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:0000000015176127

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

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries, and wait at least three minutes before performing any service.**

Precaution for Work

INFOID:0000000015176128

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:

- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:

- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

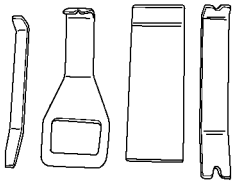
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000015176129

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

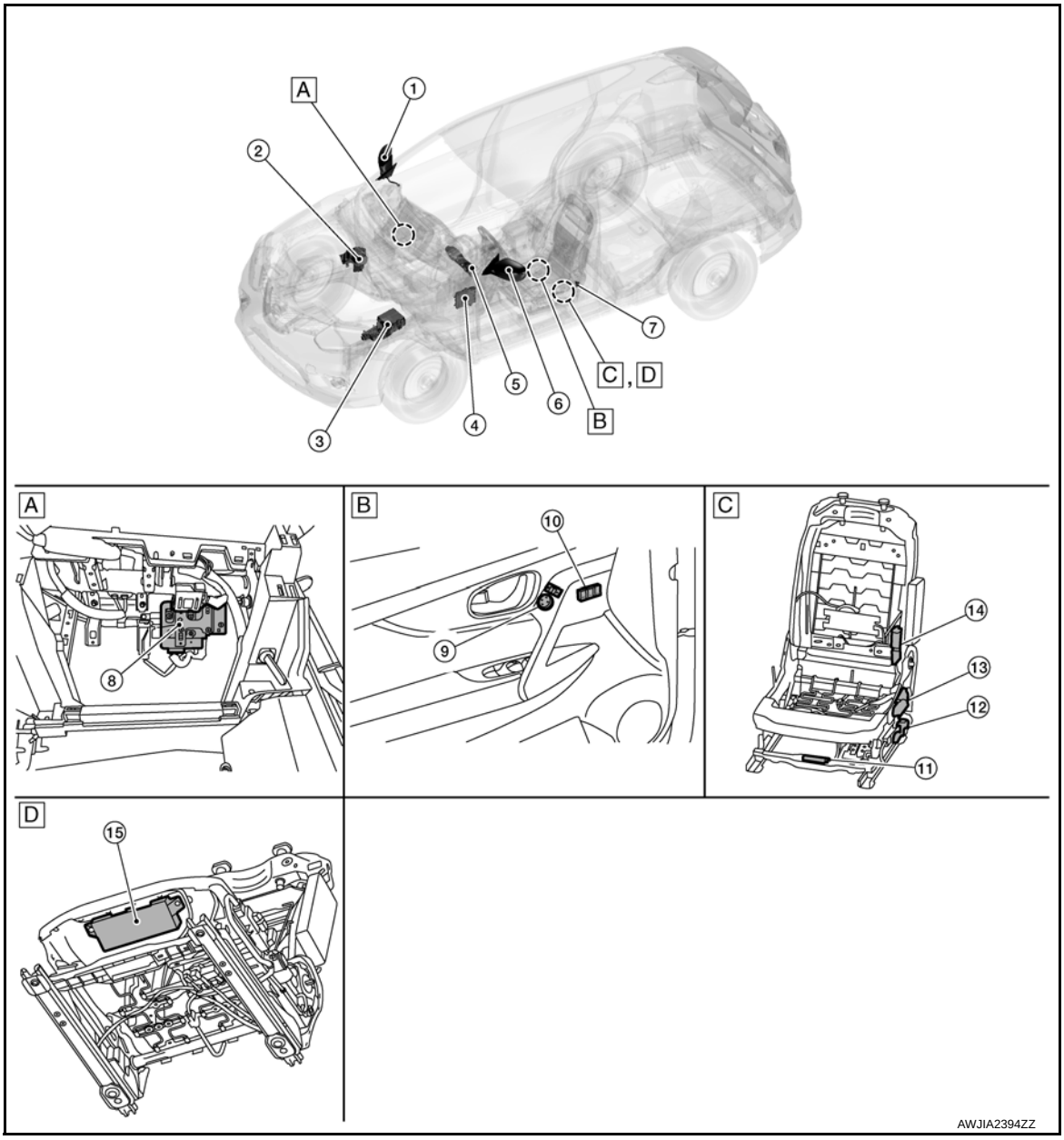
Tool number (TechMate No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000015176130



A. View with instrument glove box assembly removed

B. LH driver door panel

C. View with seat removed (shown with seat cushion and seat back removed)

D. View of seat bottom (shown with seat removed)

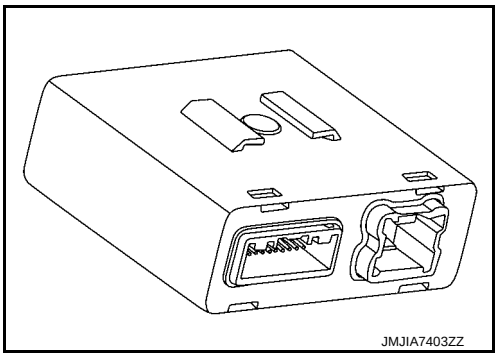
No.	Component parts		Description
1.	Door mirror RH	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies. Refer to MIR-4, "Component Parts Location" for detailed installation location.
		Mirror sensor	• 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-23, "Exploded View" for detailed installation location.
2.	ABS actuator and electric unit (control unit)		Transmit the shift position signal to driver seat control unit via CAN communication. Refer to BRC-10, "Component Parts Location" for detailed installation location.
3.	BCM		Recognizes the following status and transmits it to driver seat control unit via CAN communication: • Driver door: OPEN/CLOSE • Ignition switch position: OFF/ON • Door lock: UNLOCK • Key ID • Starter: CRANKING/OTHER Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
4.	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-6, "Component Parts Location" for detailed installation location.
5.	Combination meter		Transmit the vehicle speed signal to driver seat control unit via CAN communication. Refer to MWI-5, "METER SYSTEM : Component Parts Location" for detailed installation location.
6.	Door mirror RH	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-4, "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-23, "Exploded View" for detailed installation location.
7.	Front door switch (driver side)		Detects door open/close condition and transmits to BCM. Refer to DLK-12, "POWER DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.
8.	Automatic drive positioner control unit		Refer to ADP-9, "Automatic Drive Positioner Control Unit".

No.	Component parts		Description
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-4, "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-4, "Component Parts Location" for detailed installation location.
10.	Seat memory switch	Set switch	Refer to ADP-9, "Seat Memory Switch".
11.	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.
		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.
12.	Power seat switch	Sliding switch	• Sliding switch is equipped to power seat switch on seat cushion side surface. • The operation signal is input to driver seat control unit when sliding switch is operated.
		Reclining switch	• The operation signal is input to driver seat control unit when reclining switch is operated. • The operation signal is input to driver seat control unit when reclining switch is operated.
		Lifting switch (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.
13.	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).
		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.
14.	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.
		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.
15.	Driver seat control unit		Refer to ADP-9, "Driver Seat Control Unit".

Automatic Drive Positioner Control Unit

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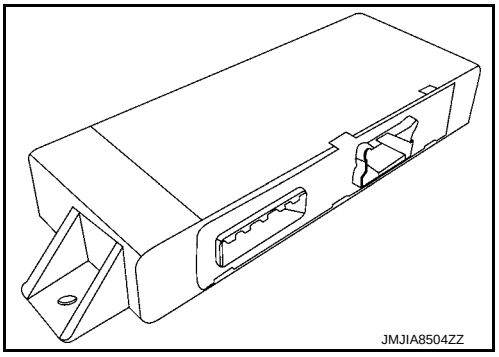
- It communicates with driver seat control unit via UART communication.
- Performs various controls with the instructions of driver seat control unit.
- Performs the controls of tilt & telescopic and door mirror.
- Operates door mirror with the signal from the driver seat control.


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Driver Seat Control Unit

INFOID:0000000015240135

- Main unit of automatic drive positioner system.
- It is connected to the CAN communication system.
- It communicates with automatic drive positioner control unit via UART communication.
- 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.
- Performs the control of seat memory switch.
- Operates the specific seat motor with the signal from power seat switch.

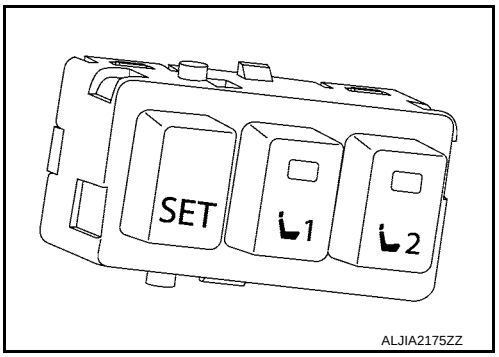

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Seat Memory Switch

INFOID:0000000015240136

SET SWITCH

It is used for registration and setting change of driving position.



ALJIA2175ZZ

SEAT MEMORY SWITCH

- The maximum 2 driving positions can be registered by memory switch 1 and 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.

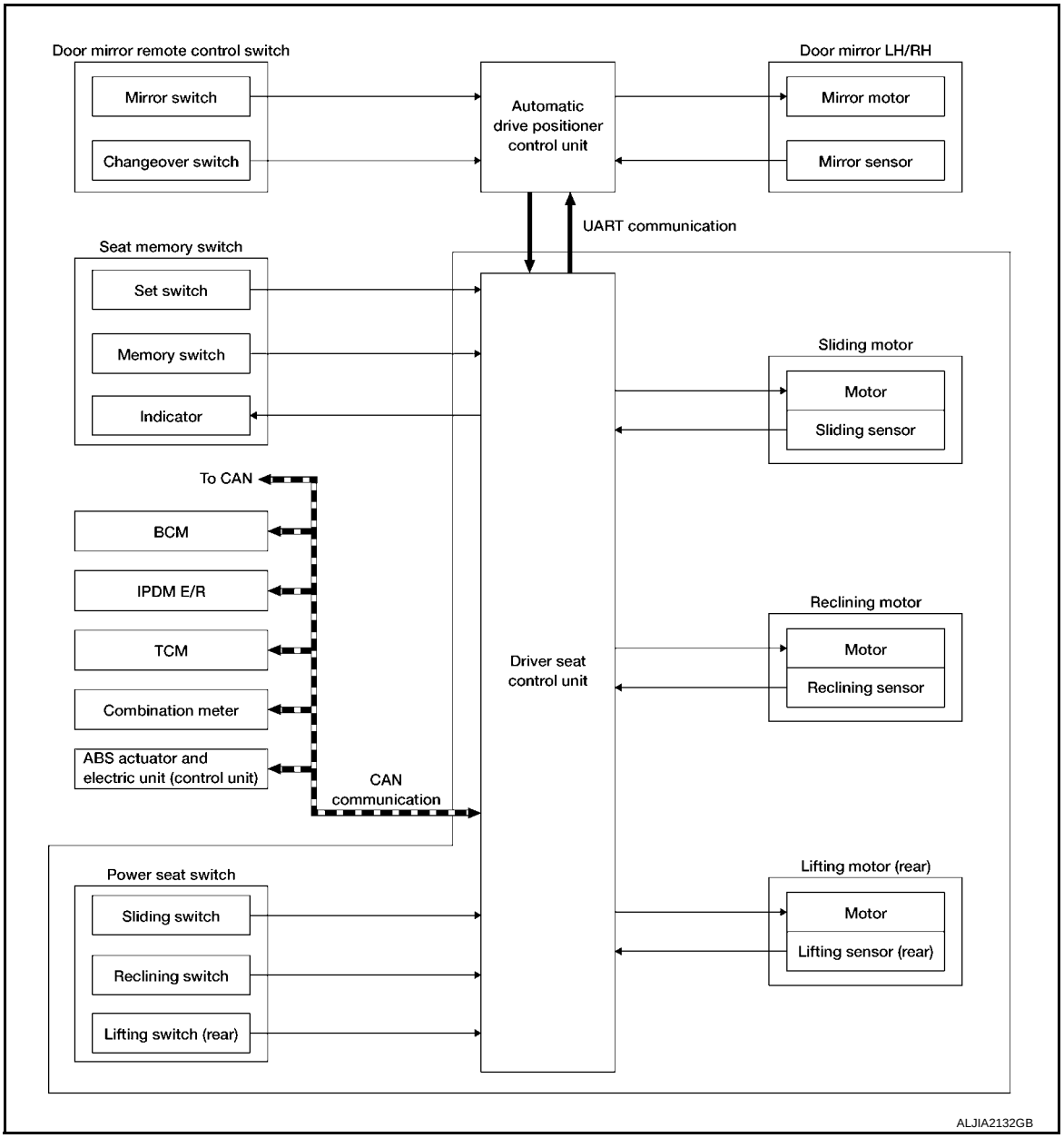
SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:0000000015176134

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.
- 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.

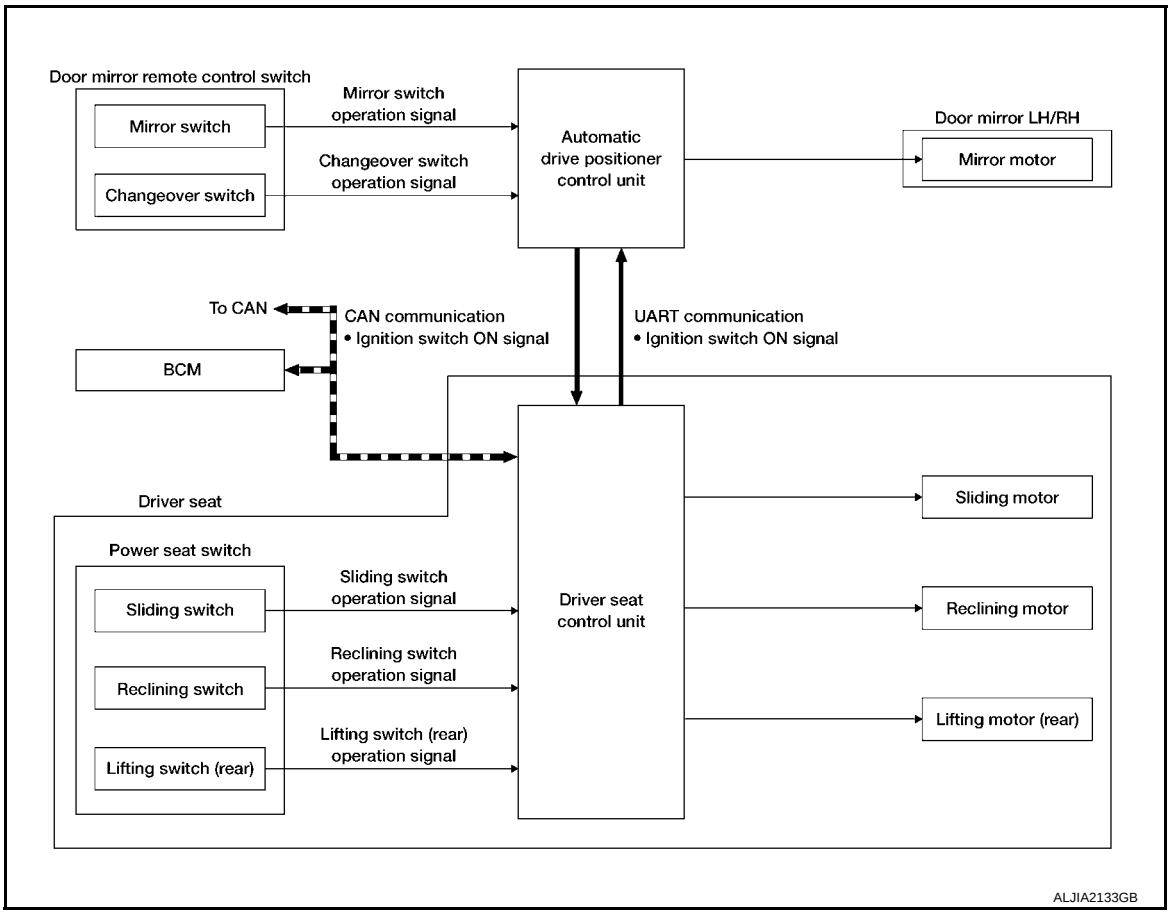
- CAN communication
- Power seat switch
- Set switch and seat memory switch (1 and 2)

MANUAL FUNCTION

MANUAL FUNCTION : System Description

INFOID:0000000015176135

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 ON or OFF position.
- When power seat switch is operated, operation signal is transmitted to driver seat control unit. Each motor is operated according to operation signal.

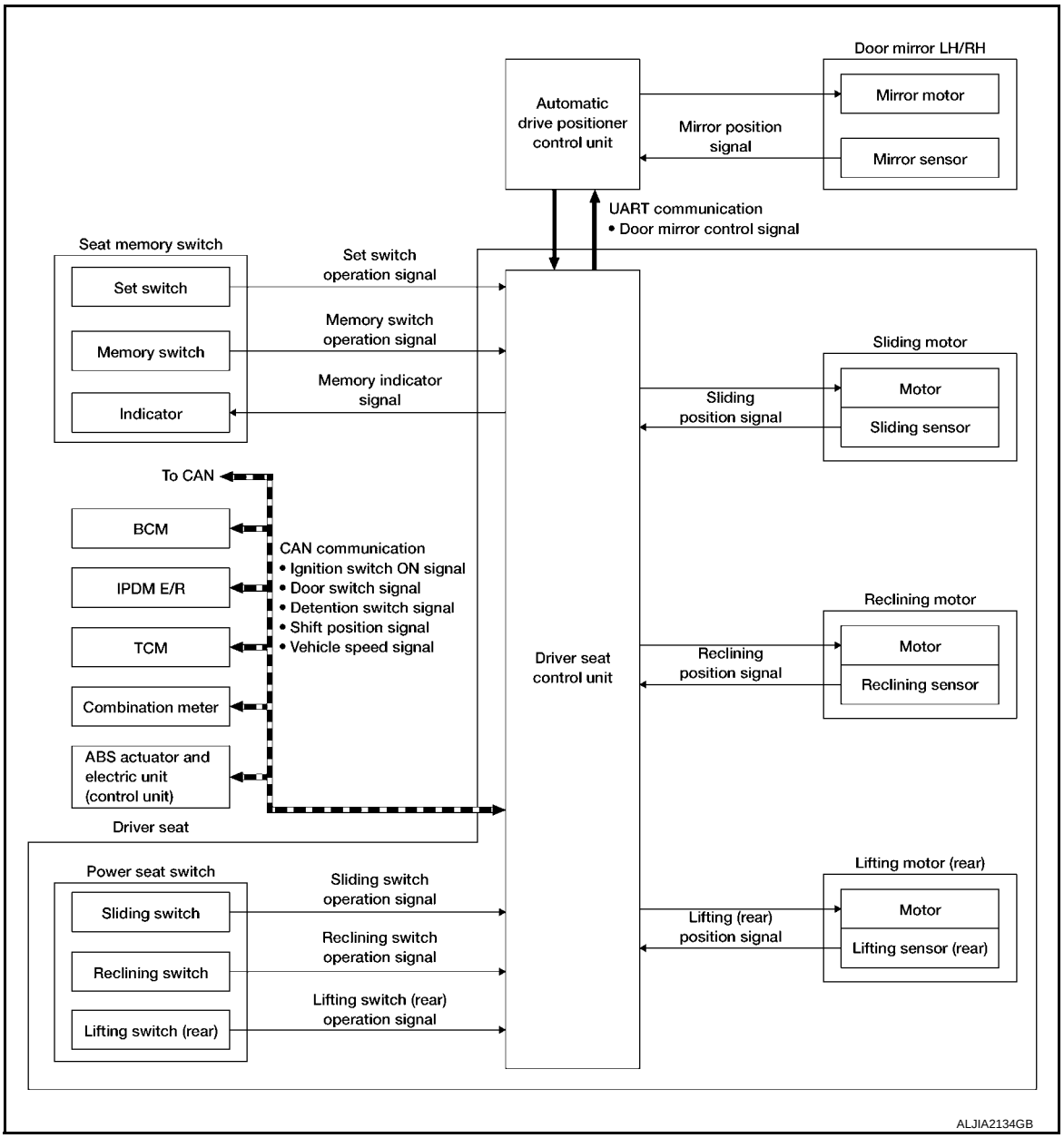
- When mirror switch and changeover switch are operated, operation signal is transmitted to automatic drive positioner control unit. Mirror motor is operated according to operation signal.

MEMORY FUNCTION

MEMORY FUNCTION : System Description

INFOID:0000000015176136

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-43, "MEMORY STORING : Work Procedure".

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

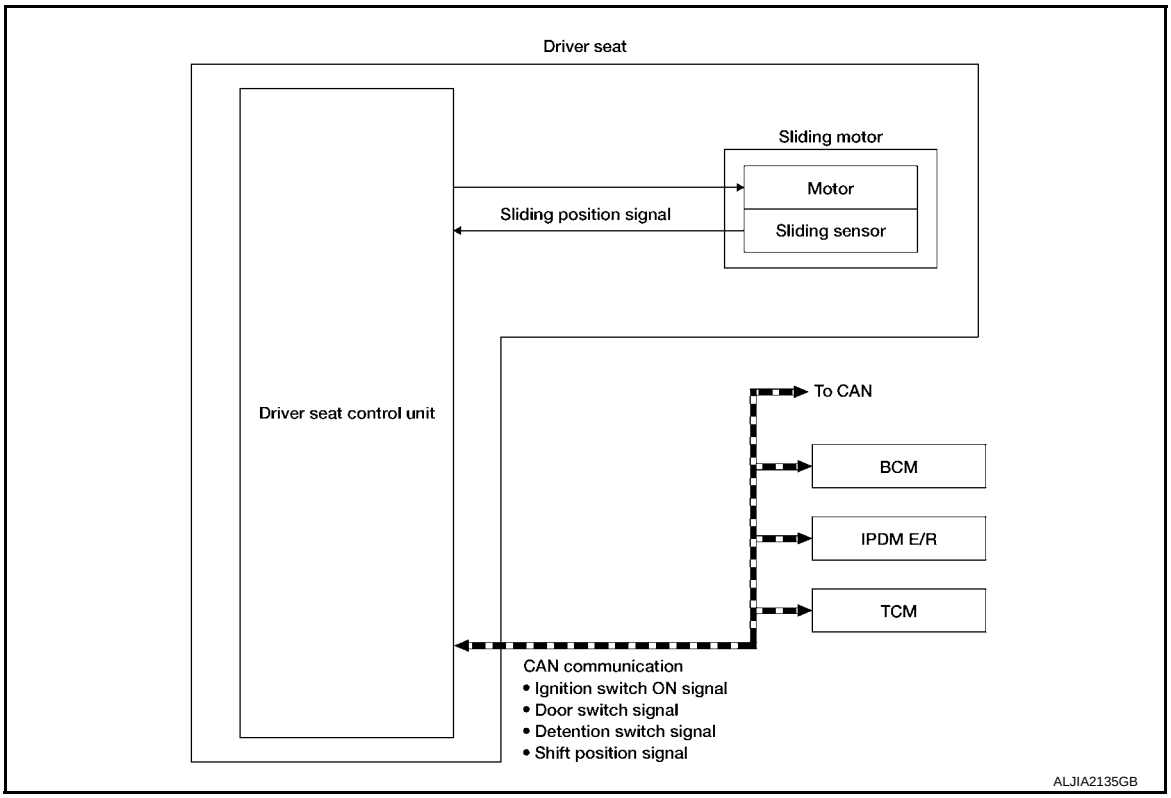
Item	Request status
Ignition position	ON
Switch inputs • Power seat switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
CVT shift selector	P position
Memory function	Registered
Vehicle speed	0 MPH (0 km/h)
CONSULT	Not connected

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Description

INFOID:0000000015176137

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-44, "SYSTEM SETTING : Description".

Operation Condition

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

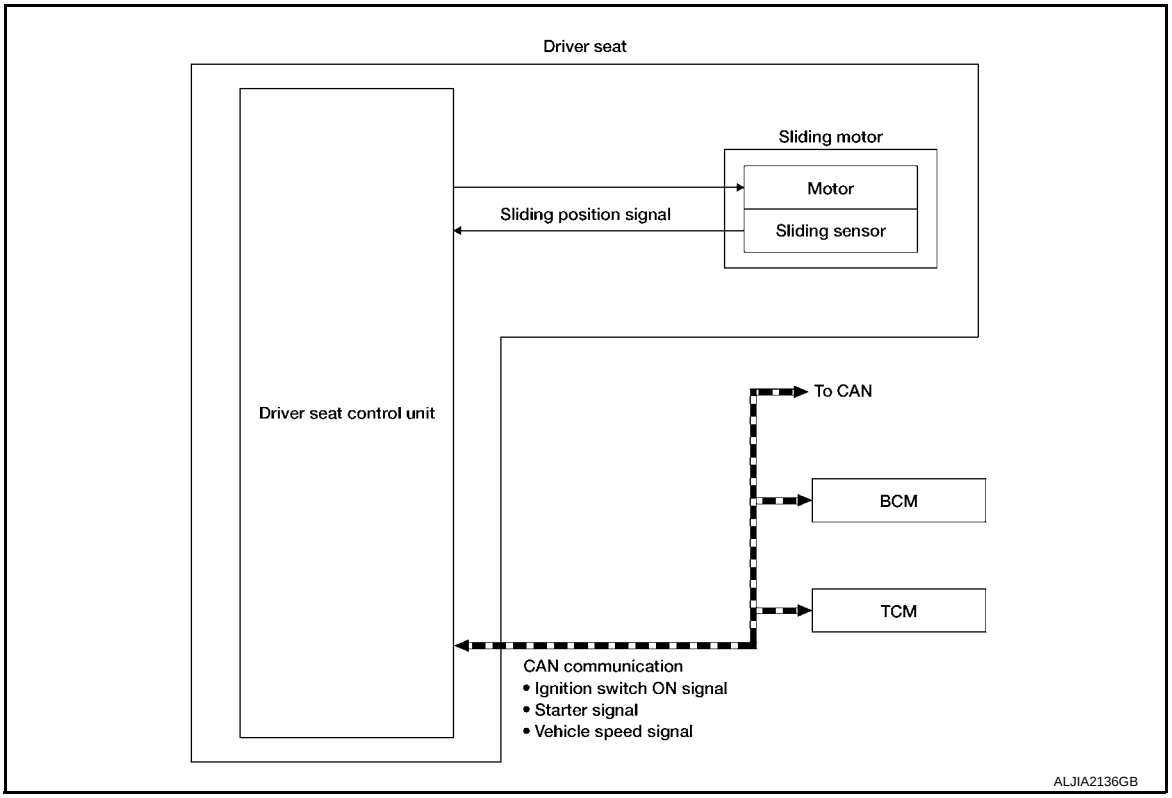
Item	Request status
Ignition position	OFF
System setting (Entry/exit assist function)	ON
Initialization	Done
Switch inputs • Power seat switch • Door mirror remote control switch • Set switch • Memory switch	OFF (Not operated)
CVT shift selector	P position
Handle position	LHD
Transmission	CVT
CONSULT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

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Description

INFOID:0000000015176138

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-44, "SYSTEM SETTING : Description".

Operation Condition

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

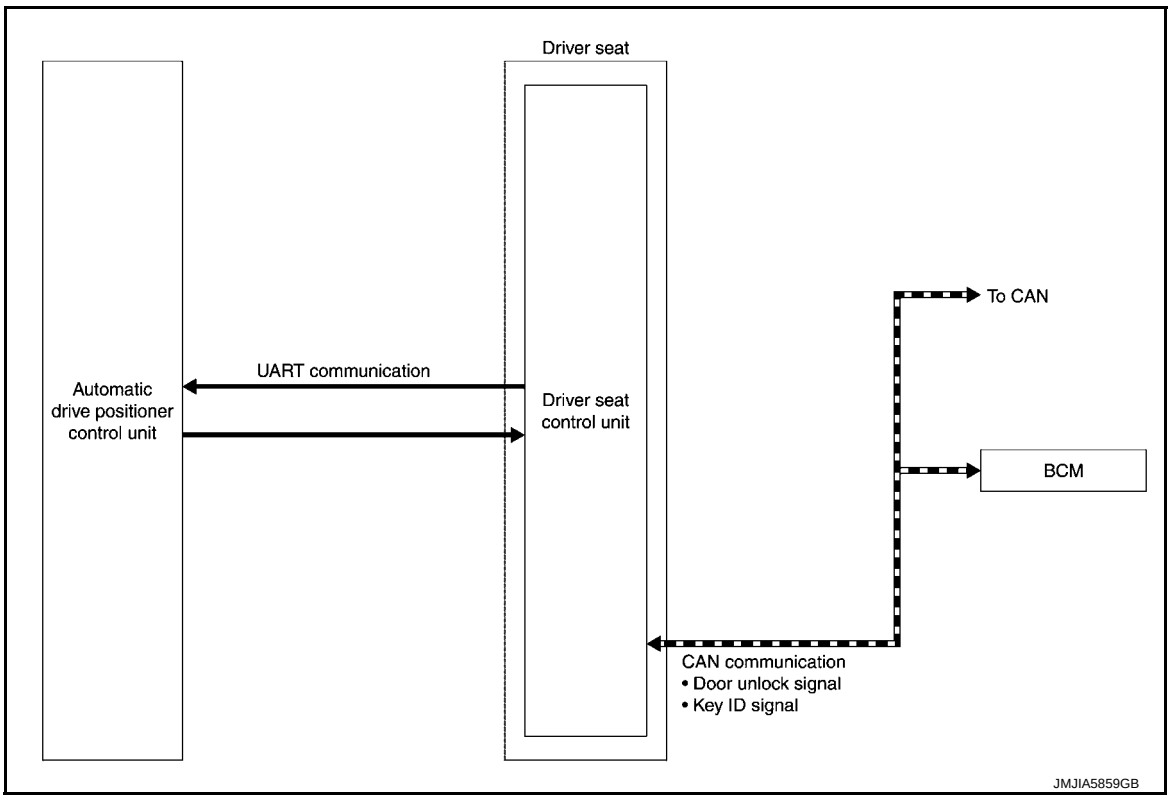
Item	Request status
Seat	The vehicle is not moved after performing the exit assist function.
Switch inputs • Power seat switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Vehicle speed	0 km/h (0 MPH)
Starter	OFF
Transmission	CVT
CONSULT	Not connected

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000015176139

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-43, "INTELLIGENT KEY INTERLOCK STORING : Description".

Operation Condition

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

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

Fail-safe

INFOID:0000000015176140

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-46, "DTC Logic"
	CONTROL UNIT (CAN)	U1010	ADP-47, "DTC Logic"
	EEPROM	B2130	ADP-54, "DTC Logic"
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-52, "DTC Logic"
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-48, "DTC Logic"
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-50, "DTC Logic"

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function

INFOID:0000000015176141

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-24, "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.
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 RR SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW–RH	“ON/OFF”	×	×	ON/OFF status judged from the 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.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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 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 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

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000015176142

VALUES ON THE DIAGNOSIS TOOL

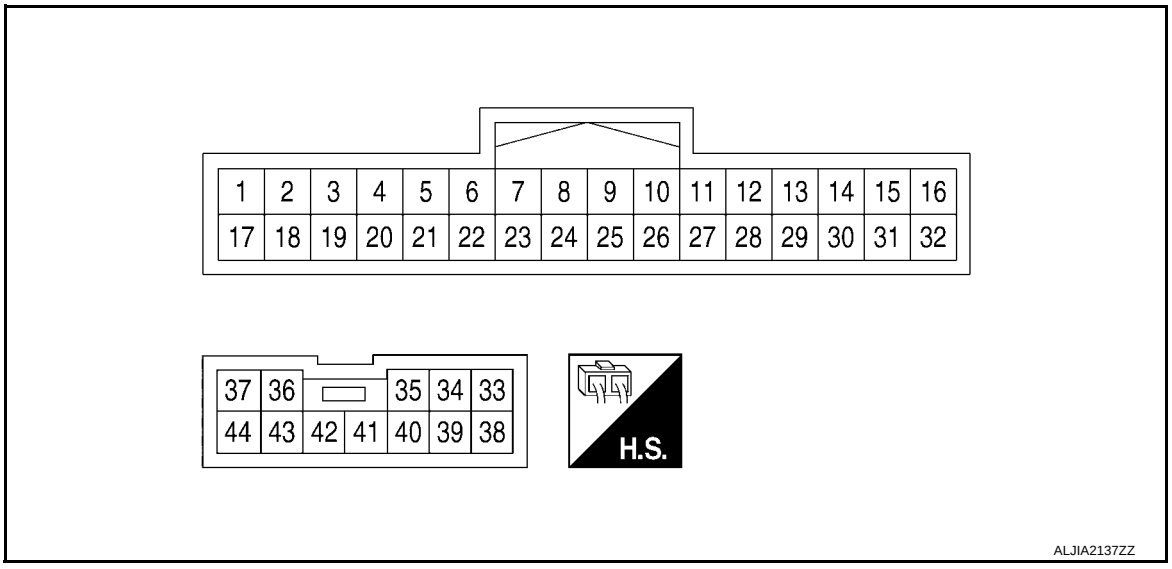
CONSULT MONITOR ITEM

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

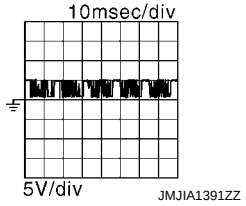
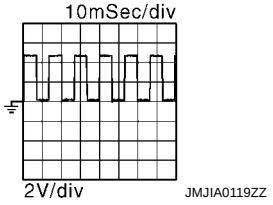
Monitor Item	Condition		Value/Status
LIFT RR SW–DN	Lifting switch rear (downward)	Operate	ON
		Release	OFF
MIR CON SW–UP	Mirror switch	Up	ON
		Other than above	OFF
MIR CON SW–DN	Mirror switch	Down	ON
		Other than above	OFF
MIR CON SW–RH	Mirror switch	Right	ON
		Other than above	OFF
MIR CON SW–LH	Mirror switch	Left	ON
		Other than above	OFF
MIR CHNG SW–R	Changeover switch	Right	ON
		Other than above	OFF
MIR CHNG SW–L	Changeover switch	Left	ON
		Other than above	OFF
SLIDE PULSE	Seat sliding	Forward	The numeral value decreases *
		Backward	The numeral value increases*
		Other than above	No change to numeral value*
RECLN PULSE	Seat reclining	Forward	The numeral value decreases*
		Backward	The numeral value increases *
		Other than above	No change to numeral value*
LIFT RR PULSE	Seat lifter (rear)	Upward	The numeral value decreases *
		Downward	The numeral value increases *
		Other than above	No change to numeral value*
MIR/SEN RH U–D	Door mirror (passenger side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R–L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U–D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R–L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)

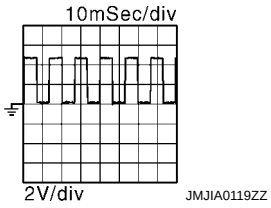
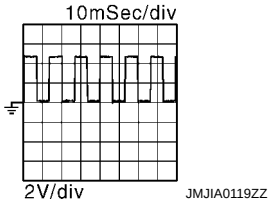
*: The value at the position attained when the battery is connected is regarded as 32768.

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
1 (P)	—	CAN high	—	—		—
2 (GR)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		
4 (V)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Stop	0 or 5
6 (L)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0
					Other than above	5
7 (LG)	Ground	Memory indicator 2 signal	Output	Memory indicator 2	Illuminate	1
					Other than above	Battery voltage
8 (L/W)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0
					Release	Battery voltage
9 (GR/R)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0
					Release	Battery voltage

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
11 (V/W)	Ground	Lifting switch (rear) downward signal	Input	Lifting switch (rear)	Operate (downward)	0
					Release	Battery voltage
12 (W)	Ground	Sensor power supply	Output	—		Battery voltage
17 (L)	—	CAN low	—	—		—
18 (V)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Stop	0 or 5
20 (O)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Stop	0 or 5
22 (BR)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0
					Other than above	5
23 (Y)	Ground	Memory indicator 1 signal	Output	Memory indicator 1	Illuminate	1
					Other than above	Battery voltage
24 (BR/W)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0
					Release	Battery voltage
25 (G/W)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
					Release	Battery voltage
27 (Y/R)	Ground	Lifting switch (rear) upward signal	Input	Seat lifting switch (rear)	Operate (upward)	0
					Release	Battery voltage
28 (SB)	Ground	Set switch signal	Input	Set switch	Press	0
					Other than above	5
35 (P)	Ground	Reclining motor LH forward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
					Release	0
36 (SB)	Ground	Sliding motor LH backward output signal	Output	Seat sliding	Operate (backward)	Battery voltage
					Stop	0
37 (R)	Ground	Power source	Input	—		Battery voltage

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

Fail Safe

INFOID:0000000015176143

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-46
	CONTROL UNIT	U1010	ADP-47
	EEPROM	B2130	ADP-54
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-52
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-48
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-50

DTC Index

INFOID:0000000015176144

CONSULT display	Timing		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-46
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-47
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-48
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-50
UART COMM [B2128]	0	1-39	UART communication	ADP-52
EEPROM [B2130]	0	1-39	EEPROM	ADP-54

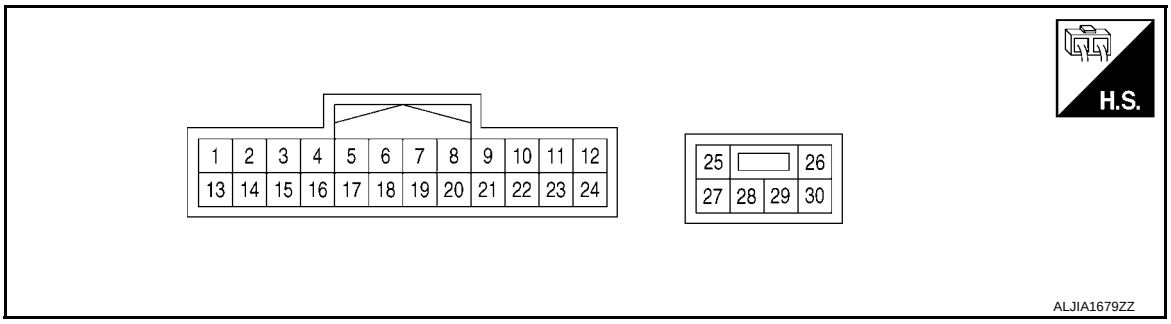
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

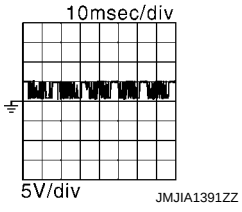
Reference Value

INFOID:0000000015176145

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
2 (LG)	Ground	Changeover switch RH signal	Input	Changeover switch position	RH	0
					Neutral or LH	5
3 (G)	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0
					Other than above	5
4 (V)	Ground	Mirror switch left signal	Input	Mirror switch	Operated (left)	0
					Other than above	5
5 (BG)	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 (BG)	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 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		
10 (V)	Ground	Door mirror motor (passenger side) up output signal	Output	Door mirror RH	Operate (up)	Battery voltage
					Other than above	0
11 (Y)	Ground	Door mirror motor (passenger side) left output signal	Output	Door mirror RH	Operate (left)	Battery voltage
					Other than above	0

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
12 (BR)	Ground	Door mirror motor (driver side) down output signal	Output	Door mirror (LH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (driver side) right output signal			Operate (right)	Battery voltage
					Other than above	0
14 (SB)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0
					Neutral or RH	5
15 (L)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0
					Other than above	5
16 (Y)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
					Other than above	5
17 (V)	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 (V)	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 (Y)	Ground	Ground	—	—		0
21 (SB)	Ground	Door mirror motor sensor power supply	Input	—		5
22 (R)	Ground	Door mirror motor (passenger side) down output signal	Output	Door mirror (RH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (passenger side) right output signal			Operate (right)	Battery voltage
					Other than above	0
23 (GR)	Ground	Door mirror motor (driver side) up output signal	Output	Door mirror (LH)	Operate (up)	Battery voltage
					Other than above	0
24 (W)	Ground	Door mirror motor (driver side) left output signal	Output	Door mirror (LH)	Operate (left)	Battery voltage
					Other than above	0
25 (GR)	Ground	Power source	Input	—		Battery voltage
30 (B)	Ground	Ground	—	—		0

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000015176146

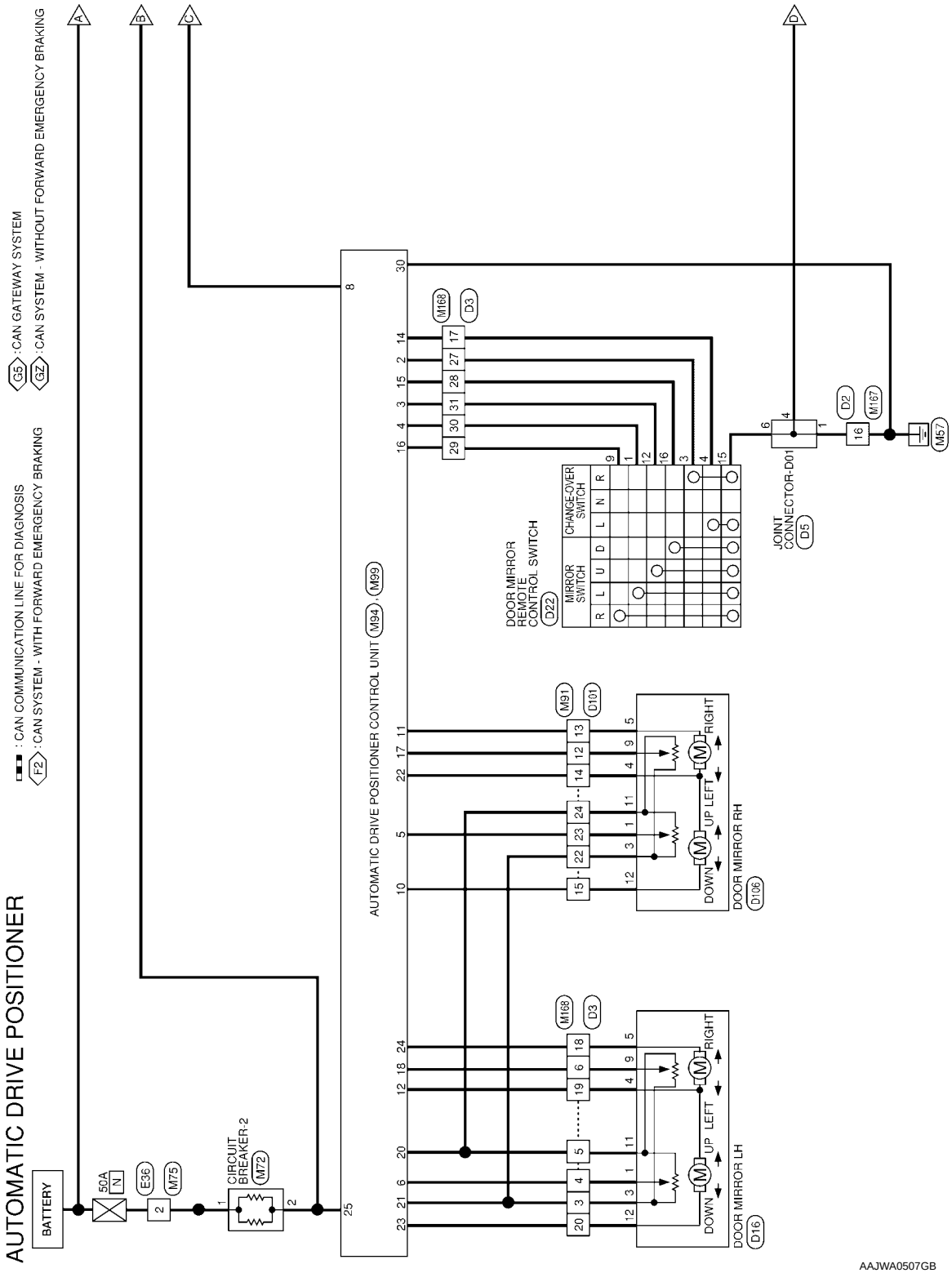
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

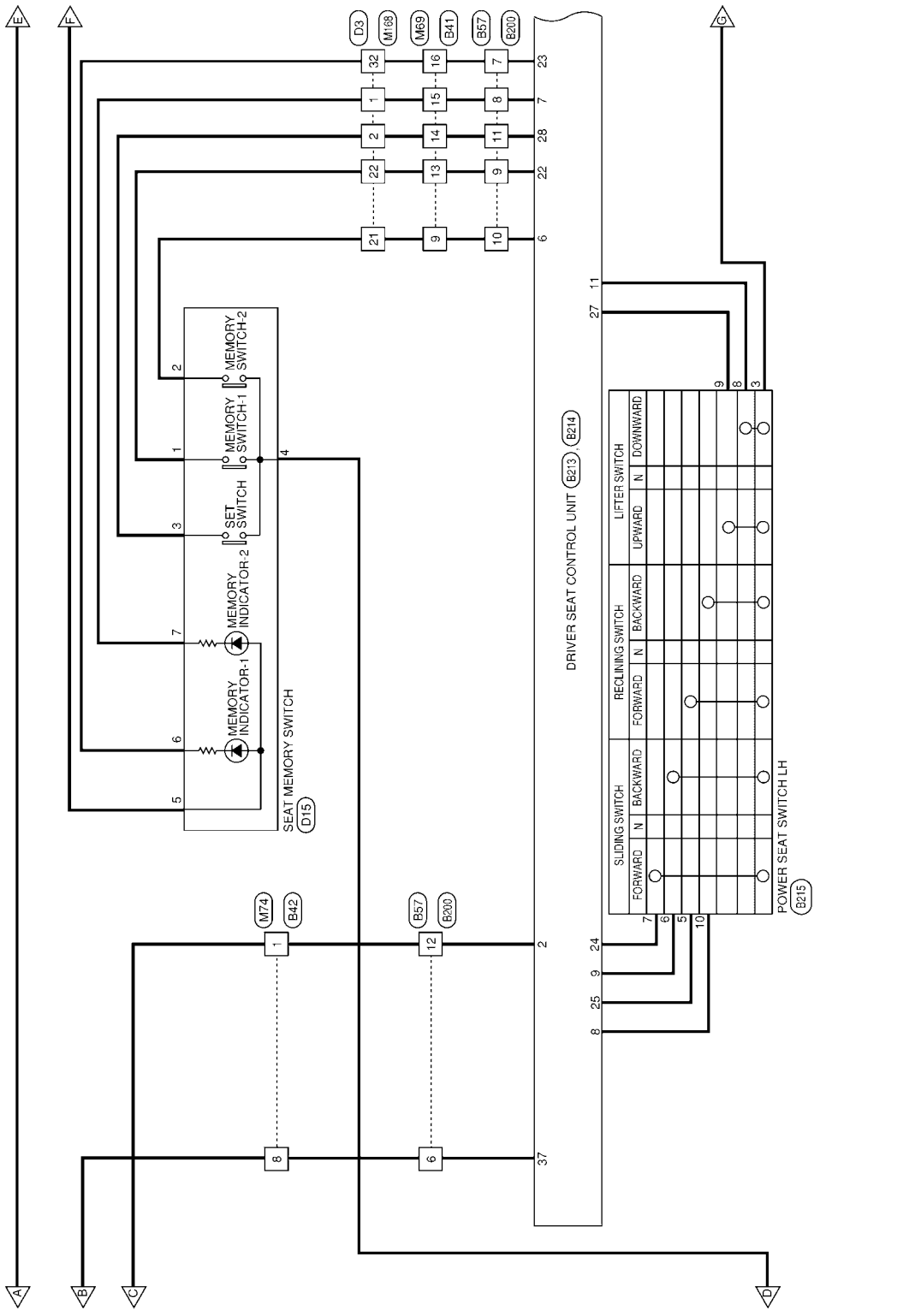
WIRING DIAGRAM

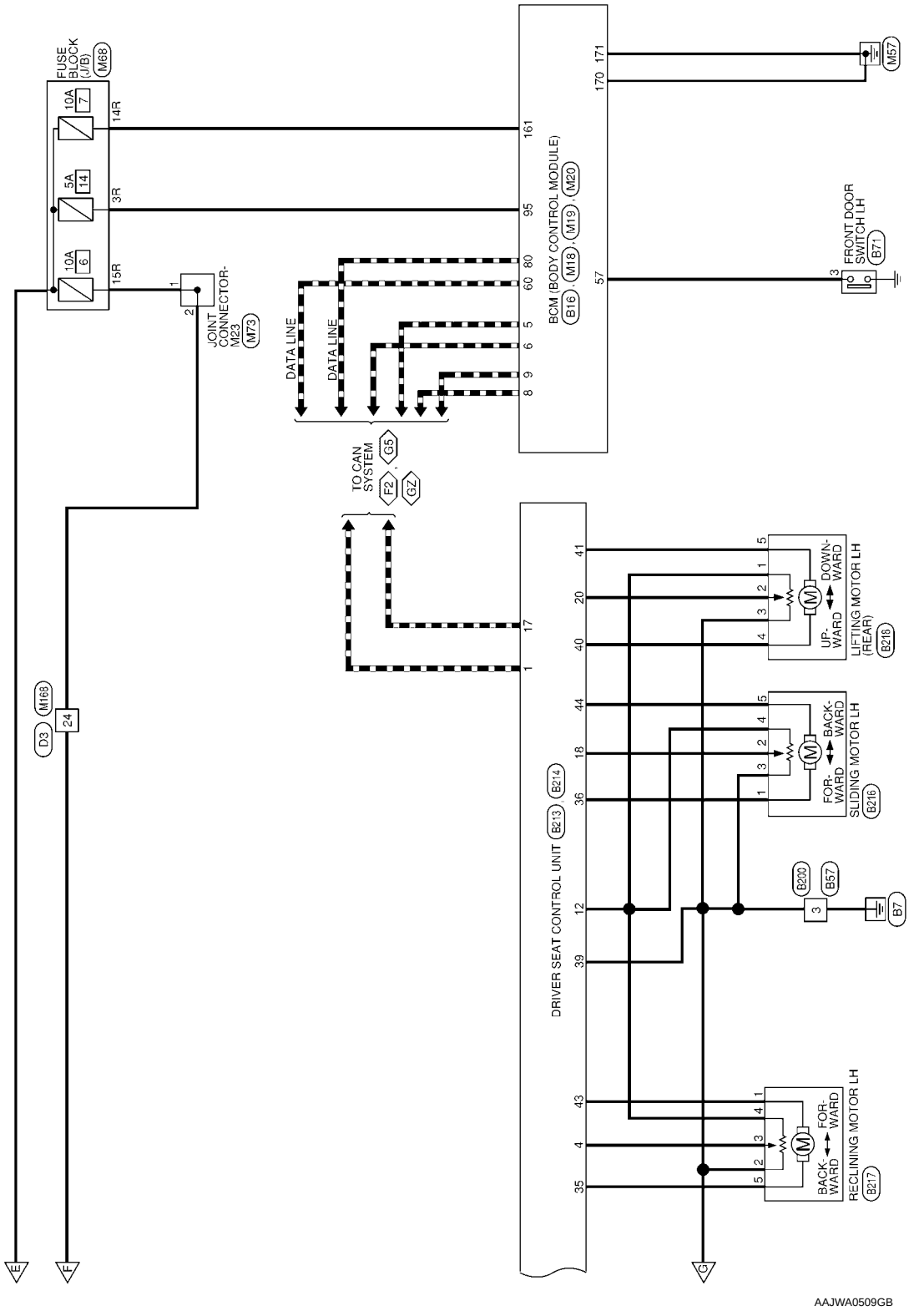
AUTOMATIC DRIVE POSITIONER SYSTEM

Wiring Diagram

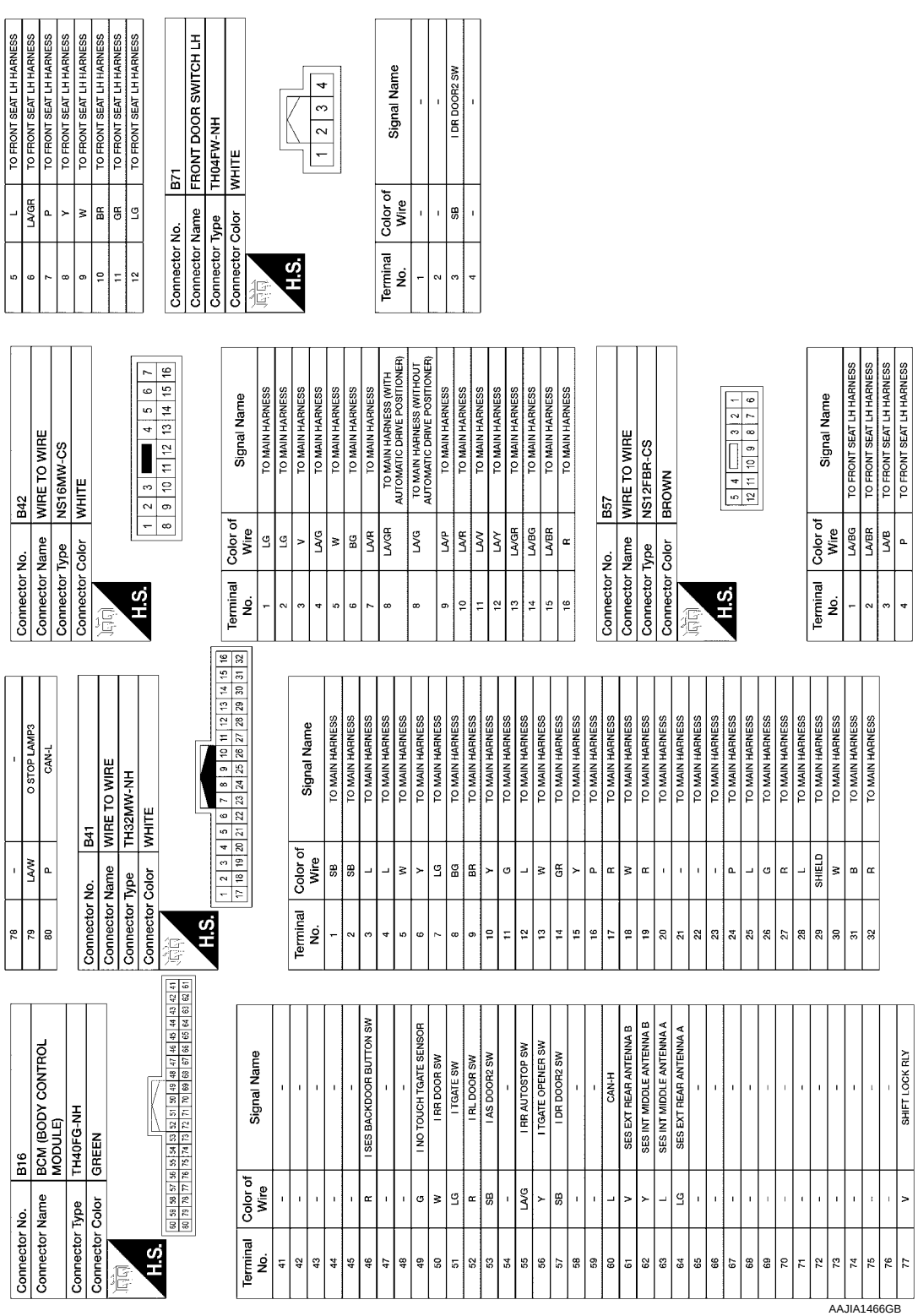
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D3
M168
M69
B41
B57
B200
DRIVER SEAT CONTROL UNIT (B213), (B214)
MEMORY SWITCH-2
MEMORY SWITCH-1
SET SWITCH
MEMORY INDICATOR-2
MEMORY INDICATOR-1
SEAT MEMORY SWITCH
D15
M74
B42
B57
B200
LIFTER SWITCH
UP
N
DOWN
RECLINING SWITCH
FORWARD
N
BACKWARD
SLIDING SWITCH
FORWARD
N
BACKWARD
POWER SEAT SWITCH LH
B215
AAJWA0508GB


FUSE BLOCK (J/B) M68
10A 7
5A 14
10A 6
14R
3R
15R
JOINT CONNECTOR-M23 M73
DATA LINE
DATA LINE
BCM (BODY CONTROL MODULE) B16, M18, M19, M20
TO CAN SYSTEM G5, F2, G2
DRIVER SEAT CONTROL UNIT B213, B214
FRONT DOOR SWITCH LH B71
M57
LIFTING MOTOR LH (REAR) B216
SLIDING MOTOR LH B216
RECLINING MOTOR LH B217
B200 B57
B7
D3 M168
24
E
F
C
AAJWA0509GB

AUTOMATIC DRIVE POSITIONER CONNECTORS



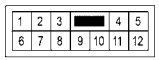
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AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER CONNECTORS

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

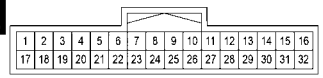
H.S.



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

Connector No.	B213
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FW-NH
Connector Color	WHITE

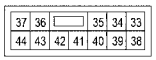
H.S.



Terminal No.	Color of Wire	Signal Name
1	P	CAN-H
2	GR	UART (TX/RX)
3	–	–
4	V	PULSE (RECLINER)
5	–	–
6	L	ADDRESS 2
7	LG	IND 2
8	L/W	SLIDE SW (BACKWARD)
9	GR/R	RECLINER SW (BACKWARD))
10	–	–
11	V/W	REAR LIFTER SW (DOWNWARD)
12	W	POWER SUPPLY (ENCODER)
13	–	–
14	–	–
15	–	–
16	–	–
17	L	CAN-L
18	V	PULSE (SLIDE)
19	–	–
20	O	PULSE (REAR LIFTER)
21	–	–
22	BR	ADDRESS 1
23	Y	IND 1
24	BR/W	SLIDE SW (FORWARD)
25	G/W	RECLINER SW (FORWARD)
26	–	–
27	Y/R	REAR LIFTER SW (UPWARD)
28	SB	SET SW
29	–	–
30	–	–
31	–	–
32	–	–

Connector No.	B214
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.



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

Connector No.	B215
Connector Name	POWER SEAT SWITCH LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	NS04FBR-CS
Connector Color	BROWN

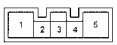
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	B	GND
4	–	–
5	G/W	RECLINER SW (FORWARD)
6	L/W	SLIDE SW (BACKWARD)
7	BR/W	SLIDE SW (FORWARD)
8	V/W	REAR LIFTER SW (DOWNWARD)
9	Y/R	REAR LIFTER SW (UPWARD)
10	GR/R	RECL (BACKWARD)

Connector No.	B216
Connector Name	SLIDING MOTOR LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	0 - 1379217-3
Connector Color	BLACK

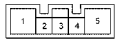
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	SLIDING MOTOR (BACKWARD)
2	W	PULSE
3	V	SEN GND
4	B	PWR ENC
5	SB	SLIDING MOTOR (FORWARD)

Connector No.	B217
Connector Name	RECLINING MOTOR LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	0 - 1379217-3
Connector Color	BLACK

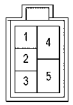
H.S.



Terminal No.	Color of Wire	Signal Name
1	BR	RECLINING MOTOR (BACKWARD)
2	B	SEN GND
3	V	PULSE
4	W	PWR ENC
5	P	RECLINING MOTOR (FORWARD)

Connector No.	B218
Connector Name	LIFTING MOTOR LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	2044898
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	W	PWR ENC
2	O	PULSE
3	B	SEN GND
4	R	LIFTING MOTOR (DOWNWARD)
5	V	LIFTING MOTOR (UPWARD)

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AUTOMATIC DRIVE POSITIONER CONNECTORS

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	TO MAIN HARNESS
2	R	TO MAIN HARNESS
3	G	TO MAIN HARNESS
4	BR	TO MAIN HARNESS
5	P	TO MAIN HARNESS
6	L/A	TO MAIN HARNESS
7	LA/BR	TO MAIN HARNESS
8	SB	TO MAIN HARNESS
9	GR	TO MAIN HARNESS
10	L	TO MAIN HARNESS
11	P	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	V	TO MAIN HARNESS
15	R	TO MAIN HARNESS
16	B	TO MAIN HARNESS

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	TO MAIN HARNESS
2	GR	TO MAIN HARNESS
3	W	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
3	LA/SB	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
4	V	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
4	LA/BG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
5	SB	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	LA/Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	LA/V	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
7	W	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	SB	TO MAIN HARNESS
10	LG	TO MAIN HARNESS
11	GR	TO MAIN HARNESS
12	G	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	B	TO MAIN HARNESS
15	BG	TO MAIN HARNESS
16	L	TO MAIN HARNESS
17	LA/SB	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
17	LA/W	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/W	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	LA/LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	LA/BR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	LA/V	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
20	LA/GR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
21	BR	TO MAIN HARNESS
22	W	TO MAIN HARNESS
23	LA/R	TO MAIN HARNESS
24	GR	TO MAIN HARNESS
25	R	TO MAIN HARNESS
26	LA/G	TO MAIN HARNESS
27	LA/LG	TO MAIN HARNESS
28	L/A	TO MAIN HARNESS
29	LA/Y	TO MAIN HARNESS
30	LA/V	TO MAIN HARNESS
31	LA/BR	TO MAIN HARNESS
32	P	TO MAIN HARNESS

Connector No.	D5
Connector Name	JOINT CONNECTOR-D01
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	B	GROUND
4	B	GROUND
5	LA/B	GROUND
6	LA/B	GROUND (WITH AUTOMATIC DRIVE POSITIONER)
6	B	GROUND (WITHOUT AUTOMATIC DRIVE POSITIONER)
7	B	GROUND
8	LA/B	GROUND

Connector No.	D15
Connector Name	SEAT MEMORY SWITCH
Connector Type	A08FW
Connector Color	WHITE

H.S.

3	5	6	7	2	1	4

Terminal No.	Color of Wire	Signal Name
1	W	ADDRESS 1
2	BR	ADDRESS 2
3	GR	SET SW
4	B	GROUND
5	GR	BATTERY
6	P	IND 1
7	Y	IND 2
8	–	–

Connector No.	D16
Connector Name	DOOR MIRROR LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	TH16MW-NH
Connector Color	WHITE

H.S.

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

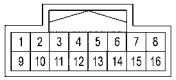
Terminal No.	Color of Wire	Signal Name
1	LA/BG	MIRROR SENSOR (LH VERTICAL)
2	LG	RELAY OUTPUT
3	LA/SB	POWER SUPPLY (SENSOR FOR 5V)
4	LA/BR	MIRROR MOTOR LH COMMON (DOWN&RIGHT)
5	LA/W	MIRROR MOTOR LH HORIZONTAL (LEFT)
6	–	–
7	–	–
8	–	–
9	LA/V	MIRROR SENSOR (LH HORIZONTAL)
10	B	GROUND
11	LA/Y	GND (SENSOR GND)
12	LA/GR	MIRROR MOTOR LH VERTICAL
13	LA/G	O D/ FR LEFT D
14	LA/B	GROUND
15	–	–
16	–	–

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AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	D22
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	TH16FGY-NH
Connector Color	GRAY

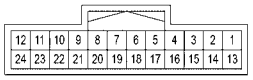
H.S.



Terminal No.	Color of Wire	Signal Name
1	LA/V	MIRROR SW (LEFTWARD)
2	–	–
3	LA/LG	MIRROR SELECT SW (RH)
4	LA/SB	MIRROR SELECT SW (LH)
5	–	–
6	–	–
7	–	–
8	–	–
9	LA/Y	MIRROR SW (RIGHTWARD)
10	–	–
11	–	–
12	LA/BR	MIRROR SW (UPWARD)
13	LA/R	ILL CONT OUT
14	LA/B	GROUND
15	LA/B	GROUND
16	LA/L	MIRROR SW (DOWNWARD)

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

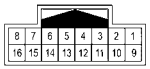
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	TO MAIN HARNESS
2	B	TO MAIN HARNESS
3	B	TO MAIN HARNESS
4	P	TO MAIN HARNESS
5	R	TO MAIN HARNESS
6	SB	TO MAIN HARNESS
7	L	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	Y	TO MAIN HARNESS
10	B	TO MAIN HARNESS
11	G	TO MAIN HARNESS
12	LA/V	TO MAIN HARNESS
13	LA/Y	TO MAIN HARNESS
14	LA/R	TO MAIN HARNESS
15	LA/V	TO MAIN HARNESS
16	LA/L	TO MAIN HARNESS
17	LA/BG	TO MAIN HARNESS
18	GR	TO MAIN HARNESS
19	LG	TO MAIN HARNESS
20	BR	TO MAIN HARNESS
21	LA/G	TO MAIN HARNESS
22	LA/SB	TO MAIN HARNESS
23	LA/BG	TO MAIN HARNESS
24	LA/Y	TO MAIN HARNESS

Connector No.	D106
Connector Name	DOOR MIRROR RH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	TH16MW-NH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	LA/BG	MIRROR SENSOR (RH VERTICAL)
2	GR	RELAY OUTPUT
3	LA/SB	POWER SUPPLY (SENSOR FOR 5V)
4	LA/R	MIRROR MOTOR RH (COMMON)
5	LA/Y	MIRROR MOTOR RH HORIZONTAL (LEFT)
6	–	–
7	–	–
8	–	–
9	LA/V	MIRROR SENSOR (RH HORIZONTAL)
10	B	GROUND
11	LA/Y	GND (SENSOR GND)
12	LA/V	MIRROR MOTOR RH VERTICAL
13	LA/G	O DI FR RIGHT D
14	LA/B	GROUND
15	–	–
16	–	–

Connector No.	E36
Connector Name	WIRE TO WIRE
Connector Type	L02FB-MC
Connector Color	BLACK

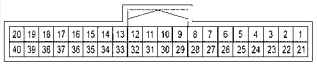
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO MAIN HARNESS
2	W	TO MAIN HARNESS

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
1	L	LIN 3 D
2	LA/G	O DI FR LEFT D
3	LA/Y	O DI FR RIGHT D
4	P	O SPARE4 RL N
5	R	CAN-L
6	L	CAN-H
7	–	–
8	L	CAN-H
9	R	CAN-L
10	BG	I DOORLOCK SW
11	Y	I HAZARD SW D
12	W	O PWR AUTOLIGHT SENSOR
13	–	–
14	–	–
15	–	–
16	–	–
17	L	O PWR ATDVC
18	–	–
19	LG	I AUTOLIGHT SENSOR
20	–	–
21	–	–
22	–	–
23	G	O WL AUTHORIZATION RL
24	LA/R	O DEFROSTER RL D
25	BR	O BAT TEMP1 RL
26	–	–
27	Y	O IGN1 RL
28	LA/W	O IGN2 RL
29	–	–
30	V	O GND AUTOLIGHT SENSOR
31	–	–
32	–	–
33	LG	O CSW 5
34	Y	I CSW 5
35	BG	O SECURITY LED
36	G	O CSW 3
37	GR	O CSW 4
38	V	O CSW 1
39	W	O CSW 2
40	SB	I DOORUNLOCK SW

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AUTOMATIC DRIVE POSITIONER CONNECTORS

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

H.S.

103	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	I SES FR HANDLE BUTTON SW
83	–	–
84	BR	I CSW 2
85	SB	I CSW 1
86	P	I CSW 3
87	BG	I CSW 4
88	W	O START SW BACKLIGHT LED
89	Y	I START WO ESCL SW
90	–	–
91	–	–
92	BR	I KEY CYLINDER LOCK SW
93	P	I KEY CYLINDER UNLOCK SW
94	G	I AT LOCKED IN PARK SW
95	V	I SHORTING PIN
96	–	–
97	–	–
98	–	–
99	–	–
100	V	SES EXT DR ANTENNA A
101	–	–
102	–	–
103	–	–
104	R	I DR KNOB SW
105	Y	I SES DR HANDLE BUTTON SW
106	W	O AUTO ACC2
107	–	–
108	–	–
109	–	–
110	BG	O MR OUTPUT
111	–	–
112	–	–
113	–	–
114	Y	O IMMOBILIZER KAZASHI B
115	W	O IMMOBILIZER KAZASHI A
116	BG	SES INT FRONT ANTENNA B
117	GR	SES INT FRONT ANTENNA A
118	SB	SES EXT AS ANTENNA B
119	P	SES EXT AS ANTENNA A
120	BR	SES EXT DR ANTENNA B

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
161	W	I PWR ECU
162	SB	O PWM ROOMLAMP 1
163	L	O AS LOCK OR UNLOCK D
164	–	–
165	V	O DR OR FR LOCK D
166	–	–
167	LA/V	I PWR DOORLOCK1
168	BG	I PWR FLASHERS
169	GR	I PWR STOP LAMP
170	B	I GND1
171	B	I GND2
172	G	O FR OR DR UNLOCK D
173	–	–
174	–	–
175	R	I PWR DOORLOCK2
176	LG	I PWR WIPER

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1R	V	ILLUMINATION +
2R	G	IGNITION
3R	V	BATTERY
4R	–	–
5R	–	–
6R	LA/L	ACCESSORY
7R	LA/V	BATTERY
8R	–	–
9R	–	–
10R	GR	BATTERY
11R	–	–
12R	–	–
13R	–	–
14R	W	BATTERY
15R	W	BATTERY
16R	GR	ACCESSORY

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	SB	TO BODY HARNESS
2	BR	TO BODY HARNESS
3	L	TO BODY HARNESS
4	L	TO BODY HARNESS
5	W	TO BODY HARNESS
6	Y	TO BODY HARNESS
7	LG	TO BODY HARNESS
8	BG	TO BODY HARNESS
9	BR	TO BODY HARNESS
10	Y	TO BODY HARNESS
11	G	TO BODY HARNESS
12	L	TO BODY HARNESS
13	W	TO BODY HARNESS
14	GR	TO BODY HARNESS
15	Y	TO BODY HARNESS
16	P	TO BODY HARNESS
17	R	TO BODY HARNESS
18	W	TO BODY HARNESS
19	R	TO BODY HARNESS
20	–	TO BODY HARNESS
21	–	TO BODY HARNESS
22	–	TO BODY HARNESS
23	–	TO BODY HARNESS
24	P	TO BODY HARNESS
25	L	TO BODY HARNESS
26	BR	TO BODY HARNESS
27	R	TO BODY HARNESS
28	L	TO BODY HARNESS
29	SHIELD	TO BODY HARNESS
30	W	TO BODY HARNESS
31	B	TO BODY HARNESS
32	R	TO BODY HARNESS

Connector No.	M72
Connector Name	CIRCUIT BREAKER-2
Connector Type	M02FW-P-LC
Connector Color	WHITE

H.S.

1
2

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

Connector No.	M73
Connector Name	JOINT CONNECTOR-M23
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	W	BATTERY
2	GR	BATTERY
3	W	BATTERY
4	W	BATTERY
5	W	BATTERY
6	W	BATTERY
7	W	BATTERY
8	W	BATTERY

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AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M74
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	TO BODY HARNESS
2	LG	TO BODY HARNESS
3	V	TO BODY HARNESS
4	Y	TO BODY HARNESS
5	W	TO BODY HARNESS
6	BG	TO BODY HARNESS
7	SB	TO BODY HARNESS
8	BR	TO BODY HARNESS
9	LA/G	TO BODY HARNESS
10	LA/R	TO BODY HARNESS
11	LG	TO BODY HARNESS
12	GR	TO BODY HARNESS
13	BR	TO BODY HARNESS
14	LA/L	TO BODY HARNESS
15	LA/BR	TO BODY HARNESS
16	GR	TO BODY HARNESS

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

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

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

Connector No.	M94
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS06FW-CS
Connector Color	WHITE

H.S.

25		26
27	28	29	30

Terminal No.	Color of Wire	Signal Name
25	GR	BAT (PTC)
26	–	–
27	–	–
28	–	–
29	–	–
30	B	GND (POWER)

Connector No.	M99
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	–
2	LG	MIRROR SELECOR SW (RH)
3	G	MIRROR SW (UPWARD)
4	V	MIRROR SW (LEFTWARD)
5	BG	MIRROR SENSOR (RH VERTICAL)
6	BG	MIRROR SENSOR (LH VERTICAL)
7	–	–
8	LG	UART (TX/RX)
9	–	–
10	V	MIRROR MOTOR RH VERTICAL
11	Y	MIRROR MOTOR (RH HORIZONTAL)
12	BR	MIRROR MOTOR LH (COMMON)

Connector No.	M75
Connector Name	WIRE TO WIRE
Connector Type	L02MB-MC
Connector Color	BLACK

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	–	TO ENGINE ROOM HARNESS
2	W	TO ENGINE ROOM HARNESS

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	TO FRONT DOOR LH HARNESS
2	R	TO FRONT DOOR LH HARNESS
3	G	TO FRONT DOOR LH HARNESS
4	BR	TO FRONT DOOR LH HARNESS
5	P	TO FRONT DOOR LH HARNESS
6	Y	TO FRONT DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
6	LA/L	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
7	R	TO FRONT DOOR LH HARNESS (WITHOUT BOSE AUDIO SYSTEM)
7	LA/BR	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
8	L	TO FRONT DOOR LH HARNESS
9	LA/BR	TO FRONT DOOR LH HARNESS
10	LA/GR	TO FRONT DOOR LH HARNESS
11	Y	TO FRONT DOOR LH HARNESS
12	BG	TO FRONT DOOR LH HARNESS
13	LA/G	TO FRONT DOOR LH HARNESS
14	LA/R	TO FRONT DOOR LH HARNESS
15	P	TO FRONT DOOR LH HARNESS
16	B	TO FRONT DOOR LH HARNESS

13	–	–
14	SB	MIRROR SELECT SW (LH)
15	L	MIRROR SW (DOWNWARD)
16	Y	MIRROR SW (RIGHTWARD)
17	V	MIRROR SENSOR (RH HORIZONTAL)
18	V	MIRROR SENSOR (LH HORIZONTAL)
19	–	–
20	Y	GND (SENSOR GND)
21	SB	POWER SUPPLY (SENSOR) FOR 5V
22	R	MIRROR MOTOR RH (COMMON)
23	GR	MIRROR MOTOR (LH VERTICAL)
24	W	MIRROR MOTOR (LH HORIZONTAL)

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AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	TO FRONT DOOR LH HARNESS
2	GR	TO FRONT DOOR LH HARNESS
3	Y	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
3	SB	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
4	V	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
4	BG	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
5	BR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	Y	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	LG	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	V	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
7	Y	TO FRONT DOOR LH HARNESS
8	V	TO FRONT DOOR LH HARNESS
9	BR	TO FRONT DOOR LH HARNESS
10	LG	TO FRONT DOOR LH HARNESS
11	L	TO FRONT DOOR LH HARNESS
12	Y	TO FRONT DOOR LH HARNESS
13	G	TO FRONT DOOR LH HARNESS
14	SHIELD	TO FRONT DOOR LH HARNESS
15	SB	TO FRONT DOOR LH HARNESS
16	BG	TO FRONT DOOR LH HARNESS
17	SB	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
17	GR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/SB	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	LA/GR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	BR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	LA/V	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
20	GR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
21	BR	TO FRONT DOOR LH HARNESS
22	W	TO FRONT DOOR LH HARNESS
23	LA/R	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
23	R	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
24	GR	TO FRONT DOOR LH HARNESS
25	R	TO FRONT DOOR LH HARNESS LED INDICATOR L
26	LA/G	TO FRONT DOOR LH HARNESS
27	LG	TO FRONT DOOR LH HARNESS
28	L	TO FRONT DOOR LH HARNESS
29	Y	TO FRONT DOOR LH HARNESS
30	V	TO FRONT DOOR LH HARNESS
31	G	TO FRONT DOOR LH HARNESS
32	P	TO FRONT DOOR LH HARNESS

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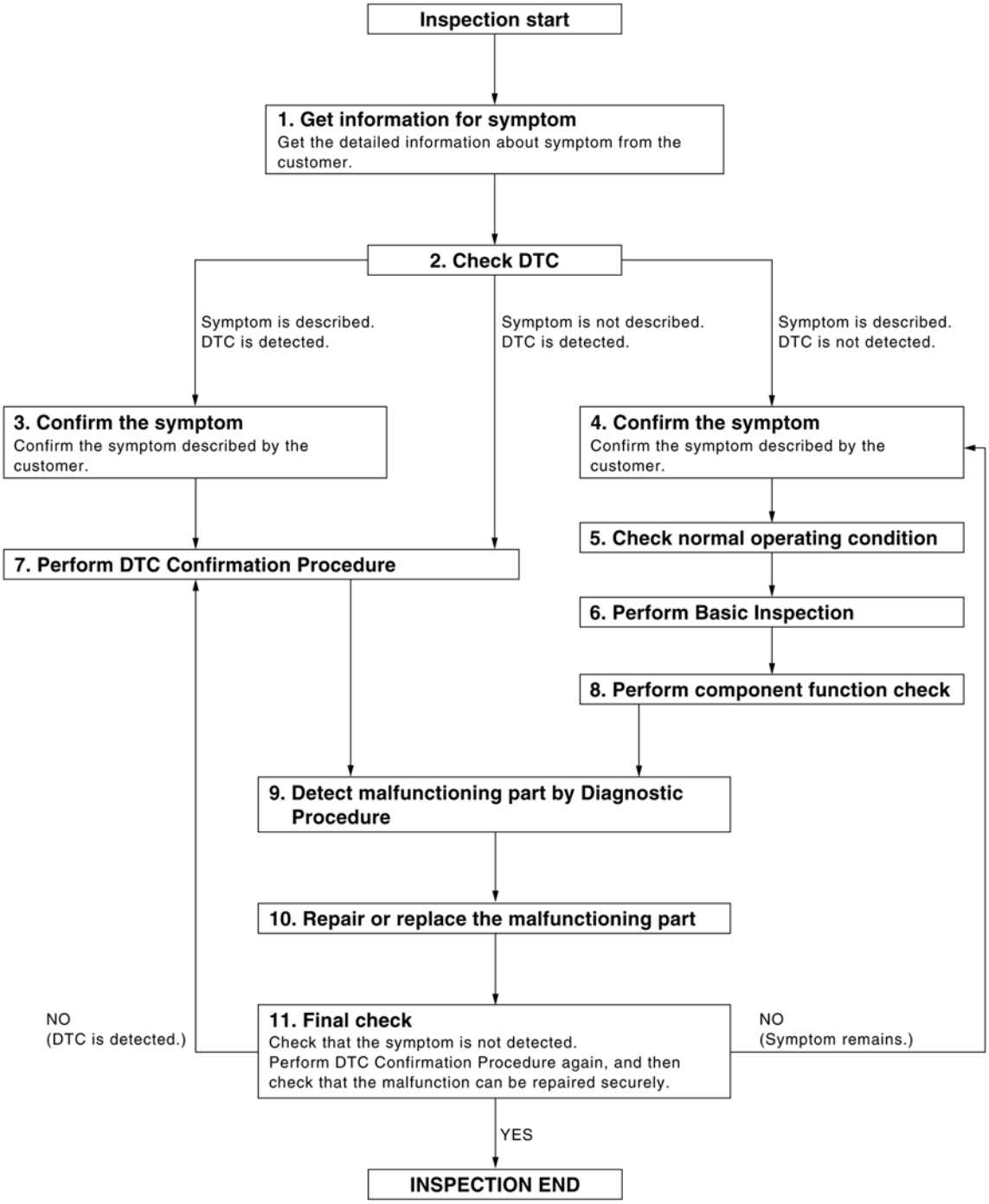
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000015176149

WORK FLOW



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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-24, "DTC Index".

Is any symptom described and any DTC is displayed?

Symptom is described, DTC is displayed.>>GO TO 3.
Symptom is not described, DTC is displayed.>>GO TO 7.
Symptom is described, DTC is not displayed.>>GO TO 4.

3. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 7.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5. CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-101, "Description".

Is the incident normal operation?

YES >> Inspection End.
NO >> GO TO 6.

6. PERFORM BASIC INSPECTION

Isolate the malfunctioning point with a basic inspection.

>> GO TO 8.

7. PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 9.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

8. PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 9.

9. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

>> GO TO 10.

10. REPAIR OR REPLACE

Repair or replace the malfunctioning part.

>> GO TO 11.

11. FINAL CHECK

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

Are all malfunctions corrected?

YES >> Inspection End.
Symptom is detected.>> GO TO 4.
DTC is detected.>> GO TO 7.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000015176150

Each function is reset to the following condition when the battery terminal is disconnected. Refer to ADP-41, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Work Procedure"

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.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Work Procedure

INFOID:0000000015176151

1. SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-42, "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2. MEMORY STORAGE

Perform memory storage. Refer to ADP-43, "MEMORY STORING : Description".

>> GO TO 3.

3. INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to ADP-43, "INTELLIGENT KEY INTERLOCK STORING : Description".

>> GO TO 4.

4. SYSTEM SETTING

Perform system setting. Refer to ADP-44, "SYSTEM SETTING : Description".

>> Inspection End.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000015176152

Each function is reset to the following condition when the driver seat control unit is replaced. Refer to ADP-42, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure"

Function	Condition	Procedure
Memory (Seat, mirror)	Erased	Perform storing

Function	Condition	Procedure
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.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure

INFOID:0000000015176153

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-42, "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to ADP-43, "MEMORY STORING : Description".

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to ADP-43, "INTELLIGENT KEY INTERLOCK STORING : Description".

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to ADP-44, "SYSTEM SETTING : Description".

>> Inspection End.

SYSTEM INITIALIZATION

SYSTEM INITIALIZATION : Description

INFOID:0000000015176154

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. Refer to ADP-42, "SYSTEM INITIALIZATION : Work Procedure"

SYSTEM INITIALIZATION : Work Procedure

INFOID:0000000015176155

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 ON to OFF position.
2. Front door switch (driver side) is ON (open) → OFF (close) → ON (open).

>> Inspection End.

3. STEP 2-B (WITH VEHICLE SPEED)

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

>> Inspection End.

MEMORY STORING

MEMORY STORING : Description

INFOID:0000000015176156

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. Refer to ADP-43, "MEMORY STORING : Work Procedure"

MEMORY STORING : Work Procedure

INFOID:0000000015176157

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.

>> Inspection End.

INTELLIGENT KEY INTERLOCK STORING

INTELLIGENT KEY INTERLOCK STORING : Description

INFOID:0000000015176158

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. Refer to ADP-43, "INTELLIGENT KEY INTERLOCK STORING : Work Procedure"

INTELLIGENT KEY INTERLOCK STORING : Work Procedure

INFOID:0000000015176159

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.

>> Inspection End.

SYSTEM SETTING

SYSTEM SETTING : Description

INFOID:0000000015176160

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. Refer to ADP-44, "SYSTEM SETTING : Work Procedure"

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

SYSTEM SETTING : Work Procedure

INFOID:0000000015176161

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

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

>> GO TO 5.

3.WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

>> GO TO 4.

4.WITH SET SWITCH - STEP 2

Push set switch and hold for more than 10 seconds, then confirm blinking of the memory switch indicator.
- Entry/exit assist are ON: Memory switch indicator blink two times.
- Entry/exit assist are OFF: Memory switch indicator blink once.

>> GO TO 5.

5.CONFIRM THE OPERATION

Check the entry/exit assist function setting is changed.

Is the setting changed?

YES >> Inspection End.
NO >> GO TO 1.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000015176162

Refer to LAN-44, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

DTC Logic

INFOID:0000000015176163

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
U1000	CAN COMM CIRCUIT (CAN communication circuit)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	—
		Threshold	—
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. STEP 1

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2.

2. STEP 2

CONSULT
Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-46, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO–2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000015176164

Refer to LAN-26, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

INFOID:0000000015176165

Refer to ADP-42, "SYSTEM INITIALIZATION : Work Procedure".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000015176166

Refer to LAN-44, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart".

DTC Logic

INFOID:0000000015176167

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
U1010	CONTROL UNIT (Control unit)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	—
		Threshold	—
		Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

Driver seat control unit

FAIL-SAFE

—

Diagnosis Procedure

INFOID:0000000015176168

1. REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".

B2112 SLIDING MOTOR

Description

INFOID:0000000015176169

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

DTC Logic

INFOID:0000000015176170

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2112	SEAT SLIDE (Seat slide)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	Sliding motor LH circuit (terminals 1 and 5)
		Threshold	Approx. 0V
		Diagnosis delay time	0.1 seconds or more

POSSIBLE CAUSE

- Driver seat control unit
- Slide motor harness is shorted

FAIL-SAFE

Only manual functions, except seat sliding, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Check DTC.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-48, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO–2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000015176171

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Check DTC.

Is the DTC detected?

YES >> GO TO 2.
NO–1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO–2 >> Confirmation after repair: Inspection End.

2.CHECK SLIDING MOTOR LH CIRCUIT (POWER SHORT)

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

(+)		(–)	Voltage (V) (Approx.)
Sliding motor LH			
Connector	Terminals		
B216	1	Ground	0
	5		

Is the inspection result normal?

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

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B214	36	Ground	0
	44		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End

B2113 RECLINING MOTOR

Description

INFOID:0000000015176172

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

DTC Logic

INFOID:0000000015176173

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2113	SEAT RECLINING (Seat reclining)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	Reclining motor LH circuit (terminals 1 and 5)
		Threshold	Approx. 0V
		Diagnosis delay time	0.1 seconds or more

POSSIBLE CAUSE

- Driver seat control unit
- Reclining motor harness is shorted

FAIL-SAFE

Only manual functions, except seat reclining, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Check DTC.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-50, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO–2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000015176174

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-50, "Description".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

2.CHECK RECLINING MOTOR LH CIRCUIT (POWER SHORT)

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

(+)		(–)	Voltage (V) (Approx.)
Reclining motor LH			
Connector	Terminals		
B217	1	Ground	0
	5		

Is the inspection result normal?

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

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B214	35	Ground	0
	43		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

B2128 UART COMMUNICATION LINE

Description

INFOID:0000000015176175

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

DTC Logic

INFOID:0000000015176176

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2128	UART COMM (Universal asynchronous receiver transmitter communication)	Diagnosis condition	—
		Signal (terminal)	—
		Threshold	Communication between driver seat control unit and auto drive positioner control unit is interrupted.
		Diagnosis delay time	A period of time.

POSSIBLE CAUSE

- UART communication line
  (UART communication line is open or shorted)
- Driver seat control unit
- Automatic drive positioner control unit

FAIL-SAFE

Only manual functions, except door mirror, operate normally.

DTC CONFIRMATION PROCEDURE

1. SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Check DTC.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-52, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO–2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000015176177

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-52, "Description".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

2. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit		Automatic drive positioner control unit		Continuity
Connector	Terminal	Connector	Terminal	
B213	2	M99	8	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	2		No

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".
NO >> Repair or replace harness.

B2130 EEPROM

DTC Logic

INFOID:0000000015176178

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2130	EEPROM (EEPROM malfunction)	Diagnosis condition	—
		Signal (terminal)	—
		Threshold	Driver seat control unit detected a CPU malfunction.
		Diagnosis delay time	—

POSSIBLE CAUSE

Driver seat control unit

FAIL-SAFE

Only manual functions operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Ⓔ CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Check DTC.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-54, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO–2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000015176179

1.PERFORM DTC CONFIRMATION PROCEDURE

Ⓔ CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO DRIVE POS.”.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-54, "DTC Logic".

Is the DTC displayed again?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> GO TO 2.

2. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000015243506

Regarding Wiring Diagram information, refer to BCS-51, "Wiring Diagram".

1. CHECK FUSE

Check that the following fuses are not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)
167	Power door lock battery power supply	5 (20A)
168	Turn signal/hazard battery power supply	1 (15A)
169	Stop lamp battery power supply	10 (10A)
175	Power door lock2 battery power supply	3 (20A)
176	Rear wiper battery power supply	4 (15A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage
	167		
	168		
	169		
	175		
	176		

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000015176182

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

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Power source	Condition	Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminal				
B214	37	Ground	Battery power supply	Ignition switch OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following.
- Repair or replace harness.
- Circuit breaker-2.

2. CHECK GROUND CIRCUIT

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B214	39		Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:0000000015176183

1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-41, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000015176184

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

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage (V) (Approx.)
Automatic drive positioner control unit			
Connector	Terminal		
M94	25	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following.
- Repair or replace harness.
- Circuit breaker-2.

2. CHECK GROUND CIRCUIT

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M94	30		Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:0000000015176185

1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-41, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

SLIDING SWITCH

Description

INFOID:0000000015176186

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

Component Function Check

INFOID:0000000015176187

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “SLIDE SW-FR”, “SLIDE SW-RR”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-58, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176188

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK SLIDING SWITCH SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminals				
B213	9	Ground	Sliding switch	Operate (back-ward)	0
				Release	Battery voltage
	24			Operate (forward)	0
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK SLIDING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B213	9	B215	6	Yes
	24		7	

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

Driver seat control unit connector		Ground	Continuity
Connector	Terminal		
B213	9		No
	24		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B213	9	Ground	Battery voltage
	24		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".

4. CHECK SLIDING SWITCH

Refer to ADP-59, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power seat switch LH. Refer to ADP-105, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace malfunctioning part.

Component Inspection

INFOID:0000000015176189

1. CHECK SLIDING SWITCH

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

Terminal		Condition		Continuity
Power seat switch LH				
3	6	Sliding switch (backward)	Operate	Yes
			Release	No
	7	Sliding switch (forward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to ADP-105, "Removal and Installation".

RECLINING SWITCH

Description

INFOID:0000000015176190

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

Component Function Check

INFOID:0000000015176191

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS”.
2. Select “RECLN SW-FR”, “RECLN SW-RR”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:0000000015176192

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK RECLINING SWITCH SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminals				
B213	25	Ground	Reclining switch	Operate (forward)	0
				Release	Battery voltage
	8			Operate (backward)	0
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK RECLINING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch LH connector		Continuity
Connector	Terminal	Connector	Terminal	
B213	25	B215	5	Yes
	8		10	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	25		No
	8		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B213	8	Ground	Battery voltage
	25		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".

4. CHECK RECLINING SWITCH

Refer to ADP-62, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power seat switch LH. Refer to ADP-105, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000015176193

1. CHECK RECLINING SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to ADP-105, "Removal and Installation".

LIFTING SWITCH (REAR)

Description

INFOID:0000000015176194

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

Component Function Check

INFOID:0000000015176195

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “LIFT RR SW-UP”, “LIFT RR SW-DN”.
3. Check that the function operates normally according to 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 inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-64, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176196

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminals				
B213	11	Ground	Lifting switch (rear)	Operate (downward)	0
				Release	Battery voltage
	27			Operate (upward)	0
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seat control unit		Power sear switch LH		Continuity
Connector	Terminal	Connector	Terminal	
B213	11	B215	8	Yes
	27		9	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	11		No
	27		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B213	11	Ground	Battery voltage
	27		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".

4. CHECK LIFTING SWITCH (REAR)

Refer to ADP-65, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power seat switch LH. Refer to ADP-105, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000015176197

1. CHECK LIFTING SWITCH (REAR)

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

Terminal		Condition		Continuity
Power seat switch LH				
3	8	Lifting switch rear (upward)	Operate	Yes
			Release	No
	9	Lifting switch rear (downward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to ADP-105, "Removal and Installation".

SEAT MEMORY SWITCH

Description

INFOID:0000000015176198

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

Component Function Check

INFOID:0000000015176199

1. DATA MONITOR

CONSULT

1. Select “Data Monitor” mode of “AUTO DRIVE POS”.
2. Select “MEMORY SW 1”, “MEMORY SW 2”, “SET SW”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

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

Diagnosis Procedure

INFOID:0000000015176200

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK SEAT MEMORY SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Seat memory switch			
Connector	Terminals		
D15	1	Ground	5
	2		
	3		

Is the inspection result normal?

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

2. CHECK MEMORY SWITCH CIRCUIT

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B213	6	D15	2	Yes
	22		1	
	28		3	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	6		No
	22		
	28		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D15	4		Yes

Is the inspection result normal?

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

4. CHECK SEAT MEMORY SWITCH

Refer to ADP-68, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".
NO >> Replace seat memory switch. Refer to ADP-104, "Removal and Installation".

Component Inspection

INFOID:0000000015176201

1. CHECK SEAT MEMORY SWITCH

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

Terminal		Condition		Continuity
Seat memory switch				
4	1	Memory switch 1	Push	Yes
			Release	No
	2	Memory switch 2	Push	Yes
			Release	No
	3	Set switch	Push	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace seat memory switch. Refer to ADP-104, "Removal and Installation".

DOOR MIRROR REMOTE CONTROL SWITCH
CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:0000000015176202

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

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000015176203

1. DATA MONITOR

Ⓔ CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “MIR CHNG SW-R”, “MIR CHNG SW-L”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-70, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000015176204

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK CHANGEOVER SWITCH SIGNAL

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

(+)		(-)	Change over switch condition	Voltage (V) (Approx.)
Automatic drive positioner control unit				
Connector	Terminal			
M94	2	Ground	RIGHT	0
			Other than above	5
	14		LEFT	0
			Other than above	5

Is the inspection result normal?

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

2. CHECK HARNESS CONTINUITY

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M94	2	D22	3	Yes
	14		4	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M94	2		No
	14		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch		Ground	Continuity
Connector	Terminal		
D22	15		Yes

Is the inspection result normal?

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

4. CHECK CHANGEOVER SWITCH

Check changeover switch.
Refer to ADP-71, "CHANGEOVER SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-54, "Intermittent Incident".
NO >> Replace door mirror remote control switch. Refer to MIR-28, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000015176205

1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

Terminal		Change over switch condition	Continuity
Door mirror remote control switch			
4	15	LEFT	Yes
		Other than above	No
3		RIGHT	Yes
		Other than above	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace door mirror remote control switch. Refer to MIR-28, "Removal and Installation".

MIRROR SWITCH

MIRROR SWITCH : Description

INFOID:0000000015176206

It operates angle of the door mirror face.
It transmits mirror face adjust operation to automatic drive positioner control unit.

MIRROR SWITCH : Component Function Check

INFOID:0000000015176207

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “MIR CON SW-UP/DN”,“MIR CON SW-RH/LH “.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-72, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000015176208

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK MIRROR SWITCH FUNCTION

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

(+)		(–)	Mirror switch Condition	Voltage (V) (Approx.)
Automatic drive positioner control unit				
Connector	Terminal			
M94	3	Ground	UP	0
			Other than above	5
	4		LEFT	0
			Other than above	5
	15		DOWN	0
			Other than above	5
	16		RIGHT	0
			Other than above	5

Is the inspection result normal?

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

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M94	3	D22	12	Yes
	4		1	
	15		16	
	16		9	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M94	3	Ground	No
	4		
	15		
	16		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch		Ground	Continuity
Connector	Terminal		
D22	15		Yes

Is the inspection result normal?

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

4. CHECK MIRROR SWITCH

Check mirror switch.
Refer to ADP-73, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-54, "Intermittent Incident".
NO >> Replace door mirror remote control switch. Refer to MIR-28, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

MIRROR SWITCH : Component Inspection

INFOID:0000000015176209

1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Terminal		Mirror switch condition	Continuity
Door mirror remote control switch			
9	15	RIGHT	Yes
		Other than above	No
1		LEFT	Yes
		Other than above	No
12		UP	Yes
		Other than above	No
16		DOWN	Yes
		Other than above	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace door mirror remote control switch. Refer to MIR-28, "Removal and Installation".

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000015176210

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT

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

Power seat switch LH		Ground	Continuity
Connector	Terminal		
B215	3		Yes

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".
NO >> Repair or replace harness.

SLIDING SENSOR

Description

INFOID:0000000015176211

- The sliding sensor is installed to the seat frame.
- The pulse signal is input to the driver seat control unit when sliding is performed.
- The driver seat control unit counts the pulse and calculates the sliding amount of the seat.

Component Function Check

INFOID:0000000015176212

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “SLIDE PULSE”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-76, "Diagnosis Procedure".

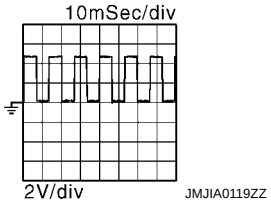
Diagnosis Procedure

INFOID:0000000015176213

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK SLIDING SENSOR SIGNAL

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

(+)		(–)	Condition		Voltage signal
Driver’s seat control unit					
Connector	Terminal				
B213	18	Ground	Seat sliding	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> GO TO 2.

2. CHECK SLIDING SENSOR CIRCUIT

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

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

Driver seat control unit		Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B213	18	B216	2	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	18		No

Is the inspection result normal?

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

3. CHECK SLIDING SENSOR POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Sliding motor LH			
Connector	Terminals		
B216	4	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B213	12	B216	4	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	12		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK SLIDING SENSOR GROUND

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

Sliding motor LH		Ground	Continuity
Connector	Terminal		
B216	3		Yes

Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to SE-47, "Exploded View".
NO >> Repair or replace harness.

RECLINING SENSOR

Description

INFOID:0000000015176214

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

Component Function Check

INFOID:0000000015176215

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “RECLN PULSE”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

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

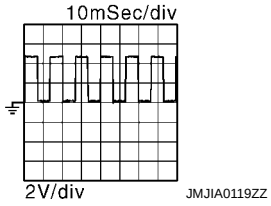
Diagnosis Procedure

INFOID:0000000015176216

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK RECLINING SENSOR SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Voltage signal
Connector	Terminal				
B213	4	Ground	Seat reclining	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> GO TO 2.

2. CHECK RECLINING SENSOR CIRCUIT

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

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

Driver seat control unit		Reclining motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B213	4	B217	3	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	4		No

Is the inspection result normal?

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

3. CHECK RECLINING SENSOR POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Reclining motor LH			
Connector	Terminals		
B217	4	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Reclining motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B213	12	B217	4	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	12		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK RECLINING SENSOR GROUND

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

Reclining motor LH		Ground	Continuity
Connector	Terminal		
B217	2		Yes

Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to SE-47, "Exploded View".
NO >> Repair or replace harness.

LIFTING SENSOR (REAR)

Description

INFOID:0000000015176217

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

Component Function Check

INFOID:0000000015176218

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “LIFT RR PULSE”.
3. Check lifting sensor (rear) signal under the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-82, "Diagnosis Procedure".

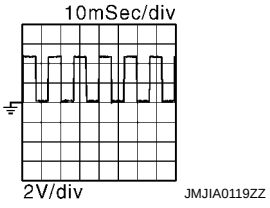
Diagnosis Procedure

INFOID:0000000015176219

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

(+)		(–)	Condition		Voltage signal
Driver seat control unit					
Connector	Terminal				
B213	20	Ground	Seat lifting (rear)	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> GO TO 2.

2. CHECK LIFTING SENSOR (REAR) CIRCUIT

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

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

Driver seat control unit		Lifting motor LH (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B213	20	B218	2	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	20		No

Is the inspection result normal?

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

3. CHECK LIFTING SENSOR (REAR) POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Lifting motor LH (rear)			
Connector	Terminals		
B218	1	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Lifting motor LH (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B213	12	B218	1	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	12		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK LIFTING SENSOR (REAR) GROUND

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

Lifting motor LH (rear)		Ground	Continuity
Connector	Terminal		
B218	3		Yes

Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to SE-47, "Exploded View".
NO >> Repair or replace harness.

MIRROR SENSOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000015176220

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

DRIVER SIDE : Component Function Check

INFOID:0000000015176221

1. DATA MONITOR

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “MIR/SEN LH U-D”, “MIR/SEN LH R-L”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-85, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000015176222

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK DOOR MIRROR LH SENSOR SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Door mirror LH					
Connector	Terminal				
D16	1	Ground	Door mirror LH	Close to peak	3.4
				Close to valley	0.6
	9			Close to right edge	3.4
				Close to left edge	0.6

Is the inspection result normal?

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

2. CHECK DOOR MIRROR LH SENSOR CIRCUIT 1

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

Automatic drive positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
M99	6	D16	1	Yes
	18		9	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M99	6		No
	18		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR LH SENSOR CIRCUIT 2

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

Automatic drive positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
M99	20	D16	11	Yes
	21		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M99	20		No
	21		

Is the inspection result normal?

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

4. CHECK TILT MOTOR ADJUSTING OPERATION

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

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror LH). Refer to MIR-26, "Removal and Installation".
NO >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000015176223

- The mirror sensor RH is installed to the door mirror RH.

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

PASSENGER SIDE : Component Function Check

INFOID:0000000015176224

1. CHECK FUNCTION

CONSULT
1. Select “Data Monitor” mode of “AUTO DRIVE POS.”.
2. Select “MIR/SEN RH U-D”, “MIR/SEN RH R-L”.
3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-87, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000015176225

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK DOOR MIRROR RH SENSOR SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Door mirror RH					
Connector	Terminal				
D106	1	Ground	Door mirror RH	Close to peak	3.4
				Close to valley	0.6
	9			Close to right edge	0.6
				Close to left edge	3.4

Is the inspection result normal?

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

2. CHECK DOOR MIRROR RH SENSOR CIRCUIT 1

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

Automatic drive positioner control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
M99	5	D106	1	Yes
	17		9	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M99	5		No
	17		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR RH SENSOR CIRCUIT 2

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

Automatic drive positioner control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
M99	20	D106	11	Yes
	21		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M99	20		No
	21		

Is the inspection result normal?

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

4. CHECK TILT MOTOR ADJUSTING OPERATION

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

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror RH). Refer to MIR-26, "Removal and Installation".
NO >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

SLIDING MOTOR

Description

INFOID:0000000015176226

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

Component Function Check

INFOID:0000000015176227

1. ACTIVE TEST

CONSULT
1. Select “Active Test” mode of “AUTO DRIVE POS.”.
2. Select “SEAT SLIDE”.
3. Check that the function operates normally.

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

Is the operation of relevant parts normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-89, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176228

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK SLIDING MOTOR LH POWER SUPPLY

CONSULT
1. Turn the ignition switch to ACC.
2. Perform “SEAT SLIDE" in “Active Test” mode of “AUTO DRIVE POS.”.
3. Check voltage between driver seat control unit harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminal				
B214	36	Ground	SEAT SLIDE	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	44			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to SE-47, "Exploded View".
NO >> GO TO 2.

2. CHECK SLIDING MOTOR LH CIRCUIT

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

Driver seat control unit		Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B214	36	B216	1	Yes
	44		5	

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

Driver seat control unit connector		Ground	Continuity
Connector	Terminal		
B214	36		No
	44		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

RECLINING MOTOR

Description

INFOID:0000000015176229

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

Component Function Check

INFOID:0000000015176230

1. ACTIVE TEST

CONSULT
1. Select “Active Test” mode of “AUTO DRIVE POS.”.
2. Select “SEAT RECLINING”.
3. Check that the function operates normally.

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

Is the operation of relevant parts normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176231

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK RECLINING MOTOR LH POWER SUPPLY

CONSULT
1. Turn the ignition switch to ACC.
2. Perform “SEAT RECLINING“ in “Active Test” mode of “AUTO DRIVE POS.”.
3. Check voltage between driver seat control unit harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminal				
B214	43	Ground	SEAT RECLINING	OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0
	35			OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage

Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to SE-47, "Exploded View".
NO >> GO TO 2.

2. CHECK RECLINING MOTOR LH CIRCUIT

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

Driver seat control unit		Reclining motor LH		Continuity
Connector	Terminal	Connector	Terminal	
B214	35	B217	5	Yes
	43		1	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B214	35		No
	43		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

LIFTING MOTOR (REAR)

Description

INFOID:0000000015176232

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

Component Function Check

INFOID:0000000015176233

1. ACTIVE TEST

CONSULT
1. Select “Active Test” mode of “AUTO DRIVE POS.”.
2. Select “SEAT LIFTER RR”.
3. Check that the function operates normally.

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

Is the operation of relevant parts normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-93, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176234

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK LIFTING MOTOR LH (REAR) POWER SUPPLY

CONSULT
1. Turn the ignition switch to ACC.
2. Perform “SEAT LIFTER RR“ in “Active Test” mode of “AUTO DRIVE POS.”.
3. Check voltage between driver seat control unit harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminal				
B214	40	Ground	SEAT LIFTER RR	OFF	0
				UP	0
				DWN (down)	Battery voltage
	41			OFF	0
				UP	Battery voltage
				DWN (down)	0

Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to SE-47, "Exploded View".
NO >> GO TO 2.

2. CHECK LIFTING MOTOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor LH (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B214	41	B218	5	Yes
	40		4	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B214	41		No
	40		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

DOOR MIRROR MOTOR

Description

INFOID:0000000015176235

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

Component Function Check

INFOID:0000000015176236

1. ACTIVE TEST

CONSULT
1. Select “Active Test” mode of “AUTO DRIVE POS.”.
2. Select “MIRROR MOTOR RH” and “MIRROR MOTOR LH”.
3. Check that the function operates normally.

Test item		Description	
MIRROR MOTOR LH	UP	Door mirror (driver side)	Upward
	DN		Downward
	LH		Leftward
	RH		Rightward
	OFF		Stop
MIRROR MOTOR RH	UP	Door mirror (passenger side)	Upward
	DN		Downward
	LH		Leftward
	RH		Rightward
	OFF		Stop

Is the inspection result normal?

YES >> Door mirror motor function is OK.
NO >> Refer to ADP-95, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176237

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+)		(–)	Door mirror remote control switch condition	Voltage (V) (Approx.)
Door mirror				
Connector	Terminal			
D16 (LH) D106 (RH)	12	Ground	UP	Battery voltage
			Other than above	0
	5		LEFT	Battery voltage
			Other than above	0
	4		DOWN / RIGHT	Battery voltage
			Other than above	0

Is the inspection result normal?

YES >> Refer to ADP-97, "Component Inspection".
NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

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

Door mirror LH

Automatic drive positioner control unit		Door mirror LH connector		Continuity
Connector	Terminal	Connector	Terminal	
M99	12	D16	4	Yes
	23		12	
	24		5	

Door mirror RH

Automatic drive positioner control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
M99	10	D106	12	Yes
	11		5	
	22		4	

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

Door mirror LH

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M99	12		No
	23		
	24		

Door mirror RH

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M99	10		No
	11		
	22		

Is the inspection result normal?

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

3. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

Door mirror LH

(+)		(-)	Mirror switch condition	Voltage (V) (Approx.)
Automatic drive positioner control unit				
Connector	Terminal			
M99	12	Ground	DOWN / RIGHT	Battery voltage
			Other than above	0
	23		UP	Battery voltage
			Other than above	0
	24		LEFT	Battery voltage
			Other than above	0

Door mirror RH

(+)		(-)	Mirror switch condition	Voltage (V) (Approx.)
Automatic drive positioner control unit				
Connector	Terminal			
M99	10	Ground	UP	Battery voltage
			Other than above	0
	11		LEFT	Battery voltage
			Other than above	0
	22		DOWN / RIGHT	Battery voltage
			Other than above	0

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace automatic drive positioner control unit. Refer to ADP-103, "Removal and Installation".

4. CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-97, "Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-54, "Intermittent Incident".
NO >> Replace door mirror actuator. Refer to MIR-26, "Removal and Installation".

Component Inspection

INFOID:0000000015176238

1. CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage.
Refer to MIR-23, "Exploded View".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace door mirror actuator. Refer to MIR-26, "Removal and Installation".

2. CHECK DOOR MIRROR MOTOR-II

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

Door mirror connector	Terminal		Operational direction
	(+)	(–)	
D16 (LH) D106 (RH)	4	5	RIGHT
	5	4	LEFT
	12	11	UP
	11	12	DOWN

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace door mirror actuator. Refer to MIR-26, "Removal and Installation".

SEAT MEMORY INDICATOR

Description

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

Component Function Check

INFOID:0000000015176240

1. ACTIVE TEST

CONSULT
1. Select “Active Test” mode of “AUTO DRIVE POS.”.
2. Select “MEMORY SW INDCTR“.
3. Check that the function operates normally.

Test item		Description	
MEMORY SW INDCTR	OFF	Memory switch indicator	OFF
	ON-1		Indicator 1: ON
	ON-2		Indicator 2: ON

Is the operation of relevant parts normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-98, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015176241

Regarding Wiring Diagram information, refer to ADP-28, "Wiring Diagram".

1. CHECK SEAT MEMORY INDICATOR CIRCUIT

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B213	23	D15	6	Yes
	7		7	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B213	23		No
	7		

Is the inspection result normal?

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

2. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Seat memory switch			
Connector	Terminals		
D15	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check the following:
- 10A fuse No. 1.
- Harness for open or short between memory indicator and fuse.

3. CHECK MEMORY INDICATOR

Refer to ADP-99, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace seat memory switch. Refer to ADP-104, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-102, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

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1. CHECK SEAT MEMORY INDICATOR

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

Terminal		Continuity
Seat memory switch		
(+)	(-)	
5	6	Yes
	7	

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace seat memory switch. Refer to ADP-104, "Removal and Installation".

SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table

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NOTE:
Always perform the “Basic Inspection” before performing diagnosis in the following table. Refer to ADP-38, "Work Flow".

Symptom		Diagnosis procedure	Reference page
Manual functions (for specific part) do not operate.	Sliding operation	Check sliding switch.	ADP-58
	Reclining operation	Check reclining switch.	ADP-61
	Lifting operation (rear)	Check lifting switch (rear).	ADP-64
	Door mirror operation	1. Changeover switch.	ADP-70
		2. Mirror switch	ADP-72
	All parts of seat	Check power seat switch ground circuit.	ADP-75
Memory functions (for specific part) do not operate.	Sliding operation	Check sliding sensor.	ADP-76
	Reclining operation	Check reclining sensor.	ADP-79
	Lifting operation (rear)	Check lifting sensor (rear).	ADP-82
	Door mirror operation	Check door mirror sensor.	Driver side: ADP-85 Passenger side: ADP-87
Memory functions and manual functions (for specific part) do not operate.	Sliding operation	Check sliding motor LH.	ADP-89
	Reclining operation	Check reclining motor LH.	ADP-91
	Lifting operation (rear)	Check lifting motor LH (rear).	ADP-93
	Door mirror operation	Check door mirror motor.	ADP-95
Entry/Exit assist function does not operate.		1. Check system setting.	ADP-44
		2. Perform initialization.	ADP-42
		3. Check front door switch (driver side).	DLK-206
Intelligent Key interlock function does not operate. (Other automatic operations and Intelligent Key system are normal)		1. Check door lock function.	DLK-216
		2. Perform memory storing.	ADP-43

NORMAL OPERATING CONDITION

Description

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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-42
	Entry/exit assist function is disabled. **NOTE:** Entry/exit assist function is set to ON before delivery (initial setting).	Change the settings.	ADP-44
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-14
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-43
			Entry assist function: ADP-14
			Exit assist function: ADP-13
			Intelligent Key interlock function: ADP-43

REMOVAL AND INSTALLATION

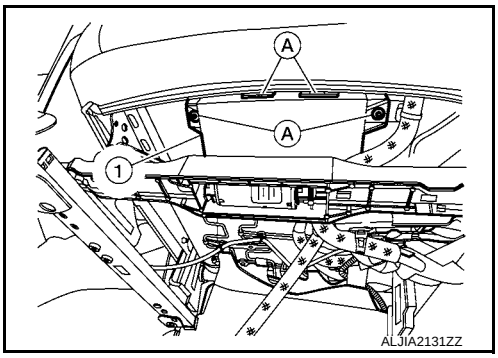
DRIVER SEAT CONTROL UNIT

Removal and Installation

INFOID:0000000015176245

REMOVAL

1. Reposition the driver seat to access driver seat control module. Refer to SE-34, "DRIVER SIDE : Removal and Installation".
2. Remove the screws (A).
3. Disconnect the harness connectors (A) from the driver seat control module (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Perform "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT". Refer to ADP-10, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Description".

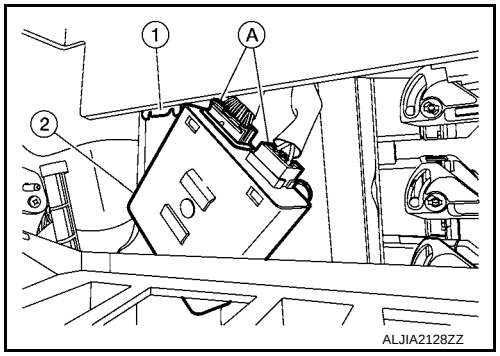
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

INFOID:0000000015176246

REMOVAL

1. Disconnect the negative battery terminal. Refer to PG-128, "Battery Disconnect".
2. Remove the glove box assembly and housing. Refer to IP-23, "Removal and Installation".
3. Release the automatic drive positioner control unit from the bracket (1).
4. Disconnect the harness connectors (A) from the automatic drive positioner control unit (2).



5. Remove automatic drive positioner control unit.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Perform "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT". Refer to ADP-41, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

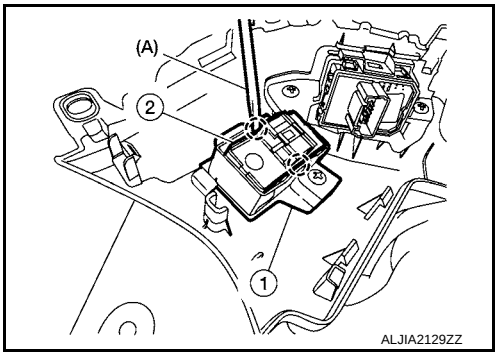
SEAT MEMORY SWITCH

Removal and Installation

INFOID:0000000015176247

REMOVAL

1. Remove the front door inside handle finisher. Refer to INT-15, "Exploded View".
2. Remove the front door pull handle. Refer to INT-15, "Exploded View"
3. Disconnect harness connector from the seat memory switch.
4. Release the pawls using a suitable tool (A) and remove seat memory switch (2) from switch finisher (1).
   ◌: Pawl



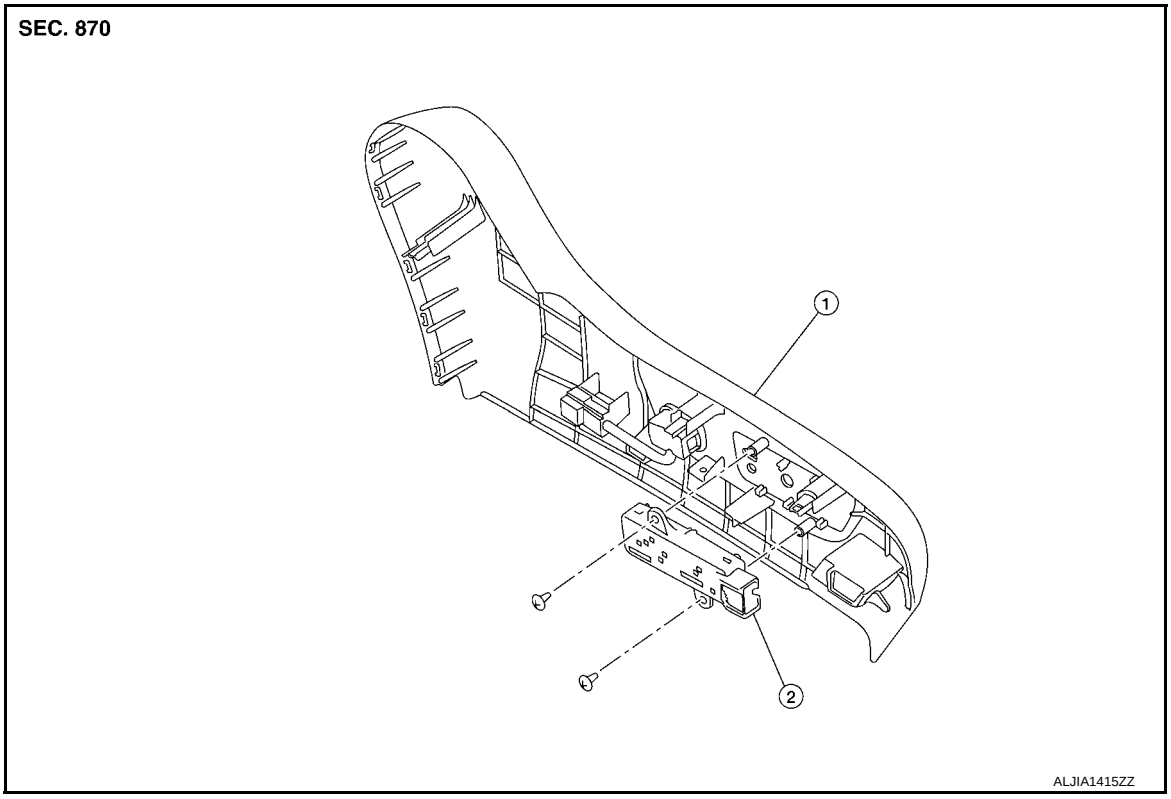
INSTALLATION

Installation is in the reverse order of removal.

POWER SEAT SWITCH

Exploded View

INFOID:0000000015176248



1. Seat cushion outer finisher
2. Power seat switch

Removal and Installation

INFOID:0000000015176249

REMOVAL

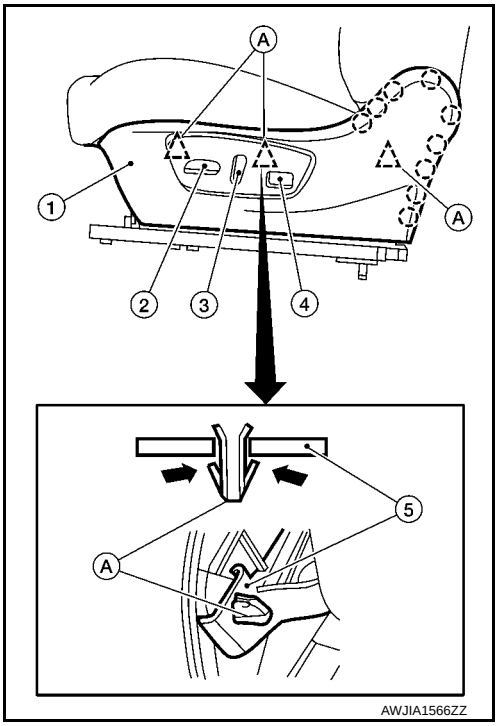
NOTE:

LH shown, RH similar.

1. Remove the seat cushion outer finisher (1).

a. Remove seat slide knob (2), seat recline knob (3) and seat lumbar knob (4), then release metal clips (A) from seat frame (5), as shown (⬅).
   △:Clip

b. Release pawls and remove.
   ◌: Pawl



2. Disconnect harness connector from power seat switch.
3. Remove screws and power seat switch.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Visually check the clips for deformation and damage during installation. Replace with new ones if necessary.**
- **When installing seat cushion outer finisher, check that clips are securely placed into seat cushion frame holes.**