# **AUTOMATIC DRIVE POSITIONER**

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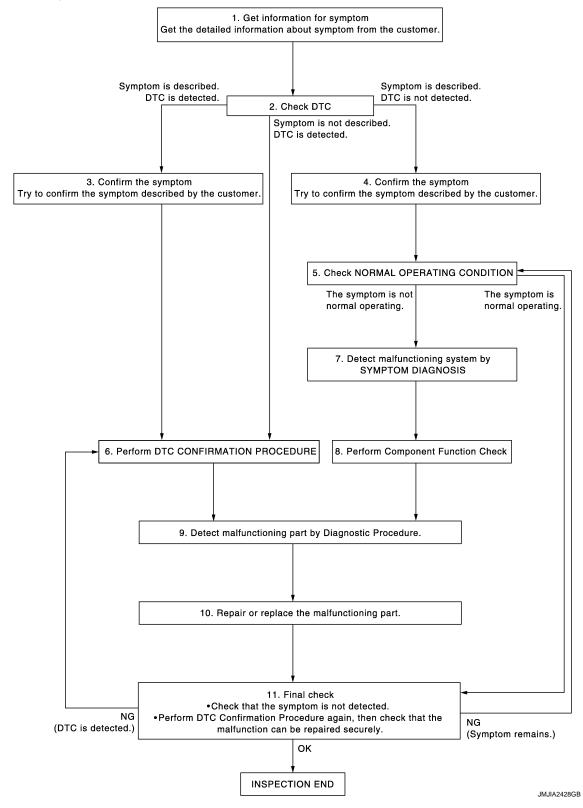
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# **BASIC INSPECTION**

# DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

### **OVERALL SEQUENCE**



# **DIAGNOSIS AND REPAIR WORKFLOW** < BASIC INSPECTION > $1.\mathsf{GET}$ INFORMATION FOR SYMPTOM Α Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred). В >> GO TO 2. 2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM Check "Self Diagnostic Result" with CONSULT-III. Refer to ADP-165, "DTC Index" Is any symptom described and any DTC is displayed? Symptom is described, DTC is displayed.>>GO TO 3. D Symptom is not described, DTC is displayed.>>GO TO 6. Symptom is described, DTC is not displayed.>>GO TO 4. 3.CONFIRM THE SYMPTOM Try to confirm the symptom described by the customer. >> GO TO 6. 4.CONFIRM THE SYMPTOM Try to confirm the symptom described by the customer. >> GO TO 5. CHECK NORMAL OPERATING CONDITION Н Check normal operating condition. Refer to ADP-233, "Description". Is the incident normal operation? >> INSPECTION END YES NO >> GO TO 7. $\mathsf{6}.$ PERFORM DTC CONFIRMATION PROCEDURE ADP Perform the confirmation procedure for the detected DTC. Is the DTC displayed? >> GO TO 8. YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident". NO $7.\mathsf{DETECT}$ MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom. M >> GO TO 8. 8.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 9.

# 9.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

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>> GO TO 10.

# 10. REPARE OR REPLACE

Repair or replace the malfunctioning part.

# **DIAGNOSIS AND REPAIR WORKFLOW**

### < BASIC INSPECTION >

>> GO TO 11.

# 11. FINAL CHECK

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

### Are all malfunctions corrected?

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

### < BASIC INSPECTION >

### INSPECTION AND ADJUSTMENT

# ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description INFOID:0000000005631958

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

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

### NOTE:

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

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Special Repair Requirement INFOID:0000000005631959

# 1.SYSTEM INITIALIZATION

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

>> GO TO 2.

# 2.system setting

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

>> GO TO 3.

# 3.MEMORY STORING

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

### >> END

# ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description

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 memory storing
Intelligent Key interlock	Erased	Perform memory storing
Seat synchronization	OFF	_

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

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Special Repair Requirement INFOID:0000000005631961

# 1.system initialization

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### < BASIC INSPECTION >

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

>> GO TO 2.

# 2. SYSTEM SETTING

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

>> GO TO 3.

# 3.MEMORY STORING

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

>> END

### SYSTEM INITIALIZATION

# SYSTEM INITIALIZATION: Description

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

### SYSTEM INITIALIZATION: Special Repair Requirement

INFOID:0000000005631963

INFOID:0000000005631962

### INITIALIZATION PROCEDURE

**1.** STEP-1

Slide the seat to the front edge.

### NOTE:

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

>> END

### MEMORY STORING

# MEMORY STORING: Description

INFOID:0000000005631964

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

# MEMORY STORING: Special Repair Requirement

INFOID:0000000005631965

### Memory Storage Procedure

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

**1.**STEP 1

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

>> GO TO 2.

# **2.**STEP 2

Turn ignition switch ON.

>> GO TO 3.

# 3.STEP 3

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

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< BASI	IC INSPECTION >	
1	>> GO TO 4.	
<b>4.</b> STE		
	ush set switch. DTE:	
• 1	Memory indicator for which driver seat position is already retained in memory is illuminate	ed for 5 sec
	onds. Memory indicator for which driver seat position is not retained in memory is illuminated for	0.5 second
2. Pu	ush the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the se	
	OTE: memory is stored in the same memory switch, the previous memory will be deleted.	
	u need linking of Intelligent Key?	
YES	>> GO TO 6.	
NO <b>5.</b> STE	>> GO TO 5.	
Confirm	m the operation of each part with memory operation.	
	>> END	
<b>6.</b> STE	EP 6	
Turn ig	gnition switch OFF (LOCK).	
7 -	>> GO TO 7.	
<b>7.</b> STE		
	s and release set switch. Memory switch indicator is illuminated for 5 seconds. During material ator is illuminated, press Intelligent Key unlock button while pressing memory switch 1 or 2	
NOTE:	:	
Memor	ry switch indicator lamp blinks for 5 seconds when registration is complete.	
	>> GO TO 8.	
<b>8.</b> STE		
Confirn	m the operation of each part with memory operation and Intelligent Key interlock operation	
CVCT	>> END	
	TEM SETTING	
SYST	ΓΕΜ SETTING : Description	INFOID:000000000563196
The se	etting of the automatic driving positioner system can be changed using the set switch.	
SYST	ΓΕΜ SETTING : Special Repair Requirement	INFOID:000000000563196
	ING PROCEDURE	
<b>1.</b> STE	EP-1	
	e vehicle to the following condition.  Ion position: ACC	
<ul> <li>A/T s</li> </ul>	selector lever: P position (A/T models)	
<ul> <li>Parki</li> </ul>	ing brake: Applied only (M/T models)	
	>> GO TO 2.	
<b>2</b> .ste		

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

# < BASIC INSPECTION >

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

### NOTE:

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

>> END.

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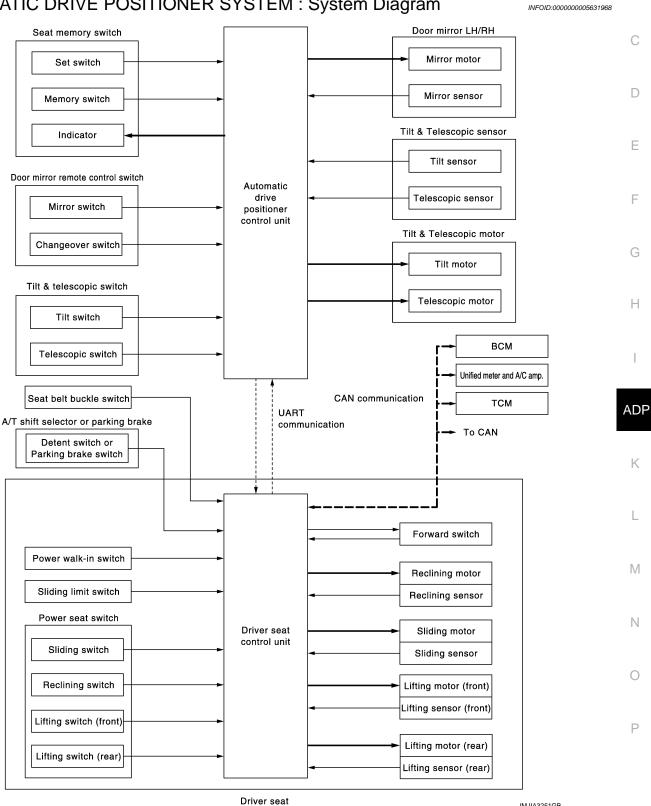
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# SYSTEM DESCRIPTION

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

# AUTOMATIC DRIVE POSITIONER SYSTEM: System Diagram



### < SYSTEM DESCRIPTION >

# AUTOMATIC DRIVE POSITIONER SYSTEM: System Description

INFOID:0000000005631969

### **OUTLINE**

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

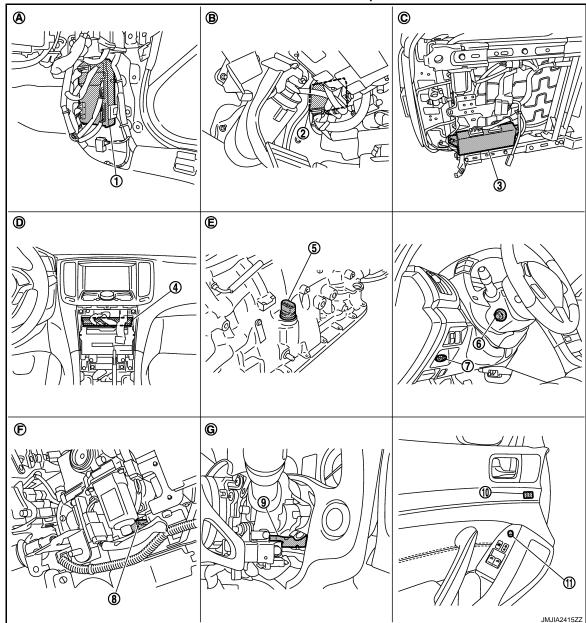
Function	Description
Manual function	The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch.
Seat synchronization function	The positions of the steering column and door mirror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

### < SYSTEM DESCRIPTION >

# AUTOMATIC DRIVE POSITIONER SYSTEM: Component Parts Location INFOID:000000005631970



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

- 2. Automatic drive positioner control unit 3.
- 5. A/T assembly
- 8. Tilt sensor
- 11. Door mirror remote control switch
- View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)
- Driver seat control unit
- 6. Tilt & telescopic switch
- 9. Telescopic sensor
- C. Backside of seat cushion (driver side)
- F. View with instrument driver lower panel removed

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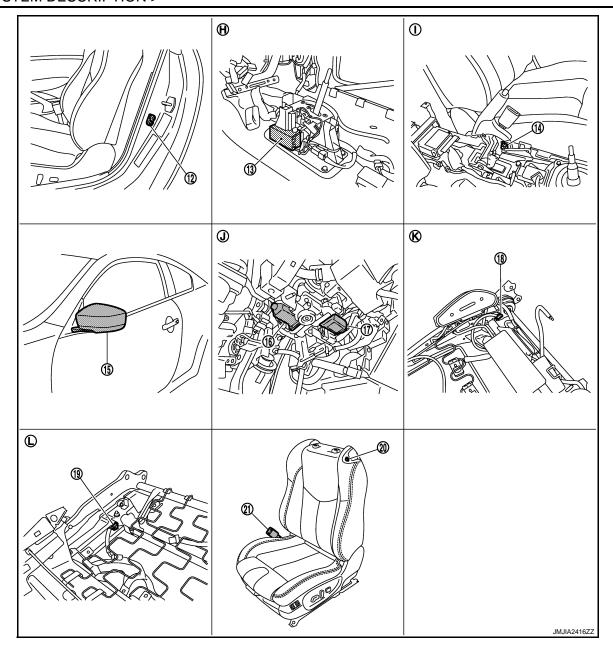
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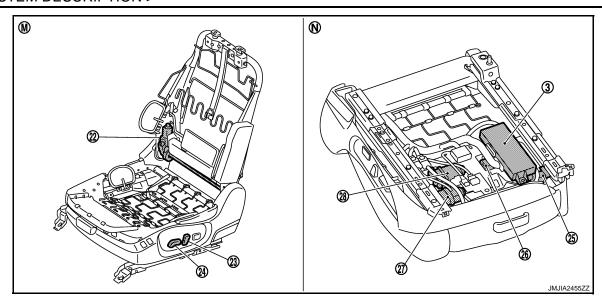
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- 12. Driver side door switch
- 15. Door mirror (driver side)
- 18. Forward switch
- 21. Seat belt buckle switch (driver side)
- H. View with center console assembly is removed.
- K. View with seat back pad is removed. L.
- 13. A/T shift selector (detention switch)
- 16. Telescopic motor
- 19. Sliding limit switch
  - View with center console assembly is removed.
  - View with seat cushion pad is removed.
- 14. Parking brake switch
- 17. Tilt motor
- 20. Power walk-in switch
- View with instrument driver lower panel is removed.

### < SYSTEM DESCRIPTION >



22. Reclining motor

- 23. Reclining switch (Power seat switch)
- 24. Sliding, lifting switch (Power seat switch)

25. Sliding sensor

- 26. Lifting motor (front)
- 27. Sliding motor

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

# AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description

INFOID:0000000005631971

### **CONTROL UNITS**

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

### **INPUT PARTS**

### Switches

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

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### < SYSTEM DESCRIPTION >

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

### Sensors

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

### **OUTPUT PARTS**

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

### **SLEEP MODE**

- The seat control unit adopts the sleep mode to reduce the electric power consumption.
- The sleep mode is activated when all of the following condition are fulfilled.
- 1. Ignition switch turn OFF (steering LOCK position)
- 2. No load is applied to the seat control

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### < SYSTEM DESCRIPTION >

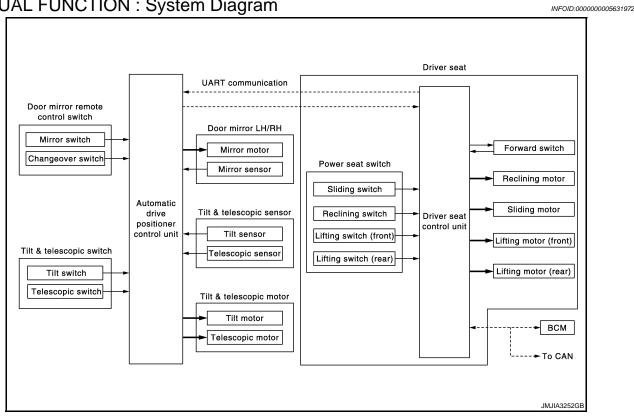
- The seat control unit 45seconds timer in not activated
- Set switch and memory switch (1 and 2) turn OFF

### WAKE-UP MODE

- The sleep mode is cancelled when any status change is detected for the followings.
- CAN communication
- Power seat switch
- Set switch and memory switch (1 and 2)
- Power walk-in switch
- 5. Door mirror switch
- Steering column switch

### MANUAL FUNCTION

# MANUAL FUNCTION: System Diagram



# MANUAL FUNCTION: System Description

### **OUTLINE**

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

### OPERATION PROCEDURE

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

### **DETAIL FLOW**

Seat Р

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### < SYSTEM DESCRIPTION >

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, reclining)	The driver seat control unit outputs signals to each motor according to the power seat switch input signal.

### Tilt & Telescopic

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

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

### Door Mirror

Order	Input	Output	Control unit condition
1	Door mirror remote control switch	_	The door mirror remote control switch signal is inputted to the automatic drive positioner control unit when the door mirror remote control switch is operated.
2	_	Motors (Door mirror motor)	The automatic drive positioner control unit actuates each motor according to the signal from the door mirror remote control switch.
3	Sensors (Mirror)	_	The automatic drive positioner control unit monitors the input of mirror sensor. It stops the operation if the input reaches the operation limit.

### NOTE:

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

### < SYSTEM DESCRIPTION >

# MANUAL FUNCTION: Component Parts Location

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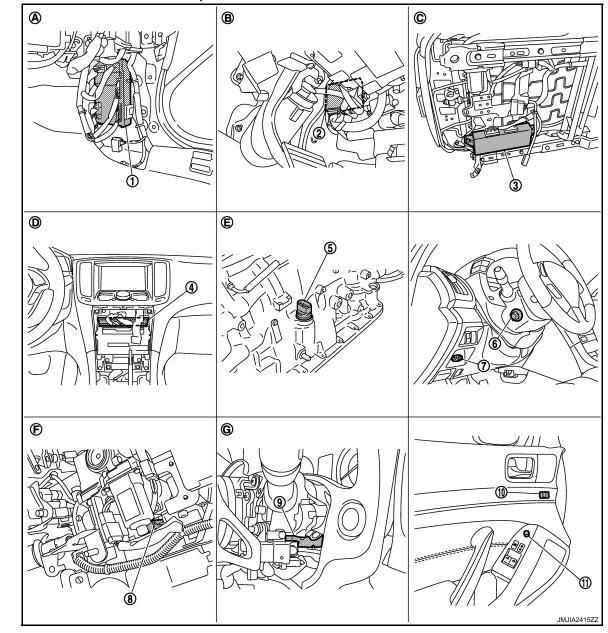
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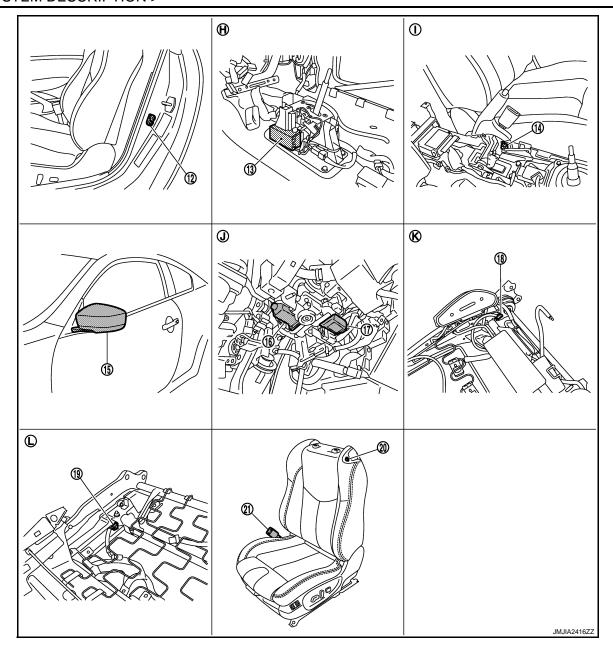
- 1. BCM
- 4. Unified meter and A/C amp.
- 7. Key slot
- 10. Seat memory switch
- A. Dash side lower (passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- 2. Automatic drive positioner control unit 3.
- 5. A/T assembly
- 8. Tilt sensor
- 11. Door mirror remote control switch
- View with instrument driver lower panel removed
- A/T assembly (TCM is built in A/T assembly)
- Driver seat control unit
- 6. Tilt & telescopic switch
- 9. Telescopic sensor
- C. Backside of seat cushion (driver side)
- View with instrument driver lower panel removed

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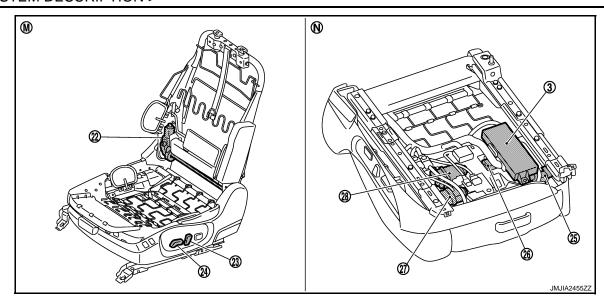
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- 12. Driver side door switch
- 15. Door mirror (driver side)
- 18. Forward switch
- 21. Seat belt buckle switch (driver side)
- H. View with center console assembly is removed.
- K. View with seat back pad is removed. L.
- 13. A/T shift selector (detention switch)
- 16. Telescopic motor
- 19. Sliding limit switch
- View with center console assembly is removed.
- View with seat cushion pad is removed.
- 14. Parking brake switch
- 17. Tilt motor
- 20. Power walk-in switch
- View with instrument driver lower panel is removed.

### < SYSTEM DESCRIPTION >



22. Reclining motor

- 23. Reclining switch (Power seat switch)
- 24. Sliding, lifting switch (Power seat switch)

25. Sliding sensor

- 26. Lifting motor (front)
- 27. Sliding motor

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

# MANUAL FUNCTION: Component Description

INFOID:0000000005631975

### **CONTROL UNITS**

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

### **INPUT PARTS**

### Switches

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

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# < SYSTEM DESCRIPTION >

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

### Sensors

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

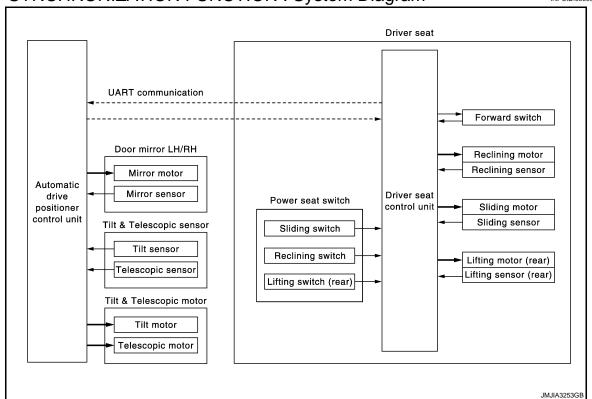
### **OUTPUT PARTS**

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

# SEAT SYNCHRONIZATION FUNCTION

# SEAT SYNCHRONIZATION FUNCTION : System Diagram

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SEAT SYNCHRONIZATION FUNCTION : System Description

INFOID:0000000005631977

**OUTLINE** 

### < SYSTEM DESCRIPTION >

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

### NOTE:

This function is set to OFF before delivery. (initial setting)

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

### OPERATION PROCEDURE

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

### NOTE:

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

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

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

### **OPERATION CONDITION**

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

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

### **DETAIL FLOW**

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

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

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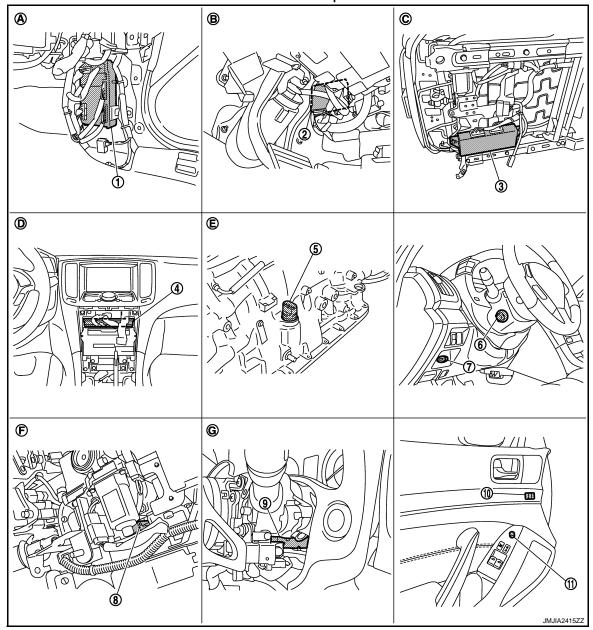
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### < SYSTEM DESCRIPTION >

# SEAT SYNCHRONIZATION FUNCTION: Component Parts Location

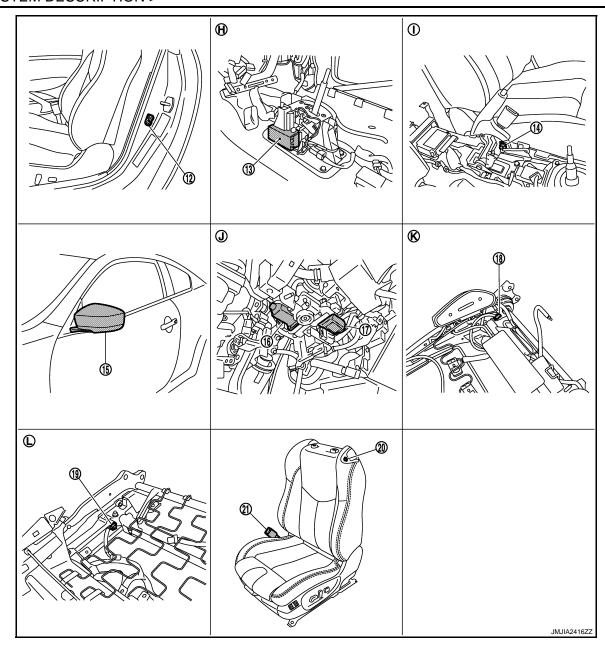
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- 1. BCM
- 4. Unified meter and A/C amp.
- 7. Key slot
- 10. Seat memory switch
- A. Dash side lower (passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- 2. Automatic drive positioner control unit 3.
- 5. A/T assembly
- Tilt sensor
- 11. Door mirror remote control switch
- View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)
- Driver seat control unit
- 6. Tilt & telescopic switch
- 9. Telescopic sensor
- C. Backside of seat cushion (driver side)
- View with instrument driver lower panel removed

### < SYSTEM DESCRIPTION >



- 12. Driver side door switch
- 15. Door mirror (driver side)
- 18. Forward switch
- 21. Seat belt buckle switch (driver side)
- H. View with center console assembly is removed.
- K. View with seat back pad is removed. L.
- 13. A/T shift selector (detention switch)
- 16. Telescopic motor
- 19. Sliding limit switch
- I. View with center console assembly is removed.
  - View with seat cushion pad is removed.
- 14. Parking brake switch
- 17. Tilt motor
- 20. Power walk-in switch
- J. View with instrument driver lower panel is removed.

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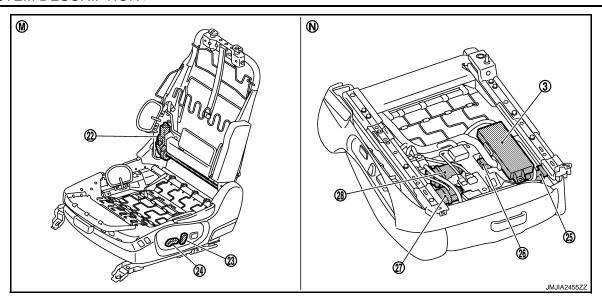
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### < SYSTEM DESCRIPTION >



22. Reclining motor

- 23. Reclining switch (Power seat switch)
- 24. Sliding, lifting switch (Power seat switch)
- 26. Lifting motor (front)
- 25. Sliding sensor 28. Lifting motor (rear)
- M. View with seat cushion pad and seat- N. Backside of seat cushion back pad are removed.
- 27. Sliding motor

# SEAT SYNCHRONIZATION FUNCTION: Component Description

INFOID:0000000005631979

### **CONTROL UNITS**

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

### **INPUT PARTS**

### **Switches**

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

### Sensors

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

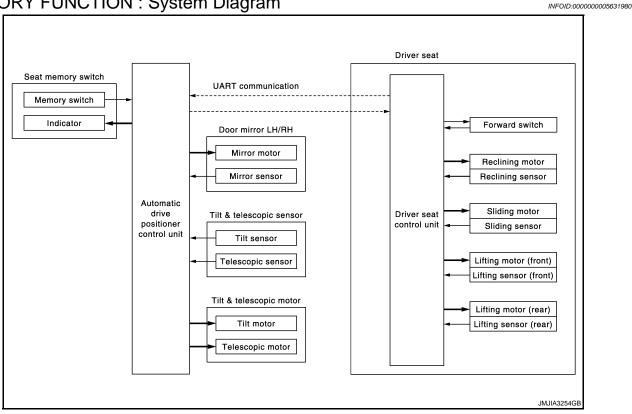
### < SYSTEM DESCRIPTION >

### **OUTPUT PARTS**

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

### MEMORY FUNCTION

**MEMORY FUNCTION: System Diagram** 



# **MEMORY FUNCTION: System Description**

**OUTLINE** 

The driver seat control unit can store the optimum driving positions (seat, steering column and door mirror position) for 2 people. If the front seat position is changed, one-touch (pressing desired memory switch for more than 0.5 second) operation allows changing to the other driving position.

NOTE:

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

### **OPERATION PROCEDURE**

- 1. Turn ignition switch ON
- Press desired memory switch for more than 0.5 second.
- 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.

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# < SYSTEM DESCRIPTION >

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

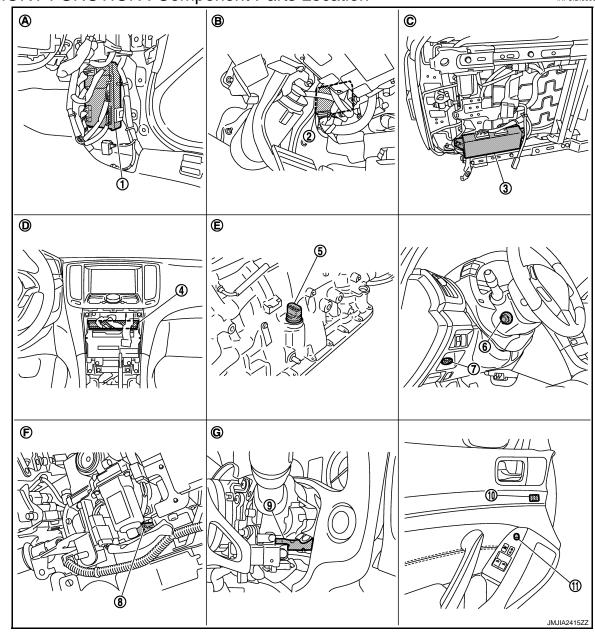
# **DETAIL FLOW**

Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the automatic drive positioner control unit when memory switch 1 or 2 is operated.  Memory switch signal is output to driver seat control unit via UART communication.
2 —	Motors (Seat, steering, door mirror)	Driver seat control unit operates each motor of seat when it recognizes the memory switch pressed for 0.5 second or more and requests each motor operation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor.	
	Memory switch Indicator	Driver seat control unit requests the flashing of memory indicator to automatic drive positioner control unit via UART communication while either of the motors is operating. The automatic drive positioner control unit illuminates the memory indicator.	
3	Sensors (Seat, steering, door mirror)	_	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirror are monitored with each sensor signal that is input from auto drive positioner control unit via UART communication. Driver seat control unit stops the operation of each motor when each part reaches the recorded address.
4	_	Memory switch Indicator	Driver seat control unit requests the illumination of memory indicator to auto drive positioner control unit via UART communication after all motors stop. The auto driving positioner control unit illuminates the memory indicator for 5 seconds.

### < SYSTEM DESCRIPTION >

# **MEMORY FUNCTION: Component Parts Location**

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

- 2. Automatic drive positioner control unit 3.
- 5. A/T assembly
- 8. Tilt sensor
- 11. Door mirror remote control switch
- View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)
- . Driver seat control unit
- 6. Tilt & telescopic switch
- 9. Telescopic sensor
- C. Backside of seat cushion (driver side)
- F. View with instrument driver lower panel removed

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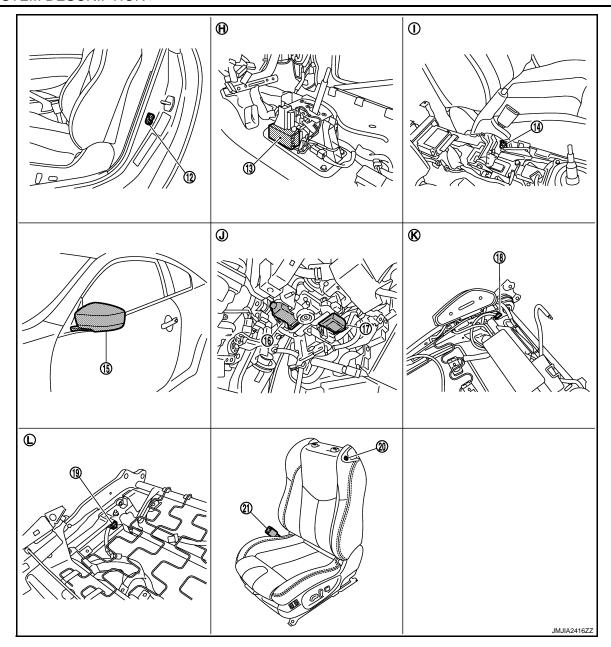
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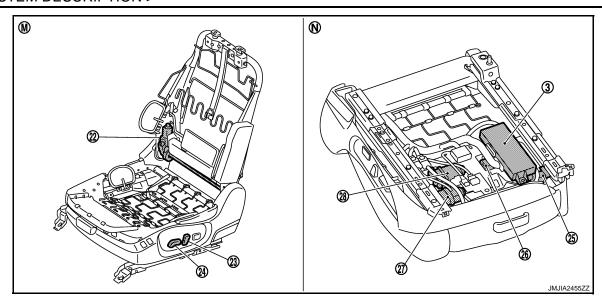
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- 12. Driver side door switch
- 15. Door mirror (driver side)
- 18. Forward switch
- 21. Seat belt buckle switch (driver side)
- H. View with center console assembly is removed.
- K. View with seat back pad is removed. L.
- 13. A/T shift selector (detention switch)
- 16. Telescopic motor
- 19. Sliding limit switch
- View with center console assembly is removed.
- View with seat cushion pad is removed.
- 14. Parking brake switch
- 17. Tilt motor
- 20. Power walk-in switch
- View with instrument driver lower panel is removed.

### < SYSTEM DESCRIPTION >



22. Reclining motor

- 23. Reclining switch (Power seat switch)
- 24. Sliding, lifting switch (Power seat switch)

25. Sliding sensor

- 26. Lifting motor (front)
- 27. Sliding motor

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

# MEMORY FUNCTION: Component Description

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### **CONTROL UNITS**

Item	Function
Driver seat control unit	<ul> <li>The address of each part is recorded.</li> <li>Operates each motor of seat to the registered position.</li> <li>Requests the operations of steering column and door mirror to automatic drive positioner control unit</li> </ul>
Automatic drive positioner control unit	Operates the steering column and door mirror with the signal 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.
Forward switch	Detect folded down or folded up of the seat back.

### Sensors

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

### **OUTPUT PARTS**

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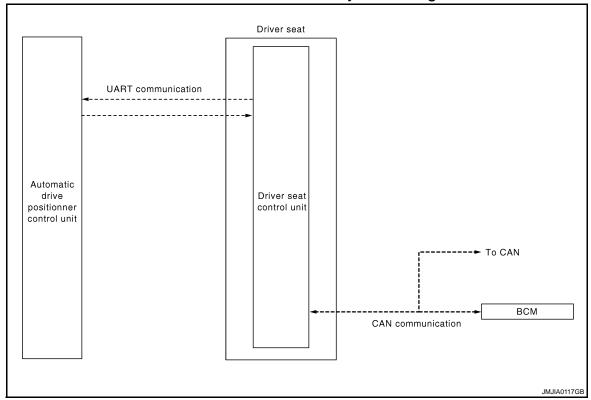
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Item	Function	
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.	
Tilt & telescopic motor	Move the steering column upward/downward and forward/backward.	
Lifting motor (front)	Move the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

# INTELLIGENT KEY INTERLOCK FUNCTION

# INTELLIGENT KEY INTERLOCK FUNCTION: System Diagram

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# INTELLIGENT KEY INTERLOCK FUNCTION: System Description

INFOID:0000000005631985

### **OUTLINE**

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

### **OPERATION PROCEDURE**

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

### NOTE:

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

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

### **OPERATION CONDITION**

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

# < SYSTEM DESCRIPTION >

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

### **DETAIL FLOW**

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

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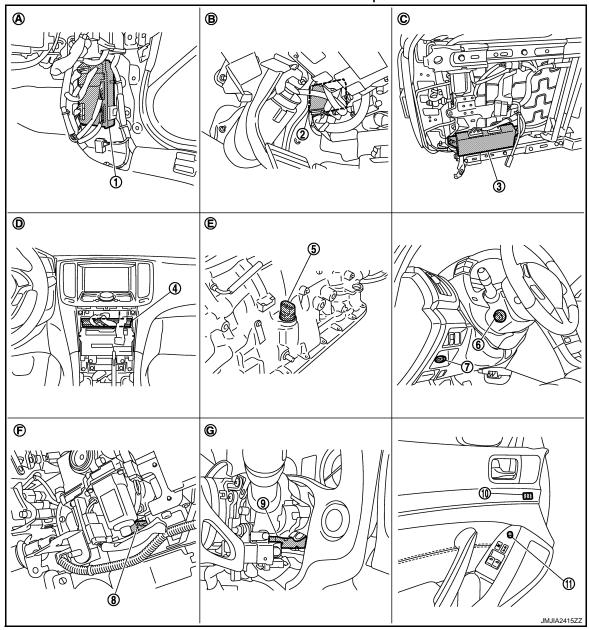
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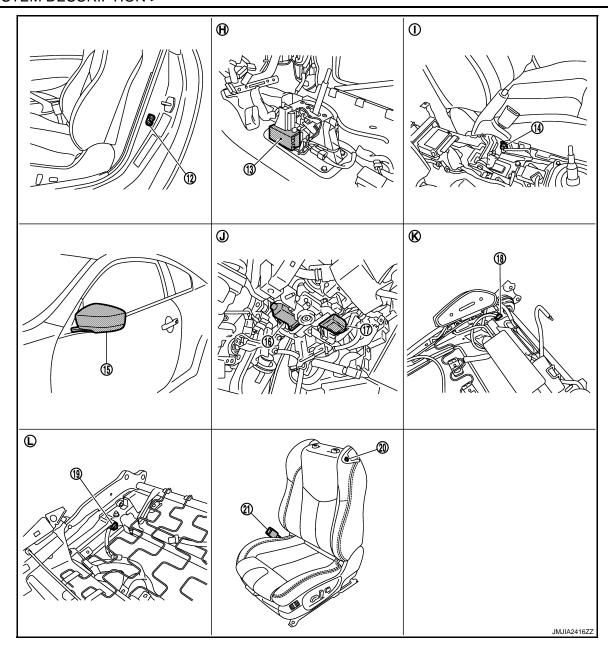
# INTELLIGENT KEY INTERLOCK FUNCTION: Component Parts Location INFOID:000000005631986



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

- 2. Automatic drive positioner control unit 3.
- 5. A/T assembly
- Tilt sensor
- 11. Door mirror remote control switch
- View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)
- Driver seat control unit
- 6. Tilt & telescopic switch
- 9. Telescopic sensor
- C. Backside of seat cushion (driver side)
- View with instrument driver lower panel removed

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- 12. Driver side door switch
- 15. Door mirror (driver side)
- 18. Forward switch
- 21. Seat belt buckle switch (driver side)
- H. View with center console assembly is removed.
- $\mbox{K.} \quad \mbox{View with seat back pad is removed.} \ \mbox{L.}$
- 13. A/T shift selector (detention switch)
- 16. Telescopic motor
- 19. Sliding limit switch
- I. View with center console assembly is removed.
  - View with seat cushion pad is removed.
- 14. Parking brake switch
- 17. Tilt motor
- 20. Power walk-in switch
- J. View with instrument driver lower panel is removed.

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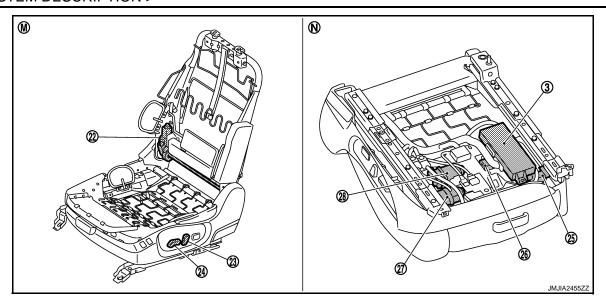
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#### < SYSTEM DESCRIPTION >



22. Reclining motor

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

25. Sliding sensor

28. Lifting motor (rear)

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

## INTELLIGENT KEY INTERLOCK FUNCTION: Component Description

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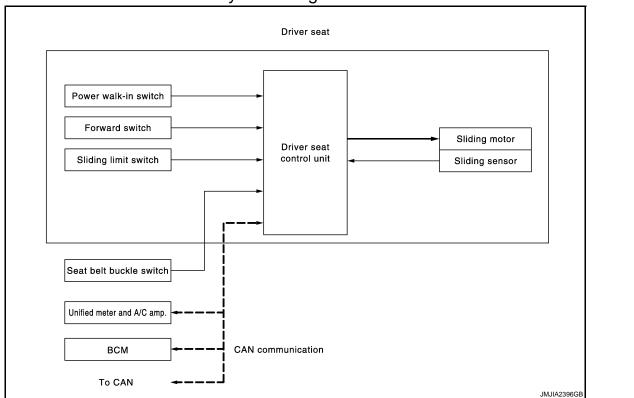
#### **CONTROL UNITS**

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

## POWER WALK-IN FUNCTION

#### < SYSTEM DESCRIPTION >

## POWER WALK-IN FUNCTION: System Diagram



## POWER WALK-IN FUNCTION: System Description

#### OUTLINE

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

#### Forward Operation

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

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

#### **Backward Operation**

The seat back is folded up after performing the forward operation of power walk-in function. Slide (backward) it to the position before performing the forward operation by operating the power walk-in switch.

If the manual operation, memory operation, and Intelligent Key interlock operation are performed after performing the forward operation, do not perform the backward operation.

#### OPERATION PROCEDURE

#### **Forward Operation**

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

#### **Backward Operation**

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

#### **OPERATION CONDITION**

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

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## < SYSTEM DESCRIPTION >

## Forward Operation

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

#### **Backward Operation**

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

#### **DETAIL FLOW**

## Forward Operation

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

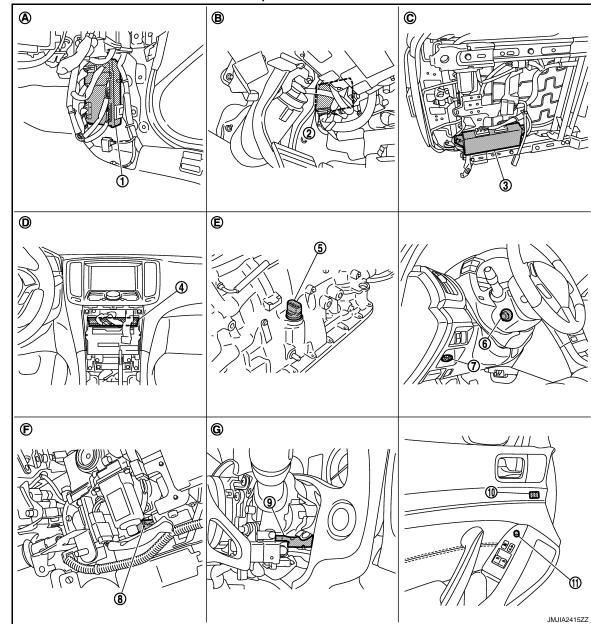
#### **Backward Operation**

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

#### < SYSTEM DESCRIPTION >

## POWER WALK-IN FUNCTION : Component Parts Location

INFOID:0000000005631990



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

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

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

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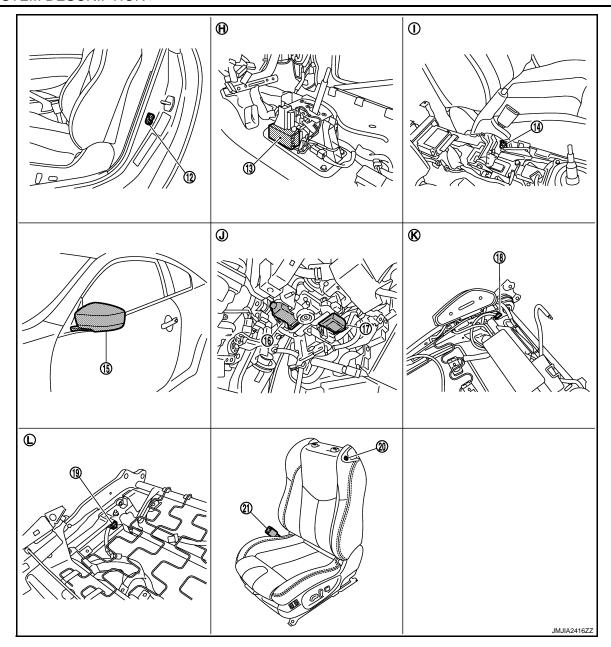
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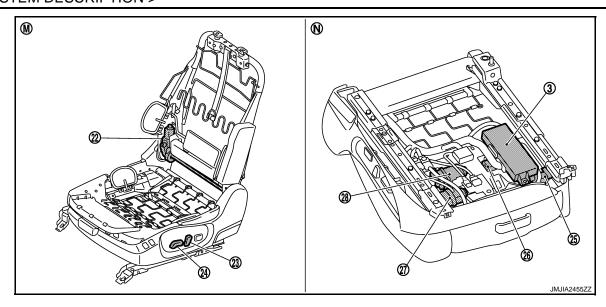
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- 12. Driver side door switch
- 15. Door mirror (driver side)
- 18. Forward switch
- 21. Seat belt buckle switch (driver side)
- H. View with center console assembly is removed.
- ${\sf K.} \quad {\sf View \ with \ seat \ back \ pad \ is \ removed. \ \ L.}$
- 13. A/T shift selector (detention switch)
- 16. Telescopic motor
- 19. Sliding limit switch
- View with center console assembly is removed.
- View with seat cushion pad is removed.
- 14. Parking brake switch
- 17. Tilt motor
- 20. Power walk-in switch
- View with instrument driver lower panel is removed.

#### < SYSTEM DESCRIPTION >



22. Reclining motor

- 23. Reclining switch (Power seat switch)
- 24. Sliding, lifting switch (Power seat switch)

25. Sliding sensor

- 26. Lifting motor (front)
- 27. Sliding motor

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

## POWER WALK-IN FUNCTION : Component Description

INFOID:0000000005631991

#### **CONTROL UNITS**

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

#### **INPUT PARTS**

#### **Switches**

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

#### Sensors

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

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## < SYSTEM DESCRIPTION >

## **OUTPUT PARTS**

Item	Function			
Sliding motor	Slide the seat forward/backward.			

## **DIAGNOSIS SYSTEM (DRIVER SEAT C/U)**

#### < SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

## **Diagnosis Description**

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

#### DIAGNOSTIC MODE

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

## **CONSULT-III Function**

SELF DIAGNOSTIC RESULTS

Refer to ADP-165, "DTC Index".

#### **DATA MONITOR**

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW 1	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW-FR*3	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW-RR*3	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW-FR*3	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW-RR*3	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW-UP*3	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (upward) signal.
LIFT FR SW-DN*3	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (downward) signal.
LIFT RR SW-UP*3	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (upward) signal.
LIFT RR SW-DN*3	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (downward) signal.
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (upward) signal.
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (downward) signal.
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.

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## **DIAGNOSIS SYSTEM (DRIVER SEAT C/U)**

### < SYSTEM DESCRIPTION >

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

<sup>\*1:</sup> M/T models display all item except this item.

#### **ACTIVE TEST**

#### **CAUTION:**

## When driving vehicle, never perform active test.

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

<sup>\*2:</sup> A/T models display all item except this item.

 $<sup>^{\</sup>star3}$ : Only this item is displayed for driver seat without automatic drive positioner system.

<sup>\*4:</sup> It is displayed but is not operated for models with driver seat without automatic driver positioner system.

## DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

### < SYSTEM DESCRIPTION >

Test item	Description	
SEAT LIFTER FR	Activates/deactivates the lifting motor (front).	
SEAT LIFTER RR	Activates/deactivates the lifting motor (rear).	
TILT MOTOR*	Activates/deactivates the tilt motor.	
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.	

<sup>\*:</sup> Does not display without automatic driver position system.

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# DTC/CIRCUIT DIAGNOSIS

#### U1000 CAN COMM CIRCUIT

Description INFOID:000000005631994

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	<ul> <li>Driver seat control unit cannot communicate to other control units.</li> <li>Driver seat control unit cannot communicate for more than the specified time.</li> </ul>	Harness or connectors (CAN communication line is open or shorted)

#### DTC CONFIRMATION PROCEDURE

#### **1.**STEP 1

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

#### Is the DTC detected?

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

NO >> INSPECTION END

#### Diagnosis Procedure

INFOID:0000000005631996

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

## Special Repair Requirement

INFOID:0000000005631997

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

### **B2112 SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### **B2112 SLIDING MOTOR**

Description INFOID:0000000005631998

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

**DTC** Logic INFOID:0000000005631999

#### DTC DETECTION LOGIC

#### NOTE:

First perform diagnosis for B2126 if B2126 is detected.

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

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

Turn ignition switch ON.

Check "Self diagnostic result" using CONSULT-III.

#### Is the DTC detected?

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

NO >> INSPECTION END

## Diagnosis Procedure

1. CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)

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

(+) Sliding motor		(-)	Voltage (V) (Approx.)	L
Connector	Terminals		(Approxi)	
B525	35 42	Ground	0	M

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

## 2.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(* 1997-5711)	
B525	35	Ground	0	
B323	42	- Ground	U	

#### Is the inspection result normal?

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### **B2112 SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace driver seat control unit. Refer to <u>ADP-236</u>, "Removal and Installation"

3. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

#### **B2113 RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### **B2113 RECLINING MOTOR**

**Description** 

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

DTC Logic

#### DTC DETECTION LOGIC

#### NOTE:

First perform diagnosis for B2126 if B2126 is detected.

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

#### DTC CONFIRMATION PROCEDURE

## 1. PEFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

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

NO >> INSPECTION END

## Diagnosis Procedure

1. CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+) Reclining motor		(–)	Voltage (V) (Approx.)	
Connector	Terminals		(/ (PP-0711)	
B523	36	Ground	0	
D323	44	Ground	U	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

## 2.check driver seat control unit output signal

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

(+)			Voltago (V)	
Driver seat control unit		(–)	Voltage (V) (Approx.)	
Connector	Terminals			
B523	36	Ground	0	
B523	44	- Ground	0	

Is the inspection result normal?

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### **B2113 RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

#### **B2118 TILT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## B2118 TILT SENSOR

Description INFOID:0000000005632004

- The tilt sensor is installed to the steering column assembly.
- The resistance of tilt sensor is changed according to the up/down position of steering column.
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of tilt sensor resistance. Automatic drive positioner control unit calculates the tilt position from the voltage.

DTC Logic

#### DTC DETECTION LOGIC

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

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

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

NO >> INSPECTION END

## Diagnosis Procedure

## 1. CHECK TILT SENSOR SIGNAL

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

Monitor item	Condition	Value
TILT SEN	Tilt position	Change between 1.1 V (close to top) 3.9 V (close to bottom)

#### Is the value normal?

YES >> GO TO 6.

NO >> GO TO 2.

### 2.CHECK TILT SENSOR CIRCUIT

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

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

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

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#### **B2118 TILT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK TILT SENSOR POWER SUPPLY

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

(+) Tilt & telescopic sensor		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(/ (pp. 6/4)	
M48	1	Ground	5	

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## 4.CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive po	sitioner control unit	Tilt & teleso	copic sensor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	33	M48	1	Existed

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK TILT SENSOR GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness.

#### 6. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

## **B2118 TILT SENSOR**

### < DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

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#### **B2119 TELESCOPIC SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2119 TELESCOPIC SENSOR**

Description INFOID:000000005632007

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

DTC Logic

#### DTC DETECTION LOGIC

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

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC is detected?

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

NO >> INSPECTION END

## Diagnosis Procedure

INFOID:0000000005632009

## 1. CHECK TELESCOPIC SENSOR SIGNAL

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

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

#### Is the valve normal?

YES >> GO TO 6. NO >> GO TO 2.

## 2.CHECK TELESCOPIC SENSOR CIRCUIT

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

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

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

#### **B2119 TELESCOPIC SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK TELESCOPIC SENSOR POWER SUPPLY

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

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## 4.CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

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

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

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

### 5. CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness.

#### 6. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

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## **B2119 TELESCOPIC SENSOR**

>> INSPECTION END

#### **B2126 DETENT SW**

Description INFOID:0000000005632010

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

 The driver seat control unit judges that the A/T selector lever is in P position if continuity does not exist in this circuit.

DTC Logic INFOID:0000000005632011

#### DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2126	DETENT SW	Selector lever is in P position and the vehicle speed of 7 $\pm$ 4 km/h is detected.	Harness and connectors     (Detention switch circuit is opened/shorted.)     Detention switch     Unified meter and A/C amp.     (CAN communication)	

#### DTC CONFIRMATION PROCEDURE

### 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-59, "Diagnosis Procedure".

NO >> INSPECTION END

## Diagnosis Procedure

## CHECK DTC WITH "BCM"

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

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

>> Check the DTC. Refer to BCS-74, "DTC Index". YES

NO >> GO TO 2.

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

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

#### Is the DTC detected?

YES >> Check the DTC. Refer to MWI-102, "DTC Index".

NO >> GO TO 3.

## 3.CHECK DETENTION SWITCH SIGNAL

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

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

#### Is the status normal?

YES >> GO TO 5.

>> GO TO 4. NO

## 4. CHECK DETENTION SWITCH CIRCUIT

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#### **B2126 DETENT SW**

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

#### **B2127 PARKING BRAKE SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### **B2127 PARKING BRAKE SWITCH**

Description INFOID:0000000005632013

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

DTC Logic INFOID:0000000005632014

#### DTC DETECTION LOGIC

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

#### DTC CONFIRMATION PROCEDURE

### 1.STEP 1

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

#### Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-61</u>, "<u>Diagnosis Procedure</u>".

NO >> INSPECTION END

### Diagnosis Procedure

## 1. CHECK PARKING BRAKE SWITCH SIGNAL

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

Monitor item	Condition		Status
PARK BRAKE SW	Parking brake	Applied	ON
FAIRE DIVARLE SW	raiking blake	Release	OFF

#### Is the status normal?

YES >> GO TO 5.

NO >> GO TO 2.

## 2.CHECK PARKING BRAKE SWITCH INPUT SIGNAL

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

(+) Parking brake switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal		( 44)	
B14	1	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 4. NO >> GO TO 3.

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#### **B2127 PARKING BRAKE SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

# 3. CHECK PARKING BRAKE SWITCH HARNESS CONTINUITY

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

Driver seat	Driver seat control unit		Parking brake switch	
Connector	Terminal	Connector Terminal		Continuity
B503	8	B14	1	Existed

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236. "Removal and Installation".

NO >> Repair or replace harness.

#### 4. CHECK PARKING BRAKE SWITCH

Refer to ADP-62, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Adjust or replace parking brake switch.

#### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

INFOID:0000000005632016

## 1. CHECK PARKING BRAKE SWITCH

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

Terminal		Condition		Continuity
Parking brake switch				Continuity
1	Ground part of Parking brake		Applied	Existed
	parking brake switch	I dikiliy biake	Other than above	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Adjust or replace parking brake switch.

#### **B2128 UART COMMUNICATION LINE**

#### < DTC/CIRCUIT DIAGNOSIS >

### **B2128 UART COMMUNICATION LINE**

Description INFOID:0000000005632017

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

**DTC** Logic INFOID:0000000005632018

#### 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. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-63, "Diagnosis Procedure".

>> INSPECTION END NO

## Diagnosis Procedure

1. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat	river seat control unit Automatic drive positioner control unit		Continuity	
Connector	Terminal	Connector Terminal		Continuity
B503	1	M51	10	Existed
<b>D</b> 000	17	IVIST	26	LAISIEU

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B503	1	Cround	Not existed
	17		INOL EXISTED

#### Is the inspection result normal?

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YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> Repair or replace harness.

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#### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## POWER SUPPLY AND GROUND CIRCUIT

**BCM** 

BCM : Diagnosis Procedure

INFOID:0000000005632020

### 1. CHECK FUSE AND FUSIBLE LINK

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

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

#### Is the fuse fusing?

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

NO >> GO TO 2.

## 2.CHECK POWER SUPPLY CIRCUIT

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

(+) BCM		(-)	Voltage (Approx.)	
Connector	Terminal		(, .Fb.ov.)	
M118	1	Ground	Rattory voltage	
M119	11	Ground	Battery voltage	

#### Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## 3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector Terminal		Ground	Continuity
M119 13			Existed

#### Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

#### DRIVER SEAT CONTROL UNIT

#### DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000005632021

#### NOTE:

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

## 1. CHECK POWER SUPPLY CIRCUIT

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

#### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(· .PP1000)	
B504	33	Cround	Pottony voltage	
D304	40	- Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following.

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

## 2.CHECK GROUND CIRCUIT

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B503	32	- Ground	Existed
B504	48		Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

### DRIVER SEAT CONTROL UNIT: Special Repair Requirement

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

### >> Refer to ADP-64, "DRIVER SEAT CONTROL UNIT: Diagnosis Procedure".

#### AUTOMATIC DRIVE POSITIONER CONTROL UNIT

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Procedure

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

#### 1. CHECK POWER SUPPLY CIRCUIT

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

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

#### Is the inspection result normal?

>> GO TO 2.

NO - 1 >> Repair or replace harness between automatic drive positioner control unit and fuse block (J/B).

NO - 2 >> Check circuit breaker.

## 2.CHECK GROUND CIRCUIT

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

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#### **POWER SUPPLY AND GROUND CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Special Repair Requirement

INFOID:0000000005632024

## 1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

#### SLIDING SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### SLIDING SWITCH

Description INFOID:0000000005632025

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

## Component Function Check

## INFOID:0000000005632026

## 1. CHECK FUNCTION

- Turn ignition switch ON.
- Select "SLIDE SW-FR", "SLIDE SW-RR" in the "Data monitor" mode using 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	Sliding Switch (lorward)	Release	OFF
SLIDE SW-RR	Sliding switch (backward)	Operate	ON
SLIDE SW-IXIX	Siluling Switch (backward)	Release	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

## Diagnosis Procedure

1. CHECK SLIDING SWITCH SIGNAL

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

(+)		(-)	Voltage (V) (Approx.)	
Power seat switch				
Connector	Terminal		, , , , , , , , , , , , , , , , , , ,	
B510	11	Ground	Pottory voltage	
D310	26	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2.CHECK SLIDING SWITCH CIRCUIT

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

Driver seaf	t control unit	Power seat switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B503	11	B510	11	Existed	
B303	26	B310	26	Existed	

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

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#### **SLIDING SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B503	11 Ground		Not existed	
D303	26		INOL EXISTED	

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

## 3.CHECK SLIDING SWITCH

Refer to ADP-68, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

#### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

# Component Inspection

INFOID:0000000005632028

## 1. CHECK SLIDING SWITCH

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

#### **RECLINING SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

## **RECLINING SWITCH**

Description

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

## Component Function Check

#### INFOID:0000000005632030

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## 1. CHECK FUNCTION

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

Monitor item	Condition	Status	
RECLINE SW-FR	Declining quitch (forward)	Operate	ON
	Reclining switch (forward)	Release	OFF
RECLINE SW-RR	Paglining quitab (hackward)	Operate	ON
RECLINE SW-RR	Reclining switch (backward)	Release	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

## Diagnosis Procedure

#### INFOID:0000000005632031

## 1. CHECK RECLINING SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)	
Power seat switch				
Connector	Terminal			
B510	12	Ground	Pattory voltage	
	27	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK RECLINING SWITCH CIRCUIT

- 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
B503	12	R510	12	Existed
B303	27	B510	27	Existed

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

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#### **RECLINING SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B503	12 Ground		Not existed	
D303	27		INUL EXISTED	

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

## 3. CHECK RECLINING SWITCH

Refer to ADP-70, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-239</u>, "Removal and Installation".

#### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

# Component Inspection

INFOID:0000000005632032

## 1. CHECK RECLINING SWITCH

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

Power se	eat switch	Condition		Continuity
Terminal		Condition		Continuity
	12	Reclining switch (backward)	Operate	Existed
32	12	recilling switch (backward)	Release	Not existed
27	27	Reclining switch (forward)	Operate	Existed
	21		Release	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

### **LIFTING SWITCH (FRONT)**

#### < DTC/CIRCUIT DIAGNOSIS >

## LIFTING SWITCH (FRONT)

Description INFOID:0000000005632033

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

## Component Function Check

#### INFOID:0000000005632034

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## 1. CHECK FUNCTION

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

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

#### Is the indication normal?

YES >> INSPECTION END

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

## Diagnosis Procedure

#### INFOID:0000000005632035

## 1. CHECK LIFTING SWITCH SIGNAL

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

(+) Power seat switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(πρριολί)	
B510	13	Ground	Pottory voltage	
0100	28	Giouna	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.check lifting switch (front) circuit

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

Driver seaf	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
B503	13	B510	13	Existed
B303	28	6510	28	Existed

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

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## **LIFTING SWITCH (FRONT)**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B503	13	Giouna	Not existed	
D303	28		INOL EXISTED	

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

 ${f 3.}$ CHECK LIFTING SWITCH (FRONT)

Refer to ADP-72, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

## Component Inspection

INFOID:0000000005632036

## 1. CHECK LIFTING SWITCH (FRONT)

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

### **LIFTING SWITCH (REAR)**

#### < DTC/CIRCUIT DIAGNOSIS >

# LIFTING SWITCH (REAR)

Description INFOID:0000000005632037

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

# Component Function Check

#### INFOID:0000000005632038

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# 1. CHECK FUNCTION

- Turn ignition switch ON.
- Select "LIFT RR SW-UP", "LIFT RR SW-DN" in the "Data monitor" mode using 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
	Litting Switch real (up)	Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
EII I KIK GW-DIN		Release	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

# Diagnosis Procedure

#### INFOID:0000000005632039

# 1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

	+) eat switch	(–)	Voltage (V) (Approx.)	
Connector	Terminal		(лергох.)	
B510	14	Ground	Pottory voltage	
B310	29	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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# 2.CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seaf	control unit	Power sear switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	14	B510	14	Existed
B303	29	6510	29	Existed

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

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### **LIFTING SWITCH (REAR)**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver se	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B503	14	Giouna	Not existed
D303	29		Not existed

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

NO >> Repair or replace harness.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-74, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

# Component Inspection

INFOID:0000000005632040

# 1. CHECK LIFTING SWITCH (REAR)

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

Power se	Power seat switch		Condition	
Terr	ninal	Condi	lion	Continuity
	4.4	14 Lifting switch rear (down)	Operate	Existed
32	14		Release	Not existed
29	Lifting quitab roor (up)	Operate	Existed	
	29	Lifting switch rear (up)  Release  No	Not existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to ADP-239, "Removal and Installation".

#### FORWARD SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

#### FORWARD SWITCH

Description INFOID:0000000005632041

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

# Component Function Check

# 1. CHECK FUNCTION

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

Test item	Condition		Status
FORWARD SW	Driver side seat back	Folded up	ON
I OKWAKD OW	Dilver side seat back	Folded down	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

# 1. CHECK FORWARD SWITCH SIGNAL

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

·	+) d switch	(-)	Voltage (V) (Approx.)	
Connector	Terminal		(, , , , , , , , , , , , , , , , , , ,	
B512	41	Ground	5	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2. CHECK FORWARD SWITCH CIRCUIT

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

Driver seat	Driver seat control unit		Forward switch	
Connector	Terminal	Connector	Terminal	Continuity
B504	41	B512	41	Existed

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

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

#### Is the inspection result normal?

Revision: 2009 Novemver

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation"

NO >> Repair or replace harness.

### 3. FORWARD SWITCH GROUND CIRCUIT

Check continuity between forward switch harness connector and ground.

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#### **FORWARD SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Forward switch			Continuity
Connector	Terminal	Ground	Continuity
B512	32		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4.CHECK FORWARD SWITCH

Refer to ADP-76, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-234, "Exploded View"</u>.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

#### >> INSPECTION END

# Component Inspection

INFOID:0000000005632044

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

Forward switch		Condition		Continuity	
Connector	Terr	minal		Idition	Continuity
B512	41	32	Driver side seat	Folded up	Not existed
D312	41		41 32	back	Folded down

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-234, "Exploded View"</u>.

#### SEAT BELT BUCKLE SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

#### SEAT BELT BUCKLE SWITCH

Description INFOID:000000005632045

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

### Component Function Check

# 1. CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "SEAT BELT SW" in the "Data Monitor" mode using CONSULT-III.
- 3. Check the seat belt buckle switch signal under the following condition.

Test item	Condition		Status
SEAT BELT SW	Driver side seat belt	Fastened	ON
	Driver side seat beit	Released	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

# 1. CHECK SEAT BELT BUCKLE SWITCH SIGNAL

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

(+) Seat belt buckle switch		(-)	Voltage (V) (Approx.)
Connector	Connector Terminal		(11 - 7
B13	1	Ground	5

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Disconnect driver seat control unit connector.

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

Driver seat control unit		Seat belt buckle switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	5	B13	1	Existed

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

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

#### Is the inspection result normal?

Revision: 2009 Novemver

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

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#### **SEAT BELT BUCKLE SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Seat belt buckle switch			Continuity
Connector	Connector Terminal		Continuity
B13	2		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

# 4. CHECK SEAT BELT BUCKLE SWITCH

Refer to ADP-78, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat belt buckle switch (Built in seat belt buckle). Refer to <u>SE-234, "Exploded View"</u>.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

#### >> INSPECTION END

# Component Inspection

INFOID:0000000005632048

# 1. CHECK SEAT BELT BUCKLE SWITCH

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

	Seat belt buckle switch		Condition		Continuity
Connector	Terr	minal		lullon	Continuity
B13	1	2	Driver side seat	Fastened	Not existed
ыз		2	belt	Released	Existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat belt buckle switch (Built in seat belt buckle). Refer to <u>SE-234, "Exploded View"</u>.

#### **SLIDING LIMIT SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### SLIDING LIMIT SWITCH

Description INFOID:0000000005632049

Sliding limit switch is installed on seat cushion frame. Sliding limit switch detects condition of seat sliding.

# Component Function Check

# 1. CHECK FUNCTION

- Select "FWD LIMIT SW" in the "Data Monitor" mode using CONSULT-III.
- Check the sliding limit switch signal under the following condition.

Test item	Condi	Status	
FWD LIMIT SW	Seat sliding	Front edge	ON
T WD LIWIT SW	Seat sliding	Other than above	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

# 1. CHECK SLIDING LIMIT SWITCH SIGNAL

- Turn ignition switch OFF.
- Disconnect sliding limit switch harness connector. 2.
- Check voltage between sliding limit switch harness connector and ground.

(+) Sliding limit switch		(–)	Voltage (V) (Approx.)
Connector	Terminal		(, 45, 2)
B514	4	Ground	5

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

### 2.CHECK SLIDING LIMIT SWITCH CIRCUIT

- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and sliding limit switch harness connector.

Driver seat control unit		Sliding limit switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	4	B514	4	Existed

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

Driver seat control unit			Continuity
Connector	Connector Terminal		Continuity
B503	4		Not existed

#### Is the inspection result normal?

Revision: 2009 Novemver

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation"

NO >> Repair or replace harness.

### 3.check sliding limit switch ground circuit

Check continuity between sliding limit switch harness connector and ground.

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#### **SLIDING LIMIT SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Sliding limit switch			Continuity
Connector	Connector Terminal		Continuity
B514	32		Existed

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK SLIDING LIMIT SWITCH

Refer to ADP-80, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-234. "Exploded View"</u>.

### 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

#### >> INSPECTION END

# Component Inspection

INFOID:0000000005632052

# 1. CHECK SLIDING LIMIT SWITCH

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

Sliding limit switch		Condition		Continuity	
Connector	Terr	minal	Conducti		Continuity
B514	4	32	Coat aliding	Front edge	Existed
D314	4	32	Seat sliding	Other than above	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace forward switch (Built in seat back frame). Refer to <u>SE-234, "Exploded View"</u>.

### **POWER WALK-IN SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### POWER WALK-IN SWITCH

Description INFOID:0000000005632053

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

# Component Function Check

Turn ignition switch ON.

1. CHECK FUNCTION

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

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

#### Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-81, "Diagnosis Procedure".

### Diagnosis Procedure

# 1. CHECK POWER WALK-IN SWITCH SIGNAL

Turn ignition switch OFF.

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

(+) Power walk-in switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		(Αρρίολ.)	
B513	30	Ground	5	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK POWER WALK-IN SWITCH CIRCUIT

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

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

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

Driver seat control unit			Continuity
Connector	Connector Terminal		Continuity
B503	30		Not existed

#### Is the inspection result normal?

>> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation". YES

NO >> Repair or replace harness.

# 3.check power walk-in switch ground circuit

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#### **POWER WALK-IN SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK POWER WALK-IN SWITCH

Refer to ADP-82, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power walk-in switch (Built in walk-in lever). Refer to <u>SE-234, "Exploded View"</u>.

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

# Component Inspection

INFOID:0000000005632056

# 1. CHECK POWER WALK-IN SWITCH

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

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

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power walk-in switch (Built in walk-in lever). Refer to <u>SE-234, "Exploded View"</u>.

#### **TILT SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

### **TILT SWITCH**

Description INFOID:000000005632057

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

# Component Function Check

#### INFOID:0000000005632058

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# 1. CHECK FUNCTION

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

Monitor item	Condition Sta		
TILT SW-UP	Tilt quitch (up)	Operate	ON
TILI 3W-OF	Tilt switch (up)	Release	OFF
TILT SW-DN	Tilt switch (down)	Operate	ON
TIET SW-DIN	Till Switch (down)	Release	OFF

#### Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-83, "Diagnosis Procedure"</u>.

# Diagnosis Procedure

#### INFOID:0000000005632059

# 1. CHECK TILT SWITCH SIGNAL

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

(+) Tilt & telescopic switch		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
M31	4	Ground	Pottory voltage	
I CIVI	5	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2. CHECK TILT SWITCH CIRCUIT

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

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

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

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#### **TILT SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK TILT SWITCH

Refer to ADP-84, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-241, "Removal and Installation".

#### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

# Component Inspection

INFOID:0000000005632060

# 1. CHECK TILT SWITCH

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

Tilt & teles	copic switch	Cor	odition	Continuity	
Terr	minal	- Condition		Continuity	
	4	Tilt switch (up)	Operate	Existed	
1	4	The Switch (up)	Release	Not existed	
ı	E Tils avvitals		Tilt quitch (down)	Operate	Existed
	5	Tilt switch (down)	Release	Not existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-241, "Removal and Installation".

#### TELESCOPIC SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

### TELESCOPIC SWITCH

Description INFOID:0000000005632061

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

# Component Function Check

Turn ignition switch ON.

1. CHECK FUNCTION

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

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

#### Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-85, "Diagnosis Procedure".

# Diagnosis Procedure

1. CHECK TELESCOPIC SWITCH SIGNAL

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

(+) Tilt & telescopic switch		(–)	Voltage (V) (Approx.)	
Connector	Terminal		( )	
M31	2 Cround		Pottory voltogo	
IVI3 <sup>*</sup> I	3	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK TELESCOPIC SWITCH CIRCUIT

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	sitioner control unit	Tilt & telescopic switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M51	11	M31	2	Existed	
I CIVI	27	IVIST	3	Existed	

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

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#### **TELESCOPIC SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	ositioner control unit	Continuity	
Connector	Terminal	Cround	Continuity
M51	11	- Ground	Not existed
I CIVI	27		NOT EXISTED

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK TELESCOPIC SWITCH

Refer to ADP-86, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to ADP-241, "Removal and Installation".

#### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

# Component Inspection

INFOID:0000000005632064

# 1. CHECK TELESCOPIC SWITCH

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

Tilt & telescopic switch		Condition		Continuity
Terminal				
	2	Telescopic switch (forward)	Operate	Existed
1	2	Telescopic Switch (forward)	Release	Not existed
ı	3	Talasaania ayyitah (haalayyard)	Operate	Existed
	3	Telescopic switch (backward)	Release	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to ADP-241, "Removal and Installation".

#### **SEAT MEMORY SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

#### SEAT MEMORY SWITCH

**Description** 

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

# Component Function Check

# 1. CHECK FUNCTION

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

Monitor item	Condition		Status
SET SW	SET SW	Press	ON
SELSW	SET SW	Release	OFF
MEMORY CW 4		Press	ON
MEMORY SW 1	Memory switch 1	Release	OFF
MEMORY OW A	Marrie de la Companya	Press	ON
MEMORY SW 2	Memory switch 2	Release	OFF

#### Is the indication normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

# 1. CHECK SEAT MEMORY SWITCH SIGNAL

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

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

#### Is the inspection result normal?

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

# 2. CHECK MEMORY SWITCH CIRCUIT

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

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#### **SEAT MEMORY SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

# 3. CHECK MEMORY SWITCH GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

#### 4.CHECK SEAT MEMORY SWITCH

Refer to ADP-88, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to ADP-238, "Removal and Installation".

# 5. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

#### >> INSPECTION END

# Component Inspection

INFOID:0000000005632068

# 1. CHECK SEAT MEMORY SWITCH

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

### **SEAT MEMORY SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

Seat men	Seat memory switch		Condition		
Terr	ninal		ondition	Continuity	
	3	Set switch	Press	Existed	
	3	Set switch	Release	Not existed	
4	4	Memory switch 1		Press	Existed
4	'		Release	Not existed	
	O Marray suita	Memory switch 2	Press	Existed	
	2		Release	Not existed	

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch.Refer to <u>ADP-238, "Removal and Installation"</u>.

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#### < DTC/CIRCUIT DIAGNOSIS >

# DOOR MIRROR REMOTE CONTROL SWITCH MIRROR SWITCH

MIRROR SWITCH: Description

INFOID:0000000005632069

It operates angle of the door mirror face.

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

#### MIRROR SWITCH: Component Function Check

INFOID:0000000005632070

# 1. CHECK MIRROR SWITCH FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "MIR CON SW-UP/DN", "MIR CON SW-RH/LH" in the "DATA MONITOR" mode using CON-SULT-III.
- 3. Check mirror switch signal under the following conditions.

Monitor item	Condition	Status
MIR CON SW-UP/DN	When operating the mirror switch up or down side.	ON
WIR CON SW-OP/DIN	Other than above.	OFF
MIR CON SW-RH/I H	When operating the mirror switch right or left side.	ON
WIR CON 3W-RH/LH	Other than above.	OFF

#### Is the inspection result normal?

YES >> Mirror switch function is OK.

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

#### MIRROR SWITCH: Diagnosis Procedure

INFOID:0000000005632071

# ${f 1}$ .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.

	(+) lote control switch	(-) Voltage (V) (Approx.)	
Connector	Terminal		(/ .pp. 0/)
	4		
D17	12	Ground	E
DIT	13	Ground	3
	15		

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2. CHECK MIRROR SWITCH CIRCUIT

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

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3	D17	15	Existed
M51	4		13	
ICIVI	19		12	Existed
	20		4	

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check door mirror remote control switch ground circuit

Turn ignition switch OFF.

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

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

#### 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-91, "MIRROR SWITCH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace door mirror remote control switch (mirror switch). Refer to MIR-24, "Removal and Installation".

### 5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-37, "Intermittent Incident".

#### >> INSPECTION END

### MIRROR SWITCH: Component Inspection

### 1. CHECK MIRROR SWITCH

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

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#### < DTC/CIRCUIT DIAGNOSIS >

Door mirror remote control switch		Condition		Continuity	
Connector	Teri	minal	Condition		Continuity
	4			RIGHT	Existed
	4			Other than above	Not existed
	12	13 7 Mirror switch	LEFT	Existed	
D17	13		Mirror owitch	Other than above	Not existed
DIT	15		UP	Existed	
	15		15	Other than above	Not existed
	12			DOWN	Existed
	12			Other than above	Not existed

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to MIR-24, "Removal and Installation".

#### CHANGEOVER SWITCH

# CHANGEOVER SWITCH: Description

Changeover switch is integrated into door mirror remote control switch.

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

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

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### CHANGEOVER SWITCH: Component Function Check

# 1. CHECK CHANGEOVER SWITCH FUNCTION

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

Monitor item	Condition	
MIR CHNG SW-R/L	When operating the changeover toward the right or left side.	: ON
WIII GI ING 3W-N/L	Other than above.	: OFF

#### Is the inspection result normal?

YES >> Changeover switch function is OK.

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

# CHANGEOVER SWITCH: Diagnosis Procedure

1. CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)			V 14 0.0
Door mirror rem	Door mirror remote control switch		Voltage (V) (Approx.)
Connector	Terminal		( 44)
D17	10	Ground	5
DIT	11	Ground	5

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2. CHECK CHANGEOVER SWITCH CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

1	Turn	ignition	ewitch	OFF
1.	TUITI	IUITILIOTT	SWILLII	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	oositioner control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	2	D17	11	Existed
IVIOT	18	DII	10	LXISIGU

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

# 3.check door mirror remote control switch ground circuit

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

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch (changeover switch).

Refer to ADP-93, "CHANGEOVER SWITCH: Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace door mirror remote control switch (changeover switch). Refer to MIR-24, "Removal and Installation".

# 5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-37, "Intermittent Incident".

#### >> INSPECTION END

# **CHANGEOVER SWITCH: Component Inspection**

# 1. CHECK CHANGEOVER SWITCH

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

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### < DTC/CIRCUIT DIAGNOSIS >

Door mirror remote control switch		Condition		Continuity			
Connector	Terr	minal	- Condition		Continuity		
	10			LEFT	Existed		
D17	10	7	7 Changeover st	7	Changeover switch	Other than above	Not existed
DIT	11			Changeover switch	RIGHT	Existed	
	11			Other than above	Not existed		

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to MIR-24, "Removal and Installation".

#### **POWER SEAT SWITCH GROUND CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

# POWER SEAT SWITCH GROUND CIRCUIT

# Diagnosis Procedure

#### INFOID:0000000005632077

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# 1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

Power seat switch			Continuity
Connector	Terminal	Ground	Continuity
B510	32		Existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

# 2.CHECK POWER SEAT SWITCH INTERNAL CIRCUIT

Check reclining switch.

Refer to ADP-70, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace power seat switch. Refer to <u>ADP-239</u>, "Removal and Installation".

# 3. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

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#### TILT &TELESCOPIC SWITCH GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

# TILT &TELESCOPIC SWITCH GROUND CIRCUIT

### Diagnosis Procedure

INFOID:0000000005632078

# 1. CHECK POWER TILT & TELESCOPIC SWITCH GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

# 2.check power tilt & telescopic switch internal circuit

Check tilt switch.

Refer to ADP-84, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace tilt & telescopic switch. Refer to ADP-241, "Removal and Installation".

# 3. CHECK INTERMITTENT INCIDENT

Refer to GI-37, "Intermittent Incident".

>> INSPECTION END

#### SLIDING SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

# SLIDING SENSOR

Description INFOID:0000000005632079

- The sliding sensor is installed to the seat slide cushion frame.
- The pulse signal is input 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

- Turn ignition switch ON.
- Select "SLIDE PULSE" in the "Data monitor" mode using 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 <sup>*1</sup>

<sup>\*1:</sup> 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-97, "Diagnosis Procedure". NO

# Diagnosis Procedure

INFOID:0000000005632081

INFOID:0000000005632080

# 1. CHECK SLIDING SENSOR SIGNAL

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

(+) Driver seat control unit			(–) Condition		VI. II
		(–)			Voltage (V) (Approx.)
Connector	Terminal	1			(, ,pp. 0,t.)
B503	24	Ground	Seat sliding	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

>> GO TO 2. NO

# 2.CHECK SLIDING SENSOR CIRCUIT

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

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#### SLIDING SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3. CHECK SLIDING SENSOR POWER SUPPLY

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

(+) Sliding sensor		(-)	Voltage (V) (Approx.)	
Connector	Terminal		(11 /	
B526	16	Ground	Battery voltage	

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

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

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

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# 5. CHECK SLIDING SENSOR GROUND CIRCUIT 1

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

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

#### **SLIDING SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

# 6. CHECK SLIDING SENSOR GROUND CIRCUIT 2

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

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

#### Is the inspection result normal?

YES >> Replace sliding sensor (Built in seat slide cushion frame). Refer to <u>ST-19, "WITH ELECTRIC MOTOR: Exploded View"</u>.

NO >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

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#### **RECLINING SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### RECLINING SENSOR

Description INFOID:000000005632082

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

# Component Function Check

INFOID:0000000005632083

# 1. CHECK FUNCTION

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

Monitor item	Condition		Value
		Operate (forward)	Change (increase)*1
RECLN PULSE	Seat reclining	Operate (backward)	Change (decrease)*1
			No change <sup>*1</sup>

<sup>\*1:</sup> The value at the seat position attained when the battery is connected is considered to be 32768.

#### Is the indication normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632084

# 1. CHECK RECLINING SENSOR SIGNAL

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

(+) Driver seat cor	ntrol unit	(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(11 - 7
B503	9	Ground	Seat reclining	Operate  Other than above	10mSec/div 2V/div JMJIA0119ZZ

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> GO TO 2.

# 2. CHECK RECLINING SENSOR CIRCUIT

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

#### RECLINING SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Reclining motor		
Connector	Terminal	Connector Terminal		Continuity	
B503	9	B523	9	Existed	

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

Driver seat control unit			Continuity	
Connector Terminal		Ground	Continuity	
B503	9		Not existed	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.CHECK RECLINING SENSOR POWER SUPPLY

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

	(+)		
Reclining motor		(–)	Voltage (V) (Approx.)
Connector	Terminal		(11 - 7
B523	16	Ground	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### f 4.CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat	Driver seat control unit		Reclining motor		
Connector	Terminal	Connector Terminal		- Continuity	
B503	16	B523	16	Existed	

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

# 5.CHECK RECLINING SENSOR GROUND CIRCUIT 1

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

Driver seat	control unit	Reclinir	ng motor	Continuity
Connector	Terminal	Connector Terminal		Continuity
B503	31	B523	31	Existed

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#### **RECLINING SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

# 6. CHECK RECLINING SENSOR GROUND CIRCUIT 2

- 1. Connect driver seat control unit connector.
- 2. Check continuity between reclining sensor harness connector and ground.

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

### Is the inspection result normal?

YES >> Replace reclining motor. Refer to <u>SE-234, "Exploded View"</u>.

NO >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

### **LIFTING SENSOR (FRONT)**

#### < DTC/CIRCUIT DIAGNOSIS >

# LIFTING SENSOR (FRONT)

Description

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

# Component Function Check

# 1. CHECK FUNCTION

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

Monitor item	Condition		Value
		Operate (Up)	Change (increase)*1
LIFT FR PULSE	T FR PULSE Seat lifting (front)	Operate (Down)	Change (decrease)*1
		Release	No change <sup>*1</sup>

<sup>\*1:</sup>The value at the seat position attained when the battery is connected is considered to be 32768.

#### Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-103, "Diagnosis Procedure".

### Diagnosis Procedure

INFOID:0000000005632087

INFOID:0000000005632086

# 1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> GO TO 2.

# 2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

- 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.

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### LIFTING SENSOR (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.check lifting sensor (front) power supply

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

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

# 4. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

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

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

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# 5. CHECK LIFTING SENSOR (FRONT) GROUND CIRCUIT 1

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

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

### **LIFTING SENSOR (FRONT)**

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

# $6.\mathsf{CHECK}$ LIFTING SENSOR (FRONT) GROUND CIRCUIT 2

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

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

#### Is the inspection result normal?

YES >> Replace lifting motor (front). Refer to <u>SE-234. "Exploded View"</u>.

NO >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

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### LIFTING SENSOR (REAR)

#### < DTC/CIRCUIT DIAGNOSIS >

# LIFTING SENSOR (REAR)

**Description** 

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

# Component Function Check

INFOID:0000000005632089

### 1. CHECK FUNCTION

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

Monitor item	Condition		Value
		Operate (Up)	Change (increase)*1
LIFT RR PULSE	Seat lifting (rear)	Operate (Down)	Change (decrease)*1
		Release	No change <sup>*1</sup>

<sup>\*1:</sup> The value at the seat position attained when the battery is connected is considered to be 32768.

#### Is the indication normal?

YES >> INSPECTION END

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

# Diagnosis Procedure

INFOID:0000000005632090

# 1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

(+) Driver seat contro	ol unit Terminal	(-)	Condition		Voltage (V) (Approx.)
B503	10	Ground	Seat Lifting (rear)	Operate Other than above	10mSec/div 2V/div JMJIA0119ZZ

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> GO TO 2.

# 2.check lifting sensor (rear) circuit

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

# LIFTING SENSOR (REAR)

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit	Lifting m	otor (rear)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	10	B529	10	Existed

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

Driver seat control unit			Continuity
Connector Terminal		Ground	Continuity
B503 10			Not Existed

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3.check lifting sensor (rear) power supply

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

(+) Lifting motor (rear)			Voltage (V) (Approx.)
		(–)	
Connector	Terminal		, , ,
B529	16	Ground	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

# 4.CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	16	B529	16	Existed

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

# 5.CHECK LIFTING SENSOR (REAR) GROUND CIRCUIT 1

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

Driver seat	control unit	Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B503	31	B529	31	Existed

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# **LIFTING SENSOR (REAR)**

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

# 6. CHECK LIFTING SENSOR (REAR) GROUND CIRCUIT 2

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

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

### Is the inspection result normal?

YES >> Replace lifting motor (rear). Refer to <u>SE-234, "Exploded View"</u>.

NO >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

### **TILT SENSOR**

Description INFOID:000000005632091

- The tilt sensor is installed to the steering column assembly.
- The resistance of tilt sensor changes according to the up/down position of steering column.
- The terminal voltage of automatic drive positioner control unit changes according to a change of tilt sensor resistance. Automatic drive positioner control unit calculates the tilt position from the voltage.

### Component Function Check

# 1.check function

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

Monitor item	Condition	Value	
TILT SEN	Tilt position	Change between 1.1 V (Close to top) 3.9 V (Close to bottom)	

#### Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-109, "Diagnosis Procedure".

### Diagnosis Procedure

### 1. CHECK TILT SENSOR SIGNAL

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

	(+) Automatic drive positioner control unit		Condition	Voltage (V) (Approx.)
Connector	Terminal			(·
M51	7	Ground	Tilt position	Change between 1.1 V (Close to top) 3.9 V (Close to bottom)

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> GO TO 2.

## 2.check tilt sensor circuit

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

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

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

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

#### Is the inspection result normal?

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#### **TILT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK TILT SENSOR POWER SUPPLY

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

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

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

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK TILT SENSOR GROUND CIRCUIT 1

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

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

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### 6.CHECK TILT SENSOR GROUND CIRCUIT 2

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

### **TILT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

### Is the inspection result normal?

YES >> Replace tilt & telescopic sensor (Built in steering column assembly). Refer to <u>ST-16, "WITHOUT ELECTRIC MOTOR: Exploded View"</u>.

NO >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

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### TELESCOPIC SENSOR

Description INFOID:000000005632094

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

### Component Function Check

INFOID:0000000005632095

### 1. CHECK FUNCTION

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

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

#### Is the indication normal?

YES >> INSPECTION END.

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

### Diagnosis Procedure

INFOID:0000000005632096

## 1. CHECK TELESCOPIC SENSOR SIGNAL

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> GO TO 2.

## 2. CHECK TELESCOPIC SENSOR CIRCUIT

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

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

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

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

#### Is the inspection result normal?

#### TELESCOPIC SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3.CHECK TELESCOPIC SENSOR POWER SUPPLY

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

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### f 4 .CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

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

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

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

### 5.CHECK TELESCOPIC SENSOR GROUND CIRCUIT 1

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

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

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### 6.CHECK TELESCOPIC SENSOR GROUND CIRCUIT 2

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

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### **TELESCOPIC SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

- YES >> Replace tilt & telescopic sensor (Built in steering column assembly). Refer to <u>ST-16, "WITHOUT ELECTRIC MOTOR: Exploded View"</u>.
- NO >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

#### < DTC/CIRCUIT DIAGNOSIS >

## MIRROR SENSOR **DRIVER SIDE**

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### **DRIVER SIDE**: Description

INFOID:0000000005632097

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

### DRIVER SIDE: Component Function Check

#### D INFOID:0000000005632098

### 1. CHECK FUNCTION

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

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

#### Is the indication normal?

YES >> INSPECTION END

>> Perform diagnosis procedure. Refer to ADP-115, "DRIVER SIDE : Diagnosis Procedure".

### DRIVER SIDE: Diagnosis Procedure

## INFOID:0000000005632099

### 1. CHECK DOOR MIRROR SENSOR (DRIVER SIDE) SIGNAL

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation". NO >> GO TO 2.

## 2.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

Turn ignition OFF.

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

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#### < DTC/CIRCUIT DIAGNOSIS >

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

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

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M51	6	Ground	Not existed	
I CIVI	22		NOT EXISTER	

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

(+) Door mirror (driver side)		(-)	Voltage (V) (Approx.)	
Connector	Terminal		( 1   1   2   1	
D3	11	Ground	5	

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

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

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

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

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

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

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

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit	Door mirror	(driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	41	D3	12	Existed

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### 6.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND 2

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

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

### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Replace door mirror sensor (Built in passenger side door mirror). Refer to MIR-21, "DOOR MIR-ROR ASSEMBLY: Removal and Installation".

### PASSENGER SIDE

### PASSENGER SIDE : Description

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

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

### PASSENGER SIDE : Component Function Check

## 1.CHECK FUNCTION

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

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

#### Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-117, "PASSENGER SIDE : Diagnosis Procedure"</u>.

### PASSENGER SIDE : Diagnosis Procedure

## 1. CHECK DOOR MIRROR SENSOR (PASSENGER SIDE) SIGNAL

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

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#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	(+) Automatic drive positioner control unit		Condition	Voltage (V) (Approx.)
Connector	Terminal			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M51	5	Construction of the Constr	Door mirror (Passenger	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)
I GIVI	21	Ground	side) position	Change between 3.4 [V] (close to left edge) 0.6 [V] (close to right edge)

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-237, "Removal and Installation"</u>. NO >> GO TO 2.

## 2.CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit connector 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	Automatic drive positioner control unit Door min		assenger side)	Continuity
Connector	Terminal	Connector Terminal		
M51	5	D33	9	Existed
IVIST	21	D33	10	LXISIGU

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## $3. {\sf CHECK\ DOOR\ MIRROR\ SENSOR\ (PASSENGER\ SIDE)\ POWER\ SUPPLY}$

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

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

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

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

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	33	D33	11	Existed

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

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

#### Is the inspection result normal?

>> Replace automatic driver positioner control unit. Refer to ADP-237, "Removal and Installation". YES

NO >> Repair or replace harness.

## ${f 5.}$ CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR GROUND 1

Turn ignition switch OFF.

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

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	41	D33	12	Existed

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

### **Ó.**CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR GROUND 2

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

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation". NO

>> Replace door mirror sensor (Built in passenger side door mirror). Refer to MIR-21, "DOOR MIR-ROR ASSEMBLY: Removal and Installation".

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#### **SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### SLIDING MOTOR

Description INFOID:000000005632103

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

### Component Function Check

INFOID:0000000005632104

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-120, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000005632105

## 1. CHECK SLIDING MOTOR POWER SUPPLY

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

	Sliding motor		Condition		Voltage (V) (Approx.)
Connector	Terminal				
				OFF	0
	35	Ones and	SEAT SLIDE	FR (forward)	Battery voltage
B525				RR (backward)	0
D020		Ground		OFF	0
	42			FR (forward)	0
				RR (backward)	Battery voltage

#### Is the inspection result normal?

YES >> Replace sliding motor. (Built in seat slide cushion frame.) Refer to <u>SE-234. "Exploded View"</u>.

NO >> GO TO 2.

## 2.CHECK SLIDING MOTOR CIRCUIT

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

### **SLIDING MOTOR**

### < DTC/CIRCUIT DIAGNOSIS >

Driver sea	at control unit	Slidin	g motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B504	35	B525	35	Existed
D304	42	6020	42	Existed

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B504	35	Ground	Not existed
D304	42		INOL EXISTED

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-236, "Removal and Installation".

NO >> Repair or replace harness.

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#### **RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### RECLINING MOTOR

Description INFOID:000000005632106

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

### Component Function Check

INFOID:0000000005632107

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-122, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000005632108

## 1. CHECK RECLINING MOTOR POWER SUPPLY

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

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

#### Is the inspection result normal?

YES >> Replace reclining motor. (Built in seat back frame.) Refer to <u>SE-234. "Exploded View"</u>.

NO >> GO TO 2.

## 2.check reclining motor circuit

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

### **RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit Reclining motor		ng motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B504	36	B523	36	Existed
B3U4	44	D323	44	LXISIEU

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

Driver seat	t control unit		Continuity
Connector	Connector Terminal		Continuity
B504	36	Ground	Not existed
B304	44		Not existed

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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### **LIFTING MOTOR (FRONT)**

#### < DTC/CIRCUIT DIAGNOSIS >

### LIFTING MOTOR (FRONT)

Description INFOID:000000005632109

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

### Component Function Check

INFOID:0000000005632110

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632111

## 1. CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

	(+) Lifting motor (front)		Condition		Voltage (V) (Approx.)
Connector	Terminal				, , ,
				OFF	0
	37 Ground	Ground	SEAT LIFTER FR	UP	0
B527				DWN (down)	Battery voltage
D321				OFF	0
				UP	Battery voltage
			DWN (down)	0	

#### Is the inspection result normal?

YES >> Replace lifting motor (front). (Built in seat slide cushion frame.) Refer to <u>SE-234, "Exploded View"</u>. NO >> GO TO 2.

## 2.check lifting motor (front) circuit

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

### **LIFTING MOTOR (FRONT)**

### < DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		otor (front)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B504	37	B527	37	Existed
B304	45	D321	45	LXISIEU

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

Driver seat control unit			Continuity
Connector	Connector Terminal		Continuity
B504	37	Ground	Not existed
5304	45		INOL EXISTED

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-236, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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### **LIFTING MOTOR (REAR)**

#### < DTC/CIRCUIT DIAGNOSIS >

### LIFTING MOTOR (REAR)

Description INFOID:000000005632112

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

### Component Function Check

INFOID:0000000005632113

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632114

## 1.CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

	(+) Lifting motor (rear)		Condition		Voltage (V) (Approx.)
Connector	Terminal				, , ,
				OFF	0
	38		ound SEAT LIFTER RR	UP	Battery voltage
B529		Ground		DWN (DOWN)	0
D329				OFF	0
	39			UP	0
				DWN (DOWN)	Battery voltage

#### Is the inspection result normal?

YES >> Replace lifting motor (rear). (Built in seat slide cushion frame.) Refer to <u>SE-234, "Exploded View"</u>. NO >> GO TO 2.

## 2.CHECK LIFTING MOTOR (REAR) CIRCUIT

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

### **LIFTING MOTOR (REAR)**

### < DTC/CIRCUIT DIAGNOSIS >

Driver sea	at control unit	Lifting m	otor (rear)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B504	38	B529	38	Existed
B504	39	- 5029	39	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B504	38	Ground	Not existed
5304	39		INOL GAISIGU

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-236</u>. "Removal and Installation".

NO >> Repair or replace harness.

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### **TILT MOTOR**

Description INFOID:0000000005632115

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

### Component Function Check

INFOID:0000000005632116

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632117

### 1. CHECK TILT MOTOR POWER SUPPLY

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

	(+) Tilt & telescopic motor		(–) Cond		Voltage (V) (Approx.)
Connector	Terminal				(11 - 7
				OFF	0
	3	Ground	TILT MOTOR	UP	0
M49				DWN (down)	Battery voltage
10149	10149			OFF	0
	4			UP	Battery voltage
				DWN (down)	0

#### Is the inspection result normal?

YES >> Replace tilt motor. (Built in steering column assembly.) Refer to <u>ST-19, "WITH ELECTRIC MOTOR: Exploded View".</u>

NO >> GO TO 2.

## 2.CHECK TILT MOTOR CIRCUIT

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

### **TILT MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	35	M49	4	Existed
M52 42		IVI <del>4</del> 3	3	LXISIEU

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

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

### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-237, "Removal and Installation"</u>. NO >> Repair or replace harness.

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#### **TELESCOPIC MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### **TELESCOPIC MOTOR**

Description INFOID:0000000056321118

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

### Component Function Check

INFOID:0000000005632119

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632120

## 1. CHECK TELESCOPIC MOTOR POWER SUPPLY

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

	+) copic motor Terminal	(-)	Condition		Voltage (V) (Approx.)	
	1	1			OFF FR (forward)	0
M49	'	Ground	TELESCOPIC MO-	RR (backward)	Battery voltage	
IVI49	W49			OFF	0	
	2			FR (forward)	Battery voltage	
				RR (backward)	0	

#### Is the inspection result normal?

YES >> Replace telescopic motor. (Built in steering column assembly.) Refer to <u>ST-19. "WITH ELECTRIC MOTOR</u>: Exploded View".

NO >> GO TO 2.

## 2.CHECK TELESCOPIC MOTOR CIRCUIT

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

### **TELESCOPIC MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	36	M49	2	Existed
IVIOZ	44	10149	1	LVISIGA

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M52	36	Giodila	Not existed
	44		Not existed

### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

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### DOOR MIRROR MOTOR

Description INFOID:0000000005632121

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

### Component Function Check

INFOID:0000000005632122

## 1. CHECK DOOR MIRROR MOTOR FUNCTION

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

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632123

## 1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+) Door mirror		(–) Cond		dition	Voltage (V) (Approx.)
Connector	Terminal				(
-	5			UP	Battery voltage
	5	6 Ground	Door mirror remote control switch	Other than above	0
D3 (Driver side)	6			LEFT	Battery voltage
side)				Other than above	0
	7			DOWN / RIGHT	Battery voltage
	/		Other than above	0	

#### Is the inspection result normal?

YES >> Replace door mirror. Refer to MIR-21, "DOOR MIRROR ASSEMBLY: Removal and Installation".

NO >> GO TO 2.

#### **DOOR MIRROR MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## $\overline{2}$ .check harness continuity

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

[Door mirror driver side]

Automatic drive p	ositioner control unit	Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	16		7	
M51	31	D3	5	Existed
	32		6	

[Door mirror passenger side]

Automatic drive p	ositioner control unit	Door mirror (passenger side)		O control tr
Connector	Terminal	Connector	Terminal	Continuity
	14		5	
M51	15	D33	6	Existed
	30		7	

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

[Door mirror driver side]

Automatic drive po	ositioner control unit		Continuity
Connector	Terminal	Ground	Continuity
	16		
M51	31		Not existed
	32		

[Door mirror passenger side]

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

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-237, "Removal and Installation".

NO >> Repair or replace harness.

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### SEAT MEMORY INDICATOR

#### < DTC/CIRCUIT DIAGNOSIS >

### SEAT MEMORY INDICATOR

Description INFOID:000000005632124

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

The status of automatic drive positioner system can be checked according to the illuminating/flashing status.

### Component Function Check

INFOID:0000000005632125

### 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> INSPECTION END

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

### Diagnosis Procedure

INFOID:0000000005632126

### 1. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO

>> Check the following.

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

### 2. CHECK MEMORY INDICATOR CIRCUIT

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

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

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

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

### **SEAT MEMORY INDICATOR**

### < DTC/CIRCUIT DIAGNOSIS >

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YES >> Replace seat memory switch. Refer to <u>ADP-238, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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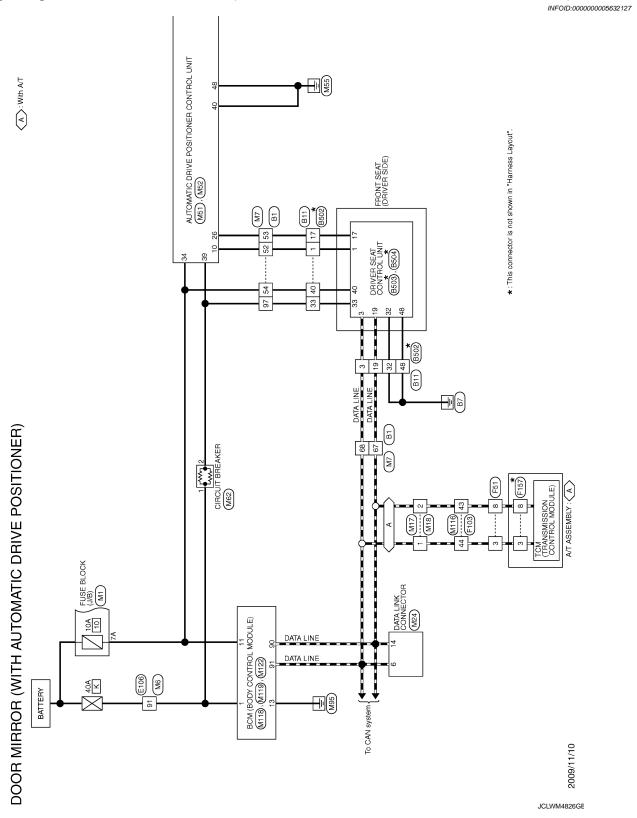
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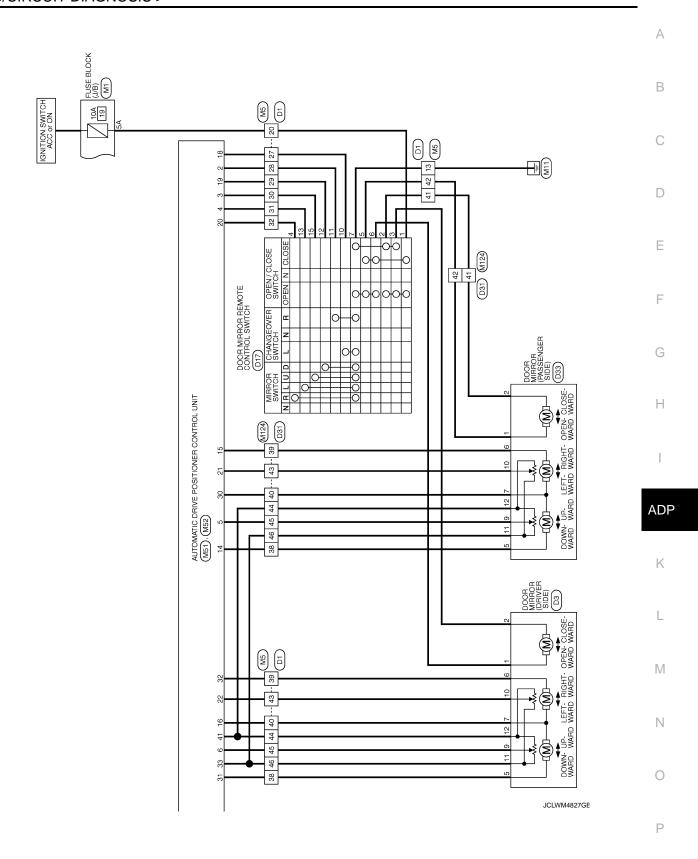
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## Wiring Diagram - DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER) -





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000	R MI	DOOR MIRROR (WITH AUTOMATIC_D	RIVE	POS	RIVE POSITIONER)							
Connector No.	or No.	B1	44	4		Connector No.		B11	48	В	1	
Connect	Connector Name	WIRE TO WIRE	45	> 3	1 1	Connect	Connector Name V	WIRE TO WIRE	99	>- a	1 1	
Connector Type	x Type	TH80FW-CS16-TM4	47	╀	1	Connector Type	Т	NS16FW-CS	67	>	1	
			48	LG	1							
厚			49	ΓC		彦				-		
SH		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	49	+	1	118	<u>[</u>		Connec	Connector No.	B503	
	-	97 92 00 10 10 10 10 10 10 10 10 10 10 10 10	20	+			29	40 17 1 3 19	Connec	Connector Name	DRIVER SEAT CONTROL UNIT	
		4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	200	+	- [Without BOSE system]		09	67 33 21 48 32 66 5 8	Č	. Canadatas Timo	W Local F	
		M CO	n 5	+		_	Ц		Colline	٦.	IH32FW	
		[6] [N] [8] [8]	25	5 2	1 1	_			1			
Terminal	Color		25	F	1	Terminal	Color	,	Į			
Š		Signal Name [Specification]	55	╀	1	ė	_	Signal Name [Specification]	2	23		
-	>		29	>	1	-	9			1	4 5 8 9 10 11 12 13 14 16	
2	_	1	57	ŀ	-	က	-	1		17 19	21 24	
8	~	1	9	~	1	9	>	1				
4	>	1	19	F	1	17	g	1				
5	×	1	62	В	1	19	۵	1	Terminal	al Color	3	
9	а	1	63	H	1	21	>	1	ŏ.	of Wire	Signal Name [Specification]	
6	g	1	9	۵	1	32	<u>m</u>	1	-	L/W	XX	
01	띪	1	65	8	1	33	SB	1	m	ΡĄ	CAN-H	
12	SHELD	-	99	H	-	40	BR		4	0/B	SLIDING LIMIT SW	
13	۶		67	┞	ı	48	М	1	2	_	BUCKLE SW	
14	٦	1	99	ľ	1	09	BG	1	æ	Ş	P RANGE SW	
15	۳	1	69	۵	1	99	>	1	6	9/M	PULSE (RECLINING)	
16	Μ	1	70	Ľ	1	67	g	1	9	P/B	PULSE (RR LIFTING)	
17	BR	1	80	ŋ	1				Ξ	BR	SLIDING SW (BACKWARD)	
20	5	1	81	۸	1				12	SB	RECLINING SW (BACKWARD)	
21	SB	1	82	~	1	Connector No.		B502	13	LG/R	FRONT LIFTING SW (DOWNWARD)	
22	GR	1	83	BR	1	1	Γ,	DIM OT BOWN	14	g/B	REAR LIFTING SW (DOWNWARD)	
23	М	1	84	5	1	Collinect		WINE TO WINE	16	0	VCC	
24	SB	1	82	_	1	Connector Type		NS16MW-CS	17	Y/R	ΤX	
25	BR	1	98	Y	-	٥			19	^	CAN-L	
26	FG	-	87	GR	-	修			21	$\Gamma \lambda$	P RANGE SW	
27	Υ	-	91	Н	-	- T	L		24	ď	PULSE (SLIDING)	
28	ч	-	93	BG	-	2	19	3 1 1 17 40 59	25	A/B	PULSE (FR LIFTING )	
59	۸	ì	94	Ь			2 0	7 20 40 01 00	26	Υ	SLIDING SW (FORWARD)	
31	SHIELD	- Q	92	GR	-		٥	3 00 32 40 21 33 07	27	R/G	RECLINING SW (FORWARD)	
32	9	1	96	GR	-				28	M/B	FRONT LIFTING SW (UPWARD)	
33	æ	-	97	SB	-				59	P/L	REAR LIFTING SW (UPWARD)	
34	BB	ì	66	Y	-	Terminal	-	Simpl Name [Sangification]	30	Ь	POWER WALK-IN SW	
32	æ		100	4/B	-	ò	of Wire	oignal Name [Specification]	31	S.	SENSOR GND	
36	æ	ı		l		-  -	N/	1	32	B/W	GND (SIGNAL)	
37	۵	- [With climate controlled seat]				8	Rγ	1				
37	>	- [Without climate controlled seat]				9	_	1				
38	>	- [With climate controlled seat]				17	Y/R	1				
38	GR	- [Without climate controlled seat]				19	>	1				
40	SHIELD	Ц				21	$\sim$	1				
41	٦	1				32	B/W					
45	۵	-				33	۳	-				
43	SHIELD					40	R/W	1				

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### < DTC/CIRCUIT DIAGNOSIS >

		А
Manuary   WIRE TO WIRE   Manuary   WIRE TO WIRE   Manuary   WIRE TO WIRE   Manuary		В
1   1   1   1   2   2   2   2   2   2		С
Connector No.   Connector No.   Connector No.   Connector No.   Connector Type   Connecto		D
infration]  to positioner]  we positioner]  infration]  If infration]		Е
Signal Name [Spec With automatic driv House automatic driv House automatic driv Con Report automatic driv		F
		G
Color   Colo		Н
DS BOOR MIRROR (DRIVER SIDE)  THIZAMA-NH  THIZAMA-NH  TI21110918		ADP
	•	
10   VE   POSITION   10   10   10   10   10   10   10   1		K
		L
Connector Name   DRIVER SEAT CONTROL UNIT		M
MIRROR (WIT   100   10		Ν
Commetter Name   Commetter Type   Comm		0
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DOOR M	DOOR MIRROR (WITH AUTOMATIC D	RIVE	POSI	DRIVE POSITIONER)							
Connector No.		8	g	-	94	٦	-	6	Υ	-	
	- GOOD MIDDOD (DASSENCED SIDE)	10	M (	1	92	Υ	1	10	GR	1	
OOIIIIGOO		11	۸	1	97	BR	1	19	0	1	
Connector Type	TH12MW-NH	12	ч	1	86	SHIELD	Г	20	٨	1	
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E		14	1 GR	1	100	Д	I	29	57	1	
Ę		15	9 9	-				30	В	-	
5		16	W .	-				31	В	-	
	5 6 7 2 1 4	17	۸	-	Connector No.		F51	41	0	-	
	12 11 10 9 8	18	-	1	·		> 1071L334 E/4	42	BR	1	
	2 2	ے ا	GR	1	Connector Name		ASSEMBL1	43	۵	1	
		20	┝	1	Connector Type		RK10FG-DGY	44	_	1	
Terminal Color		30	╀	1		1		45	>	1	
	fire Signal Name [Specification]		╀	1	Œ		•	46	>	1	
1	- [With automatic drive positioner]	32	BB				≪				
-	Ľ	33	╁		Ż.						
2	- [With automatic drive positioner]	34	╀				5 4 3 2 1	Connector No.	4o. F157		
5 Te	ľ	38	ľ	1			c		Γ		
4	ŀ	38	╀	1			,	Connector Name		TCM (TRANSMISSION CONTROL MODULE)	
	- [With automatic drive positioner]	37	╀	1				Connector Type	Vpe SP10FG	JEG.	
ŀ	Ľ	8	╀	1	Terminal	Color			1		
H	ļ	8	╀	1	No	of Wire	Signal Name [Specification]	Œ		•	
ł	ľ	5	ł			>		主		<	
+	+	₹ ₹	+		- 0	- 6		\ \ \ \			
5 1	+	1	+		7	Ľ.			`	_	
+	- [Without automatic drive positioner]	4.7	+		m	4	-		=	ဂ ႗	
+	1	\$	4	1	4	>	1		~	0 8 9 10	
6	1	4	1 GR	1	2	В	1		•		
10 BR	2	45	Н	-	9	Υ	1				
11 W	_	46	) LG	1	7	ď	1	le	Color	Simal Name [Specification]	
12 V	_	47	^	-	8	Ь	-	No.	of Wire	orginal realite Especification	
		48	3 P	-	6	GR	1	-	W	VIGN	
		46	7 (	1	10	В	ı	2	В	BATT	
Connector No.	E106	29	В	1				3	ч	CAN-H	
Connector Mamo	MIDE TO MIDE	99	Н	-				4	0	K-LINE	
OOIIIIGOO MAIII		67	SB /	-	Connector No.		F103	9	B	GND	
Connector Type	TH80FW-CS16-TM4	99	<u>«</u>	1	Connector Name		WIRE TO WIRE	9	GR	VIGN	
þ		69	Α.	-		2		7	7	REV LAMP RLY	
厚		70	9	-	Connector	Type	Connector Type TK36FW-NS10	8	BR	CAN-L	
Ě	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	80	M (	-	þ			6	Υ	STARTER RLY	
Ş	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	8	Δ.	-	国			10	M/B	GND	
		82	5	1	Ę						
		83	^	1	2						
	00 00 00 00 00 00 00 00 00 00 00 00 00	84		1		46 45 44 43 42	(2) (2) (3) (3) (3) (4) (4) (4) (4) (4) (4) (5) (5) (4) (4) (5) (5) (5) (5) (5) (5) (5) (5) (5) (5				
		82			_						
Terminal Color		98	╀								
	fire Signal Name [Specification]	87	╀	-							
- GR		88	S. GR		Terminal	Golor					
3 BG		88	╀	1	No.	of Wire	Signal Name [Specification]				
t		S	╀		0	c	1				
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JCLWM4830GE

### < DTC/CIRCUIT DIAGNOSIS >

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- (With A.T]	F
	G
6     6     7     8 <td>Н</td>	Н
	I
ONER)  - (With automatic - (Without automatic -	ADI
March   Marc	K
Commetta	
	L
Name     Specification	М
Name   Fuse BLOCK (J/B)	N
Terminal Color Name Connector Name Connector Name Connector Type SA BR BR BA L A A L A A BR BR BA L A A BR BA L A A BR BA L A A BR BA L A BR BA L BA BR BA L BA BR BA L BA BR BA L BA BR BA BR BA BA BR BA BA BR BA	0
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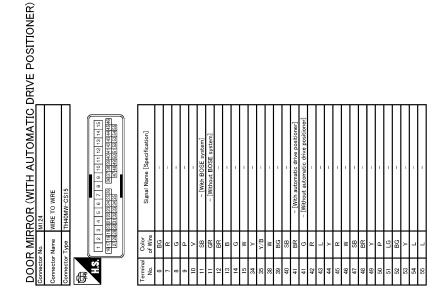
DOOR MIRROR (WITH AUTOMATIC		VE PC	SITI	DRIVE POSITIONER)					
Connector No. M7		44	>	=	Connector No.	M17	5	BR	-
Connector Name WIRE TO WIRE	_	45	SB SS	1 1	Connector Name	WIRE TO WIRE	9 1	< ا	
Connector Type TH80MW-CS16-TM4	T	47	SB	-	Connector Type	TK02FW	- ∞	. 0	1
á	 	48	ΓG	ı	4		Ξ	SB	1
		49	ΓG	- [With BOSE system]	厚		14	۵	1
112		49	SB	- [Without BOSE system]	S		16	œ	=
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		20	SB	- [With BOSE system]					
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		200	ي ا	- [Without BOSE system]		2 1	c	1	****
		2 5	Σ,	1			Coune	Connector No.	Mal
		25	> 0	1 1			Conne	Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Tarminal	Г	2 2	- a		Tarminal Color		Conne	Connector Type	TH39EW-NH
	_	52	-	- [With A/T]	_	Signal Name [Specification]			
1 BG	T	22	BG	- [With M/T]	t	1	Œ	_	
2 LG -	Ι	26	٦	1	2 P	1	I	,	
3 6	Γ	23	>	ı			2	2	
4 V -	Г	09	LG					1	3 4 5 6 7 9 10 11 12 13
2	П	61	BG	-	Connector No.	M18		17 18	19 20 21 22 23 24 25 26 27 30 31 32
- B 9		62	В	-	Nomoto Momo	DOWN OF BOWN			
- T 6		63	۸	1		אוויב וס אוויב			
10 BR –		64	SB		Connector Type	TK02MW	Terminal	_	Simol Nama [Sasaifantian]
12 SHIELD -	Г	92	BR	-			N <sub>o</sub>	of Wire	
13 V -		99	Υ	-	修		-	Υ	TILT SW (UPWARD)
14 BR –	_ _	.9	Ь	1	Ę		2	PT	MIRROR SELECT SW (RH)
15 GR -		89	٦	-	21		8	9	MIRROR SW (UPWARD)
- PT 91	_ _	69	Ь	Î		0	4	^	MIRROR SW (LEFTWARD)
17 L	П	70	٦	-		7	5	۳	MIRROR SENSOR (RH VERTICAL)
20 BR –		80	G	-			9	GR	MIRROR SENSOR (LH VERTICAL)
21 G -		81	LG	-			7	BG	TILT SENSOR
22 R –		82	Υ	-	Terminal Color	Simpl Nama [Sasaifantion]	6	BR	ADDRESS 1
23 SB –		83	BR	1	No. of Wire		10	>	TX (UART)
24 B –		84	>	_	1 L	-	Ξ	GR	TELESCOPIC SW (FRONTWARD)
25 W –		85	٦	1	2 P	1	12	BG	IND 1
26 Y =	7	98	Υ	1			13	Д	IND 2
$\dashv$	_ _	87	GR	1			14	≯	MIRROR MOTOR (RH VERTICAL)
+	_ 	91	ď	1	Connector No.	M24	12	BG	MIRROR MOTOR (RH HORIZONTAL)
┪	_ 	93	g	İ	Connector Name	DATA LINK CONNECTOR	16	>	MIRROR MOTOR (LH COMMON)
ξ		94	۵	=			17	æ	TILT SW (DOWNWARD)
4	 	92	æ	1	Connector Type	BD16FW	∞_	۵	MIRROR SELECT SW (LH)
$\dashv$	_	96	<b>&gt;</b>	1	þ		19	SB	MIRROR SW (DOWNWARD)
+	7	97	SB	ı	厚		20	BR	MIRROR SW (RIGHTWARD)
+	7	66	>	ı	Ę		21	_	MIRROR SENSOR (RH HORIZONTAL)
36 BR –	_	100	Y/B	ı		9 10 11 12 13 14 15 16	22	5	MIRROR SENSOR (LH HORIZONTAL)
۵	7				_	7 7 7 7 7	23	۵	TELESCOPIC SENSOR
- ا	٦				=	12345018	24	۳	SET SW
>	П				<u> </u>	1	25	>	ADDRESS 2
Н	П						26	۵	RX (UART)
40 SHIELD –	П				la l	Signal Name [Specification]	27	G	TELESCOPIC SW (BACKWARD)
+	Т				٥		30	SB	MIRROR MOTOR (RH COMMON)
┪	Т				+	I	3	g	MIRROR MOTOR (LH VERTICAL)
43 SHIELD –	٦				4 B		35	æ	MIRROR MOTOR (LH HORIZONTAL)

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### < DTC/CIRCUIT DIAGNOSIS >

R SUPPLY R SUPPLY R SUPPLY R SUPPLY PLY R SUPPLY	А
IGN RELAV (F/B) CONT  KEVLESS ENTRY RECEIVER COMM  COMBI SW INPUT 5  COMBI SW INPUT 5  COMBI SW INPUT 5  COMBI SW INPUT 6  CAN+H  KEY SLOT ILL  ON IND  ACC BELLAY CONT  SAL CONDITION 1  ASCIDIC GLITCH SW [WAN AT]  PASSENGER BOOF REQUEST SW  BLOWER FAN MOTOR REQUEST SW  BLOWER FAN MOTOR REQUEST SW  COMBI SW INPUT 4  COMBI SW INPUT 4  COMBI SW INPUT 4  COMBI SW INPUT 4  COMBI SW INPUT 3  SAL UNIT COMM	В
N	С
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	D
MODULE)    Seefication   High 19   H	Е
119	F
Connector No.   Man   E	G H
ceffication]  ceffication]  L. B. Suppliv (BAT)  R. Suppliv (RAP)	
Name   WIRE TO WIRE	ADF
Connector Name   WIRE TO W	К
	L
DOOR MIRROR (WITH AUTOMATIC Connector No.   MM2	М
MIRROR (WITH-   MS2	N
Connector Name   Color Name   Connector Name   Connecto	0
	JCLWM4833GE

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< ECU DIAGNOSIS INFORMATION >

# **ECU DIAGNOSIS INFORMATION**

# DRIVER SEAT CONTROL UNIT (WITH AUTOMATIC DRIVE POSITIONER)

Reference Value

## VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condit	ion	Value/Status
SET SW	Set switch	Push	ON
OLI OVV	Set Switch	Release	OFF
MEMORY CWA	Mamanu quitab 1	Push	ON
MEMORY SW1	Memory switch 1	Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
WEWORT SWZ	Wemory Switch 2	Release	OFF
SLIDE SW-FR	Sliding switch (front)	Operate	ON
SLIDE SW-FK	Sliding Switch (front)	Release	OFF
SLIDE SW-RR	Sliding switch (roor)	Operate	ON
SLIDE SW-KK	Sliding switch (rear)	Release	OFF
DECLN SW ED	Declining quitab (front)	Operate	ON
RECLN SW-FR	Reclining switch (front)	Release	OFF
RECLN SW-RR	Paglining switch (rear)	Operate	ON
NEOLIN SW-KK	Reclining switch (rear)	Release	OFF
LIFT FR SW-UP	Lifting ewitch front (up)	Operate	ON
LII I FR SVV-UP	Lifting switch front (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
LIFT FK SW-DIN	Litting Switch from (down)	Release	OFF
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
LII I KK SW-OF	Litting Switch real (up)	Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
LII I KK SW-DN	Litting Switch real (down)	Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
WIII CON OW-OI	WIIITOI SWITCH	Other than above	OFF
MIR CON SW-DN	Mirror switch	Down	ON
WIII CON OW-DIN	WIIITOI SWITCH	Other than above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
WIII OON OW-INI	WIIITOI SWILOIT	Other than above	OFF
MIR CON SW-LH	Mirror switch	Left	ON
	WIIITOI SWILOIT	Other than above	OFF
MIR CHNG SW-R	Changeover switch	Right	ON
WIII OTHO OW-IX	OnlingCover Switch	Other than above	OFF
MIR CHNG SW-L	Changeover switch	Left	ON
01110 011 1	Shangoovor switch	Other than above	OFF
TILT SW-UP	Tilt switch	Up	ON
	THE OWNOR	Other than above	OFF
TILT SW-DOWN	Tilt switch	Down	ON
011 501111		Other than above	OFF

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< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cor	dition	Value/Status
TELESCO SW ED	Talagagaig gwitch	Forward	ON
TELESCO SW-FR	Telescopic switch	Other than above	OFF
TELESCO SW-RR	Tilt switch	Backward	ON
TEEE300 SW-RR	The Switch	Other than above	OFF
FORWARD SW	Seat back	Folded down	ON
	Cour Busic	Other than above	OFF
WALK-IN SW	Power walk-in switch	Pressed	ON
	. one namen	Other than above	OFF
FWD LIMIT SW	Seat sliding	Front edge	ON
		Other than above	OFF
SEAT BELT SW	Seat belt	Fastened	ON
	<b>C</b> G G G G G G G G G G G G G G G G G G G	Other than above	OFF
DETENT SW <sup>*1</sup>	A/T selector lever	P position	OFF
		Other than above	ON
PARK BRAKE SW <sup>*2</sup>	Parking brake	Applied	ON
	3	Release	OFF
STARTER SW	Ignition position	Cranking	ON
	3	Other than above	OFF
		Forward	The numeral value decreases *3
SLIDE PULSE	Seat sliding	Backward	The numeral value increases *3
-		Other than above	No change to numeral value*3
		Forward	The numeral value decreases *3
RECLN PULSE	Seat reclining	Backward	The numeral value increases *3
		Other than above	No change to numeral value*3
		Up	The numeral value decreases *3
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *3
		Other than above	No change to numeral value*3
		Up	The numeral value decreases *3
LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *3
		Other than above	No change to numeral value*3
MIR/SEN RH U-D	Door mirror (passenger s	side)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger s	side)	Change between 3.4 (close to left edge 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
TILT SEN	Tilt position		Change between 1.2 (close to top) 3.4 (close to bottom)
TELESCO SEN	Telescopic position		Change between 3.4 (close to top) 0.8 (close to bottom)

<sup>\*1:</sup> A/T model

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<sup>\*2:</sup> M/T model

<sup>\*3:</sup> The value at the position attained when the battery is connected is regarded as 32768.

< ECU DIAGNOSIS INFORMATION >

# TERMINAL LAYOUT 1 2 3 4 5 6 7 8 9 1011 1213 1415 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 JMJIA0199ZZ

#### PHYSICAL VALUES

	nal No.	Description				Voltage (V)
+	-	Signal name	Input/ Out- put	Con	dition	(Approx)
1 L/W	Ground	UART communication (RX)	Input	Ignition switch ON		2mSec/div 2V/div JMJIA0118ZZ
3 R/Y	_	CAN-H	_	-	_	_
4	_	Sliding limit switch		Seat sliding front	edge	0
O/B	Ground	signal	Input	Seat switch & pow pressed	er walk-in switch is	5
5 L	Ground	Seat belt buckle switch signal (driv-	Input	Seat belt fastened pressed	& seat switch	5
L		er side)		Other than above		0
8	Ground	Parking brake	Input	Parking brake	Applied	0
L/Y	Cround	switch signal	mpat	r anding brane	Release	Battery voltage
9 W/G	Ground	Reclining sensor signal	Input	Seat reclining	Operate	10mSec/div
					Stop	0 or 5
10 P/B	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div 2V/div JMJIA0119ZZ
					Stop	0 or 5

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< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Voltage (V)
+	-	Signal name	Input/ Out- put	Con	dition	(Approx)
11 (BR)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0
		Zaomara eignar			Release	Battery voltage
12 (SB)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0
(02)		baokwara signar			Release	Battery voltage
13 (LG/R)	Ground	Lifting switch (front) downward signal	Input	Lifting switch (front)	Operate (downward)	0
		aommara oigna		()	Release	Battery voltage
14 (GB)	Ground	Lifting switch (rear) downward signal	Input	Lifting switch (rear)	Operate (downward)	0
(05)		downward signal		(rodi)	Release	Battery voltage
16 (O)	Ground	Sensor power sup- ply	Out- put	-	_	Battery voltage
17 (Y/R)	Ground	UART communication (TX)	Out- put	Ignition switch ON	I	10mSec/div 2V/div JMJIA0121ZZ
19 (V)	_	CAN-L	_	-	_	_
21 (L/Y)	Ground	Detention switch switch	Input	A/T selector lever	P position  Except P position	0  20mSec/div  WWWWWWWW  5V/div  JMJIA0120ZZ
24 (R)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div 2V/div JMJIA0119ZZ
					Stop	0 or 5
25 (Y/B)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 2V/div JMJIA0119ZZ
					Stop	0 or 5

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Voltage (V)
+	-	Signal name	Input/ Out- put	Con	dition	(Approx)
26 (Y)	Ground	Sliding switch for- ward signal	Input	Sliding switch	Operate (forward)	0
(1)		waru signai			Release	Battery voltage
27 (R/G)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
(14/6)		lorward signal			Release	Battery voltage
28 (W/B)	Ground	Lifting switch (front) upward signal	Input	Seat lifting switch (front)	Operate (upward)	0
(۷۷/۵)		upwaru signai		(HOIII)	Release	Battery voltage
29 (P/L)	Ground	Lifting switch (rear) upward signal	Input	Seat lifting switch (rear)	Operate (upward)	0
(F/L)		upwaru signai		(leai)	Release	Battery voltage
30	Ground	Power walk-in	Input	Power walk-in	Pressed	0
(P)	Glound	switch signal	input	switch	Other than above	Battery voltage
31 (GR)	Ground	Sensor ground	_	-	_	0
32 (B/W)	Ground	Ground (signal)	_	-	_	0
33 (R)	Ground	Power source (C/B)	Input	-	_	Battery voltage
35 (W/R)	Ground	Sliding motor for- ward output	Out- put	Seat sliding	Operate (forward)	Battery voltage
(**/***)		wara output	Put		Release	0
36 (G/Y)	Ground	Reclining motor for- ward output signal	Out- put	Seat reclining	Operate (forward)	Battery voltage
(0/1)		wara output signal	put		Release	0
37 (G/W)	Ground	Lifting motor (front) downward output	Out- put	Seat lifting (front)	Operate (downward)	Battery voltage
(3/11)		downward output	put		Stop	0
38 (L/Y)	Ground	Lifting motor (rear) upward output	Out- put	Seat lifting (rear)	Operate (upward)	Battery voltage
(=/ 1)		apmara output	ραι		Stop	0
39 (R/B)	Ground	Lifting motor (rear) downward output	Out- put	Seat lifting (rear)	Operate (downward)	Battery voltage
(, 5)			F.01		Stop	0
40 (R/W)	Ground	Power source (Fuse)	Input	-		Battery voltage
				Seat back is folde walk-in switch pre	d down and power ssed	0
41 (Y/G)	Ground	Forward switch signal	Input	Seat back is fold using is operation	up and seat reclin-	battery voltage
				Seat back is fold usin switch is presse	up and power walk- ed	5
42	Ground	Sliding motor back-	Out-	Seat sliding	Operate (backward)	Battery voltage
(W)		ward output	put		Stop	0

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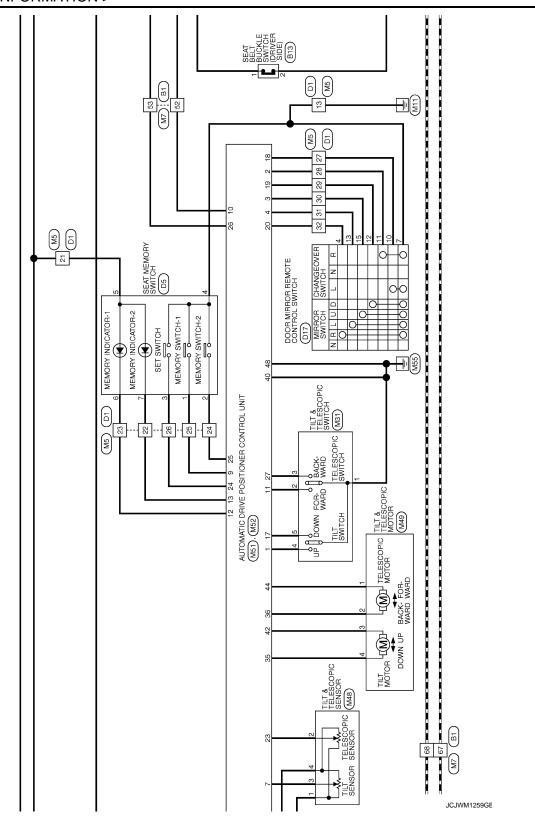
## < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description				Voltage (V)				
+	-	Signal name	Input/ Out- put	Con	dition	(Approx)				
44 (P)	Ground	Reclining motor backward output	Out- put	Seat reclining	Operate (backward)	Battery voltage				
(٢)		backwaru output		put	put	put	put	put		Stop
45 (L/R)	Ground	Lifting motor (front)	Out-	Seat lifting (front)	Operate (upward)	Battery voltage				
(L/K)		upwaru output	output put		Stop	0				
48 (B)	Ground	Ground (power)		_	_	0				

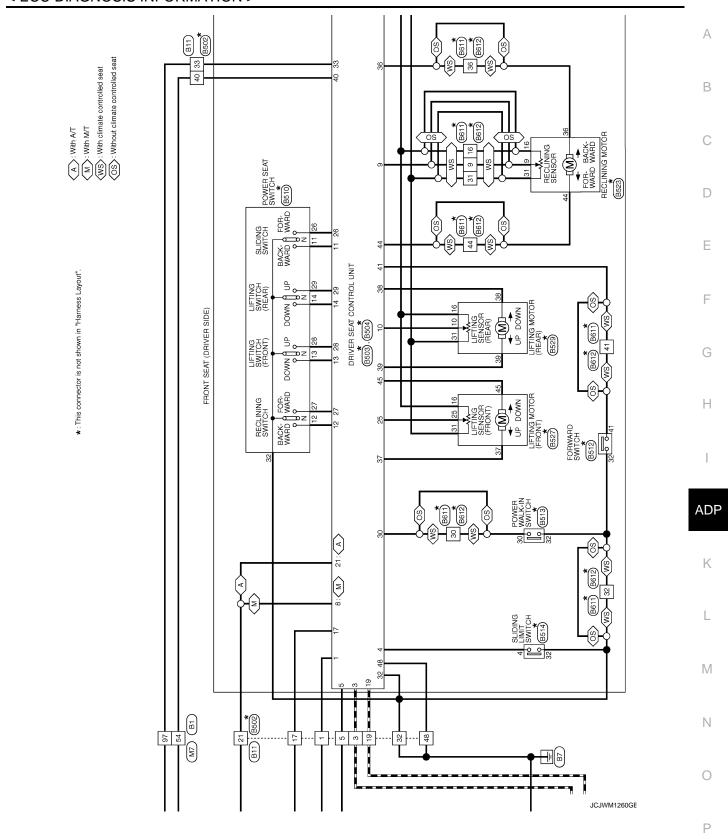
< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -Α INFOID:0000000005841719 В C AUTOMATIC DRIVE POSITIONER CONTROL UNIT (M51) (M52) D 44 45 46 Е DOOR MIRROR (DRIVER SIDE) F \*: This connector is not shown in "Harness Layout". [5] (<u>§</u> G 40 44 Н 45 46 ADP M137): < A CIRCUIT BREAKER (M62) F157) A/T ASSEMBLY : A TCM (TRANSMISSION CONTROL MODULE) K DATA LINK CONNECTOR M24 FUSE BLOCK (J/B) (M1) **AUTOMATIC DRIVE POSITIONER** BCM (BODY CONTROL MODULE) (M118), (M123), (M123) KEY SLOT DATA LINE M95 10A M To CAN system Ν <u>E100</u> (M6 404 A BATTERY 0 2009/11/10 Ρ

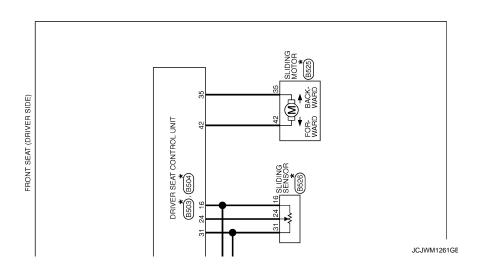
JCJWM1258GE



< ECU DIAGNOSIS INFORMATION >



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



## < ECU DIAGNOSIS INFORMATION >

	А
BI4 PARKING BRAKE SWITCH POIFB-A Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)  Signal Name (Specification)	В
B16 PARKING POIFE-A DRIVER 8 AOSTW	С
Connector Name Connector Name Connector Name Terminal Color No. Ownector Name Connector Name Con	D
Sife ation of feation of feating	Е
B11   WIRE TO WIRE   WISE TO WIRE   WISE TO WIRE   WISE W.CS   W	F
	G
Connector Name   Color Nam	Н
- [With BOSE system] - [Without BOSE system] - [Without BOSE system] - [Without BOSE system] - [Without BOSE system]	I
- [With [Wit	ADP
	K
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ER Seseri	L
Connector No.   BI   Connector No.   BI   Connector No.   BI   Connector No.	M
BI WIRE TO WIRE CHARLES THAT THE WIRE TO WIRE CHARLES THAT THE	Ν
Connector Name   Conn	0
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< ECU DIAGNOSIS INFORMATION >

Connector No. BS02 Connector No. BS02 Connector Name WIRE TO WIRE	$\Box$	FRONT LIFTING SW (DOWNWARD) REAR LIFTING SW (DOWNWARD) VCC		B510 POWER SEAT SWITCH (DRIVER SIDE)	
19 3 1	<del>                                     </del>	CAN-L PRANCE SW PULSE (SLIDING) SLIDING SW (CREWARD) RECLINING SW (FORWARD) RECLINING SW (FORWARD) FROM LETING SW (FORWARD)	H.S.	NS 10+P-05   32   14   29   12   27   11   26   13   28	Connector type I NUZ-BH I SZ 30
Signal Name [Specification]	30 P/L 31 GR 32 B/W Gomector No. B504 Commettor Name DRIV	HEATLI-ING SIGNAL) PAYLI-ING SIGNAL) GND (SIGNAL) GND (SIGNAL) BEGA DRIVER SEAT CONTROL UNIT NSIGFW-CS 3   35   36	× 1 8 6 7 8 8 8 8 8 6	Signal Name [Speoification]	Terminal   Color   Signal Name [Specification]   Oolor   Ool
BS03 TH3ZFW	Terminal Color No. of Wire 33 R.R. 35 W.R. 37 G.V. 37 G.V. 37 G.V. 38 L.Y. 38 L.Y. 38 L.Y. 38 L.Y.	41   42   44   45   48   48   8   8   8   8   8   8   8	Connector Name Connector Type H.S.	BB12 FORWARD SWITCH (DRIVER SIDE) S02FW  41 41 32	Signal Name [Specification]   Color Nice   Signal Name [Specification]   4
1	39 R/B 40 R/W/W 41 47 4 42 W W 45 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 8 B B	REAR LIFTING MOTOR (BACKWARD) BAT (FUSE) BAT (FUSE) FORWARD SW RECLIMING MOTOR (BACKWARD) FROUT LIFTING MOTOR (LIPWARD) GND (POWER)	Terminal   Color   No.   Of Wire   22   B/W   41   V/G	Signal Name [Specification]	

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< ECU DIAGNOSIS INFORMATION >

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36 [41]	Е
Signal Name [Specification]   Sign	F
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Conne	Н
Signal Name [Specification]	1
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Connector Name   List	К
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AUTOMATIC DRIVE POSITIONER  Connector Name RECLINING MOTOR (DRIVER SIDE)  Connector Name RECLINING MOTOR (DRIVER SIDE)  Connector Name Signal Name (Specification)  16 0	М
Name   RECLINING   Name   RECLINING   Name   RECLINING   NSOGFW-CS    NSOGFW-CS    Name   SLIDING M   NAme   SLIDING S    Name   N	N
AUTOMA Connector Name	0
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< ECU DIAGNOSIS INFORMATION >

إ∖		AUTOMATIC DRIVE POSITIONER	Ĺ	-			ſ		١			
Conne	ctor No.	DI	44	+		Connector No.	No. D5		Connector No.	or No.	D31	
Conne	Connector Name	ne WIRE TO WIRE	45	+		Connector Name		SEAT MEMORY SWITCH	Connect	Connector Name	WIRE TO WIRE	
Conne	tor Type	Connector Type TH40FW-CS15	47	>		Connector Type	1	A08FW	Connect	Connector Type	TH40FW-CS15	
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			S	Connector No	60							
Tarmi			5	IGCCOI INO.	Т	Tarminal	Color		Tormina	Color		
N	of Wire	Nire Signal Name [Specification]	Conn	Connector Name			of Wire	Signal Name [Specification]	N	_	Signal Name [Specification]	
4	П		Conn	Connector Type	TH12MW-NH	-	SB	1	9	BR	1	
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13	L	_	No		oignal Name [opecimication]			Total to date of the control of the	34	>	1	
14	H	- /		- SB	- [With automatic drive positioner]	Connector Name		DOOR MIRROR REMOTE CONTROL SWITCH	32	Y/B	1	
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91	Y/B	(8	_	0					39	GR.	1	
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20	H	- /	4	H	L	Ě	L		14	>	1	
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23	0		9	6 GR	- [With automatic drive positioner]			10 11 12 13 14 13	44	^	-	
24	Н		9	Н	_				45	Ь	-	
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56	æ	-	_	^	<ul> <li>[Without automatic drive positioner]</li> </ul>	lal	Color	Signal Name [Specification]	47	>	1	
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< ECU DIAGNOSIS INFORMATION >

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MIRROR (PASSENGER SIDE)  WEANH  Signal Name (Specification)  Signal Name (Specification)  Without automatic drive positioner)  Without automatic drive positioner)  Without automatic drive positioner   American Automatic drive positioner  American Automatic drive positioner   American Automatic drive positioner	M
10 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ν
AUTOMAT  Connector Name  Connector Type  Connector Type  1	0
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< ECU DIAGNOSIS INFORMATION >

88 89 SB C C C C C C C C C C C C C C C C C C	G G G BR BR P P P V SHIELD	-	
3 R	G		44 B R -  Wth M/T] 46 G -  Wth M/T] 48 P C -  Wth M/T] 48 P C -  Wth M/T] 50 P C -
20 BG	BR P P P P P P P P P P P P P P P P P P P	<del>                                     </del>	50   SB   52
AUTOMATIC DRIVE POSITIONER Connector No. MI Connector Name FUSE BLOCK (J/B) Connector Type INSOFFW-MZ	H.S. 3A2A1A 8A 7A6A5A4A	Connector Name   Connector Name   Capecification   Cape	Target and programmer   Targ

JCJWM1267GE

## < ECU DIAGNOSIS INFORMATION >

	А
DATA  ILL BAT  ILL BA	В
M31 TILT & TT TK06F GY	С
1   S   B   Connector Name   Connector	D
if cation]	Е
Signal Name (Specification)	F
Connector No. M17  Connector Name WIRE TO WIRE  Connector Type TROZFW  No. of Wire  Connector No. M18  Connector No. M18  Connector No. M22  Conne	G
Connector No.  Connec	Н
- (With BOSE system) - [Without BOSE system] - [Without BOSE system] - [Without BOSE system] - (With A/T) - (With M/T) - (	I
- [With - [With - ]	ADP
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NER Joseph Jasest Jases	L
Wr-CS16-TM4 Wr-CS16-TM4 Wr-CS16-TM4 Signal Name (Specification) Signal Name (Specification)	M
AUTOMATIC DRIVE POSITIONER   Connector Name   WIRE TO WIRE	N
Name	
Connector No.   Connector No	0
JC.N	WM1268GE

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< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER  Commercer No. M48  TILT & TELESCOPIC SENSOR  Commercer Type TKG4FW	Color   Color   No.   of Wire     Y     Y		40 B 41 Y 42 BG 44 G 48 B	GND (SIGNAL) GND (SENSOR) TIL MOTOR (DOMNUMARD) TELESCOPIC MOTOR (BACKWARD) GND (POWER)	<del>                                     </del>	INTAKI IN-VEHIC AMBIEN SUNLO/ ION CONTRC	
	A	MIRROR SW (LETTWARD) MIRROR SENSOR GHA VERTICAL) MIRROR SENSOR (HA VERTICAL) TILT SENSOR ADDRESS 1 TX (MART) TELESCOPIC SW (FRONTWARD)	Connector No. Connector Name Connector Type	MR2 CIRCUIT BREAKER MOZFW-LC	65 BG 69 L 70 R 71 GR 72 P	EACH DOOR MUTUR POWER SUPPLY GROUND CAN-L	
ППП	12 BG 13 P 14 W 15 BG 16 Y 17 BR	IND 2 MIRROR MOTOR (RH VERTICAL) MIRROR MOTOR (RH HORZONTAL) MIRROR MOTOR (LH COMMON) TIT SW (DOWNWARD) TIT SW (DOWNWARD)	H.S.		Connector No. Connector Type	MITG WRE TO WIRE TK38MW-NS10	
	<del>                                     </del>	MIRROR SW (TOWNWARD) MIRROR SW (TOWNWARD) MIRROR SENSOR (THE HORIZONTAL) MIRROR SENSOR (THE HORIZONTAL) MIRROR SENSOR (LH HORIZONTAL) TELESORPIC SENSOR	Terminal Golor No. of Wire 1 W	Signal Name [Specification]			
	24 K 25 V 27 G 30 SB 31 G 32 BR	SELSW ADDRESS Z RX (UART) TELESCOPIC SW IEACKWARD) MIRROR MOTOR (IH VERTICAL) MIRROR MOTOR (IH VERTICAL) MIRROR MOTOR (IH HORIZONTAL)	or No.	M67 UNIFIED METER AND A/G AMP. TH32FW-NH	ē	Signal Name [Specification]	
	Connector No. Connector Name Connector Type	MS2 AUTOMATIC DRIVE POSITIONER CONTROL UNIT NS16FW-CS	1.5.   41 42 43   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59   57 58 59 59 59   57 58 59   57 58 59   57 58 59	57] 505 505 605 6162 62 65 66 66 87 77 172 605 605 605 605 605 605 605 605 605 605	100 F F F F F F F F F F F F F F F F F F		
	S.	33 54 35 36 59 39 40 41 42 44 48	41 BR 42 BR 43 R 44 LG 45 V 46 BG	ACC POWER SUPPLY FUEL LEVEL SENDORS RIGHAL INTAKE SENSOR SIGNAL IN-VEHICLE SENSOR SIGNAL AMBIENT SENSOR SIGNAL SUNLOAD SENSOR SIGNAL	42 G 43 P 44 L 45 C 46 Y		
	Terminal Color No. of Wire 33 BR 34 R 35 L 35 L 36 GR	Signal Name (Specification) POWER SUPPLY (SENSOR) BAT (FUSE) TILT MOTOR (UPWARD) TELESCOPIC MOTOR (C-R)		GAS SENSOR SIGNAL IGNITION FOWER SUPPLY BATTERY POWER SUPPLY GROUND CANH BRAKE FLUID EVEL SWITCH SIGNAL FUEL LEVEL SENSOR SIGNAL GROUND			

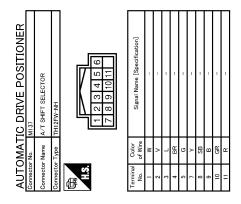
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## < ECU DIAGNOSIS INFORMATION >

and indicated in the control of the	А
No.   M124   Name   WIRE TO WIRE   TH40MM-CS115	В
Name   WIRE TO WIRE   Th40MM-0SI E	С
Oonnector Connector Connec	D
MODULE)  MODULE)  MODULE  MODULE  MODULE  SPECIFICATION  SERPALLINK  SERPALLIN	Е
Signal Name [5 Signal	F
	G
Connector No.   Connector No.   Connector Name   Connector Name   Connector Type   Connec	Н
No.   M122	S/L UNIT COMM S/L UNIT COMM
NATE SIGNA (BODY C PAS)  PASS PASS PASS PASS PASS PASS PASS PAS	ADP
Color No.   Colo	K
	1113 L
AUTOMATIC DRIVE POSITIONER   Sometor No.   MI18   BOM (BODY CONTROL MODULE)	М
_ ' .	N
AUTOMAT  Connector No.  Connector No.  Connector Lype  Connector Type  Connect	0
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< ECU DIAGNOSIS INFORMATION >



Fail Safe

JCJWM1271GE

INFOID:0000000005632130

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

< ECU DIAGNOSIS INFORMATION >

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

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

DTC Index

CONSULT-III	Tim	ing <sup>*1</sup>		
display	Current mal- function Previous mal- function		Item	Reference page
CAN COMM CIRCUIT*2	0	1 20	CAN communication	With ADP: ADP-48
[U1000]	0 1-39 CAN		CAN communication	Without ADP: ADP-48
SEAT SLIDE*2	0	1-39	Coat alide meter autout	With ADP: ADP-49
[B2112]	0	1-39	Seat slide motor output	Without ADP: ADP-49
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-51
TILT SENSOR [B2118]	0	1-39	Tilt sensor input	ADP-53
TELESCO SENSOR [B2119]	0	1-39	Telescopic sensor input	ADP-56
DETENT SW* <sup>2</sup> [B2126]	0	1-39	Detention switch condition	<u>ADP-59</u>
PARKING BRAKE [B2127]	0	1-39	Parking brake switch condition	<u>ADP-61</u>
UART COMM [B2128]	0	1-39	UART communication	ADP-63

<sup>\*1.</sup> 

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<sup>• 0:</sup> Current malfunction is present

<sup>• 1-39:</sup> 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.

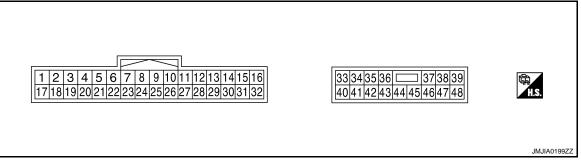
<sup>\*2:</sup> Driver seat without automatic driver positioner system display only "U1000 CAN COMM CIRCUIT" and "B2112 SEAT SLIDE".

< ECU DIAGNOSIS INFORMATION >

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

#### **TERMINAL LAYOUT**



#### PHYSICAL VALUES

	nal No. color)	Description		Conditi	on	Voltage (V)
+	_	Signal name	Input/ Output	Conditi	OII	(Approx.)
1	Ground	Tilt switch upward signal	Input	Tilt switch	Operate (upward)	0
(Y)	Giodila	Till Switch upward Signal	Шрис	THE SWILCH	Other than above	5
2		Changeover switch RH		Changeover	RH	0
(LG)	Ground	signal	Input	switch position	Neutral or LH	5
3	Ground	Mirror switch upward sig-	Input	Mirror switch	Operated (upward)	0
(G)	Ground	nal	прис	WIIITOI SWILCII	Other than above	5
4	Ground	Mirror switch leftward sig-	Input	Mirror switch	Operated (leftward)	0
(V)	Giodila	nal	прис	WIIIOI SWILCII	Other than above	5
5 (R)	Ground	Door mirror sensor (RH) upward/downward signal	Input	Mirror face (door m	nirror RH)	Change between 3.4 (close to peak) 0.6 (close to valley)
6 (GR)	Ground	Door mirror sensor (LH) upward/downward signal	Input	Mirror face (door mirror LH)		Change between 3.4 (close to peak) 0.6 (close to valley)
7 (O)	Ground	Tilt sensor signal	Input	Tilt position		Change between 1.2 (close to top) 3.8 (close to bottom)
9					Press	0
(BR)	Ground	Memory switch 1 signal	Input	Memory switch 1	Other than above	5
10 (V)	Ground	UART communication (TX)	Output	Ignition switch ON		2mSec/div

# < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)  Description			Condition	on	Voltage (V)			
+	_	Signal name	Input/ Output	Condition	UII	(Approx.)		
11	Ground	Telescopic switch forward	Input	Telescopic switch	Operate (forward)	0		
(GR)	Giodila	signal	прис	relescopic switch	Other than above	5		
12	Ground	Mamary indictor 1 signal	Output	Mamary indictor 1	Illuminate	1		
(O)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Other than above	Battery voltage		
13	0	Managaria diatan O aina al	0	Managara di atau O	Illuminate	1		
(P)	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Other than above	Battery voltage		
14	Ground	Door mirror motor (RH)	Output	Door mirror RH	Operate (upward)	Battery voltage		
(W)	Giodila	upward output	Output	Door million Kiri	Other than above	0		
15	0	Door mirror motor (RH)	0 1 1	D	Operate (leftward)	Battery voltage		
(O)	Ground	leftward output	Output	Door mirror RH	Other than above	0		
		Door mirror motor (LH) downward output			Operate (down- ward)	Battery voltage		
16	Ground	Door mirror motor (LH)	Output	Door mirror (LH)	Other than above	0		
(Y)			Door mirror motor (LH)		Door mirror motor (LH)	'		Operate (rightward)
		rightward output			Other than above	0		
17 (BB)	Ground	Tilt switch downward sig-	Input	Tilt switch	Operate (down- ward)	0		
(BR)		nal			Other than above	5		
18		Changeover switch LH		Changeover	LH	0		
(P)	Ground	signal	Input	switch position	Neutral or RH	5		
19 (SB)	Ground	Mirror switch downward	Input	Mirror switch	Operate (down- ward)	0		
(SB)	C.Odila	signal			Other than above	5		
					Operate	0		
20 (BR)	Ground	Mirror switch rightward signal	Input	Mirror switch	(rightward) Other than	5		
21	Ground	Door mirror sensor (RH)	Input	Door mirror RH po	above	Change between 3.4 (close to left		
(L) 22		leftward/rightward signal  Door mirror sensor (LH)	-	-		edge) 0.6 (close to right edge)  Change between 0.6 (close to left		
(G)	Ground	leftward/rightward signal	Input	Door mirror LH pos	sition	edge) 3.4 (close to right edge)		
23 (P)	Ground	Telescopic sensor signal	Input	Telescopic position	1	Change between 0.8 (close to top) 4.4 (close to bottom)		

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#### < ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition	on.	Voltage (V)	
+	_	Signal name	Input/ Output	Condition	Л	(Approx.)	
24 (R)	Ground	Set switch signal	Input	Set switch	Press Other than above	5	
25 (LG)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press Other than above	5	
26 (P)	Ground	UART communication (RX)	Input	Ignition switch ON		10mSec/div	
27 (G)	Ground	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (backward) Other than above	0 5	
		Door mirror motor (RH) downward output	Output			Operate (down- ward)	Battery voltage
30 (SB)	Ground	Door mirror motor (RH)		tput Door mirror (RH)	Other than above	0	
					Operate (rightward)	Battery voltage	
		rightward output			Other than above	0	
31	Ground	Door mirror motor (LH)	Output	Door mirror (LH)	Operate (upward)	Battery voltage	
(G)		upward output		(= 4)	Other than above	0	
32	Ground	Door mirror motor (LH)	Output	Door mirror (LH)	Operate (leftward)	Battery voltage	
(L)		leftward output	Jupan	2001 11111101 (21.1)	Other than above	0	
33 (W)	Ground	Sensor power supply	Input	_		5	
34 (V)	Ground	Power source (Fuse)	Input	_		Battery voltage	
35	Ground	Tilt motor upward output	Output	Steering tilt	Operate (upward)	Battery voltage	
(L)					Other than above	0	
36	Ground	Telescopic motor forward	Output	Steering telescop-	Operate (forward)	Battery voltage	
(GR)		output signal		ic	Other than above	0	
39 (W)	Ground	Power source (C/B)	Input	_		Battery voltage	
40 (B)	Ground	Ground	_	_		0	

## < ECU DIAGNOSIS INFORMATION >

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

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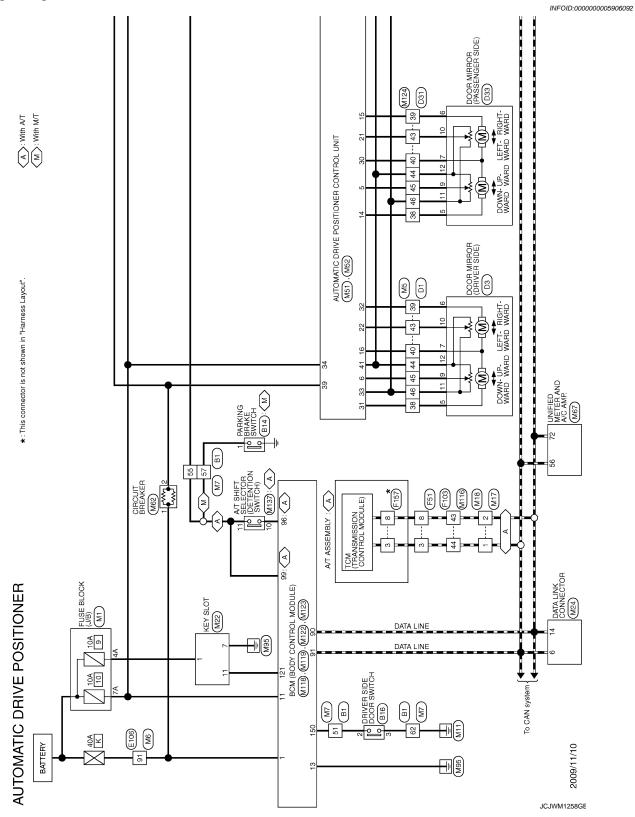
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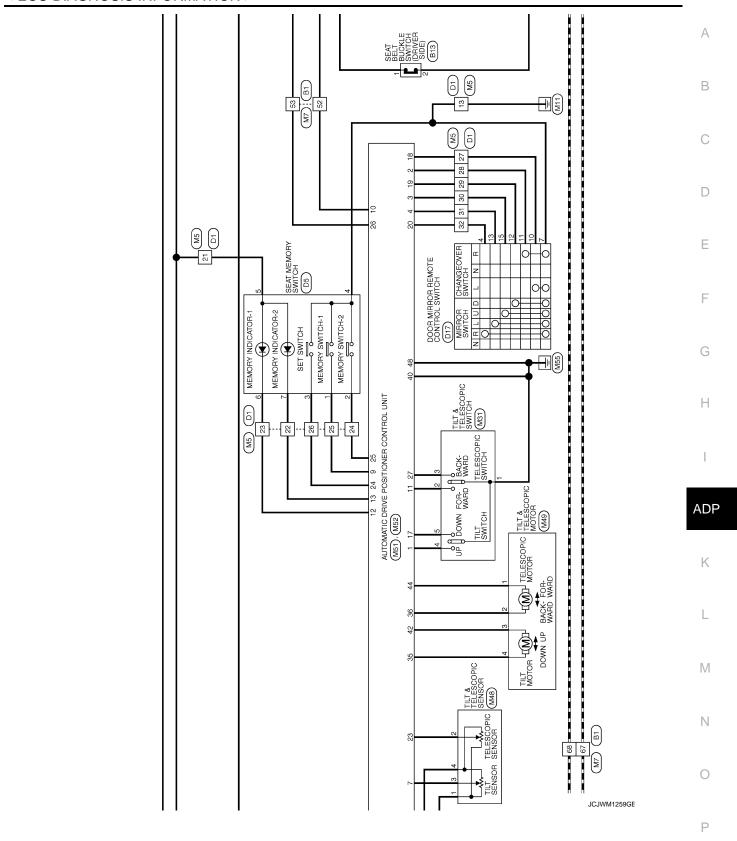
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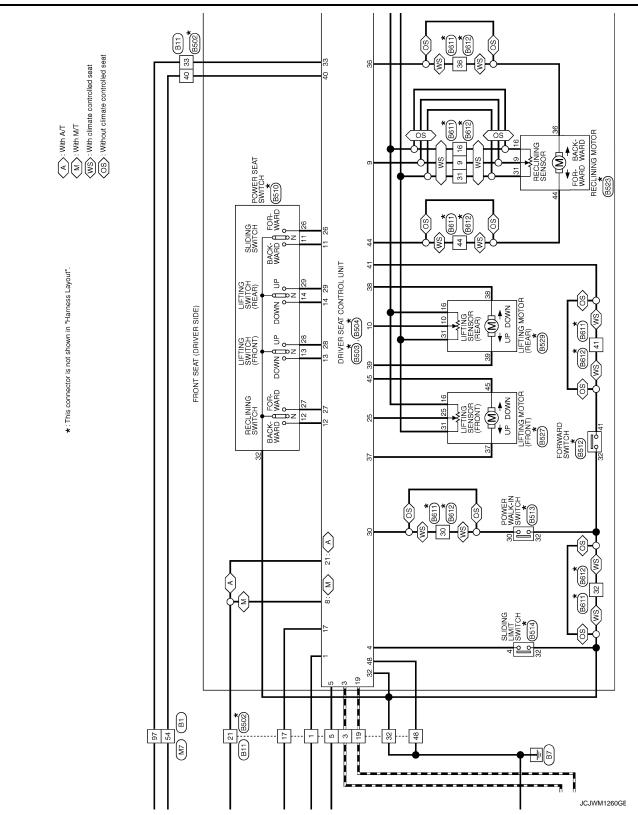
Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -



#### < ECU DIAGNOSIS INFORMATION >



#### < ECU DIAGNOSIS INFORMATION >



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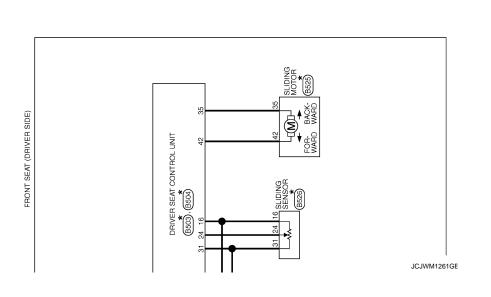
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## < ECU DIAGNOSIS INFORMATION >

AUTO	∕d	Į	ŀ		[			
Connector No.	No. B1	4	4		Š	Connector No.	B11	Connector No. B14
Connector Name	Name WIRE TO WIRE	4 4	45 V		3	Connector Name	WIRE TO WIRE	Connector Name PARKING BRAKE SWITCH
Connector Type	Type TH80FW-CS16-TM4	_	H	-	Cor	Connector Type	NS16FW-CS	Connector Type P01FB-A
q		4	+					4
等	100 100 100 100 100 100 100 100 100 100	7	49	= [With BOSE system]	F			(ATA)
Ę.		' L'	╀	ļ		λį.	1 2 10	[]
	C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u> </u>	╀		T	<u> </u>	S   1	<del> -</del>
		<u> </u> "	H		Γ	٥	60 67 33 21 48 32 66 5 8	3
		<b>_</b>	H	1		J		
		<u>.</u>	L	1	Γ			
la la	Color	<u>_</u>	H	1	Ter	Terminal Color		ā
_	of Wire	<u>°</u>	55 Y	1	_	No. of Wire	oignaí Name Lopecinication.	No. of Wire Signal Name [Specification]
-		2	26 W			1 LG		1 V
2	- 7	2	57 V	-		3 F	_	
3		Ľ	60 R	-		۷ و		
4	۸ -	Ľ	61 BG			17 G	-	Connector No. B16
5	M	Ľ	62 B	-		19 P	-	Company Mome SIDE DOOR SIMITOR
9	В –	Ľ	3 F			21 Y	-	
6	- 5	Ľ	4. P	1		32 B	1	Connector Type A03FW
10		Ľ	65 B	1		H	1	
12 S	SHIELD -	Ľ	BS 91			40 BR	-	
13	Υ -	9	67 P	-		Н	-	
14			T 89	1		99 BG	-	
15		9	G 69	-		. Д	-	Īc
16		_	T 0.	-		67 GR	-	7
17	BR -	- 8	80 G					က
20	- 9	8	81 V	-				
21		8	82 R	-	Cor	Connector No.	B13	lal
22				1		1	And the state of t	of Wire
23	- M		┝	1	3	Connector Name	SEAT BELLI BUCKLE SWITCH (DRIVER SIDE)	T
24			85 L	1	Cor	Connector Type	A03FW	3 B
25	BR -	-8	86 Y	-				
26	TG	8	87 GR				Ē	
27	γ –	5	91 R			ě.	2	
28		5	93 BG		<b>.</b>	2	-	
П		S	94 P	-			· c	
31 S	SHIELD -	S	95 GR	-			7	
32	0	5	96 GR	-				
33		5	97 SB				]	
34	BG -	5	A 66	-	Ter	lal	[moistong] come N loom S	
35		<u> </u>	100 Y/B	8		No. of Wire	oighal Name Lopecindadori	
36	BR -					M 1	-	
37	P - [With climate controlled seat]					2 B	-	
37	Y - [Without climate controlled seat]							
38	GR – [Without climate controlled seat]							
1	SHIELD -							
14	L							
42	ا د							
П	SHIELD -							

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## < ECU DIAGNOSIS INFORMATION >

tien]		Α
POWER WALK-IN SWITCH (DRIVER SIDE)  TKOZEBR  Signal Name (Specification)  Signal Name (Specification)  Signal Name (Specification)		В
11K02PBB 131		С
Connector No Connector Type  1.5  1.5  1.5  1.5  1.5  1.5  1.5  1.		D
Tempoon Community France Community Franc		
SIDE) ication]		Е
NSIGEW-CS   NSIGEW-CS   NSIGEW-CS   NSIGEW-CS   NSIGEW-CS   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 26 13 28   12 27 11 2		F
NSIOFW-CS   SEAT   NSIOFW-CS   SEAT		
		G
Connector No.		Н
D D D D D D D D D D D D D D D D D D D		
(DOWNWAR)  SW DINIG) DINIG) DINIG) DINIG) DINIG) CORWARD) CORWARD) CORWARD) CORWARD CORPORATION CORPOR		
FRONT LIFTING SW (DOWNWARD)  NOC  TX  CAN-I  PANGE SW  PULSE (SELDING)  PULSE (FR LIFTING SW (LPWARD)  SUDING SW (FORWARD)  FRONT LIFTING SW (UPWARD)  FRONT LIFTING MOTOR (FORWARD)  FRECLINING MOTOR (FORWARD)  FRECLINING MOTOR (BACKWARD)  FRECLINING MOTOR (BACKWARD)  FRECLINING MOTOR (BACKWARD)  FRONT LIFTING MOTOR (BACKWARD)		
REAR LETING SW (DOW)   TRAR LETING SW (DOW)   TA		ADF
		K
13 1.0.R 14 0.18 16 0.18 17 V.R 18 0.28 25 V.B 26 V.R 27 R.G 28 W.R 30 P.U 30 P.U 31 GR WAR 32 R.W 33 R.W 44 A.0 R.W 45 C.W 46 C.W 47 C.W 48 C.W 48 C.W 49 C.W 40 R.W 40 R.W 41 V.G 42 V.G 44 V.G 44 V.G 44 V.G 45 V.G 46 V.G 46 V.G 47 R.W 48 C.W 48		
		L
10   10   10   10   10   10   10   10		N /I
Signal Name [Specification]		M
Main		Ν
Name		
Commector Name   Comm		0
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Connector No.   B611	Connector Name WIRE TO WIRE	Connector Type NS12MBR-CS	唇	H.S. [58 57   <b>10 1</b> 44 36]	30 16 31 9 32 41		Terminal Color Signal Name [Specification]	6	$\dashv$	30 P	F	- A/S 98	a. 44	H			Connector No. B612	Connector Name WIRE TO WIRE	Connector Type NS12FBR-CS	鹭	H.S. 36 44 [77] 57 58	9 31 16		Terminal Color Signal Name [Specification]	✝	Н	$\dashv$	+	32 B/W -	╁	Н	57 W =	1
Terminal Color Stemal Name (Specification)		H	31 GR –	Connector No. B527	Connector Name LIFTING MOTOR (FRONT) (DRIVER SIDE)	Connector Type NS06FW-CS	医	45   37	16 31 25			Terminal Golor Signal Name [Specification]	+		H	37 G/W =	┨	Connector No R529	٩			H.S.	31 10		Terminal Color	of Wire	10 P/B –	+	31 GR	╁	ł		
AUTOMATIC DRIVE POSITIONER Connector No.   18523	Gonnector Name RECLINING MOTOR (DRIVER SIDE)	Connector Type NS06FW-CS	医	H.S. [44 [136]	16 31 9		Terminal   Color   Signal Name [Specification]   No.   of Wire	- 5/M 6	0	31 GR -	- a		Connector No. 18525	L	- 1	Connector Type   6098-0239	· · · · · · · · · · · · · · · · · · ·	Hs.	42	2	Terminal Color		42 W –	Connector No. 18526	П	_	Connector Type 6098-0241	4	THAT .	HS.	04 14 16	10 10	

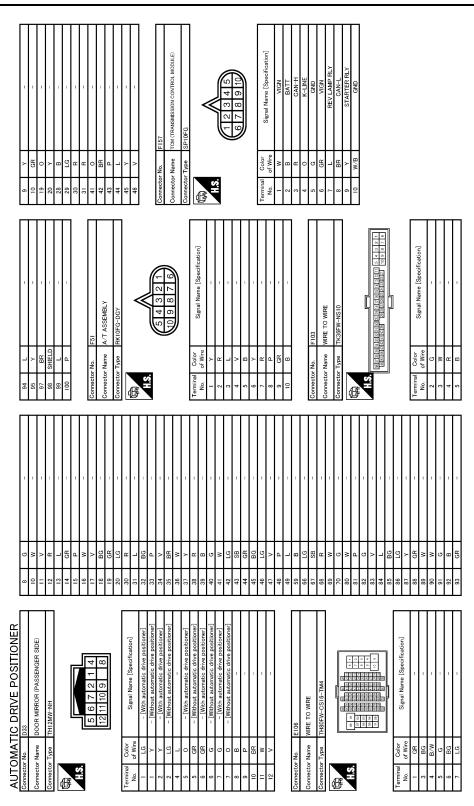
JCJWM1264GE

## < ECU DIAGNOSIS INFORMATION >

		А
Signal Name   WIRE TO WRE   Signal Name   Specification   Signal Name		В
No.   O.		С
Connector Name   Conn		D
1 4		Е
Signal Name [5 Signal Name [6 7 12 13]		F
Connector No.   Dig		G
		Н
R MIRROR (DRIVER SIDE)  2		I
D3 DOOR MIRROR (DRIVER SIDE) THI2MW-NH  12 111 10 9 8 Signal Name Specific With automatic drive p - [With automatic drive		ADP
		K
1   28   1   1   1   1   1   1   1   1   1		
		L
Colorector Name   MIRE TO WIRE   Connector Name   Color Name   C		M
MATIC DRIVE   Population   Mile TO Wife   Population   M		
MATIC DRIVING   10   10   10   10   10   10   10   1		Ν
Connector Name   Conn		0
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		Р

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#### < ECU DIAGNOSIS INFORMATION >



JCJWM1266GE

## < ECU DIAGNOSIS INFORMATION >

	А
	В
	С
88 89 88 89 88 89 88 89 88 89 88 89 88 89 89	D
	Е
- (With A/T) - (With M/T) - (Wi	F
	G
2 4 4 6 9 9 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Н
- [With automatic drive positioner] - [Without automatic drive positioner] - [With automatic dri	1
	ADP
22	К
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	L
[ONER]	
Signal Name [Specification]	M
Name   FUSE BLOCK (J/B)	N
	0
Composition of the second of t	JCJWM1267GE
	Р

**ADP-179** Revision: 2009 Novemver 2010 G37 Convertible

## < ECU DIAGNOSIS INFORMATION >

AUTC	MATIC DF	AUTOMATIC DRIVE POSITIONER								
Connector No.	No. M7		44	>	1	Connector No.	MI7	3 W	DATA	
Connector Name	Name WIRE TO WIRE	) WIRE	45	# W	1 1	Connector Name	WIRE TO WIRE	> 5	ILL BAT	_
Connector Type	Т	TH80MW-CS16-TM4	4	8 8		Connector Type	TK02FW	ł	GND	_
	1		48	БЛ	-			11 SB	KEY SWITCH SIGNAL	_
修			49	PT	- [With BOSE system]					
S E	1 6	200	49	SS	- [Without BOSE system]					,
Ž	2 7	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20	SB	<ul><li>- [With BOSE system]</li></ul>			Connector No. M24		_
	0 0	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	20	PC	- [Without BOSE system]	1	2 1	Connector Name DATA	DATA LINK CONNECTOR	
	01 8		21	~	1		]			_
			25	>	ı			Connector Type BD16FW	FW	_
- 1			23	۵	ı	ŀ		þ		
ē	Color	Signal Name [Specification]	54	æ	1	la	Signal Name [Specification]	连		
No.	of Wire		22	>	- [With A/T]	No. of Wire				
-	BG	1	22	BG	- [With M/T]		ı	=	9 10 11 12 13 14 15 16 \	
2	re	1	20	- :	1	2 P	1	F =	0 3 4 5 6 7 8	
.,	5	1	9/	>	-	1				
4	>	1	09	LG	ı					
5	٦	-	61	BG	_	Connector No.	M18			
9	В		62	В	-	National	DE DE SERVICIO	Terminal Color	Cinnel Manne [Consideration]	
6		1	63	>	1	OOIIIIGCOO		No. of Wire	olgrial Ivalile Lopeciilcation	
10	BR	1	64	SB	1	Connector Type	TK02MW	3 Γ.G	1	_
12	SHIELD	1	65	BR	1			4 B	1	_
13	^	1	99	Υ	-			5 BR	-	
41	BR		67	۵				7 9	1	_
15	GR	1	89	_	1	Z H		^ _	1	_
16	PT	1	69	۵		Ī	7	9	1	_
17			2	-	1		7	ľ	1	_
02	HH.	1	80	c	1	Γ		H	1	_
2	5		8	9	1			ł	1	_
33	0	1	83	<b> </b>	1	Terminal Golor		ł		,
23	SB	1	8	ä	1	_	Signal Name [Specification]			
24	8 8	1	8	>	1	t	1	Connector No. M31		_
25	W	-	82	-	1	2	1			_
56	· >-	-	98	>				Connector Name TILT & TELESCOPIC SWITCH	& TELESCOPIC SWITCH	
27	>	1	87	g	1			Connector Type TK06FG)	FGY	_
28	۵	1	9	œ	ı	Connector No.	M22	1		,
59	>	1	93	g	1		FO 10 312	I I		
П	SHIELD	-	94	Ь	1	Collinector Ivaline	NET 3EOT	2		
32	9	1	96	GR	1	Connector Type	TH12FW-NH	13		
33	œ	1	96	>	1				0 4 1 10	
34	BG	1	6	SB	1			<u>1</u>	t	
32	GR	1	66	>	1					
36	BR	1	100	Y/B	1	ė				
37	_	- [With climate controlled seat]					123 56	Terminal Color	[	
37	ű- 1	- [Without climate controlled seat]					7 11	No. of Wire	Signal Name [Specification]	
38	^	<ul> <li>[With climate controlled seat]</li> </ul>						1 B	_	_
7	╛	<ul> <li>[Without climate controlled seat]</li> </ul>				ŀ		1	1	_,
┪	SHIELD	1				ā	Signal Name [Specification]	3 8	1	_,
14	<u> </u>	1				No. of Wire		+	1	_
45	۵	1				+	ВАТ	5 BR	1	_
┑	SHIELD					2 GR	CLOCK			

JCJWM1268GE

#### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

#### < ECU DIAGNOSIS INFORMATION >

NUND OUND OUND OUND OUND OUND OUND OUND		А
Color   Colo		В
		С
Separate		D
		Е
GND (SIGNAL GND (SERVISO) CND (SERVISO) GND (POWRER GND (POWRER) TER AND A.C. AA TER AND A.C. AA TER SERVISOR SIGNAL GND (POWRER SERVISOR SIGNAL ACLUDE SERVISOR SIGNAL ALUDID LEVEL SERVISOR SIGNAL CON A SERVISOR SIGNAL C		F
		G
41   4   4   4   4   4   4   6   4   4   6   6		Н
Signal Name [Specification]  TILT SW (UPWARD)  MIRROR SELECT SW (FH)  MIRROR SENSOR (LH VERTICAL)  MIRROR MOTOR (FH VERTICAL)  MIRROR MOTOR (FH VERTICAL)  MIRROR MOTOR (FH VERTICAL)  MIRROR MOTOR (FH HORIZONTAL)  MIRROR MOTOR (FH HORIZONTAL)  MIRROR SELOSOR (LH HORIZONTAL)  MIRROR SENSOR (LH HORIZONTAL)  MIRROR MOTOR (LH HORIZONTAL)  MIRROR SUPPLY (SENSOR)  EAT (FUSE)  TILL MOTOR (LENSOR)  EAT (FUSE)  TILL MOTOR (LOWARD)  TILL MOTOR (LOWARD)  TELESCOPIC MOTOR (CORWARD)  TELESCOPIC MOTOR (CORWARD)  TELESCOPIC MOTOR (CORWARD)		I
Signal Name [Specification]  TILT SW (UPWARD)  MIRROR SELECT SW (RH)  MIRROR SELECT SW (RH)  MIRROR SELECT SW (RH)  MIRROR SENSOR (LH VERTICAL)  TILL SENSOR  ADDRESS 1  TRESCOPIC SW (FRONTWARD)  MIRROR MOTOR (HH VERTICAL)  MIRROR SW (BIGHTWARD)  MIRROR SW (BIGHTWARD)  MIRROR SW (CHONTWARD)  MIRROR SW (CH HORIZONTAL)  TELESCOPIC SIN (SACHORIZONTAL)  MIRROR SELDED (CH VERTICAL)  MIRROR MOTOR (LH HORIZONTAL)  MIRROR SELDED (SENSOR)  SET 36  ALTOMATOR (CHONTROL)  SIGNAL NAME (Specification)  FOWER SUPPLY (SENSOR)  BAT (CHS)  TELESCOPIC MOTOR (LFORWARD)  TILT MOTOR (LH GORWARD)  TILT MOTOR (LH GORWARD)		ADP
Color   Colo		K
Terminal No. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		I
ONER		_
Signal Name [Specification]  Signal Name [Specification]  Signal Name [Specification]  CS  CS  CS  NH  CD 111 12 13 14 12 13 14 12 12 14 12 12 14 12 13 14 12 14 12 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15		M
M48		Ν
AUTOMAT  Connector No.  Connector Type  Connector Type  Connector Type  Connector Type  Connector Type  Connector No.  Connect		0
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### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

#### < ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER										
Connector No. M118	Connector No.	П	M122	Connector No.	П	M123	Connector No.	П	M124	
Connector Name BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)	Connector Name		WIRE TO WIRE	
Connector Type M03FB-LC	Connector Type	П	TH40FB-NH	Connector Type	П	TH40FG-NH	Connector Type	П	TH40MW-CS15	
H.S.	语 H.S.	20		₽ H.S.	60) (40) (40)		是 H.S.	1 2 3	4 5 6 7 8 9	
	_		007 004 103 103 103 103 103 104 104 105 105 105 105 105 105 105 105 105 105	-1-1	51 150 149 148	<del>-1</del> 11		2728293031	21 12 22 24 12 24 24 14 14 14 14 14 14 14 14 14 14 14 14 14	
Terminal Color Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	Terminal No.	Color of Wire	Signal Name [Specification]	
1 W BAT (F/L)	72	۵	ROOM ANT 2-	112	BR	RAIN SENSOR SERIAL LINK	9	BG	1	
Н	73	9	ROOM ANT 2+	113	ŋ	OPTICAL SENSOR	7	۳	1	
3 BG POWER WINDOW POWER SUPPLY (RAP)	74	SB	PASSENGER DOOR ANT-	114	œ	CLUTCH INTERLOCK SW	80	g	I	
	75	H :	PASSENGER DOOR ANT+	116	SB	STOP LAMP SW 1	o !	a :	1	
Connector No Mitto	9/	> 2	DRIVER DOOR ANT-	80 5	¥ 6	STOP LAMP SW 2	2 :	> 8	- Dwitt BOSE	
Т	782	2 >	ROOM ANT 1-	121	5 8	KEY SLOT SW	=	9 8	- [Without BOSE system]	
Connector Name BCM (BODY CONTROL MODULE)	79	. 8	ROOM ANT 1+	123	3 3	IGN F/B	- 12	£ %	-	
Connector Type NS16FW-CS	80	GR.	NATS ANTRNNA AMP.	124	BG	PASSENGER DOOR SW	13	В	1	
4	81	W	NATS ANTRNNA AMP.	129	BG	TRUNK LID OPENER CANCEL SW	14	9	-	
修	82	۳	IGN RELAY (F/B) CONT	132	ΓG	P/W SW & RHT G/U COMM	12	W	1	
	83	<b>&gt;</b>	KEYLESS ENTRY RECEIVER COMM	133	>	PUSH-BUTTON IGNITION SWILL POWER	34	>	1	
4 5 6 7 8 9 10	87	>	COMBI SW INPUT 5	134	PC	LOCK IND	35	Y/B	I	
11 12 13 14 15 16 17 18 19	88	BG	COMBI SW INPUT 3	137	BG	RECEIVER / SENSOR GND	38	Α	1	
2- 2- 2- 2- 2- 2- 2- 2- 2- 2- 2- 2- 2- 2	88	H G	PUSH SW	138	> .	RECEIVER / SENSOR POWER SUPPLY	66 66	BG G	1	
	6 3	٠	CAN-L	88	7 6	LIKE PRESSURE RECEIVER COMM	9 ;	20 6		
T	5 6		CAN-H	0 ;	5 0	SHIP I N/P	14 ;	ž (	- [With automatic drive positioner]	
	35	2 >	ON IND	142	<u>د</u> ۾	COMBLEW OUTBILLS	4.5	5 0	- Lwithout automatic drive positioner	
t	95	. BG	ACC RELAY CONT	143	<u> </u>	COMBI SW OUTPUT 1	43	:	1	
5 P PASSENGER DOOR UNLOCK OUTPUT	96	S.	A/T SHIFT SELECTOR POWER SUPPLY	144	ŋ	COMBI SW OUTPUT 2	44	>	1	
Н	97	7	S/L CONDITION 1	145	7	COMBI SW OUTPUT 3	45	ď	-	
8 V ALL DOOR, FUEL LID LOCK OUTPUT	86	SB	S/L CONDITION 2	146	SB	COMBI SW OUTPUT 4	46	W	-	
DRIVER DOOR,	66	٣	SHIFT P [With A/T]	149	W	TIRE PRESSURE WARN CHECK SW	47	SB	_	
11 GR BAT (FUSE)	66	٣	ASCD/ICC CLUTCH SW [With M/T]	150	ч	DRIVER DOOR SW	48	BR		
В	001	>-	PASSENGER DOOR REQUEST SW	151	g	REAR WINDOW DEFOGGER RELAY CONT	49	>-	I	
W PUSH-BUTTO	101	۵	DRIVER DOOR REQUEST SW				20	а	T.	
BG	102	BG	BLOWER FAN MOTOR RELAY CONT				51	ΓG	Í	
H	103	5	KEYLESS ENTRY RECEIVER POWER SUPPLY				25	BG	ı	
BG	106	>	S/L UNIT POWER SUPPLY				23	>	1	
19 V ROOM LAMP TIMER CONTROL	107	<u>5</u>	COMBI SW INPUT 1				54	1	1	
	80 5	٤ :	COMBI SW INPUT 4				55	_	-	
	100	≥ C	COMBLSW INPULZ							
	= =	5 >	S/L UNIT COMM							
		-	O/L OINT COMIN							

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#### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

< ECU DIAGNOSIS INFORMATION >

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IONER				cation]										
AUTOMATIC DRIVE POSITIONER	A/T SHIFT SELECTOR	TH12FW-NH	7 8 9 10 11	Signal Name [Specification]	-	-	-	1	1	1	-	1	-	1
OMAT		r Type		Color of Wire	W	۸	٦	BR	9	٨	SB	В	GR	ď
AUTOM Connector No.	Connector Name	Connector Type	H.S.	Terminal No.	-	2	3	4	2	7	8	6	10	-

#### < ECU DIAGNOSIS INFORMATION >

## **BCM (BODY CONTROL MODULE)**

Reference Value

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
ER WIDER HI	Other than front wiper switch HI	Off
FR WIPER HI  Front wiper switch HI  Front wiper switch LO  The Wiper switch LO  Front wiper switch LO  Front wiper switch LO  Front washer switch OFF  Front washer switch ON  Other than front wiper switch INT/AUTO  Front wiper switch INT/AUTO  Front wiper switch INT/AUTO  Front wiper is not in STOP position  Front wiper is in STOP position	On	
	Other than front wiper switch LO	Off
	Front wiper switch LO	On
ED WASHED SW	Front washer switch OFF	Off
Monitor Item  FR WIPER HI  FR WIPER LOW  FR WASHER SW  FR WIPER INT  FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW  DOOR SW-DR  DOOR SW-RR	Front washer switch ON	On
Monitor Item  FR WIPER HI  FR WIPER LOW  FR WASHER SW  FR WIPER INT  FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW  DOOR SW-DR  DOOR SW-RR	Other than front wiper switch INT/AUTO	Off
Monitor Item  FR WIPER HI  FR WIPER LOW  FR WASHER SW  FR WIPER INT  FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW  DOOR SW-DR  DOOR SW-AS  DOOR SW-RR	Front wiper switch INT/AUTO	On
ED WIDED STOD	Front wiper is not in STOP position	Off
FR WIFER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper volume dial is in a dial position 1 - 7	Wiper volume dial posi tion
Monitor Item  FR WIPER HI  FR WIPER LOW  FR WASHER SW  FR WIPER INT  FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW  DOOR SW-DR  DOOR SW-AS  DOOR SW-RR	Other than turn signal switch RH	Off
	Turn signal switch RH	On
Monitor Item FR WIPER HI FR WIPER LOW FR WASHER SW FR WIPER INT FR WIPER STOP INT VOLUME TURN SIGNAL R TURN SIGNAL L TAIL LAMP SW HI BEAM SW HEAD LAMP SW 1 HEAD LAMP SW 2 PASSING SW AUTO LIGHT SW FR FOG SW POOR SW-DR DOOR SW-AS DOOR SW-RR	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMD CM	Other than lighting switch 1ST and 2ND	Off
TAIL LAIVIP SVV	Lighting switch 1ST or 2ND	On
LU DE AM CVA	Other than lighting switch HI	Off
FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW	Lighting switch HI	On
LIEAD LAMB CW/4	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
LIEAD LAMB CW.	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DA COLNIC CIA	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
FR WIPER HI  FR WIPER LOW  FR WASHER SW  FR WIPER INT  FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW  DOOR SW-DR  DOOR SW-AS  DOOR SW-RR	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
ED EOO 0144	Front fog lamp switch OFF	Off
Monitor Item  FR WIPER HI  FR WIPER LOW  FR WASHER SW  FR WIPER INT  FR WIPER STOP  INT VOLUME  TURN SIGNAL R  TURN SIGNAL L  TAIL LAMP SW  HI BEAM SW  HEAD LAMP SW 1  HEAD LAMP SW 2  PASSING SW  AUTO LIGHT SW  FR FOG SW  RR FOG SW  DOOR SW-DR  DOOR SW-AS  DOOR SW-RR	Front fog lamp switch ON	On
RR FOG SW		Off
DOOD CW DD	Driver door closed	Off
DOOK SW-DR	Driver door opened	On
DOOR SWAR	Passenger door closed	Off
DOOK 2W-AS	Passenger door opened	On
DOOR SW-RR		Off
DOOR SW-RL		Off

### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	_
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off	
CDL LOCK SW	Other than power door lock switch LOCK	Off	
DL LOCK SW	Power door lock switch LOCK	On	
SDL LINI OOK SW	Other than power door lock switch UNLOCK	Off	
DL UNLOCK SW	Power door lock switch UNLOCK	On	
VEV CVL LV CW	Other than driver door key cylinder LOCK position	Off	<del></del>
NET CTL LK-SW	Driver door key cylinder LOCK position	On	
ZEV CVI LINI SW	Other than driver door key cylinder UNLOCK position	Off	
NET CIL UN-3W	Driver door key cylinder UNLOCK position	On	_
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off	
1474DD 6/4/	Hazard switch is OFF	Off	
HAZARD SW	R SW-BK  NOTE: The item is indicated, but not monitored.  Other than power door lock switch LOCK Power door lock switch LOCK Other than power door lock switch UNLOCK position Priver door key cylinder UNLOCK position Priver door key cylinder UNLOCK position Priver door lock switch INLOCK Power door lock sw		
REAR DEF SW		Off	
H/L WASH SW		Off	_
TD CANCEL SW	Trunk lid opener cancel switch OFF	Off	
IR CANCEL SW	Trunk lid opener cancel switch ON	On	
FD/DD ODEN SW	Trunk lid opener switch OFF	Off	
IN/BD OPEN 3W	While the trunk lid opener switch is turned ON	On	
FDNIK/WAT MANTO	Trunk lid closed	Off	
I KINWHAT WINTK	Trunk lid opened	On	
DKET OCK	LOCK button of the Intelligent Key is not pressed	Off	
NL-LOOK	LOCK button of the Intelligent Key is pressed	On	
DKE TIMI OCK	UNLOCK button of the Intelligent Key is not pressed	Off	
KKE-UNLOCK	UNLOCK button of the Intelligent Key is pressed	On	
OVE TD/DD	TRUNK OPEN button of the Intelligent Key is not pressed	Off	
KKE-TK/BD	TRUNK OPEN button of the Intelligent Key is pressed	On	
DKE DANIC	PANIC button of the Intelligent Key is not pressed	Off	
TRE-PAINIC	PANIC button of the Intelligent Key is pressed	On	
DOOR SW-BK  CDL LOCK SW  KEY CYL LK-SW  KEY CYL UN-SW  KEY CYL SW-TR  HAZARD SW  REAR DEF SW  H/L WASH SW  TR CANCEL SW  TR/BD OPEN SW  TRNK/HAT MNTR  RKE-LOCK  RKE-UNLOCK  RKE-TR/BD  RKE-PANIC  RKE-PANIC  RKE-PANIC  RKE-POPEN  RKE-MODE CHG  OPTICAL SENSOR  REQ SW -AS  REQ SW -AS  REQ SW -RR  REQ SW -RR	UNLOCK button of the Intelligent Key is not pressed	Off	
KKE-F/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On	
RKE-MODE CHG		Off	
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On	
ADTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
OF HUAL SENSUK	Dark outside of the vehicle	Close to 0 V	
DEO SW. DD	Driver door request switch is not pressed	Off	
VEM 911 - DK	Driver door request switch is pressed	On	_
DEO SW. AS	Passenger door request switch is not pressed	Off	
KEQ SW -AS	Passenger door request switch is pressed	On	
REQ SW -RR		Off	_
REQ SW -RL		Off	<del></del>

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Monitor Item	Condition	Value/Status
REO SW -BD/TD	Trunk lid opener request switch is not pressed	Off
CLG OW -DD/TR	Trunk lid opener request switch is pressed	On
	Push-button ignition switch (push switch) is not pressed	Off
Trunk lid opener request switch is not pressed Trunk lid opener request switch is pressed PUSH SW PUSH-button ignition switch (push switch) is not pressed Push-button ignition switch (push switch) is pressed Push-button ignition switch (push switch) is pressed Ignition switch in OFF or ACC position Ignition switch in ON position NOTE: The item is indicated, but not monitored. The clutch pedal is not depressed The brake pedal is depressed The brake pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal  PUSHAKE SW 2 The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal  PUSHAKE SW 2 The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal  PUSHAKE SW 2 The brake pedal is not depressed (M/T models)  Selector lever in P position (Except M/T models)  Selector lever in any position other than P (Except M/T models)  The clutch pedal is not depressed (M/T models)  Selector lever in any position other than P (Except M/T models)  Selector lever in P or N position  Selector lever in P or N position  Steering is unlocked  Steering is locked  Steering is locked  Steering is unlocked  Driver door is unlocked  Driver door is unlocked  Driver door is locked  Push-button ignition switch (push-switch) is not pressed  Push-button ignition switch (push-switch) is pressed  Push-button ignition switch (push-switch) is pressed  Push-button ignition switch (push-switch) is pressed  Ignition switch in OFF or ACC position  Ignition switch in OFF or ACC position  Ignition switch in OFF or ACC position  Selector lever in any position other than P   On		
CN DIV2 E/D	Ignition switch in OFF or ACC position	Off
Push-button ignition switch (push switch) is not pressed Push-button ignition switch (push switch) is pressed  Push-button ignition switch in OFF or ACC position  Ignition switch in OFF or ACC position  Ignition switch in ON position  NOTE: The item is indicated, but not monitored.  The clutch pedal is not depressed  The clutch pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is real for the brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is real for the brake pedal is not depressed  The brake pedal is not depressed  The brake pedal is not depressed  The brake pedal is depressed  **The clutch pedal is depressed  **The clutch pedal is depressed (M/T models)  **The clutch pedal is depressed (M/T models)  **Selector lever in Position (Except M/T models)  **The clutch pedal is not depressed (M/T models)  **Selector lever in any position other than P and N  **Selector lever in Por N position  Selector lever in Por N position  Selector lever in Por N position  Steering is locked  Steering is locked  Steering is locked  Steering is locked  Driver door is unlocked  Driver door is unlocked  Driver door is locked  Push-button ignition switch (push-switch) is not pressed  Push-button ignition switch (push-switch) is pressed  Ignition switch in OFF or ACC position  Ignition switch in OFF or ACC position  Ignition switch in ON position  Selector lever in any position other than P  Selector lever in any position  Selector lever in any position other than P  The clutch pedal is not depressed (M/T models)	On	
ACC RLY -F/B	113.1—1	Off
OLLICII OW	The clutch pedal is not depressed	Off
CLUCH SW	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
Monitor Item  REQ SW -BD/TR  PUSH SW  IGN RLY2 -F/B  ACC RLY -F/B  CLUCH SW  BRAKE SW 1  BRAKE SW 2  DETE/CANCL SW  SFT PN/N SW  S/L -LOCK  S/L -UNLOCK  S/L -UNLOCK  S/L RELAY-F/B  UNLK SEN -DR  PUSH SW -IPDM  IGN RLY1 -F/B  DETE SW -IPDM  SFT PN -IPDM  SFT P -MET  SFT N -MET	The brake pedal is not depressed	Off
DIVALE OW 7	The brake pedal is depressed	On
DETE/CANCL SW		Off
JE I E/CAINCL SW		On
CET DNI/NI CVA/	The brake pedal is depressed  Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models) Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models) Selector lever in any position other than P and N Selector lever in P or N position  Selector lever in P or N position  Steering is unlocked Steering is locked Steering is locked Steering is unlocked  Ignition switch in OFF or ACC position  Ignition switch in ON position  Driver door is unlocked  Driver door is locked  Push-button ignition switch (push-switch) is not pressed	Off
OF I PIN/IN OVV	Selector lever in P or N position	On
2/L LOCK	Steering is unlocked	Off
5/L -LOOK	Steering is locked	On
C/L LINILOCK	Steering is locked	Off
5/L -UNLOCK	Steering is unlocked	On
DELAVE/D	Ignition switch in OFF or ACC position	Off
5/L RELAY-F/B	Ignition switch in ON position	On
SELUCH SW  SRAKE SW 1  SRAKE SW 2  DETE/CANCL SW  SFT PN/N SW  S/L -LOCK  S/L -UNLOCK  S/L -UNLOCK  S/L RELAY-F/B  INLK SEN -DR  PUSH SW -IPDM  GN RLY1 -F/B  DETE SW -IPDM	Driver door is unlocked	Off
JNLK SEN -DK	Driver door is locked	On
DUCULOW IDDM	Push-button ignition switch (push-switch) is not pressed	Off
GN RLY2 -F/B ACC RLY -F/B CLUCH SW BRAKE SW 1 BRAKE SW 2 DETE/CANCL SW BFT PN/N SW B/L -LOCK B/L -UNLOCK B/L -UNLOCK B/L -UNLOCK B/L -UNLOCK B/L -UNLOCK B/L -DR DETE SW -IPDM DETE SW -IPDM BFT PN -IPDM BFT PN -IPDM	Push-button ignition switch (push-switch) is pressed	On
PUSH SW  IGN RLY2 -F/B  ACC RLY -F/B  CLUCH SW  BRAKE SW 1  BRAKE SW 2  DETE/CANCL SW  SFT PN/N SW  S/L -LOCK  S/L -UNLOCK  S/L -UNLOCK  S/L RELAY-F/B  UNLK SEN -DR  PUSH SW -IPDM  IGN RLY1 -F/B  DETE SW -IPDM  SFT PN -IPDM  SFT PN -IPDM	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE/CANCL SW  SFT PN/N SW  S/L -LOCK  S/L -UNLOCK  S/L RELAY-F/B  JNLK SEN -DR  PUSH SW -IPDM  GN RLY1 -F/B  DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SET DN IDDM		Off
OF I PIN -IPUIVI	·	On
DET D. MET	Selector lever in any position other than P	Off
OFIP-MEI	Selector lever in P position	On
	Trunk lid opener request switch is not pressed Trunk lid opener request switch is pressed Push-button ignition switch (push switch) is not pressed Push-button ignition switch (push switch) is pressed Push-button ignition switch (push switch) is pressed Ignition switch in OFF or ACC position Ignition switch in ON position C RLY -F/B  NOTE: The item is indicated, but not monitored. The clutch pedal is depressed The clutch pedal is depressed The clutch pedal is depressed when No. 7 fuse is blown The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is not mall AKE SW 1  The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is not mall AKE SW 2  The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is not mall The brake pedal is depressed (M/T models)  • Selector lever in P position (Except M/T models) • The clutch pedal is depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • The clutch pedal is not depressed (M/T models) • Selector lever in P or N position  Selector lever in P or N position  Selector lever in P or N position  LK SEN -DR  Driver door is locked  Steering is unlocked  Steering is unlocked  Driver door is locked  SH SW -IPDM  Push-button ignition switch (push-switch) is not pressed  Push-button ignition switch (push-switch) is not pressed  Ignition switch in ON position  If PN -IPDM  Selector lever in any position other than P  Selector lever in P or N position  • The clutch pedal is not depressed  Selector lever in any position other than P  Selector lever in any position other than P	Off
SFIN-MEI	Selector lever in N position	On

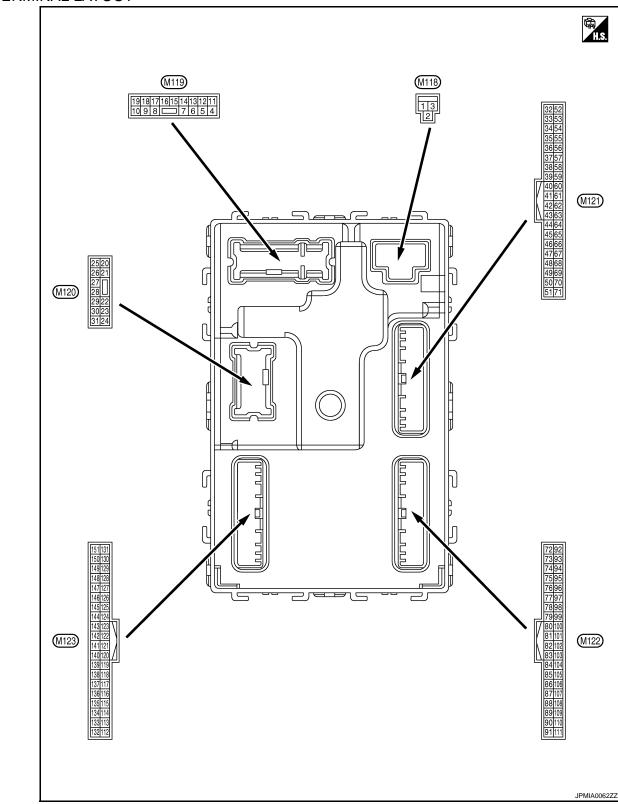
### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
	Engine stopped	Stop
Monitor Item  ENGINE STATE  S/L LOCK-IPDM  S/L UNLK-IPDM  S/L RELAY-REQ  VEH SPEED 1  VEH SPEED 2  DOOR STAT-DR  DOOR STAT-AS  ID OK FLAG  PRMT ENG STRT  PRMT RKE STRT  KEY SW -SLOT  RKE OPE COUN1  RKE OPE COUN2  CONFIRM ID ALL  CONFIRM ID3	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
Monitor Item  ENGINE STATE  S/L LOCK-IPDM  S/L UNLK-IPDM  S/L RELAY-REQ  VEH SPEED 1  VEH SPEED 2  DOOR STAT-DR  DOOR STAT-AS  ID OK FLAG  PRMT ENG STRT  PRMT RKE STRT  KEY SW -SLOT  RKE OPE COUN1  RKE OPE COUN2  CONFRM ID ALL  CONFIRM ID4	Steering is unlocked	Off
	Steering is locked	On
	Steering is locked	Off
S/E ONER II DIVI	Steering is unlocked	On
S/I DELAY DEO	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off
S/L KLLAI-KLQ	Steering lock system are not the LOCK condition or the changing condition from LOCK to UNLOCK	On
VEH SPEED 1	While driving	Equivalent to speed- ometer reading
VEH SPEED 2	While driving	Equivalent to speed- ometer reading
S/L LOCK-IPDM  S/L UNLK-IPDM  S/L RELAY-REQ  VEH SPEED 1  VEH SPEED 2  DOOR STAT-DR  DOOR STAT-AS  ID OK FLAG  PRMT ENG STRT  PRMT RKE STRT  KEY SW -SLOT  RKE OPE COUN1  RKE OPE COUN2  CONFRM ID ALL  CONFIRM ID4	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG PRMT ENG STRT	Steering is locked	Reset
D OK FLAG	Steering is unlocked	Set
DOMT ENG STOT	The engine start is prohibited	Reset
TRIVIT LING STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
DOOR STAT-DR DOOR STAT-AS DOOR STAT-AS DOK FLAG PRMT ENG STRT PRMT RKE STRT KEY SW -SLOT RKE OPE COUN1 RKE OPE COUN2	The Intelligent Key is not inserted into key slot	Off
NET 3W -3LOT	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
CONEDMID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
CONFRIVI ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIDM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIDM ID2	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
CUNFIKIM IU3	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
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
COM IKW ID2	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRMIDI	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
1P 4	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
173	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
IP 2	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
IFI	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGST FLT	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGST FRT	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
ID REGST RRT	ID of rear RH tire transmitter is not registered	Yet
ID DECCE DI 4	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
MADNING LAND	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
DUZZED	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

#### TERMINAL LAYOUT



PHYSICAL VALUES

Α

В

С

D

Е

F

G

Н

ADP

K

L

M

Ν

0

Р

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

Signal name		nal No.	Description			Condition	Value
17   Ground   Front   Country   Co		1	Signal name	Input/ Output		Condition	
Turn signal switch OFF  Ground  Ground  Turn signal LH (Front)  Turn signal switch OFF  Turn signal switch LH  Turn signal switch OFF  Turn signal switch O		Ground		Output		-	(V) 15 10
18 (BG)   Ground   Turn signal LH (Front)   Output   Ignition switch   ON   Turn signal switch LH   Interior room   Iamp   ON   OV						Turn signal switch OFF	1 s PKID0926E 6.5 V
Control   Cont		Ground	Turn signal LH (Front)	Output		Turn signal switch LH	15 10 5 0 1 s PKID0926E
Turn signal switch OFF  O V  Ground  Turn signal RH (Rear)  Output  Turn signal switch RH  Turn signal switch RH  OPEN (Trunk lid opener actuator is activated)  Other than OPEN (Trunk lid opener actuator is not activated)  Turn signal switch LH  Ground  Turn signal switch OFF  O V		Ground		Output			
23 (Y) Ground Trunk lid open  Output Trunk lid  Other than OPEN (Trunk lid opener actuator is activated)  Other than OPEN (Trunk lid opener actuator is not activated)  Turn signal switch OFF  Ov  Ignition switch ON  Turn signal switch LH  Output  Trunk room  Output  Trunk lid  Other than OPEN (Trunk lid opener actuator is activated)  Turn signal switch OFF  Ov  Turn signal switch LH  Output  Trunk room ON  Ov  Trunk room ON  Ov		Ground	Turn signal RH (Rear)	Output		Turn signal switch RH	(V) 15 10 5 11 1 s
Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH  Turn signal switch LH  Ground Turn signal LH (Rear) Output Ignition switch ON Turn signal switch LH  Turn signal switch LH  ON ON ON OV	23 (Y)	Ground	Trunk lid open	Output	Trunk lid	(Trunk lid opener actuator is activated)  Other than OPEN (Trunk lid opener actuator	
Ground Trunk room lamp   Output		Ground	Turn signal LH (Rear)	Output			(V) 15 10 5 0 PKID0926E
		Ground	Trunk room lamp	Output	Trunk room lamp	ON OFF	0 V 12 V

	nal No. color)	Description	T		On a dition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
34	Ground	Trunk room antenna	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)	Clound	(-)	Сири	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
35	35 (V) Ground (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)		(+)		ut Ignition switch _	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 11 1 s  JMKIA0063GB
38		Rear bumper anten-		When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(B)	Ground	na (-)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB

	nal No. color)	Description			O a malitia m	Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)	
39	Cround	Rear bumper anten-	Qutout	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	
(W)	Ground	na (+)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s	
47		Ignition relay (IPDM		1 22 22 1	OFF or ACC	12 V	
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V	
50 (G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB	_
					ON (Trunk lid is opened)	0 V	
				Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V	
52	Ground	Starter relay control	Output	els)	When selector lever is not in P or N position	0 V	
(BR)	Ground	Starter relay control	Output	Ignition switch	When the clutch pedal is depressed	Battery voltage	
				ON (M/T mod-	When the clutch pedal is not depressed	0 V	
					ON (Pressed)	0 V	
61 (SB)	Ground	Trunk lid opener request switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	
		Intelligent Key warn-		Intelligent Key	Sounding	0 V	
64	Ground	ing buzzer (Engine	Output	warning buzzer			

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	0 V  (V) 15 10 10 ms  JPMIA0011GB 11.8 V
72	72 Ground Room antenna 2 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s  JMKIA0062GB	
(R)		(Center console)	Сара	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
73	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
/3 (G)	Ground				When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

	nal No. e color)	Description			Condition	Value	А
+	-	Signal name	Input/ Output		Condition	(Approx.)	7.
74	0	Passenger door an-	0.4-4	When the passenger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(SB)	Ground	tenna (-)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0  JMKIA0063GB	E
75	Ground	Passenger door an-	Output	When the passenger door request switch is	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	G H
(BR)	Glound	tenna (+)	Output	operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	ADI K
76		Driver door antenna		When the driv- er door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB	M
(V)	Ground	(-)	Output	er door request switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	O P

	nal No. color)	Description	I		0 177	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
77	Ground	Driver door antenna	Output	When the driver door request switch is oper-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(LG)	Ciodila	(+)	Сири	ated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
78	Ground	Room antenna 1 (–)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(Y)	Clound	(Instrument panel)	Сара	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB
79	Ground	Room antenna 1 (+)	Output	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 JMKIA0062GB
(BR)	Ground	(Instrument panel)	Output	OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB

(Wire c	al No.	Description			On a distinct	Value
+	- -	Signal name	Input/ Output		Condition	(Approx.)
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V 12 V
83		Pomoto koyloss ontry		During waiting		(V) 15 10 5 1 ms JMKIA0064GB
(Y)	Ground	receiver communica- tion	Input/ Output			0.0
				When operating gent Key	g either button on the Intelli-	(V) 15 10 5 1 ms JMKIA0065GB
					All switches OFF (Wiper volume dial 4)	(V) 15 10 5
						2 ms JPMIA0041GB
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper volume dial 4)	(V) 15 10 5 0
					(V)	
					Any of the conditions below with all switches OFF  • Wiper volume dial 1	15
					Wiper volume dial 2     Wiper volume dial 6     Wiper volume dial 7	0 2 ms JPMIA0040GB

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

	nal No. color)	Description			0 1111	Value
+ (vvire		Signal name	Input/ Output		Condition	(Approx.)
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
(V)					ON	0 V
95	Cround	ACC roley central	Output	Ignition owitch	OFF	0 V
(BG)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)	0.00	tion No. 1			UNLOCK status	12 V
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(SB)	Crodita	tion No. 2	прис	oteening lock	UNLOCK status	0 V
		Selector lever P posi-		Selector lever	P position	0 V
		tion switch		20100101 16761	Any position other than P	12 V
		ASCD clutch switch (M/T models without	Input	ASCD clutch	OFF (Clutch pedal is depressed)	0 V
99 (R)	Ground	ICC)		switch	ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is depressed)	0 V
	T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V	
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	put Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB
102	Ground	Blower fan motor re-	Output	Ignition switch	OFF or ACC	0 V
(BG)	Ground	lay control	Output	igililion switch	ON	12 V
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch (	DFF	12 V
106	Cra	Steering lock unit	O: :4== : :4	Ignition outlet	OFF or ACC	12 V
(W)	Ground	power supply	Output	Ignition switch	ON	0 V

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

#### < ECU DIAGNOSIS INFORMATION >

Signal name Input/ Output Condition (Approx.)  All switches OFF (Wiper volume dial 4)  Lighting switch AUTO (Wiper volume dial 4)  Combination switch INPUT 4  Input Combination switch INPUT 4  Lighting switch AUTO (Wiper volume dial 4)  Lighting switch 1ST (Wiper volume dial 4)  Lighting switch 1ST (Wiper volume dial 4)  1.3 V		nal No.	Description				Value	
All switches OFF (Wiper volume dial 4)  Lighting switch AUTO (Wiper volume dial 4)  Combination switch INPUT 4  Lighting switch AUTO (Wiper volume dial 4)  Lighting switch 1ST (Wiper volume dial 4)  1.3 V  Lighting switch 1ST (Wiper volume dial 4)  1.3 V			Signal name	Input/ Output		Condition	(Approx.)	/-
108 (R) Ground Combination switch INPUT 4 Input Switch  Combination switch Switch  Lighting switch AUTO (Wiper volume dial 4)  Lighting switch 1ST (Wiper volume dial 4)  1.3 V  Lighting switch 1ST (Wiper volume dial 4)  1.3 V							10 5 0 2 ms	
(R) Ground INPUT 4 switch  Lighting switch 1ST (Wiper volume dial 4)  1.3 V	108		Combination switch		Combination	Lighting switch AUTO (Wiper volume dial 4)	10 5 0 2 ms	F
Any of the conditions her		Ground		Input		Lighting switch 1ST (Wiper volume dial 4)	10 5 0 2 ms JPMIA0036GB	ŀ
low with all switches OFF  • Wiper volume dial 1  • Wiper volume dial 5  • Wiper volume dial 6						<ul><li>Wiper volume dial 1</li><li>Wiper volume dial 5</li></ul>	10 5 0	Al

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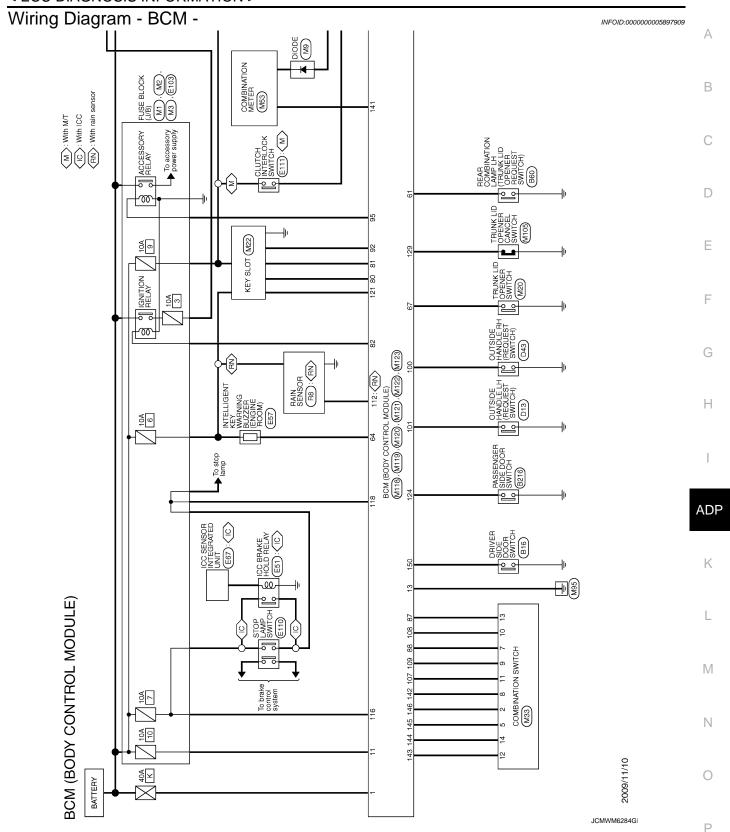
	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (W)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper volume dial 4)	Lighting switch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

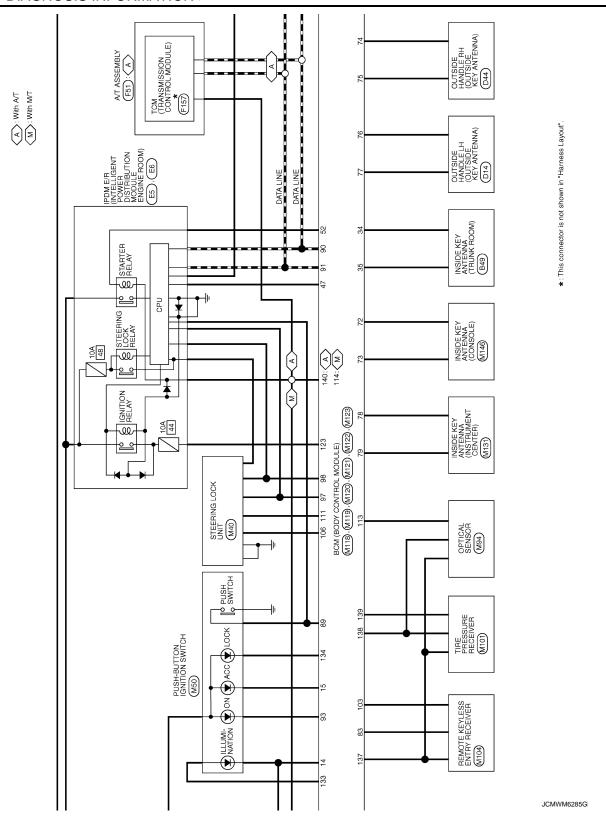
	nal No. color)	Description	T -		Condition	Value
+ (vvire	-	Signal name	Input/ Output		Condition	(Approx.)
					LOCK status	12 V
111 (Y) Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 5 0 50 ms	
					For 15 seconds after UN- LOCK	12 V
				15 seconds or later after UNLOCK	0 V	
112 (BR)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0
					When bright outside of the	JPMIA0156GB 8.7 V Close to 5 V
113 (G)	Ground	Optical sensor	Input	Ignition switch ON	wehicle  When dark outside of the vehicle	Close to 0 V
114	Ground	Clutch interlock	Input	Clutchinterlock	OFF (Clutch pedal is not depressed)	0 V
(R)		switch		switch	ON (Clutch pedal is depressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2		Stop lamp	OFF (Brake pedal is not depressed)	0 V
118	Ground	(Without ICC)	- Input	switch	ON (Brake pedal is depressed)	Battery voltage
(BR)	Cround	Stop lamp switch 2	прис		h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)			h ON (Brake pedal is de- brake hold relay ON	Battery voltage
119 (GR)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB
			1	UNLOCK status (Unlock switch sensor ON)	0 V	

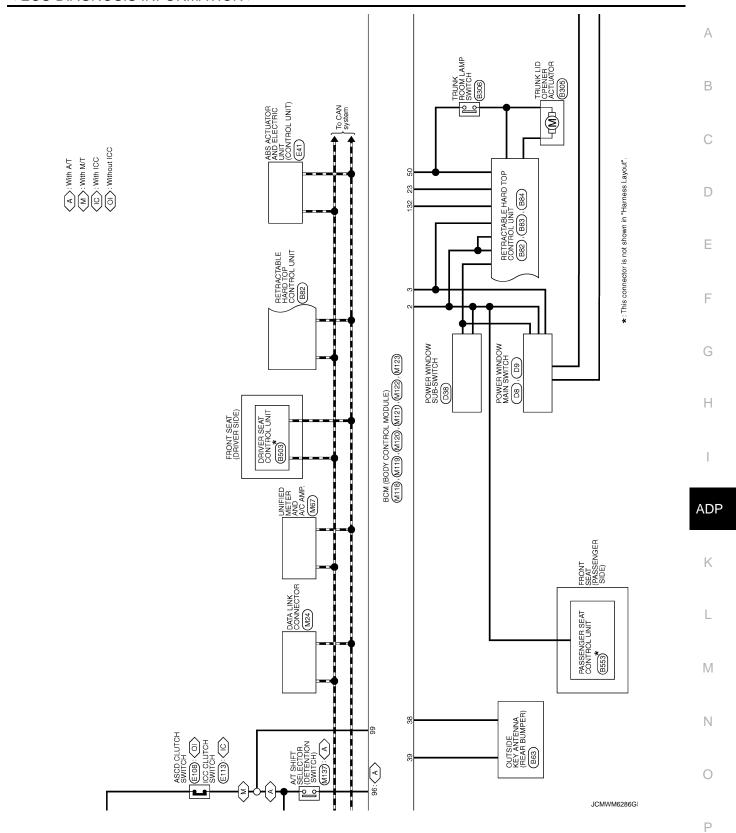
	nal No.	Description				Value
+	color)	Signal name	Input/ Output		Condition	(Approx.)
121 (SB)	Ground	Key slot switch	Input	slot	gent Key is inserted into key	12 V
(00)				key slot	gent Key is not inserted into	0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V Battery voltage
124 (BG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 10 10 ms JPMIA0011GB
					ON (Door open)	0 V
129 (BG)	Ground	Trunk lid opener cancel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB
					ON	0 V
132 (LG)	Ground	Power window switch and R.H.T. control unit communication	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0013GB
				Ignition switch C	OFF or ACC	12 V
				-	ON (Tail lamps OFF)	9.5 V
133 (Y)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il- lumination	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.  (V) 15 10 5 0  JPMIA0159GB
					OFF	0 V
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage 0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V

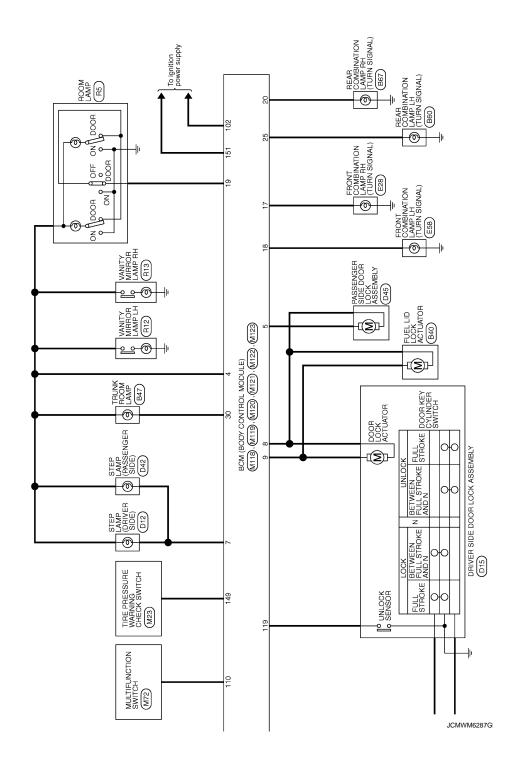
	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)
138	_	Receiver and sensor	Output		OFF	0 V
(Y)	Ground	power supply	Output	Ignition switch	ACC or ON	5.0 V
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 4 2 0 • • • 0.2s
(L)	Cround	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	12 V
(GR)	C. 54114	position (A/T models)	put	20.00.01	Except P and N positions ON	0 V 0 V
141 (R)	Ground	Security indicator lamp	Output	Security indicator lamp	Blinking	(V) 15 10 5 0 1 s  JPMIA0014GB 11.3 V
					OFF	12 V
					All switches OFF  Lighting switch 1ST	0 V
142		Combination switch		Combination switch	Lighting switch HI Lighting switch 2ND	15
(BR)	Ground	OUTPUT 5	Output	(Wiper volume dial 4)	Turn signal switch RH	5 0 2 ms JPMIA0031GB 10.7 V
					All switches OFF (Wiper volume dial 4) Front wiper switch HI	0 V
143 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch	(Wiper volume dial 4)  Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 2  Wiper volume dial 3  Wiper volume dial 6  Wiper volume dial 7	(V) 15 10 5 0 2 ms JPMIA0032GB 10.7 V

Terminal No. Description (Wire color)					Value	
+ (VVire	- color)	Signal name	Input/ Output	Condition		(Approx.)
					All switches OFF (Wiper volume dial 4)	0 V
					Front washer switch ON (Wiper volume dial 4)	(V)
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switches OFF  Wiper volume dial 1  Wiper volume dial 5  Wiper volume dial 6	15 0 5 0 2 ms JPMIA0033GB
					All switches OFF	0 V
					Front wiper switch INT/ AUTO	(V)
145 (L)		Combination switch	Output	Combination switch (Wiper volume dial 4)	Front wiper switch LO	15
	Ground	OUTPUT 3			Lighting switch AUTO	2 ms JPMIA0034GB
					All switches OFF	0 V
					Front fog lamp switch ON	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper volume dial 4)	Lighting switch 2ND	(V)
					Lighting switch PASS	10 5 0
					Turn signal switch LH	2 ms JPMIA0035GB
149 (W)	Ground	Tire pressure warning check switch	Input	_		12 V
150 (R)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (Door open)	0 V
151	Ground	Rear window defog-	Output	Rear window	Active	0 V
(G)	2.344	ger relay control		defogger	Not activated	Battery voltage





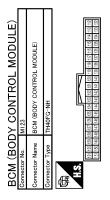




### < ECU DIAGNOSIS INFORMATION >

ST SW TSW TSW TSW T COWN T COW	А
COMBI SW INPUT 5  COMBI SW INPUT 3  PUSH SW  CANH-L  CANH-L  CANH-L  CANH-L  CANH-L  ACC RELAY CONT  ACC RELAY CONT  ACC BELAY CONT  S.L CONDITION 1  S.L LINIT POWER SUPPLY  COMBI SW INPUT 1  COMBI SW INPUT 4  COMBI SW INPUT 4  COMBI SW INPUT 4  COMBI SW INPUT 1  COMB SW INPUT	В
N	С
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	D
MODULE	Е
Signal Name [S TRUMK ROO TRUMK ROO TRUMK ROO TRUMK ROO TRUMK ROO TRUMK ROO STATTER BUME REAR BUME REAR BUME ROOM A	F
1	G
	Н
12   13   14   15   16   17   18   19   10   12   13   14   15   16   17   18   19   10   12   13   14   15   16   17   18   19   10   12   13   14   15   16   17   18   19   10   12   13   14   15   16   17   18   19   10   10   10   10   10   10   10	1
10   10   10   10   10   10   10   10	ADP
Connector No.	К
ool	L
Connector Name	M
	N
Commetter Name   Commetter Name   Commetter Name   Commetter Name   Commetter Type   Commetter Type   Commetter Name   Comm	0
	JCMWM6288GI

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2 2 ≤ 8	Terminal No.	Color of Wire RR	Signal Name [Specification] RAIN SENSOR SERIAL LINK
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	113	ő	PTICAL SENSOR
2 2 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	114	ж	
2 × ≤ 8 × 0 × 6 × 0 × 6 × 0 × 6 × 0 × 0 × 0 × 0	116	SB	
88 88 88 89 7 > 2 88 88 7 > 2 88 88 88 88 88 88 88 88 88 88 88 88 8	118	BR	
8 × 8 8 0 × 9 8 × 1 × 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	119	GR	DR DOOR UNLOCK SENSOR
	121	SB	
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	123	W	IGN F/B
0	124	BG	PASSENGER DOOR SW
2 2 4 88 L C C V B B R C C C C C C C C C C C C C C C C C	129	BG	TRUNK LID OPENER CANCEL SW
> S S S C C S S S C C S S S C C S S S C C S S S C C S S S C C S S S C C S S S C C S S S C C S S S S C C S S S S C C S S S S C C S	132	FG	SW & RHT
© 2 < 8	133	Υ	PUSH-BUTTON IGNITION SW ILL POWER
S × C S × S × C C C S × S × C C C S × S ×	134	PC	LOCK IND
> ¬ BB & BB & C	137	BG	
	138	Υ	$^{\sim}$
8 × × × × × × × × × × × × × × × × × × ×	139	٦	TIRE PRESSURE RECEIVER COMM
~ B S × ~ 0	140	GR	SHIFT N/P
88 × 60 × 88	141	ч	SECURITY INDICATOR LAMP
> 0 L G <	142	BR	
5 ¬ 88 × α	143	^	
S × G	144	g	
S × × o	145	٦	SW OUTPUT
≥ & 0	146	SB	COMBI SW OUTPUT 4
œ (	149	W	TIRE PRESSURE WARN CHECK SW
٥	150	ď	DRIVER DOOR SW
5	151	5	REAR WINDOW DEFOGGER RELAY CONT

JCMWM6289G

Fail-safe

INFOID:0000000005897910

#### FAIL-SAFE CONTROL BY DTC

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

### < ECU DIAGNOSIS INFORMATION >

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

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### < ECU DIAGNOSIS INFORMATION >

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

## DTC Inspection Priority Chart

INFOID:0000000005897911

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

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

#### < ECU DIAGNOSIS INFORMATION >

Priority	DTC	
	B2013: ID DISCORD BCM-S/L  B2014: CHANGE OF BOM  B2014: CHANG	
	B2014: CHAIN OF S/L-BCM     B2553: IONITION RELAY	
	B2553: IGNITION RELAY     B2555: STOP LAMP	
	B2556: PUSH-BTN IGN SW	
	B2557: VEHICLE SPEED	
	B2560: STARTER CONT RELAY	
	B2601: SHIFT POSITION	
	B2602: SHIFT POSITION	
	B2603: SHIFT POSI STATUS	
	B2604: PNP/CLUTCH SW	
	B2605: PNP/CLUTCH SW  B2605: PNP/CLUTCH	
	• B2606: S/L RELAY	
	B2607: S/L RELAY     B2608: STARTER RELAY	
	B2609: S/L STATUS	
	B260A: IGNITION RELAY	
4	B260B: STEERING LOCK UNIT	
	B260C: STEERING LOCK UNIT	
	B260D: STEERING LOCK UNIT	
	B260F: ENG STATE SIG LOST	
	B2612: S/L STATUS     B2614: BCM	
	B2614: BCM     B2615: BCM	
	• B2616: BCM	
	• B2617: BCMC	
	• B2618: BCM	
	• B2619: BCM	
	B261A: PUSH-BTN IGN SW	
	B261E: VEHICLE TYPE     B2650: OLUTOULOW	
	B26E8: CLUTCH SW     B26E9: S/L STATUS	
	B26E9: 3/L STATOS     B26EA: KEY REGISTRATION	_
	C1729: VHCL SPEED SIG ERR	
	U0415: VEHICLE SPEED	4
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR     C4777 LOW PRESSURE RR	
	C1707: LOW PRESSURE RL     C1708: [NO DATALE]	
	<ul> <li>C1708: [NO DATA] FL</li> <li>C1709: [NO DATA] FR</li> </ul>	
5	• C1710: [NO DATA] TR	
5	• C1711: [NO DATA] RL	
	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL     C1714 CONTROL LINET.	
	C1734: CONTROL UNIT      DOUGH INCIDE ANTENNA	
6	B2621: INSIDE ANTENNA     B2622: INSIDE ANTENNA	
6	B2622: INSIDE ANTENNA     B2623: INSIDE ANTENNA	

DTC Index

INFOID:0000000005897912

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#### 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-15</u>, "COM-MON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-34
U1010: CONTROL UNIT (CAN)	_	_	_	_	BCS-35
U0415: VEHICLE SPEED	_	_	_	_	BCS-36
B2013: ID DISCORD BCM-S/L	×	×	_	_	SEC-46
B2014: CHAIN OF S/L-BCM	×	×	_	_	SEC-47
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-38
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-41
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-42
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-44
B2195: ANTI-SCANNING	×	_	_	_	SEC-45
B2553: IGNITION RELAY	_	×	_	_	PCS-48
B2555: STOP LAMP	_	×	_	_	SEC-50
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-52
B2557: VEHICLE SPEED	×	×	×	_	<u>SEC-54</u>
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-55</u>
B2562: LOW VOLTAGE	_	×	_	_	BCS-37
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-56</u>
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-59</u>
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-61</u>
B2604: PNP/CLUTCH SW	×	×	×	_	SEC-64
B2605: PNP/CLUTCH SW	×	×	×	_	SEC-66
B2606: S/L RELAY	×	×	×	_	<u>SEC-68</u>
B2607: S/L RELAY	×	×	×	_	SEC-69
B2608: STARTER RELAY	×	×	×	_	<u>SEC-71</u>
B2609: S/L STATUS	×	×	×	_	<u>SEC-73</u>
B260A: IGNITION RELAY	×	×	×	_	PCS-50
B260B: STEERING LOCK UNIT	_	×	×	_	<u>SEC-77</u>
B260C: STEERING LOCK UNIT	_	×	×	_	<u>SEC-78</u>
B260D: STEERING LOCK UNIT	_	×	×	_	<u>SEC-79</u>
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-80
B2612: S/L STATUS	×	×	×	_	SEC-85
B2614: BCM	_	×	×	_	PCS-52
B2615: BCM	_	×	×	_	PCS-55
B2616: BCM	_	×	×	_	PCS-58
B2617: BCM	×	×	×	_	SEC-89
B2618: BCM	×	×	×	_	PCS-61
B2619: BCM	×	×	×	_	SEC-91
B261A: PUSH-BTN IGN SW	<del>_</del>	×	×	<del>-</del>	PCS-62
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-92</u>

# **BCM (BODY CONTROL MODULE)**

## < ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data  •Vehicle Speed  •Odo/Trip Meter  •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
B2621: INSIDE ANTENNA		×			DLK-61
B2622: INSIDE ANTENNA		×	_ '	_	<u>DLK-63</u>
B2623: INSIDE ANTENNA	_	×		_	DLK-65
B26E8: CLUTCH SW	×	×	×	_	SEC-81
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-83</u>
B26EA: KEY REGISTRATION	_	×	× (Turn ON for 15 seconds)	_	SEC-84
C1704: LOW PRESSURE FL	_	_		×	
C1705: LOW PRESSURE FR		_ '	_ '	×	WT-26
C1706: LOW PRESSURE RR		_ '	_ '	×	<u> </u>
C1707: LOW PRESSURE RL		_ '	_ '	×	1
C1708: [NO DATA] FL		_ '	_ '	×	
C1709: [NO DATA] FR		_ '	_ '	×	\A/T 20
C1710: [NO DATA] RR	'	_ '	'	×	<u>WT-28</u>
C1711: [NO DATA] RL	_	_ '	_	×	
C1716: [PRESSDATA ERR] FL	_	_ '		×	
C1717: [PRESSDATA ERR] FR		_ '	_ '	×	VA/T 24
C1718: [PRESSDATA ERR] RR		_ '	_ '	×	<u>WT-31</u>
C1719: [PRESSDATA ERR] RL		_ '	_ '	×	-
C1729: VHCL SPEED SIG ERR		_ '	_ '	×	WT-33
C1734: CONTROL UNIT		_ '	_ '	×	<u>WT-35</u>

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#### < SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

# MANUAL FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Description

INFOID:0000000005632139

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

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000005632140

## ${f 1.}$ CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check driver seat control unit power supply and ground circuit.

Refer to ADP-64, "DRIVER SEAT CONTROL UNIT: Diagnosis Procedure".

## Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

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

Refer to ADP-65, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Procedure".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3. CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

POWER SEAT

## POWER SEAT: Description

INFOID:0000000005632141

Power seat does not operate when manually operated.

### POWER SEAT : Diagnosis Procedure

INFOID:0000000005632142

# 1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

## Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

## 2.CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

### STEERING POSITION FUNCTION DOES NOT OPERATE

## STEERING POSITION FUNCTION DOES NOT OPERATE: Description INFOID:000000005632143

Tilt & telescopic do not operate when manually operated.

< SYMPTOM DIAGNOSIS >

STEERING POSITION FUNCTION DOES NOT OPERATE: Diagno	osis Procedure
1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT	
Check tilt & telescopic switch ground circuit.	
Refer to ADP-96. "Diagnosis Procedure".  Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace harness or connector.	
2.CONFIRM THE OPERATION	
Confirm the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".  NO >> GO TO 1.	
SEAT SLIDING	
SEAT SLIDING : Description	INFOID:000000005632145
·	IIVI OID.0000000000332 140
Seat sliding alone does not operate when manually operated.	
SEAT SLIDING : Diagnosis Procedure	INFOID:000000005632146
1. CHECK SLIDING MECHANISM	
Check for the following.	_
<ul> <li>Mechanism deformation or pinched foreign materials.</li> <li>Interference with other parts because of poor installation.</li> </ul>	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunctioning parts.  2.CHECK SLIDING SWITCH	
Check sliding switch.  Refer to ADP-67, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.  3.CHECK SLIDING MOTOR	
Check sliding motor.  Refer to ADP-120, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.	
NO >> Repair or replace the malfunctioning parts.  4.CONFIRM THE OPERATION	
Check the operation again.  Is the result normal?	
YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".	
NO >> GO TO 1.	
SEAT RECLINING	
SEAT RECLINING : Description	INFOID:0000000005632147
Seat reclining only does not operate when manually operated.	

Revision: 2009 Novemver ADP-219 2010 G37 Convertible

### < SYMPTOM DIAGNOSIS >

## SEAT RECLINING: Diagnosis Procedure

INFOID:0000000005632148

## 1. CHECK RECLINING MECHANISM

Check for the following.

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2.CHECK RECLINING SWITCH

Check reclining switch.

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

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3.CHECK RECLINING MOTOR

Check reclining motor.

Refer to ADP-122, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4.CONFIRM THE OPERATION

Check the operation again.

### Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

SEAT LIFTING (FRONT)

### SEAT LIFTING (FRONT): Description

INFOID:0000000005632149

Seat lifting (front) only does not operate when manually operated.

### SEAT LIFTING (FRONT): Diagnosis Procedure

INFOID:0000000005632150

## 1. CHECK LIFTING (FRONT) MECHANISM

Check for the following.

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

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

## 2. CHECK LIFTING SWITCH (FRONT)

Check lifting switch (front).

Refer to ADP-71, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3.CHECK LIFTING MOTOR (FRONT)

Check lifting motor (front).

Refer to ADP-124, "Component Function Check".

#### Is the inspection result normal?

< SYMPTOM DIAGNOSIS >		
YES >> GO TO 4.  NO >> Repair or replace the malfunctioning parts.  4.CONFIRM THE OPERATION		Α
Check the operation again.		_
Is the result normal?		В
YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".  NO >> GO TO 1.		
SEAT LIFTING (REAR)		С
SEAT LIFTING (REAR) : Description	INFOID:000000005632151	D
Seat lifting (rear) only does not operate when manually operated.		
SEAT LIFTING (REAR) : Diagnosis Procedure	INFOID:000000005632152	Е
1. CHECK LIFTING (REAR) MECHANISM		
Check for the following.  • Mechanism deformation or pinched foreign materials.  • Interference with other parts because of poor installation.		F
Is the inspection result normal?		G
YES >> GO TO 2.  NO >> Repair or replace the malfunctioning parts.		
2.CHECK LIFTING SWITCH (REAR)		Н
Check lifting switch (rear). Refer to ADP-73, "Component Function Check".		
Is the inspection result normal?		I
YES >> GO TO 3.		
NO >> Repair or replace the malfunctioning parts.  3.CHECK LIFTING MOTOR (REAR)		ADP
Check lifting motor (rear).		
Refer to ADP-126, "Component Function Check".		K
Is the inspection result normal?  YES >> GO TO 4.		
NO >> Repair or replace the malfunctioning parts.		L
4.CONFIRM THE OPERATION		
Check the operation again.		M
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-37</u> , "Intermittent Incident".		
NO >> GO TO 1.		N
STEERING TILT		IN
STEERING TILT : Description	INFOID:000000005632153	0
Steering tilt only does not operate when manually operated.		
STEERING TILT : Diagnosis Procedure	INFOID:0000000005632154	Р
1.CHECK STEERING TILT MECHANISM		1
Check for the following.  • Mechanism deformation or pinched foreign materials.  • Interference with other parts because of poor installation.		
Is the inspection result normal?		

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YES >> GO TO 2.

#### < SYMPTOM DIAGNOSIS >

NO >> Repair or replace the malfunctioning parts.

## 2.check tilt switch

Check tilt switch.

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

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3. CHECK TILT MOTOR

Check tilt motor.

Refer to ADP-128, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4.CONFIRM THE OPERATION

Check the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

### STEERING TELESCOPIC

## STEERING TELESCOPIC : Description

INFOID:0000000005632155

Steering telescopic only does not operate when manually operated.

## STEERING TELESCOPIC: Diagnosis Procedure

INFOID:0000000005632156

## 1. CHECK STEERING TELESCOPIC MECHANISM

Check for the following.

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

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2. CHECK TELESCOPIC SWITCH

Check telescopic switch.

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3. CHECK TELESCOPIC MOTOR

Check telescopic motor.

Refer to ADP-130, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CONFIRM THE OPERATION

Check the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

#### DOOR MIRROR

Revision: 2009 Novemver ADP-222 2010 G37 Convertible

MANUAL FUNCTION DOES NOT OPERATE  < SYMPTOM DIAGNOSIS >	
DOOR MIRROR : Description	INFOID:000000005632157
Door mirror does not operate when manually operated.	
DOOR MIRROR : Diagnosis Procedure	NEO/D 00000000000000
	INFOID:0000000005632158
1. CHECK DOOR MIRROR MECHANISM	
<ul> <li>Check for the following.</li> <li>Mechanism deformation or pinched foreign materials.</li> <li>Interference with other parts because of poor installation.</li> </ul>	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.CHECK MIRROR SWITCH	
Check mirror switch.	
Refer to <u>ADP-90, "MIRROR SWITCH: Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts.	
3. CHECK MIRROR MOTOR	
Check mirror motor.  Refer to ADP-132, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunctioning parts.  4.CONFIRM THE OPERATION	
Check the operation again.  Is the result normal?	
YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".	
NO >> GO TO 1.	

Revision: 2009 Novemver ADP-223 2010 G37 Convertible

### **MEMORY FUNCTION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

## MEMORY FUNCTION DOES NOT OPERATE

### **ALL COMPONENT**

ALL COMPONENT : Description

INFOID:0000000005632159

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

## ALL COMPONENT : Diagnosis Procedure

INFOID:0000000005632160

### 1. CHECK MANUAL OPERATION

Check manual operation.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-218, "ALL COMPONENT : Diagnosis Procedure"

# 2.perform memory storing procedure

Perform memory storing procedure.

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

### Is the inspection result normal?

YES >> Memory function is normal.

NO >> GO TO 3.

## 3. CHECK SEAT MEMORY SWITCH

Check seat memory switch.

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

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch.

### 4. CONFIRM THE OPERATION

Confirm the operation again.

#### Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

SEAT SLIDING

### **SEAT SLIDING: Description**

INFOID:0000000005632161

Seat sliding only does not operate when memory operated.

## SEAT SLIDING : Diagnosis Procedure

INFOID:0000000005632162

## 1. CHECK MANUAL OPERATION

Check manual operation.

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-219, "SEAT SLIDING : Diagnosis Procedure"

### 2.CHECK SLIDING SENSOR

Check sliding sensor.

Refer to ADP-97, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

## 3.CONFIRM THE OPERATION

Check the operation again.

Revision: 2009 Novemver ADP-224 2010 G37 Convertible

## **MEMORY FUNCTION DOES NOT OPERATE**

< SYMPTOM DIAGNOSIS >		
Is the result normal?  YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".  NO >> GO TO 1.		А
SEAT RECLINING		В
SEAT RECLINING : Description	INFOID:0000000005632163	
Seat reclining only does not operate when memory operated.  SEAT RECLINING: Diagnosis Procedure		С
1. CHECK MANUAL OPERATION	INFOID:0000000005632164	
Check manual operation.		D
Is the inspection result normal?		E
YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT RECLINING: Diagnosis Procedure"  2.CHECK RECLINING SENSOR		
Check reclining sensor.		F
Refer to ADP-100, "Component Function Check".		
Is the inspection result normal? YES >> GO TO 3.		G
NO >> Repair or replace the malfunctioning parts.  3.CONFIRM THE OPERATION		Н
Check the operation again.		
Is the result normal?		I
YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".		
NO >> GO TO 1.		
		ADP
NO >> GO TO 1.	INFOID:0000000005632165	ADP
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.	INFOID:000000005632165	ADP K
NO >> GO TO 1. SEAT LIFTING (FRONT) SEAT LIFTING (FRONT) : Description	INFOID:0000000005632165 INFOID:0000000005632166	
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.		
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.		K
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.		
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"		K L M
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).		K
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).  Refer to ADP-103, "Component Function Check".		K L M
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).  Refer to ADP-103, "Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.		K L M
NO >> GO TO 1.  SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).  Refer to ADP-103, "Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.		K L M
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).  Refer to ADP-103, "Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.		K L M
NO >> GO TO 1. SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).  Refer to ADP-103, "Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.  3.CONFIRM THE OPERATION  Check the operation again.  Is the result normal?		K L M
SEAT LIFTING (FRONT)  SEAT LIFTING (FRONT): Description  Seat lifting (front) only does not operate when memory operated.  SEAT LIFTING (FRONT): Diagnosis Procedure  1.CHECK MANUAL OPERATION  Check manual operation.  Is the inspection result normal?  YES >> GO TO 2.  NO >> Refer to ADP-220, "SEAT LIFTING (FRONT): Diagnosis Procedure"  2.CHECK LIFTING SENSOR (FRONT)  Check lifting sensor (front).  Refer to ADP-103, "Component Function Check".  Is the inspection result normal?  YES >> GO TO 3.  NO >> Repair or replace the malfunctioning parts.  3.CONFIRM THE OPERATION  Check the operation again.		K L M

### **MEMORY FUNCTION DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

SEAT LIFTING (REAR): Description

INFOID:0000000005632167

Seat lifting (rear) only does not operate when memory operated.

SEAT LIFTING (REAR): Diagnosis Procedure

INFOID:0000000005632168

### 1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-221, "SEAT LIFTING (REAR): Diagnosis Procedure"

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).

Refer to ADP-106, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC: Description

INFOID:0000000005632169

Steering telescopic only does not operate when memory operated.

STEERING TELESCOPIC: Diagnosis Procedure

INFOID:0000000005632170

## 1. CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to ADP-222, "STEERING TELESCOPIC : Diagnosis Procedure"

2.CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

STEERING TILT

STEERING TILT : Description

INFOID:0000000005632171

Steering tilt only does not operate when memory operated.

#### **MEMORY FUNCTION DOES NOT OPERATE** < SYMPTOM DIAGNOSIS > STEERING TILT: Diagnosis Procedure INFOID:0000000005632172 Α CHECK MANUAL OPERATION Check manual operation. В Is the inspection result normal? YES >> GO TO 2. NO >> Refer to ADP-221, "STEERING TILT : Diagnosis Procedure" 2.CHECK TILT SENSOR Check steering tilt sensor. Refer to ADP-109, "Component Function Check". D Is the inspection result normal? YES >> GO TO 3. Е NO >> Repair or replace the malfunctioning parts. 3.CONFIRM THE OPERATION Check the operation again. F Is the result normal? YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident". NO >> GO TO 1. DOOR MIRROR **DOOR MIRROR**: Description INFOID:0000000005632173 Door mirror does not operate when memory operated. DOOR MIRROR: Diagnosis Procedure INFOID:0000000005632174 1. CHECK MANUAL OPERATION Check manual operation. ADP Is the inspection result normal? YES >> GO TO 2. NO >> Refer to ADP-223, "DOOR MIRROR: Diagnosis Procedure" 2.CHECK MIRROR SENSOR Check mirror sensor. Refer to ADP-115, "DRIVER SIDE: Component Function Check". (Driver side)

 Refer to ADP-117, "PASSENGER SIDE: Component Function Check". (Passenger side) Is the inspection result normal?

YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

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### MEMORY INDICATE DOES NOT ILLUMINATE

### < SYMPTOM DIAGNOSIS >

## MEMORY INDICATE DOES NOT ILLUMINATE

## Diagnosis Procedure

INFOID:0000000005632175

## 1. CHECK MEMORY INDICATOR

Check memory indicator.

Refer to ADP-134, "Component Function Check".

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2.CONFIRM THE OPERATION

Confirm the operation again.

## Is the result normal?

YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident".

NO >> GO TO 1.

## SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS > SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE		
Diagnosis Procedure	NFOID:0000000005632176	Α
1.CHECK SYSTEM SETTING		В
Check system setting.  Refer to ADP-11, "SYSTEM SETTING: Special Repair Requirement".		
Is the inspection result normal?		С
YES >> Synchronization function is normal. NO >> GO TO 2.		
2.CHECK ALL FUNCTIONS MAMUAL OPERATION		D
Check all functions manual operation. <u>Is the inspection result normal?</u>		Е
YES >> GO TO 3. NO >> Refer to ADP-218, "ALL COMPONENT : Diagnosis Procedure".		
3.CONFIRM THE OPERATION		F
Check the operation again.		
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-37</u> , "Intermittent Incident".		G
NO >> GO TO 1.		
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### POWER WALK-IN FUNCTION DOES NOT OPERATE

#### < SYMPTOM DIAGNOSIS >

## POWER WALK-IN FUNCTION DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005632177

## 1. CHECK POWER WALK-IN FUNCTION

Check power walk-in function.

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

#### Is the inspection result normal?

YES >> Power walk-in function is OK.

NO >> GO TO 2.

# 2.perform initialization procedure

1. Perform initialization procedure.

Refer to ADP-10, "SYSTEM INITIALIZATION: Special Repair Requirement".

2. Check power walk-in function.

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

#### Is the inspection result normal?

YES >> Power walk-in function is normal.

NO >> GO TO 3.

### 3. CHECK POWER WALK-IN SWITCH

Check power walk-in switch.

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

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

### 4. CHECK SEAT BELT BUCKLE SWITCH

Check seat belt buckle switch.

Refer to ADP-77, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

## 5. CHECK FORWARD SWITCH

Check forward switch.

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

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

### 6.CHECK SLIDING LIMIT SWITCH

Check sliding limit switch.

Refer to ADP-79, "Component Function Check".

#### Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

#### .CHECK DRIVER SIDE DOOR SWITCH

Check driver side door switch.

Refer to DLK-70, "Component Function Check"

#### Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace the malfunctioning parts.

### 8.CONFIRM THE OPERATION

Check the operation again.

POWER WALK-IN FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > Refer to ADP-39, "POWER WALK-IN FUNCTION: System Description". Α Is the result normal? YES >> Check intermittent incident. Refer to GI-37, "Intermittent Incident". NO >> GO TO 1. В С D Е F G Н

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### INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

### < SYMPTOM DIAGNOSIS >

## INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000005632178

## 1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Refer to DLK-7, "Work Flow".

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

# 2. PERFORM MEMORY STORING PROCEDURE

1. Perform memory storing procedure.

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

2. Check Intelligent Key interlock function.

Refer to ADP-34, "INTELLIGENT KEY INTERLOCK FUNCTION: System Description".

### Is the inspection result normal?

YES >> Intelligent Key inter lock function is normal.

NO >> GO TO 1.

## **NORMAL OPERATING CONDITION**

## < SYMPTOM DIAGNOSIS >

# NORMAL OPERATING CONDITION

Description INFOID:0000000005632179

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

Symptom	Cause	Action to take	Reference page
Seat synchronization function does not operate.	The synchronization function will not operate if the steering (tilt, telescopic) or the door mirror moves to the operating end while the seat synchronization function is operating.	Perform the memory function or drive the vehicle at more than 7km/h (4 MPH).	<u>ADP-24</u>
	Seat adjustment value has exceed any of the values below.  Seat sliding: 76 mm Seat reclining: 9.1 degrees Seat lifting (rear): 20 mm	_	_
Side support or lumbar support does not perform memory operation.	The side support and the lumbar support are controlled independently with no link	_	Side support: SE-24
	to the automatic drive positioner system.		Lumbar support: <u>SE-27</u>
Memory function, power walk-in function, seat synchronization function, or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-29
			Power walk-in function: ADP-39
			Seat synchronization function: <u>ADP-24</u>
			Intelligent Key interlock function: <u>ADP-34</u>

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## **PRECAUTION**

### **PRECAUTIONS**

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

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

#### **WARNING:**

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

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

#### **WARNING:**

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

Service Procedure Precautions for Models with a Pop-up Roll Bar

#### INFOID:0000000005632181

INFOID:0000000005632182

#### **WARNING:**

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll
  over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative,
  all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the
  ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The
  purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply
  circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

## Precaution for Battery Service

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

Service INFOID:0000000005632183

- When removing or installing various parts, place a cloth or padding onto the vehicle body to prevent scratches.
- Handle trim, molding, instruments, grille, etc. carefully during removing or installing. Be careful not to oil or damage them.
- Apply sealing compound where necessary when installing parts.

### **PRECAUTIONS**

#### < PRECAUTION >

- When applying sealing compound, be careful that the sealing compound does not protrude from parts.
- When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust prevention measures.

Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
- Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.
  - Then rub with a soft and dry cloth.
- Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the fouled area.
- Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol, and gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

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### **DRIVER SEAT CONTROL UNIT**

< REMOVAL AND INSTALLATION >

# REMOVAL AND INSTALLATION

## DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-234, "Exploded View".

Removal and Installation

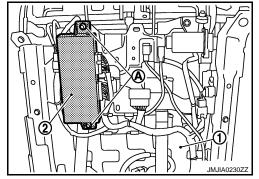
#### INFOID:0000000005632186

#### **REMOVAL**

#### **CAUTION:**

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

- 1. Remove driver seat (1). Refer to <u>SE-245, "Removal and Installation"</u>.
- 2. Remove mounting bolts (A).
- 3. Remove driver seat control unit (2).



#### **INSTALLATION**

Install in reverse order of removal.

#### **CAUTION:**

Be sure to clump the harness to the right place.

#### NOTE:

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

### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

< REMOVAL AND INSTALLATION >

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

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

Removal and Installation

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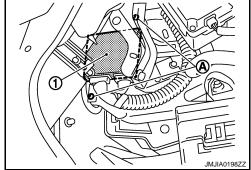
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## **REMOVAL**

#### **CAUTION:**

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

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



**INSTALLATION** 

Install in reverse order of removal.

**CAUTION:** 

Be sure to clump the harness to the right place.

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### **SEAT MEMORY SWITCH**

### < REMOVAL AND INSTALLATION >

## **SEAT MEMORY SWITCH**

Exploded View

Refer to INT-12, "Exploded View"

Removal and Installation

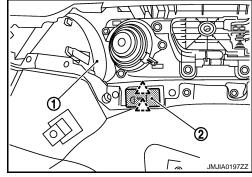
### **REMOVAL**

#### **CAUTION:**

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

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





#### **INSTALLATION**

Install in reverse order of removal.

#### **CAUTION:**

Be sure to clump the harness to the right place.

### **POWER SEAT SWITCH**

### < REMOVAL AND INSTALLATION >

## POWER SEAT SWITCH

Exploded View

Refer to SE-234, "Exploded View".

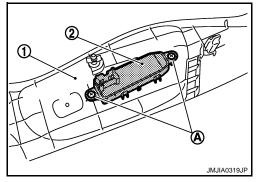
Removal and Installation

### **REMOVAL**

#### **CAUTION:**

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

- 1. Remove seat cushion outer finisher (1). Refer to <u>SE-245</u>, "Removal and Installation".
- 2. Remove screws (A).
- 3. Remove power seat switch (2) from seat cushion outer finisher (1).



#### **INSTALLATION**

Install in reverse order of removal.

#### **CAUTION:**

Be sure to clump the harness to the right place.

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### SIDE SUPPORT SWITCH

### < REMOVAL AND INSTALLATION >

## SIDE SUPPORT SWITCH

Exploded View

Refer to SE-234, "Exploded View"

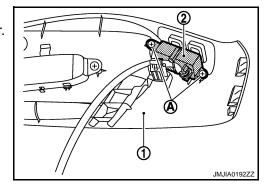
Removal and Installation

### **REMOVAL**

#### **CAUTION:**

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

- 1. Remove seat cushion outer finisher (1). Refer to SE-245, "Removal and Installation"
- 2. Remove screws (A).
- 3. Remove side support switch (2) from seat cushion outer finisher.



#### **INSTALLATION**

Install in reverse order of removal.

#### **CAUTION:**

Be sure to clump the harness to the right place.

### TILT&TELESCOPIC SWITCH

### < REMOVAL AND INSTALLATION >

## TILT&TELESCOPIC SWITCH

Exploded View

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

Removal and Installation

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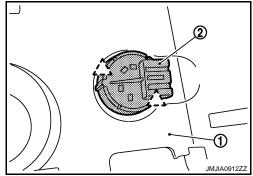
### **REMOVAL**

#### **CAUTION:**

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

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





#### **INSTALLATION**

Install in reverse order of removal.

#### **CAUTION:**

Be sure to clump the harness to the right place.

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