

SECTION ADP

AUTOMATIC DRIVE POSITIONER

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

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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 dual stage front air bag modules. The SRS system may only deploy one front air bag, depending on the severity of a collision and whether the front passenger seat is occupied. Information necessary to service the system safely is included in the SR and SB section 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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 SR section.
- 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 or batteries, and wait at least three minutes before performing any service.

Precaution for Work

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- 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 prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:
 - Water soluble dirt:
 - Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
 - Then rub with a soft, dry cloth.
 - Oily dirt:
 - Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
 - Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
 - Then rub with a soft, dry cloth.
 - Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
 - For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

< PREPARATION >

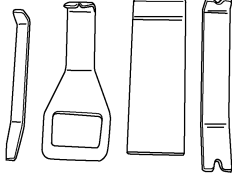
PREPARATION

PREPARATION

Special Service Tool

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The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

COMPONENT PARTS

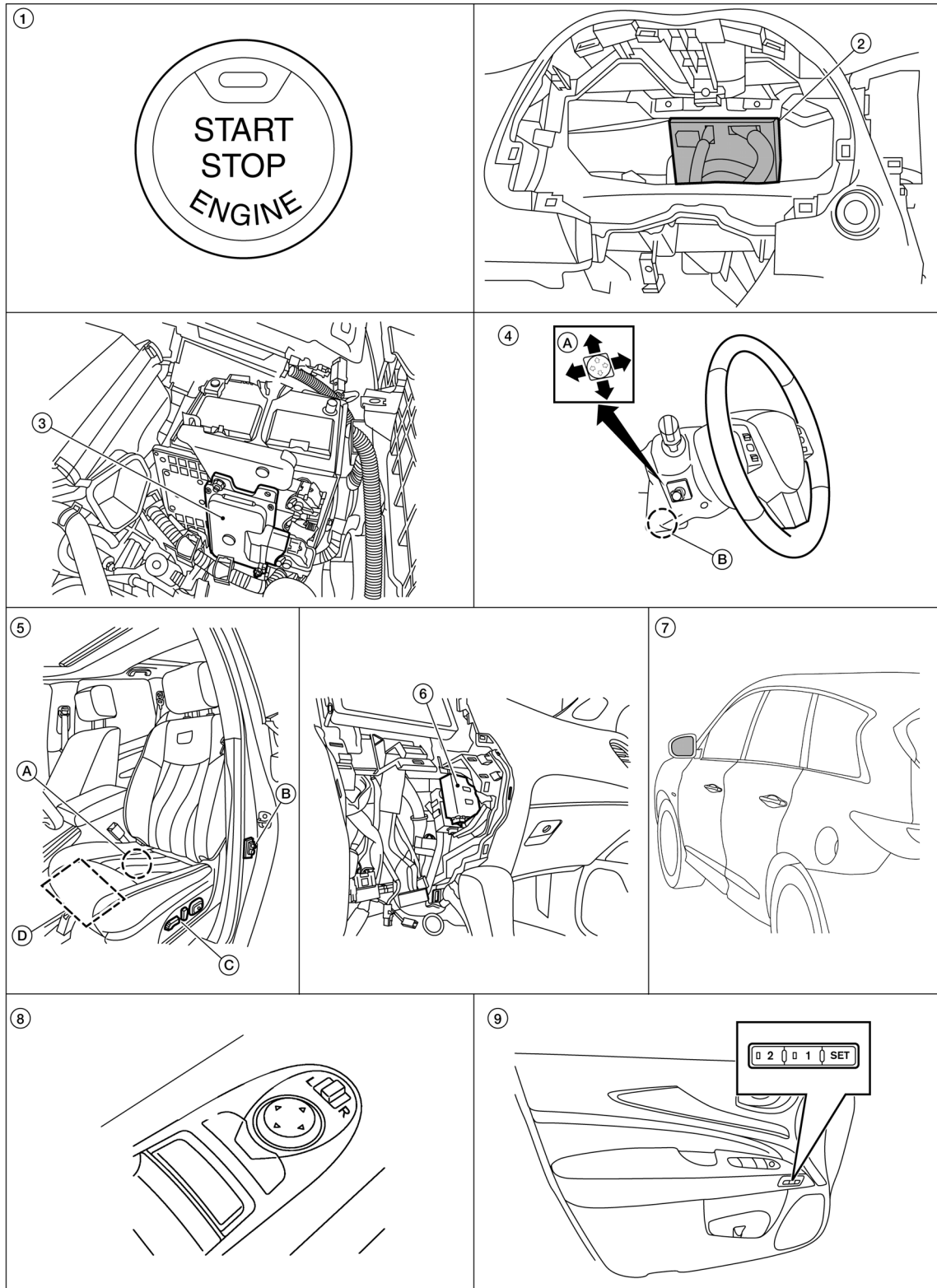
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

- | | | |
|--|--|--|
| 1. Push-button ignition switch | 2. BCM (view with combination meter removed) | 3. TCM |
| 4. A. ADP steering switch
B. Tilt motor, telescopic motor | 5. A. Driver seat control unit
B. Front door switch LH
C. Power seat switch LH
D. Sliding motor LH, reclining motor LH, lifting motor LH (front/rear) | 6. Automatic drive positioner control unit (view with AV control unit removed) |
| 7. Door mirror LH (RH similar) | 8. Power mirror remote control switch | 9. Seat memory switch |

Component Description

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Component parts	Description
Driver seat control unit	• Main units of automatic drive positioner system. • It is connected to the CAN. • It communicates with automatic drive positioner control unit via UART communication. • It performs memory function after receiving the door unlock signal from BCM. • Operates each motor of seat to the registered position. • Requests the operation of steering column and door mirror to automatic drive positioner control unit • Operates the specific seat motor with the signal from power seat switch. • Transmits the ignition switch signal (ACC/ON) via UART communication to automatic driver positioner control unit.
Automatic drive positioner control unit	• It communicates with driver seat control unit via UART communication. • Performs various controls with the instructions of driver seat control unit. • Performs the controls of tilt & telescopic, door mirror and seat memory switch. • Operates steering column and door mirror with the signal from the driver seat control unit
BCM	Recognizes the following status and transmits it to driver seat control unit via CAN communication. • Handle position: LHD • Driver door: OPEN/CLOSE • Ignition switch position: ACC/ON • Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) • Key ID • Starter: CRANKING/OTHER
TCM	The following signals are transmitted to driver seat control unit via CAN communication. • Shift position signal (P range) • Identification of transmission: CVT
Combination meter	Transmits the vehicle speed signal to driver seat control unit via CAN communication.
CVT shift selector (Detention switch)	• Detention switch is installed on CVT shift selector. It is turned OFF when CVT shift selector is in P position. • Driver seat control unit judges that CVT shift selector is in P position if continuity does not exist in this circuit.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component parts		Description
Power mirror remote control switch	Mirror switch	- Mirror switch is integrated in power mirror remote control switch. - It operates angle of door mirror face. - It transmits mirror face adjust operation to automatic drive positioner control unit.
	Changeover switch	- Changeover switch is integrated in power 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.
ADP steering switch	Tilt switch	- Tilt switch is equipped to steering column. - The operation signal is input to automatic drive positioner control unit when tilt switch is operated.
	Telescopic switch	- Telescopic switch is equipped to steering column. - The operation signal is input to automatic drive positioner control unit when telescopic switch is operated.
Seat memory switch	Set switch	It is used for registration and setting change of driving position and Intelligent Key interlock function.
	Seat memory switch	- The maximum 2 driving positions can be registered by memory switch 1 to 2. - Driving position is set to the registered driving position when memory switch is pressed while operation conditions are satisfied.
	Seat memory indicator	Memory indicator indicates the status of auto driving position system by turning ON or blinking.
Power seat switch	Sliding switch	- Sliding switch is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when sliding switch is operated.
	Reclining switch	- The operation signal is input to driver seat control unit when reclining switch is operated. - The operation signal is input to driver seat control unit when reclining switch is operated.
	Lifting switch (front)	- Lifting switch (front) is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when lifting switch (front) is operated.
	Lifting switch (rear)	- Lifting switch (rear) is equipped to power seat switch on seat cushion side surface. - The operation signal is input to driver seat control unit when lifting switch (rear) is operated.
Door mirror (driver side/passenger side)	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.
	Mirror sensor	- Mirror sensor is installed to door mirror. - The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated. - Automatic drive positioner control unit calculates door mirror position according to the change of the voltage of 2 sensor input terminals.

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component parts		Description
Tilt motor	Tilt motor	- Tilt motor is installed to steering column assembly. - Tilt motor is activated with automatic drive positioner control unit. - Steering column is tilted upward/downward by changing the rotation direction of tilt motor.
	Tilt sensor	- Tilt sensor is integrated in tilt motor. - The resistance of tilt sensor is changed according to the upward/downward 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.
Telescopic motor	Telescopic motor	- Telescopic motor is installed to steering column assembly. - Telescopic motor is activated with automatic drive positioner control unit. - Compresses steering column by changing the rotation direction of telescopic motor.
	Telescopic sensor	- Telescopic sensor is integrated in telescopic motor. - 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.
Sliding motor LH	Sliding motor LH	- Seat sliding motor LH is installed to the seat cushion frame. - Seat sliding motor LH is activated with driver seat control unit. - Slides the seat forward/backward by changing the rotation direction of sliding motor.
	Sliding sensor	- Sliding sensor is integrated in sliding motor. - The pulse signal is input to driver seat control unit when sliding is performed. - Driver seat control unit counts the pulse and calculates the sliding amount of the seat.
Reclining motor LH	Reclining motor LH	- Seat reclining motor LH is installed to seat back frame. - Seat reclining motor LH is activated with driver seat control unit. - Seatback is reclined forward/backward by changing the rotation direction of reclining motor.
	Reclining sensor	- Reclining sensor is integrated in reclining motor. - The pulse signal is input to driver seat control unit when the reclining is operated. - Driver seat control unit counts the pulse and calculates the reclining amount of the seat.
Lifting motor LH (front)	Lifting motor LH (front)	- Lifting motor LH (front) is installed to seat side cushion frame. - Lifting motor LH (front) is activated with driver seat control unit. - Seat lifter (front) is moved upward/downward by changing the rotation direction of lifting motor (front).
	Lifting sensor (front)	- Lifting sensor (front) is installed in lifting motor (rear). - When lifting motor (rear) operates, pulse signal is transmitted to driver seat control unit from lifting sensor. Driver seat control unit counts the pulse and calculates the lift position (rear) of the seat.
Lifting motor LH (rear)	Lifting motor LH (rear)	- Lifting motor LH (rear) is installed to seat slide cushion frame. - Lifting motor LH (rear) is activated with driver seat control unit. - Seat lifter (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear).
	Lifting sensor (rear)	- Lifting sensor (rear) is installed to seat side cushion frame. - The pulse signal is input to driver seat control unit when lifting (rear) is operated. - Driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat.

SYSTEM

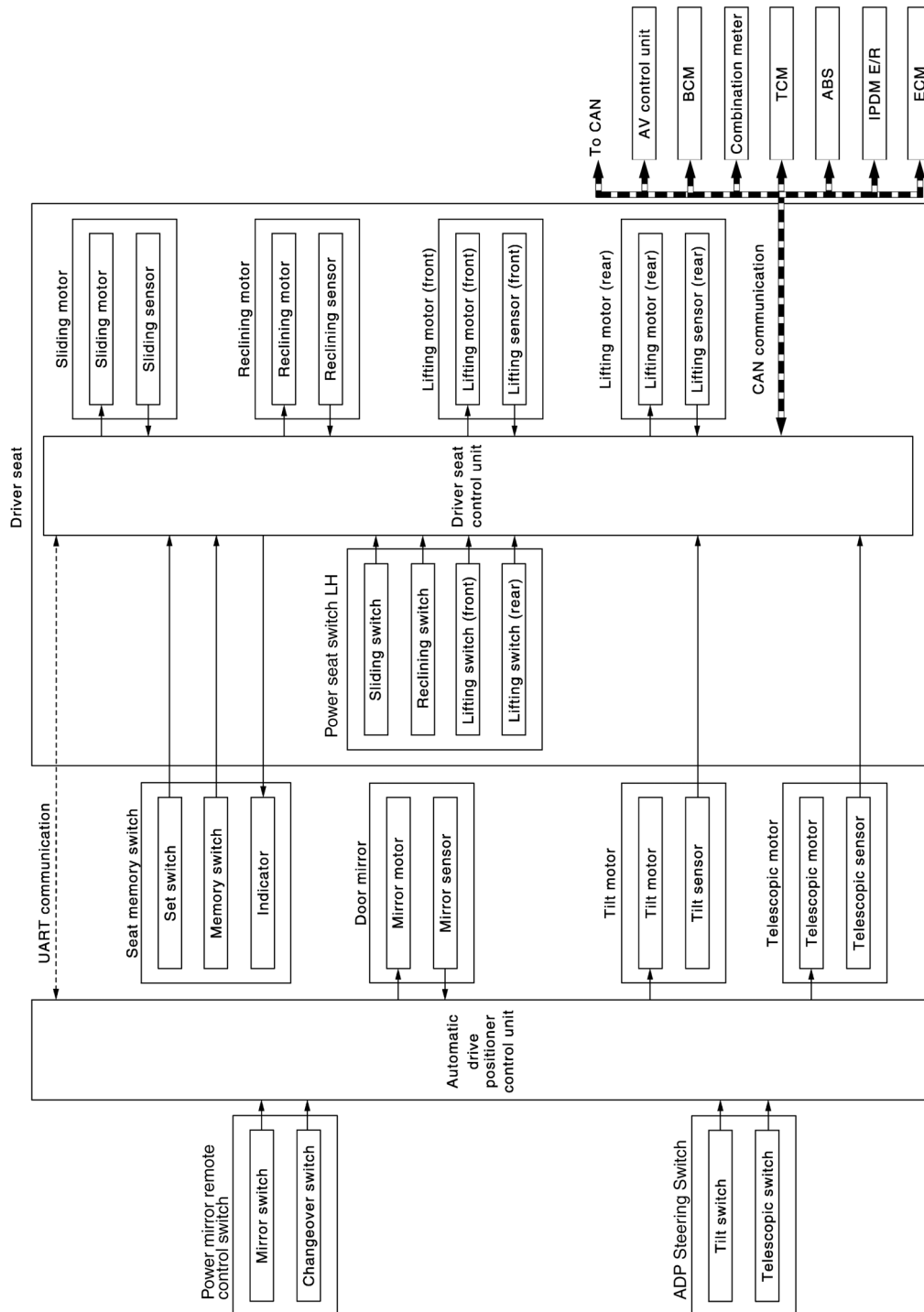
< SYSTEM DESCRIPTION >

SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram

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AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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OUTLINE

Revision: April 2016

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SYSTEM

< SYSTEM DESCRIPTION >

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, ADP steering switch or door mirror remote control switch.
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).
Entry/Exit assist function	Exit	On exit, the seat moves backward and the steering column moves upward.
	Entry	On entry, the seat and steering column returns from exiting position to the previous driving position.
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 is controlled independently with no link to the automatic drive positioner system.

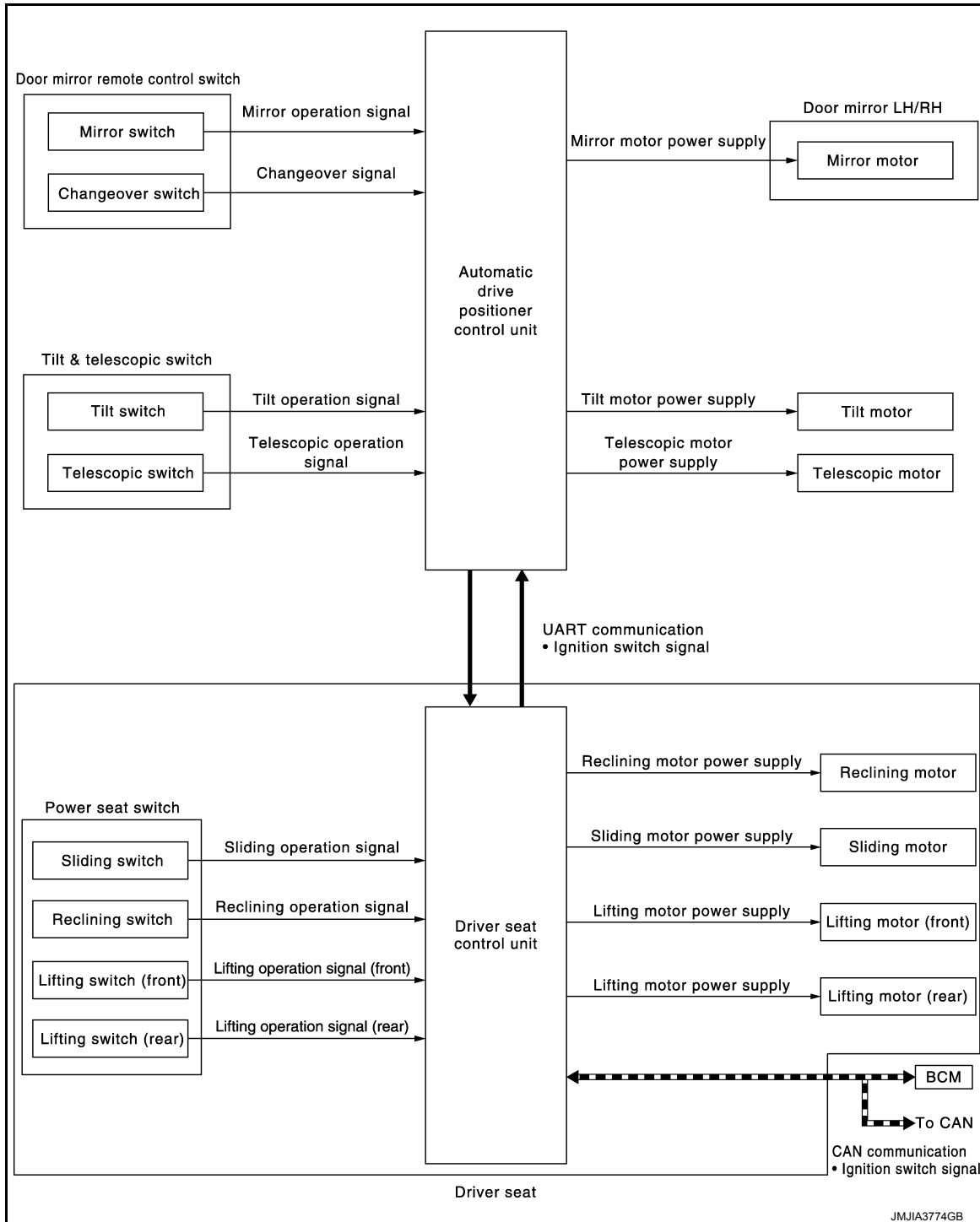
MANUAL FUNCTION

SYSTEM

< SYSTEM DESCRIPTION >

MANUAL FUNCTION : System Diagram

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MANUAL FUNCTION : System Description

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OUTLINE

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

OPERATION PROCEDURE

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

SYSTEM

< SYSTEM DESCRIPTION >

DETAIL FLOW

Seat

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

Tilt and Telescopic

Order	Input	Output	Control unit condition
1	ADP steering switch	—	The ADP steering switch signal is input to the automatic drive positioner control unit when the ADP steering switch is operated.
2	—	Motors (tilt, telescopic)	The automatic drive positioner control unit actuates the motors according to the operation of the ADP steering switch signal.
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 motors anymore at that time.

Door Mirror

Order	Input	Output	Control unit condition
1	Door mirror remote control switch	—	The door mirror remote control switch signal is inputted to the automatic drive positioner control unit when the door mirror remote control switch is operated.
2	—	Motors (Door mirror motor)	The automatic drive positioner control unit actuates each motor according to the operation of the door mirror remote control switch.

NOTE:

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

MEMORY FUNCTION

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NOTE:

OPERATION PROCEDURE

- Revision: April 2016

SYSTEM

< SYSTEM DESCRIPTION >

2. Press desired memory switch.
3. Front seat LH, steering column and door mirror will move to the memorized position.

OPERATION CONDITION

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

Item	Request status
Ignition position	ON
Switch inputs • Power seat switch • ADP steering switch • Door mirror control switch • Set switch • Seat memory switch	OFF (Not operated)
CVT selector lever	P position

However, the memory operation can be performed for 45 seconds after opening the front door LH (front door switch LH OFF → ON) even if the ignition switch is OFF.

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Memory switch	—	The memory switch signal is inputted to the automatic drive positioner control unit when memory switch 1 or 2 is operated. Memory switch signal is input to driver seat control unit via UART communication.
2	—	Motors (seat, steering, door mirror)	Driver seat control unit operates each motor of seat when it recognizes the memory switch pressed 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 column, door mirrors)	—	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirrors 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.

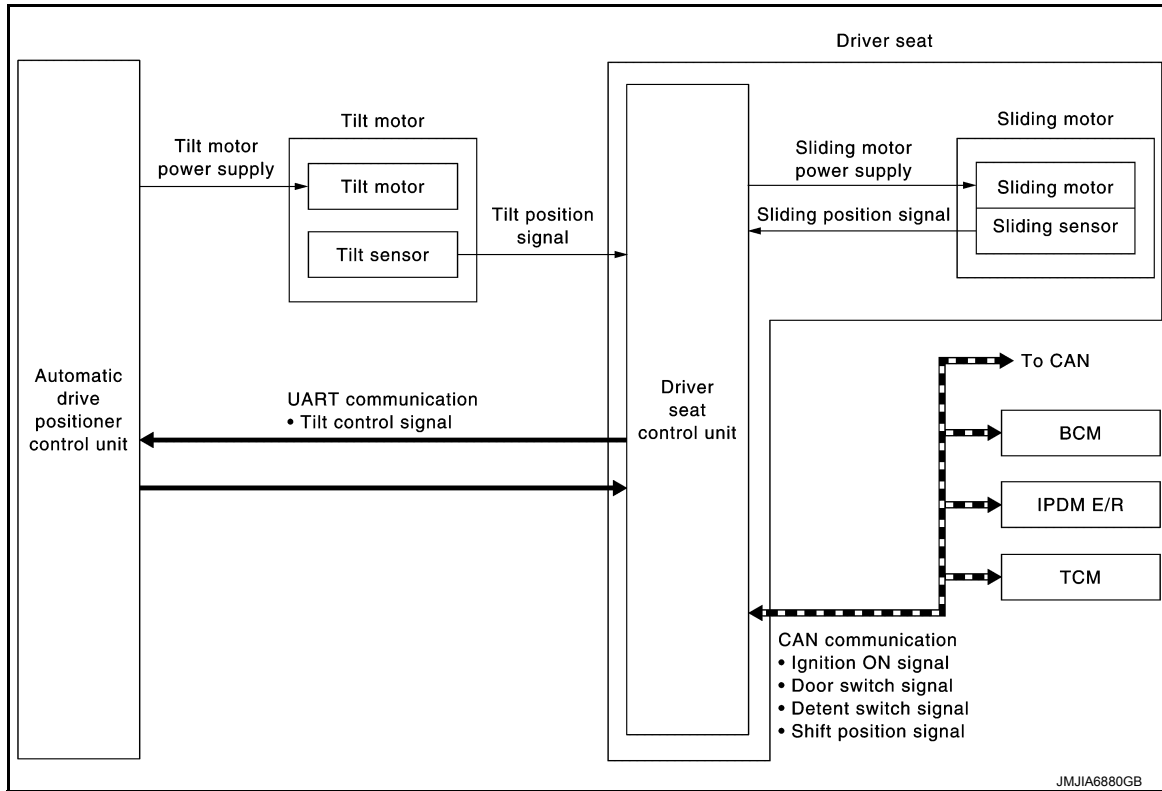
EXIT ASSIST FUNCTION

SYSTEM

< SYSTEM DESCRIPTION >

EXIT ASSIST FUNCTION : System Diagram

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EXIT ASSIST FUNCTION : System Description

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OUTLINE

When exiting, if the conditions are satisfied, the seat is moved backward from normal sitting position and the steering column is moved up.

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

NOTE:

- This function is set to ON before delivery (initial setting).
- For further information for the system setting procedure, refer to Owner's Manual.

OPERATION PROCEDURE

1. Open the front door LH with ignition switch in OFF position.
2. Front seat LH and steering column will move to the exiting position.

OPERATION CONDITION

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

Item	Request status
Ignition switch	OFF
System setting [Entry/exit assist function]	ON
Initialization	Done
Switch inputs • Power seat switch • ADP steering switch • Door mirror remote control switch • Set switch • Seat memory switch	OFF (Not operated)
CVT selector lever	P position

DETAIL FLOW

SYSTEM

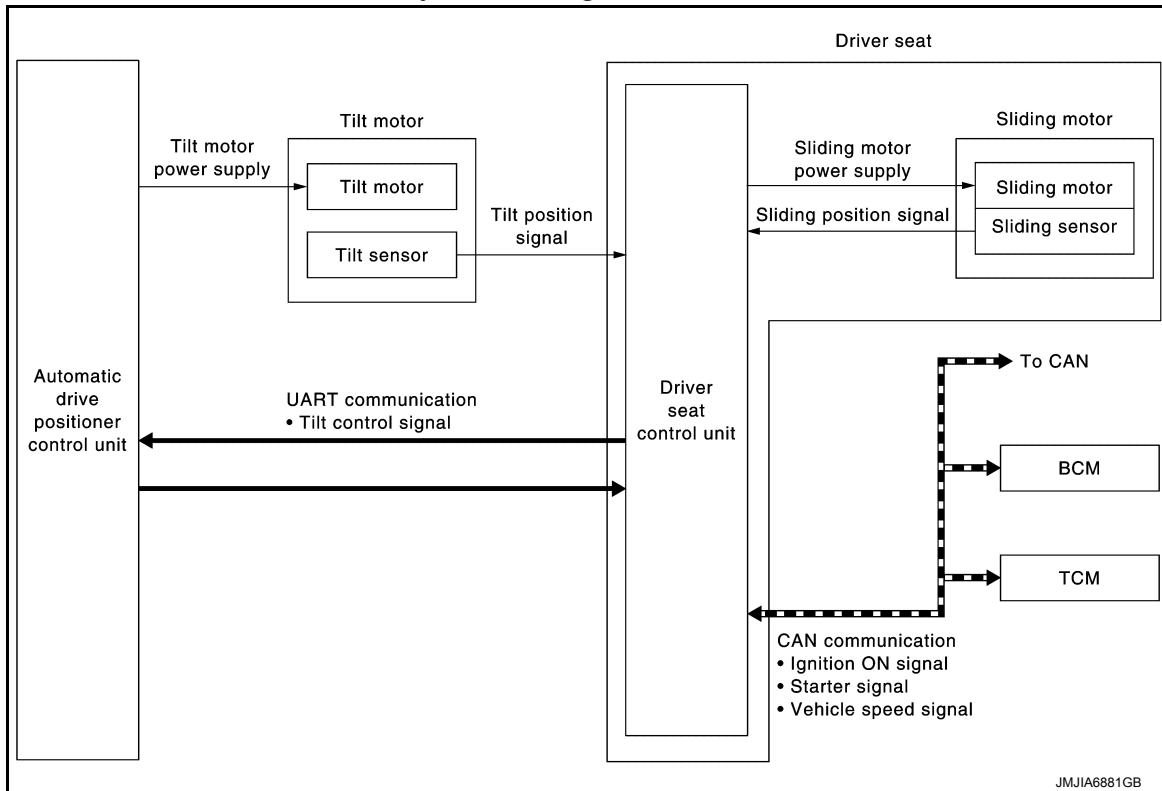
< SYSTEM DESCRIPTION >

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

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Diagram

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ENTRY ASSIST FUNCTION : System Description

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OUTLINE

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

NOTE:

- This function is set to OFF before delivery (initial setting).
- For further information for the system setting procedure, refer to Owner's Manual.

OPERATION PROCEDURE

1. Turn the ignition switch to ACC.
2. Front seat LH and steering column will return from the exiting position to entry position.

OPERATION CONDITION

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

SYSTEM

< SYSTEM DESCRIPTION >

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

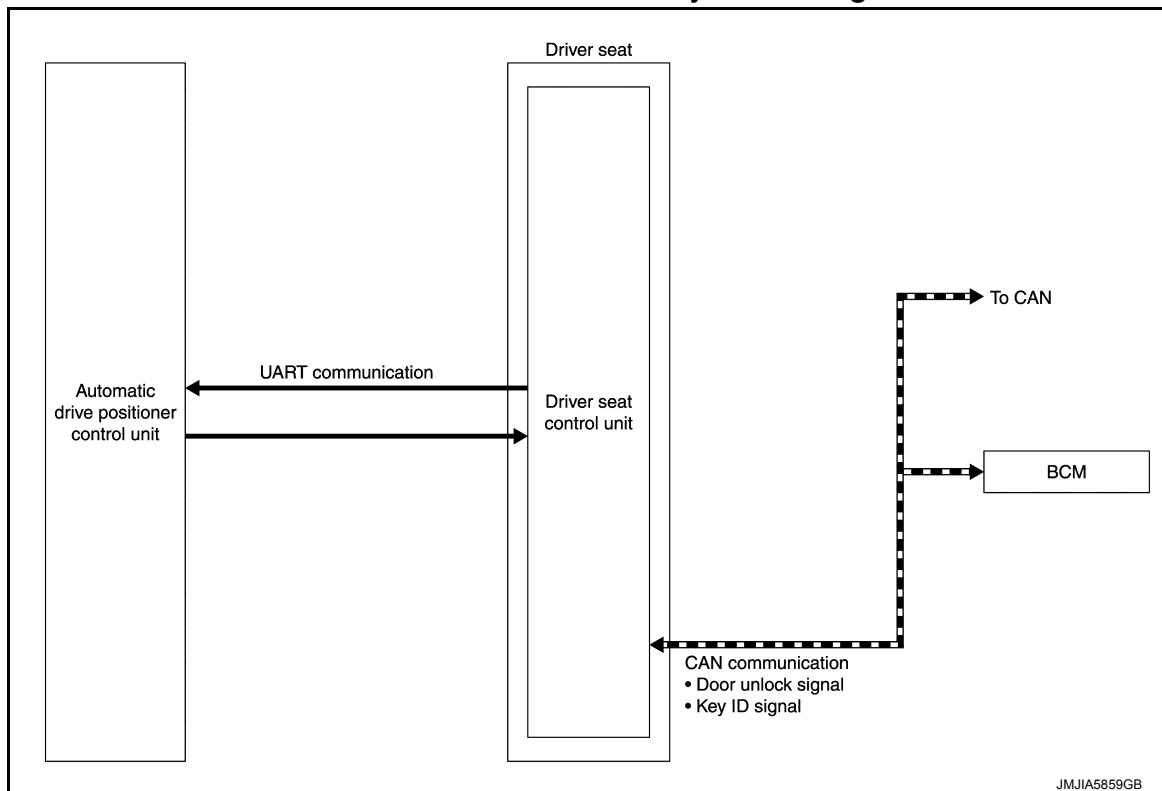
DETAIL FLOW

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

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

INFOID:0000000012852766



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000012852767

- By associating Intelligent Key and automatic drive positioner system, the unlock operation of Intelligent Key or driver side door request switch performs memory function and entry/exit assist function.

SYSTEM

< SYSTEM DESCRIPTION >

- Registration of Intelligent Key interlock function can register a different key ID to the driver seat control unit, one by one, for memory switch 1 and 2. A total of 2 key IDs can be registered.
- When ignition switch is OFF, and door unlock operation is performed using Intelligent Key or driver side door request switch, driver seat automatically adjusts to a driving position other than seat sliding. Seat sliding and steering column tilt perform return operation and are set to standby status.
- In standby status, when ignition switch is operated from OFF to ACC, return operation sets seat sliding and steering column tilt to a registered position.

NOTE:

- When another key ID is newly registered to a key switch to which a key ID is already registered, the previously registered key ID is overwritten and becomes unusable.
- When starter signal turns ON during return operation, the operation is interrupted, starter signal turns from ON to OFF, and operation restarts.

OPERATION PROCEDURE

1. Unlock driver door by Intelligent Key or driver side door request switch.
2. Operation other than memory function of seat sliding is performed. Seat sliding and steering column tilt perform exit assist operation.
3. Turn ignition switch ACC.
4. Driver seat and steering column will return from the exiting position to entry position.

NOTE:

Further information for Intelligent Key interlock function. Refer to [ADP-56. "INTELLIGENT KEY INTERLOCK STORING : Description"](#).

OPERATION CONDITION

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

Item	Request status
Ignition position	OFF
Intelligent Key interlock function	Registered
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
CVT shift selector	P position

DETAIL FLOW

Order	Input	Output	Control unit condition
1	• Door unlock signal (CAN) • Key ID signal (CAN)	—	Driver seat control unit receives the door unlock signal and the key ID signal from BCM when unlocking the door with Intelligent Key or driver side door request switch.
2	—	—	Driver seat control unit performs the seat slide and steering tilt move directly to the exit assist function. Other loads move to the exit assist function after performing memory function.
3	—	—	Driver seat control unit performs the entry assist function.

Fail Safe

INFOID:0000000012852768

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions operate normally.	CAN communication	U1000	ADP-59
	CONTROL UNIT	U1010	ADP-60
	EEPROM	B2130	ADP-69

SYSTEM

< SYSTEM DESCRIPTION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-67
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-61
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-63
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-65

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function (AUTO DRIVE POS)

INFOID:0000000012852769

CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

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

APPLICATION ITEMS

Diagnostic mode	Description
ECU IDENTIFICATION	Displays part numbers of driver seat control unit parts.
SELF DIAGNOSTIC RESULT	Performs self-diagnosis for the auto drive positioner system and displays the results.
ACTIVE TEST	Drive each output device.
DATA MONITOR	Displays input signals transmitted from various switches and sensors to driver seat control unit in real time.
WORK SUPPORT	Changes the setting of each function.

SELF-DIAGNOSIS RESULTS

Refer to [ADP-30, "DTC Index"](#).

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

Test item	Description
SEAT SLIDE	Activates/deactivates the sliding motor LH.
SEAT RECLINING	Activates/deactivates the reclining motor LH.
SEAT LIFTER FR	Activates/deactivates the lifting motor LH (front).
SEAT LIFTER RR	Activates/deactivates the lifting motor LH (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.

DATA MONITOR

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
DETENT SW	"ON/OFF"	×	×	The selector lever position "OFF (P position) / ON (other than P position)" judged from the detention switch signal.
P RANG SW CAN	"ON/OFF"	×	×	ON/OFF status judged from the P range switch signal.
STARTER SW	"ON/OFF"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
R RANGE (CAN)	"ON/OFF"	×	×	ON/OFF status judged from the R range switch signal.
VEHICLE SPEED	—	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
DOOR SW-FL	"OPEN/CLOSED"	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW-FR	"OPEN/CLOSED"	×	×	ON/OFF status judged from the door switch (front passenger side) signal.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
IGN ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ignition switch signal.
ACC ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ACC switch signal.
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock actuator output switch signal.
KEYLESS ID	—	×	×	Key ID status judged from the key ID signal.
VHCL SPEED (ABS)	"RCV"	×	×	Vehicle speed status judged from vehicle speed signal.
HANDLE	"RHD/LHD"	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	"A/T"	×	×	CVT status judged from transmission.
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW1	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW2	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (upward) signal.
LIFT FR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (downward) signal.
LIFT RR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (upward) signal.
LIFT RR SW-DN	"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 (up) signal.
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	"ON/OFF"	—	×	ON/OFF status judged from the ADP steering switch (upward) signal.
TILT SW-DOWN	"ON/OFF"	—	×	ON/OFF status judged from the ADP steering switch (downward) signal.
TELESCO SW-FR	"ON/OFF"	—	×	ON/OFF status judged from the ADP steering switch (forward) signal.
TELESCO SW-RR	"ON/OFF"	—	×	ON/OFF status judged from the ADP steering switch (backward) signal.
SLIDE PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
RECLN PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves DOWNWARD, the value increases. If it moves UPWARD, the value decreases.
LIFT RR PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves DOWNWARD, the value increases. If it moves UPWARD, the value decreases.
MIR/SEN RH U-D	"V"	—	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R-L	"V"	—	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U-D	"V"	—	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R-L	"V"	—	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves DOWNWARD, the value increases. If it moves UPWARD, the value decreases.
TELESCO PULSE	—	—	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.

WORK SUPPORT

Work item	Content	Item
EXIT SEAT SLIDE SETTING	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	ON
		OFF
EXIT TILT SETTING	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	ON
		OFF
SEAT SLIDE VOLUME SET	The amount of seat sliding for entry/exit assist can be selected from 3 items.	40 mm (1.6 in)
		80 mm (3.1 in)
		150 mm (6 in)

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000012852770

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Condition		Value/Status
DETENT SW	CVT selector lever	P position	OFF
		Other than above	ON
P RANG SW CAN	CVT selector lever	P position	ON
		Other than above	OFF
STARTER SW	Ignition position	Cranking	ON
		Other than above	OFF
R RANGE (CAN)	CVT selector lever	R position	ON
		Other than above	OFF
VEHICLE SPEED	The condition of vehicle speed is displayed		km/h
DOOR SW-FL	Driver door	Open	OPEN
		Close	CLOSED
DOOR SW-FR	Passenger door	Open	OPEN
		Close	CLOSED
IGN ON SW	Ignition switch	ON position	ON
		Other than above	OFF
ACC ON SW	Ignition switch	ACC or ON position	ON
		Other than above	OFF
KYL5 DR UNLK	Intelligent Key or driver side door request switch	ON	ON
		OFF	OFF
KEYLESS ID	UNLOCK button of Intelligent Key is pressed		1, 2, 3, 4 or 5
VHCL SPEED (ABS)	CAN signal from ABS	Received	ON
		Not received	OFF
HANDLE	Driving position		LHD
			RHD
TRANSMISSION	Transmission type		CVT
SET SW	Set switch	Push	ON
		Release	OFF
MEMORY SW1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
		Release	OFF
SLIDE SW-FR	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW-RR	Sliding switch (backward)	Operate	ON
		Release	OFF
RECLN SW-FR	Reclining switch (forward)	Operate	ON
		Release	OFF

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
RECLN SW-RR	Reclining switch (backward)	Operate	ON
		Release	OFF
LIFT FR SW-UP	Lifting switch front (upward)	Operate	ON
		Release	OFF
LIFT FR SW-DN	Lifting switch front (downward)	Operate	ON
		Release	OFF
LIFT RR SW-UP	Lifting switch rear (upward)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting switch rear (downward)	Operate	ON
		Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
		Other than above	OFF
MIR CON SW-DN	Mirror switch	Down	ON
		Other than above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
		Other than above	OFF
MIR CON SW-LH	Mirror switch	Left	ON
		Other than above	OFF
MIR CHNG SW-R	Changeover switch	Right	ON
		Other than above	OFF
MIR CHNG SW-L	Changeover switch	Left	ON
		Other than above	OFF
TILT SW-UP	Tilt switch	Upward	ON
		Other than above	OFF
TILT SW-DOWN	Tilt switch	Downward	ON
		Other than above	OFF
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
		Other than above	OFF
SLIDE PULSE	Seat sliding	Forward	The numeral value decreases *
		Backward	The numeral value increases*
		Other than above	No change to numeral value*
RECLN PULSE	Seat reclining	Forward	The numeral value decreases*
		Backward	The numeral value increases *
		Other than above	No change to numeral value *
LIFT FR PULSE	Seat lifter (front)	Upward	The numeral value decreases *
		Downward	The numeral value increases *
		Other than above	No change to numeral value *
LIFT RR PULSE	Seat lifter (rear)	Upward	The numeral value decreases *
		Downward	The numeral value increases *
		Other than above	No change to numeral value *

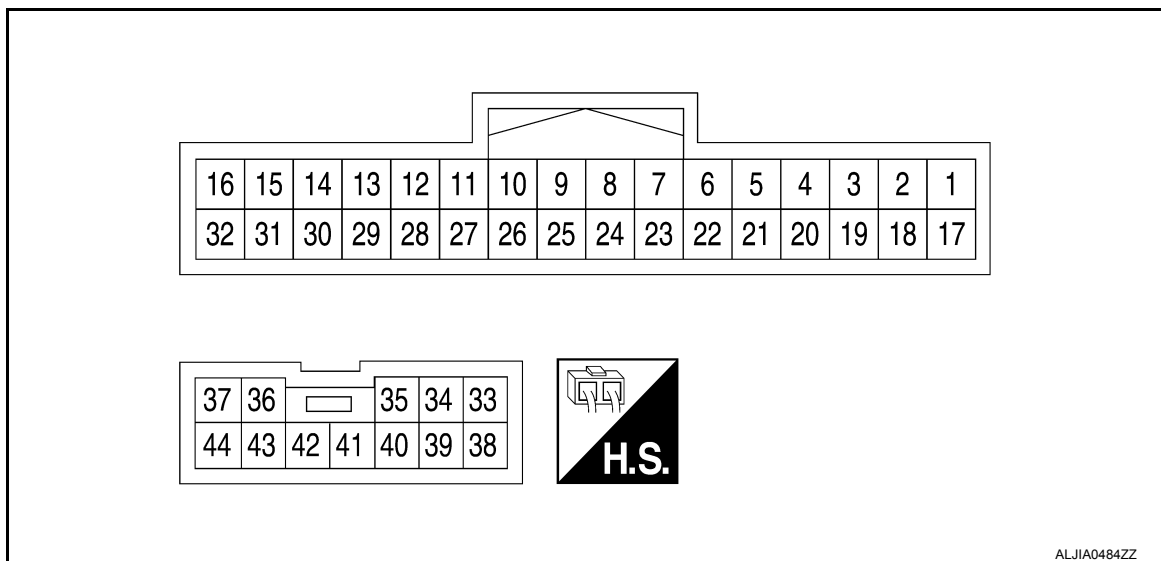
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
MIR/SEN RH U-D	Door mirror (passenger side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
TILT PULSE	Tilt position	Upward	The numeral value decreases *
		Downward	The numeral value increases *
		Other than above	No change to numeral value *
TELESCO PULSE	Telescopic position	Forward	The numeral value decreases *
		Backward	The numeral value increases *
		Other than above	No change to numeral value *

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

TERMINAL LAYOUT

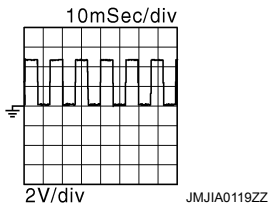
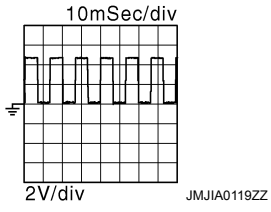
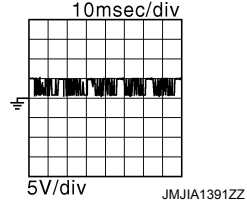


PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
5 (W)	Ground	Sensor power supply	Output	—		Battery voltage
6 (R)	Ground	Lifting switch (rear) down- ward signal	Input	Lifting switch (rear)	Operate (downward)	0
					Release	Battery voltage
7 (Y)	Ground	Lifting switch (front) down- ward signal	Input	Lifting switch (front)	Operate (downward)	0
					Release	Battery voltage
8 (BG)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0
					Release	Battery voltage

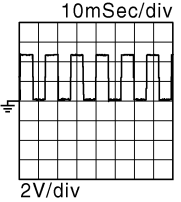
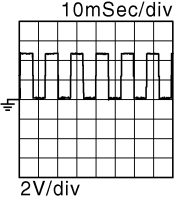
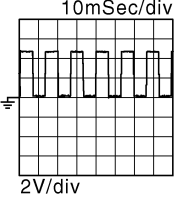
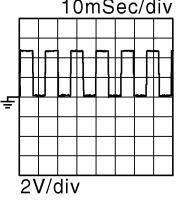
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
9 (SB)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0
					Release	Battery voltage
10 (G)	Ground	Memory indicator 2 signal	Output	Memory indicator 2	Illuminate	1
					Other than above	Battery voltage
11 (GR)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0
					Other than above	5
12 (W)	Ground	Telescopic sensor signal	Input	Telescopic	Operate	
					Other than above	0 or 5
13 (G)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Stop	0 or 5
15 (SB)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		
16 (P)	—	CAN-H	—	—		—
21 (L)	Ground	Set switch signal	Input	Set switch	Press	0
					Other than above	5
22 (V)	Ground	Lifting switch (rear) up- ward signal	Input	Seat lifting switch (rear)	Operate (upward)	0
					Release	Battery voltage
23 (G)	Ground	Lifting switch (front) up- ward signal	Input	Seat lifting switch (front)	Operate (upward)	0
					Release	Battery voltage
24 (P)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
					Release	Battery voltage
25 (L)	Ground	Sliding switch forward sig- nal	Input	Sliding switch	Operate (forward)	0
					Release	Battery voltage

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
26 (Y)	Ground	Memory indicator 1 signal	Output	Memory indicator 1	Illuminate	1
					Other than above	Battery voltage
27 (V)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0
					Other than above	5
28 (BG)	Ground	Tilt sensor signal	Input	Tilt	Operate	
					Other than above	0 or 5
29 (R)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Stop	0 or 5
30 (Y)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	
					Stop	0 or 5
31 (L)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Stop	0 or 5
32 (W)	—	CAN-L	—	—	—	—
34 (SB)	Ground	Lifting motor LH (front) up-ward output signal	Output	Seat lifting (front)	Operate (upward)	Battery voltage
					Stop	0
35 (V)	Ground	Reclining motor LH forward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
					Release	0
36 (W)	Ground	Sliding motor LH back-ward output signal	Output	Seat sliding	Operate (backward)	Battery voltage
					Stop	0

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DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
37 (R)	Ground	Power source	Input	—		Battery voltage
39 (B)	Ground	Ground (power)	—	—		0
40 (L)	Ground	Lifting motor LH (rear) downward output signal	Output	Seat lifting (rear)	Operate (downward)	Battery voltage
					Stop	0
41 (Y)	Ground	Lifting motor LH (rear) up- ward output signal	Output	Seat lifting (rear)	Operate (upward)	Battery voltage
					Stop	0
42 (GR)	Ground	Lifting motor LH (front) downward signal	Output	Seat lifting (front)	Operate (downward)	Battery voltage
					Stop	0
43 (BR)	Ground	Reclining motor LH back- ward output signal	Output	Seat reclining	Operate (backward)	Battery voltage
					Stop	0
44 (G)	Ground	Sliding motor LH forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage
					Release	0

Fail Safe

INFOID:0000000012852771

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions operate normally.	CAN communication	U1000	ADP-59
	CONTROL UNIT	U1010	ADP-60
	EEPROM	B2130	ADP-69
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-67
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-61
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-63
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-65

DTC Index

INFOID:0000000012852772

CONSULT display	Timing*1		Item	Reference page
	Current mal- function	Previous mal- function		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-59
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-60
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-61
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-63

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Timing*1		Item	Reference page
	Current mal-function	Previous mal-function		
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-65
UART COMM [B2128]	0	1-39	UART communication	ADP-67
EEPROM [B2130]	0	1-39	EEPROM	ADP-69

*1.

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

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

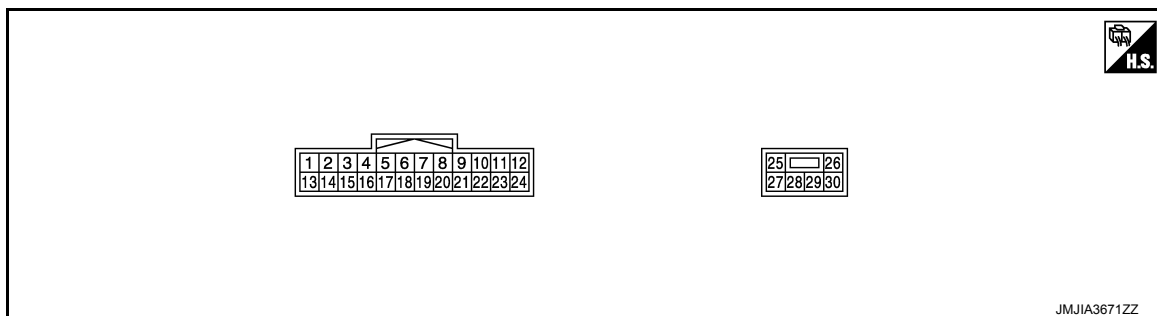
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:0000000012852773

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
1 (LG)	Ground	Tilt switch upward signal	Input	Tilt switch	Operate (upward)	0
					Other than above	5
2 (V)	Ground	Changeover switch RH signal	Input	Changeover switch position	RH	0
					Neutral or LH	5
3 (G)	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0
					Other than above	5
4 (P)	Ground	Mirror switch left signal	Input	Mirror switch	Operated (left)	0
					Other than above	5
5 (W)	Ground	Door mirror sensor (pas- senger side) up/down signal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)
6 (R)	Ground	Door mirror sensor (driv- er side) up/down signal	Input	Door mirror LH position		Change between 3.4 (close to peak) 0.6 (close to valley)
7 (BR)	Ground	Telescopic switch for- ward signal	Input	Telescopic switch	Operate (forward)	0
					Other than above	5
8 (G)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

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

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000012852774

ECU	Reference
BCM	BCS-30. "Reference Value"
	BCS-49. "Fail Safe"
	BCS-50. "DTC Inspection Priority Chart"
	BCS-51. "DTC Index"

ADP

AUTOMATIC DRIVE POSITIONER SYSTEM

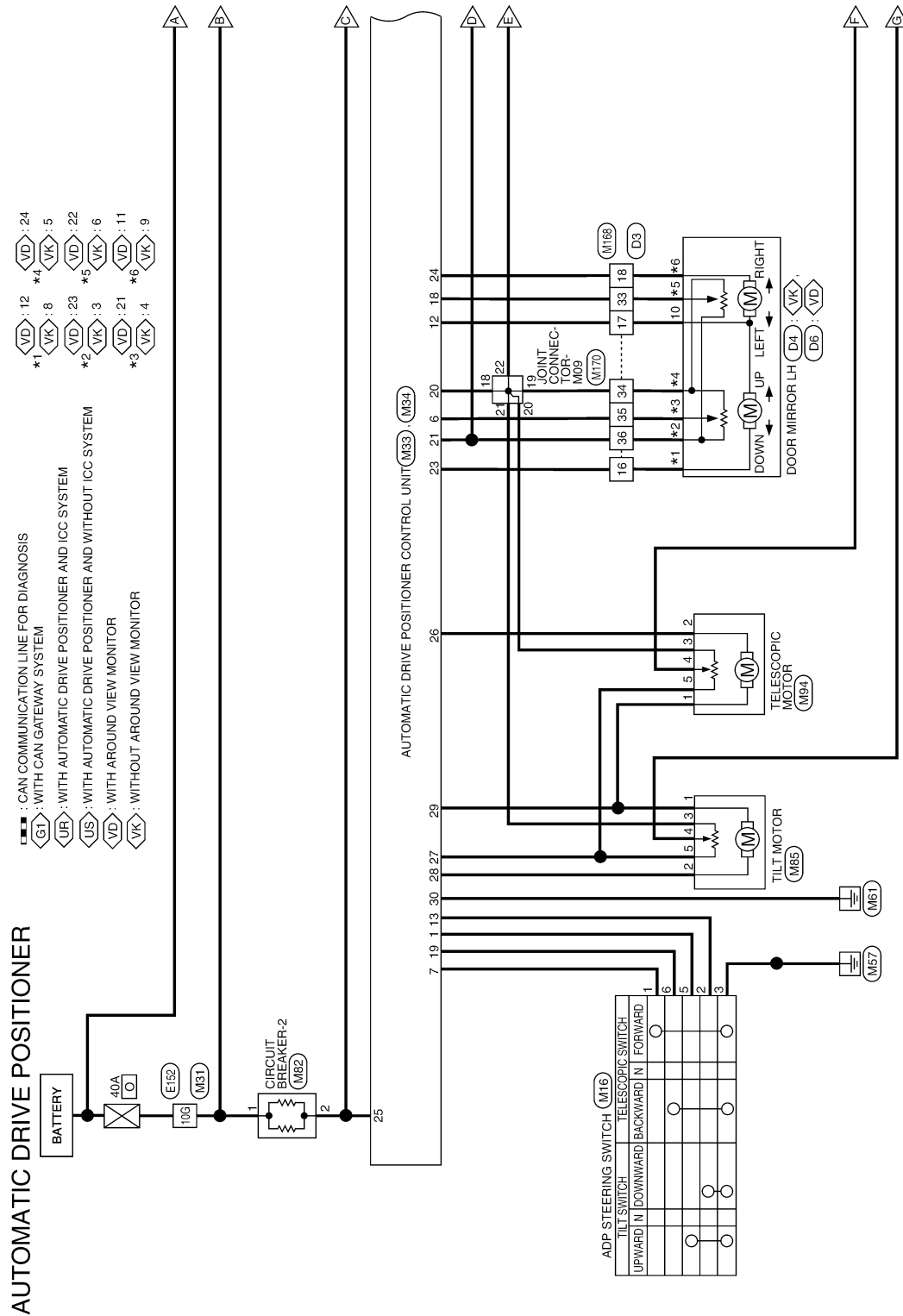
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WIRING DIAGRAM

AUTOMATIC DRIVE POSITIONER SYSTEM

Wiring Diagram

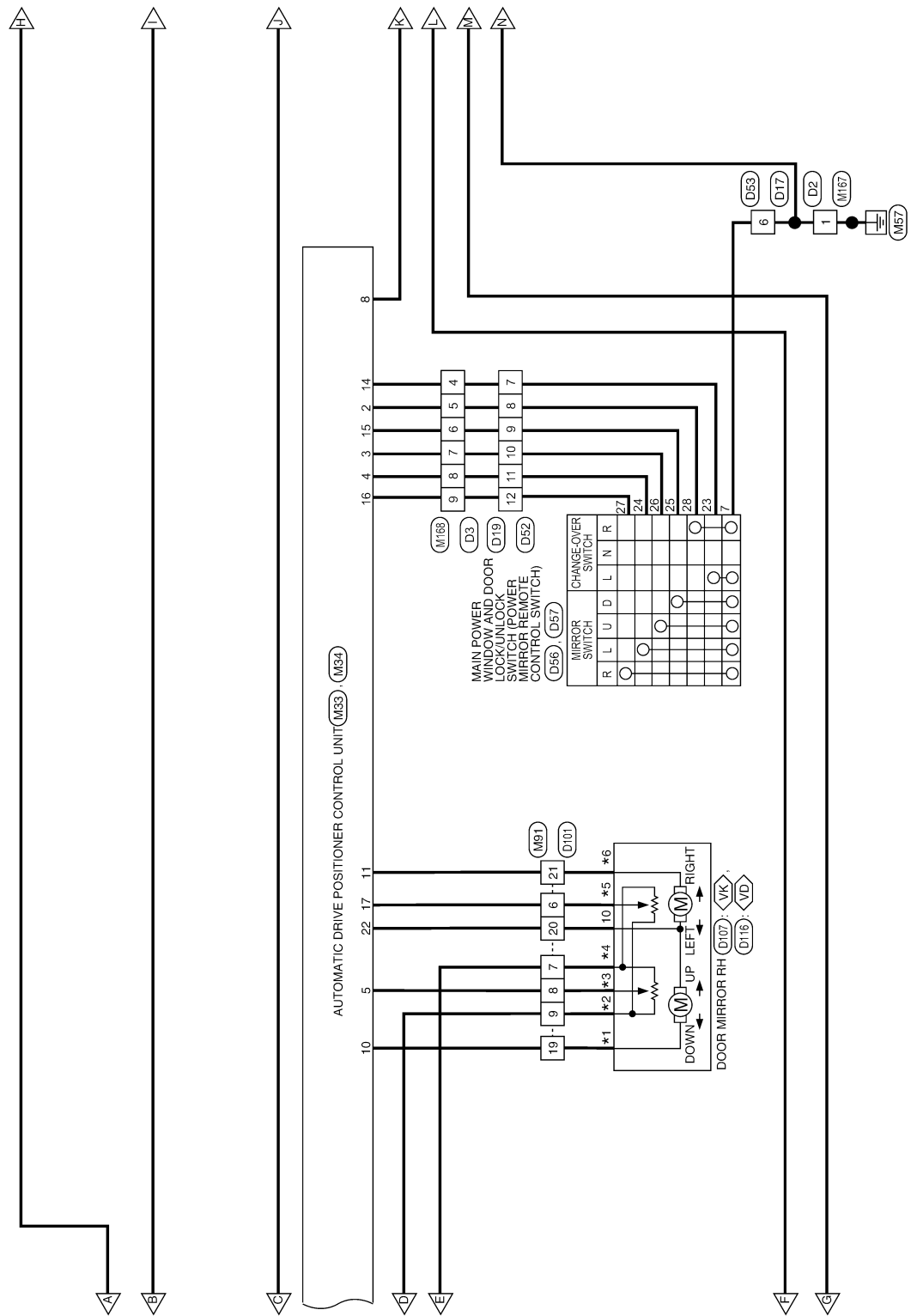
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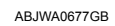
AUTOMATIC DRIVE POSITIONER SYSTEM

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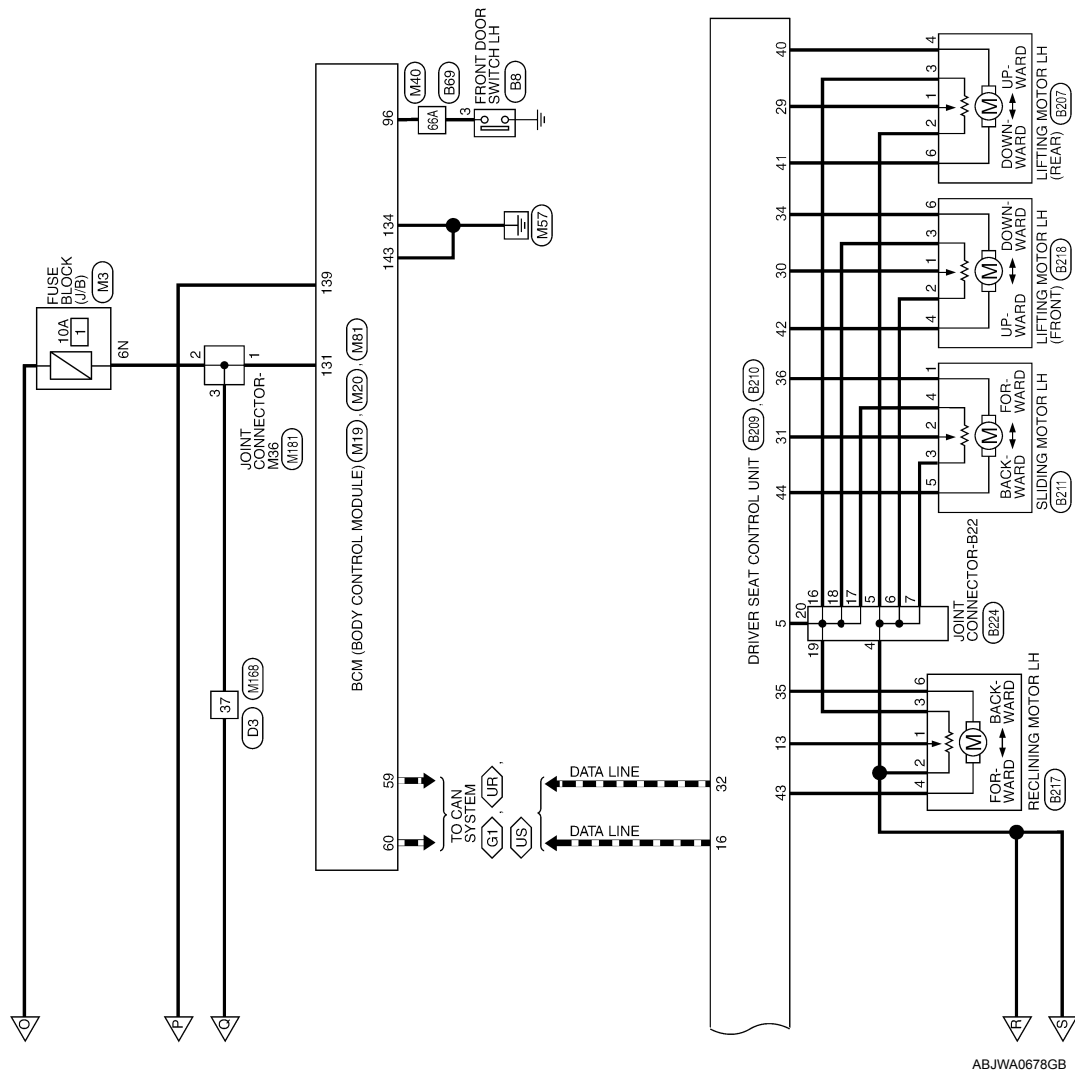
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AUTOMATIC DRIVE POSITIONER SYSTEM

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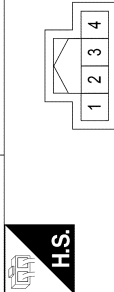
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AUTOMATIC DRIVE POSITIONER SYSTEM

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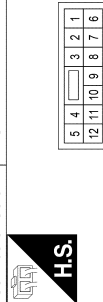
AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE



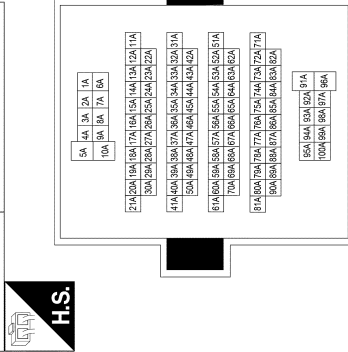
Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	L	DR DOOR SW
4	-	-

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Type	NS12FBR-CS
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	L	TO FRONT SEAT LH HARNESS
2	P	TO FRONT SEAT LH HARNESS
3	GR	TO FRONT SEAT LH HARNESS
4	BR	TO FRONT SEAT LH HARNESS
5	L	TO FRONT SEAT LH HARNESS
6	Y	TO FRONT SEAT LH HARNESS
7	SB	TO FRONT SEAT LH HARNESS
8	LG	TO FRONT SEAT LH HARNESS
9	V	TO FRONT SEAT LH HARNESS
10	BR	TO FRONT SEAT LH HARNESS
11	Y	TO FRONT SEAT LH HARNESS
12	L	TO FRONT SEAT LH HARNESS

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Type	TH00MDGY-CS16-TM4
Connector Color	GRAY

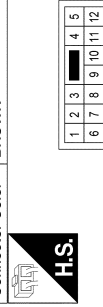


Terminal No.	Color of Wire	Signal Name
1A	-	TO MAIN HARNESS
2A	Y	TO MAIN HARNESS
3A	Y	TO MAIN HARNESS
4A	G	TO MAIN HARNESS
5A	-	TO MAIN HARNESS
6A	LG	TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
7A	R	TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)
8A	BR	TO MAIN HARNESS
9A	P	TO MAIN HARNESS
10A	-	TO MAIN HARNESS
11A	W	TO MAIN HARNESS
12A	G	TO MAIN HARNESS
13A	-	TO MAIN HARNESS
14A	R	TO MAIN HARNESS
15A	G	TO MAIN HARNESS
16A	W	TO MAIN HARNESS
17A	B	TO MAIN HARNESS
18A	B	TO MAIN HARNESS
19A	SHIELD	TO MAIN HARNESS
20A	W	TO MAIN HARNESS
21A	SHIELD	TO MAIN HARNESS
22A	-	TO MAIN HARNESS
23A	W	TO MAIN HARNESS
24A	B	TO MAIN HARNESS

25A	SHIELD	TO MAIN HARNESS
26A	B	TO MAIN HARNESS
27A	B	TO MAIN HARNESS
28A	SHIELD	TO MAIN HARNESS
29A	R	TO MAIN HARNESS
30A	B	TO MAIN HARNESS
31A	BR	TO MAIN HARNESS
32A	-	TO MAIN HARNESS
33A	W	TO MAIN HARNESS
34A	B	TO MAIN HARNESS
35A	SHIELD	TO MAIN HARNESS
36A	-	TO MAIN HARNESS
37A	LG	TO MAIN HARNESS
38A	V	TO MAIN HARNESS
39A	SB	TO MAIN HARNESS
40A	BR	TO MAIN HARNESS
41A	Y	TO MAIN HARNESS
42A	-	TO MAIN HARNESS
43A	-	TO MAIN HARNESS
44A	V	TO MAIN HARNESS
45A	G	TO MAIN HARNESS
46A	V	TO MAIN HARNESS
47A	L	TO MAIN HARNESS
48A	SB	TO MAIN HARNESS
49A	G	TO MAIN HARNESS
50A	W	TO MAIN HARNESS
51A	-	TO MAIN HARNESS
52A	-	TO MAIN HARNESS
53A	R	TO MAIN HARNESS
54A	SB	TO MAIN HARNESS
55A	LG	TO MAIN HARNESS
56A	Y	TO MAIN HARNESS
57A	SB	TO MAIN HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
57A	V	TO MAIN HARNESS - (WITH CLIMATE CONTROLLED SEAT)
58A	BR	TO MAIN HARNESS
59A	BR	TO MAIN HARNESS
60A	L	TO MAIN HARNESS
61A	Y	TO MAIN HARNESS
62A	-	TO MAIN HARNESS
63A	P	TO MAIN HARNESS
64A	R	TO MAIN HARNESS
65A	SB	TO MAIN HARNESS
66A	L	TO MAIN HARNESS
67A	LG	TO MAIN HARNESS
68A	P	TO MAIN HARNESS
69A	W	TO MAIN HARNESS
70A	G	TO MAIN HARNESS
71A	BR	TO MAIN HARNESS
72A	-	TO MAIN HARNESS
73A	Y	TO MAIN HARNESS
74A	P	TO MAIN HARNESS
75A	V	TO MAIN HARNESS

76A	R	TO MAIN HARNESS
77A	Y	TO MAIN HARNESS
78A	LG	TO MAIN HARNESS
79A	BR	TO MAIN HARNESS
80A	Y	TO MAIN HARNESS
81A	L	TO MAIN HARNESS
82A	BG	TO MAIN HARNESS
83A	Y	TO MAIN HARNESS
84A	LG	TO MAIN HARNESS
85A	SHIELD	TO MAIN HARNESS
86A	LG	TO MAIN HARNESS
87A	SB	TO MAIN HARNESS
88A	BG	TO MAIN HARNESS
89A	L	TO MAIN HARNESS
90A	P	TO MAIN HARNESS
91A	L	TO MAIN HARNESS
92A	LG	TO MAIN HARNESS
93A	B	TO MAIN HARNESS
94A	-	TO MAIN HARNESS
95A	-	TO MAIN HARNESS
96A	-	TO MAIN HARNESS
97A	BR	TO MAIN HARNESS
98A	L	TO MAIN HARNESS
99A	-	TO MAIN HARNESS
100A	-	TO MAIN HARNESS

Connector No.	B200
Connector Name	WIRE TO WIRE
Connector Type	NS12MBR-CS
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
1	P	TO BODY HARNESS
2	W	TO BODY HARNESS
3	B	TO BODY HARNESS
4	W	TO BODY HARNESS
5	BG	TO BODY HARNESS
6	SB	TO BODY HARNESS
7	L	TO BODY HARNESS
8	GR	TO BODY HARNESS
9	V	TO BODY HARNESS
10	G	TO BODY HARNESS
11	Y	TO BODY HARNESS
12	R	TO BODY HARNESS

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

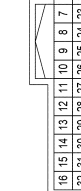
AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	B207
Connector Name	LIFTING MOTOR LH (REAR)
Connector Type	6242-5061
Connector Color	WHITE



H.S.

Connector No.	B209
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FW-NH
Connector Color	WHITE



H.S.

Connector No.	B210
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12FW-CS
Connector Color	WHITE



H.S.

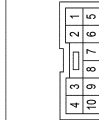
Connector No.	B217
Connector Name	RECLINING MOTOR LH
Connector Type	6242-5061
Connector Color	GRAY



H.S.

Terminal No.	Color of Wire	Signal Name
1	R	PULSE
2	B	GROUND
3	W	POWER SUPPLY
4	L	REAR LIFTING MOTOR (UPWARD)
5	-	-
6	Y	REAR LIFTING MOTOR (DOWNWARD)

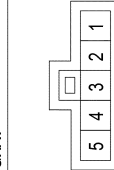
Connector No.	B208
Connector Name	POWER SEAT SWITCH LH
Connector Type	NS10FW-CS
Connector Color	WHITE



H.S.

Terminal No.	Color of Wire	Signal Name
33	-	-
34	SB	FRONT LIFTER MOTOR (UPWARD)
35	V	RECLINER MOTOR (FORWARD)
36	W	SLIDE MOTOR (BACKWARD)
37	R	BAT (PTC)
38	-	-
39	B	REAR LIFTER MOTOR (DOWNWARD)
40	L	REAR LIFTER MOTOR (UPWARD)
41	Y	REAR LIFTER MOTOR (DOWNWARD)
42	GR	FRONT LIFTER MOTOR (DOWNWARD)
43	BR	RECLINER MOTOR (BACKWARD)
44	G	SLIDE MOTOR (FORWARD)

Connector No.	B211
Connector Name	SLIDING MOTOR LH
Connector Type	6098-0344
Connector Color	GRAY



H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	PULSE
2	B	GROUND
3	W	POWER SUPPLY
4	GR	LIFTING MOTOR (FRONT) UPWARD
5	-	-
6	SB	LIFTING MOTOR (FRONT) DOWNWARD

Terminal No.	Color of Wire	Signal Name
1	W	SLIDING MOTOR (FORWARD)
2	L	PULSE
3	B	GROUND
4	W	POWER SUPPLY
5	G	SLIDING MOTOR (BACKWARD)

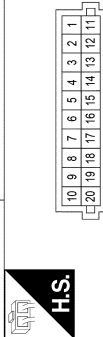
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AUTOMATIC DRIVE POSITIONER SYSTEM

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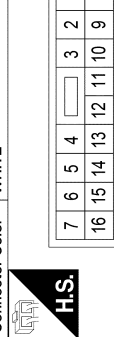
AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	B224
Connector Name	JOINT CONNECTOR-B22
Connector Type	-
Connector Color	PINK



Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	B	GROUND
4	B	GROUND
5	B	GROUND
6	B	GROUND
7	B	GROUND
8	B	GROUND
9	B	GROUND
10	B	GROUND
11	-	-
12	-	-
13	R	BATTERY
14	R	BATTERY
15	R	BATTERY
16	W	POWER SUPPLY
17	W	POWER SUPPLY
18	W	POWER SUPPLY
19	W	POWER SUPPLY
20	W	POWER SUPPLY

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

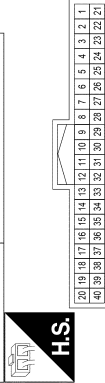


Terminal No.	Color of Wire	Signal Name
1	B	TO MAIN HARNESS
2	Y	TO MAIN HARNESS
3	G/B	TO MAIN HARNESS

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4	BR	TO MAIN HARNESS
5	SB	TO MAIN HARNESS
6	LG	TO MAIN HARNESS
7	Y	TO MAIN HARNESS
8	W	TO MAIN HARNESS
9	G	TO MAIN HARNESS
10	V	TO MAIN HARNESS
11	BR	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	L	TO MAIN HARNESS
14	SHIELD	TO MAIN HARNESS
15	B	TO MAIN HARNESS
16	W	TO MAIN HARNESS

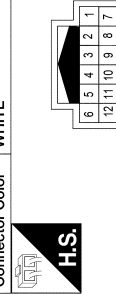
Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-NH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	TO MAIN HARNESS
2	R	TO MAIN HARNESS
3	G/B	TO MAIN HARNESS
4	SB	TO MAIN HARNESS
5	LG	TO MAIN HARNESS
6	L	TO MAIN HARNESS
7	BR	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
9	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
10	BR	TO MAIN HARNESS
11	Y	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	LG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
14	Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
15	BR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
15	Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
16	LG	TO MAIN HARNESS
17	L	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)

17	BG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	BR	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	L	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	Y	TO MAIN HARNESS
20	LG	TO MAIN HARNESS
21	LG	TO MAIN HARNESS
22	Y	TO MAIN HARNESS
23	LG	TO MAIN HARNESS
24	SB	TO MAIN HARNESS
25	BR	TO MAIN HARNESS
26	B	TO MAIN HARNESS
27	-	TO MAIN HARNESS
28	G	TO MAIN HARNESS
29	SHIELD	TO MAIN HARNESS
30	R	TO MAIN HARNESS
31	B	TO MAIN HARNESS
32	W	TO MAIN HARNESS
33	V	TO MAIN HARNESS
34	Y	TO MAIN HARNESS
35	BG	TO MAIN HARNESS
36	SB	TO MAIN HARNESS
37	V	TO MAIN HARNESS
38	LG	TO MAIN HARNESS
39	Y	TO MAIN HARNESS
40	BR	TO MAIN HARNESS

Connector No.	D4
Connector Name	DOOR MIRROR LH (WITHOUT AROUND VIEW MONITOR)
Connector Type	TH12MW-NH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y	H+
2	B	H-
3	SB	POWER SUPPLY (SENSOR FOR SV)
4	BG	MIRROR SENSOR (LH VERTICAL)
5	Y	GND (SENSOR GND)
6	V	MIRROR SENSOR (LH HORIZONTAL)
7	SB	ST+

AUTOMATIC DRIVE POSITIONER SYSTEM

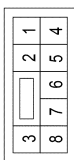
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AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	D6
Connector Name	DOOR MIRROR LH (WITH AROUND VIEW MONITOR)
Connector Type	TH24MW-NH
Connector Color	WHITE



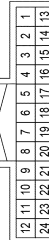

Connector No.	D17
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	Y	BATTERY
8	LG	CLOSE
9	Y	OPEN
10	BG	MIRROR MOTOR [LH COMMON (DOWN&RIGHT)]
11	L	MIRROR MOTOR [LH HORIZONTAL(LEFT)]
12	LG	MIRROR MOTOR [LH VERTICAL (UP)]
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	B	TURN -
20	SB	TURN +
21	BG	MIRROR SENSOR (LH VERTICAL)
22	V	MIRROR SENSOR (LH HORIZONTAL)
23	SB	POWER SUPPLY (SENSOR FOR 5V)
24	Y	GND (SENSOR GND)

Terminal No.	Color of Wire	Signal Name
1	W	TO FRONT DOOR LH SUB HARNESS
2	V	TO FRONT DOOR LH SUB HARNESS
3	LG	TO FRONT DOOR LH SUB HARNESS
4	BG	TO FRONT DOOR LH SUB HARNESS
5	BR	TO FRONT DOOR LH SUB HARNESS
6	B	TO FRONT DOOR LH SUB HARNESS
7	BR	TO FRONT DOOR LH SUB HARNESS
8	L	TO FRONT DOOR LH SUB HARNESS

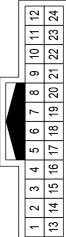
Connector No.	D19
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	LG	TO FRONT DOOR LH SUB HARNESS
2	BR	TO FRONT DOOR LH SUB HARNESS
3	LG	TO FRONT DOOR LH SUB HARNESS
4	LG	TO FRONT DOOR LH SUB HARNESS
5	Y	TO FRONT DOOR LH SUB HARNESS
6	BR	TO FRONT DOOR LH SUB HARNESS

7	SB	TO FRONT DOOR LH SUB HARNESS
8	LG	TO FRONT DOOR LH SUB HARNESS
9	L	TO FRONT DOOR LH SUB HARNESS
10	BR	TO FRONT DOOR LH SUB HARNESS
11	V	TO FRONT DOOR LH SUB HARNESS
12	Y	TO FRONT DOOR LH SUB HARNESS
13	Y	TO FRONT DOOR LH SUB HARNESS
14	BR	TO FRONT DOOR LH SUB HARNESS
15	SB	TO FRONT DOOR LH SUB HARNESS
16	Y	TO FRONT DOOR LH SUB HARNESS
17	LG	TO FRONT DOOR LH SUB HARNESS
18	SB	TO FRONT DOOR LH SUB HARNESS
19	BR	TO FRONT DOOR LH SUB HARNESS
20	L	TO FRONT DOOR LH SUB HARNESS
21	V	TO FRONT DOOR LH SUB HARNESS
22	BR	TO FRONT DOOR LH SUB HARNESS
23	B	TO FRONT DOOR LH SUB HARNESS
24	B	TO FRONT DOOR LH SUB HARNESS

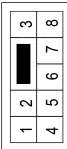
Connector No.	D52
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	LG	TO FRONT DOOR LH HARNESS
2	BR	TO FRONT DOOR LH HARNESS
3	LG	TO FRONT DOOR LH HARNESS
4	O	TO FRONT DOOR LH HARNESS
5	Y	TO FRONT DOOR LH HARNESS
6	BR	TO FRONT DOOR LH HARNESS
7	SB	TO FRONT DOOR LH HARNESS
8	LG	TO FRONT DOOR LH HARNESS

9	L	TO FRONT DOOR LH HARNESS
10	W	TO FRONT DOOR LH HARNESS
11	V	TO FRONT DOOR LH HARNESS
12	Y	TO FRONT DOOR LH HARNESS
13	Y	TO FRONT DOOR LH HARNESS
14	W	TO FRONT DOOR LH HARNESS
15	SB	TO FRONT DOOR LH HARNESS
16	Y	TO FRONT DOOR LH HARNESS
17	LG	TO FRONT DOOR LH HARNESS
18	SB	TO FRONT DOOR LH HARNESS
19	BR	TO FRONT DOOR LH HARNESS
20	L	TO FRONT DOOR LH HARNESS
21	V	TO FRONT DOOR LH HARNESS
22	BR	TO FRONT DOOR LH HARNESS
23	B	TO FRONT DOOR LH HARNESS
24	B	TO FRONT DOOR LH HARNESS

Connector No.	D53
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	O	TO FRONT DOOR LH HARNESS
2	V	TO FRONT DOOR LH HARNESS
3	Y	TO FRONT DOOR LH HARNESS
4	R	TO FRONT DOOR LH HARNESS
5	W	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	BR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	B	TO FRONT DOOR LH HARNESS
7	BR	TO FRONT DOOR LH HARNESS
8	L	TO FRONT DOOR LH HARNESS

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	D56
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Type	NS16FW-CS
Connector Color	WHITE



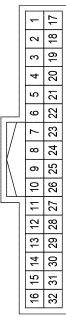

Connector No.	D57
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (POWER MIRROR REMOTE CONTROL SWITCH) (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	TH12FW-NH
Connector Color	WHITE



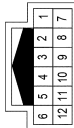

Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	R	ENCODER +
4	Y	B +
5	BR	MOTOR DN DR
6	L	MOTOR UP DR
7	B	GND
8	-	-
9	W	IGN (RAPS) (WITHOUT AUTOMATIC DRIVE POSITIONER)
9	BR	IGN (RAP) (WITH AUTOMATIC DRIVE POSITIONER)
10	LG	ENCODER GND
11	V	ENCODER SIG1 (DLP)
12	O	ENCODER SIG2 (ULP)
13	Y	COM
14	-	-
15	BR	LOCK SW (WITHOUT AUTOMATIC DRIVE POSITIONER)
15	W	LOCK SW (WITH AUTOMATIC DRIVE POSITIONER)
16	SB	UNLOCK SW

7	-	-
8	BR	ILL
9	B	GROUND
10	BR	MEMORY 1
11	B	ILL CONT
12	-	-
13	LG	MEMORY SW(IND2)
14	Y	MEMORY SW(IND1)
15	V	BATTERY
16	L	MEMORY 2

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

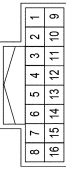
Connector No.	D107
Connector Name	DOOR MIRROR RH (WITHOUT AROUND VIEW MONITOR)
Connector Type	TH12MW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	G	TO MAIN HARNESS
2	SHIELD	TO MAIN HARNESS
3	R	TO MAIN HARNESS
4	B	TO MAIN HARNESS
5	W	TO MAIN HARNESS
6	Y	TO MAIN HARNESS
7	L	TO MAIN HARNESS
8	BR	TO MAIN HARNESS
9	V	TO MAIN HARNESS
10	BR	TO MAIN HARNESS
11	LG	TO MAIN HARNESS
12	B	TO MAIN HARNESS
13	W	TO MAIN HARNESS
14	-	TO MAIN HARNESS
15	W/B	TO MAIN HARNESS
16	-	TO MAIN HARNESS
17	Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	LG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	L	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	BR	TO MAIN HARNESS
20	SB	TO MAIN HARNESS
21	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
21	G	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)

Terminal No.	Color of Wire	Signal Name
1	BR	H+
2	B	H-
3	V	POWER SUPPLY (SENSOR FOR 5V)
4	BR	MIRROR SENSOR (RH VERTICAL)
5	L	GND (SENSOR GND)
6	Y	MIRROR SENSOR (RH HORIZONTAL)
7	LG	ST+
8	BR	MA
9	G	MB - (WITH AUTOMATIC DRIVE POSITIONER)
9	LG	MB - (WITHOUT AUTOMATIC DRIVE POSITIONER)
10	SB	MC
11	L	OP - (WITHOUT AUTOMATIC DRIVE POSITIONER)
11	LG	OP - (WITH AUTOMATIC DRIVE POSITIONER)
12	Y	CL

Connector No.	D60
Connector Name	SEAT MEMORY SWITCH
Connector Type	TH16FW-NH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	-	-
2	SB	SET
3	-	-
4	-	-
5	-	-
6	-	-

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	DT16
Connector Name	DOOR MIRROR RH (WITH AROUND VIEW MONITOR)
Connector Type	TH24MW-NH
Connector Color	WHITE



12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE



50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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Terminal No.	Color of Wire	Signal Name
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	BR	BATTERY
8	Y	CLOSE
9	LG	OPEN
10	SB	MIRROR MOTOR [RH COMMON (DOWN&RIGHT)]
11	G	MIRROR MOTOR [RH HORIZONTAL (LEFT)]
12	BR	MIRROR MOTOR [RH VERTICAL (UP)]
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	B	TURN -
20	LG	TURN +
21	BR	MIRROR SENSOR (RH VERTICAL)
22	Y	MIRROR SENSOR (RH HORIZONTAL)
23	V	POWER SUPPLY (SENSOR FOR 5V)
24	L	GND (SENSOR GND)

27G	W	TO MAIN HARNESS
28G	R	TO MAIN HARNESS
29G	B	TO MAIN HARNESS
30G	G	TO MAIN HARNESS
31G	L	TO MAIN HARNESS
32G	LG	TO MAIN HARNESS
33G	LG	TO MAIN HARNESS
34G	W	TO MAIN HARNESS
35G	P	TO MAIN HARNESS
36G	L	TO MAIN HARNESS
37G	EG	TO MAIN HARNESS
38G	W	TO MAIN HARNESS
39G	W	TO MAIN HARNESS
40G	Y	TO MAIN HARNESS
41G	EG	TO MAIN HARNESS
42G	P	TO MAIN HARNESS
43G	R	TO MAIN HARNESS
44G	W	TO MAIN HARNESS
45G	Y	TO MAIN HARNESS
46G	SB	TO MAIN HARNESS
47G	V	TO MAIN HARNESS
48G	BR	TO MAIN HARNESS
49G	W	TO MAIN HARNESS
50G	G	TO MAIN HARNESS
51G	B/W	TO MAIN HARNESS
52G	BR	TO MAIN HARNESS
53G	L	TO MAIN HARNESS
54G	P	TO MAIN HARNESS
55G	BR	TO MAIN HARNESS
56G	R	TO MAIN HARNESS
57G	P	TO MAIN HARNESS
58G	EG	TO MAIN HARNESS
59G	W	TO MAIN HARNESS
60G	B	TO MAIN HARNESS
61G	SHIELD	TO MAIN HARNESS
62G	P	TO MAIN HARNESS
63G	L	TO MAIN HARNESS
64G	R	TO MAIN HARNESS
65G	G/R	TO MAIN HARNESS
66G	R	TO MAIN HARNESS
67G	EG	TO MAIN HARNESS
68G	LG/R	TO MAIN HARNESS
69G	W	TO MAIN HARNESS
70G	G	TO MAIN HARNESS
71G	GR	TO MAIN HARNESS
72G	-	TO MAIN HARNESS
73G	-	TO MAIN HARNESS
74G	-	TO MAIN HARNESS
75G	G	TO MAIN HARNESS
76G	Y	TO MAIN HARNESS
77G	BR	TO MAIN HARNESS
78G	-	TO MAIN HARNESS
79G	P	TO MAIN HARNESS

Terminal No.	Color of Wire	Signal Name
1G	G	TO MAIN HARNESS
2G	W	TO MAIN HARNESS
3G	P	TO MAIN HARNESS
4G	R	TO MAIN HARNESS
5G	P	TO MAIN HARNESS
6G	W	TO MAIN HARNESS
7G	SHIELD	TO MAIN HARNESS
8G	G	TO MAIN HARNESS
9G	LG	TO MAIN HARNESS
10G	P	TO MAIN HARNESS
11G	G	TO MAIN HARNESS
12G	P	TO MAIN HARNESS
13G	W	TO MAIN HARNESS
14G	EG	TO MAIN HARNESS
15G	W	TO MAIN HARNESS
16G	R	TO MAIN HARNESS
17G	B	TO MAIN HARNESS
18G	SHIELD	TO MAIN HARNESS
19G	W	TO MAIN HARNESS
20G	G	TO MAIN HARNESS
21G	P	TO MAIN HARNESS
22G	B	TO MAIN HARNESS
23G	SHIELD	TO MAIN HARNESS
24G	R	TO MAIN HARNESS
25G	W	TO MAIN HARNESS
26G	SHIELD	TO MAIN HARNESS

80G	G	TO MAIN HARNESS
81G	R	TO MAIN HARNESS
82G	-	TO MAIN HARNESS
83G	-	TO MAIN HARNESS
84G	-	TO MAIN HARNESS
85G	-	TO MAIN HARNESS
86G	-	TO MAIN HARNESS
87G	-	TO MAIN HARNESS
88G	-	TO MAIN HARNESS
89G	R	TO MAIN HARNESS
90G	L	TO MAIN HARNESS
91G	L	TO MAIN HARNESS
92G	-	TO MAIN HARNESS
93G	-	TO MAIN HARNESS
94G	Y	TO MAIN HARNESS
95G	W	TO MAIN HARNESS
96G	-	TO MAIN HARNESS
97G	-	TO MAIN HARNESS
98G	-	TO MAIN HARNESS
99G	-	TO MAIN HARNESS
100G	SHIELD	TO MAIN HARNESS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE



3N	2N	1N
8N	7N	6N 5N 4N

Terminal No.	Color of Wire	Signal Name
1N	LG	IGNITION
2N	EG	BATTERY
3N	L	IGNITION
4N	V	BATTERY
5N	Y	BATTERY
6N	W	BATTERY
7N	L	BATTERY
8N	L	IGNITION

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A B C D E F G H I K L M N O P

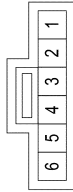
ADP

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

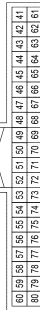
AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M16
Connector Name	ADP STEERING SWITCH
Connector Type	TK06FGY
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	BR	TELESCOPIC SW (FRONTWARD)
2	Y	TILT SW DOWNWARD
3	B	GROUND
4	-	-
5	LG	TILT SW (UPWARD)
6	L	TELESCOPIC SW (BACKWARD)

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

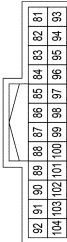


Terminal No.	Color of Wire	Signal Name
41	-	-
42	-	-
43	-	-
44	-	-
45	-	-
46	-	-
47	-	-
48	R	HIGH SIDE START SW LED
49	-	-
50	-	-
51	-	-
52	W	AUDIO DONGLE
53	-	-
54	W	PW LIN/COM
55	BR	R SENSOR K-LINE
56	-	-

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57	-	-
58	-	-
59	P	CAN-L
60	L	CAN-H
61	BG	REAR DEFOGGER RELAY OUT
62	W	STARTER RELAY OUT
63	BG	I-KEY LINK SIGNAL
64	P	BUIZER OUT
65	P	DOOR HANDLE LAMP
66	W	BLOWER FAN RELAY OUT
67	G	IGN ELEC RELAY OUT 2
68	P	MR OUTPUT
69	G	AT DEVICE OUT
70	P	IGN USM OUT 1
71	R	DR REQUEST SW
72	G	AS REQUEST SW
73	-	-
74	-	-
75	BG	COMBI SW OUT 5
76	P	COMBI SW OUT 4
77	P	COMBI SW OUT 3
78	W	COMBI SW OUT 2
79	W	COMBI SW OUT 1
80	R	BACK DOOR OPEN SW

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FGY-NH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
81	L	BAT REAR WIPER FUSE
82	W	RL DOOR SW
83	BG	BACK DOOR REQUEST SW
84	BR	R WIPER AUTOSTOP SW
85	-	-
86	R	TRAILER FLASHER RL
87	P	TRAILER FLASHER RR
88	-	-
89	LG	REVERSE LAMP OUT
90	-	-
91	-	-
92	R	RR FLASHER
93	R	RR DOOR SW

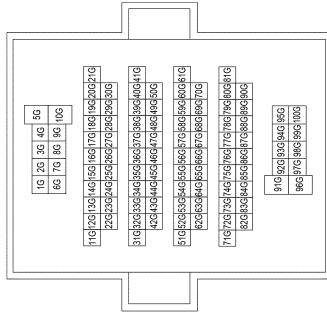
94	G	AS DOOR SW
95	V	REAR WIPER OUT
96	BG	DR DOOR SW
97	W	BACK DOOR SW
98	-	-
99	P	ROOM ANT 3 B
100	W	ROOM ANT 3 A
101	R	REAR BUMPER ANT B
102	G	REAR BUMPER ANT A
103	BG	RL FLASHER
104	-	-

AUTOMATIC DRIVE POSITIONER SYSTEM

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AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

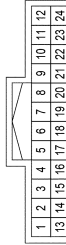


Terminal No.	Color of Wire	Signal Name
1G	SB	TO ENGINE ROOM HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
1G	P	TO ENGINE ROOM HARNESS - (WITH CLIMATE CONTROLLED SEAT)
2G	W	TO ENGINE ROOM HARNESS
3G	P	TO ENGINE ROOM HARNESS
4G	G	TO ENGINE ROOM HARNESS
5G	P	TO ENGINE ROOM HARNESS
6G	SB	TO ENGINE ROOM HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
6G	R	TO ENGINE ROOM HARNESS - (WITH CLIMATE CONTROLLED SEAT)
7G	SHIELD	TO ENGINE ROOM HARNESS
8G	G	TO ENGINE ROOM HARNESS
9G	BG	TO ENGINE ROOM HARNESS
10G	W	TO ENGINE ROOM HARNESS
11G	R	TO ENGINE ROOM HARNESS
12G	G	TO ENGINE ROOM HARNESS
13G	G	TO ENGINE ROOM HARNESS
14G	V	TO ENGINE ROOM HARNESS
15G	W	TO ENGINE ROOM HARNESS
16G	R	TO ENGINE ROOM HARNESS
17G	B	TO ENGINE ROOM HARNESS
18G	SHIELD	TO ENGINE ROOM HARNESS
19G	SB	TO ENGINE ROOM HARNESS

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73G	-	TO ENGINE ROOM HARNESS
74G	-	TO ENGINE ROOM HARNESS
75G	G	TO ENGINE ROOM HARNESS
76G	Y	TO ENGINE ROOM HARNESS
77G	BR	TO ENGINE ROOM HARNESS
78G	-	TO ENGINE ROOM HARNESS
79G	R	TO ENGINE ROOM HARNESS
80G	W	TO ENGINE ROOM HARNESS
81G	G	TO ENGINE ROOM HARNESS
82G	P	TO ENGINE ROOM HARNESS
83G	P	TO ENGINE ROOM HARNESS
84G	P	TO ENGINE ROOM HARNESS
85G	P	TO ENGINE ROOM HARNESS
86G	P	TO ENGINE ROOM HARNESS
87G	P	TO ENGINE ROOM HARNESS
88G	P	TO ENGINE ROOM HARNESS
89G	R	TO ENGINE ROOM HARNESS
90G	P	TO ENGINE ROOM HARNESS
91G	L	TO ENGINE ROOM HARNESS
92G	P	TO ENGINE ROOM HARNESS
93G	P	TO ENGINE ROOM HARNESS
94G	O	TO ENGINE ROOM HARNESS
95G	B	TO ENGINE ROOM HARNESS
96G	P	TO ENGINE ROOM HARNESS
97G	P	TO ENGINE ROOM HARNESS
98G	P	TO ENGINE ROOM HARNESS
99G	P	TO ENGINE ROOM HARNESS
100G	SHIELD	TO ENGINE ROOM HARNESS

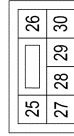
Connector No.	M33
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	TH24FW-NH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	LG	TILT SW (UPWARD)
2	V	MIRROR SELECTOR SW (RH)
3	G	MIRROR SW (UPWARD)
4	P	MIRROR SW (LEFTWARD)
5	W	MIRROR SENSOR (RH VERTICAL)
6	R	MIRROR SENSOR (LH VERTICAL)
7	BR	TELESCOPIC SW (FRONTWARD)
8	G	UART (TX/RX)

9	-	-
10	P	MIRROR MOTOR (RH VERTICAL) [UP]
11	R	MIRROR MOTOR (RH HORIZONTAL) [LEFT]
12	G	MIRROR MOTOR (LH COMMON) [DOWN&RIGHT]
13	Y	TILT SW (DOWNWARD)
14	P	MIRROR SELECT SW (LH)
15	R	MIRROR SW (DOWNWARD)
16	W	MIRROR SW (RIGHTWARD)
17	G	MIRROR SENSOR (RH HORIZONTAL)
18	BG	MIRROR SENSOR (LH HORIZONTAL)
19	L	TELESCOPIC SW (BACKWARD)
20	Y	GND (SENSOR GND)
21	BG	POWER SUPPLY (SENSOR for 5V)
22	G	MIRROR MOTOR (RH COMMON) [DOWN&RIGHT]
23	W	MIRROR MOTOR (LH VERTICAL) [UP]
24	BG	MIRROR MOTOR (LH HORIZONTAL) [LEFT]

Connector No.	M34
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS06FW-CS
Connector Color	WHITE



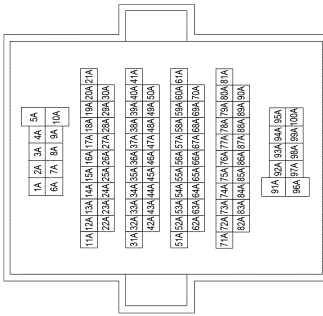
Terminal No.	Color of Wire	Signal Name
25	L	BAT (PTC)
26	V	TELESCOPIC MOTOR (BACKWARD)
27	LG	POWER SUPPLY (SENSOR FOR 16V)
28	SB	TILT MOTOR (DOWNWARD)
29	BR	STEG MOTOR COMMON (UPWARD-CHWARD)
30	B	GND (POWER)

AUTOMATIC DRIVE POSITIONER SYSTEM

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AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80FDGY-CS16-TM4
Connector Color	GRAY



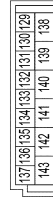
Terminal No.	Color of Wire	Signal Name
1A	GR	TO BODY HARNESS
2A	BR	TO BODY HARNESS
3A	Y	TO BODY HARNESS
4A	V	TO BODY HARNESS
5A	L/B	TO BODY HARNESS
6A	L	TO BODY HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
6A	G	TO BODY HARNESS - (WITH CLIMATE CONTROLLED SEAT)
7A	Y	TO BODY HARNESS
8A	W	TO BODY HARNESS
9A	L	TO BODY HARNESS
10A	R	TO BODY HARNESS
11A	R	TO BODY HARNESS
12A	B/G	TO BODY HARNESS
13A	O	TO BODY HARNESS
14A	L/G	TO BODY HARNESS
15A	R	TO BODY HARNESS
16A	G	TO BODY HARNESS
17A	B	TO BODY HARNESS
18A	B	TO BODY HARNESS
19A	SHIELD	TO BODY HARNESS
20A	B	TO BODY HARNESS
21A	SHIELD	TO BODY HARNESS
22A	-	TO BODY HARNESS
23A	W	TO BODY HARNESS

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24A	B	TO BODY HARNESS
25A	SHIELD	TO BODY HARNESS
26A	B	TO BODY HARNESS
27A	B	TO BODY HARNESS
28A	SHIELD	TO BODY HARNESS
29A	R	TO BODY HARNESS
30A	B	TO BODY HARNESS
31A	R	TO BODY HARNESS
32A	Y/R	TO BODY HARNESS
33A	W	TO BODY HARNESS
34A	B	TO BODY HARNESS
35A	SHIELD	TO BODY HARNESS
36A	L/Y	TO BODY HARNESS
37A	L/G	TO BODY HARNESS
38A	V	TO BODY HARNESS
39A	SB	TO BODY HARNESS
40A	BR	TO BODY HARNESS
41A	Y	TO BODY HARNESS
42A	G	TO BODY HARNESS
43A	-	TO BODY HARNESS
44A	W	TO BODY HARNESS
45A	R	TO BODY HARNESS
46A	B/G	TO BODY HARNESS
47A	L/G	TO BODY HARNESS
48A	R	TO BODY HARNESS
49A	P	TO BODY HARNESS
50A	W	TO BODY HARNESS
51A	L	TO BODY HARNESS
52A	P	TO BODY HARNESS
53A	G	TO BODY HARNESS
54A	W	TO BODY HARNESS
55A	B/G	TO BODY HARNESS
56A	BR	TO BODY HARNESS
57A	P	TO BODY HARNESS - (WITH CLIMATE CONTROLLED SEAT)
57A	L	TO BODY HARNESS - (WITHOUT CLIMATE CONTROLLED SEAT)
58A	G	TO BODY HARNESS
59A	SB	TO BODY HARNESS
60A	L	TO BODY HARNESS
61A	G	TO BODY HARNESS
62A	BR	TO BODY HARNESS
63A	BR	TO BODY HARNESS
64A	Y	TO BODY HARNESS
65A	W	TO BODY HARNESS
66A	B/G	TO BODY HARNESS
67A	Y	TO BODY HARNESS
68A	L/G	TO BODY HARNESS
69A	R	TO BODY HARNESS
70A	P	TO BODY HARNESS
71A	BR	TO BODY HARNESS
72A	SB	TO BODY HARNESS
73A	B/G	TO BODY HARNESS
74A	BR	TO BODY HARNESS

77A	L/G	TO BODY HARNESS
78A	W	TO BODY HARNESS
77A	L	TO BODY HARNESS
78A	V	TO BODY HARNESS
79A	L/G	TO BODY HARNESS
80A	Y	TO BODY HARNESS
81A	L	TO BODY HARNESS
82A	B/G	TO BODY HARNESS
83A	Y	TO BODY HARNESS
84A	L/G	TO BODY HARNESS
85A	SHIELD	TO BODY HARNESS
86A	Y	TO BODY HARNESS
87A	L/G	TO BODY HARNESS
88A	BR	TO BODY HARNESS
89A	L	TO BODY HARNESS
90A	P	TO BODY HARNESS
91A	L	TO BODY HARNESS
92A	L	TO BODY HARNESS
93A	B	TO BODY HARNESS
94A	W	TO BODY HARNESS
95A	W	TO BODY HARNESS
96A	-	TO BODY HARNESS
97A	SB	TO BODY HARNESS
98A	Y	TO BODY HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
98A	L	TO BODY HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
99A	-	TO BODY HARNESS
100A	-	TO BODY HARNESS

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
129	SB	BATTERY SAVER OUT
130	L/G	DOOR UNLOCK AS
131	W	BAT BCM FUSE
132	BR	DOOR LOCK RR/L
133	Y	DOOR UNLOCK RR/L
134	B	GND 2
135	L	DOOR LOCK DR/AS/FL
136	L/G	ROOM LAMP CONT

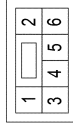
137	V	DOOR UNLOCK DR/FL
138	V	BAT REAR DOOR
139	W	BAT POWER F/L
140	BR	P/W POWER SUPPLY IGN
141	Y	P/W POWER SUPPLY BAT
142	Y	BAT FRONT DOOR
143	B	GND 1

Connector No.	M82
Connector Name	CIRCUIT BREAKER-2
Connector Type	M02FW-P-LC
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	W	BATTERY
2	L	BAT (PTC)

Connector No.	M85
Connector Name	TILT MOTOR
Connector Type	NS06FW-CS
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	BR	UPWARD/FORWARD
2	SB	BACKWARD
3	Y	GROUND
4	L	STRG TILT SENSOR
5	L/G	POWER SUPPLY (POWER FOR 16V)
6	-	-

AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name
1	W	TO FRONT DOOR RH HARNESS
2	SHIELD	TO FRONT DOOR RH HARNESS
3	G	TO FRONT DOOR RH HARNESS
4	R	TO FRONT DOOR RH HARNESS
5	B	TO FRONT DOOR RH HARNESS
6	G	TO FRONT DOOR RH HARNESS
7	Y	TO FRONT DOOR RH HARNESS
8	W	TO FRONT DOOR RH HARNESS
9	BG	TO FRONT DOOR RH HARNESS
10	P	TO FRONT DOOR RH HARNESS
11	LG	TO FRONT DOOR RH HARNESS
12	B	TO FRONT DOOR RH HARNESS
13	W	TO FRONT DOOR RH HARNESS
14	Y/R	TO FRONT DOOR RH HARNESS
15	GR	TO FRONT DOOR RH HARNESS
16	B/W	TO FRONT DOOR RH HARNESS
17	BG	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	G	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	W	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	BG	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	G	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	P	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	G	TO FRONT DOOR RH HARNESS
21	W	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
21	R	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
22	SB	TO FRONT DOOR RH HARNESS
23	P	TO FRONT DOOR RH HARNESS
24	G	TO FRONT DOOR RH HARNESS

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25	BG	TO FRONT DOOR RH HARNESS
26	W	TO FRONT DOOR RH HARNESS
27	-	TO FRONT DOOR RH HARNESS
28	-	TO FRONT DOOR RH HARNESS
29	W	TO FRONT DOOR RH HARNESS
30	SB	TO FRONT DOOR RH HARNESS
31	W	TO FRONT DOOR RH HARNESS
32	-	TO FRONT DOOR RH HARNESS



Connector No.	M94
Connector Name	TELESCOPIC MOTOR
Connector Type	NS06FBR-CS
Connector Color	BROWN

1	2
3	4
5	6

Terminal No.	Color of Wire	Signal Name
1	BR	UPWARD/FORWARD
2	V	BACKWARD
3	Y	GROUND
4	SB	STRG TELESCOPIC SENSOR
5	LG	POWER SUPPLY (SENSOR FOR 10V)
6	-	-

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE



1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16					

Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT DOOR LH HARNESS
2	V	TO FRONT DOOR LH HARNESS
3	G/B	TO FRONT DOOR LH HARNESS
4	V	TO FRONT DOOR LH HARNESS
5	SB	TO FRONT DOOR LH HARNESS
6	BR	TO FRONT DOOR LH HARNESS
7	Y	TO FRONT DOOR LH HARNESS

8	W	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
8	V	TO FRONT DOOR LH HARNESS - (WITH BASE AUDIO SYSTEM)
9	P	TO FRONT DOOR LH HARNESS - (WITHOUT SURROUND SOUND SYSTEM)
9	G	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM AND SURROUND SOUND SYSTEM)
9	SB	TO FRONT DOOR LH HARNESS - (WITH BASE AUDIO SYSTEM)
10	L	TO FRONT DOOR LH HARNESS
11	BR	TO FRONT DOOR LH HARNESS
12	Y	TO FRONT DOOR LH HARNESS
13	LG	TO FRONT DOOR LH HARNESS
14	SHIELD	TO FRONT DOOR LH HARNESS
15	B	TO FRONT DOOR LH HARNESS
16	W	TO FRONT DOOR LH HARNESS

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	SB	TO FRONT DOOR LH HARNESS
2	R	TO FRONT DOOR LH HARNESS
3	G/B	TO FRONT DOOR LH HARNESS
4	P	TO FRONT DOOR LH HARNESS
5	V	TO FRONT DOOR LH HARNESS
6	R	TO FRONT DOOR LH HARNESS
7	G	TO FRONT DOOR LH HARNESS
8	P	TO FRONT DOOR LH HARNESS
9	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
9	R	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
10	R	TO FRONT DOOR LH HARNESS
11	G	TO FRONT DOOR LH HARNESS
12	P	TO FRONT DOOR LH HARNESS
13	P	TO FRONT DOOR LH HARNESS
14	BG	TO FRONT DOOR LH HARNESS
15	W	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)

15	G	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
16	G	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
16	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
17	G	TO FRONT DOOR LH HARNESS
18	W	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	BG	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	W	TO FRONT DOOR LH HARNESS
20	SB	TO FRONT DOOR LH HARNESS
21	P	TO FRONT DOOR LH HARNESS
22	W	TO FRONT DOOR LH HARNESS
23	G	TO FRONT DOOR LH HARNESS
24	SB	TO FRONT DOOR LH HARNESS
25	R	TO FRONT DOOR LH HARNESS
26	B	TO FRONT DOOR LH HARNESS
27	-	TO FRONT DOOR LH HARNESS
28	B	TO FRONT DOOR LH HARNESS
29	SHIELD	TO FRONT DOOR LH HARNESS
30	R	TO FRONT DOOR LH HARNESS
31	G	TO FRONT DOOR LH HARNESS
32	W	TO FRONT DOOR LH HARNESS
33	BG	TO FRONT DOOR LH HARNESS
34	Y	TO FRONT DOOR LH HARNESS
35	R	TO FRONT DOOR LH HARNESS
36	BG	TO FRONT DOOR LH HARNESS
37	W	TO FRONT DOOR LH HARNESS
38	P	TO FRONT DOOR LH HARNESS
39	W	TO FRONT DOOR LH HARNESS
40	P	TO FRONT DOOR LH HARNESS

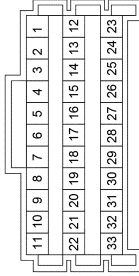
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AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M170
Connector Name	JOINT CONNECTOR-M09
Connector Type	BJ30FW
Connector Color	WHITE



Connector No.	M181
Connector Name	JOINT CONNECTOR-M36
Connector Type	TK04FW-J
Connector Color	WHITE

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Terminal No.	Color of Wire	Signal Name
1	SHIELD	SHIELD
2	Y	SHIELD
3	SHIELD	SHIELD
4	-	-
5	-	-
6	GR	SHIELD
7	SHIELD	SHIELD
8	SHIELD	SHIELD
9	SHIELD	SHIELD
10	SHIELD	SHIELD
11	-	-
12	G	SENS GND
13	-	-
14	G	SENS GND
15	G	SENS GND
16	G	SENS GND
17	G	SENS GND
18	Y	SENS GND
19	Y	SENS GND
20	Y	SENS GND
21	Y	SENS GND
22	Y	SENS GND
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	W	PW LIN
29	W	PW LIN
30	W	PW LIN
31	-	-
32	W	PW LIN
33	W	PW LIN

Terminal No.	Color of Wire	Signal Name
1	W	BATTERY
2	W	BATTERY
3	W	BATTERY
4	W	BATTERY

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

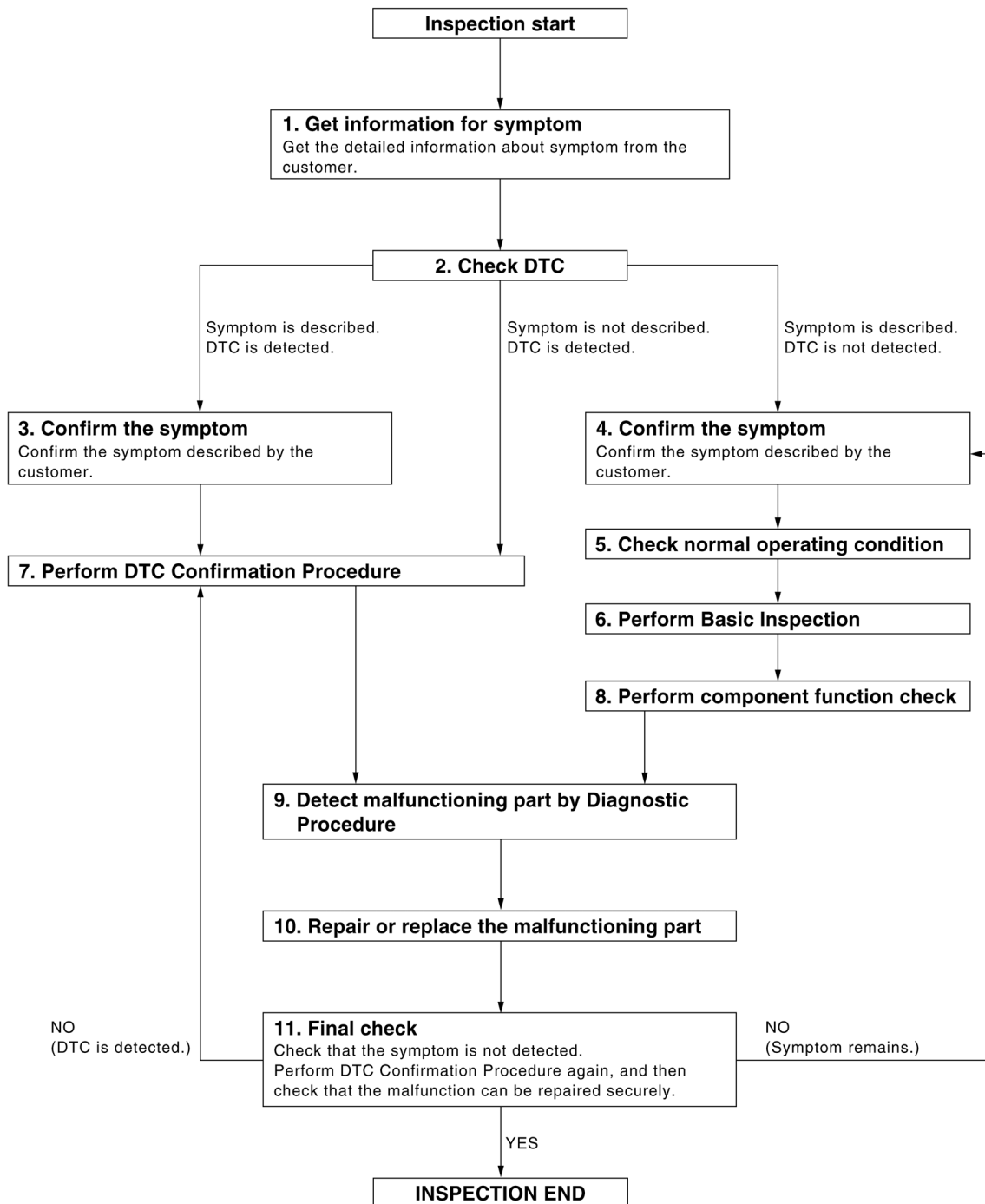
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012852776

WORK FLOW



DETAILED FLOW

Revision: April 2016

ADP-51

ALKIA2788GB

2016 QX60

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1. GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT.

Refer to [ADP-30. "DTC Index"](#).

Is any symptom described and any DTC is displayed?

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

Symptom is not described, DTC is displayed.>>GO TO 7.

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 7.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5. CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to [ADP-141. "Description"](#).

Is the incident normal operation?

YES >> Inspection End.

NO >> GO TO 6.

6. PERFORM BASIC INSPECTION

Isolate the malfunctioning point with a basic inspection.

>> GO TO 8.

7. PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 9.

NO >> Check intermittent incident. Refer to [GI-50. "Intermittent Incident"](#).

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.

>> GO TO 10.

10. REPAIR OR REPLACE

Repair or replace the malfunctioning part.

DIAGNOSIS AND REPAIR WORK FLOW

< 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 4.

DTC is detected.>> GO TO 7.

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000012852777

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Entry/exit assist	ON	Perform initialization
		Set slide amount ^{*1}
Intelligent Key interlock	Erased	Perform initialization
		Perform storing

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

NOTE:

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Work Procedure

INFOID:0000000012852778

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [ADP-55. "SYSTEM INITIALIZATION : Work Procedure"](#).

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to [ADP-56. "MEMORY STORING : Work Procedure"](#).

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to [ADP-57. "INTELLIGENT KEY INTERLOCK STORING : Work Procedure"](#).

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to [ADP-57. "SYSTEM SETTING : Work Procedure"](#).

>> Inspection End.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000012852779

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
Entry/exit assist	ON	Perform initialization
		Set slide amount ^{*1}

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

Function	Condition	Procedure
Intelligent Key interlock	Erased	Perform initialization
		Perform storing

*1: Default value is 40 mm.

NOTE:

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure

INFOID:0000000012852780

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [ADP-55, "SYSTEM INITIALIZATION : Work Procedure"](#).

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to [ADP-56, "MEMORY STORING : Work Procedure"](#).

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to [ADP-57, "INTELLIGENT KEY INTERLOCK STORING : Work Procedure"](#).

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to [ADP-57, "SYSTEM SETTING : Work Procedure"](#).

>> Inspection End.

SYSTEM INITIALIZATION

SYSTEM INITIALIZATION : Description

INFOID:0000000012852781

Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced.

The entry/exit assist function will not operate normally if no initialization is performed.

SYSTEM INITIALIZATION : Work Procedure

INFOID:0000000012852782

INITIALIZATION PROCEDURE

1. CHOOSE METHOD

There are two initialization methods.

Which method do you use?

With door switch>>GO TO 2.

With vehicle speed>>GO TO 4.

2. STEP A-1

Turn ignition switch from ACC to OFF position.

>> GO TO 3.

3. STEP A-2

Driver door switch is ON (open) → OFF (close) → ON (open).

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

>> Inspection End.

4. STEP B-1

Drive the vehicle at more than 25 km/h (16 MPH).

>> Inspection End.

MEMORY STORING

MEMORY STORING : Description

INFOID:0000000012852783

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

MEMORY STORING : Work Procedure

INFOID:0000000012852784

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

Check the following conditions.

- Ignition switch: ON
- CVT shift selector: P (Park) position

>> GO TO 2.

2. STEP 2

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

>> GO TO 3.

3. STEP 3

1. Push set switch.

NOTE:

- Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
- Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 seconds.

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

NOTE:

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

NOTE:

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

>> GO TO 4.

4. STEP 4

Confirm the operation of each part with memory operation.

>> Inspection End.

INTELLIGENT KEY INTERLOCK STORING

INTELLIGENT KEY INTERLOCK STORING : Description

INFOID:0000000012852785

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

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INTELLIGENT KEY INTERLOCK STORING : Work Procedure

INFOID:0000000012852786

Intelligent Key Interlock Storage Procedure

Performing the following operation associates the registered driving position with Intelligent Key. When driver door unlock operation is performed by Intelligent Key or driver door request switch, display of the registered driving position and turnout operation can be performed.

1.STEP 1

Check the following conditions.

- Ignition switch: OFF
- Initialization: done
- Driving position: registered

>> GO TO 2.

2.STEP 2

1. Push set switch.

NOTE:

Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.

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

NOTE:

From the time registration is performed, the applicable memory indicator blinks for 5 seconds.

>> GO TO 3.

3.STEP 3

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

>> Inspection End.

SYSTEM SETTING

ADP

SYSTEM SETTING : Description

INFOID:0000000012852787

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

Setting Change

x: Applicable

Item	Content	CONSULT	Set switch	Factory setting
Amount of seat sliding for entry/exit assist	The amount of seat sliding for entry/exit assist can be selected from 3 items. [40 mm/80 mm/150 mm]	x	—	40 mm
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	x	x	ON
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	x		ON

SYSTEM SETTING : Work Procedure

INFOID:0000000012852788

1. CHOOSE METHOD

There are three setting methods.

Which method do you choose?

With CONSULT>>GO TO 2.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

With set switch>>GO TO 4.

2. WITH CONSULT - STEP 1

Select "Work support".

>> GO TO 3.

3. WITH CONSULT - STEP 2

1. Select "EXIT SEAT SLIDE SETTING", or "EXIT TILT SETTING" then touch display to change between ON and OFF.
 - EXIT SEAT SLIDE SETTING: Entry/exit assist (seat)
 - EXIT TILT SETTING: Entry/exit assist (steering column)
2. Select "SEAT SLIDE VOLUME SET" and touch either of "40 mm", "80 mm", or "150 mm".
3. Then touch "OK".

>> Inspection End.

4. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

>> GO TO 5.

5. WITH SET SWITCH - STEP 2

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

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

>> Inspection End.

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000012852789

Refer to [LAN-49, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

DTC Logic

INFOID:0000000012852790

DTC DETECTION LOGIC

DTC	Trouble diagnosis name	DTC detecting condition	Possible cause
U1000	CAN COMM CIRCUIT	- Driver seat control unit cannot communicate to other control units. - Driver seat control unit cannot communicate for more than the specified time.	Harness or connectors (CAN communication line is open or shorted)

DTC CONFIRMATION PROCEDURE

1. STEP 1

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2.

2. STEP 2

Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to [ADP-59, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012852791

Refer to [LAN-28, "Trouble Diagnosis Flow Chart"](#).

Special Repair Requirement

INFOID:0000000012852792

Refer to Owner's Manual.

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000012852793

Refer to [LAN-49, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

DTC Logic

INFOID:0000000012852794

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000012852795

1. REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

Description

INFOID:0000000012852796

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

DTC Logic

INFOID:0000000012852797

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

- YES >> Refer to [ADP-61, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012852798

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-61, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

2.CHECK SLIDING MOTOR LH CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Sliding motor LH			
Connector	Terminals		
B211	1	Ground	0
	5		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness or connector.

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B210	36	Ground	0
	44		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

>> Inspection End

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

Description

INFOID:0000000012852799

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

DTC Logic

INFOID:0000000012852800

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

- YES >> Refer to [ADP-63. "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012852801

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-63. "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-50. "Intermittent Incident"](#).

2.CHECK RECLINING MOTOR LH CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Reclining motor LH			
Connector	Terminals		
B217	4	Ground	0
	6		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness or connector.

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+)		(-)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B210	35	Ground	0
	43		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

>> Inspection End.

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

Description

INFOID:0000000012852802

- 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 tilt motor.

DTC Logic

INFOID:0000000012852803

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2116	STEERING TILT	The automatic drive positioner control unit detects tilt motor operation for 0.1 second or more when tilt switch has not been turned on, and there is no output of automatic operation.	• Automatic drive positioner control unit • Tilt motor harness is shorted

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

- YES >> Refer to [ADP-65, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012852804

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-65, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

2.CHECK TILT MOTOR CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Tilt motor			
Connector	Terminals		
M85	1	Ground	0
	2		

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness or connector.

3.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Automatic drive positioner control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals		
M34	28	Ground	0
	29		

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#)
- NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

INFOID:0000000012852805

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

DTC Logic

INFOID:0000000012852806

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2128	UART COMM	The communication between driver seat control unit and automatic 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

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

Is the DTC detected?

- YES >> Refer to [ADP-67, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012852807

ADP

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-67, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

2. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit connector		Automatic drive positioner control unit connector		Continuity
Connector	Terminal	Connector	Terminal	
B209	15	M33	8	Yes

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

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	15		No

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-50. "Intermittent Incident"](#).
NO >> Repair or replace harness.

B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

INFOID:0000000012852808

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

- YES >> Refer to [ADP-69, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012852809

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-69, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

2. REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

>> Inspection End.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000013563104

Regarding Wiring Diagram information, refer to [BCS-54. "Wiring Diagram"](#).

1. CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
139	Fusible link battery power	O (40A)
131	BCM battery fuse	1 (10A)

Is the fuse or fusible link blown?

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

NO >> GO TO 2

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M81.
2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M81	131	—	Battery voltage
	139		

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair or replace harness or connectors.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M81 terminals 134, 143 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M81	134	—	Yes
	143		

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness or connectors.

DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012852811

NOTE:

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

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

1. CHECK POWER SUPPLY CIRCUIT

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

(+) Driver seat control unit		(-)	Power source	Condition	Voltage (V) (Approx.)
Connector	Terminal				
B210	37	Ground	Battery power supply	Ignition switch OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following.

- Repair or replace harness.
- Circuit breaker-2.

2. CHECK GROUND CIRCUIT

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B210	39		Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:0000000012852812

ADP

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to [ADP-54, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012852813

NOTE:

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

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK POWER SUPPLY CIRCUIT

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

(+) Automatic drive positioner control unit		(-)	Voltage (V) (Approx.)
Connector	Terminal		
M34	25	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following.

- Repair or replace harness.
- Circuit breaker-2.

2. CHECK GROUND CIRCUIT

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M34	30		Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:0000000012852814

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to [ADP-54, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Description

INFOID:0000000012852815

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

Component Function Check

INFOID:0000000012852816

1. CHECK FUNCTION

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

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-73. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852817

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK SLIDING SWITCH SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B209	9	Ground	Sliding switch	Operate (backward)	0
				Release	Battery voltage
	25			Operate (forward)	0
				Release	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

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

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Power seat switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	9	B208	8	Yes
	25		7	

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

Driver seat control unit connector		Ground	Continuity
Connector	Terminal		
B209	9		No
	25		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B209	9	Ground	Battery voltage
	25		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

4. CHECK SLIDING SWITCH

Refer to [ADP-74, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace malfunctioning part.

Component Inspection

INFOID:0000000012852818

1. CHECK SLIDING SWITCH

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

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Terminal		Condition		Continuity
Power seat switch LH				
3	8	Sliding switch (backward)	Operate	Yes
			Release	No
	7	Sliding switch (forward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

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RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Description

INFOID:0000000012852819

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

Component Function Check

INFOID:0000000012852820

1. CHECK FUNCTION

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

Monitor item	Condition		Status
RECLN SW-FR	Reclining switch (forward)	Operate	ON
		Release	OFF
RECLN SW-RR	Reclining switch (backward)	Operate	ON
		Release	OFF

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-76, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852821

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK RECLINING SWITCH SIGNAL

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

(+) Driver seat control unit		(−)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B209	24	Ground	Reclining switch	Operate (forward)	0
				Release	Battery voltage
	8			Operate (backward)	0
				Release	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK RECLINING SWITCH CIRCUIT

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

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Power seat switch LH connector		Continuity
Connector	Terminal	Connector	Terminal	
B209	24	B208	9	Yes
	8		10	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		No
B209	24		
	8		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B209	8	Ground	Battery voltage
	24		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

4. CHECK RECLINING SWITCH

Refer to [ADP-77, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000012852822

1. CHECK RECLINING SWITCH

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

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Terminals		Condition		Continuity
Power seat switch LH				
3	10	Reclining switch (backward)	Operate	Yes
			Release	No
	9	Reclining switch (forward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description

INFOID:0000000012852823

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

Component Function Check

INFOID:0000000012852824

1. CHECK FUNCTION

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

Monitor item	Condition		Status
LIFT FR SW-UP	Lifting switch front (upward)	Operate	ON
		Release	OFF
LIFT FR SW-DN	Lifting switch front (downward)	Operate	ON
		Release	OFF

Is the inspection result normal?

- YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to [ADP-79, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852825

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK LIFTING SWITCH SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B209	7	Ground	Lifting switch (front)	Operate (downward)	0V
				Release	Battery voltage
	23			Operate (upward)	0V
				Release	Battery voltage

Is the inspection result normal?

- YES >> GO TO 5.
NO >> GO TO 2.

2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Power seat switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	7	B208	6	Yes
	23		5	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		No
B209	7		
	23		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B209	7	Ground	Battery voltage
	23		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

4. CHECK LIFTING SWITCH (FRONT)

Refer to [ADP-80, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000012852826

1. CHECK LIFTING SWITCH (FRONT)

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

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Terminal		Condition		Continuity
Power seat switch LH				
3	6	Lifting switch front (downward)	Operate	Yes
			Release	No
	5	Lifting switch front (upward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

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LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description

INFOID:0000000012852827

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

Component Function Check

INFOID:0000000012852828

1. CHECK FUNCTION

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

Monitor item	Condition		Status
LIFT RR SW-UP	Lifting switch rear (upward)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting switch rear (downward)	Operate	ON
		Release	OFF

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-82, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852829

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B209	6	Ground	Lifting switch (rear)	Operate (downward)	0
				Release	Battery voltage
	22			Operate (upward)	0
				Release	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

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

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Power seat switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	6	B208	2	Yes
	22		1	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	6		No
	22		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B209	6	Ground	Battery voltage
	22		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

4. CHECK LIFTING SWITCH (REAR)

Refer to [ADP-83, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000012852830

1. CHECK LIFTING SWITCH (REAR)

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

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Terminal		Condition		Continuity
Power seat switch LH				
3	1	Lifting switch rear (upward)	Operate	Yes
			Release	No
	2	Lifting switch rear (downward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TILT SWITCH

Description

INFOID:0000000012852831

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

Component Function Check

INFOID:0000000012852832

1. CHECK FUNCTION

1. Select "TILT SW-UP", "TILT SW-DOWN" in "DATA MONITOR" mode with CONSULT.
2. Check tilt switch signal under the following conditions.

Monitor item	Condition		Status
TILT SW-UP	Tilt switch (upward)	Operate	ON
		Release	OFF
TILT SW-DOWN	Tilt switch (downward)	Operate	ON
		Release	OFF

Is the inspection result normal?

- YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to [ADP-85. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852833

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK TILT SWITCH SIGNAL

1. Disconnect ADP steering switch (tilt switch).
2. Check voltage between ADP steering switch harness connector and ground.

(+) (–)		Voltage (V) (Approx.)
ADP steering switch (tilt switch)		
Connector	Terminals	
M16	5	Ground 5 V
	2	

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.
2. Check continuity between automatic drive positioner control unit harness connector and ADP steering switch harness connector.

Automatic drive positioner control unit		ADP steering switch (tilt switch)		Continuity
Connector	Terminal	Connector	Terminal	
M33	1	M16	5	Yes
	13		2	

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

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	1		No
	13		

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).
NO >> Repair or replace harness.

3. CHECK TILT SWITCH

Refer to [ADP-86, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace ADP steering switch (tilt switch). Refer to [ADP-146, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012852834

1. CHECK TILT SWITCH

1. Turn ignition switch OFF.
2. Disconnect ADP steering switch (tilt switch).
3. Check continuity between ADP steering switch terminals.

ADP steering switch (tilt switch)		Condition		Continuity
Terminal				
3	5	Tilt switch (upward)	Operate	Yes
			Release	No
	2	Tilt switch (downward)	Operate	Yes
			Release	No

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace ADP steering switch (tilt switch). Refer to [ADP-146, "Removal and Installation"](#).

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Description

INFOID:0000000012852835

ADP steering switch (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

INFOID:0000000012852836

1. CHECK FUNCTION

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

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

Is the inspection result normal?

- YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to [ADP-87, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852837

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK TELESCOPIC SWITCH SIGNAL

1. Disconnect ADP steering switch (telescopic switch).
2. Check voltage between ADP steering switch harness connector and ground.

(+) (Approx.)		(−)	Voltage (V) (Approx.)
ADP steering switch (telescopic switch)			
Connector	Terminals	Ground	5 V
M16	1		
	6		

Is the inspection result normal?

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

2. CHECK TELESCOPIC SWITCH CIRCUIT

1. Disconnect automatic drive positioner control unit.
2. Check continuity between automatic drive positioner control unit harness connector and ADP steering switch harness connector.

Automatic drive positioner control unit		ADP steering switch (telescopic switch)		Continuity
Connector	Terminal	Connector	Terminal	
M33	7	M16	1	Yes
	19		6	

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

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	7		No
	19		

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).
NO >> Repair or replace harness.

3. CHECK TELESCOPIC SWITCH

Refer to [ADP-88, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace ADP steering switch (telescopic switch). Refer to [ADP-146, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

>> Inspection End.

Component Inspection

INFOID:0000000012852838

1. CHECK TELESCOPIC SWITCH

1. Turn ignition switch OFF.
2. Disconnect ADP steering switch (telescopic switch).
3. Check continuity between ADP steering switch terminals.

ADP steering switch (telescopic switch)		Condition		Continuity
Terminal				
3	1	Telescopic switch (forward)	Operate	Yes
			Release	No
	6	Telescopic switch (backward)	Operate	Yes
			Release	No

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace ADP steering switch (telescopic switch). Refer to [ADP-146, "Removal and Installation"](#).

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Description

INFOID:0000000012852839

Seat memory switch is installed to the front door LH trim. The operation signal is input to the driver seat control unit when the memory switch is operated.

Component Function Check

INFOID:0000000012852840

1. CHECK FUNCTION

1. Select ""MEMORY SW 1", "MEMORY SW 2", "SET SW" in "DATA MONITOR" mode with CONSULT.
2. Check seat memory switch signal under the following conditions.

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-89, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852841

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK SEAT MEMORY SWITCH SIGNAL

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

(+) (–)		Voltage (V) (Approx.)
Seat memory switch		
Connector	Terminals	
D60	2	Ground 5
	10	
	16	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK MEMORY SWITCH CIRCUIT

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

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B209	11	D60	16	Yes
	21		2	
	27		10	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	11		No
	21		
	27		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

3. CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D60	9		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK SEAT MEMORY SWITCH

Refer to [ADP-90, "Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).

NO >> Replace seat memory switch. Refer to [ADP-144, "Removal and Installation"](#).

Component Inspection

INFOID:0000000012852842

1. CHECK SEAT MEMORY SWITCH

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

Terminal		Condition		Continuity
Seat memory switch				
9	10	Memory switch 1	Push	Yes
			Release	No
	16	Memory switch 2	Push	Yes
			Release	No
	2	Set switch	Push	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace seat memory switch. Refer to [ADP-144. "Removal and Installation"](#).

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DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:0000000012852843

Changeover switch is integrated into door mirror remote control switch.

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

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

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000012852844

1. CHECK FUNCTION

1. Select "MIR CHNG SW-R", "MIR CHNG SW-L" in "DATA MONITOR" mode with CONSULT.
2. Check changeover switch signal under the following conditions.

Monitor item	Condition		Status
MIR CHNG SW-R	Mirror switch (right)	Operate	ON
		Release	OFF
MIR CHNG SW-L	Mirror switch (left)	Operate	ON
		Release	OFF

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-92. "CHANGEOVER SWITCH : Diagnosis Procedure"](#).

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000012852845

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK CHANGEOVER SWITCH SIGNAL

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

(+) Automatic drive positioner control unit		(-)	Change over switch condition	Voltage (V) (Approx.)
Connector	Terminal			
M33	2	Ground	RIGHT	0
			Other than above	5
	14		LEFT	0
			Other than above	5

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

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

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M33	2	D57	28	Yes
	14		23	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	2		No
	14		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch		Ground	Continuity
Connector	Terminal		
D56	7		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK CHANGEOVER SWITCH

Check changeover switch.

Refer to [ADP-93, "CHANGEOVER SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Replace door mirror remote control switch. Refer to [MIR-41, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000012852846

1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

Terminal		Change over switch condition	Continuity
Door mirror remote control switch			
23	7	LEFT	Yes
		Other than above	No
28		RIGHT	Yes
		Other than above	No

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to [MIR-41, "Removal and Installation"](#).

MIRROR SWITCH

MIRROR SWITCH : Description

INFOID:0000000012852847

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:0000000012852848

1. CHECK FUNCTION

1. Select "MIR CON SW-UP", "MIR CON SW-DN", "MIR CON SW-RH", "MIR CON SW-LH" in "DATA MONITOR" mode with CONSULT.
2. Check mirror switch signal under the following conditions.

Monitor item	Condition		Status
MIR CON SW-UP	Mirror switch (up)	Operate	ON
		Release	OFF
MIR CON SW-DN	Mirror switch (down)	Operate	ON
		Release	OFF
MIR CON SW-RH	Mirror switch (right)	Operate	ON
		Release	OFF
MIR CON SW-LH	Mirror switch (left)	Operate	ON
		Release	OFF

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-94, "MIRROR SWITCH : Diagnosis Procedure"](#).

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000012852849

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK MIRROR SWITCH FUNCTION

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

(+) Automatic drive positioner control unit		(-)	Mirror switch Condition	Voltage (V) (Approx.)
Connector	Terminal			
M33	3	Ground	UP	0
			Other than above	5
	4		LEFT	0
			Other than above	5
	15		DOWN	0
			Other than above	5
	16		RIGHT	0
			Other than above	5

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M33	3	D57	26	Yes
	4		24	
	15		25	
	16		27	

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

Automatic drive positioner control unit			Continuity
Connector	Terminal		
M33	3	Ground	No
	4		
	15		
	16		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch			Continuity
Connector	Terminal		
D56	7	Ground	Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK MIRROR SWITCH

Check mirror switch.

Refer to [ADP-96, "MIRROR SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Replace door mirror remote control switch. Refer to [MIR-41, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SWITCH : Component Inspection

INFOID:0000000012852850

1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Terminal		Mirror switch condition	Continuity
Door mirror remote control switch			
27	7	RIGHT	Yes
		Other than above	No
24		LEFT	Yes
		Other than above	No
26		UP	Yes
		Other than above	No
25		DOWN	Yes
		Other than above	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to [MIR-41, "Removal and Installation"](#).

POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012852851

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT

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

Power seat switch LH		Ground	Continuity
Connector	Terminal		
B208	3		Yes

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).
NO >> Repair or replace harness.

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TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012852852

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK ADP STEERING SWITCH (TILT & TELESCOPIC SWITCH) GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect ADP steering switch (tilt & telescopic switch).
3. Check continuity between ADP steering switch (tilt & telescopic switch) and ground.

ADP steering switch (tilt & telescopic switch)		Ground	Continuity
Connector	Terminal		
M16	3		Yes

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-50, "Intermittent Incident"](#).
- NO >> Repair or replace harness.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Description

INFOID:0000000012852853

- The sliding sensor is installed to the seat 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

INFOID:0000000012852854

1. CHECK FUNCTION

1. Select "SLIDE PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check sliding sensor switch signal under the following conditions.

Monitor item	Condition		Value
SLIDE PULSE	Seat sliding	Operate (forward)	Change (decrease)
		Operate (backward)	Change (increase)
		Release	No change

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Perform diagnosis procedure. Refer to [ADP-99, "Diagnosis Procedure"](#).

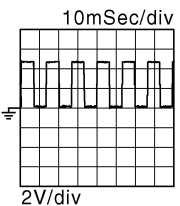
Diagnosis Procedure

INFOID:0000000012852855

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK SLIDING SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage signal
Connec- tor	Termi- nal				
B209	31	Ground	Seat sliding	Operate	
				Other than above	0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).
- NO >> GO TO 2.

2. CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and sliding motor LH.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

Driver seat control unit		Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	31	B211	2	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	31		No

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.
2. Turn ignition switch ON.
3. Check voltage between sliding motor LH harness connector and ground.

(+)		(-)	Voltage (V) (Approx.)
Sliding motor LH			
Connector	Terminals		
B211	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	5	B211	4	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK SLIDING SENSOR GROUND

1. Turn ignition switch OFF.
2. Check continuity between sliding motor LH harness connector and ground.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Sliding motor LH		Ground	Continuity
Connector	Terminal		
B211	3		Yes

Is the inspection result normal?

- YES >> Replace sliding motor LH. Refer to [SE-122. "Removal and Installation"](#).
- NO >> Repair or replace harness.

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RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Description

INFOID:0000000012852856

- The reclining motor LH is installed to the seatback assembly.
- 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:0000000012852857

1. CHECK FUNCTION

1. Select "RECLN PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check reclining sensor signal under the following conditions.

Monitor item	Condition		Value
RECLN PULSE	Seat reclining	Operate (forward)	Change (decrease)
		Operate (backward)	Change (increase)
		Release	No change

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-102. "Diagnosis Procedure"](#).

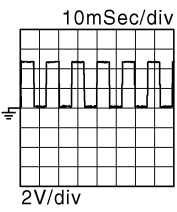
Diagnosis Procedure

INFOID:0000000012852858

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK RECLINING SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage signal
Connec-tor	Termi-nal				
B209	13	Ground	Seat reclining	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142. "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 LH.

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

Driver seat control unit		Reclining motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	13	B217	1	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	13		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK RECLINING SENSOR POWER SUPPLY

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

(+) Reclining motor LH		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B217	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Reclining motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B209	5	B217	3	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK RECLINING SENSOR GROUND

1. Turn ignition switch OFF.
2. Check continuity between reclining motor LH harness connector and ground.

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Reclining motor LH		Ground	Continuity
Connector	Terminal		
B217	2		Yes

Is the inspection result normal?

- YES >> Replace reclining motor LH. Refer to [SE-122. "Removal and Installation"](#).
NO >> Repair or replace harness.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Description

INFOID:0000000012852859

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

INFOID:0000000012852860

1. CHECK FUNCTION

1. Select "LIFT FR PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check the lifting sensor (front) signal under the following conditions.

Monitor item	Condition		Value
LIFT FR PULSE	Seat lifting (front)	Operate (upward)	Change (decrease)
		Operate (downward)	Change (increase)
		Release	No change

Is the inspection result normal?

- YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to [ADP-105, "Diagnosis Procedure"](#).

Diagnosis Procedure

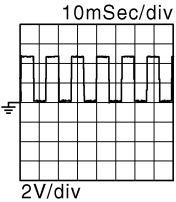
INFOID:0000000012852861

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK LIFTING SENSOR (FRONT) SIGNAL

ADP

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

(+) Driver seat control unit		(-)	Condition		Voltage signal
Connector	Terminal				
B209	30	Ground	Seat lifting (front)	Operate	
				Other than above	0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).
NO >> GO TO 2.

2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor LH (front).

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

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

Driver seat control unit		Lifting motor LH (front)		Continuity
Connector	Terminal	Connector	Terminal	
B209	30	B218	1	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	30		No

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.
2. Turn ignition switch ON.
3. Check voltage between lifting motor LH (front) harness connector and ground.

(+) Lifting motor LH (front)		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B218	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Lifting motor LH (front)		Continuity
Connector	Terminal	Connector	Terminal	
B209	5	B218	3	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK LIFTING SENSOR (FRONT) GROUND

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

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Lifting motor LH (front)		Ground	Continuity
Connector	Terminal		
B218	2		Yes

Is the inspection result normal?

- YES >> Replace lifting motor LH (front). Refer to [SE-122. "Removal and Installation"](#).
NO >> Repair or replace harness.

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LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description

INFOID:0000000012852862

- The lifting sensor (rear) is installed to the seat 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:0000000012852863

1. CHECK FUNCTION

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

Monitor item	Condition		Value
LIFT RR PULSE	Seat lifting (rear)	Operate (upward)	Change (decrease)
		Operate (downward)	Change (increase)
		Release	No change

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-108, "Diagnosis Procedure"](#).

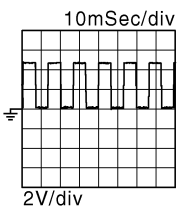
Diagnosis Procedure

INFOID:0000000012852864

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage signal
Connector	Terminal				
B209	29	Ground	Seat lifting (rear)	Operate	
			Other than above	0 or 5	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK LIFTING SENSOR (REAR) CIRCUIT

1. Turn ignition switch OFF.

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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

Driver seat control unit		Lifting motor LH (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B209	29	B207	1	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	29		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK LIFTING SENSOR (REAR) POWER SUPPLY

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

(+) Lifting motor LH (rear)		(-)	Voltage (V) (Approx.)
Connector	Terminals		
B207	3		
		Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Lifting motor LH (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B209	5	B207	3	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142. "Removal and Installation"](#).

NO >> Repair or replace harness.

5. CHECK LIFTING SENSOR (REAR) GROUND

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

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Lifting motor LH (rear)		Ground	Continuity
Connector	Terminal		
B207	2		Yes

Is the inspection result normal?

- YES >> Replace lifting motor LH (rear). Refer to [SE-122, "Removal and Installation"](#).
NO >> Repair or replace harness.

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TILT SENSOR

Description

INFOID:0000000012852865

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

Component Function Check

INFOID:0000000012852866

1. CHECK FUNCTION

1. Select "TILT PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check tilt sensor signal under the following conditions.

Monitor item	Condition		Value
TILT PULSE	Steering column	Operate (upward)	Change (decrease)
		Operate (downward)	Change (increase)
		Release	No change

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Perform diagnosis procedure. Refer to [ADP-111, "Diagnosis Procedure"](#).

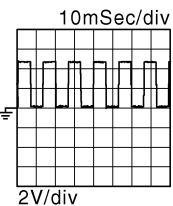
Diagnosis Procedure

INFOID:0000000012852867

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK TILT SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Con- nector	Termi- nals				
B209	28	Ground	Steer- ing col- umn	Oper- ate	
				Other than above	0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).
- NO >> GO TO 2.

2. CHECK TILT SENSOR CIRCUIT

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

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
B209	28	M85	4	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	28		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK TILT SENSOR POWER SUPPLY

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

(+)		(-)	Voltage (V) (Approx.)
Tilt motor			
Connector	Terminals		
M85	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M34	27	M85	5	Yes

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M34	27		No

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5. CHECK TILT SENSOR GROUND CIRCUIT

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

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M33	20	M85	3	Yes

Is the inspection result normal?

YES >> Replace tilt motor. Refer to [ST-52, "Exploded View"](#).
NO >> Repair or replace harness.

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TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Description

INFOID:0000000012852868

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

Component Function Check

INFOID:0000000012852869

1. CHECK FUNCTION

1. Select "TELESCO PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check telescopic sensor signal under the following conditions.

Monitor item	Condition		Valve
TELESCO PULSE	Steering column	Operate (forward)	Change (decrease)
		Operate (backward)	Change (increase)
		Release	No change

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-114, "Diagnosis Procedure"](#).

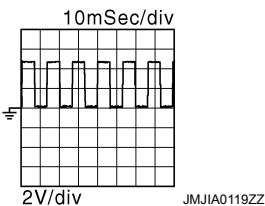
Diagnosis Procedure

INFOID:0000000012852870

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK TELESCOPIC SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Con- nector	Termi- nals				
B209	12	Ground	Steer- ing col- umn	Oper- ate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and telescopic motor.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

Driver seat control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
B209	12	M94	4	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	12		No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK TELESCOPIC SENSOR POWER SUPPLY

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

(+) Telescopic motor		(-)	Voltage (V) (Approx.)
Connector	Terminals		
M94	5	Ground	Battery voltage

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

Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M34	27	M94	5	Yes

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M34	27		No

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "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.
3. Check continuity between automatic drive positioner control unit harness connector and telescopic motor harness connector.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M33	20	M94	3	Yes

Is the inspection result normal?

YES >> Replace telescopic motor. Refer to [ST-52, "Exploded View"](#).

NO >> Repair or replace harness.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SENSOR

DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000012852871

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

DRIVER SIDE : Component Function Check

INFOID:0000000012852872

1. CHECK FUNCTION

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

Monitor item	Condition		Value
MIR/SEN LH U-D	Door mirror LH	Close to peak	3.4V
		Close to valley	0.6V
MIR/SEN LH R-L		Close to right edge	3.4V
		Close to left edge	0.6V

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-117, "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012852873

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

ADP

1. CHECK DOOR MIRROR LH SENSOR SIGNAL

1. Turn ignition switch to ACC.
2. Check voltage between door mirror LH harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
Door mirror LH					
Connector	Terminal				
D6 (with around view monitor)	21	Ground	Door mirror LH	Close to peak	3.4
				Close to valley	0.6
	22			Close to right edge	3.4
				Close to left edge	0.6
D4 (without around view monitor)	4	Ground	Door mirror LH	Close to peak	3.4
				Close to valley	0.6
	6			Close to right edge	3.4
				Close to left edge	0.6

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK DOOR MIRROR LH SENSOR CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror LH connector.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic drive positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
M33	6	D6 (with around view monitor)	21	Yes
	18		22	
M33	6	D4 (without around view monitor)	4	Yes
	18		6	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	6		No
	18		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DOOR MIRROR LH SENSOR CIRCUIT 2

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

Automatic drive positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
M33	20	D6 (with around view monitor)	24	Yes
	21		23	
M33	20	D4 (without around view monitor)	5	Yes
	21		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	20		No
	21		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK TILT MOTOR ADJUSTING OPERATION

- Connect automatic drive positioner control unit and door mirror LH.
- Turn ignition switch ON.
- Check tilt motor adjusting operation with memory function.

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror LH). Refer to [MIR-35, "Removal and Installation"](#).

NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143. "Removal and Installation"](#).
NO >> Repair or replace the malfunctioning part.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000012852874

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

PASSENGER SIDE : Component Function Check

INFOID:0000000012852875

1. CHECK FUNCTION

1. Select "MIR/SEN RH U-D", "MIR/SEN RH R-L" in "DATA MONITOR" mode with CONSULT.
2. Check the mirror sensor RH signal under the following conditions.

Monitor item	Condition		Value
MIR/SEN RH U-D	Door mirror RH	Close to peak	3.4V
		Close to valley	0.6V
MIR/SEN RH R-L		Close to right edge	0.6V
		Close to left edge	3.4V

Is the inspection result normal?

- YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to [ADP-119. "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012852876

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

ADP

1. CHECK DOOR MIRROR RH SENSOR SIGNAL

1. Turn ignition switch to ACC.
2. Check voltage between door mirror RH harness connector and ground.

(+) Door mirror RH		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
D116 (with around view monitor)	21	Ground	Door mirror RH	Close to peak	3.4
				Close to valley	0.6
	22			Close to right edge	0.6
				Close to left edge	3.4
D107 (without around view monitor)	4	Ground	Door mirror RH	Close to peak	3.4
				Close to valley	0.6
	6			Close to right edge	0.6
				Close to left edge	3.4

Is the inspection result normal?

- YES >> GO TO 5.
NO >> GO TO 2.

2. CHECK DOOR MIRROR RH SENSOR CIRCUIT 1

1. Turn ignition switch OFF.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic drive positioner control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
M33	5	D116 (with around view monitor)	21	Yes
	17		22	
M33	5	D107 (without around view monitor)	4	Yes
	17		6	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	5		No
	17		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK DOOR MIRROR RH SENSOR CIRCUIT 2

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

Automatic drive positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
M33	20	D116 (with around view monitor)	24	Yes
	21		23	
M33	20	D107 (without around view monitor)	5	Yes
	21		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M33	20		No
	21		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK TILT MOTOR ADJUSTING OPERATION

1. Connect automatic drive positioner control unit and door mirror RH.
2. Turn ignition switch ON.
3. Check tilt motor adjusting operation with memory function.

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror RH). Refer to [MIR-35, "Removal and Installation"](#).

NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).
NO >> Repair or replace the malfunctioning part.

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SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

Description

INFOID:0000000012852877

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

Component Function Check

INFOID:0000000012852878

1. CHECK FUNCTION

1. Select "SEAT SLIDE" in "ACTIVE TEST" mode with CONSULT.
2. Check the sliding motor LH operation.

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

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-122. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852879

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK SLIDING MOTOR LH POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT SLIDE") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
B210	36	Ground	SEAT SLIDE	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	44			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to [SE-122. "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK SLIDING MOTOR LH CIRCUIT

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

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B210	36	B211	1	Yes
	44		5	

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

Driver seat control unit connector		Ground	Continuity
Connector	Terminal		
B210	36		No
	44		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

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RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING MOTOR

Description

INFOID:0000000012852880

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

Component Function Check

INFOID:0000000012852881

1. CHECK FUNCTION

1. Select "SEAT RECLINING" in "ACTIVE TEST" mode with CONSULT.
2. Check the reclining motor LH operation.

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

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-124. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852882

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK RECLINING MOTOR LH POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT RECLINING") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Conne- ctor	Terminal				
B210	43	Ground	SEAT RE- CLINING	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	35			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to [SE-122. "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK RECLINING MOTOR LH CIRCUIT

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

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Reclining motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B210	35	B217	6	Yes
	43		4	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B210	35		No
	43		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

ADP

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Description

INFOID:0000000012852883

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

Component Function Check

INFOID:0000000012852884

1. CHECK FUNCTION

1. Select "SEAT LIFTER FR" in "ACTIVE TEST" mode with CONSULT.
2. Check the lifting motor LH (front) operation.

Test Item		Description	
SEAT LIFTER FR	OFF	Seat lifting (front)	Stop
	UP		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:0000000012852885

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK LIFTING MOTOR LH (FRONT) POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT LIFTER FR") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
B210	34	Ground	SEAT LIFTER FR	OFF	0
				UP	Battery voltage
				DWN (downward)	0
	42			OFF	0
				UP	0
				DWN (downward)	Battery voltage

Is the inspection result normal?

YES >> Replace lifting motor LH (front). Refer to [SE-122. "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK LIFTING MOTOR LH (FRONT) CIRCUIT

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

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Lifting motor LH (front)		Continuity
Connector	Terminal	Connector	Terminal	
B210	34	B218	6	Yes
	42		4	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B210	34		No
	42		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

ADP

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (REAR)

Description

INFOID:0000000012852886

- The lifting motor LH (rear) is installed to the seat frame.
- The lifting motor LH (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 LH (rear).

Component Function Check

INFOID:0000000012852887

1. CHECK FUNCTION

1. Select "SEAT LIFTER RR" in "ACTIVE TEST" mode with CONSULT.
2. Check the lifting motor LH (rear) operation.

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

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-128. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852888

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK LIFTING MOTOR LH (REAR) POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT LIFTER RR") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

(+) Driver seat control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
B210	40	Ground	SEAT LIFTER RR	OFF	0
				UP	0
				DWN (downward)	Battery voltage
	41			OFF	0
				UP	Battery voltage
				DWN (downward)	0

Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to [SE-122. "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK LIFTING MOTOR (REAR) CIRCUIT

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

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Lifting motor LH (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B210	41	B207	6	Yes
	40		4	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B210	41		No
	40		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

ADP

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TILT MOTOR

Description

INFOID:0000000012852889

- 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:0000000012852890

1. CHECK FUNCTION

1. Select "TILT MOTOR" in "ACTIVE TEST" mode with CONSULT.
2. Check the tilt motor operation.

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

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-130, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852891

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK TILT MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect tilt motor.
3. Turn the ignition switch ON.
4. Perform "ACTIVE TEST" ("TILT MOTOR") with CONSULT.
5. Check voltage between tilt motor harness connector and ground.

(+)		(−)	Condition		Voltage (V) (Approx.)
Tilt motor					
Connector	Terminals				
M85	2	Ground	TILT MOTOR	OFF	0
				UP	0
				DWN (down-ward)	Battery voltage
	1			OFF	0
				UP	Battery voltage
				DWN (down-ward)	0

Is the inspection result normal?

YES >> Replace tilt motor. Refer to [ST-52, "Exploded View"](#).

NO >> GO TO 2.

2. CHECK TILT MOTOR CIRCUIT

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

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M34	28	M85	2	Yes
	29		1	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M34	28		No
	29		

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).
NO >> Repair or replace harness.

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TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC MOTOR

Description

INFOID:0000000012852892

- 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:0000000012852893

1. CHECK FUNCTION

1. Select "TELESCO MOTOR" in "ACTIVE TEST" mode with CONSULT.
2. Check the telescopic motor operation.

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

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-132. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852894

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK TELESCOPIC MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect telescopic motor.
3. Turn the ignition switch ON.
4. Perform "ACTIVE TEST" ("TELESCO MOTOR") with CONSULT.
5. Check voltage between telescopic motor harness connector and ground.

(+)		(−)	Condition		Voltage (V) (Approx.)
Telescopic motor					
Connector	Terminals				
M94	2	Ground	TELE- SCOPIC MOTOR	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	1			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace telescopic motor. Refer to [ST-52. "Exploded View"](#).

NO >> GO TO 2.

2. CHECK TELESCOPIC MOTOR CIRCUIT

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

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M34	29	M94	1	Yes
	26		2	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M34	29		No
	26		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).
NO >> Repair or replace harness.

ADP

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR MOTOR

Description

INFOID:0000000012852895

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:0000000012852896

1. CHECK DOOR MIRROR MOTOR FUNCTION

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

Refer to [ADP-22, "CONSULT Function \(AUTO DRIVE POS\)"](#).

Is the inspection result normal?

YES >> Door mirror motor function is OK.

NO >> Refer to [ADP-134, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852897

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+)Door mirror		(−)	Door mirror remote control switch condition	Voltage (V) (Approx.)
Connector	Terminal			
D6 (LH) D116 (RH) (with around view monitor)	12	Ground	UP	Battery voltage
			Other than above	0
	11		LEFT	Battery voltage
			Other than above	0
	10		DOWN / RIGHT	Battery voltage
			Other than above	0
D4 (LH) D107 (RH) (without around view monitor)	8	Ground	UP	Battery voltage
			Other than above	0
	9		LEFT	Battery voltage
			Other than above	0
	10		DOWN / RIGHT	Battery voltage
			Other than above	0

Is the inspection result normal?

YES >> Refer to [ADP-136, "Component Inspection"](#).

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

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

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Door mirror LH

Automatic drive positioner control unit		Door mirror LH connector		Continuity
Connector	Terminal	Connector	Terminal	
M33	12	D6 (with around view monitor)	10	Yes
	23		12	
	24		11	
M33	12	D4 (without around view monitor)	10	Yes
	23		8	
	24		9	

Door mirror RH

Automatic drive positioner control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
M33	10	D116 (with around view monitor)	12	Yes
	11		11	
	22		10	
M33	10	D107 (without around view monitor)	8	Yes
	11		9	
	22		10	

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

Door mirror LH

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		No
M33	12		
	23		
	24		

Door mirror RH

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		No
M33	10		
	11		
	22		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

Door mirror LH

(+) Automatic drive positioner control unit		(-)	Mirror switch condition	Voltage (V) (Approx.)
Connector	Terminal			

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

M33	12	Ground	DOWN / RIGHT	Battery voltage
			Other than above	0
	23		UP	Battery voltage
			Other than above	0
	24		LEFT	Battery voltage
			Other than above	0

Door mirror RH

(+) Automatic drive positioner control unit		(-)	Mirror switch condition	Voltage (V) (Approx.)
Connector	Terminal			
M33	10	Ground	UP	Battery voltage
			Other than above	0
	11		LEFT	Battery voltage
			Other than above	0
	22		DOWN / RIGHT	Battery voltage
			Other than above	0

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

4. CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to [ADP-136, "Component Inspection"](#).

Is the inspection result normal?

YES >> Refer to [GI-50, "Intermittent Incident"](#).

NO >> Replace door mirror actuator. Refer to [MIR-35, "Removal and Installation"](#).

Component Inspection

INFOID:0000000012852898

1. CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage.

Refer to [MIR-35, "Exploded View"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror actuator. Refer to [MIR-35, "Removal and Installation"](#).

2. CHECK DOOR MIRROR MOTOR-II

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

Door mirror connector	Terminal		Operational direction
	(+)	(-)	
D6 (LH) D116 (RH) (with around view monitor)	10	11	RIGHT
	11	10	LEFT
	12	10	UP
	10	12	DOWN

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Door mirror connector	Terminal		Operational direction
	(+)	(-)	
D4 (LH) D107 (RH) (without around view monitor)	10	9	RIGHT
	9	10	LEFT
	8	10	UP
	10	8	DOWN

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror actuator. Refer to [MIR-35. "Removal and Installation"](#).

ADP

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description

INFOID:0000000012852899

- Memory switch is equipped on the seat memory switch installed to the driver side door trim. The operation signal is input to the driver seat control unit when the memory switch is operated.
- The status of automatic drive positioner system can be checked according to the illuminating/flashing status.

Component Function Check

INFOID:0000000012852900

1. CHECK FUNCTION

1. Select "MEMORY SW INDCTR" in "ACTIVE TEST" mode with CONSULT.
2. Check the memory indicator operation.

Test item		Description	
MEMORY SW INDCTR	OFF	Memory switch indicator	OFF
	ON-1		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-138. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012852901

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

1. CHECK SEAT MEMORY INDICATOR CIRCUIT

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B209	10	D60	13	Yes
	26		14	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B209	10		No
	26		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

(+) Seat memory switch		(-)	Voltage (V) (Approx.)
Connector	Terminals		
D60	15	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check the following:

- 10A fuse No. 1.
- Harness for open or short between memory indicator and fuse.

3. CHECK MEMORY INDICATOR

Refer to [ADP-139, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch. Refer to [ADP-144, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-50, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000012852902

1. CHECK SEAT MEMORY INDICATOR

1. Disconnect seat memory switch.
2. Check continuity between seat memory switch terminals.

Terminal Seat memory switch		Continuity
(+)	(-)	
15	13	Yes
	14	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace seat memory switch. Refer to [ADP-144, "Removal and Installation"](#).

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ADP

ADP SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000012852903

NOTE:

Always perform the "Basic Inspection" before performing diagnosis in the following table. Refer to [ADP-51](#), "Work Flow".

Symptom		Diagnosis procedure	Reference page
Manual functions (for specific part) do not operate.	Sliding operation	Check sliding switch.	ADP-73
	Reclining operation	Check reclining switch.	ADP-76
	Lifting operation (front)	Check lifting switch (front).	ADP-79
	Lifting operation (rear)	Check lifting switch (rear).	ADP-82
	Tilt operation	Check tilt switch.	ADP-85
	Telescopic sensor	Check telescopic switch.	ADP-87
	Door mirror operation	1. Changeover switch.	ADP-92
		2. Mirror switch	ADP-94
	All parts of seat	Check power seat switch ground circuit.	ADP-97
Memory functions (for specific part) do not operate.	Sliding operation	Check sliding sensor.	ADP-99
	Reclining operation	Check reclining sensor.	ADP-102
	Lifting operation (front)	Check lifting sensor (front).	ADP-105
	Lifting operation (rear)	Check lifting sensor (rear).	ADP-108
	Tilt operation	Check tilt sensor.	ADP-111
	Telescopic operation	Check telescopic sensor.	ADP-114
	Door mirror operation	Check door mirror sensor.	Driver side: ADP-117 Passenger side: ADP-119
Memory functions and manual functions (for specific part) do not operate.	Sliding operation	Check sliding motor LH.	ADP-122
	Reclining operation	Check reclining motor LH.	ADP-124
	Lifting operation (front)	Check lifting motor LH (front).	ADP-126
	Lifting operation (rear)	Check lifting motor LH (rear).	ADP-128
	Tilt operation	Check tilt motor.	ADP-130
	Telescopic operation	Check telescopic motor.	ADP-132
	Door mirror operation	Check door mirror motor.	ADP-134
Entry/Exit assist function does not operate.		1. Check system setting.	ADP-57
		2. Perform initialization.	ADP-55
		3. Check front door switch (driver side).	DLK-172
Intelligent Key interlock function does not operate. (Other automatic operations and Intelligent Key system are normal)		1. Check door lock function.	DLK-18
		2. Perform memory storing.	ADP-56

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:0000000012852904

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

Symptom	Cause	Action to take	Reference page
Entry/exit assist function do not operate.	No initialization has been performed.	Perform initialization.	ADP-55
	Entry/exit assist function is disabled. NOTE: Entry/exit assist function is set to ON before delivery (initial setting).	Change the settings.	ADP-57
Entry assist function does not operate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the entry assist function.	ADP-18
Memory function, entry/exit assist function, or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-15
			Entry assist function: ADP-18
			Exit assist function: ADP-17
			Intelligent Key interlock function: ADP-19

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DRIVER SEAT CONTROL UNIT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

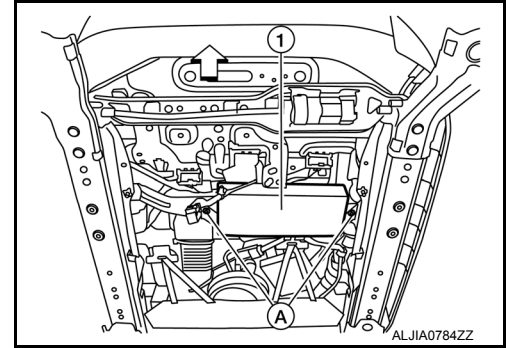
DRIVER SEAT CONTROL UNIT

Removal and Installation

INFOID:0000000012852905

REMOVAL

1. Remove the driver seat. Refer to [SE-122. "Removal and Installation"](#).
⇐: Front
2. Remove the two driver seat control unit screws (A).
3. Disconnect the two harness connectors from driver seat control unit.
4. Remove the driver seat control unit (1).



INSTALLATION

Installation is in the reverse order of removal.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to [ADP-54. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

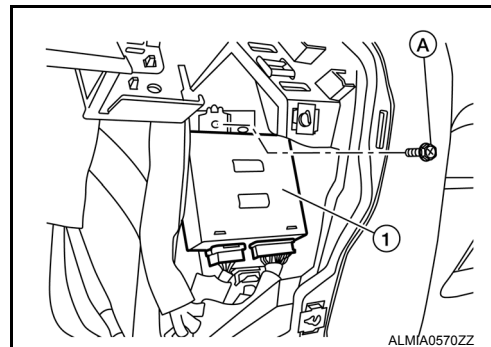
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

INFOID:000000012852906

REMOVAL

1. Disconnect the negative battery terminal. Refer to [PG-147. "Removal and Installation"](#).
2. Remove the multifunction switch. Refer to [AV-135. "Removal and Installation"](#).
3. Remove the automatic drive positioner control unit screw (A).
4. Disconnect the two harness connectors from the automatic drive positioner control unit (1).
5. Remove automatic drive positioner control unit (1).



INSTALLATION

Installation is in the reverse order of removal.

NOTE:

After installing the automatic drive positioner control unit, perform additional service. Refer to [ADP-54. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

ADP

SEAT MEMORY SWITCH

< REMOVAL AND INSTALLATION >

SEAT MEMORY SWITCH

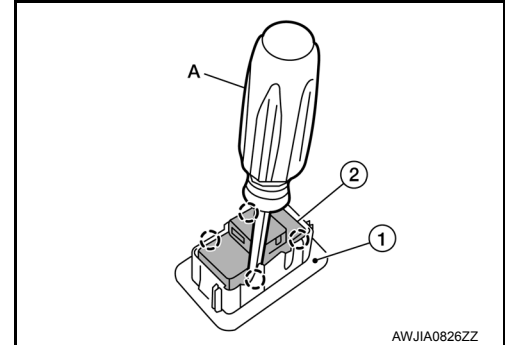
Removal and Installation

INFOID:0000000012852907

REMOVAL

1. Remove front door finisher LH (1). Refer to [INT-15. "Removal and Installation"](#).
2. Release the pawls using a suitable tool (A) and remove seat memory switch (2) from switch finisher (1).

⊖: Pawl



INSTALLATION

Installation is in the reverse order of removal.

POWER SEAT SWITCH

< REMOVAL AND INSTALLATION >

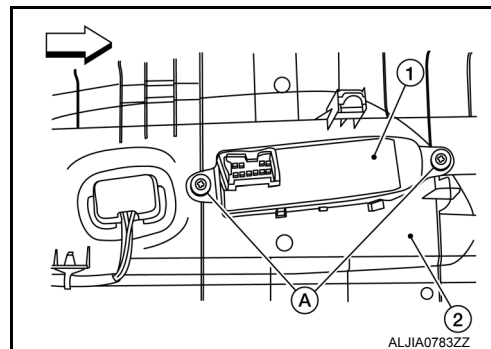
POWER SEAT SWITCH

Removal and Installation

INFOID:0000000012852908

REMOVAL

1. Remove seat cushion outer finisher LH (2). Refer to [SE-162, "Seat Cushion"](#).
⇐: Front
2. Remove the power seat switch screws (A).
3. Remove power seat switch (1) from seat cushion outer finisher LH (2).



INSTALLATION

Installation is in the reverse order of removal.

ADP

ADP STEERING SWITCH

< REMOVAL AND INSTALLATION >

ADP STEERING SWITCH

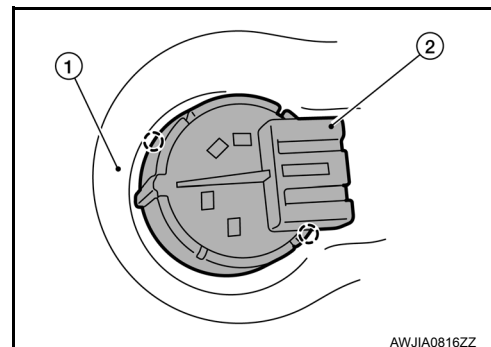
Removal and Installation

INFOID:0000000012852909

REMOVAL

1. Remove steering column lower cover (1). Refer to [IP-17. "Removal and Installation"](#).
2. Release the pawls and remove ADP steering switch (2) from the steering column lower cover (1).

: Pawl



INSTALLATION

Installation is in the reverse order of removal.