH U-D Door mirror (passenger side) Change between 3.4 (dose to park) 0.6 (dose to park) 0.6 (dose to valley) MIR/SEN RH R-L Door mirror (driver side) Change between 3.4 (dose to park) 0.6 (dose to valle) <th>Monitor Item</th> <th>Cor</th> <th>ndition</th> <th>Value/Status</th>	Monitor Item	Cor	ndition	Value/Status
Telescopic switch Other than above OFF Telescopic switch Eackward ON DETENT SW ArT selector lever Pootion OFF DETENT SW Ignition position Other than above ON STARTER SW Ignition position Cranking ON State Siding Seet sliding Cranking ON SLIDE PULSE Seet sliding Envard The numeral value decreases* Backward The numeral value decreases Other than above No change to numeral value RECLN PULSE Seat reclining Backward The numeral value decreases UP The numeral value decreases Other than above No change to numeral value LIFT RPULSE Seat lifter (front) Down The numeral value decreases UP The numeral value decreases Other than above No change to numeral value MIR/SEN RH U-D Door mirror (passenger side) Other than above No change to numeral value MIR/SEN RH R-L Door mirror (passenger side) Change between 3.4 (close to left edge) MIR/SEN RH R-L		Tala and tala	Forward	ON
Telescopic switch Other than above OFF DETENT SW A/T selector lever Position OFF STARTER SW Ignition position Cranking ON STARTER SW Ignition position Cranking ON SLIDE PULSE Seat sliding Forward The numeral value decreases* Backward The numeral value decreases* Backward The numeral value decreases* RECLN PULSE Seat reclining Backward The numeral value decreases* RECLN PULSE Seat reclining Backward The numeral value decreases* UFF than above No change to numeral value* Up The numeral value increases* LIFT RR PULSE Seat lifter (front) Down The numeral value decreases* UFF than above No change to numeral value* No change to numeral value* MIR/SEN RH U-D Door mirror (passenger side) Down The numeral value increases* MIR/SEN RH R-L Door mirror (driver side) Change between 3.4 (close to peak), 0.6 (close to valley) MIR/SEN RH R-L Door mirror (driver side) Change between 3.4 (close to relet edge) 0.6 (TELESCO SW-FR	Telescopic switch	Other than above	OFF
Other than above OFF DETENT SW AT selector lever Other than above OFF STARTER SW Ignition position Cranking ON STARTER SW Ignition position Cranking ON SLIDE PULSE Seat sliding Cranking ON SLIDE PULSE Seat sliding Eackward The numeral value decreases* Backward The numeral value decreases* Other than above No change to numeral value* RECLN PULSE Seat reclining Backward The numeral value decreases* UFF TR PULSE Seat lifter (front) Down The numeral value decreases* LIFT RR PULSE Seat lifter (front) Down The numeral value increases UFF RP ULSE Seat lifter (front) Down The numeral value increases UFF RR PULSE Seat lifter (rear) Down The numeral value increases Other than above No change to numeral value Minvisen RH v-L Door mirror (passenger side) Change between 3.4 (close to peak) 0.6 (close to valley) MIR/SEN RH N-L Door mirror (driver side) Change between 3.4 (clos		Telescenia switch	Backward	ON
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Characterization Other than above ON STARTER SW Ignition position Other than above ON SLIDE PULSE Seat sliding Envarid The numeral value decreases* SLIDE PULSE Seat sliding Backward The numeral value decreases* RECLN PULSE Seat reclining Backward The numeral value decreases* RECLN PULSE Seat reclining Backward The numeral value decreases* LIFT RR PULSE Seat iffer (front) Up The numeral value decreases* LIFT RR PULSE Seat lifter (front) Down The numeral value decreases* LIFT RR PULSE Seat lifter (rear) Up The numeral value decreases* UFT RR PULSE Seat lifter (rear) Up The numeral value decreases* MIR/SEN RH U-D Door mirror (passenger 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 valley) MIR/SEN LH R-L Door mirror (driver side) Change between 0.6 (close to valley) MIR/SEN LH R-L Door mirror (driver side) Change between 0.6 (close	DETENT SW	A/T coloctor lover	P position	OFF
STARTER SW Ignition position Other than above OFF SLIDE PULSE Seat sliding Forward The numeral value decreases* Backward The numeral value increases* Other than above No change to numeral value? RECLN PULSE Seat reclining Backward The numeral value increases* IFT FR PULSE Seat reclining Up The numeral value increases* LIFT RPULSE Seat lifter (front) Up The numeral value increases* LIFT RPULSE Seat lifter (rear) Up The numeral value? LIFT RR PULSE Seat lifter (rear) Up The numeral value decreases* Down The numeral value decreases* Other than above No change to numeral value? LIFT RR PULSE Seat lifter (rear) Up The numeral value decreases* Down The numeral value? 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 LH R-L Door mirror (driver side) Change between 3.4 (close to peak) 0.6 (close to right edge) MIR/SEN	DETENT SW	A/T Selector level	Other than above	ON
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RECLN PULSE Seat reclining Forward The numeral value decreases* Backward The numeral value increases increases increases. Other than above No change to numeral value increases. LIFT FR PULSE Seat lifter (front) Up The numeral value decreases. LIFT RR PULSE Seat lifter (front) Down The numeral value decreases. LIFT RR PULSE Seat lifter (rear) Up The numeral value decreases. LIFT RR PULSE Seat lifter (rear) Up The numeral value decreases. MIR/SEN RH U-D Door mirror (passenger side) Other than above No change to numeral value' MIR/SEN RH R-L Door mirror (passenger side) Change between 3.4 (close to peak) 0.6 (close to valley) 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 3.4 (close to peak) 0.6 (close to valley) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to peak) 0.6 (close to valley) TILT PULSE Tilt position Change between 3.4 (close to peak) 0.6 (close to valley) TILT PULSE Tilt position <t< td=""><td>SLIDE PULSE</td><td>Seat sliding</td><td>Backward</td><td>The numeral value increases*</td></t<>	SLIDE PULSE	Seat sliding	Backward	The numeral value increases*
RECLN PULSE Seat reclining Backward The numeral value increases ' UF Other than above No change to numeral value' LIFT RP PULSE Seat lifter (front) Down The numeral value increases ' Durn The numeral value increases ' Other than above No change to numeral value' LIFT RR PULSE Seat lifter (rear) Up The numeral value increases ' Down The numeral value increases ' Other than above No change to numeral value' MIR/SEN RH U-D Door mirror (passenger side) Other than above No change to numeral value' MIR/SEN RH R-L Door mirror (passenger side) Change between 3.4 (close to peak) 0.6 (close to valley) 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 3.4 (close to peak) 0.6 (close to valley) MIR/SEN LH R-L 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 3.4 (close to right edge) TLT PULSE Tilt position Upward The numeral value increa			Other than above	No change to numeral value*
Other than above No change to numeral value' LIFT FR PULSE Seat lifter (front) Up The numeral value decreases' LIFT RPULSE Seat lifter (front) Down The numeral value increases' LIFT RR PULSE Seat lifter (rear) Up The numeral value increases' LIFT RR PULSE Seat lifter (rear) Down The numeral value increases' MIR/SEN RH U-D Door mirror (passenger side) Other than above No change to numeral value' MIR/SEN RH R-L Door mirror (passenger side) Change between 3.4 (close to left edge) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to left edge) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to left edge) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) <t< td=""><td></td><td></td><td>Forward</td><td>The numeral value decreases*</td></t<>			Forward	The numeral value decreases*
LIFT FR PULSE Seat lifter (front) Up The numeral value decreases' LIFT RPULSE Seat lifter (front) Down The numeral value increases' LIFT RPULSE Seat lifter (rear) Up The numeral value decreases' LIFT RPULSE Seat lifter (rear) Down The numeral value decreases' MIR/SEN RH U-D Door mirror (passenger side) Other than above No change to numeral value' MIR/SEN RH R-L Door mirror (passenger side) Change between 3.4 (close to peak) 0.6 (close to valley) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (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 U-D Door mirror (driver side) Change between 3.4 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to right edge) TILT PULSE Tilt position Upward The numeral value increases' TELESCO PULSE Telescopic position Backward The numeral value increases' <t< td=""><td>RECLN PULSE</td><td>Seat reclining</td><td>Backward</td><td>The numeral value increases *</td></t<>	RECLN PULSE	Seat reclining	Backward	The numeral value increases *
LIFT FR PULSE Seat lifter (front) Down The numeral value increases ' UFR RPULSE Seat lifter (rear) Up The numeral value decreases ' UFR RPULSE Seat lifter (rear) Down The numeral value decreases ' MIR/SEN RH U-D Door mirror (passenger side) Other than above No change to numeral value ' MIR/SEN RH R-L 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 peak) 0.6 (close to valley) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to peak) 0.6 (close to valley) 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 peak) 0.6 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 0.6 (close to right edge) MIR/SEN LH R-L Door mirror (driver side) Change between 0.6 (close to right edge) TILT PULSE Tilt position Upward The numeral value increases ' Telescopic position Backward The numeral value incr			Other than above	No change to numeral value [*]
Image: Constraint of the second sec			Up	The numeral value decreases *
LIFT RR PULSE Seat lifter (rear) Up The numeral value decreases ' Down The numeral value decreases ' Down The numeral value decreases ' 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 peak) 0.6 (close to valley) MIR/SEN LH U–D Door mirror (driver side) Change between 3.4 (close to peak) 0.6 (close to right edge) MIR/SEN LH U–D Door mirror (driver side) Change between 0.6 (close to right edge) 0.6 (close to right edge) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to right edge) 3.4 (close to right edge) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to right edge) 3.4 (close to right edge) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to right edge) 3.4 (close to right edge) TILT PULSE Tilt position Upward The numeral value decreases ' Telescopic position Backward The numeral value increases ' TELESCO PULSE Telescopic position Backward The numeral value ' STEERING STATUS Steering lock unit	LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *
LIFT RR PULSE Seat lifter (rear) Down The numeral value increases* 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 peak) 0.6 (close to valley) MIR/SEN RH R–L Door mirror (passenger side) Change between 3.4 (close to peak) 0.6 (close to valley) MIR/SEN LH U–D Door mirror (driver side) Change between 3.4 (close to valley) MIR/SEN LH U–D Door mirror (driver side) Change between 3.4 (close to valley) MIR/SEN LH U–D Door mirror (driver side) Change between 3.4 (close to valley) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to valley) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to valley) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to valley) TILT PULSE Tilt position Upward The numeral value decreases* TELESCO PULSE Telescopic position Backward The numeral value * STEERING STATUS Steering lock unit LOCK LOCK VEHICLE SPEED The con			Other than above	No change to numeral value [*]
Other than above No change to numeral value* MIR/SEN RH U–D Door mirror (passenger side) Change between 3.4 (close to valley) MIR/SEN RH R–L Door mirror (passenger side) Change between 3.4 (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 right edge) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to right edge) 3.4 (close to right edge) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to right edge) 3.4 (close to right edge) TILT PULSE Tilt position Downward The numeral value decreases * Other than above No change to numeral value* * TELESCO PULSE Telescopic position Backward The numeral value increases * Other than above No change to numeral value* * STEERING STATUS Steering lock unit LOCK LOCK VEHICLE SPEED The condition of vehicle speed is displayed km/h P RANG SW CAN A/T selector lever P position ON			Up	The numeral value decreases *
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 peak) 0.6 (close to valley) MIR/SEN LH U–D Door mirror (driver side) Change between 3.4 (close to peak) 0.6 (close to valley) 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 valley) MIR/SEN LH R–L Door mirror (driver side) Change between 0.6 (close to left edge) 3.4 (close to right edge) TILT PULSE Tilt position Downward The numeral value decreases * TELESCO PULSE Telescopic position Backward The numeral value increases * TELESCO PULSE Telescopic position Backward The numeral value increases * STEERING STATUS Steering lock unit LOCK LOCK VEHICLE SPEED The condition of vehicle speed is displayed km/h P RANG SW CAN A/T selector lever P position ON Qpen ON OFF Qpen ON	LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *
MIR/SEN RH C-D Door mirror (passenger side) 0.6 (close to valley) MIR/SEN RH R-L Door mirror (passenger side) Change between 3.4 (close to left edge) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to peak) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to peak) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to peak) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to reget) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to peak) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to peak) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to reget) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to reget) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to reget) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to reget) MIR/SEN LH R-L Door mirror (driver side) Change between 3.4 (close to reget) TILT PULSE Tilt position Downward The numeral value increases ' TELESCO PULSE Telescopic position			Other than above	No change to numeral value*
MIR/SEN KH R-L Door mirror (driver side) 0.6 (close to right edge) MIR/SEN LH U-D Door mirror (driver side) Change between 3.4 (close to peak) 0.6 (close to valley) MIR/SEN LH R-L Door mirror (driver side) Change between 0.6 (close to left edge) 3.4 (close to right edge) TILT PULSE Tilt position Downward The numeral value decreases * Other than above No change to numeral value * Forward TELESCO PULSE Telescopic position Backward The numeral value decreases * Other than above No change to numeral value * * STEERING STATUS Steering lock unit LOCK LOCK VEHICLE SPEED The condition of vehicle speed is displayed km/h P RANG SW CAN A/T selector lever P position ON R RANGE (CAN) A/T selector lever R position ON DOOR SW-FL Driver door Open ON	MIR/SEN RH U-D	Door mirror (passenger s	side)	
MIR/SEN LH 0-D Door mirror (driver side) 0.6 (close to valley) MIR/SEN LH R-L Door mirror (driver side) Change between 0.6 (close to left edge) 3.4 (close to right edge) TILT PULSE Tilt position Upward The numeral value decreases * Downward The numeral value increases * Downward The numeral value increases * TELESCO PULSE Telescopic position Backward The numeral value increases * TELESCO PULSE Telescopic position Backward The numeral value increases * STEERING STATUS Steering lock unit LOCK LOCK VEHICLE SPEED The condition of vehicle speed is displayed km/h P RANG SW CAN A/T selector lever P position ON R RANGE (CAN) A/T selector lever R position ON DOOR SW-FL Driver door Open ON	MIR/SEN RH R-L	Door mirror (passenger s	side)	
MIR/SEN LH R-L Door minfor (driver side) 3.4 (close to right edge) TILT PULSE Tilt position Upward The numeral value decreases* Downward The numeral value increases* Other than above No change to numeral value* TELESCO PULSE Telescopic position Backward The numeral value decreases* TELESCO PULSE Telescopic position Backward The numeral value increases* Other than above No change to numeral value * STEERING STATUS Steering lock unit LOCK LOCK VEHICLE SPEED The condition of vehicle speed is displayed km/h P RANG SW CAN A/T selector lever P position ON R RANGE (CAN) A/T selector lever R position ON DOOR SW-FL Driver door Open ON	MIR/SEN LH U-D	Door mirror (driver side)		
TILT PULSETilt positionDownwardThe numeral value increases*DownwardThe numeral value increases*Other than aboveNo change to numeral value*TELESCO PULSETelescopic positionForwardTelescopic positionBackwardThe numeral value decreases*BackwardThe numeral value increases*Other than aboveNo change to numeral value*STEERING STATUSSteering lock unitLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONR RANGE (CAN)A/T selector leverR positionONDOOR SW-FLDriver doorOpenON	MIR/SEN LH R-L	Door mirror (driver side)		
Other than aboveNo change to numeral value*TELESCO PULSETelescopic positionForwardThe numeral value decreases*BackwardThe numeral value increases*Dother than aboveNo change to numeral value*STEERING STATUSSteering lock unitLOCKLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONR RANGE (CAN)A/T selector leverR positionONDOOR SW-FLDriver doorOpenON			Upward	The numeral value decreases *
TELESCO PULSETelescopic positionForwardThe numeral value decreases *TELESCO PULSETelescopic positionBackwardThe numeral value increases *BackwardThe numeral value increases *Other than aboveNo change to numeral value *STEERING STATUSSteering lock unitLOCKLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONR RANGE (CAN)A/T selector leverR positionONDOOR SW-FLDriver doorOpenON	TILT PULSE	Tilt position	Downward	The numeral value increases *
TELESCO PULSETelescopic positionBackwardThe numeral value increases*Other than aboveNo change to numeral value*STEERING STATUSSteering lock unitLOCKLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONP RANGE (CAN)A/T selector leverR positionONPOOR SW-FLDriver doorOpenON				
Other than aboveNo change to numeral value*STEERING STATUSSteering lock unitLOCKUNLOCKUNLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONOther than aboveOFFOther than aboveOFFR RANGE (CAN)A/T selector leverR positionONDOOR SW-FLDriver doorOpenON			Other than above	No change to numeral value [*]
Other than aboveNo change to numeral value*STEERING STATUSSteering lock unitLOCKLOCKUnlockUNLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONOther than aboveOFFR RANGE (CAN)A/T selector leverR positionONDOOR SW-FLDriver doorOpenON				
STEERING STATUSSteering lock unitLOCKLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONOther than aboveOFFR RANGE (CAN)A/T selector leverR positionONDOOR SW-FLDriver doorOpenON	TELESCO PULSE	Telescopic position	Forward	The numeral value decreases *
STEERING STATUSSteering lock unitunlockUNLOCKVEHICLE SPEEDThe condition of vehicle speed is displayedkm/hP RANG SW CANA/T selector leverP positionONOther than aboveOFFR RANGE (CAN)A/T selector leverR positionONOOR SW-FLDriver doorOpenON	TELESCO PULSE	Telescopic position	Forward Backward	The numeral value decreases * The numeral value increases *
VEHICLE SPEED The condition of vehicle speed is displayed km/h P RANG SW CAN A/T selector lever P position ON Other than above OFF R RANGE (CAN) A/T selector lever R position ON Other than above OFF OPen ON			Forward Backward Other than above	The numeral value decreases * The numeral value increases * No change to numeral value*
P RANG SW CAN A/T selector lever Other than above OFF R RANGE (CAN) A/T selector lever R position ON Other than above OFF Other than above OFF DOOR SW-FL Driver door Open ON			Forward Backward Other than above LOCK	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK
P RANG SW CAN A/T selector lever Other than above OFF R RANGE (CAN) A/T selector lever R position ON Other than above OFF Other than above OFF DOOR SW-FL Driver door Open ON	STEERING STATUS	Steering lock unit	Forward Backward Other than above LOCK unlock	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK UNLOCK
R RANGE (CAN) A/T selector lever Other than above OFF DOOR SW-FL Driver door Open ON	STEERING STATUS	Steering lock unit The condition of vehicle	Forward Backward Other than above LOCK unlock speed is displayed	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK UNLOCK km/h
Other than above OFF DOOR SW-FL Driver door Open ON	STEERING STATUS	Steering lock unit The condition of vehicle	Forward Backward Other than above LOCK unlock speed is displayed P position	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK UNLOCK km/h ON
DOOR SW-FL Driver door	STEERING STATUS VEHICLE SPEED P RANG SW CAN	Steering lock unit The condition of vehicles A/T selector lever	Forward Backward Other than above LOCK unlock speed is displayed P position Other than above	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK UNLOCK km/h ON OFF
	STEERING STATUS VEHICLE SPEED P RANG SW CAN	Steering lock unit The condition of vehicles A/T selector lever	Forward Backward Other than above LOCK unlock speed is displayed P position Other than above R position	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK UNLOCK km/h ON OFF ON
	STEERING STATUS VEHICLE SPEED P RANG SW CAN R RANGE (CAN)	Steering lock unit The condition of vehicles A/T selector lever A/T selector lever	Forward Backward Other than above LOCK unlock speed is displayed P position Other than above R position Other than above	The numeral value decreases * The numeral value increases * No change to numeral value* LOCK UNLOCK Km/h ON OFF ON OFF ON OFF

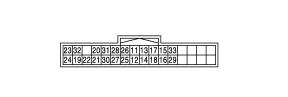
< ECU DIAGNOSIS >

Monitor Item	Cond	ition	Value/Status	
DOOR SW-FR	December deer	Open	ON	Δ
DOOR SW-FR	Passenger door	Close	OFF	
IGN ON SW	Ignition owitch	ON position	ON	В
IGN ON SW	Ignition switch	Other than above	OFF	
	Institute autitab	ACC or ON position	ON	
ACC ON SW	Ignition switch	Other than above	OFF	С
	Intelligent Key	Inserted is key slot	ON	
KEY ON SW	Intelligent Key	Inserted is not key slot	OFF	D
KEYLESS ID	UNLOCK button of Intellige	ent Key is pressed	1,2,3,4or5	
KYLS DR UNLK	Intelligent Key or driver	ON	ON	
KTLS DR UNLK	side door request switch	OFF	OFF	E
	Consignal from ABS	Received	ON	
VHCL SPEED (ABS)	Can signal from ABS	Not received	OFF	F
	The DOM for bondle positio		LHD	
HANDLE	The BCM for handle position	on is displayed	RHD	
TRANSMISSION	Transmission type is disale	wod	AT or CVT	G
I KANSINISSION	Transmission type is displa	iyeu	MT	

13 69 4510872

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

TERMINAL LAYOUT



PHYSICAL VALUES

	Terminal No. (wire color) Descrip		Condition		dition	Voltage (V)	
+	-	Signal name	Input/ Output	Cont		(Approx)	
1 (R)	Ground	Power source	Input	_		Battery voltage	
2 (B)	Ground	Ground (power)	_	_		0	
3 (G)		-	Output	Seat sliding	Operate (backward)	Battery voltage	
(0)		output signal			Stop	0	
4 (G/R)	Ground	Sliding motor forward out-	Output	Seat sliding	Operate (forward)	Battery voltage	
(G/R)	G/R) put signal			Release	0		
5 (V)	Ground	Reclining motor backward output signal	Output	Seat reclining	Operate (backward)	Battery voltage	
(V) 00				Stop	0		

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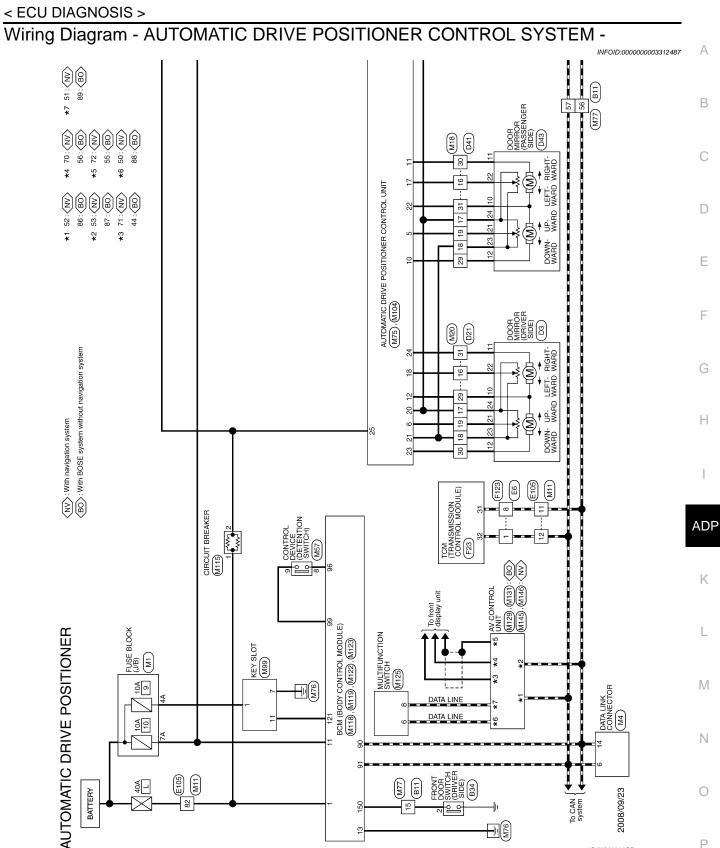
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	nal No. color)	Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Conc	aition	(Approx)	
6 (R/L)	Ground	Reclining motor forward output signal	Output	Seat reclining	Operate (forward)	Battery voltage	
(102)					Release	0	
7 (L)	Ground	Lifting motor (rear) down output signal	Output	Seat lifting (rear)	Operate (down)	Battery voltage	
(-/					Stop	0	
8 (L/W)	Ground	Lifting motor (rear) up out- put signal	Output	Seat lifting (rear)	Operate (up)	Battery voltage	
(_,)		P 0.9.1			Stop	0	
9 (L/R)	Ground	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	Battery voltage	
()					Stop	0	
10 (L/B)	Ground	Lifting motor (front) up out- put signal	Output	Seat lifting (front)	Operate (up)	Battery voltage	
()		P ** * .9. **			Stop	0	
11 (G/B)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0	
(Release	Battery voltage	
12 (G/W)	Ground	Sliding switch forward sig- nal	Input	Sliding switch	Operate (forward)	0	
					Release	Battery voltage	
13 (R/G)	Ground	Reclining switch backward signal		Input	Reclining switch	Operate (backward)	0
		5			Release	Battery voltage	
14 (R/W)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0	
		5			Release	Battery voltage	
15 (Y/B)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0	
		5		· · · ·	Release	Battery voltage	
16 (Y/R)	Ground	Lifting switch (rear) up sig- nal	Input	Seat lifting switch (rear)	Operate (up)	0	
				. ,	Release	Battery voltage	
17 (LG/B)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0	
		5		· · ·	Release	Battery voltage	
18 (LG/R)	Ground	Lifting switch (front) up sig- nal	Input	Seat lifting switch (front)	Operate (up)	0	
(/		lial		()	Release	Battery voltage	
19 (G/Y)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div	
					Stop	0 or 5	

	nal No. color)	Description		Condition		Voltage (V)	A
+	-	Signal name	Input/ Output			(Approx)	5
20 (R/Y)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	10mSec/div	B C D
					Stop	0 or 5	E
21 (L/Y)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div	F
					Stop	0 or 5	G
22 (BR/Y)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div	H
					Stop	0 or 5	ADF
23 (P)	—	CAN-H	—	-	_	_	
24 (P/L)	_	CAN-L			_	_	Κ
25 (G/O)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Illuminate Other than above	1 Battery voltage	L
26 (L/O)	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Illuminate	1 Pottony voltage	
27	Ground	Memory switch 1 signal	Input	Memory switch 1	Other than above Press	Battery voltage 0	Μ
(V)	Giouna	Memory Switch 1 Signal	input	Memory Switch 1	Other than above	5	N
28 (V/W)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press Other than above	0 5	Ν
29 (O/L)	Ground	Set switch signal	Input	Set switch	Press Other than above	0 5	0
30 (BR)	Ground	Tilt sensor signal	Input	Tilt	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ 0 or 5	Ρ

	nal No. color)	Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Condition		(Approx)	
31	Ground	Telescopic sensor signal	Input	Telescopic	Operate		
(BR/W)	Ground	relescopic sensor signal	Input	Telescopic	Other than above	0 or 5	
32 (W/L)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		10msec/div IMUTINI VII VII VII 5V/div JMJIA1391ZZ	
33 (W)	Ground	Sensor power supply	Output			Battery voltage	



Revision: 2008 October

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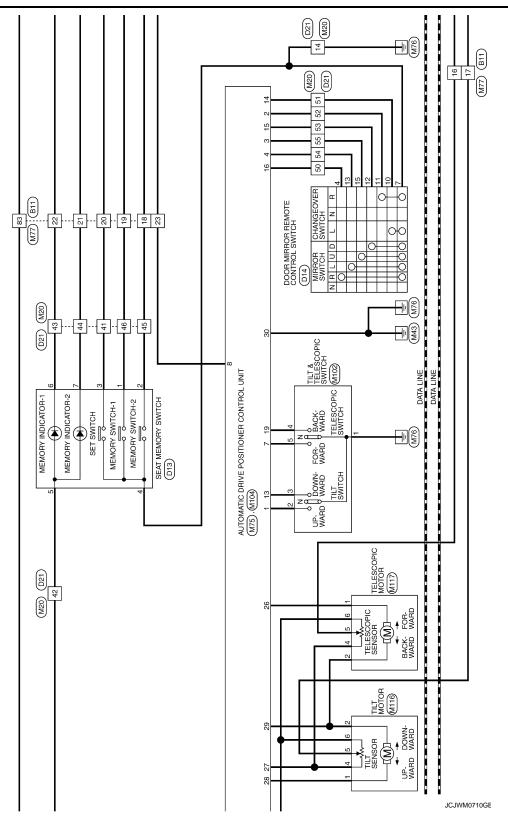
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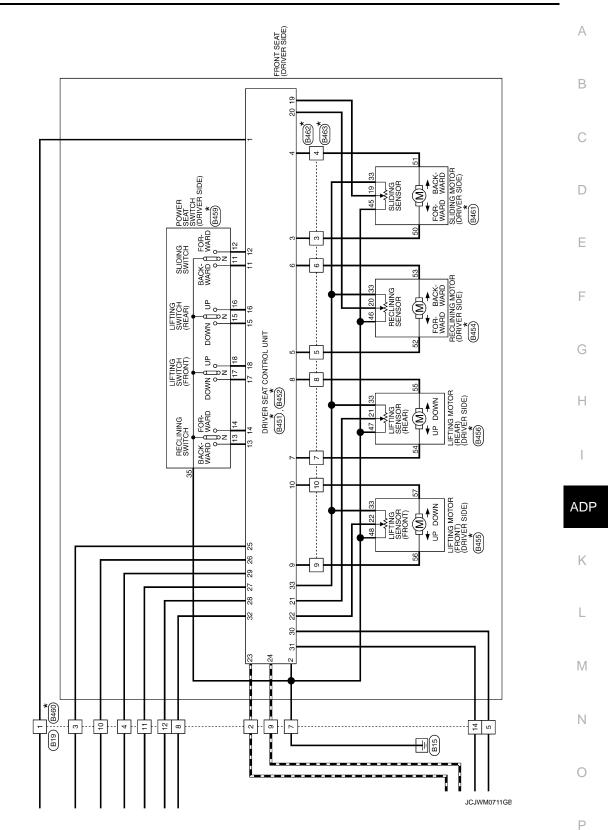
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To CAN system

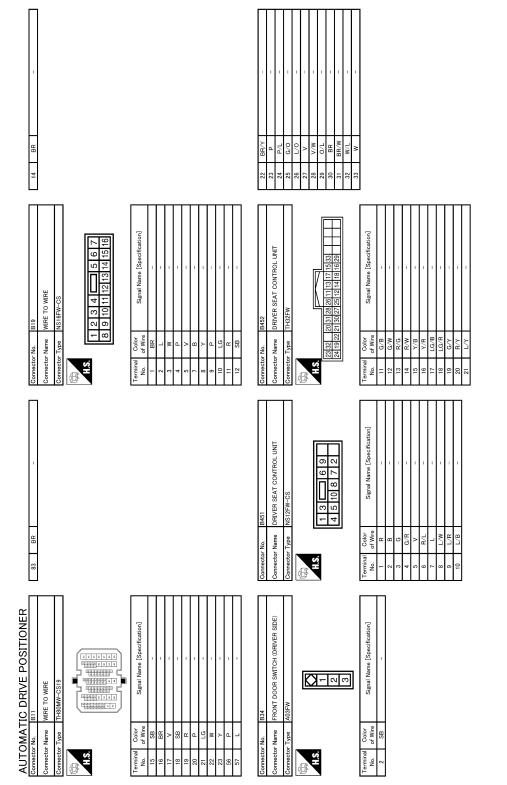
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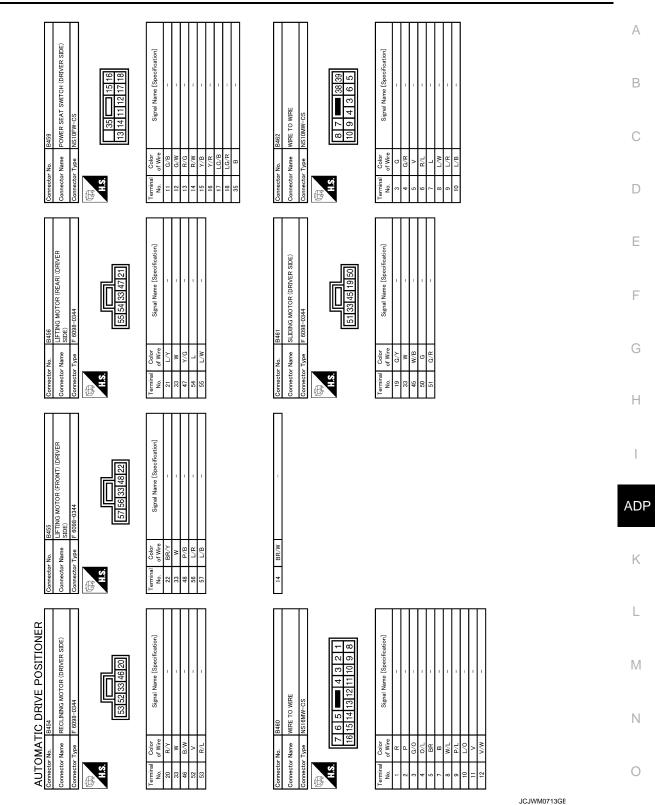


★: This connector is not shown in "Harness Layout".



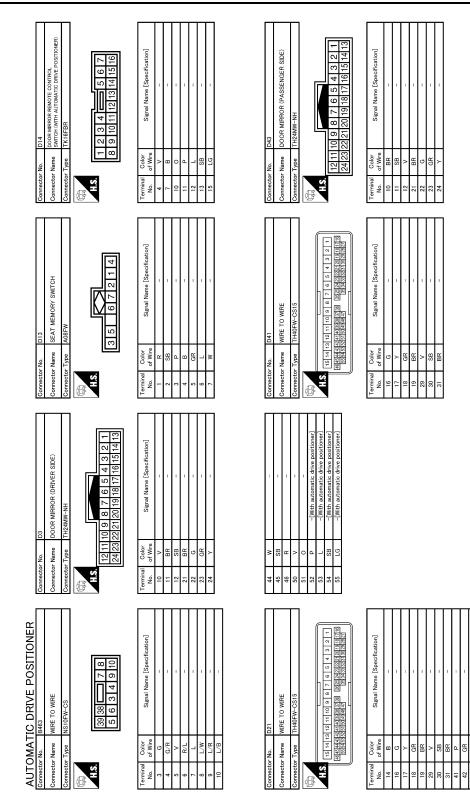
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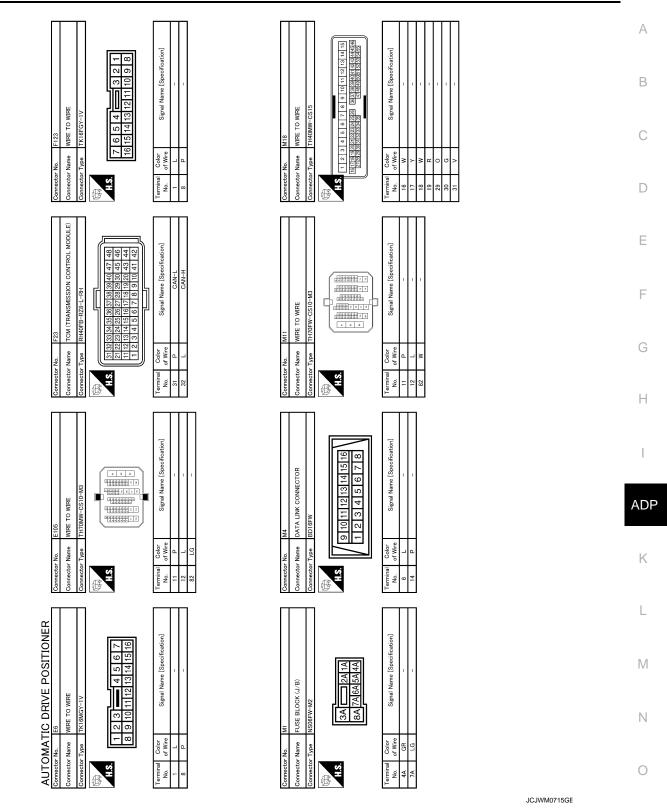
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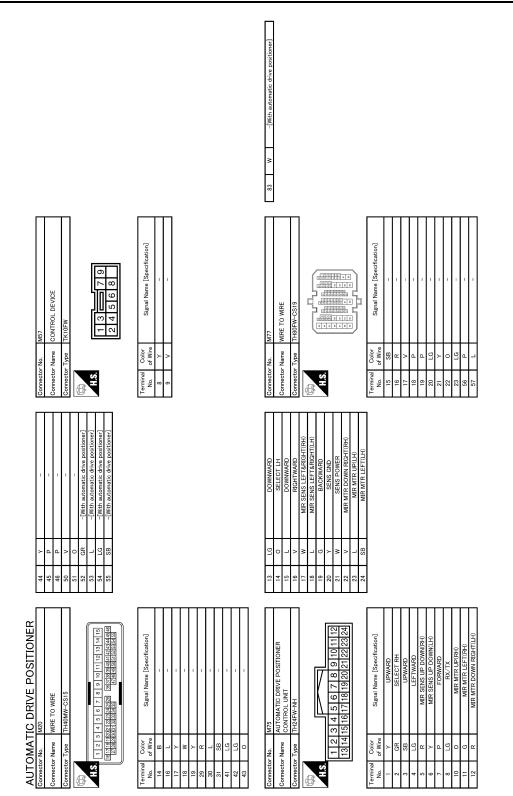
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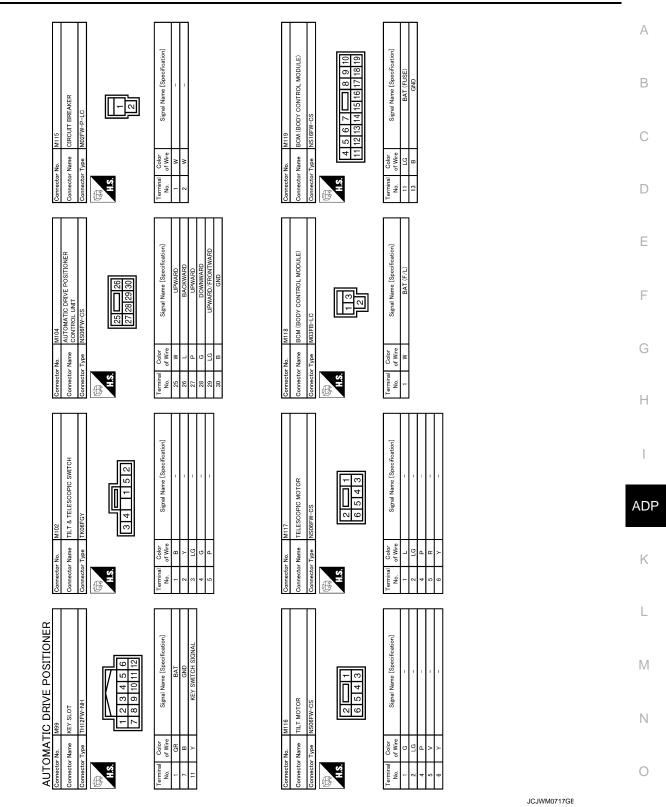


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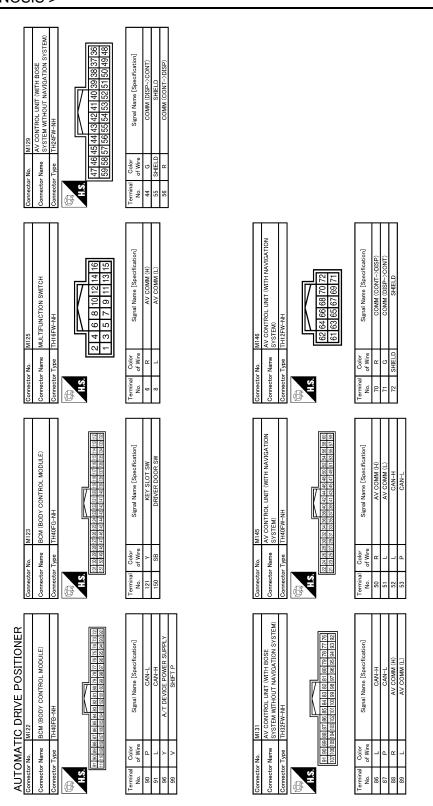


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JCJWM0718GE

Fail Safe

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

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Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis	-
	CAN communication	U1000	<u>ADP-41</u>	-
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-42</u>	-
	EEPROM	B2130	<u>ADP-43</u>	-
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-50</u>	-
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-44</u>	-
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-46</u>	-
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-48	-

DTC Index

INFOID:000000003312489

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CONSULT-III	Tim	ing ^{*1}			
display	Current mal- function Function		Item	Reference page	F
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	<u>ADP-41</u>	0
CONTROL UNIT [U1010]	0	1-39	Control unit	<u>ADP-42</u>	G
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	<u>ADP-44</u>	Н
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	<u>ADP-46</u>	
STEERING TILT [B2116]	0	1-39	Tilt motor output	<u>ADP-48</u>	
UART COMM [B2128]	0	1-39	UART communication	<u>ADP-50</u>	ADP
EEPROM [B2130]	0	1-39	EEPROM	<u>ADP-43</u>	K

*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.

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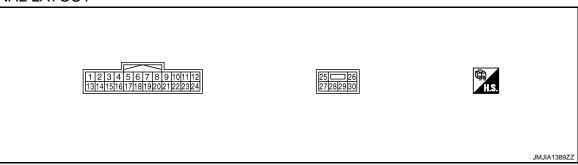
< ECU DIAGNOSIS >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000003312490

TERMINAL LAYOUT



PHYSICAL VALUES

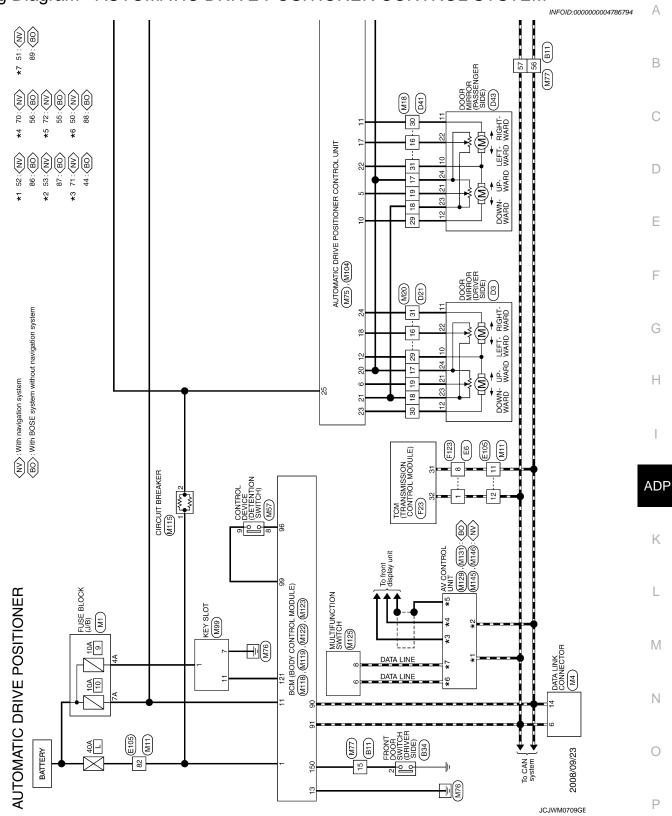
Terminal No. (wire color)		Description	Condit	ion	Voltage (V)		
+	-	Signal name	Input/ Output	Condition		(Approx.)	
1	Ground	Tilt switch up signal	Input	Tilt switch	Operate (up)	0	
(Y)	Ground	The switch up signal	input	The Switch	Other than above	5	
2		Changes yes switch DLL		Changestor	RH	0	
2 (GR)	Ground	Changeover switch RH signal	Input	Changeover switch position	Neutral or LH	5	
3	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0	
(SB)	Croana	winter switch up signal	mput	WINTER SWITCH	Other than above	5	
4	Ground	Mirror switch left signal	Input	ut Mirror switch	Operated (left)	0	
(LG)	Cround					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 (driv- er side) up/down signal	Input	Door mirror LH p	osition	Change between 3.4 (close to peak) 0.6 (close to valley)	
7	Ground	Telescopic switch for-	Input	Telescopic	Operate (forward)	0	
(P)	Croana	ward signal	mpar	switch	Other than above	5	
8 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		10msec/div MUTMUMUMUMUM SV/div JMJIA1391ZZ	

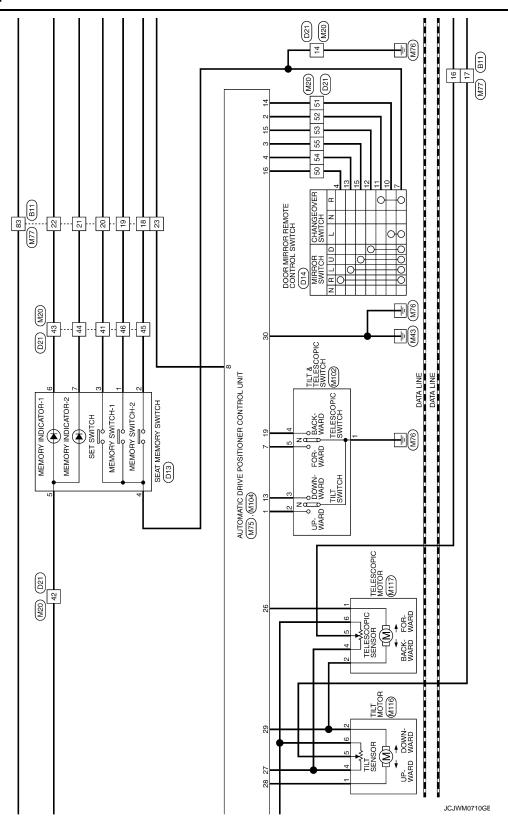
	inal No. e color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			(Approx.)
10	Ground	Door mirror motor (pas- senger side) up output	Output	Door mirror RH	Operate (up)	Battery voltage
(O)	Cround	signal	Output		Other than above	0
11	Ground	Door mirror motor (pas- senger side) left output	Output	Door mirror RH	Operate (left)	Battery voltage
(G)	Cround	signal	Output		Other than above	0
		Door mirror motor (driv- er side) down output sig-			Operate (down)	Battery voltage
12	Ground	nal	Output	Door mirror (LH)	Other than above	0
(R)		Door mirror motor (driv- er side) right output sig-			Operate (right)	Battery voltage
		nal			Other than above	0
13	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
(LG)			p at		Other than above	5
14 (O)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH Neutral or	0 5
()					RH Operate	0
15 (L)	Ground	Mirror switch down sig- nal	Input	Mirror switch	(down) Other than	5
					above Operate (right)	0
16 (V)	Ground	Mirror switch right signal	Input	Mirror switch	Other than above	5
17 (W)	Ground	Door mirror sensor (pas- senger side) left/right signal	Input	Door mirror RH po		Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (L)	Ground	Door mirror sensor (driv- er side) left/right signal	Input	Door mirror LH po	osition	Change between 0.6 (close to left edge) 3.4 (close to right edge)
19 (G)	Ground	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (back- ward)	0
、 /		, , , , , , , , , , , , , , , , , , ,			Other than above	5
20 (Y)	Ground	Ground	_	_		0
21 (W)	Ground	Door mirror motor sen- sor power supply	Input	_		5

	nal No. color)	Description	Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Condition		(Approx.)
		Door mirror motor (pas- senger side) down out-			Operate (down)	Battery voltage
22	Ground	put signal	Output	Door mirror (RH)	Other than above	0
(V)	Ground	Door mirror motor (pas- senger side) right output	Output		Operate (right)	Battery voltage
		signal			Other than above	0
23	Ground	Door mirror motor (driv-	Output	Door mirror (LH)	Operate (up)	Battery voltage
(L)	Cround	er side)up output signal	output		Other than above	0
24	Ground	Door mirror motor (driv-	Output	Door mirror (LH)	Operate (left)	Battery voltage
(SB)	Cround	er side)left output signal	output		Other than above	0
25 (W)	Ground	Power source	Input	_		Battery voltage
26 (L)	Ground	Telescopic motor back- ward output signal	Output	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	Output	Steering tilt	Operate (down)	Battery voltage
(G)	Cround	signal	Output		Other than above	0
		Tilt motor up output sig-		Steering tilt	Operate (up)	Battery voltage
29	Ground	nal	Output		Other than above	0
(LG)	Cround	Telescopic motor for-	Juiput	Steering tele-	Operate (forward)	Battery voltage
		ward output signal		scopic	Other than above	0
30 (B)	Ground	Ground		_		0

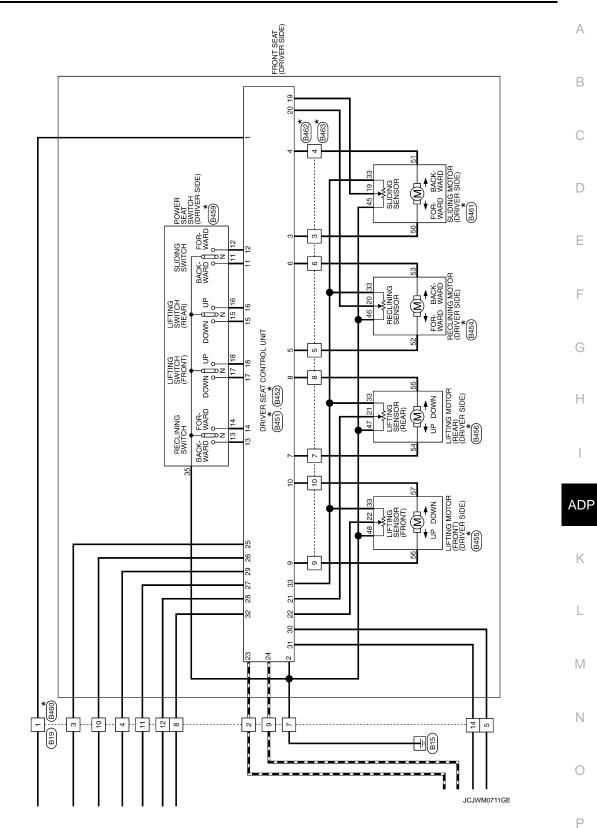
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Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -



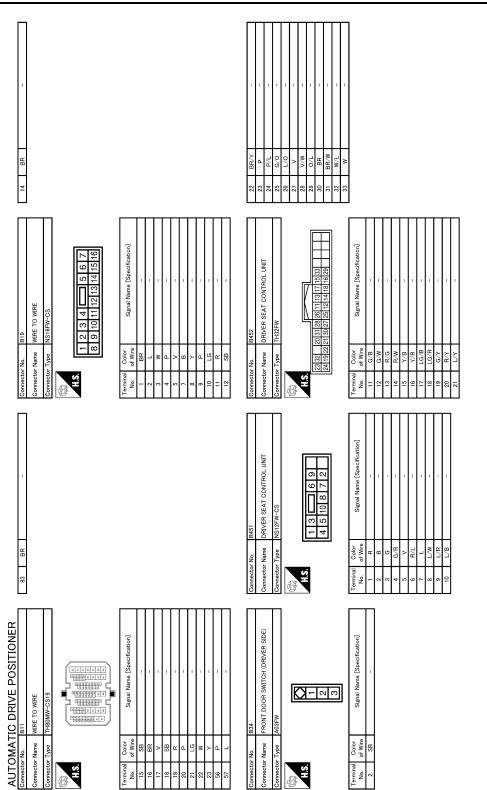


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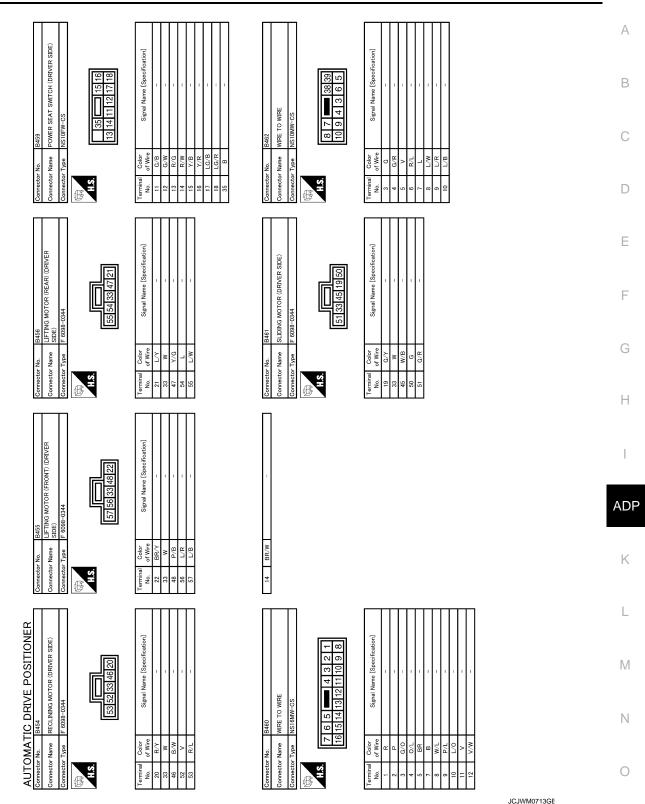
★: This connector is not shown in "Harness Layout".

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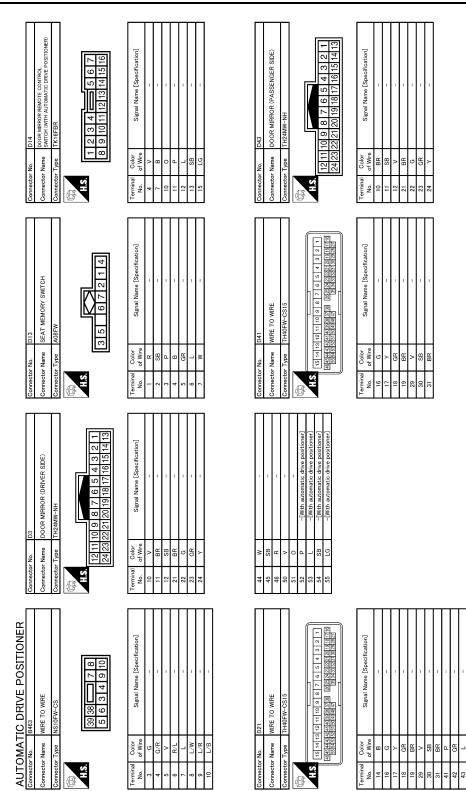
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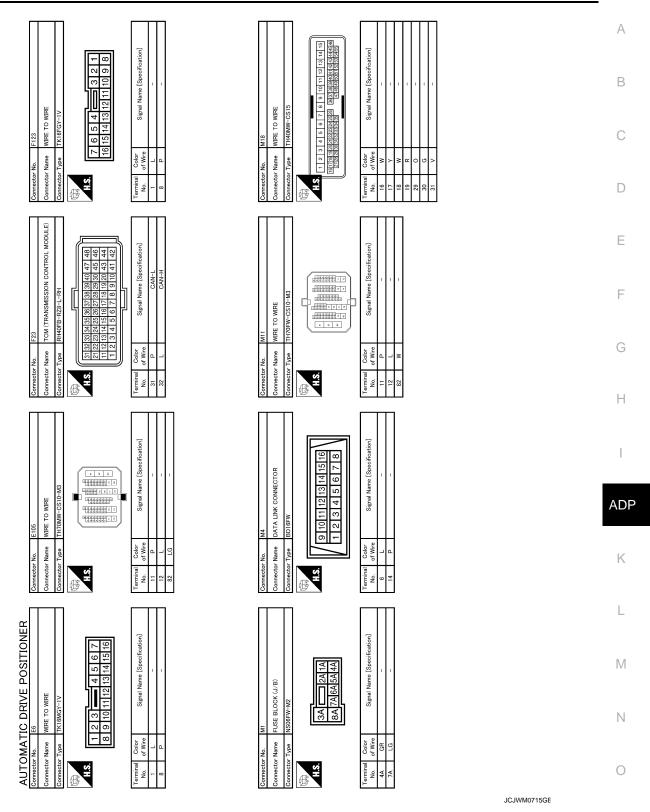
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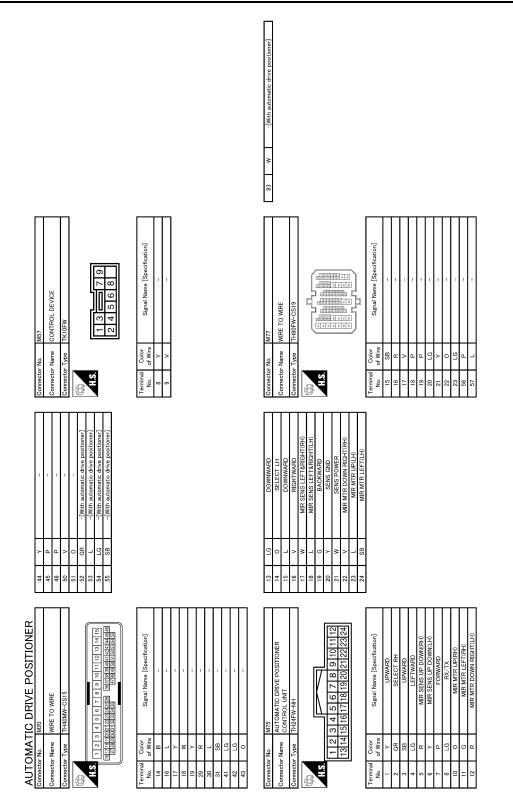
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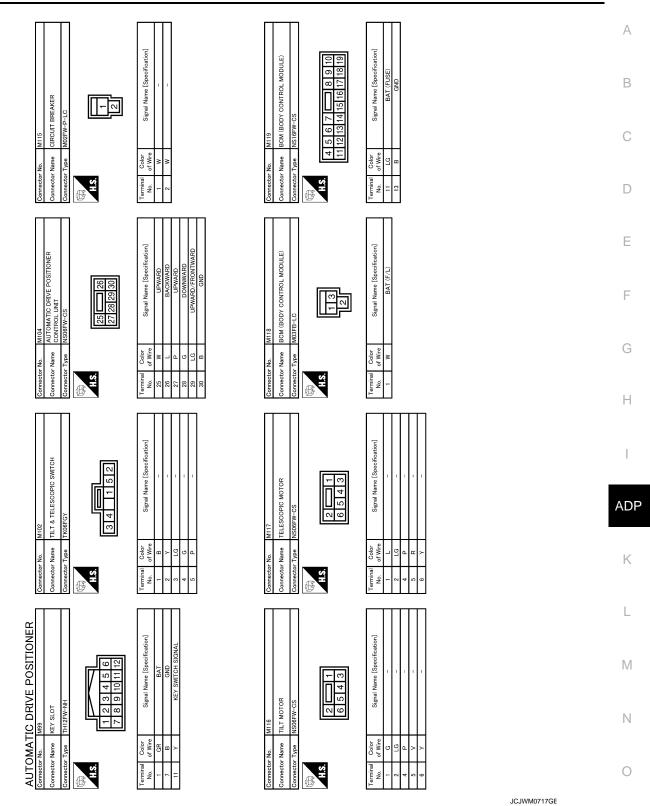
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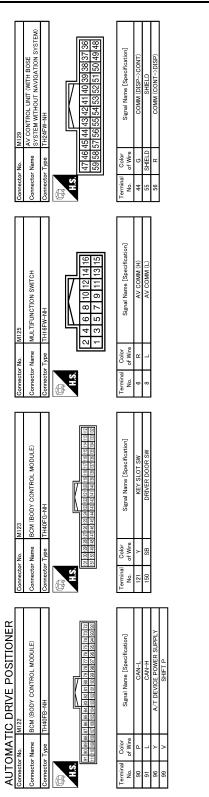
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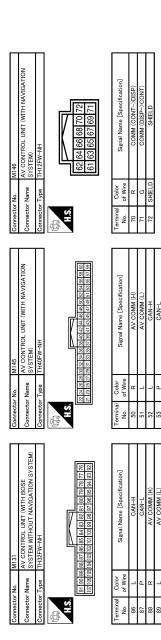
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BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status	_
	Other than front wiper switch HI	Off	C
	Front wiper switch HI	On	_
	Other than front wiper switch LO	Off	D
FR WIFER LOW	Front wiper switch LO	On	_
	Front washer switch OFF	Off	
FR WASHER SW	Front washer switch ON	On	E
	Other than front wiper switch INT/AUTO	Off	_
	Front wiper switch INT/AUTO	On	F
	Front wiper is not in STOP position	Off	
FR WIFER STOP	Front wiper is in STOP position	On	
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position	G
	Other than rear wiper switch ON	Off	
R WIPER HI R WIPER LOW R WASHER SW R WIPER INT R WIPER STOP T VOLUME R WIPER ON R WIPER INT R WASHER SW R WIPER STOP JRN SIGNAL R JRN SIGNAL R JRN SIGNAL L AIL LAMP SW BEAM SW EAD LAMP SW 1 EAD LAMP SW 2 ASSING SW JTO LIGHT SW	Rear wiper switch ON	On	—
	Other than rear wiper switch INT	Off	
R WIPER LOW R WASHER SW R WIPER INT R WIPER STOP IT VOLUME R WIPER ON R WIPER INT R WASHER SW R WIPER STOP URN SIGNAL R URN SIGNAL L AIL LAMP SW I BEAM SW EAD LAMP SW 1 EAD LAMP SW 2 ASSING SW UTO LIGHT SW	Rear wiper switch INT	On	
R WIPER ON R WIPER INT R WASHER SW R WIPER STOP URN SIGNAL R URN SIGNAL L AIL LAMP SW II BEAM SW IEAD LAMP SW 1 IEAD LAMP SW 2 ASSING SW UTO LIGHT SW R FOG SW	Rear washer switch OFF	Off	
RR WASHER SW	Rear washer switch ON	On	
	Rear wiper is in STOP position	OnOffOnOffOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOffOnOff	
RR WIPER STOP	Rear wiper is not in STOP position	On	- AD
	Other than turn signal switch RH	Off	
I URIN SIGINAL R	Turn signal switch RH	On	K
	Other than turn signal switch LH	Off	
I URN SIGNAL L	Turn signal switch LH	On	
	Other than lighting switch 1ST and 2ND	Off	- L
TAIL LAWP SW	Lighting switch 1ST or 2ND	On	
	Other than lighting switch HI	Off	M
	Lighting switch HI	her than front wiper switch HI Off nt wiper switch LO Off her than front wiper switch LO Off nt washer switch OFF Off nt washer switch ON On ner than front wiper switch INT/AUTO Off nt wiper switch INT/AUTO Off nt wiper switch INT/AUTO Off nt wiper switch INT/AUTO On are wiper switch ON Off are wiper switch ON On are wiper switch ON On are wiper switch INT Off ar wiper switch INT On are wiper switch OFF Off are wiper switch ON On are wiper switch ON On are wiper switch ON On are wiper switch OFF Off are wiper switch NT On are wiper switch OFF Off are wiper switch NT On are wiper switch NT On are wiper switch OFF Off are sus	
	Other than lighting switch 2ND	Off On Viper intermittent dial position Off On	
HEAD LAWP SW T	Lighting switch 2ND	On	N
	Other than lighting switch 2ND	Off	
HEAD LAMP SVV 2	Lighting switch 2ND	On	0
	Other than lighting switch PASS	Off	_ 0
PASSING SW	Lighting switch PASS	On	
	Other than lighting switch AUTO	Off	P
AUTO LIGHT SW	Lighting switch AUTO	On	_
	Front fog lamp switch OFF	Off	_
FR FOG SW	Front fog lamp switch ON	On	
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off	

А

В

INFOID:000000004790221

Monitor Item	Condition	Value/Status
	Driver door closed	Off
DOOR 3W-DR	Driver door opened	On
DOOP SWLAS	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
	Rear RH door closed	Off
DOOR SW-RR	Rear RH door opened	On
	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On
	Back door closed	Off
DOOK SW-BK	Back door opened	On
	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
	Other than power door lock switch UNLOCK	Off
DOOR SW-DR DOOR SW-AS DOOR SW-RR DOOR SW-RL DOOR SW-BK CDL LOCK SW CDL UNLOCK SW CDL UNLOCK SW CDL UNLOCK SW CDL UNLOCK SW CCL U	Power door lock switch UNLOCK	On
	Other than driver door key cylinder LOCK position	Off
DOOR SW-DR DOOR SW-AS DOOR SW-RR DOOR SW-RL DOOR SW-RL DOOR SW-BK CDL LOCK SW CDL UNLOCK SW CDL UNLOCK SW CCL UNLOCK SW CCL UNLOCK SW CCL UNLOCK SW CCL UNLOCK REAR DEF SW NOTE: At model with BOSE au- dio system this item is not monitored. TR CANCEL SW TR/BD OPEN SW TRNK/HAT MNTR RKE-LOCK RKE-UNLOCK RKE-TR/BD RKE-PANIC RKE-P/W OPEN	Driver door key cylinder LOCK position	On
	Other than driver door key cylinder UNLOCK position	Off
HAZARD SW REAR DEF SW NOTE: At model with BOSE au- dio system this item is not monitored. TR CANCEL SW TR/BD OPEN SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW NOTE: At model with BOSE au-	Rear window defogger switch OFF Rear window defogger switch ON	Off On
dio system this item is not monitored.		
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
PKE LOCK	LOCK button of the key is not pressed	Off
RRE-LOOK	LOCK button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RRE-UNLOCK	UNLOCK button of the key is pressed	On
	BACK DOOR OPEN button of the key is not pressed	Off
KKE-IK/DU	BACK DOOR OPEN button of the key is pressed	On
	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On
	LOCK/UNLOCK button of the key is not pressed and held simulta- neously	Off
	LOCK/UNLOCK button of the key is pressed and held simulta- neously	On

Monitor Item	Condition	Value/Status	
	Bright outside of the vehicle	Close to 5 V	_
JPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V	_
	Driver door request switch is not pressed	Off	_
KEQ SW -DK	Driver door request switch is pressed	On	-
	Bright outside of the vehicle Close to 5 V Dark outside of the vehicle Close to 0 V Driver door request switch is not pressed Off	Off	_
REQ SW -AS	Passenger door request switch is pressed	On	_
REQ SW -RR		Off	
REQ SW -RR		Off	_
REQ SW -BD/TR	Back door request switch is not pressed	Off	_
EQ SW -BD/TR JSH SW SN RLY2 -F/B CC RLY -F/B LUCH SW RAKE SW 1	Back door request switch is pressed	On	_
PTICAL SENSOR EQ SW -DR EQ SW -AS EQ SW -RR EQ SW -RR EQ SW -BD/TR USH SW GN RLY2 -F/B CC RLY -F/B LUCH SW RAKE SW 1 RAKE SW 1 RAKE SW 2 ETE/CANCL SW FT PN/N SW FT PN/N SW /L -LOCK /L -UNLOCK /L RELAY-F/B NLK SEN -DR USH SW -IPDM	Push-button ignition switch (push switch) is not pressed	Off	
	Push-button ignition switch (push switch) is pressed	On	
DPTICAL SENSOR REQ SW -DR REQ SW -AS REQ SW -RR REQ SW -RR REQ SW -BD/TR PUSH SW GN RLY2 -F/B ACC RLY -F/B CLUCH SW BRAKE SW 1 BRAKE SW 1 BRAKE SW 2 DETE/CANCL SW SFT PN/N SW S/L -LOCK S/L -LOCK S/L -UNLOCK S/L RELAY-F/B JNLK SEN -DR PUSH SW -IPDM GN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	_
	Ignition switch in ON position	On	_
ACC RLY -F/B		Off	_
CLUCH SW		Off	
3RAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	
BRAKE SW 1		On	_
BRAKE SW 2	The brake pedal is not depressed	Off	
BIVILE OW 2	Stop lamp switch 1 signal circuit is normal	On	
DETE/CANCL SW	Selector lever in P position	Off	
RAKE SW 2 ETE/CANCL SW	Selector lever in any position other than P	On	-
REQ SW -RR REQ SW -RR REQ SW -BD/TR PUSH SW GN RLY2 -F/B ACC RLY -F/B CLUCH SW BRAKE SW 1 BRAKE SW 1 BRAKE SW 2 DETE/CANCL SW SFT PN/N SW S/L -LOCK S/L -LOCK S/L -LOCK S/L -UNLOCK S/L RELAY-F/B JNLK SEN -DR PUSH SW -IPDM GN RLY1 -F/B	Selector lever in any position other than P and N	Off	_
	Selector lever in P or N position	On	_
REQ SW -DR REQ SW -AS REQ SW -RR REQ SW -RR REQ SW -BD/TR PUSH SW IGN RLY2 -F/B ACC RLY -F/B CLUCH SW BRAKE SW 1 BRAKE SW 1 BRAKE SW 2 DETE/CANCL SW SFT PN/N SW SFT PN/N SW S/L -LOCK S/L -LOCK S/L -LOCK S/L -UNLOCK S/L -UNLOCK	Steering is unlocked	Off	-
	Steering is locked	On	-
	Steering is locked	Off	
	Steering is unlocked	On	
REQ SW -RR REQ SW -BD/TR PUSH SW GN RLY2 -F/B ACC RLY -F/B CLUCH SW BRAKE SW 1 BRAKE SW 1 BRAKE SW 2 DETE/CANCL SW SFT PN/N SW SFT PN/N SW S/L -LOCK S/L -LOCK S/L -UNLOCK S/L RELAY-F/B JNLK SEN -DR PUSH SW -IPDM	Ignition switch in OFF or ACC position	Off	
	Ignition switch in ON position	On	-
LUCH SW The The RAKE SW 1 The 7 fus RAKE SW 2 The 7 fus The 7 fus Sele Sele Sele Sele Sele Sele Sele L -LOCK Stee L -LOCK Stee L -UNLOCK Stee L -UNLOCK Stee L -UNLOCK Ignit Unit Stee	Driver door is unlocked	Off	
UNLK SEN -DR	Driver door is locked	On	-
	Push-button ignition switch (push-switch) is not pressed	Off	-
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On	-
	Ignition switch in OFF or ACC position	Off	-
GN RLY1 -F/B		On	_
		Off	_
DETE SW -IPDM	Selector lever in P position	On	-
	Selector lever in any position other than P and N	Off	-
SFT PN -IPDM	Selector lever in P or N position	On	_

Monitor Item	Condition	Value/Status
SET D MET	Selector lever in any position other than P	Off
SFIP-WEI	Selector lever in P position	On
OFT N MET	Selector lever in any position other than N	Off
SFT IN -IVIET	Selector lever in N position	On
	Engine stopped	Stop
	While the engine stalls	Stall
SFT N -MET	At engine cranking	Crank
	Engine running	Run
	Steering is unlocked	Off
S/L LOCK-IPDIM	Steering is locked	On
	Steering is locked	Off
S/L UNLK-IPDM	Steering is unlocked	On
	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off
S/L RELAT-REQ	Steering lock system is the LOCK condition or the changing condi- tion from LOCK to UNLOCK.	On
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door is locked	LOCK
OOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
	Steering is locked	Reset
ID OK FLAG	Steering is unlocked	Set
	The engine start is prohibited	Reset
PRMIENGSIRI	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
VEH SPEED 2 DOOR STAT-DR DOOR STAT-AS DOK FLAG PRMT ENG STRT PRMT RKE STRT CEY SW -SLOT RKE OPE COUN1	The key is not inserted into key slot	Off
	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

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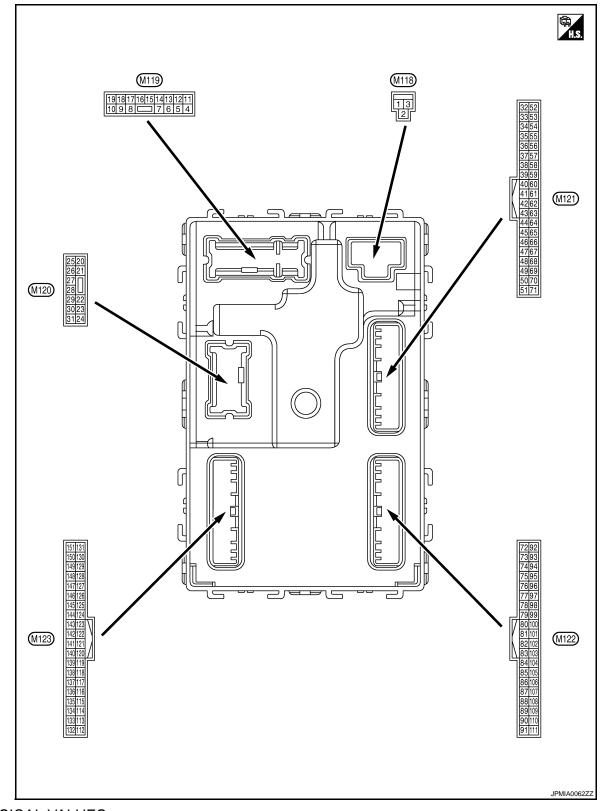
Monitor Item	Condition	Value/Status	A		
	The key ID that the key slot receives is not recognized by the sec- ond key ID registered to BCM.	Yet	A		
CONFIRM ID2The key ID that the key slot receives is not recognized by the sec ond key ID registered to BCM.YetThe key ID that the key slot receives is recognized by the second key ID registered to BCM.DoneCONFIRM ID1The key ID that the key slot receives is not recognized by the first key ID registered to BCM.YetThe key ID that the key slot receives is recognized by the first 	В				
		Yet			
		Done	C		
	The ID of fourth key is not registered to BCM	Yet	_		
1 P 4	key ID registered to BCM.TetThe key ID that the key slot receives is recognized by the first key ID registered to BCM.DoneThe ID of fourth key is not registered to BCMYetThe ID of fourth key is registered to BCMDoneThe ID of third key is not registered to BCMYetThe ID of third key is not registered to BCMDoneThe ID of third key is registered to BCMDoneThe ID of third key is registered to BCMDoneThe ID of second key is not registered to BCMYetThe ID of second key is not registered to BCMDoneThe ID of first key is not registered to BCMDoneThe ID of first key is not registered to BCMDoneThe ID of first key is not registered to BCMDoneThe ID of first key is not registered to BCMDoneIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of front LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tire				
	The ID of third key is not registered to BCM	Yet			
P 3	The ID of third key is registered to BCM	Done	E		
	The ID of second key is not registered to BCM	Yet			
IP 2	IRM ID2 The key ID that the key slot receives is not recognized by the second key ID registered to BCM. Yet IThe key ID that the key slot receives is recognized by the second key ID registered to BCM. Done IRM ID1 The key ID that the key slot receives is not recognized by the first key ID registered to BCM. Yet IRM ID1 The key ID that the key slot receives is recognized by the first key ID registered to BCM. Yet The key ID of fourth key is not registered to BCM Yet Done The ID of fourth key is not registered to BCM Yet The ID of fourth key is registered to BCM Yet The ID of fourth key is registered to BCM Yet Done The ID of fourth key is registered to BCM Yet The ID of fourth key is registered to BCM Yet Done The ID of first key is not registered to BCM Yet The ID of first key is registered to BCM Yet Done The ID of first key is registered to BCM Yet RESS FL Ignition switch ON (Only when the signal from the transmitter is received) Air pressure of front LH tit ceiveed) Air pressure of front LH tit ceiveed) RESS RL Ignition switch ON (Only when the signal from the transmitter is receiveed) Air pressure of rear RH tit ceiveed) Air pressu	Done			
	The ID of first key is not registered to BCM	Yet	F		
P 1	The ID of first key is registered to BCM	Done			
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is re-				
AIR PRESS FR		Air pressure of front RH tire			
AIR PRESS RR		Air pressure of rear RH tire			
AIR PRESS RL		Air pressure of rear LH tire			
	ID of front LH tire transmitter is registered	Done			
D REGST FL1	ID of front LH tire transmitter is not registered	Yet	AD		
	ID of front RH tire transmitter is registered	Done			
D REGST FR1	ID of front RH tire transmitter is not registered	Yet			
TP 3The ID of third key is registered to BCMDoneTP 2The ID of second key is not registered to BCMYetThe ID of second key is registered to BCMDoneTP 1The ID of first key is not registered to BCMYetThe ID of first key is not registered to BCMYetTP 1The ID of first key is registered to BCMDoneAIR PRESS FLIgnition switch ON (Only when the signal from the transmitter is received)Air prAIR PRESS FRIgnition switch ON (Only when the signal from the transmitter is received)Air prAIR PRESS RRIgnition switch ON (Only when the signal from the transmitter is received)Air prAIR PRESS RLIgnition switch ON (Only when the signal from the transmitter is received)Air prAIR PRESS RLIgnition switch ON (Only when the signal from the transmitter is received)Air prAIR PRESS RLIgnition switch ON (Only when the signal from the transmitter is received)Air prAIR PRESS RLIgnition switch ON (Only when the signal from the transmitter is received)Air prID REGST FL1ID of front LH tire transmitter is registeredDoneID REGST FR1ID of front RH tire transmitter is not registeredDoneID REGST RR1ID of rear RH tire transmitter is not registeredDoneID of rear RH tire transmitter is not registeredDoneDoneID of rear RH tire transmitter is not registeredDoneDoneID of rear RH tire transmitter is not registeredDoneDoneID of rear RH tire transmitter is not registeredDone	Done	K			
D REGST RR1	The ID of first key is not registered to BCMYetThe ID of first key is registered to BCMDoneIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of front LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of front RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireID of front LH tire transmitter is registeredDoneID of front LH tire transmitter is not registeredDoneID of front RH tire transmitter is registeredDoneID of rear RH tire transmitter is not registeredDoneID of rear RH tire transmitter is not registeredDoneID of rear RH tire transmitter is not registeredYet				
	ID of rear LH tire transmitter is registered	Done	-		
D REGST RL1	ID of rear LH tire transmitter is not registered	Yet	L		
	Tire pressure indicator OFF	Off			
WARNING LAMP	The ID of third key is registered to BCMDoneThe ID of second key is not registered to BCMYetThe ID of second key is registered to BCMDoneThe ID of first key is not registered to BCMYetThe ID of first key is registered to BCMDoneIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of front LH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear RH tireIgnition switch ON (Only when the signal from the transmitter is received)Air pressure of rear LH tireIgnition switch ON (Only when the signal from the transmitter is received)DoneID of front LH tire transmitter is registeredDoneID of front LH tire transmitter is registeredDoneID of front RH tire transmitter is not registeredDoneID of rear RH tire transmitter is not registeredDoneID of rear RH tire transmitter is not registeredDoneID of rear LH tire transmitter is not registeredDoneID				
	Tire pressure warning alarm is not sounding	Off			
BUZZER	Tire pressure warning alarm is sounding	On			

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Revision: 2008 October

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TERMINAL LAYOUT



PHYSICAL VALUES

	inal No.	Description				Value
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		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		Interior room lamp			battery saver is activated. oom lamp power supply)	0 V
ч (Р)	Ground	power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage
5	Cround	Passenger door UN-	Quitout	Dessenger desr	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	utput Step lamp	ON	0 V
(W)	Giouna		Output		OFF	Battery voltage
8	Ground		I doors LOCK Output All doors	All doors	LOCK (Actuator is activat- ed)	Battery voltage
(V)	(V) Cround 7	All doors LOCK			Other than LOCK (Actuator is not activated)	0 V
9		Driver door	UNLOCK (Actuator is activated)	Battery voltage		
(G)	Ground	Driver door UNLOCK	Output	Diver door	Other than UNLOCK (Actuator is not activated)	0 V
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(P)	Cround	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		0 V
					OFF	0 V
14	Creation	Push-button ignition	Outeut	Teillenr		NOTE: When the illumination brighten- ing/dimming level is in the neutral position
14 (O) Grou	Ground	round switch illumination ground	Output	ut Tail lamp	ON	10 0 ••••••••••••••••••••••••••••••••••
					OFF	JSNIA0010GB Battery voltage
15	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0.2 V
(L)		F			ON	0 V

	inal No.	Description				Value	
(VVir +	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		
					Turn signal switch OFF	6.5 V 0 V	
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s 1 s PKID0926E 6.5 V	
19	Ground	Room lamp timer	Output	Interior room	OFF	Battery voltage	
(Y)	Ground	control	Output	lamp	ON	0 V	
23					OPEN (Back door opener actuator is activated)	Battery voltage	
(BR)	Ground	Back door open	Output	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V
26	Cround	Deer winer	0	Deerwiner	OFF (Stopped)	0 V	
(G)	Ground	Rear wiper	Output	Rear wiper	ON (Operated)	Battery voltage	
34* ¹	Ground	und Luggage room anten- na (-)	Outout	t Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(B)	Ground		Output		When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	

Terminal No. (Wire color)		Description				Value	
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
35* ¹	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	B
(W) Ground	na (+)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 1 1 1 1 1 5 1	E	
38*1		d Rear bumper anten- na (-)	When the back	When the back door request	When Intelligent Key is in the antenna detection area	(V) 15 10 50 1 s JMKIA0062GB	G H I
38* ¹ Ground	Ground		Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	AD K
39* ¹ (BR) Ground	Ground		Rear bumper anten-	anten-	When Intelligent Key is in the antenna detection area	(V) 15 10 50 1 s JMKIA0062GB	M
	na (+)	ed	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	P	
47	Ground	Ignition relay (IPDM	Output	Ignition switch	OFF or ACC	Battery voltage	
(L)	Cround	E/R) control	Caiput	-gritteri ownor	ON	0 V	

	inal No.	Description				Value
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)
			Ignition switch	When selector lever is in P or N position	Battery voltage	
52 (R)	Ground	Starter relay control	Output	ON	When selector lever is not in P or N position	0.3 V
				Ignition switch OFI	=	0 V
					ON (Pressed)	0 V
61* ¹ (R)	Ground	Back door request switch	Input	Back door re- quest switch	OFF (Not pressed)	(V) 15 0 10 ms 10 ms JPMIA0016GB 1.0 V
64* ¹	Ground	Warning buzzer	Output	Warning buzzer	Sounding	0 V
(GR)	Cround		Output		Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	(V) 15 10 10 10 10 10 10 10 10 10 10
					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 10 ms JPMIA0011GB 11.8 V
					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 10 ms JPMIA0011GB 11.8 V

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	iinal No. e color)	Description				Value	A
+	-	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 0 10 ms JPMIA0011GB 11.8 V	C
					ON (When rear RH door opens)	0 V	г
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 0 10 10 10 11.8 V	F
					ON (When rear LH door opens)	0 V	F
70-1					When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	A
72* ¹ (B)	Ground	bund Room antenna 2 (-) (Center console) C	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 s JMKIA0063GB	k L

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	inal No.	Description	Valua		Value	
(VVire +	e color)	Signal name	Input/ Output		Condition	(Approx.)
73*1	Ground	Room antenna 2 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 1 s JMKIA0062GB
(W)		(Center console)	Culput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 15 15 15 15 15 15 15 15 15
74* ¹	Ground	Passenger door an-		When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
74* ¹ (Y) G		tenna (-)			When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
75* ¹	Ground	Passenger door an-	Output	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
75*1 (LG)	Ground	tenna (+)	Cutput	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

Terminal No. (Wire color)		Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
76* ¹		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB	B C D
(V) Ground	(-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 10 5 10 5	E	
77* ¹	Ground	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 0 1 s JMKIA0062GB	G H I
(P)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	ADI K
78* ¹	Ground	Room antenna 1 (-) (Instrument panel)	Output	lgnition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	M
(R)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	P

	inal No. e color)	Description			O and differen	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
79* ¹	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 5 0 1 5 0 1 5 0 1 5 0 1 5 10 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10
(G)	Cround	(Instrument panel)	Cuput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5
80 (SB)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82	Ground	Ignition relay [fuse	Output	Ignition switch	OFF or ACC	0 V
(BR)		block (J/B)] control		-9	ON	Battery voltage
83	Ground	Remote keyless entry receiver communica-	Input/	During waiting		(V) 15 10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(P)	Ground	tion	Output	When operating ei	ither button on the key	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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	inal No.	Description				Value	٨
(VVir +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0041GB 1.4 V	B C D
87		Combination switch		Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V	E
(R)	Ground	INPUT 5	Input	switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0039GB 1.3 V	G H
					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 1.3 V	ADP K

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	inal No.	Description				Value	
(Wire +	e color)	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 0 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 0 2 ms JPMIA0037GB 1.3 V	
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 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 0 0 2 ms JPMIA0040GB 1.3 V	
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push	Pressed	0 V	
90	Ground	CAN - L	Input/	switch)	Not pressed	Battery voltage	
(P) 91 (L)	Ground	CAN - H	Output Input/ Output		_		

Terminal No.		Description				Value	
(Wire +	e color)	Signal name	Input/ Output		Condition	value (Approx.)	
т			Output		OFF	0 V	
92 (R)* ¹ (L)* ²	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1	
					ON	Battery voltage	
					OFF or ACC	Battery voltage	
93	Ground	ON indicator lamp	Output	Ignition switch	ACC	0.2 V	
(L)	Ciouna		Output	ignition switch	ON	0 V	
					OFF	0 V	
95 (L)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage	
96 (Y)	Ground	Control device (de- tention switch) power supply	Output			Battery voltage	
					LOCK status	0 V	
97 (O)	Ground	Steering lock condi- tion No. 1	Input	Steering lock	UNLOCK status	Battery voltage	
					LOCK status		
98 (L)	Ground	Steering lock condi- tion No. 2	Input	Steering lock	UNLOCK status	Battery voltage 0 V	
99 (V)	Ground	Selector lever P posi- tion switch	Input	Selector lever	P position	0 V	
(•)					Any position other than P	Battery voltage	
100* ¹ (P)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	ON (Pressed) OFF (Not pressed)	0 V	
					ON (Pressed)	0 V	
101* ¹ (W)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB 1.0 V	
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V	
(Y)	Cround	lay control	Culput	ignition switch	ON	Battery voltage	
103 (L)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage	

	inal No. e color)	Description		-		Value	
+		Signal name	Input/ Output		Condition	(Approx.)	
106 (Y)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC ON	Battery voltage 0 V	
					All switches OFF	(V) 15 10 5 0 2.ms JPMIA0041GB 1.4 V	
					Turn signal switch LH	(V) 15 0 2 ms 1.3 V	
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 0 2 ms JPMIA0036GB 1.3 V	
					Front wiper switch LO	(V) 15 10 5 2 ms JPMIA0038GB 1.3 V	
					Front washer switch ON	(V) 15 10 5 0 2.ms JPMIA0039GB 1.3 V	

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

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	inal No.	Description				Value
	e color)	Signal name	Input/		Condition	(Approx.)
+	_		Output		All switches OFF	(V) 15 0 2 ms JPMA0041GB 1.4 V
					Lighting switch PASS	(V) 15 0 2 ms JPMA0037GB 1.3 V
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Front wiper switch INT/ AUTO	(V) 15 0 2 ms JPMA0038GB 1.3 V
					Front wiper switch HI	(V) 15 0 2 ms JPMA0040GB 1.3 V
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 10 10 10 1.1 V JPMIA0012GB

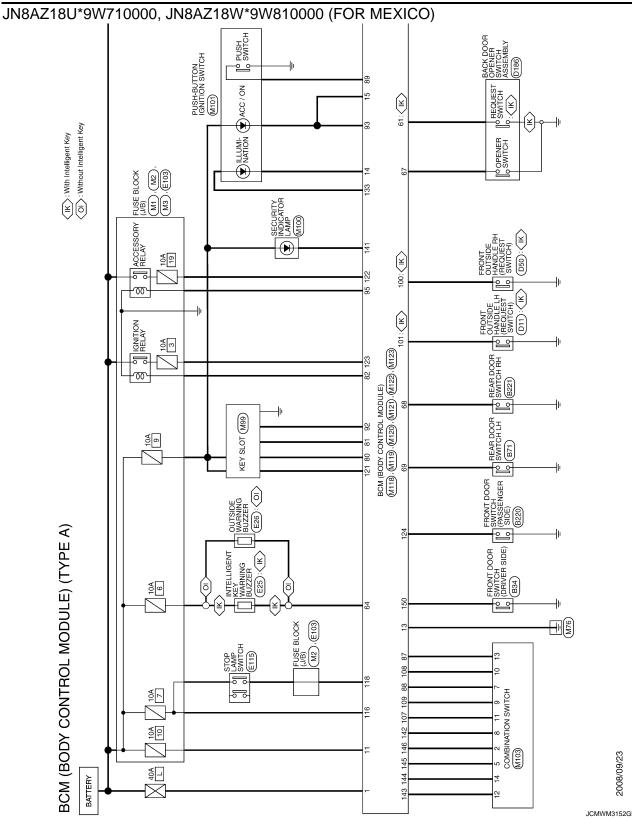
	inal No.	Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
					LOCK status	Battery voltage	
111 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB	
					For 15 seconds after UN- LOCK	Battery voltage	
					15 seconds or later after UNLOCK	0 V	
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 16 0 0 0 0 0 0 0 0 0 0 0 0 0	
113* ³	Ground	Optical sensor	loout	Ignition switch	When bright outside of the vehicle	Close to 5 V	
(O)	Ground	Oplical sensor	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 lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	
(L)					ON (Brake pedal is de- pressed)	Battery voltage	
119* ¹ (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sen- sor switch OFF)	(V) 15 10 10 10 10 11 11 12 12 12 12 12 12 12 12	
					UNLOCK status (unlock sensor switch ON)	0 V	
121	Ground	Key slot switch	Input	When the key is in	serted into key slot	Battery voltage	
(Y)	Cround		input	When the key is n	ot inserted into key slot	0 V	
122 (R)	Ground	ACC feedback	Input	Ignition switch	OFF	0 V	
					ACC or ON	Battery voltage	
	Ground	IGN feedback	Input	Ignition switch			
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC ON	0 V Battery voltage	

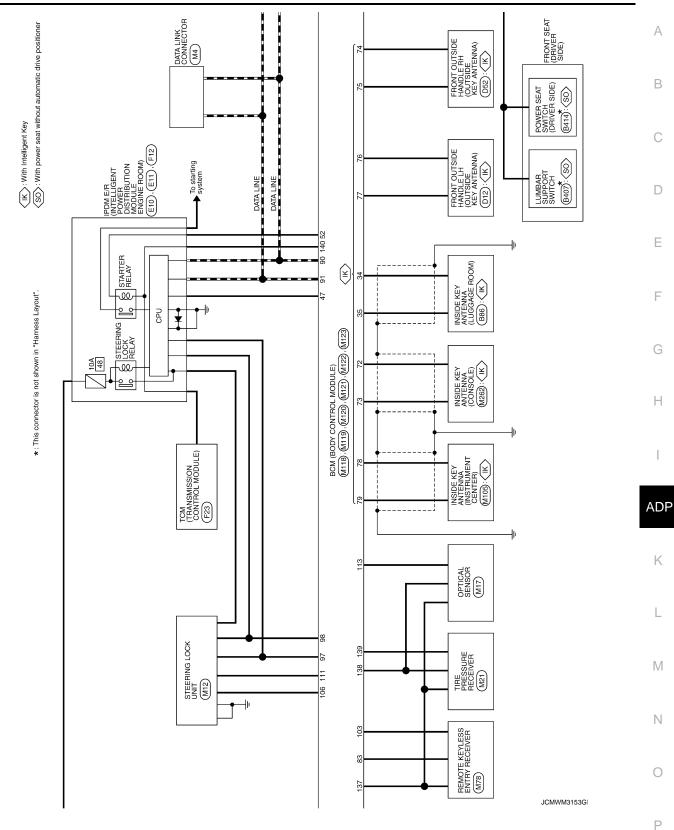
	inal No.	Description				Value
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 0 5 0 10 ms J JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V
130* ⁴ (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 0 10 ms 10 ms JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 0 10 10 ms JPMIA0013GB 10.2 V
				Ignition switch OFI	⁼ or ACC	Battery voltage
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (When tail lamps OFF) ON (When tail lamps ON)	9.5 V NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V) 15 10 5 0 0 0 0 0 0 0 0 0 0 0 0 0
					OFF	JPMIA0159GB
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF ACC or ON	0 V 5.0 V
(-)		· · · · · · · · · · · · · · · · · · ·				5.0 V

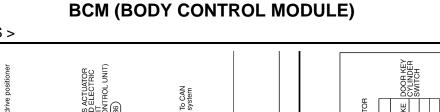
	inal No.	Description				Value	Δ
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
400*5					Standby state	(V) 6 4 2 0 ••• 0.2s OCC3881D	B C D
139 ^{∗5} (O)	Ground	Tire pressure receiver er communication	Input/ Output	Ignition switch ON	When receiving the signal from the transmitter	(V) 6 4 2 0 •••0.25 OCC3880D	E
140		Selector lever P/N			P or N position	Battery voltage	G
(GR)	Ground	position	Input	Selector lever	Except P and N positions ON	0 V 0 V	Н
141 (O)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	ADF
					OFF	Battery voltage	K
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	0 V	L
					Turn signal switch RH	<u>2 ms</u> JPMIA0031GB 10.7 V	Ν
					All switches OFF (Wiper intermittent dial 4) Front wiper switch HI	0 V	0
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	 (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 	(V) 15 0 2 ms JPMIA0032GB 10.7 V	P

		ninal No. Description				Value		
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)		
					All switches OFF (Wiper intermittent dial 4)	0 V		
					Front washer switch ON (Wiper intermittent dial 4)			
144		Combination switch		Combination	Rear wiper switch ON (Wiper intermittent dial 4)			
(P)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)			
				with all switches OFFWiper intermittent dial 1		Wiper intermittent dial 1Wiper intermittent dial 5		2 ms JPMIA0033GB
					All switches OFF	0 V		
					Front wiper switch INT/ AUTO	(V)		
145	Ground	Combination switch	Output	Combination switch (Wiper intermit- tent dial 4)	Front wiper switch LO			
(V)		OUTPUT 3			Lighting switch AUTO	0 2 ms 10.7 V		
					All switches OFF	0 V		
					Front fog lamp switch ON			
					Lighting switch 2ND	(V) 15		
146	Ground	Combination switch	Output	Combination switch	Lighting switch PASS			
(Y)		OUTPUT 4		(Wiper intermit- tent dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB 10.7 V		
149* ⁵ (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		(V) 15 0 10 ms JPMIA0011GB 11.8 V		
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes) ON (When driver door opens)	(V) 15 0 10 10 11.8 V 0 V		

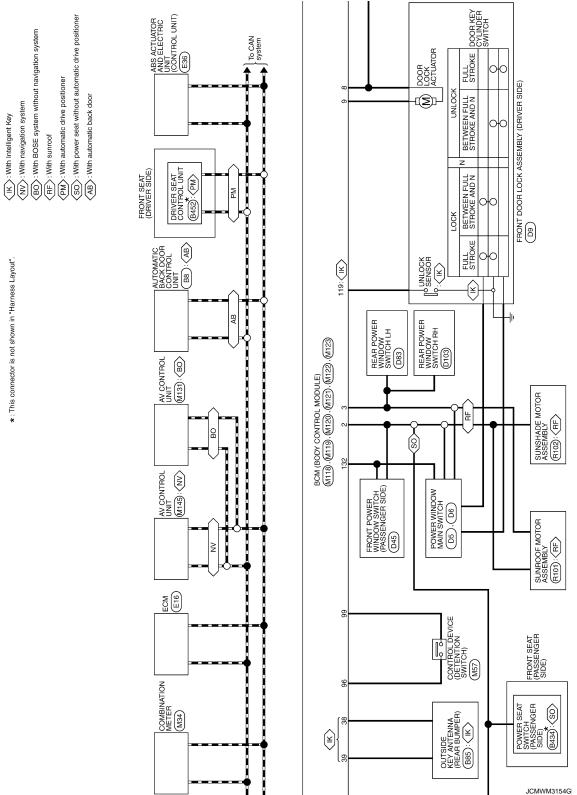
nal No.	Description						
	Signal name	Input/		Condition			
	Rear window defoc-		Rear window de-	Active		0	V
Ground	ger relay control	Output	fogger	Not activated		Battery	voltage
			1		L.		
	SE audio system						
	ram - BCM -						
y Diag							INFOID:0000000004790222
O VI	N: JN8AZ18U*9	9W100	000, JN8AZ1	8W*9W200000	(EXCEPT	FOR	MEXICO),
	color) – Ground h Intellige hout Inte h auto lig hout BOS h TPMS g Diag	color) Signal name Ground Rear window defog-ger relay control h Intelligent Key system hout Intelligent Key system hout Intelligent Key system hout BOSE audio system hout BOSE audio system hout BOSE audio system h TPMS Diagram - BCM -	Color) Signal name Input/ Output Ground Rear window defog- ger relay control Output h Intelligent Key system Output Output h Intelligent Key system hout Intelligent Key system hout BOSE audio system h Diagram - BCM - Input/ Output Input/ Output	Color) Signal name Input/ Output Ground Rear window defog- ger relay control Output Rear window de- fogger h Intelligent Key system hout Intelligent Key system hout Intelligent Key system h auto light system hout BOSE audio system hout BOSE audio system h Diagram - BCM - Here Here	color) Signal name Input/ Output Condition Ground Rear window defog- ger relay control Output Rear window de- fogger Active h Intelligent Key system Not activated Not activated h uto light system hout BOSE audio system Hout BOSE audio system h Diagram - BCM - Input/ Output Input/ Output Condition	color) Signal name Input/ Output Condition Ground Rear window defog- ger relay control Output Rear window de- fogger Active Imput/ Active Not activated h Intelligent Key system Not activated Not activated Imput/ Not activated Imput/ Active Imput/	color) Signal name Input/ Output Condition Val (Apple) Ground Rear window defog- ger relay control Output Rear window de- fogger Active 0 h Intelligent Key system hout Intelligent Key system hout BOSE audio system h TPMS g Diagram - BCM -



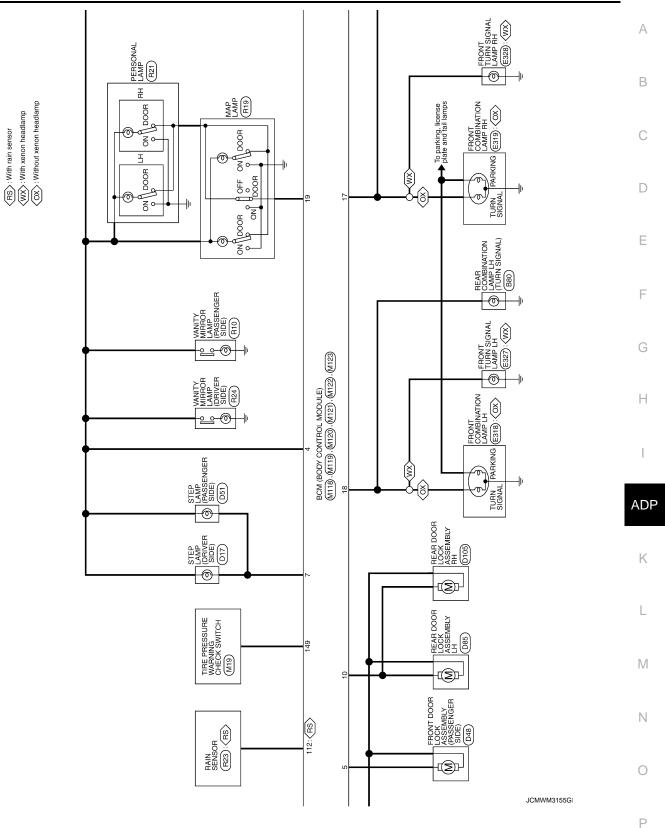




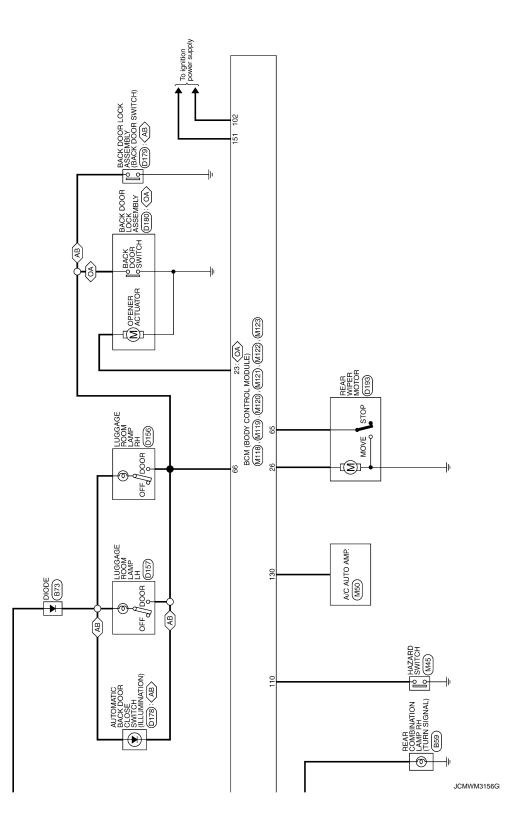
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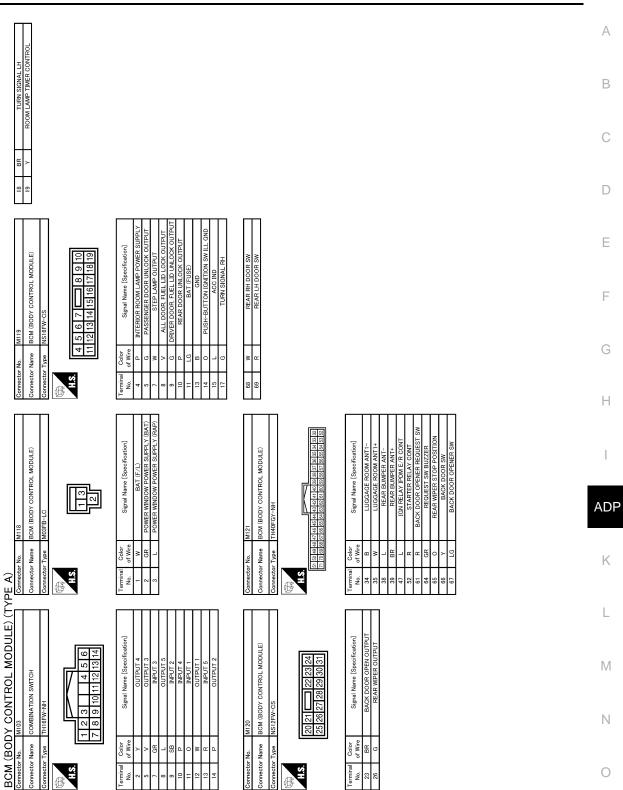


*: This connector is not shown in "Harness Layout".







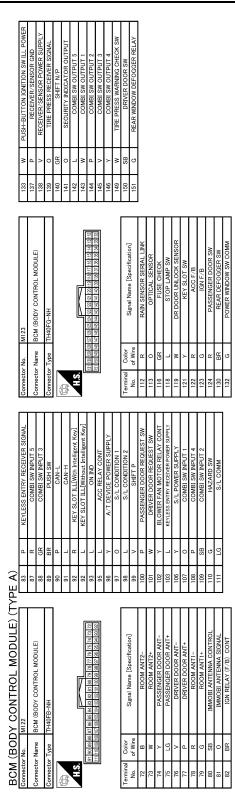


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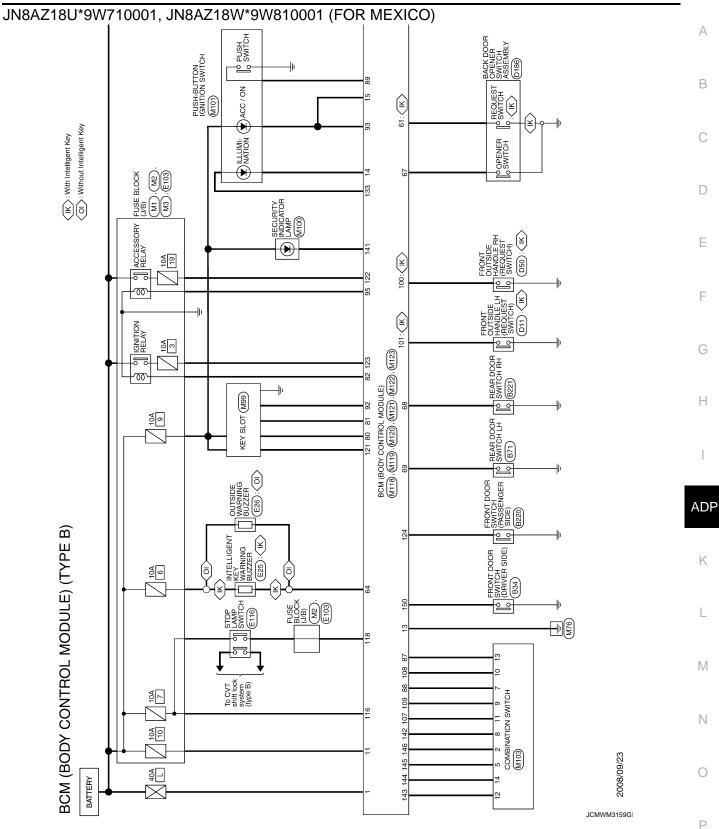


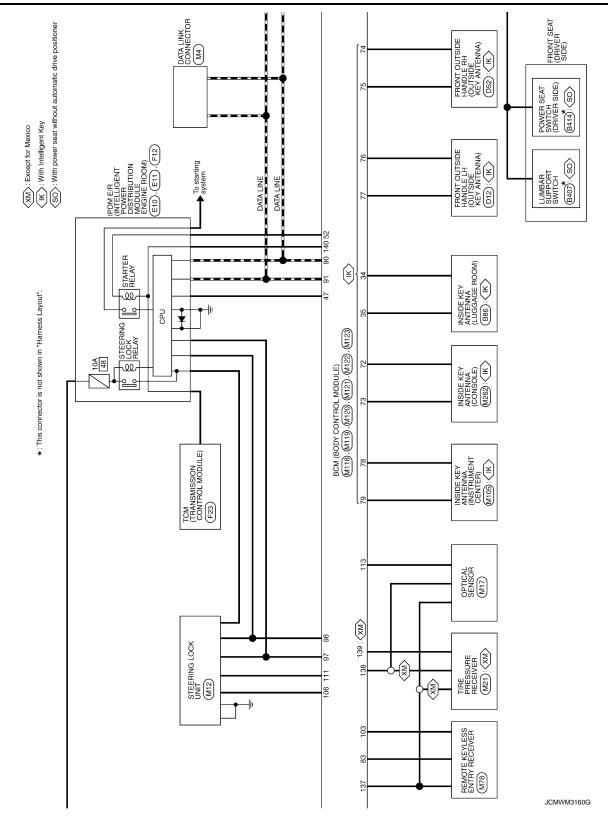
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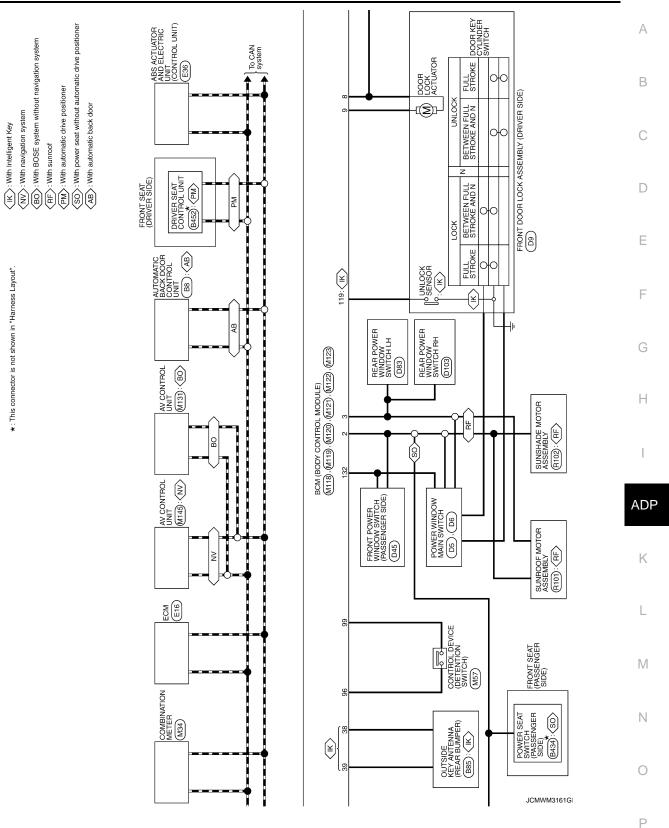
FROM VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),





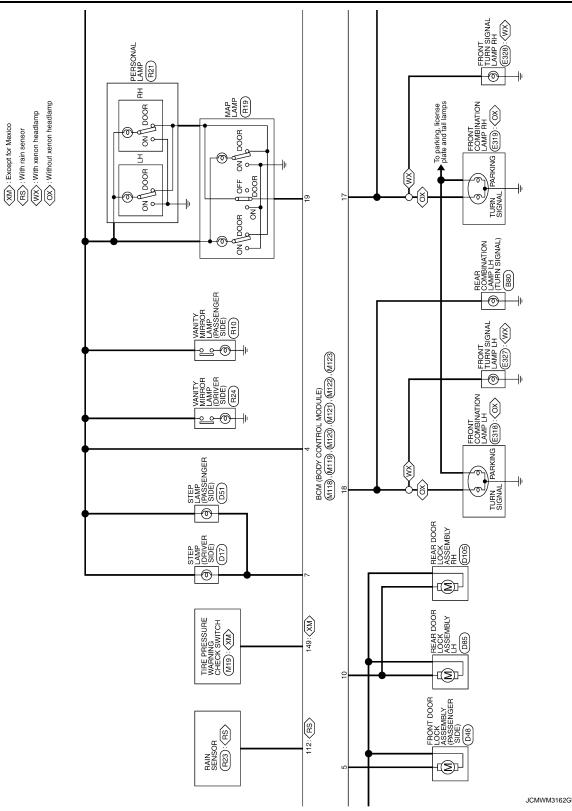


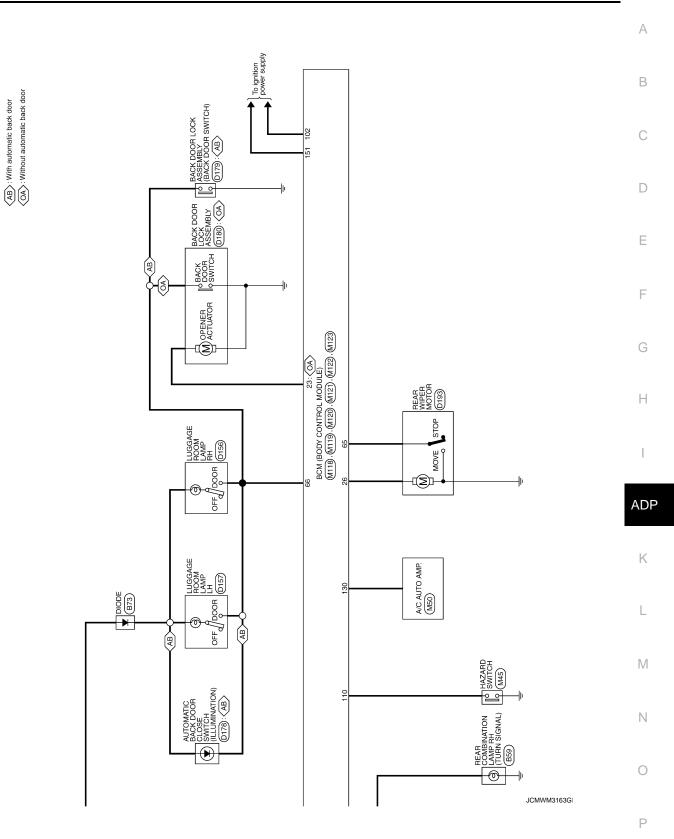
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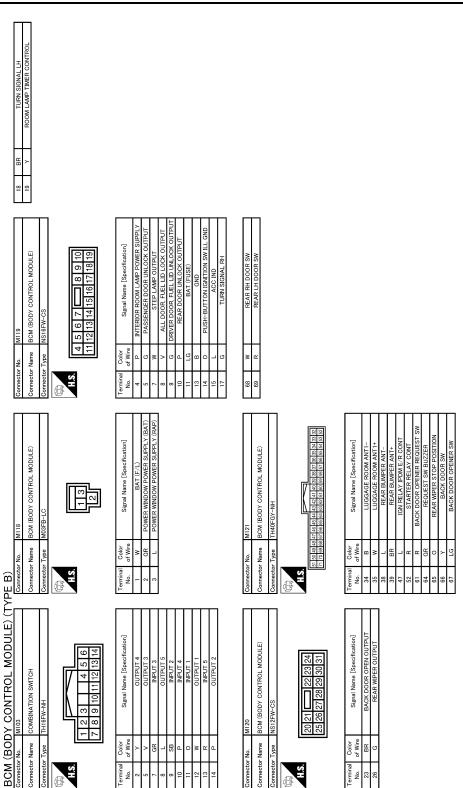
*: This connector is not shown in "Harness Layout".

2009 Murano





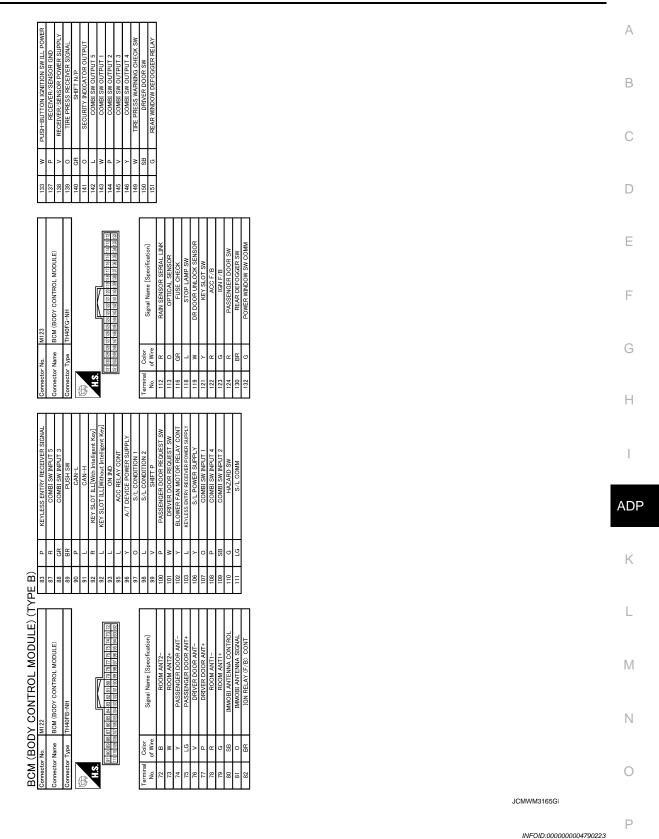
Revision: 2008 October



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Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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

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Display contents of CONSULT	Fail-safe	Cancellation
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)
B2609: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (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 fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	 Inhibit engine cranking Inhibit steering lock 	 When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: 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 be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	Inhibit engine crankingInhibit steering lock	 When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No. 1 signal: LOCK (0V) Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

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

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

NOTE:

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

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.

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- 2. Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:000000004790224

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

1 B2562: LOW VOLTAGE 2 • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY 3 • B2192: ID DISCORD BCM-ECM	Priority	DTC
• U1010: CONTROL UNIT (CAN) • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY	1	B2562: LOW VOLTAGE
B2191: DIFFERENCE OF KEY	2	
B2193: CHAIN OF BCM-ECMB2195: ANTI SCANNING	3	 B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM
 B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2555: STOP LAMP B2555: STOP LAMP B2555: STOP LAMP B2555: VEHICLE SPEED B2260: STARTER CONT RELAY B2260: SHIFT POSITION B22602: SHIFT POSITION B22603: SHIFT POSITION B22604: PNP SW B22605: SIX RELAY B22605: SIX RELAY B22608: STARTER RELAY B22609: SIX RELAY B22612: SIX SIX SIX B22614: ACC RELAY CIRC B22613: BCM B22614: ACC RELAY CIRC B22613: BCM B22614: PUSH-BTN IGN SW B22614: VEIGLE TYPE B22659	4	 B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2555: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2606: S/L RELAY B2606: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B2608: STARTER RELAY B26008: STERING LOCK UNIT B26001: SHET POSI LOCK UNIT B26001: STEERING LOCK UNIT B26001: STEERING LOCK UNIT B26001: STEERING LOCK UNIT B26002: SL STATUS B2604: IGNITION RELAY B2605: STEERING LOCK UNIT B2606: STEERING LOCK UNIT B2607: STATUS B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2615: BLOWER RELAY CIRC B2614: BCM B2613: BCM B2614: PUSH-BTN IGN SW B2614: PUSH-BTN IGN SW B2614: VHICLE TYPE B2615: SL STATUS B2614: ACC RELAY CIRC B2614: BCM B2614: STATUS B2615: BLOWER RELAY CIRC B2614: BCM B2614: BCM B2614: SCM B2614: STATUS B2615: BLOWER RELAY CIRC B2614: BCM B2614: SCM B2615: SLISTER B2614: SCM B2614: SCM B2615: SLISTATUS B2615: SLISTATUS B2615: SLISTATUS B2616: VEHICLE TYPE B2629: S/L STATUS B2616: VEHICLE TYPE B2629: S/L STATUS B2616: SCM B2616: SCM B2616: SCM B2617: SCM B2616: SCM B2616: SCM B2616: SCM B2616: SCM B2

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Priority	DTC	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	
	• C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	
	C1715: [CHECKSUM ERR] RL	
5	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	
	C1723: [CODE ERR] RL C1724: [DATE \ ON T \ ON T \ ON T \	
	C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FB	
	C1725: [BATT VOLT LOW] FR	
	 C1726: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL 	
	C1724: CONTROL UNIT	
	B2621: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA	
	B2623: INSIDE ANTENNA	

DTC Index

NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to <u>BCS-17, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	L
No DTC is detected. further testing may be required.	_	_	_	_	_	N
U1000: CAN COMM CIRCUIT	—	—	—	—	<u>BCS-40</u>	14
U1010: CONTROL UNIT (CAN)	—	—	—	—	<u>BCS-41</u>	
U0415: VEHICLE SPEED SIG	—	_			BCS-42	0
B2013: ID DISCORD BCM-S/L	×	×	—	—	<u>SEC-55</u>	
B2014: CHAIN OF S/L-BCM	×	×			<u>SEC-56</u>	Þ
B2190: NATS ANTENNA AMP	×	—	—	—	<u>SEC-47</u>	
B2191: DIFFERENCE OF KEY	×				<u>SEC-50</u>	
B2192: ID DISCORD BCM-ECM	×				<u>SEC-51</u>	
B2193: CHAIN OF BCM-ECM	×	_		_	<u>SEC-53</u>	
B2195: ANTI SCANNING	×	—	—	—	<u>SEC-54</u>	-
B2553: IGNITION RELAY	—	×	—	—	PCS-49	

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2555: STOP LAMP		×	_	_	<u>SEC-59</u>
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-61</u>
B2557: VEHICLE SPEED	×	×	×	—	<u>SEC-63</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-64</u>
B2562: LOW VOLTAGE	—	×	—	_	BCS-43
B2601: SHIFT POSITION	×	×	×		<u>SEC-65</u>
B2602: SHIFT POSITION	×	×	×		<u>SEC-68</u>
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-70</u>
B2604: PNP SW	×	×	×	—	<u>SEC-73</u>
B2605: PNP SW	×	×	×	_	<u>SEC-75</u>
B2606: S/L RELAY	×	×	×	_	<u>SEC-77</u>
B2607: S/L RELAY	×	×	×	_	<u>SEC-78</u>
B2608: STARTER RELAY	×	×	×	_	<u>SEC-80</u>
B2609: S/L STATUS	×	×	×	_	<u>SEC-82</u>
B260A: IGNITION RELAY	×	×	×	_	PCS-51
B260B: STEERING LOCK UNIT	_	×	×	_	<u>SEC-86</u>
B260C: STEERING LOCK UNIT	_	×	×	_	<u>SEC-87</u>
B260D: STEERING LOCK UNIT	_	×	×		<u>SEC-88</u>
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-89</u>
B2612: S/L STATUS	×	×	×	_	<u>SEC-92</u>
B2614: ACC RELAY CIRC	_	×	×	_	PCS-53
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-56
B2616: IGN RELAY CIRC	_	×	×	_	PCS-59
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-96</u>
B2618: BCM	×	×	×	_	PCS-62
B2619: BCM	×	×	×	_	<u>SEC-98</u>
B261A: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-99</u>
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-102</u>
B2621: INSIDE ANTENNA	_	×	—	—	DLK-95
B2622: INSIDE ANTENNA	—	×	—	—	DLK-97
B2623: INSIDE ANTENNA	—	×	—	—	<u>DLK-99</u>
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-90</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	—	<u>SEC-91</u>
C1704: LOW PRESSURE FL	—	_	—	×	
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	<u>WT-16</u>
C1707: LOW PRESSURE RL	—	—	—	×	

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	A
C1708: [NO DATA] FL	_	_	_	×		-
C1709: [NO DATA] FR	_	_	_	×	N/T 40	С
C1710: [NO DATA] RR	_	_	_	×	<u>WT-18</u>	0
C1711: [NO DATA] RL	_	_	_	×		
C1712: [CHECKSUM ERR] FL	_	_	_	×		D
C1713: [CHECKSUM ERR] FR	_	_	_	×	N/T 04	
C1714: [CHECKSUM ERR] RR	_	_	_	×	<u>WT-21</u>	_
C1715: [CHECKSUM ERR] RL	_	_	_	×	l	E
C1716: [PRESSDATA ERR] FL	—	_	_	×		-
C1717: [PRESSDATA ERR] FR	_	_	_	×		F
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>WT-24</u>	
C1719: [PRESSDATA ERR] RL	—	_	_	×		
C1720: [CODE ERR] FL	—	_	_	×		G
C1721: [CODE ERR] FR	_	_	_	×	M/T 00	
C1722: [CODE ERR] RR	_	_	_	×	<u>WT-26</u>	Н
C1723: [CODE ERR] RL	_	_	_	×		
C1724: [BATT VOLT LOW] FL	_	_	_	×		-
C1725: [BATT VOLT LOW] FR		_	_	×		
C1726: [BATT VOLT LOW] RR		_	_	×	<u>WT-29</u>	
C1727: [BATT VOLT LOW] RL		_	—	×		AD
C1729: VHCL SPEED SIG ERR		_	—	×	<u>WT-32</u>	
C1734: CONTROL UNIT	_		—	×	<u>WT-33</u>	-

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SYMPTOM DIAGNOSIS ADP SYSTEM SYMPTOMS

Symptom Table

INFOID:000000003312497

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	Momory function	Perform memory storage (Refer to <u>ADP-10</u> .) and	All parts do not operate in memory function.	—	<u>ADP-191</u>
I	Memory function	memory operation (Refer to <u>ADP-22</u>).	Memory indicator 1 or 2 does not oper- ate.	—	<u>ADP-192</u>
2	Manual function	Perform manual function	All components of power seat do not operate.	_	ADP-193
2		(Refer to <u>ADP-18</u>).	All components of tilt&telescopic do not operate.	—	<u>ADP-201</u>
				Sliding	ADP-194
	Manual function Perfor	memory function (Refer to	Refer to ADP-18.) and nemory function (Refer to does not operate. (for specific part)	Reclining	ADP-194
				Lifting (front)	ADP-195
3	and			Lifting (rear)	ADP-196
	memory function			Steering tilt	ADP-196
				Steering telescopic	ADP-197
				Door mirror	ADP-198
4	Entry/exit assist function	Perform entry/exit assist function. Exit assist function: Refer to <u>ADP-26</u> Entry assist function: Refer to <u>ADP-30</u>	Entry/exit assist function does not op- erate.	_	ADP-199
5	Intelligent Key in- ter lock function	Perform Intelligent Key in- ter lock function (Refer to <u>ADP-34</u>).	Intelligent Key inter lock function does not operate.	_	<u>ADP-200</u>

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

< SYMPTOM DIAGNOSIS >

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

Diagnosis Procedure	А
1.CHECK MEMORY FUNCTION	В
Check memory function. Refer to ADP-22, "MEMORY FUNCTION : System Description".	
Is the inspection result normal? YES >> Memory function is normal. NO >> GO TO 2.	С
2.CHECK SEAT MEMORY SWITCH	D
Check seat memory switch. Refer to <u>ADP-66, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	E
YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	F
Check driver seat control unit power supply and ground circuit. Refer to <u>ADP-52, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure"</u> . Is the inspection result normal?	G
YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	Н
Check automatic drive positioner control unit power supply and ground circuit. Refer to <u>ADP-52, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure"</u> . Is the inspection result normal?	I
YES >> GO TO 5. NO >> Repair or replace the malfunction parts. 5. PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE	ADF
1. Perform initialization procedure. Refer to <u>ADP-9, "SYSTEM INITIALIZATION : Special Repair Requirement"</u> .	K
 Perform memory storing procedure. Refer to <u>ADP-10, "MEMORY STORING : Special Repair Requirement"</u>. Check memory function. Refer to <u>ADP-22, "MEMORY FUNCTION : System Description"</u>. 	L
Is the inspection result normal? YES >> Memory function is normal. NO >> GO TO 6.	Μ
6.CONFIRM THE OPERATION	Ν
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40. "Intermittent Incident"</u> . NO >> GO TO 1.	0
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MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000003312499

1.CHECK MEMORY INDICATOR

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

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

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-40. "Intermittent Incident".

NO >> GO TO 1.

ALL COMPONENTS OF POWER SEAT DO NOT OPERATE	E	
< SYMPTOM DIAGNOSIS >		
ALL COMPONENTS OF POWER SEAT DO NOT OPERATE		А
Diagnosis Procedure	INFOID:000000003312500	
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT		В
Check power seat switch ground circuit. Refer to <u>ADP-74, "Diagnosis Procedure"</u> .		
Is the inspection result normal? YES >> GO TO 2.		С
NO >> Repair or replace harness or connector. 2.CONFIRM THE OPERATION		D
Confirm the operation again.		
Is the result normal?		Е
 YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>. NO >> GO TO 1. 		
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MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS >

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE SEAT SLIDING

SEAT SLIDING	
SEAT SLIDING : Diagnosis Procedure	INFOID:000000003312501
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 <u>ADP-54</u> , "Component Function Check". <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3. CHECK SLIDING MOTOR	
Check sliding motor. Refer to ADP-99. "Component Function Check". Is the inspection result normal? YES >> GO TO 4. NO >> Repair or replace the malfunction parts. 4. CHECK SLIDING SENSOR	
Check sliding sensor. Refer to <u>ADP-78</u> , "Component Function Check". <u>Is the inspection result normal?</u> YES >> GO TO 5. NO >> Repair or replace the malfunction parts. 5. CONFIRM THE OPERATION	
Check the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1. SEAT RECLINING	
SEAT RECLINING : Diagnosis Procedure	INFOID:000000003312502
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	
Check reclining switch.	

Refer to <u>ADP-56</u>, "Component Function Check". <u>Is the inspection result normal?</u>

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts. 3.CHECK RECLINING MOTOR	A
Check reclining motor. Refer to <u>ADP-101, "Component Function Check"</u> .	В
Is the inspection result normal?	
YES >> GO TO 4.	С
NO >> Repair or replace the malfunction parts. 4.CHECK RECLINING SENSOR	
Check reclining sensor.	D
Refer to <u>ADP-81, "Component Function Check"</u> .	D
Is the inspection result normal?	
YES >> GO TO 5. NO >> Repair or replace the malfunction parts.	E
5. CONFIRM THE OPERATION	
Check the operation again.	F
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> .	G
NO >> GO TO 1.	
SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT) : Diagnosis Procedure	Н
1.CHECK LIFTING (FRONT) MECHANISM	
Check for the following.	I
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
Is the inspection result normal?	ADP
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	Κ
2.CHECK LIFTING SWITCH (FRONT)	
Check lifting switch (front). Refer to <u>ADP-58, "Component Function Check"</u> .	I
Is the inspection result normal?	L
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	Μ
3.CHECK LIFTING MOTOR (FRONT)	
Check lifting motor (front). Refer to <u>ADP-103</u> , "Component Function Check".	Ν
Is the inspection result normal?	
YES >> GO TO 4.	0
NO >> Repair or replace the malfunction parts.	
4.CHECK LIFTING SENSOR (FRONT)	
Check lifting sensor (front). Refer to <u>ADP-84, "Component Function Check"</u> .	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.	

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

1.CHECK LIFTING (REAR) MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK LIFTING SWITCH (REAR)

Check lifting switch (rear). Refer to <u>ADP-60, "Component Function Check"</u>.

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-105, "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-87. "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-40. "Intermittent Incident".

NO >> GO TO 1. STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:000000003312505

INFOID:00000003312504

1.CHECK STEERING TILT MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK TILT SWITCH

Check tilt switch. Refer to <u>ADP-62, "Component Function Check"</u>.

< SYMPTOM DIAGNOSIS >	
Is the inspection result normal?	
YES >> GO TO 3.	А
NO >> Repair or replace the malfunction parts. 3.CHECK TILT MOTOR	
	В
Check tilt motor. Refer to <u>ADP-107, "Component Function Check"</u> .	
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-90. "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	Г
Check the operation again.	
Is the result normal?	G
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.	
STEERING TELESCOPIC	
STEERING TELESCOPIC : Diagnosis Procedure	Η
1.CHECK STEERING TELESCOPIC MECHANISM	
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	ADP
Is the inspection result normal?	
YES >> GO TO 2.	1.6
NO >> Repair or replace the malfunction parts.	K
2. CHECK TELESCOPIC SWITCH	
Check telescopic switch.	L
Refer to ADP-64, "Component Function Check"	
Is the inspection result normal?	
YES >> GO TO 3.	Μ
NO >> Repair or replace the malfunction parts.	
3.CHECK TELESCOPIC MOTOR	Ν
Check telescopic motor. Refer to <u>ADP-109, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 4.	0
NO >> Repair or replace the malfunction parts.	
4.CHECK TELESCOPIC SENSOR	Р
Check steering telescopic sensor.	
Refer to ADP-92, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Repair or replace the malfunction parts. 5.CONFIRM THE OPERATION	

< SYMPTOM DIAGNOSIS >

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1.

DOOR MIRROR : Diagnosis Procedure

INFOID:000000003312507

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-71, "MIRROR SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 $\mathbf{3.}$ CHECK MIRROR MOTOR

Check mirror motor.

Refer to ADP-111, "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 <u>ADP-95</u>, "<u>DRIVER SIDE</u> : <u>Component Function Check</u>". (Driver side) Refer to <u>ADP-96</u>, "<u>PASSENGER SIDE</u> : <u>Component Function Check</u>". (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 <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure	INFOID:000000003515883	А
1.CHECK SYSTEM SETTING		В
 Check system setting. Refer to <u>ADP-11, "SYSTEM SETTING : Special Repair Requirement"</u>. Check the operation. 		С
<u>Is the inspection result normal?</u> YES >> Entry/Exit function is OK. NO >> GO TO 2. 2.PERFORM SYSTEM INITIALIZATION		D
 Perform system initialization. Refer to <u>ADP-9, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>. Check the operation. 		E
<u>Is the inspection result normal?</u> 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 <u>DLK-103</u> , "WITH AUTOMATIC BACK DOOR : Component Function Check". Is the inspection result normal? YES >> GO TO 4.		Н
NO >> Repair or replace the malfunction parts. 4.CONFIRM THE OPERATION		I
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.		AD

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INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000003312510

1. CHECK DOOR LOCK FUNCTION

Check door lock function. Refer to DLK-14, "Work Flow".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. PERFORM MEMORY STORING PROCEDURE

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

Is the inspection result normal?

- YES >> Intelligent Key inter lock function is normal.
- NO >> Replace driver seat control unit. Refer to <u>ADP-204, "Removal and Installation"</u>.

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

	A
Diagnosis Procedure	INFOID:00000003639907
1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT	В
Check tilt & telescopic switch ground circuit. Refer to <u>ADP-75, "Diagnosis Procedure"</u> .	
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.	
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> .	E
NO >> GO TO 1.	F

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< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000003312512

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.	<u>ADP-9</u>
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 be- fore delivery (initial setting).	Change the settings.	<u>ADP-11</u>
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-30</u>
Lumbar support does not per- form memory operation.	The lumbar support system are con- trolled independently with no link to the automatic drive positioner system.	_	Lumbar support system: <u>SE-8</u>
Memory function, entry/exit as- sist function, or Intelligent Key in- terlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: <u>ADP-22</u>
			Exit assist function: <u>ADP-26</u>
			Entry assist function: <u>ADP-30</u>
			Intelligent Key interlock function: <u>ADP-34</u>

< PRECAUTION >

PRECAUTION PRECAUTIONS

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

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

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIRBAG".
- 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

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

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Revision: 2008 October

ON-VEHICLE REPAIR DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-99, "Exploded View".

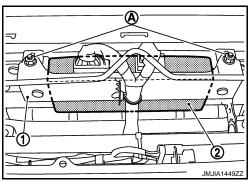
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the driver seat (1). Refer to <u>SE-106, "Removal and</u> <u>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-</u><u>TIONAL SERVICE WHEN REPLACING CONTROL UNIT</u>: <u>Description</u>".

INFOID:000000003312516

INFOID:00000003312517

Revision: 2008 October

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ON-VEHICLE REPAIR >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

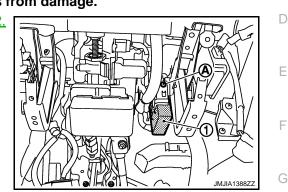
Refer to IP-11, "Exploded View".

Removal and Installation

REMOVAL

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

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



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INFOID:00000003312518

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INSTALLATION Install in the reverse order of removal. CAUTION:

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

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

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< ON-VEHICLE REPAIR >

SEAT MEMORY SWITCH

Exploded View

Refer to INT-11, "FRONT DOOR FINISHER : Exploded View".

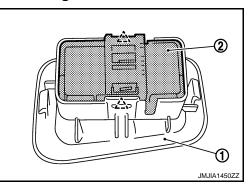
Removal and Installation

REMOVAL

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

- 1. Remove the seat memory finisher (1). Refer to <u>INT-11, "FRONT</u> <u>DOOR FINISHER : Removal and Installation"</u>.
- 2. Press pawls and remove seat memory switch (2) from seat memory finisher (1).

<u>____:</u> Pawl



INSTALLATION

Install in the reverse order of removal.

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, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.

INFOID:000000003312520

INFOID:000000003312521

POWER SEAT SWITCH

< ON-VEHICLE REPAIR	>
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POWER SEAT SWITCH

Exploded View INFOID:000000003312522 Refer to SE-99, "Exploded View". **Removal and Installation** INFOID:000000003312523 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-106</u>, 1"Removal and Installation". 2. Remove the screws (A). $\mathbf{\overline{2}}$ 3. Remove the power seat switch (2) from the seat cushion outer finisher (1). Ŕ Â JMJIA1451ZZ **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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< ON-VEHICLE REPAIR >

TILT&TELESCOPIC SWITCH

Exploded View

Refer to IP-11, "Exploded View".

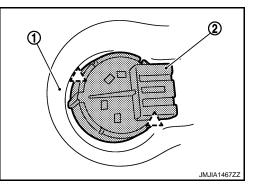
Removal and Installation

REMOVAL

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

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

2 : Pawl



INSTALLATION

Install in the reverse order of removal. **CAUTION:**

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

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

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INFOID:000000003312525