SECTION ADP
AUTOMATIC DRIVE POSITIONER

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000011562079

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Precautions for Removing Battery Terminal

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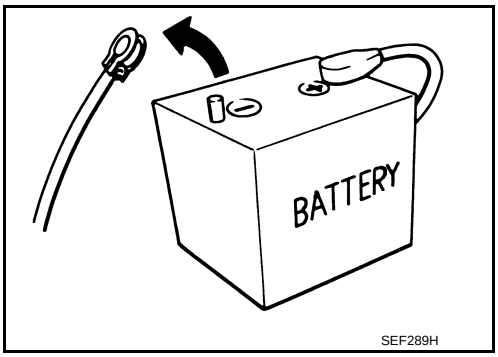

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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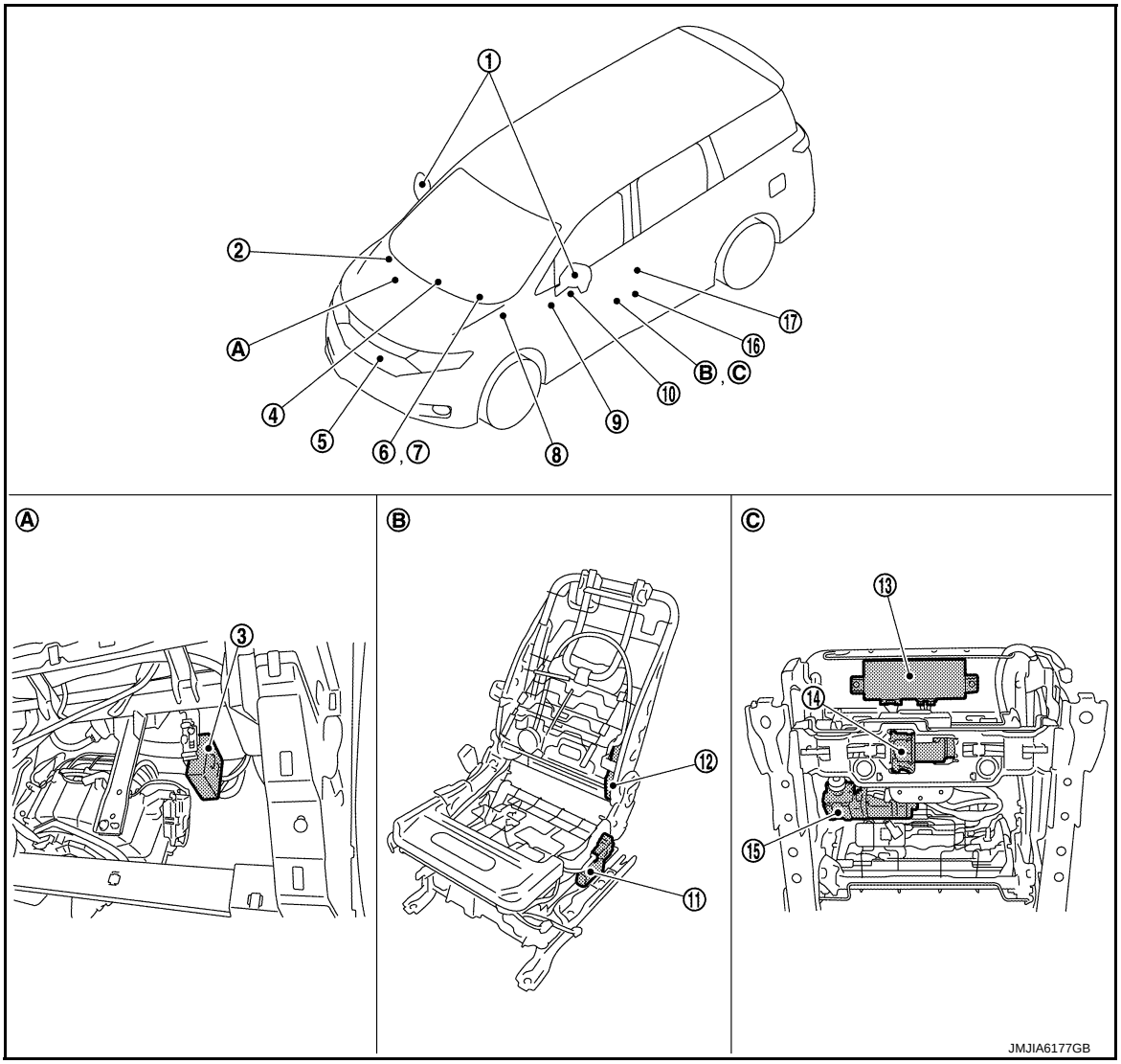


A. View with instrument lower panel RH removed
B. View with seat cushion pad and seat back pad removed
C. Backside of seat cushion

No.	Component parts		Description
1.	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. Refer to MIR-5, "Component Parts Location" for detailed installation location.
		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. Refer to MIR-5, "Component Parts Location" for detailed installation location.

No.	Component parts		Description
2.	ABS actuator and electric unit (control unit)		Transmit the vehicle speed signal to driver seat control unit via CAN communication. Refer to BRC-9, "Component Parts Location" for detailed installation location.
3.	Automatic drive positioner control unit		Refer to ADP-8, "Automatic Drive Positioner Control Unit".
4.	CVT sift 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. Refer to TM-11, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location.
5.	TCM		The following signals are transmitted to driver seat control unit via CAN communication. • Shift position signal (P range) • Identification of transmission: CVT Refer to TM-11, "CVT CONTROL SYSTEM : Component Parts Location" for detailed installation location.
6.	Combination meter		Transmit the vehicle speed signal to driver seat control unit via CAN communication. Refer to MWI-6, "METER SYSTEM : Component Parts Location" for detailed installation location.
7.	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 Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
8.	IPDM E/R		ON/OFF signal of CVT shift selector (detention switch) is transmitted to driver seat control unit via CAN communication. Refer to PCS-4, "IPDM E/R : Component Parts Location" for detailed installation location.
9.	Door mirror remote control switch	Mirror switch	• Mirror switch is integrated in door mirror remote control switch. • It operates angle of door mirror face. • It transmits mirror face adjust operation to automatic drive positioner control unit. Refer to MIR-5, "Component Parts Location" for detailed installation location.
		Changeover switch	• Changeover switch is integrated in door mirror remote control switch. • Changeover switch has three positions (L, N and R). • It changes operating door mirror motor by transmitting control signal to automatic drive positioner control unit. Refer to MIR-5, "Component Parts Location" for detailed installation location.
10.	Seat memory switch	Set switch	Refer to ADP-8, "Seat Memory Switch".

No.	Component parts		Description
11.	Lifting motor (rear)	Lifting motor (rear)	• Lifting motor (rear) is installed to seat slide cushion frame. • Lifting motor (rear) is activated with driver seat control unit. • Seat lifter (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear). Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
12.	Reclining motor	Reclining motor	• Seat reclining motor is installed to seat back frame. • Seat reclining motor is activated with driver seat control unit. • Seatback is reclined frontward/rearward by changing the rotation direction of reclining motor. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
13.	Driver seat control unit		Refer to ADP-8, "Driver Seat Control Unit".
14.	Sliding motor	Sliding motor	• Seat sliding motor is installed to the seat cushion frame. • Seat sliding motor is activated with driver seat control unit. • Slides the seat frontward/ rearward by changing the rotation direction of sliding motor. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
15.	Lifting motor (front)	Lifting motor (front)	• Lifting motor (front) is installed to seat side cushion frame. • Lifting motor is activated with driver seat control unit. • Seat lifter (front) is moved upward/downward by changing the rotation direction of lifting motor (front). Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.

No.	Component parts		Description
16.	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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
		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. Refer to SE-8, "POWER SEAT SYSTEM : Component Parts Location" for detailed installation location.
17.	Front door switch (driver side)		Detects door open/close condition and transmits to BCM. Refer to DLK-18, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.

Automatic Drive Positioner Control Unit

INFOID:0000000011322410

- It communicates with driver seat control unit via UART communication.
- Perform various controls with the instructions of driver seat control unit.
- Perform the controls of door mirror and seat memory switch.
- Operates door mirror with the signal from the driver seat control.

Seat Memory Switch

INFOID:0000000011322411

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.

Driver Seat Control Unit

INFOID:0000000011322412

- 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 perform memory function after receiving the door unlock signal from BCM.
- The address of each part is recorded.
- Operates each motor of seat to the registered position.
- Requests the operation of 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.

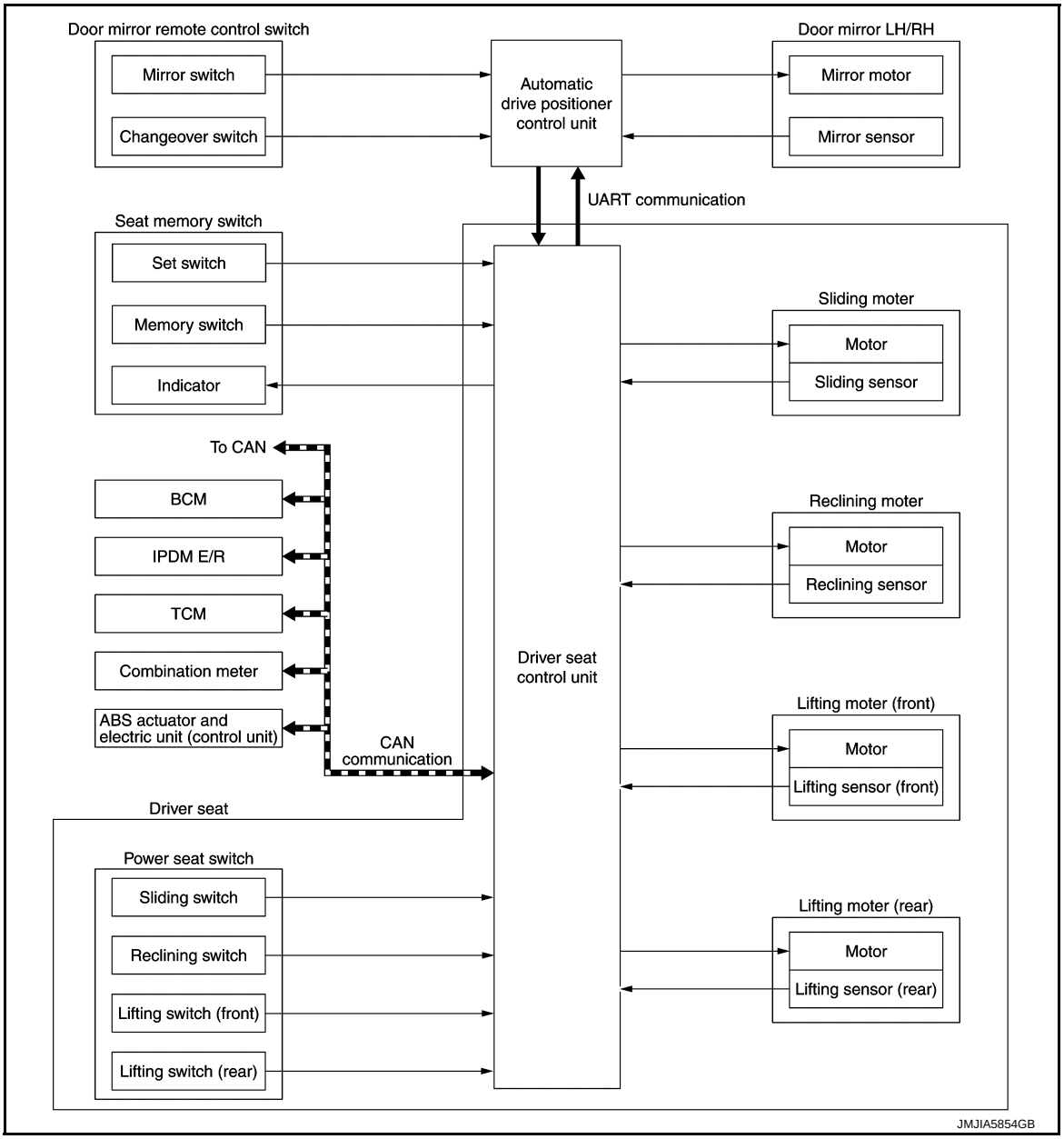
SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:0000000011322413

SYSTEM DIAGRAM



DESCRIPTION

The system automatically moves the driver seat 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 and door mirror position) can be adjusted by using the power seat switch or door mirror remote control switch.
Memory function	The seat and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).

Function		Description
Entry/Exit assist function	Exit	On exit, the seat moves backward.
	Entry	On entry, the seat 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.

Sleep Control

Driver seat control unit equips sleep control for reducing power consumption.

The system switches to sleep control when all of the following conditions are satisfied.

- Ignition switch is OFF.
- All devices of auto driving position system are not operating.
- 45 seconds timer of driver seat control unit is not operating.
- Set switch and memory switch (1 and 2) are OFF.

Wake-up Control

Sleep control releases when detecting status change in either of the following item.

- CAN communication
- Power seat switch
- Set switch and seat memory switch (1 and 2)

AUTOMATIC DRIVE POSITIONER SYSTEM : Schematic

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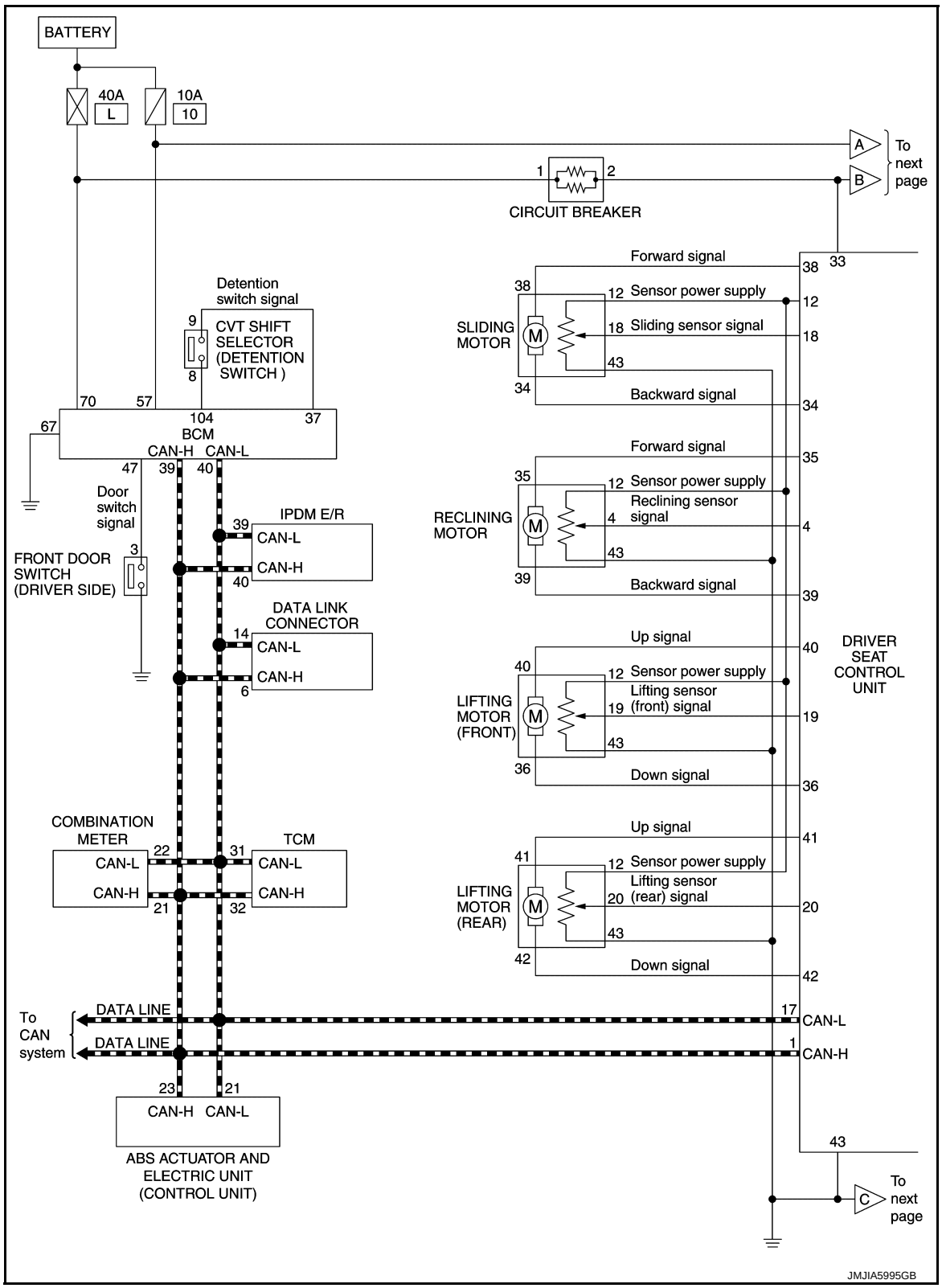

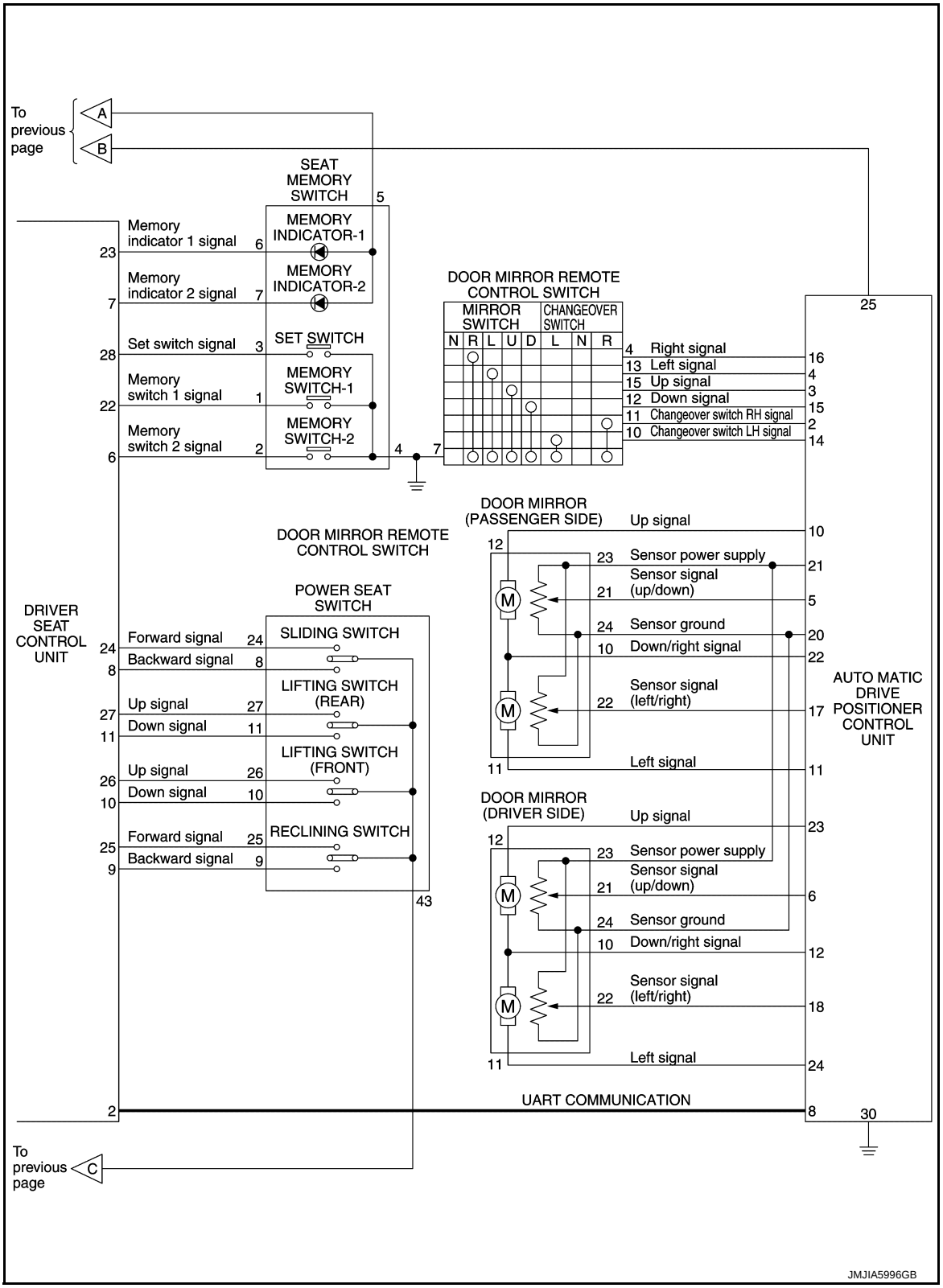
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SEAT MEMORY SWITCH
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MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
Memory indicator 1 signal
Memory indicator 2 signal
Set switch signal
Memory switch 1 signal
Memory switch 2 signal
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DOOR MIRROR REMOTE CONTROL SWITCH
MIRROR SWITCH
CHANGEOVER SWITCH
N R L U D L N R
4 Right signal
13 Left signal
15 Up signal
12 Down signal
11 Changeover switch RH signal
10 Changeover switch LH signal
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DOOR MIRROR (PASSENGER SIDE)
Up signal
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23 Sensor power supply
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Sensor signal (up/down)
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24 Sensor ground
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10 Down/right signal
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Sensor signal (left/right)
22
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Left signal
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DOOR MIRROR (DRIVER SIDE)
Up signal
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23 Sensor power supply
Sensor signal (up/down)
21
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24 Sensor ground
10 Down/right signal
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Sensor signal (left/right)
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Left signal
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DOOR MIRROR REMOTE CONTROL SWITCH
POWER SEAT SWITCH
DRIVER SEAT CONTROL UNIT
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LIFTING SWITCH (REAR)
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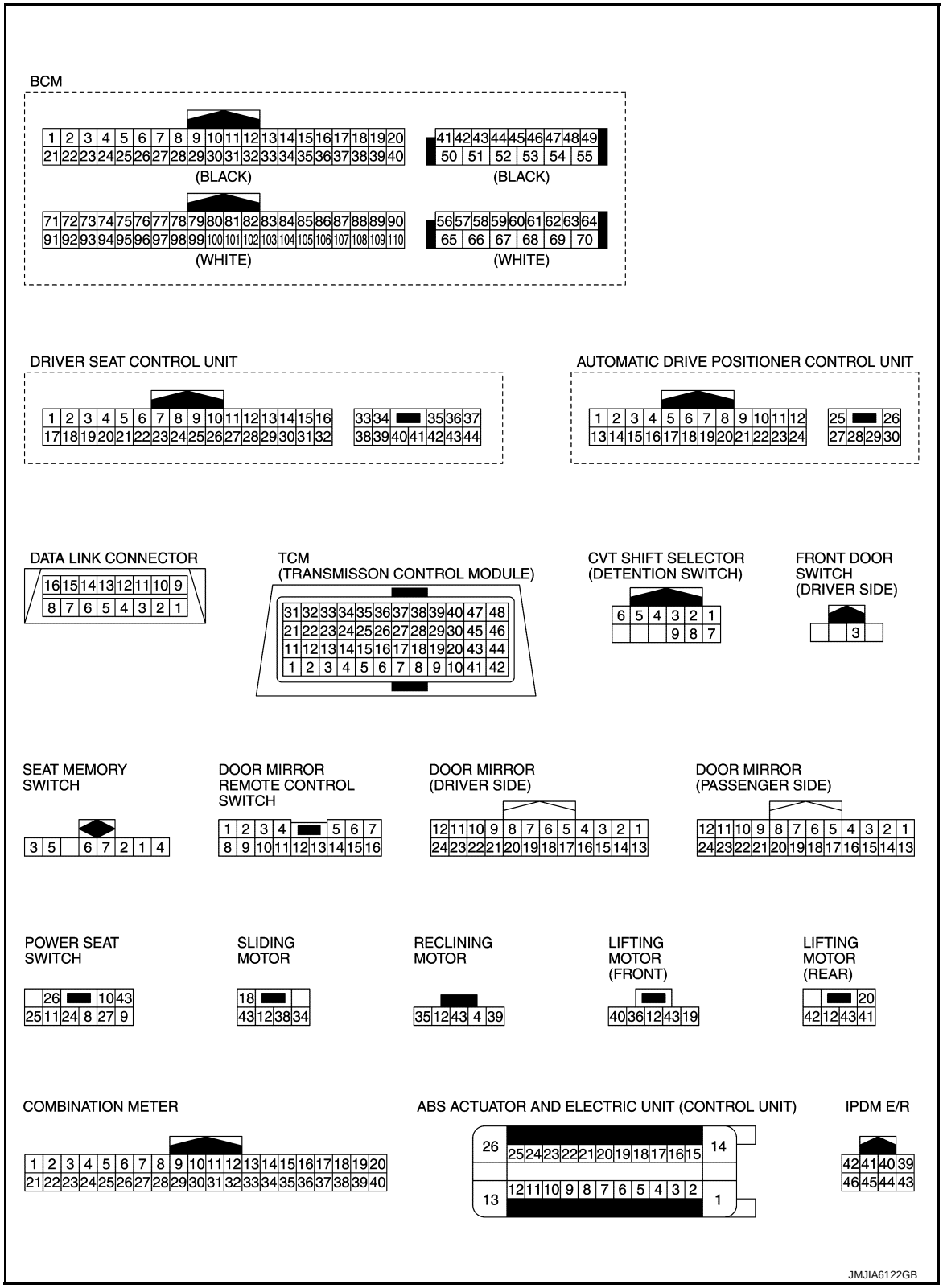

MANUAL FUNCTION

MANUAL FUNCTION : System Description

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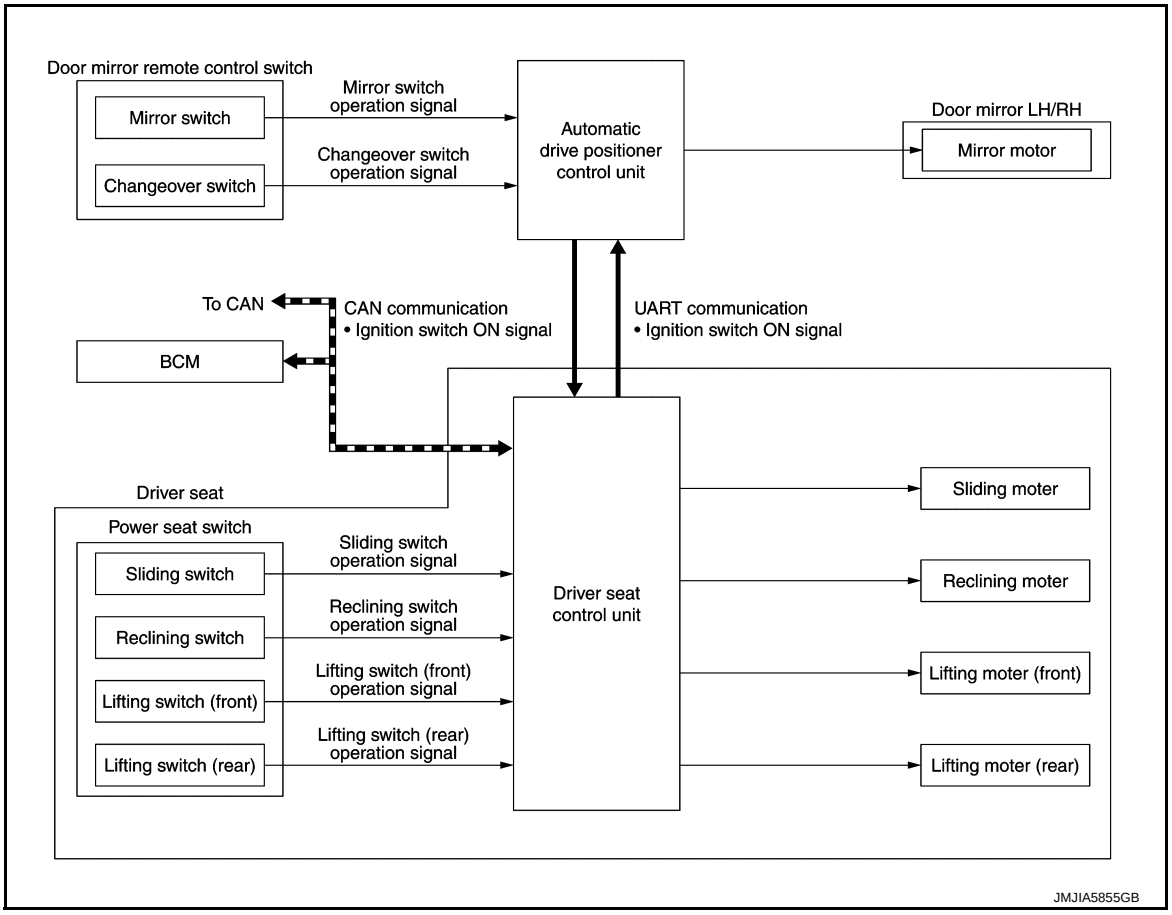
SYSTEM DIAGRAM



DESCRIPTION

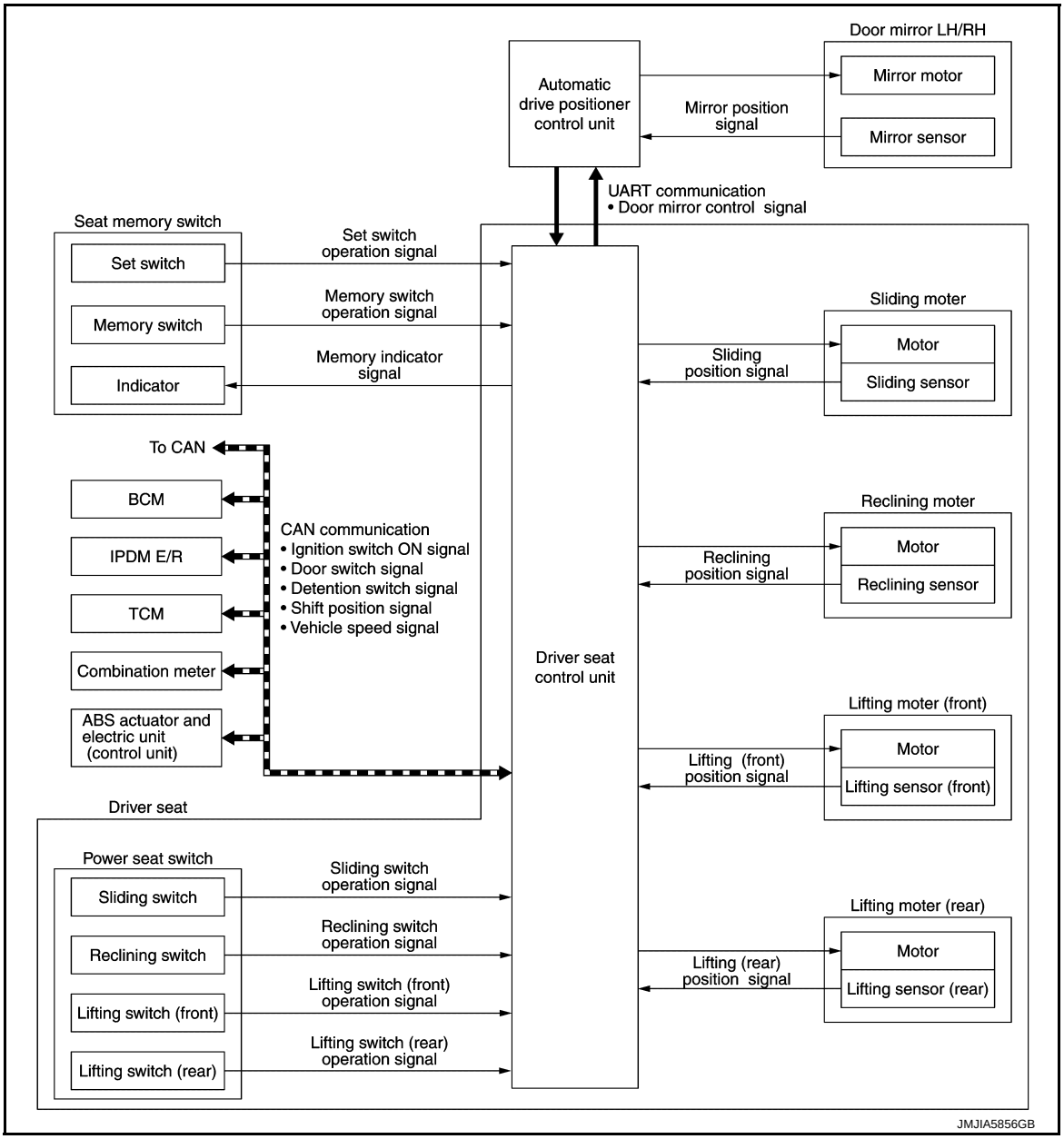
- The driving position (seat and door mirror position) can be adjusted manually with power seat switch and door mirror remote control switch.
- The power seat can be operated manually regardless of the ignition switch position.
- The door mirrors can be operated manually when ignition switch is in either ACC or ON position.
- When power seat switch is operated, operation signal is transmitted to driver seat control unit. Each motor is operated according to operation signal.
- When mirror switch and changeover switch are operated, operation signal is transmitted to automatic drive positioner control unit. Mirror motor is operated according to operation signal.

MEMORY FUNCTION

MEMORY FUNCTION : System Description

INFOID:0000000011322416

SYSTEM DIAGRAM



DESCRIPTION

- The driver seat control unit can store the optimum driving positions (seat and door mirror position) for 2 people. If the front seat position is changed, one-touch (pressing desired memory switch) operation allows changing to the other driving position.
- When memory switch 1 and 2 are operated, operation signal is transmitted to driver seat control unit.
- When driver seat control unit detects that memory switch is pressed for 0.5 seconds or more, driver seat control unit operates each motor of driver seat and detects the driver seat position according to signals transmitted from each sensor. Driver seat control unit requests the operation of mirror motor to automatic drive positioner control unit via UART communication.
- Automatic drive positioner control unit operates mirror motor, detects the door mirror position according to signal transmitted from mirror sensor, and transmits the detected door mirror position to driver seat control unit via UART communication.
- Driver seat control unit stops the operation of each motor when each part reaches the memorized positions.
- Driver seat control unit turns memory indicator lamp OFF that is blinking while each motor operates.

NOTE:

Further information for the memory storage procedure. Refer to ADP-49, "Work Procedure".

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 • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
CVT shift selector	P position
Memory function	Registered
Vehicle speed	0 km/h (0 MPH)
CONSULT	Not connected

*: When timer function does not operate.

Timer Function

- The memory function can be performed for 45 seconds after opening the driver door even if the ignition switch position is in OFF position.
- Satisfy all of the following items. The timer function is not performed if these items are not satisfied.

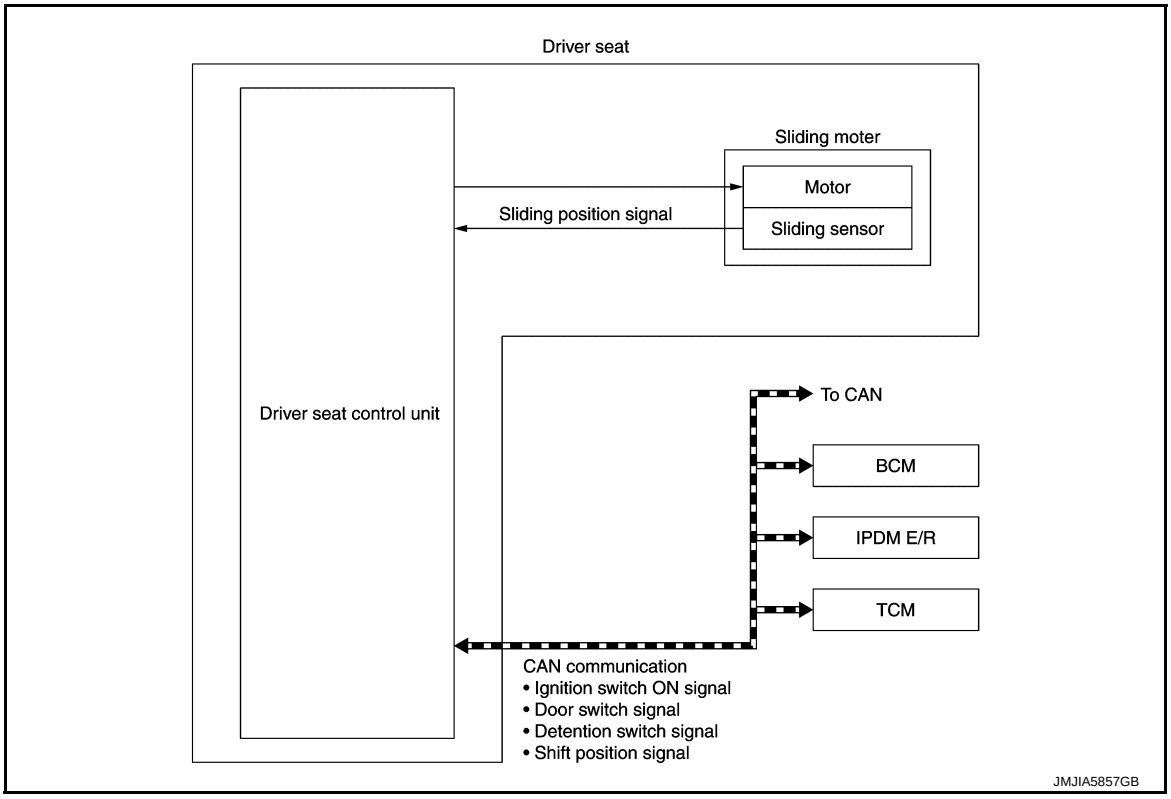
Item	Request status
Ignition position	OFF
Set switch/memory switch	OFF
Memory function	Registered
CVT shift selector	P position
Front door switch (driver side)	OFF
CUNSULT	Not connected

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Description

INFOID:0000000011322417

SYSTEM DIAGRAM



DESCRIPTION

- This function slides driver seat toward vehicle rear and facilitates entry/exit of the vehicle.
- Seat slide set amount of exit assist function is adjustable.
- When driver side door is open while operation conditions are satisfied, driver seat control unit receives front door switch (driver side) signal (open/close) from BCM via CAN communication. Driver seat control unit operates sliding motor and moves driver seat toward vehicle rear to the seat slide set amount when driver seat control unit detects that driver side door is open.
- Driver seat control unit receives sliding sensor position signal from sliding sensor. Driver seat control unit stops the operation of sliding motor when driver seat control unit detects that driver seat is slid to the seat slide set amount.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-51, "Description".

Operation Condition

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

Item	Request status
Ignition position	OFF
System setting (Entry/exit assist function)	ON
Initialization	Done
Switch inputs • Power seat switch • Door mirror remote control switch • Set switch • Memory switch	OFF (Not operated)
CVT shift selector	P position
Handle position	LHD

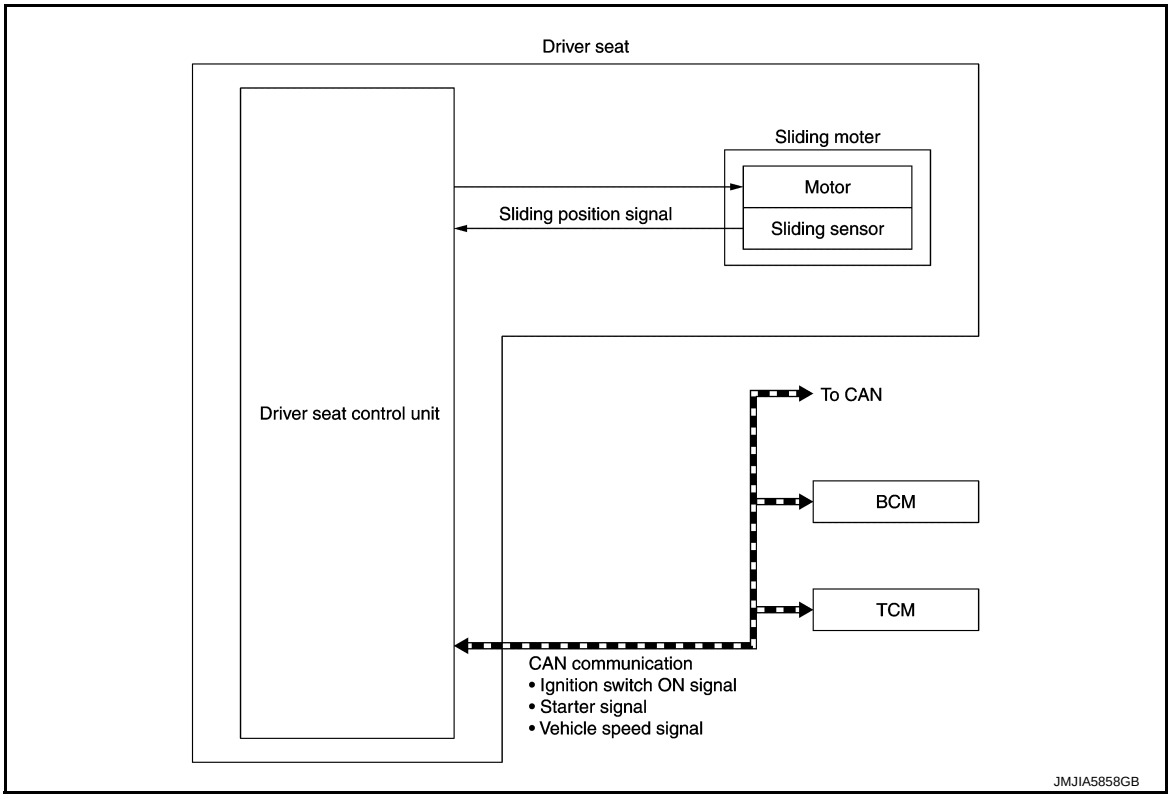
Item	Request status
Transmission	CVT
CUNSULT	Not connected

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Description

INFOID:0000000011322418

SYSTEM DIAGRAM



DESCRIPTION

- This function allows the driver seat control unit to return the driver seat from the exiting position to the previous driving position, when ignition switch is operated from OFF to ACC.
- Entry assist function stops when starter signal is ON while entry assist function is being operated. Entry assist function restarts when starter signal is OFF.
- When ignition switch is operated OFF to ACC while operation conditions are satisfied, driver seat control unit receives ACC signal from BCM via CAN communication. Driver seat control unit operates sliding motor when driver seat control unit detects that ignition switch is changed to ACC.
- Driver seat control unit receives sliding sensor position signal from sliding sensor. Driver seat control unit stops the operation of sliding motor when driver seat control unit detects that driver seat is returned to the previous driving position from the exiting position.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-51, "Description".

Operation Condition

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

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

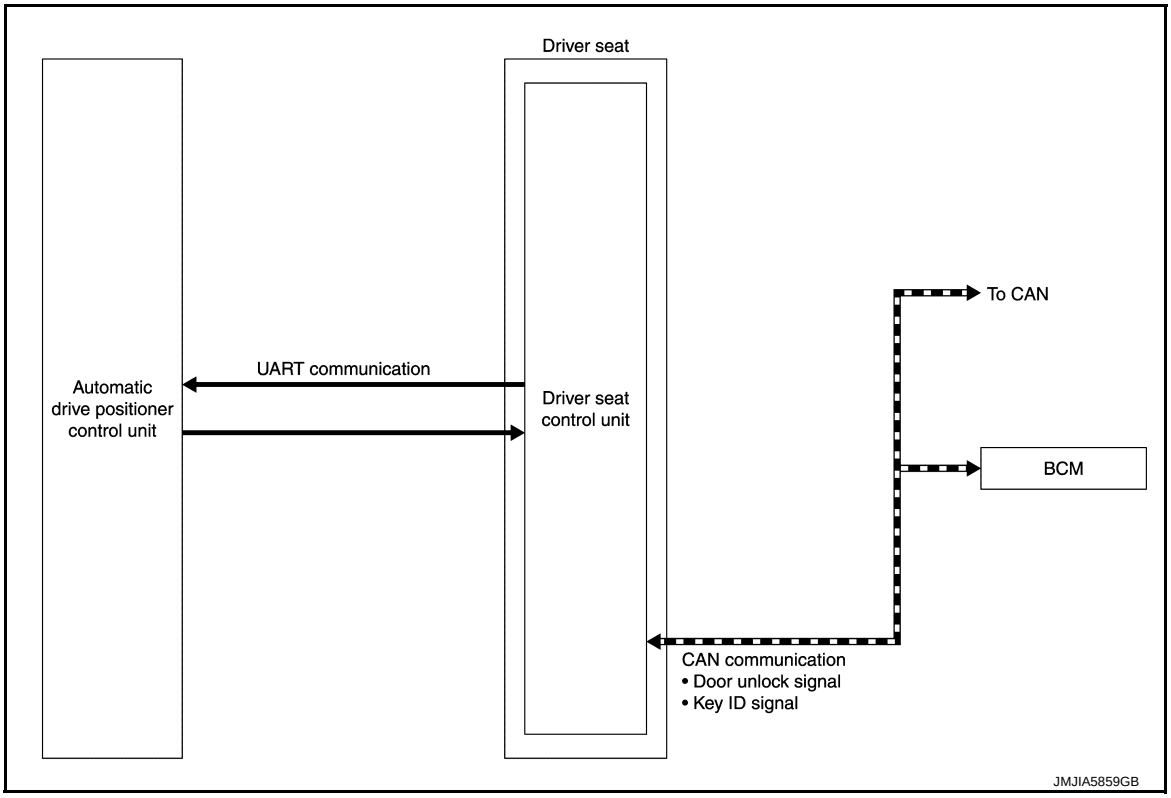
Item	Request status
Vehicle speed	0 km/h (0 MPH)
Starter	OFF
Transmission	CVT
CONSULT	Not connected

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000011322419

SYSTEM DIAGRAM



DESCRIPTION

- 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 function.
- 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.
- Driver seat control unit receives door unlock signal and key ID signal from BCM when driver side door is unlocked using Intelligent Key or driver side door request switch.
- Driver seat control unit automatically adjusts driver seat and door mirror to the driving position according to key ID. Driver seat performs turnout position and sets to standby status.
- In standby status, when ignition switch is operated from OFF to ACC, return operation sets driver seat to the 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.
- Further information for Intelligent Key interlock function. Refer to ADP-50, "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 • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
CVT shift selector	P position

Fail-safe

INFOID:0000000011322420

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-52, "DTC Logic"
	CONTROL UNIT (CAN)	U1010	ADP-53, "DTC Logic"
	EEPROM	B2130	ADP-57, "DTC Logic"
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-56, "DTC Logic"
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-54, "DTC Logic"
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-55, "DTC Logic"

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function

INFOID:0000000011322421

The automatic drive positioner system can be checked and diagnosed for component operation using CONSULT.

APPLICATION ITEMS

Diagnostic mode	Description
Ecu Identification	Displays part numbers of driver seat control unit.
Self Diagnostic Result	Performs self-diagnosis for the auto drive positioner system and displays the results.
Data Monitor	Displays input signals transmitted from various switches and sensors to driver seat control unit in real time.
Active Test	Drives each output unit.
Work support	Changes the setting for each system function.

SELF-DIAGNOSIS RESULTS

Refer to ADP-30, "DTC Index".

DATA MONITOR

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

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
STARTER SW	“ON/OFF”	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SET SW	“ON/OFF”	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW 1	“ON/OFF”	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	“ON/OFF”	×	×	ON/OFF status judged from the seat memory switch 2 signal.
DETENT SW	“ON/OFF”	×	×	The CVT shift selector position “OFF (P position) / ON (other than P position)” judged from the detention switch signal.
STEERING STATUS	“LOCK/UNLOCK”	×	×	**NOTE:** This item is indicated, but not monitored.
SLIDE SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW–RR	“ON/OFF”	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW–RR	“ON/OFF”	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch front (up) signal.
LIFT FR SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the mirror switch (up) signal.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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 mirror switch (right) signal.
MIR CON SW–LH	“ON/OFF”	×	×	ON/OFF status judged from the mirror switch (left) 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.
VEHICLE SPEED	—	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
P RANG SW CAN	“ON/OFF”	×	×	ON/OFF status judged from the P range switch signal.
R RANGE (CAN)	“ON/OFF”	×	×	ON/OFF status judged from the R range switch signal.
DOOR SW–FL	“ON/OFF”	×	×	ON/OFF status judged from the front door switch (driver side) signal.
DOOR SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the door switch (front passenger side) signal.
IGN ON SW	“ON/OFF”	×	×	ON/OFF status judged from the ignition switch signal.
ACC ON SW	“ON/OFF”	×	×	ON/OFF status judged from the ACC switch signal.
KEY ON SW	“ON/OFF”	×	×	ON/OFF status judged from the key on switch signal.
KEYLESS ID	—	×	×	Key ID status judged from the key ID signal.
KYLS DR UNLK	“ON/OFF”	×	×	ON/OFF status judged from the driver side door unlock actuator output switch signal.
VHCL SPEED (ABS)	“ON/OFF”	×	×	ON/OFF status judged from vehicle speed signal.
HANDLE	“RHD/LHD”	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	“AT or CVT/MT”	×	×	AT or CVT/MT status judged from transmission.
SLIDE PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U–D	“V”	–	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R–L	“V”	–	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U–D	“V”	–	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R–L	“V”	–	×	Voltage input from door mirror sensor (driver side) left/right is displayed.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

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

WORK SUPPORT

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

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000011322422

ECU	Reference
BCM	BCS-40, "Reference Value"
	BCS-62, "Fail-safe"
	BCS-62, "DTC Inspection Priority Chart"
	BCS-63, "DTC Index"

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000011322423

VALUES ON THE DIAGNOSIS TOOL

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

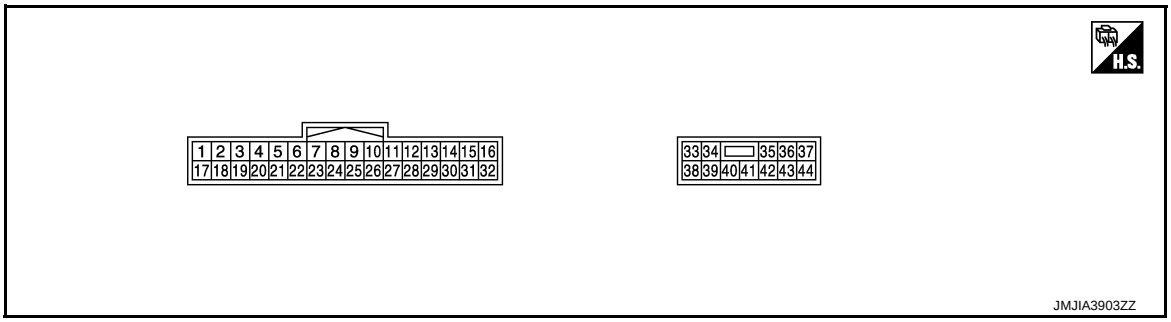
Monitor Item	Condition		Value/Status
SET SW	Set switch	Push	ON
		Release	OFF
MEMORY SW1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
		Release	OFF
SLIDE SW–FR	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW–RR	Sliding switch (backward)	Operate	ON
		Release	OFF
RECLN SW–FR	Reclining switch (forward)	Operate	ON
		Release	OFF
RECLN SW–RR	Reclining switch (backward)	Operate	ON
		Release	OFF
LIFT FR SW–UP	Lifting switch front (up)	Operate	ON
		Release	OFF
LIFT FR SW–DN	Lifting switch front (down)	Operate	ON
		Release	OFF
LIFT RR SW–UP	Lifting switch rear (up)	Operate	ON
		Release	OFF
LIFT RR SW–DN	Lifting switch rear (down)	Operate	ON
		Release	OFF
MIR CON SW–UP	Mirror switch	Up	ON
		Other than the above	OFF
MIR CON SW–DN	Mirror switch	Down	ON
		Other than the above	OFF
MIR CON SW–RH	Mirror switch	Right	ON
		Other than the above	OFF
MIR CON SW–LH	Mirror switch	Left	ON
		Other than the above	OFF
MIR CHNG SW–R	Changeover switch	Right	ON
		Other than the above	OFF
MIR CHNG SW–L	Changeover switch	Left	ON
		Other than the above	OFF
DETENT SW	CVT shift selector	P position	OFF
		Other than the above	ON

Monitor Item	Condition		Value/Status
STARTER SW	Ignition position	Cranking	ON
		Other than the above	OFF
SLIDE PULSE	Seat sliding	Forward	The numeral value decreases *
		Backward	The numeral value increases*
		Other than the above	No change to numeral value*
RECLN PULSE	Seat reclining	Forward	The numeral value decreases*
		Backward	The numeral value increases *
		Other than the above	No change to numeral value*
LIFT FR PULSE	Seat lifter (front)	Up	The numeral value decreases *
		Down	The numeral value increases *
		Other than the above	No change to numeral value*
LIFT RR PULSE	Seat lifter (rear)	Up	The numeral value decreases *
		Down	The numeral value increases *
		Other than the above	No change to numeral value*
MIR/SEN RH U–D	Door mirror (passenger side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R–L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U–D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R–L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
STEERING STATUS	Steering lock unit	Unlock	**NOTE:** This item is indicated, but not monitored.
VEHICLE SPEED	The condition of vehicle speed is displayed		km/h
P RANG SW CAN	CVT shift selector	P position	ON
		Other than the above	OFF
R RANGE (CAN)	CVT shift selector	R position	ON
		Other than the above	OFF
DOOR SW-FL	Driver door	Open	ON
		Close	OFF
DOOR SW-FR	Passenger door	Open	ON
		Close	OFF
IGN ON SW	Ignition switch	ON position	ON
		Other than the above	OFF
ACC ON SW	Ignition switch	ACC or ON position	ON
		Other than the above	OFF
KEYLESS ID	UNLOCK button of Intelligent Key is pressed		1, 2, 3, 4 or 5
KYLS DR UNLK	Intelligent Key or driver side door request switch	ON	ON
		OFF	OFF
VHCL SPEED (ABS)	Can signal from ABS	Received	ON
		Not received	OFF
HANDLE	The BCM for handle position is displayed		LHD
			RHD

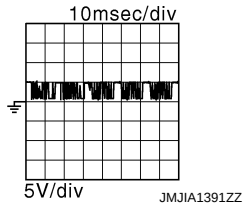
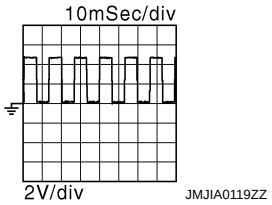
Monitor Item	Condition	Value/Status
TRANSMISSION	Transmission type is displayed	AT or CVT
		MT

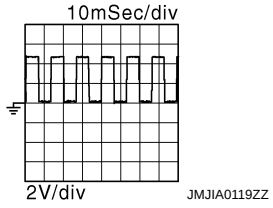
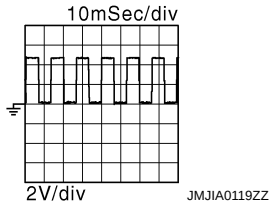
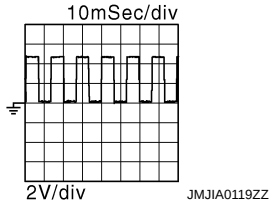
*: The value at the position attained when the battery is connected is regarded as 32768.

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ output			
1 (R/Y)	—	CAN-H	—	—		—
2 (R)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		
4 (R/L)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Other than the above	0 – 1 or 4 – 6
6 (R/W)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0 – 1
					Other than the above	4 – 6
7 (R/G)	Ground	Memory indicator 2 signal	Output	Memory indicator 2	Illuminate	0 – 1
					Other than the above	9 – 16
8 (SB)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0 – 1
					Other than the above	9 – 16

Terminal No. (Wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ output			
9 (L)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0 – 1
					Other than the above	9 – 16
10 (L/B)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0 – 1
					Other than the above	9 – 16
11 (L/W)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0 – 1
					Other than the above	9 – 16
12 (L/R)	Ground	Sensor power supply	Output	—		9 – 16
17 (V)	—	CAN-L	—	—		—
18 (B/W)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Other than the above	0 – 1 or 4 – 6
19 (B/R)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	
					Other than the above	0 – 1 or 4 – 6
20 (B/L)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Other than the above	0 – 1 or 4 – 6
22 (W/L)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0 – 1
					Other than the above	4 – 6
23 (W/R)	Ground	Memory indicator 1 signal	Output	Memory indicator 1	Illuminate	0 – 1
					Other than the above	9 – 16

Terminal No. (Wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ output			
24 (V/W)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0 – 1
					Other than the above	9 – 16
25 (Y/B)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0 – 1
					Other than the above	9 – 16
26 (Y/R)	Ground	Lifting switch (front) up signal	Input	Lifting switch (front)	Operate (up)	0 – 1
					Other than the above	9 – 16
27 (Y/L)	Ground	Lifting switch (rear) up signal	Input	Lifting switch (rear)	Operate (up)	0 – 1
					Other than the above	9 – 16
28 (G)	Ground	Set switch signal	Input	Set switch	Press	0 – 1
					Other than the above	4 – 6
33 (R)	Ground	Battery power supply	Input	—		9 – 16
34 (B)	Ground	Sliding motor backward output signal	Output	Seat sliding	Operate (backward)	9 – 16
					Other than the above	0 – 1
35 (G)	Ground	Reclining motor forward output signal	Output	Seat reclining	Operate (forward)	9 – 16
					Other than the above	0 – 1
36 (L)	Ground	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	9 – 16
					Other than the above	0 – 1
38 (GR)	Ground	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	9 – 16
					Other than the above	0 – 1
39 (Y)	Ground	Reclining motor backward output signal	Output	Seat reclining	Operate (backward)	9 – 16
					Other than the above	0 – 1
40 (W)	Ground	Lifting motor (front) up output signal	Output	Seat lifting (front)	Operate (up)	9 – 16
					Other than the above	0 – 1
41 (V)	Ground	Lifting motor (rear) up output signal	Output	Seat lifting (rear)	Operate (up)	9 – 16
					Other than the above	0 – 1

Terminal No. (Wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ output			
42 (P/B)	Ground	Lifting motor (rear) down output signal	Output	Seat lifting (rear)	Operate (down)	9 – 16
					Other than the above	0 – 1
43 (LG)	Ground	Ground	—	—		0 – 1

Fail-safe

INFOID:0000000011322424

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-52, "DTC Logic"
	CONTROL UNIT (CAN)	U1010	ADP-53, "DTC Logic"
	EEPROM	B2130	ADP-57, "DTC Logic"
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-56, "DTC Logic"
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-54, "DTC Logic"
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-55, "DTC Logic"

DTC Index

INFOID:0000000011322425

CONSULT display	Timing*		Item	Reference page
	Current mal-function	Previous mal-function		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-52, "DTC Logic"
CONTROL UNIT (CAN) [U1010]	0	1-39	Control unit	ADP-53, "DTC Logic"
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-54, "DTC Logic"
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-55, "DTC Logic"
UART COMM [B2128]	0	1-39	UART communication	ADP-56, "DTC Logic"
EEPROM [B2130]	0	1-39	EEPROM	ADP-57, "DTC Logic"

*:

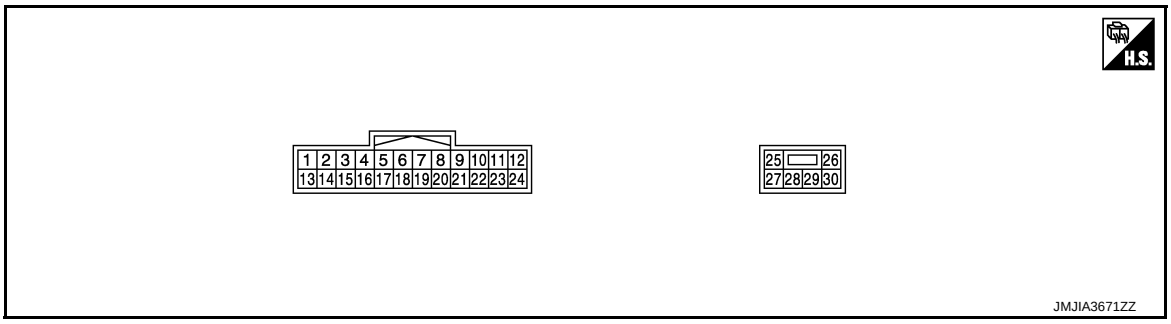
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

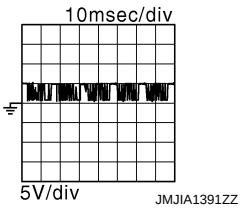
Reference Value

INFOID:0000000011322426

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			
2 (Y)	Ground	Changeover switch RH signal	Input	Changeover switch position	RH	0 – 1
					Other than the above	4 – 6
3 (V)	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0 – 1
					Other than the above	4 – 6
4 (LG)	Ground	Mirror switch left signal	Input	Mirror switch	Operated (left)	0 – 1
					Other than the above	4 – 6
5 (R)	Ground	Door mirror sensor (passenger side) up/down signal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)
6 (V)	Ground	Door mirror sensor (driver side) up/down signal	Input	Door mirror LH position		Change between 3.4 (close to peak) 0.6 (close to valley)
8 (GR)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		
10 (BR)	Ground	Door mirror motor (passenger side) up output signal	Output	Door mirror RH	Operate (up)	9 – 16
					Other than the above	0 – 1
11 (W)	Ground	Door mirror motor (passenger side) left output signal	Output	Door mirror RH	Operate (left)	9 – 16
					Other than the above	0 – 1

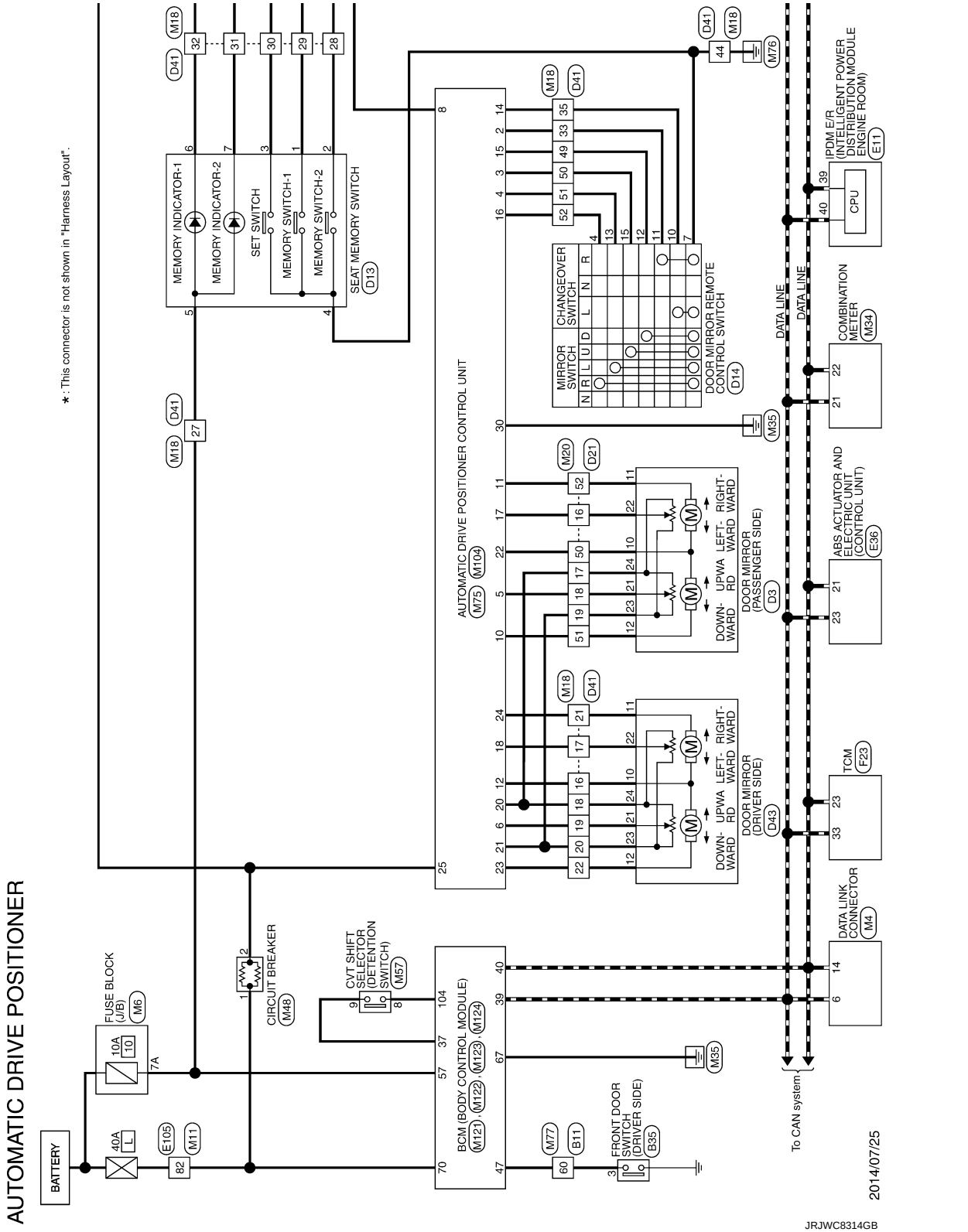
Terminal No. (wire color)		Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			
12 (Y)	Ground	Door mirror motor (driver side) down/right output signal	Output	Door mirror (LH)	Operate (down/right)	9 – 16
					Other than the above	0 – 1
14 (GR)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0 – 1
					Other than the above	4 – 6
15 (O)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0 – 1
					Other than the above	4 – 6
16 (W)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0 – 1
					Other than the above	4 – 6
17 (BR)	Ground	Door mirror sensor (passenger side) left/right signal	Input	Door mirror RH position		Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (SB)	Ground	Door mirror sensor (driver side) left/right signal	Input	Door mirror LH position		Change between 0.6 (close to left edge) 3.4 (close to right edge)
20 (P)	Ground	Sensor ground	—	—		0 – 1
21 (Y)	Ground	Door mirror motor sensor power supply	Input	—		4 – 6
22 (V)	Ground	Door mirror motor (passenger side) down/right output signal	Output	Door mirror (RH)	Operate (down/right)	9 – 16
					Other than the above	0 – 1
23 (G)	Ground	Door mirror motor (driver side) up output signal	Output	Door mirror (LH)	Operate (up)	9 – 16
					Other than the above	0 – 1
24 (W)	Ground	Door mirror motor (driver side) left output signal	Output	Door mirror (LH)	Operate (left)	9 – 16
					Other than the above	0 – 1
25 (R)	Ground	Battery power supply	Input	—		9 – 16
30 (B/W)	Ground	Ground	—	—		0 – 1

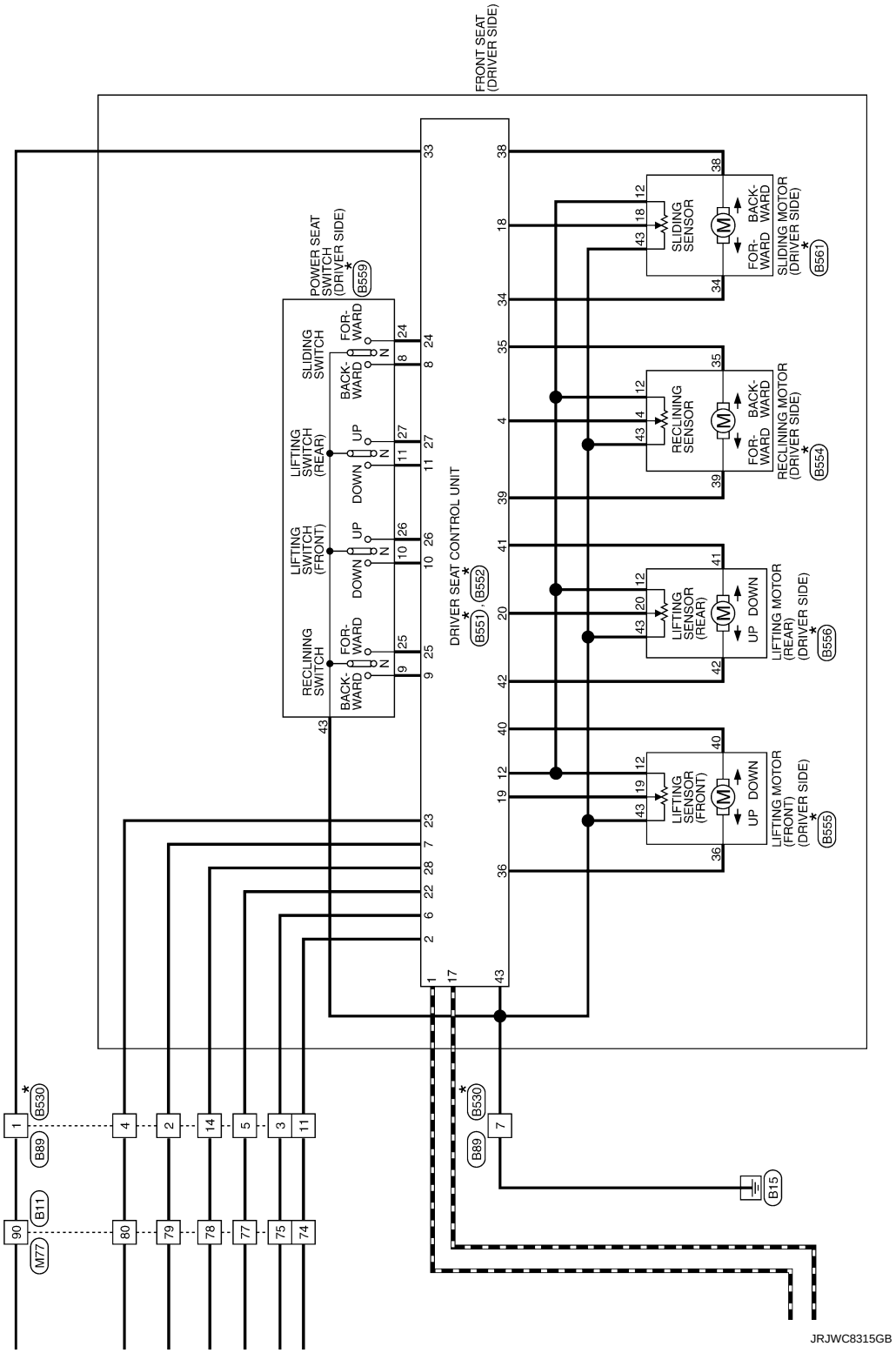
WIRING DIAGRAM

AUTOMATIC DRIVE POSITIONER SYSTEM

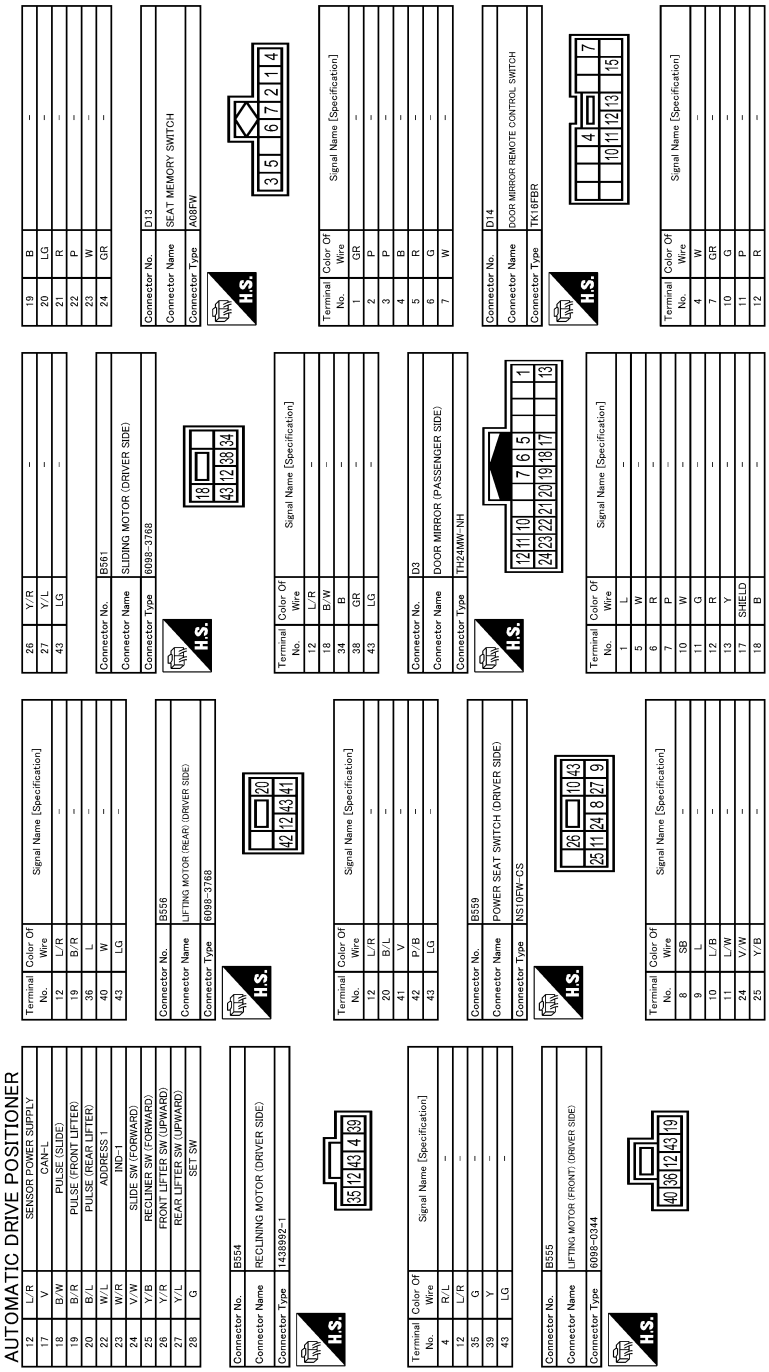
Wiring Diagram

INFOID:0000000011322427




FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT
B551
B552
POWER SEAT SWITCH (DRIVER SIDE)
B559
RECLINING SWITCH
LIFTING SWITCH (FRONT)
LIFTING SWITCH (REAR)
SLIDING SWITCH
FOR-WARD
BACK-WARD
UP
DOWN
SLIDING SENSOR
SLIDING MOTOR (DRIVER SIDE)
B561
RECLINING SENSOR
RECLINING MOTOR (DRIVER SIDE)
B554
LIFTING SENSOR (REAR)
LIFTING MOTOR (REAR) (DRIVER SIDE)
B556
LIFTING SENSOR (FRONT)
LIFTING MOTOR (FRONT) (DRIVER SIDE)
B555
B530
B89
B15
B11
M77
JRJWC8315GB

JRJWC8316GB



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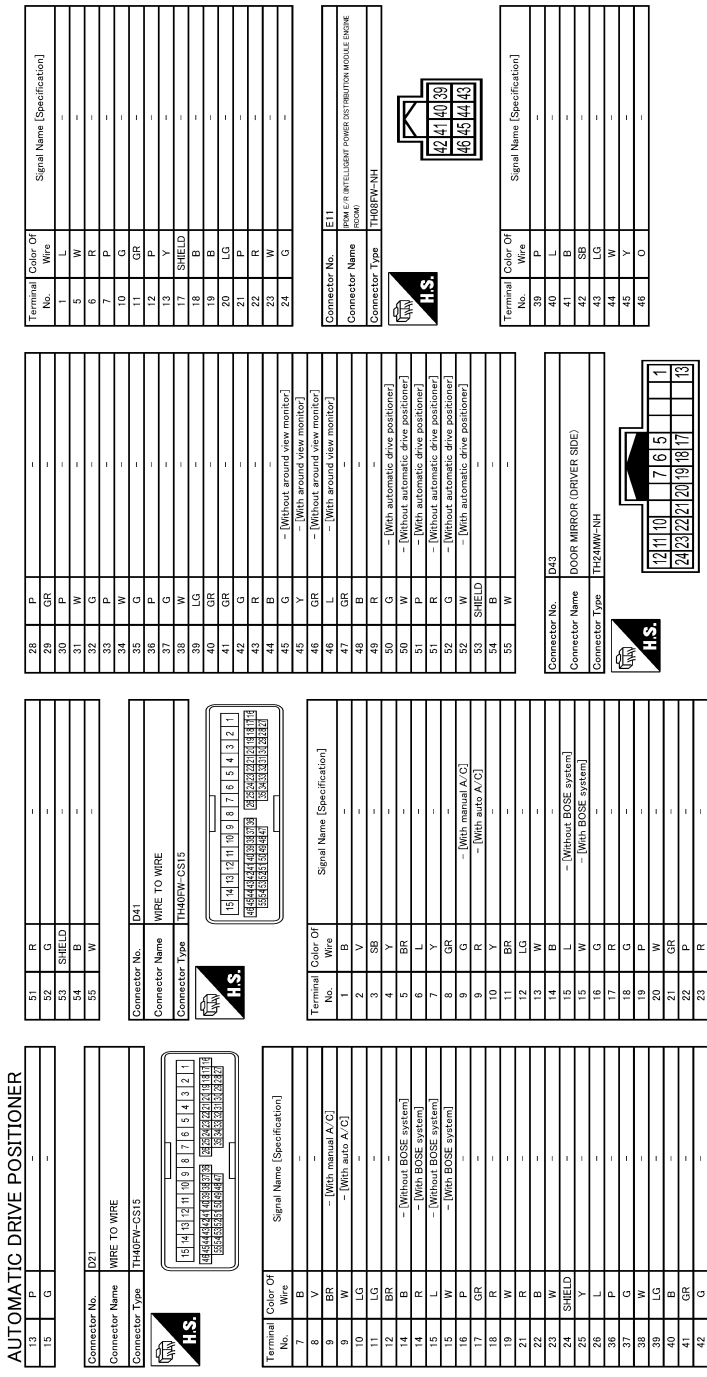

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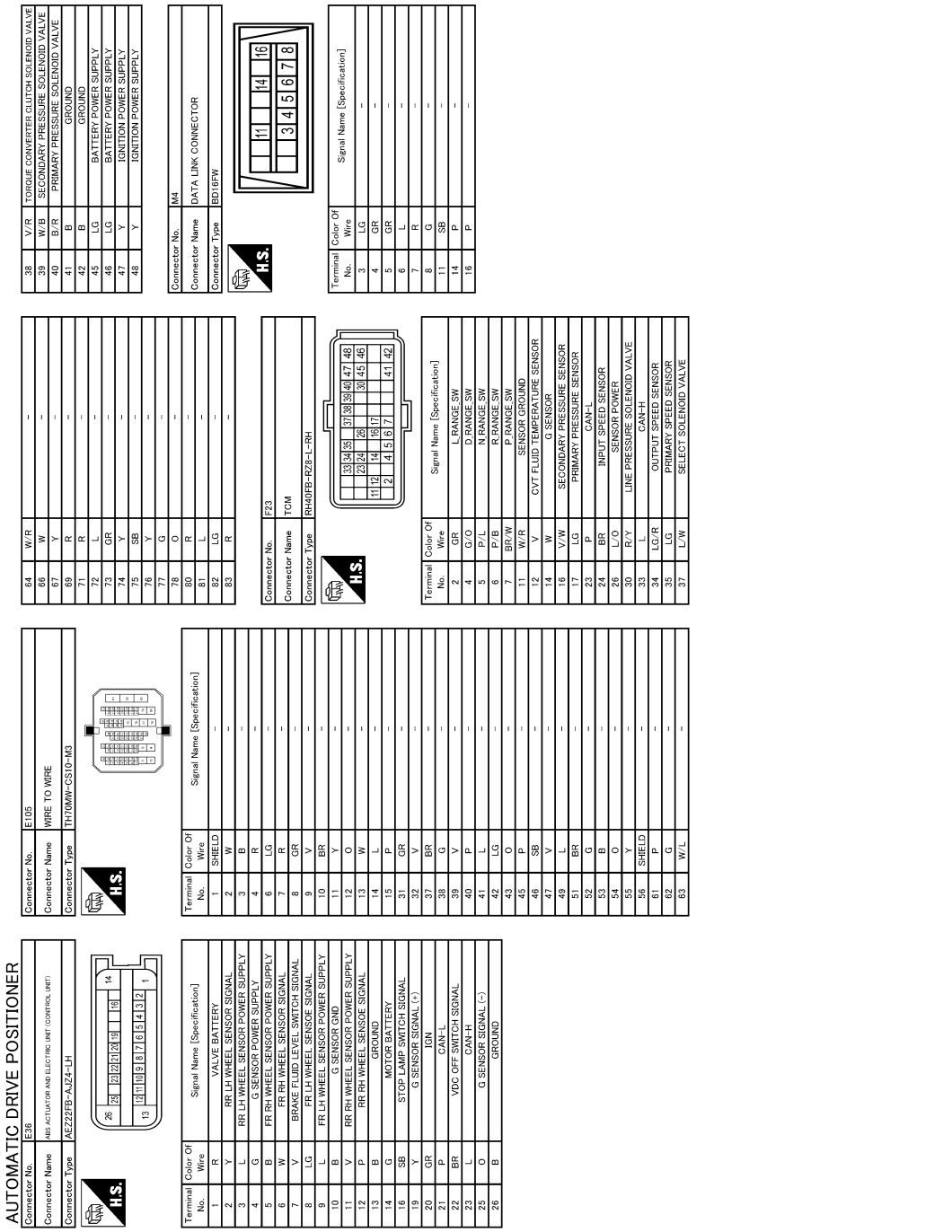
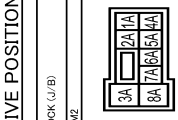


JRJWC8319GB

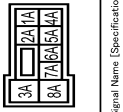
AUTOMATIC DRIVE POSITIONER

Connector No.	M6
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	–
2A	G	–
3A	L	–
4A	GR	–
5A	V	–
6A	R	–
7A	GR	–
8A	L	–

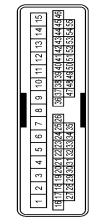
Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH70FW-CS10-M3



Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	–
2	W	–
3	B	–
4	R	–
6	G	–
7	R	–
8	G	–
9	B	–
10	R	–
11	W	–
12	L	– [Without automatic drive positioner]
12	LG	– [With automatic drive positioner]

13	G	– [Without automatic drive positioner]
13	Y	– [With automatic drive positioner]
14	L	–
15	P	–
31	R	–
32	LG	–
37	BR	– [With automatic drive positioner]
37	W	– [Without automatic drive positioner]
38	R	–
39	BE	– [Without automatic drive positioner]
39	Y	– [With automatic drive positioner]
40	P	–
41	L	–
42	G	–
43	W	–
45	P	–
46	V	–
47	R	–
49	G	–
51	G	–
52	W	–
53	B	–
54	LG	–
55	L	–
56	SHIELD	–
61	R	–
62	W	–
63	B	–
64	W	–
66	W	–
67	BR	–
69	P	–
71	R	–
72	L	–
73	LG	–
74	Y	–
75	Y	–
76	V	–
77	P	–
78	BR	–
80	Y	–
81	W	–
82	L	–
83	R	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



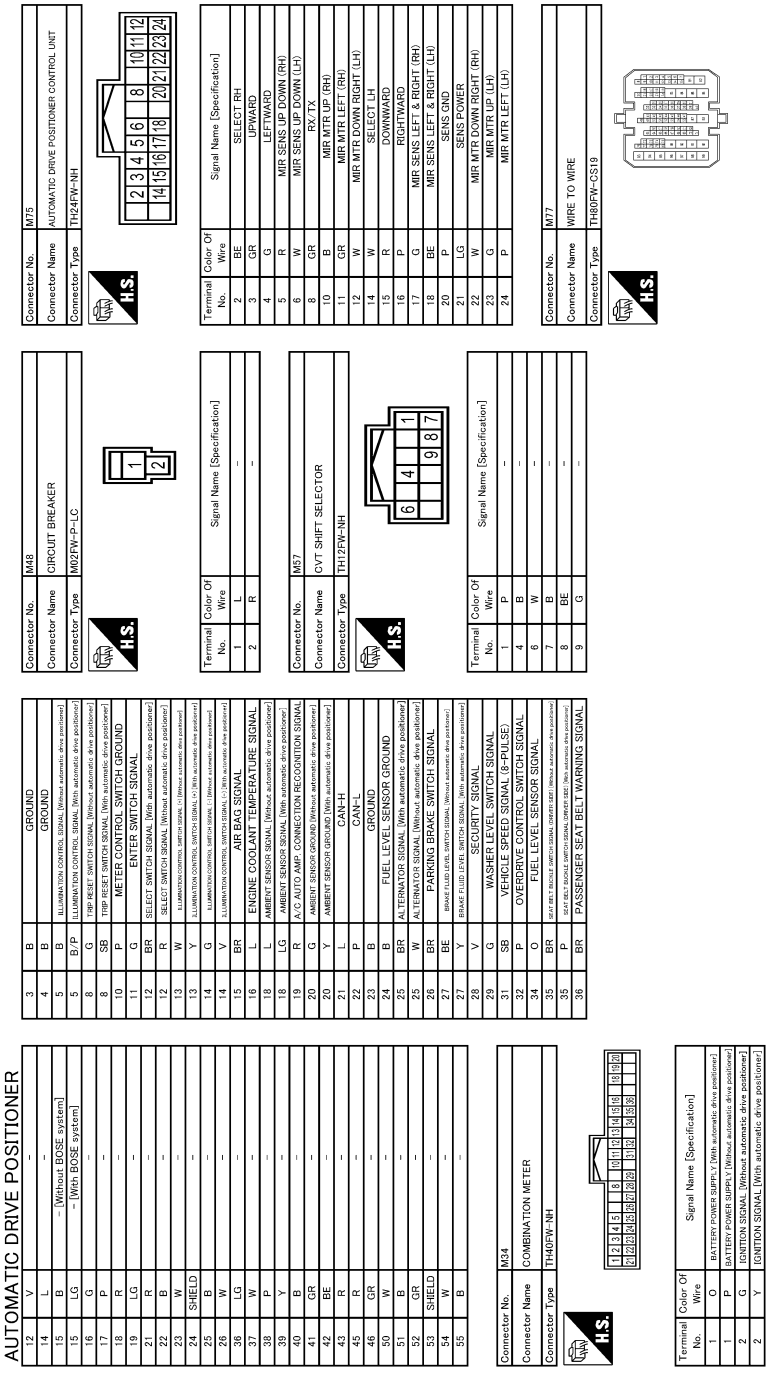
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	–
2	R	–
3	W	–
4	Y	–
5	SB	–
6	LG	–
7	V	–
8	L	–
9	GR	–
10	Y	–
11	V	–
12	G	–
13	G	–
14	B	– [Without BOSE system]
14	R	– [With BOSE system]
15	W	– [With BOSE system]
16	Y	– [Without BOSE system]
17	BE	–
18	P	–
19	W	–
20	LG	–
21	P	–
22	G	–
23	R	–
24	B	–
25	W	–
26	SHIELD	–
27	Y	–
28	G	–
29	W	–
30	R	–
31	W	–
32	G	–
33	BE	–
34	P	–

35	W	–
36	LG	–
37	W	–
38	P	–
39	V	–
40	R	–
41	B	–
42	W	–
43	G	–
44	B	–
45	B	– [With around view monitor]
45	GR	– [Without around view monitor]
46	R	– [Without around view monitor]
46	W	– [With around view monitor]
47	GR	–
48	GR	–
49	P	– [Without automatic drive positioner]
49	R	– [With automatic drive positioner]
50	GR	– [With automatic drive positioner]
50	W	– [Without automatic drive positioner]
51	B	– [Without automatic drive positioner]
51	G	– [With automatic drive positioner]
52	GR	– [Without automatic drive positioner]
52	P	– [With automatic drive positioner]
53	SHIELD	–
54	W	–
55	B	–

Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

Terminal No.	Color Of Wire	Signal Name [Specification]
7	B	–
8	L	– [With manual A/C]
8	Y	– [With auto A/C]
9	GR	– [With auto A/C]
9	LG	– [With manual A/C]
10	V	–
11	SB	–

JRJWC8320GB



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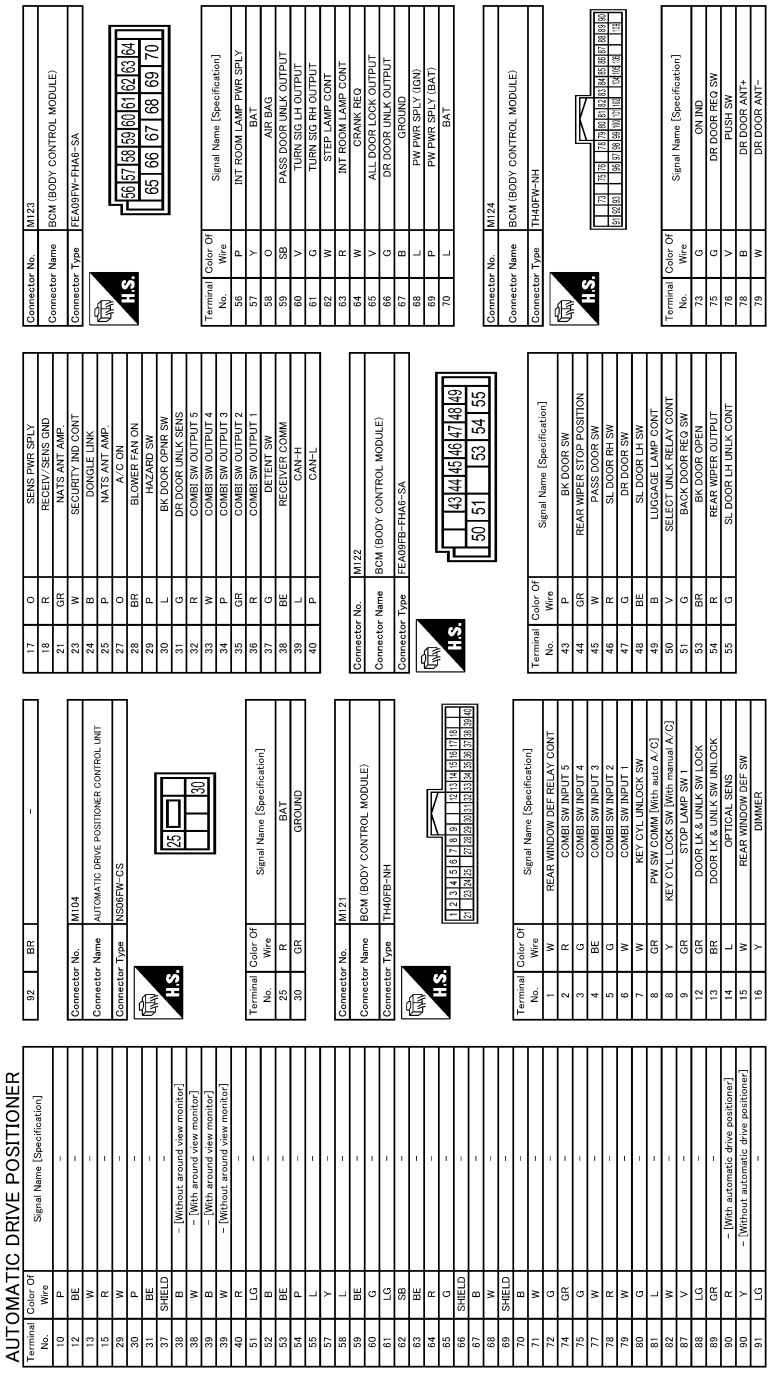

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AUTOMATIC DRIVE POSITIONER

80	GR	PASS DOOR ANT–
81	BE	PASS DOOR ANT–
82	G	REAR BMPR ANT+
83	R	REAR BMPR ANT–
84	GR	ROOM ANT1+
85	B	ROOM ANT1–
86	W	ROOM ANT2+
87	BE	ROOM ANT2–
88	GR	LAGGAGE ROOM ANT+
89	B	LAGGAGE ROOM ANT–
90	P	PUSH–BTN IGN SW ILL PWR SPLY
91	W	LOCK IND
92	B	PUSH–BTN IGN SW ILL GND
93	R	I–KEY WARN BUZZER
96	BE	ACC RELAY CONT OUTPUT
97	W	STARTER RELAY CONT
98	P	IGN RELAY (IPDM E/R) CONT
99	G	IGN RELAY (F/B) CONT OUTPUT
100	R	PASS DOOR REQ SW
101	R	IGN PWR SPLY 2
102	P	P/N POSITION
104	L	CVT SHIFT SELECT PWR SPLY
105	R	STOP LAMP SW 2
106	O	BLWR RELAY CONT OUTPUT
109	R	ACC IND

JRJWC8323GB

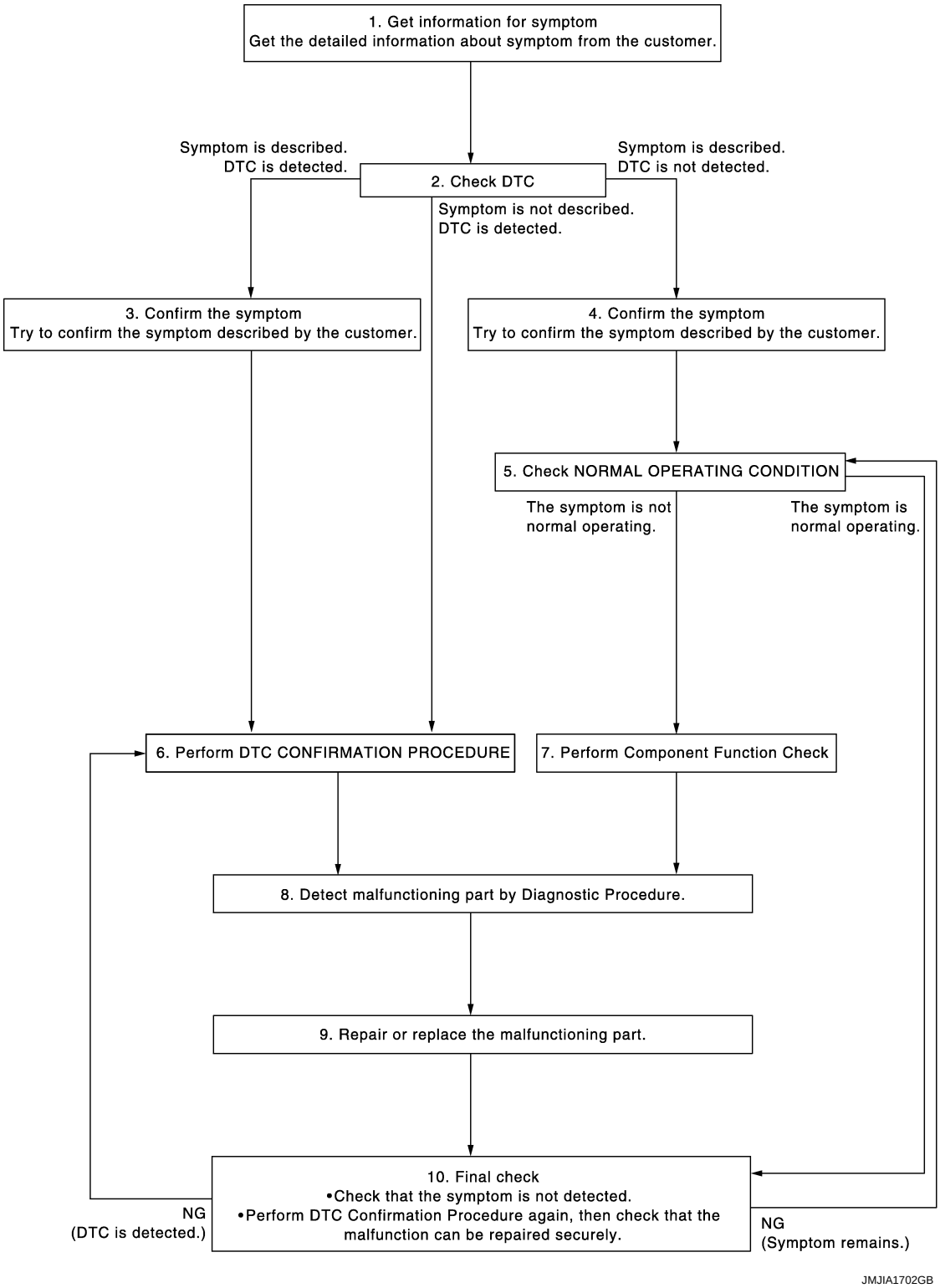
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011322428

OVERALL SEQUENCE



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DETAILED FLOW

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5.CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-110, "Description".

Is the incident normal operation?

YES >> INSPECTION END
NO >> GO TO 7.

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.
NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

7.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

>> GO TO 9.

9.REPARE OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the malfunctioning part.

>> GO TO 10.

10.FINAL CHECK

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

Are all malfunctions corrected?

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000011322429

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

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

*: Default value is 40 mm.

NOTE:

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

Work Procedure

INFOID:0000000011322430

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-48, "Work Procedure".

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to ADP-49, "Work Procedure".

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to ADP-50, "Work Procedure".

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to ADP-51, "Work Procedure".

>> END

ADDITIONAL SERVICE WHEN REMOVING DRIVER SEAT CONTROL UNIT

Description

INFOID:0000000011322431

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

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

*: Default value is 40 mm.

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

Work Procedure

INFOID:0000000011322432

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-48, "Work Procedure".

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to ADP-49, "Work Procedure".

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to ADP-50, "Work Procedure".

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to ADP-51, "Work Procedure".

>> END

SYSTEM INITIALIZATION

Description

INFOID:0000000011322433

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.

Work Procedure

INFOID:0000000011322434

1.STEP 1

There are two initialization methods.

Which method do you use?

With door switch>>GO TO 2.
With vehicle speed>>GO TO 3.

2. STEP 2-A (WITH DOOR SWITCH)

1. Turn ignition switch from ACC to OFF position.
2. Front door switch (driver side) is ON (open) → OFF (close) → ON (open).

>> END

3. STEP 2-B (WITH VEHICLE SPEED)

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

>> END

MEMORY STORING

Description

INFOID:0000000011322435

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.

Work Procedure

INFOID:0000000011322436

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

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

1.REGISTRATION METHOD

1. Adjust driver seat and outside mirror position manually.
2. Push set switch.
   NOTE:
   - Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
   - Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second.
3. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.
   NOTE:
   - To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.
   - To modify driver seat positions, memory indicator will be turned OFF for 0.5 second, then turned ON for 5 seconds.
4. Confirm the operation of each part with memory operation.

>> END

INTELLIGENT KEY INTERLOCK STORING

Description

INFOID:0000000011322437

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.

Work Procedure

INFOID:0000000011322438

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

>> END

SYSTEM SETTING

Description

INFOID:0000000011322439

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

SETTING CHANGE

×: Applicable

Item	Content	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

Work Procedure

INFOID:0000000011322440

1.STEP 1

There are two ways of setting method.

Which method do you choose?

With CONSULT>>GO TO 2.
With set switch>>GO TO 3.

2.STEP 2-A (WITH CONSULT)

1. Select “Work support”.
2. Select “EXIT SEAT SLIDE SETTING” then touch display to change between ON and OFF.

- EXIT SEAT SLIDE SETTING: Entry/exit assist (seat)

3. Select “SEAT SLIDE VOLUME SET” and touch either of “40 mm”, “80 mm”, or “150 mm”.
4. Then touch “OK”.

>> GO TO 4.

3.STEP 2-B (WITH SET SWITCH)

1. Turn ignition switch OFF.
2. Push set switch and hold for more than 10 seconds.

>> GO TO 4.

4.CONFIRM THE OPERATION

Check the entry/exit assist function setting is changed.

Is the setting changed?

YES >> END
NO >> GO TO 1.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000011322441

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

DTC Logic

INFOID:0000000011322442

DTC DETECTION LOGIC

DTC No.	CONSULT display description	DTC detecting condition	Possible cause
U1000	CAN COMM CIRCUIT	• Driver seat control unit cannot communicate to other control units. • When driver seat control unit cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

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 >> Refer to ADP-52, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011322443

Refer to LAN-17, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

INFOID:0000000011322444

Refer to ADP-48, "Description".

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000011322445

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:0000000011322446

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

B2112 SLIDING MOTOR

DTC Logic

INFOID:0000000011322447

DTC DETECTION LOGIC

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

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-54, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011322448

1.CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Sliding motor			
Connector	Terminals		
B561	34	Ground	0
	38		

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.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.

(+)		(-)	Voltage (V)
Driver seat control unit			
Connector	Terminals		
B551	34	Ground	0 – 1
	38		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

DTC Logic

INFOID:0000000011322449

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 output terminal for 0.1 second or more even if the reclining switch is not input.	• Driver seat control unit • Reclining motor harness is shorted

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-55, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011322450

1.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Reclining motor			
Connector	Terminals		
B554	35	Ground	0
	39		

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2.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.

(+)		(-)	Voltage (V)
Driver seat control unit			
Connector	Terminals		
B551	35	Ground	0 – 1
	39		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

3.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2128 UART COMMUNICATION LINE

Description

INFOID:0000000011322451

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

DTC Logic

INFOID:0000000011322452

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

YES >> Refer to ADP-56, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011322453

1.CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit		Automatic drive positioner control unit		Continuity
Connector	Terminal	Connector	Terminal	
B552	2	M75	8	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	2		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Repair or replace harness or connector.

B2130 EEPROM

DTC Logic

INFOID:0000000011322454

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-57, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000011322455

1.REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

>> INSPECTION END

POWER SUPPLY AND GROUND CIRCUIT
DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000011322456

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

1.CHECK FUSIBLE LINK

Check that the following fusible link is not fusing.

Signal name	Fusible link No.
Battery power supply	L (40 A)

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing affected circuit.

2.CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY

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

(+)		(-)	Voltage (V)
Driver seat control unit			
Connector	Terminals		
B551	33	Ground	9 – 16

Is the inspection result normal?

YES >> GO TO 3.
NO-1 >> Repair or replace harness between driver seat control unit and fusible link L (40 A).
NO-2 >> Check circuit breaker and replace it if necessary.

3.CHECK DRIVER SEAT CONTROL UNIT GROUND CIRCUIT

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B551	43		Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000011322457

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

1.CHECK FUSIBLE LINK

Check that the following fusible link is not fusing.

Signal name	Fusible link No.
Battery power supply	L (40 A)

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit.

2.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY

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

(+)		(-)	Voltage (V)
Automatic drive positioner control unit			
Connector	Terminals		
M104	25	Ground	9 – 16

Is the inspection result normal?

YES >> GO TO 3.
NO-1 >> Repair or replace harness between driver seat control unit and fusible link L (40 A).
NO-2 >> Check circuit breaker and replace it if necessary.

3.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT GROUND CIRCUIT

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M104	30		Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace harness.

SLIDING SWITCH

Component Function Check

INFOID:0000000011322458

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 indication normal?

YES >> INSPECTION END
NO >> Refer to ADP-60, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322459

1.CHECK SLIDING SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B559	8	Ground	9 – 16
	24		

Is the inspection result normal?

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

2.CHECK SLIDING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B552	8	B559	8	Existed
	24		24	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	8		Not existed
	24		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to ADP-61, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

Component Inspection

INFOID:0000000011322460

1.CHECK SLIDING SWITCH

1. Turn ignition switch OFF.
2. Disconnect power seat switch (sliding switch) connector.
3. Check continuity between power seat switch (sliding switch) terminals under the following conditions.

Power seat switch (Sliding switch)		Condition		Continuity
Terminal				
8	43	Sliding switch (backward)	Operate	Existed
			Release	Not existed
24		Sliding switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

RECLINING SWITCH

Component Function Check

INFOID:0000000011322461

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

Is the indication normal?

YES >> INSPECTION END
NO >> Refer to ADP-62, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322462

1.CHECK RECLINING SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B559	9	Ground	9 – 16
	25		

Is the inspection result normal?

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

2.CHECK RECLINING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B552	9	B559	9	Existed
	25		25	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	9		Not existed
	25		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SWITCH

Refer to ADP-63, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

Component Inspection

INFOID:0000000011322463

1.CHECK RECLINING SWITCH

1. Turn ignition switch OFF.
2. Disconnect power seat switch (reclining switch) connector.
3. Check continuity between power seat switch (reclining switch) terminals under the following conditions.

Power seat switch (Reclining switch)		Condition		Continuity
Terminal				
9	43	Reclining switch (backward)	Operate	Existed
			Release	Not existed
25		Reclining switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

LIFTING SWITCH (FRONT)

Component Function Check

INFOID:0000000011322464

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 (up)	Operate	ON
		Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END
NO >> Refer to ADP-64, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322465

1.CHECK LIFTING SWITCH (FRONT) INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B559	10	Ground	9 – 16
	26		

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B552	10	B559	10	Existed
	26		26	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	10		Not existed
	26		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK LIFTING SWITCH (FRONT)

Refer to ADP-65, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

Component Inspection

INFOID:0000000011322466

1. CHECK LIFTING SWITCH (FRONT)

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

Power seat switch (lifting switch front)		Condition		Continuity
Terminal				
10	43	Lifting switch front (down)	Operate	Existed
			Release	Not existed
26		Lifting switch front (up)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

LIFTING SWITCH (REAR)

Component Function Check

INFOID:0000000011322467

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 (up)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END
NO >> Refer to ADP-66, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322468

1.CHECK LIFTING SWITCH (REAR) INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B559	11	Ground	9 – 16
	27		

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B552	11	B559	11	Existed
	27		27	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	11		Not existed
	27		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".

NO >> Repair or replace harness or connector.

3. CHECK LIFTING SWITCH (REAR)

Refer to ADP-67, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

Component Inspection

INFOID:0000000011322469

1. CHECK LIFTING SWITCH (REAR)

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

Power seat switch (lifting switch rear)		Condition		Continuity
Terminal				
11	43	Lifting switch rear (down)	Operate	Existed
			Release	Not existed
27		Lifting switch rear (up)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-114, "Removal and Installation".

SEAT MEMORY SWITCH

Component Function Check

INFOID:0000000011322470

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 indication normal?

YES >> INSPECTION END
NO >> Refer to ADP-68, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322471

1.CHECK SEAT MEMORY SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Seat memory switch			
Connector	Terminals		
D13	1	Ground	4 – 6
	2		
	3		

Is the inspection result normal?

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

2.CHECK SEAT MEMORY SWITCH CIRCUIT

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B552	6	D13	2	Existed
	22		1	
	28		3	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	6		Not existed
	22		
	28		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK SEAT MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D13	4		Existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.CHECK SEAT MEMORY SWITCH

Refer to ADP-69, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace seat memory switch. Refer to ADP-113, "Removal and Installation".

Component Inspection

INFOID:0000000011322472

1.CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check continuity between seat memory switch terminals under the following conditions.

Seat memory switch		Condition		Continuity
Terminal				
1	4	Memory switch 1	Push	Existed
			Release	Not existed
2		Memory switch 2	Push	Existed
			Release	Not existed
3		Set switch	Push	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace seat memory switch. Refer to ADP-113, "Removal and Installation".

DOOR MIRROR REMOTE CONTROL SWITCH
MIRROR SWITCH

MIRROR SWITCH : Component Function Check

INFOID:0000000011322473

1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Refer to ADP-70, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000011322474

1.CHECK MIRROR SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Door mirror remote control switch			
Connector	Terminal		
D14	4	Ground	4 – 6
	12		
	13		
	15		

Is the inspection result normal?

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

2.CHECK MIRROR SWITCH CIRCUIT

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M75	3	D14	15	Existed
	4		13	
	15		12	
	16		4	

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-112, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK MIRROR SWITCH

Check door mirror remote control switch.
Refer to ADP-71, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace door mirror remote control switch.

MIRROR SWITCH : Component Inspection

INFOID:0000000011322475

1.CHECK MIRROR SWITCH

1. Turn ignition switch OFF.
2. Disconnect door mirror remote control switch connector.
3. Check continuity between door mirror remote control switch terminals under the following conditions.

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror remote control switch.

CHANGEOVER SWITCH

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000011322476

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

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

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000011322477

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Door mirror remote control switch			
Connector	Terminal		
D14	10	Ground	4 – 6
	11		

Is the inspection result normal?

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

2.CHECK CHANGEOVER SWITCH CIRCUIT

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M75	2	D14	11	Existed
	14		10	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	2		Not existed
	14		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-112, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness.

4.CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.
Refer to ADP-73, "CHANGEOVER SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Replace door mirror remote control switch.

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000011322478

1.CHECK CHANGEOVER SWITCH

1. Turn ignition switch OFF.
2. Disconnect door mirror remote control switch connector.
3. Check continuity between door mirror remote control switch terminals under the following conditions.

Door mirror remote control switch		Condition		Continuity
Terminal				
10	7	Changeover switch	LEFT	Existed
			Other than the above	Not existed
11			RIGHT	Existed
			Other than the above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror remote control switch.

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000011322479

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

Power seat switch		Ground	Continuity
Connector	Terminal		
B559	43		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> Repair or replace harness or connector.

SLIDING SENSOR

Component Function Check

INFOID:0000000011322480

1.CHECK FUNCTION

1. Select “SLIDE PULSE” in “Data monitor” mode with CONSULT.
2. Check sliding sensor signal under the following conditions.

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

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

Is the indication normal?

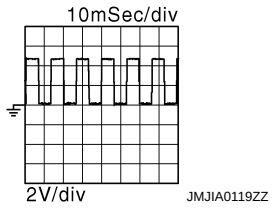
YES >> INSPECTION END
NO >> Refer to ADP-75, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322481

1.CHECK SLIDING SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Signal (V) (Reference value)
Connector	Terminals				
B552	18	Ground	Seat sliding	Operate	
				Other than the above	0 – 1 or 4 – 6

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> GO TO 2.

2.CHECK SLIDING SENSOR CIRCUIT

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B552	18	B561	18	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	18		Not existed

Is the inspection result normal?

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

3.CHECK SLIDING SENSOR POWER SUPPLY

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

(+)		(-)	Voltage (V)
Sliding motor			
Connector	Terminals		
B561	12	Ground	9 – 16

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B552	12	B561	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK SLIDING SENSOR GROUND CIRCUIT

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

Sliding motor		Ground	Continuity
Connector	Terminal		
B561	43		Existed

Is the inspection result normal?

YES >> Replace sliding motor.
NO >> Repair or replace harness or connector.

RECLINING SENSOR

Component Function Check

INFOID:0000000011322482

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 (increase)*
		Operate (backward)	Change (decrease)*
		Release	No change*

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

Is the indication normal?

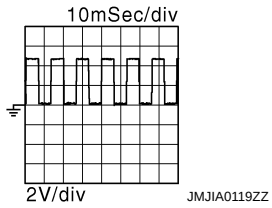
YES >> INSPECTION END
NO >> Refer to ADP-77, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322483

1.CHECK RECLINING SENSOR SIGNAL

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

(+)		(-)	Condition		Signal (V) (Reference value)
Driver seat control unit					
Connector	Terminals				
B552	4	Ground	Seat reclining	Operate	
				Other than the above	0 – 1 or 4 – 6

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> GO TO 2.

2.CHECK RECLINING SENSOR CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B552	4	B554	4	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	4		Not existed

Is the inspection result normal?

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

3.CHECK RECLINING SENSOR POWER SUPPLY

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

(+)		(-)	Voltage (V)
Reclining motor			
Connector	Terminals		
B554	12	Ground	9 – 16

Is the inspection result normal?

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

4.CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B552	12	B554	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK RECLINING SENSOR GROUND CIRCUIT

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

Reclining motor		Ground	Continuity
Connector	Terminal		
B554	43		Existed

Is the inspection result normal?

YES >> Replace reclining motor.
NO >> Repair or replace harness or connector.

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:0000000011322484

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 (up)	Change (increase)*
		Operate (down)	Change (decrease)*
		Release	No change*

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

Is the indication normal?

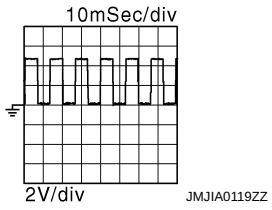
YES >> INSPECTION END
NO >> Refer to ADP-79, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322485

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Signal (V) (Reference value)
Connector	Terminals				
B552	19	Ground	Seat Lifting (front)	Operate	
				Other than the above	0 – 1 or 4 – 6

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> GO TO 2.

2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B552	19	B555	19	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	19		Not existed

Is the inspection result normal?

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

3.CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

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

(+)		(-)	Voltage (V)
Lifting motor (front)			
Connector	Terminals		
B555	12	Ground	9 – 16

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B552	12	B555	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK LIFTING SENSOR (FRONT) GROUND CIRCUIT

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

Lifting motor (front)		Ground	Continuity
Connector	Terminal		
B555	43		Existed

Is the inspection result normal?

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

LIFTING SENSOR (REAR)

Component Function Check

INFOID:0000000011322486

1.CHECK FUNCTION

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

Monitor item	Condition		Value
LIFT RR PULSE	Seat lifting (rear)	Operate (up)	Change (increase)*
		Operate (down)	Change (decrease)*
		Release	No change*

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

Is the indication normal?

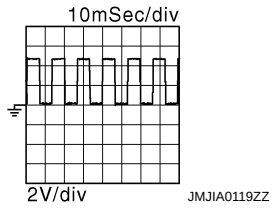
YES >> INSPECTION END
NO >> Refer to ADP-81, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322487

1.CHECK LIFTING SENSOR (REAR) SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Signal (V) (Reference value)
Connector	Terminals				
B552	20	Ground	Seat Lifting (rear)	Operate	
				Other than the above	0 – 1 or 4 – 6

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> GO TO 2.

2.CHECK LIFTING SENSOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B552	20	B556	20	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	20		Not existed

Is the inspection result normal?

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

3.CHECK LIFTING SENSOR (REAR) POWER SUPPLY

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

(+)		(-)	Voltage (V)
Lifting motor (rear)			
Connector	Terminals		
B556	12	Ground	9 – 16

Is the inspection result normal?

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

4.CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B552	12	B556	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK LIFTING SENSOR (REAR) GROUND CIRCUIT

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

Lifting motor (rear)		Ground	Continuity
Connector	Terminal		
B556	43		Existed

Is the inspection result normal?

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

MIRROR SENSOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000011322488

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END
NO >> Refer to ADP-83, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000011322489

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

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

(+)		(-)	Voltage (V)
Door mirror (driver side)			
Connector	Terminals		
D43	23	Ground	4 – 6

Is the inspection result normal?

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

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

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	21	D43	23	Existed

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-112, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND CIRCUIT

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	20	D43	24	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	20		Not existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	6	D43	21	Existed
	18		22	

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

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

Is the inspection result normal?

YES >> Replace door mirror sensor (built in driver side door mirror).
NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000011322490

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Refer to ADP-85, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000011322491

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

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

(+)		(-)	Voltage (V)
Door mirror (passenger side)			
Connector	Terminals		
D3	23	Ground	4 – 6

Is the inspection result normal?

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

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

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

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	21	D3	23	Existed

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-112, "Removal and Installation".
NO >> Repair or replace harness or connector.

3. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR GROUND CIRCUIT

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

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

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	20		Not existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace harness or connector.

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

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

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	5	D3	21	Existed
	17		22	

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

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

Is the inspection result normal?

YES >> Replace door mirror sensor (built in passenger side door mirror).
NO >> Repair or replace harness or connector.

SLIDING MOTOR

Component Function Check

INFOID:0000000011322492

1.CHECK FUNCTION

1. Select “SEAT SLIDE” in “Active test” mode with CONSULT.
2. Check the sliding motor 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 >> Refer to ADP-87, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322493

1.CHECK SLIDING MOTOR INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (V)
Sliding motor					
Connector	Terminals				
B561	34	Ground	SEAT SLIDE	OFF	0 – 1
				Backward	9 – 16
	38			OFF	0 – 1
				Forward	9 – 16

Is the inspection result normal?

YES >> Replace sliding motor (built in seat slide cushion frame).
NO >> GO TO 2.

2.CHECK SLIDING MOTOR CIRCUIT

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B551	34	B561	34	Existed
	38		38	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B551	34		Not existed
	38		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

RECLINING MOTOR

Component Function Check

INFOID:0000000011322494

1.CHECK FUNCTION

1. Select “SEAT RECLINING” in “Active test” mode with CONSULT.
2. Check the reclining motor 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 >> Refer to ADP-89, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322495

1.CHECK RECLINING MOTOR INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (V)
Reclining motor					
Connector	Terminals				
B554	35	Ground	SEAT RECLINING	OFF	0 – 1
				Forward	9 – 16
	39			OFF	0 – 1
				Backward	9 – 16

Is the inspection result normal?

YES >> Replace reclining motor (built in seat back frame).
NO >> GO TO 2.

2.CHECK RECLINING MOTOR CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B551	35	B554	35	Existed
	39		39	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B551	35		Not existed
	39		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

LIFTING MOTOR (FRONT)

Component Function Check

INFOID:0000000011322496

1.CHECK FUNCTION

1. Select “SEAT LIFTER FR” in “Active test” mode with CONSULT.
2. Check the lifting motor (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 >> Refer to ADP-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322497

1.CHECK LIFTING MOTOR (FRONT) INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (V)
Lifting motor (front)					
Connector	Terminals				
B555	36	Ground	SEAT LIFTER FR	OFF	0 – 1
				Downward	9 – 16
	40			OFF	0 – 1
				Upward	9 – 16

Is the inspection result normal?

YES >> Replace lifting motor (front) (built in seat cushion frame).
NO >> GO TO 2.

2.CHECK LIFTING MOTOR (FRONT) CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B551	36	B555	36	Existed
	40		40	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B551	36		Not existed
	40		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

LIFTING MOTOR (REAR)

Component Function Check

INFOID:0000000011322498

1.CHECK FUNCTION

1. Select “SEAT LIFTER RR” in “Active test” mode with CONSULT.
2. Check the lifting motor (rear) operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END
NO >> Refer to ADP-93, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322499

1.CHECK LIFTING MOTOR (REAR) INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (V)
Lifting motor (rear)					
Connector	Terminals				
B556	41	Ground	SEAT LIFTER RR	OFF	0 – 1
				Upward	9 – 16
	42			OFF	0 – 1
				Downward	9 – 16

Is the inspection result normal?

YES >> Replace lifting motor (rear) (built in seat cushion frame).
NO >> GO TO 2.

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B551	41	B556	41	Existed
	42		42	

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	
B551	41		Not existed
	42		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

Component Function Check

INFOID:0000000011322500

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-21, "CONSULT Function".

Is the inspection result normal?

YES >> INSPECTION END
NO >> Refer to ADP-95, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322501

1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

[Driver side]

(+) Door mirror		(-)	Condition		Voltage (V)
Connector	Terminals				
D43	10	Ground	Door mirror remote control switch	DOWN / RIGHT	9 – 16
				Other than the above	0 – 1
	11			LEFT	9 – 16
				Other than the above	0 – 1
	12			UP	9 – 16
				Other than the above	0 – 1

[Passenger side]

(+) Door mirror		(-)	Condition		Voltage (V)
Connector	Terminals				
D3	10	Ground	Door mirror remote control switch	DOWN / RIGHT	9 – 16
				Other than the above	0 – 1
	11			LEFT	9 – 16
				Other than the above	0 – 1
	12			UP	9 – 16
				Other than the above	0 – 1

Is the inspection result normal?

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

2.CHECK DOOR MIRROR MOTOR CIRCUIT

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

[Driver side]

Automatic drive positioner control unit		Door mirror		Continuity
Connector	Terminal	Connector	Terminal	
M75	12	D43	10	Existed
	23		12	
	24		11	

[Passenger side]

Automatic drive positioner control unit		Door mirror		Continuity
Connector	Terminal	Connector	Terminal	
M75	10	D3	12	Existed
	11		11	
	22		10	

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

[Driver side]

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	12		Not existed
	23		
	24		

[Passenger side]

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-112, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-96, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident.Refer to GI-42, "Intermittent Incident".
NO >> Replace door mirror motor.

Component Inspection

INFOID:0000000011322502

1.CHECK DOOR MIRROR MOTOR 1

Check that door mirror motor does not trap foreign objects and does not have any damage.
Refer to MIR-31, "Exploded View".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace door mirror.

2.CHECK DOOR MIRROR MOTOR 2

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

Door mirror		Operational direction
Terminal		
(+)	(-)	
10	11	RIGHT
11	10	LEFT
12	10	UP
10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror motor.

SEAT MEMORY INDICATOR

Component Function Check

INFOID:0000000011322503

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 >> Refer to ADP-98, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011322504

1.CHECK SEAT MEMORY SWITCH INDICATOR OPERATION

Check seat memory switch indicator operation.

Which is the malfunctioning indicator?

All indicators are NG>>GO TO 2.
An indicator is NG>>GO TO 4.

2.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the following fuse is not fusing.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace the blown fuse after repairing affected circuit.

3.CHECK SEAT MEMORY SWITCH INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

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

Is the inspection result normal?

YES >> Replace seat memory switch. Refer to ADP-113, "Removal and Installation".
NO >> Repair or replace harness between seat memory switch and 10 A fuse [No.10, located in fuse block (J/B)].

4.CHECK SEAT MEMORY SWITCH INDICATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and seat memory switch connector.
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	
B552	7	D13	7	Existed
	23		6	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B552	7		Not existed
	23		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-111, "Removal and Installation".
NO >> Repair or replace harness or connector.

SYMPTOM DIAGNOSIS

MANUAL FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000011322505

1. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check driver seat control unit power supply and ground circuit.
Refer to ADP-58, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check automatic drive positioner control unit power supply and ground circuit.
Refer to ADP-58, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

POWER SEAT

POWER SEAT : Diagnosis Procedure

INFOID:0000000011322506

1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check power seat switch ground circuit.
Refer to ADP-74, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace harness or connector.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000011322507

1. CHECK SLIDING MECHANISM

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

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2. CHECK SLIDING SWITCH

Check sliding switch.
Refer to ADP-60, "Component_Function_Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK SLIDING MOTOR

Check sliding motor.
Refer to ADP-87, "Component_Function_Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000011322508

1.CHECK RECLINING MECHANISM

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

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK RECLINING SWITCH

Check reclining switch.
Refer to ADP-62, "Component_Function_Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor.
Refer to ADP-89, "Component_Function_Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000011322509

1.CHECK LIFTING (FRONT) MECHANISM

Check for the following.
- Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK LIFTING SWITCH (FRONT)

Check lifting switch (front).
Refer to ADP-64, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (FRONT)

Check lifting motor (front).
Refer to ADP-91, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000011322510

1.CHECK LIFTING (REAR) MECHANISM

Check for the following.
• Mechanism deformation or pinched foreign materials.
• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK LIFTING SWITCH (REAR)

Check lifting switch (rear).
Refer to ADP-66, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).
Refer to ADP-93, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:0000000011322511

1.CHECK DOOR MIRROR MECHANISM

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

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CHECK DOOR MIRROR REMOTE CONTROL SWITCH

Check door mirror remote control switch. Refer to following.
- Mirror switch : Refer to ADP-70, "MIRROR SWITCH : Component Function Check".
- Changeover switch : Refer to ADP-72, "CHANGEOVER SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-95, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

MEMORY FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000011322512

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE

1. Perform initialization procedure.
   Refer to ADP-48, "Work Procedure".
2. Perform memory storing procedure.
   Refer to ADP-49, "Work Procedure".
3. Check memory function.
   Refer to ADP-15, "MEMORY FUNCTION : System Description".

Is the inspection result normal?

YES >> Memory function is normal.
NO >> GO TO 3.

3.CHECK SEAT MEMORY SWITCH

Check seat memory switch.
Refer to ADP-68, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace seat memory switch.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000011322513

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-100, "SEAT SLIDING : Diagnosis Procedure"

2.CHECK SLIDING SENSOR

Check sliding sensor.
Refer to ADP-75, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000011322514

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-101, "SEAT RECLINING : Diagnosis Procedure"

2.CHECK RECLINING SENSOR

Check reclining sensor.
Refer to ADP-77, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000011322515

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-101, "SEAT LIFTING (FRONT) : Diagnosis Procedure"

2.CHECK LIFTING SENSOR (FRONT)

Check lifting sensor (front).
Refer to ADP-79, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000011322516

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-102, "SEAT LIFTING (REAR) : Diagnosis Procedure"

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).
Refer to ADP-81, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:0000000011322517

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-103, "DOOR MIRROR : Diagnosis Procedure"

2.CHECK MIRROR SENSOR

Check mirror sensor. Refer to following.
- Driver side : ADP-83, "DRIVER SIDE : Component Function Check".
- Passenger side : ADP-84, "PASSENGER SIDE : Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011322518

1.CHECK SYSTEM SETTING

1. Check system setting.
   Refer to ADP-51, "Work Procedure".
2. Check the operation.

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 2.

2.PERFORM SYSTEM INITIALIZATION

1. Perform system initialization.
   Refer to ADP-48, "Work Procedure".
2. Check the operation.

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 3.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check front door switch (driver side).
Refer to DLK-241, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011322519

1.PERFORM INTELLIGENT KEY INTERLOCK STORING PROCEDURE

1. Perform Intelligent Key interlock storing procedure.
   Refer to ADP-50, "Work Procedure".
2. Check the operation.

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 2.

2.CHECK DOOR LOCK FUNCTION

Check door lock function.
Refer to DLK-165, "Work Flow".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check the intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000011322520

1.CHECK SEAT MEMORY SWITCH INDICATOR

Check seat memory switch indicator.
Refer to ADP-98, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

NORMAL OPERATING CONDITION

Description

INFOID:0000000011322521

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-48, "Description"
	Entry/exit assist function is disabled. **NOTE:** Entry/exit assist function is set to ON before delivery (initial setting).	Change the settings.	ADP-51, "Description"
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, "ENTRY ASSIST FUNCTION : System Description"
Lumbar support does not perform memory operation.	The lumbar support system are controlled independently with no link to the automatic drive positioner system.	—	SE-13, "POWER SEAT SYSTEM : System Description"
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, "MEMORY FUNCTION : System Description"
			Entry assist function : ADP-18, "ENTRY ASSIST FUNCTION : System Description"
			Exit assist function : ADP-17, "EXIT ASSIST FUNCTION : System Description"
			Intelligent Key interlock function : ADP-19, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description"

REMOVAL AND INSTALLATION

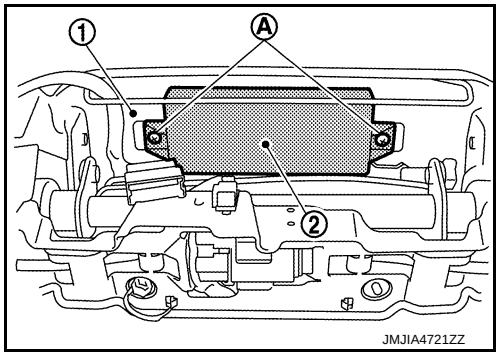
DRIVER SEAT CONTROL UNIT

Removal and Installation

INFOID:0000000011322522

REMOVAL

1. Remove driver seat. Refer to SE-103, "Removal and Installation".
2. Remove screws (A), and then remove driver seat control unit (2) from seat cushion frame (1)



INSTALLATION

Install in the reverse order of removal.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to ADP-47, "Description".

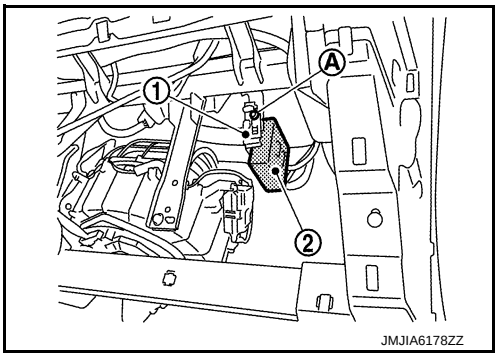
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

INFOID:0000000011322523

REMOVAL

1. Remove instrument lower panel RH. Refer to IP-14, "Removal and Installation".
2. Remove screw (A), and then remove automatic drive positioner control unit (2) from bracket (1).



INSTALLATION

Install in the reverse order of removal.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to ADP-47, "Description".

SEAT MEMORY SWITCH

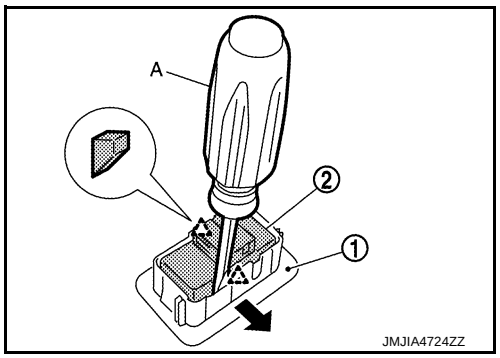
Removal and Installation

INFOID:0000000011322524

REMOVAL

1. Remove front door finisher. Refer to INT-14, "Removal and Installation".
2. Press pawls and remove seat memory switch (2) from switch finisher (1) using remover tool (A).

: Pawl



INSTALLATION

Install in the reverse order of removal.

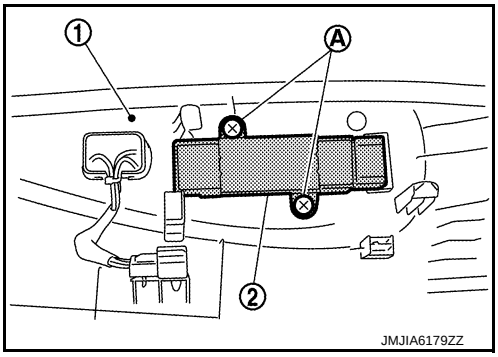
POWER SEAT SWITCH

Removal and Installation

INFOID:0000000011322525

REMOVAL

1. Remove seat cushion outer finisher. Refer to SE-109, "SEAT CUSHION : Disassembly and Assembly".
2. Remove screws (A), and then remove power seat switch (2) from seat cushion outer finisher (1).



INSTALLATION

Install in the reverse order of removal.