SECTION ADP
AUTOMATIC DRIVE POSITIONER

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000013492786

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

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, 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 “SRS AIR BAG”.**
- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

Always observe the following items for preventing accidental activation.

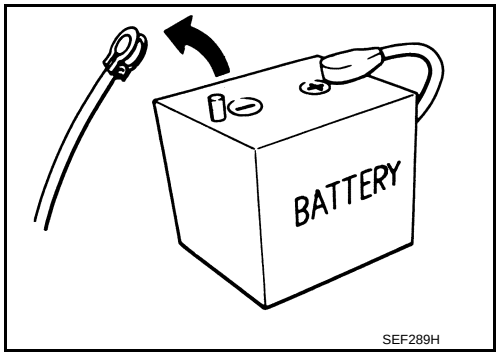
- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious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

Precautions for Removing Battery Terminal

INFOID:0000000013924570

When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:



BR08DE	: 4 minutes	V9X engine	: 4 minutes
D4D engine	: 20 minutes	YD25DDTi	: 2 minutes
HR09DET	: 12 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		

NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
  - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
  - Driving for 30 minutes or more on a steep slope.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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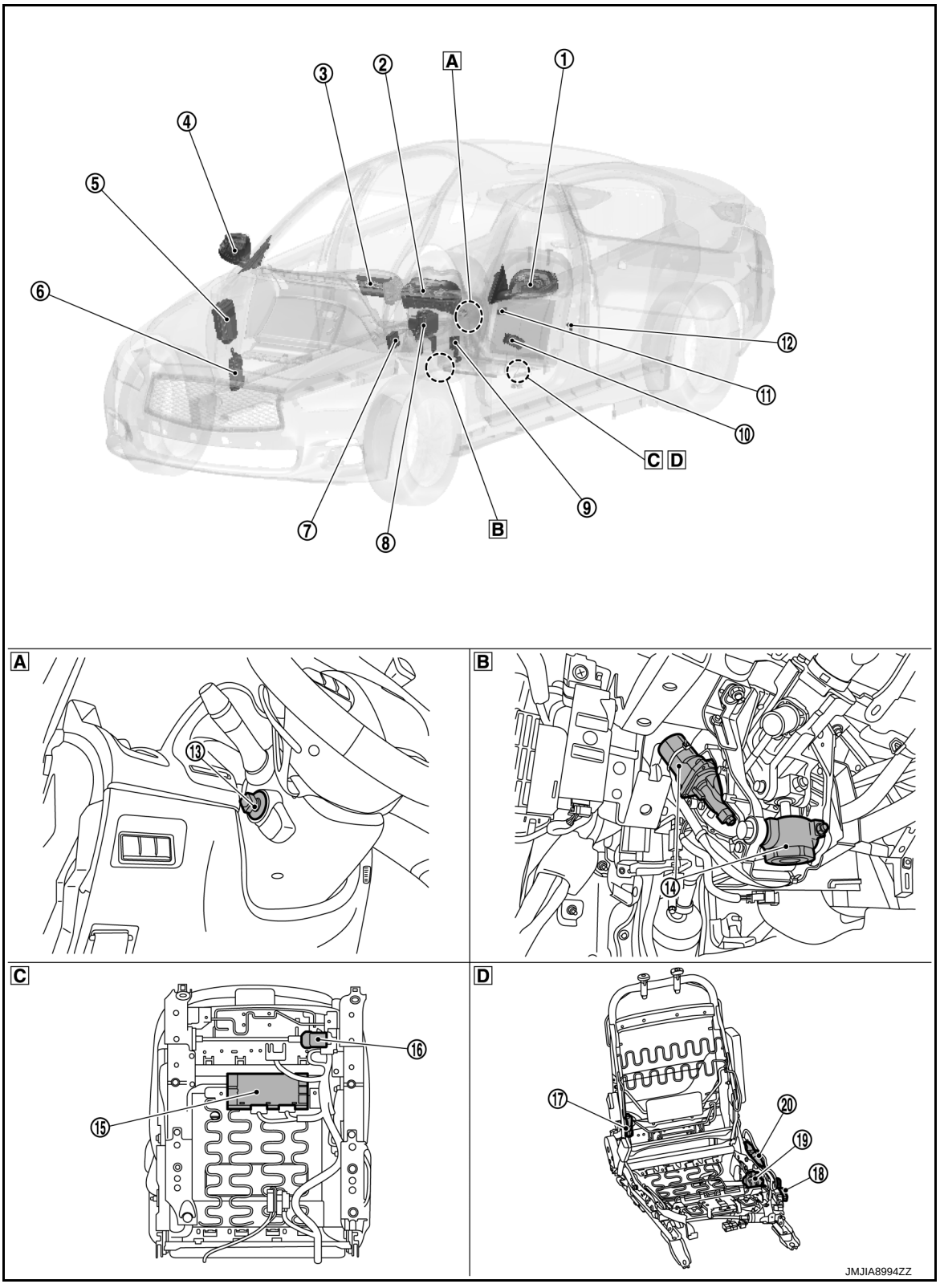

A View with steering column cover lower

B View with steering column cover lower and instrument driver lower panel removed

C Back side of seat cushion

D View with seat cushion pad and seat back pad remove

No.	Component		Function
①	Door mirror (driver side)	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies. Refer to MIR-5, "Component Parts Location" for detailed installation location.
		Mirror sensor	• Mirror sensor is installed to door mirror. • The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated. • Automatic drive positioner control unit calculates door mirror position according to the change of the voltage of 2 sensor input terminals. Refer to MIR-5, "Component Parts Location" for detailed installation location.
②	Combination meter		Transmit the vehicle speed signal to driver seat control unit via CAN communication.
③	Display control unit		Transmit the user information signal to driver seat control unit via CAN communication. Refer to AV-14, "Component Parts Location" for detailed installation location.
④	Door mirror (passenger side)	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies. Refer to MIR-5, "Component Parts Location" for detailed installation location.
		Mirror sensor	• Mirror sensor is installed to door mirror. • The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated. • Automatic drive positioner control unit calculates door mirror position according to the change of the voltage of 2 sensor input terminals. Refer to MIR-5, "Component Parts Location" for detailed installation location.
⑤	IPDM E/R		Transmit the detention switch signal to driver seat control unit via CAN communication. Refer to PCS-5, "Component Parts Location" for detailed installation location.
⑥	BCM		Recognizes the following status and transmits it to driver seat control unit via CAN communication. • Handle position: LHD • Driver door: OPEN/CLOSE • Ignition switch position: ACC/ON • Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) • Key ID • Starter: CRANKING/OTHER Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑦	Automatic drive positioner control unit		Refer to ADP-10, "Automatic Drive Positioner Control Unit".
⑧	ABS actuator and electric unit (control unit)		Transmit the vehicle speed signal to driver seat control unit via CAN communication. Refer to BRC-10, "Component Parts Location" for detailed installation location.

No.	Component		Function
⑨	Chassis control module		Transmit the key link signal and log-in permit signal to driver seat control unit via CAN communication. Refer to DAS-516, "Component Parts Location".
⑩	Power window main switch (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 PWC-7, "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 PWC-7, "Component Parts Location" for detailed installation location.
⑪	Seat memory switch		Refer to ADP-11, "Seat Memory Switch".
⑫	Front door switch (driver side)		Detects door open/close condition and transmits to BCM. Refer to DLK-9, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.
⑬	Tilt & telescopic switch		Refer to ADP-11, "Tilt & Telescopic Switch".
⑭	Tilt & telescopic motor	Tilt motor	Refer to ADP-11, "Tilt & Telescopic Motor".
		Tilt sensor	
		Telescopic motor	
		Telescopic sensor	
⑮	Driver seat control unit		Refer to ADP-11, "Driver Seat Control Unit".
⑯	Sliding motor	Sliding motor	• Sliding motor is installed to the seat cushion frame. • Sliding motor is activated with driver seat control unit. • Slides the seat forward/backward by changing the rotation direction of sliding motor.
		Sliding sensor	• Sliding sensor is integrated in sliding motor. • The pulse signal is input to driver seat control unit when sliding is performed. • Driver seat control unit counts the pulse and calculates the sliding amount of the seat.
⑰	Reclining motor	Reclining motor	• Reclining motor is installed to seat back frame. • Reclining motor is activated with driver seat control unit. • Seatback is reclined forward/backward by changing the rotation direction of reclining motor.
		Reclining sensor	• Reclining sensor is integrated in reclining motor. • The pulse signal is input to driver seat control unit when the reclining is operated. • Driver seat control unit counts the pulse and calculates the reclining amount of the seat.

No.	Component		Function
⑱	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	• Reclining switch is equipped to power seat switch on seat cushion side surface. • The operation signal is input to driver seat control unit when reclining switch is operated.
		Lifting switch (front)	• Lifting switch (front) is equipped to power seat switch on seat cushion side surface. • The operation signal is input to driver seat control unit when lifting switch (front) is operated.
		Lifting switch (rear)	• Lifting switch (rear) is equipped to power seat switch on seat cushion side surface. • The operation signal is input to driver seat control unit when lifting switch (rear) is operated.
⑲	Lifting motor (front)	Lifting motor (front)	• Lifting motor (front) is installed to seat frame assembly (driver side). • Lifting motor is activated with driver seat control unit. • Lifting motor (front) is moved upward/downward by changing the rotation direction of lifting motor (front).
		Lifting sensor (front)	• Lifting sensor (front) is installed in lifting motor (front). • When lifting motor (front) operates, pulse signal is transmitted to driver seat control unit from lifting sensor. Driver seat control unit counts the pulse and calculates the lift position (front) of the seat.
⑳	Lifting motor (rear)	Lifting motor (rear)	• Lifting motor (rear) is installed to seat frame assembly (driver side). • Lifting motor (rear) is activated with driver seat control unit. • Lifting motor (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.

Automatic Drive Positioner Control Unit

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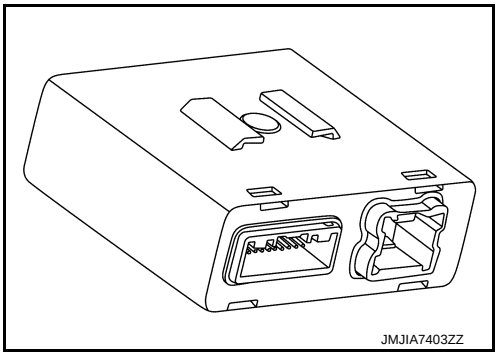
- It communicates with driver seat control unit via UART communication.
- Perform various controls with the instructions of driver seat control unit.
- Perform the controls of tilt & telescopic and door mirror.
- Operates steering column and door mirror with the signal from the driver seat control.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Driver Seat Control Unit

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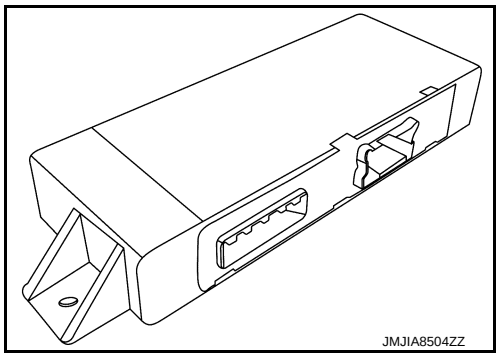
- Main units of automatic drive positioner system.
- It is connected to the CAN communication system.
- It communicates with automatic drive positioner control unit via UART communication.
- The address of each part is recorded.
- Operates each motor of seat to the registered position.
- Requests the operation of steering column and door mirror to automatic drive positioner control unit.
- Perform 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

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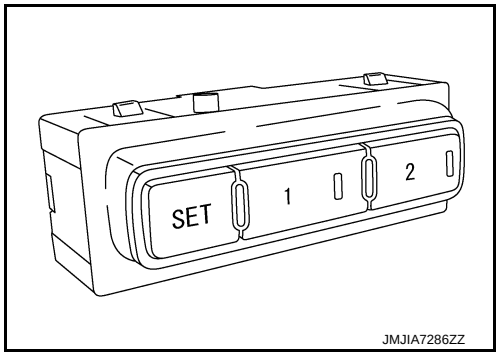

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SET SWITCH

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

SEAT MEMORY SWITCH

- The maximum 2 driving positions can be registered by memory switch 1 to 2.
- Driving position is set to the registered driving position when memory switch is pressed while operation conditions are satisfied.

SEAT MEMORY INDICATOR

Memory indicator indicates the status of auto driving position system by turning ON or blinking.

Tilt & Telescopic Switch

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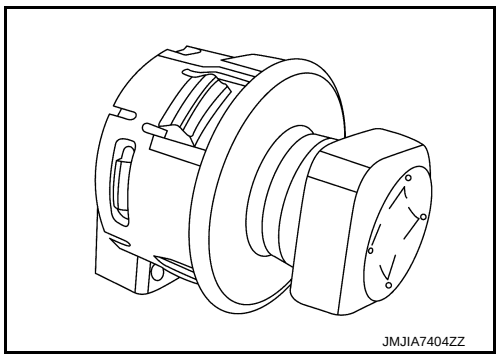
- Tilt & telescopic switch is equipped to steering column.
- The operation signal is input to automatic drive positioner control unit when switch is operated.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Tilt & Telescopic Motor

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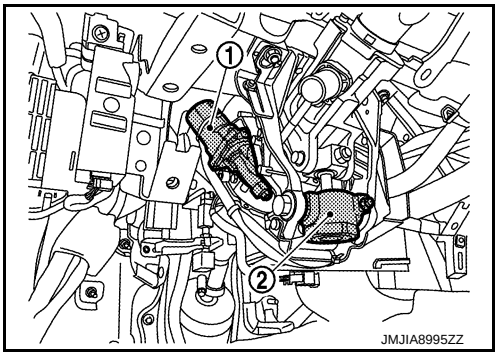


TELESCOPIC MOTOR

- Telescopic motor ① is installed to steering column assembly.
- Telescopic motor is activated with automatic drive positioner control unit.
- Compresses steering column by changing the rotation direction of telescopic motor.

TELESCOPIC SENSOR

- Telescopic sensor is integrated in telescopic motor ①.
- The resistance of telescopic sensor is changed according to the forward/backward position of steering column.
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of telescopic sensor resistance.
- Automatic drive positioner control unit calculates the telescopic position from the voltage.

TILT MOTOR

- Tilt motor ② is installed to steering column assembly.
- Tilt motor is activated with automatic drive positioner control unit.
- Steering column is tilted upward/downward by changing the rotation direction of tilt motor.

TILT SENSOR

- Tilt sensor is integrated in tilt motor ②.
- The resistance of tilt sensor is changed according to the up/down position of steering column.
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of tilt sensor resistance.
- Automatic drive positioner control unit calculates the tilt position from the voltage.

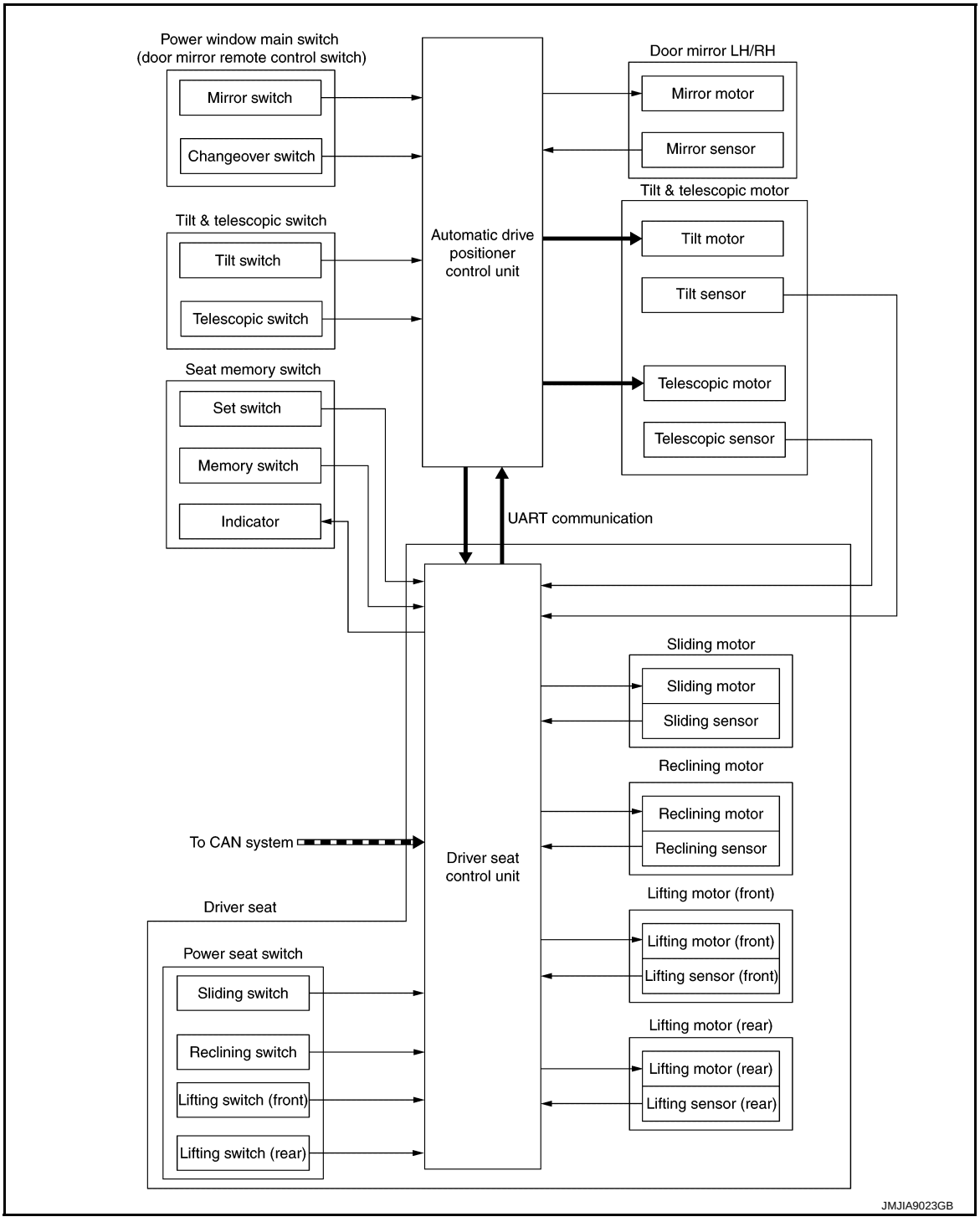
SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:0000000013509032

SYSTEM DIAGRAM



DESCRIPTION

Automatic drive positioner system is a system that adjusts the driver seat, steering column, and door mirrors. By using the following functions, an optimum driving position can be achieved. If another driver is seated in the driver seat, the driving position can be easily changed to the preset driving position.

Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch. For details on Manual function, refer to ADP-19, "MANUAL FUNCTION : System Description".
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2). The seat position set with the seat memory switch cannot be operated interlocked with the Intelligent Key. For details on Memory function, refer to ADP-21, "MEMORY FUNCTION : System Description".
Entry/Exit assist function	Exit	On exit, the seat moves backward and the steering column moves upward. For details on Exit assist function, refer to ADP-23, "EXIT ASSIST FUNCTION : System Description".
	Entry	On entry, the seat and steering column returns from exiting position to the previous driving position. For details on Entry assist function, refer to ADP-23, "EXIT ASSIST FUNCTION : System Description".
Log-in function		The driving position can be registered and retrieved for each Intelligent Key interlocked with the Log-in function of on board personal. • For Log-in function description, DMS-17, "LOG-IN FUNCTION : System Description". • For driving position operation with Log-in function, refer to ADP-26, "LOG-IN FUNCTION : System Description".
Intelligent Key interlock function		When Intelligent Key interlock function performs the following function, it causes the exit assist function to operate. • Unlock door: Intelligent Key • Unlock door: front door request switch (driver side) • Unlock door: one touch unlock sensor Registered information of the driving position is retrieved from the memory registered to the driver seat control unit by the Login-function. For details on Intelligent Key interlock function, refer to ADP-28, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description".

NOTE:
The lumbar support system and side support system are controlled independently with no link to the automatic drive positioner system.
Refer to SE-15, "LUMBAR SUPPORT SYSTEM : System Description", SE-15, "SIDE SUPPORT SYSTEM : System Description".

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)
- Tilt & telescopic switch

AUTOMATIC DRIVE POSITIONER SYSTEM : Circuit Diagram

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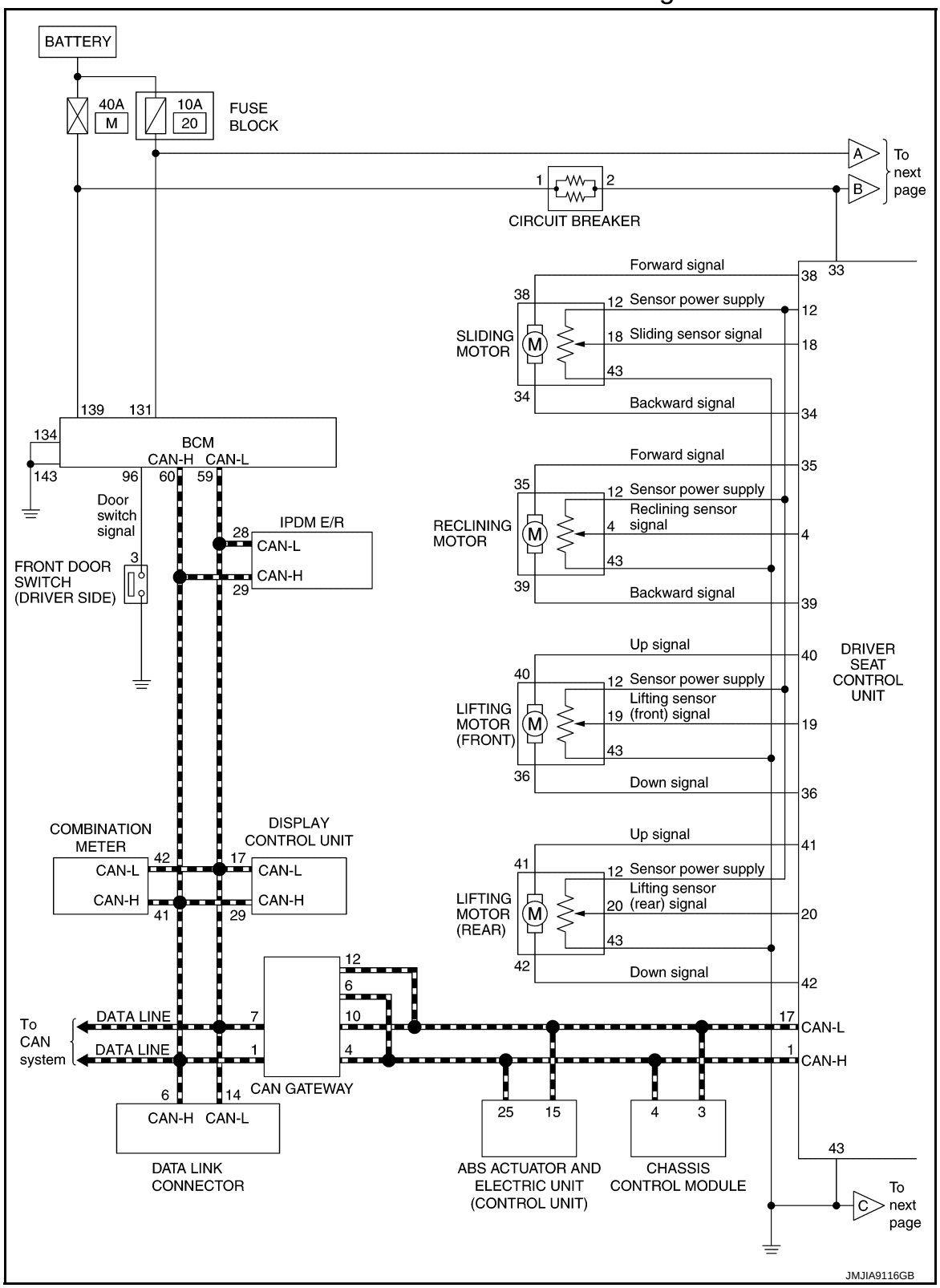
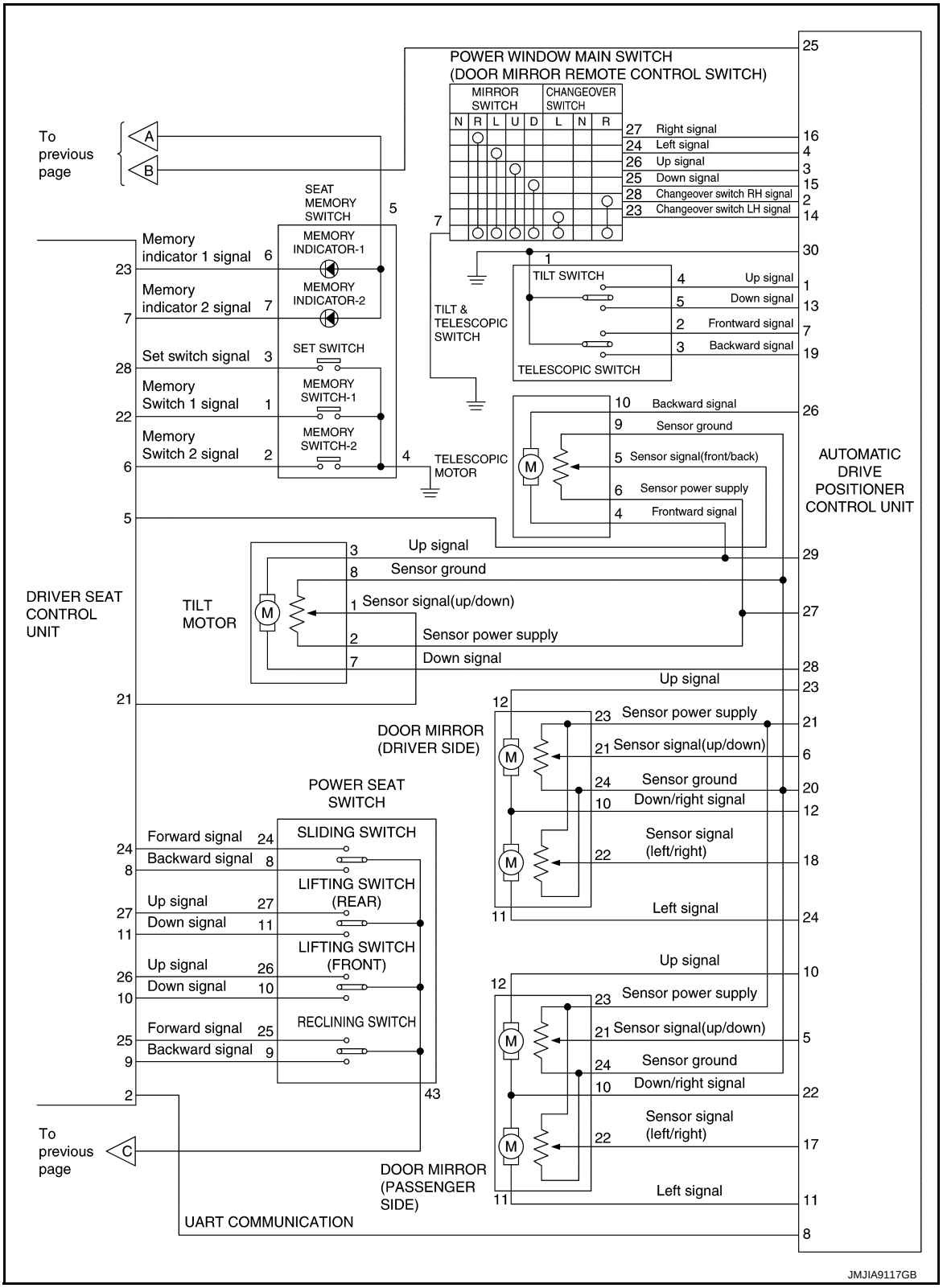
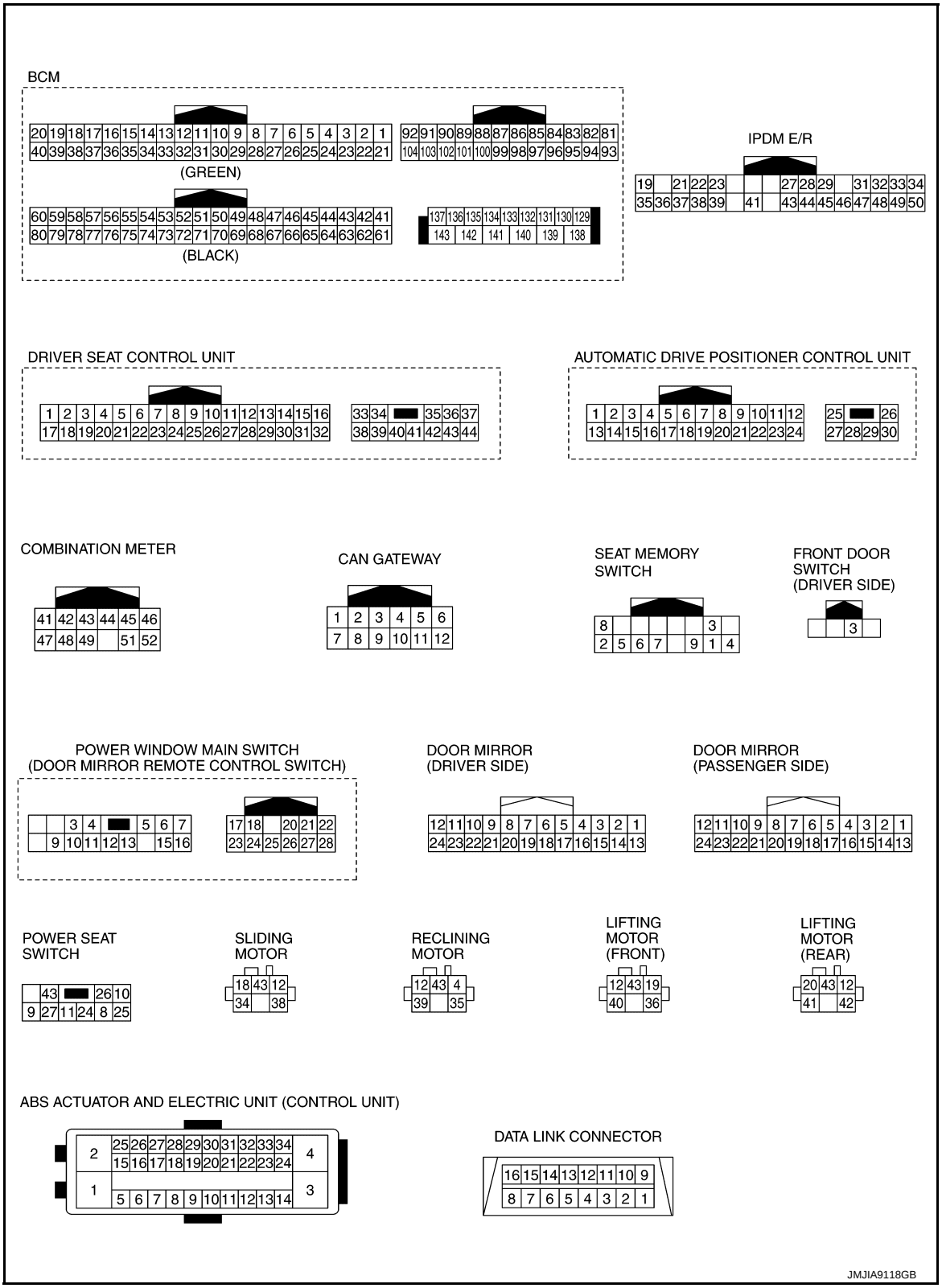
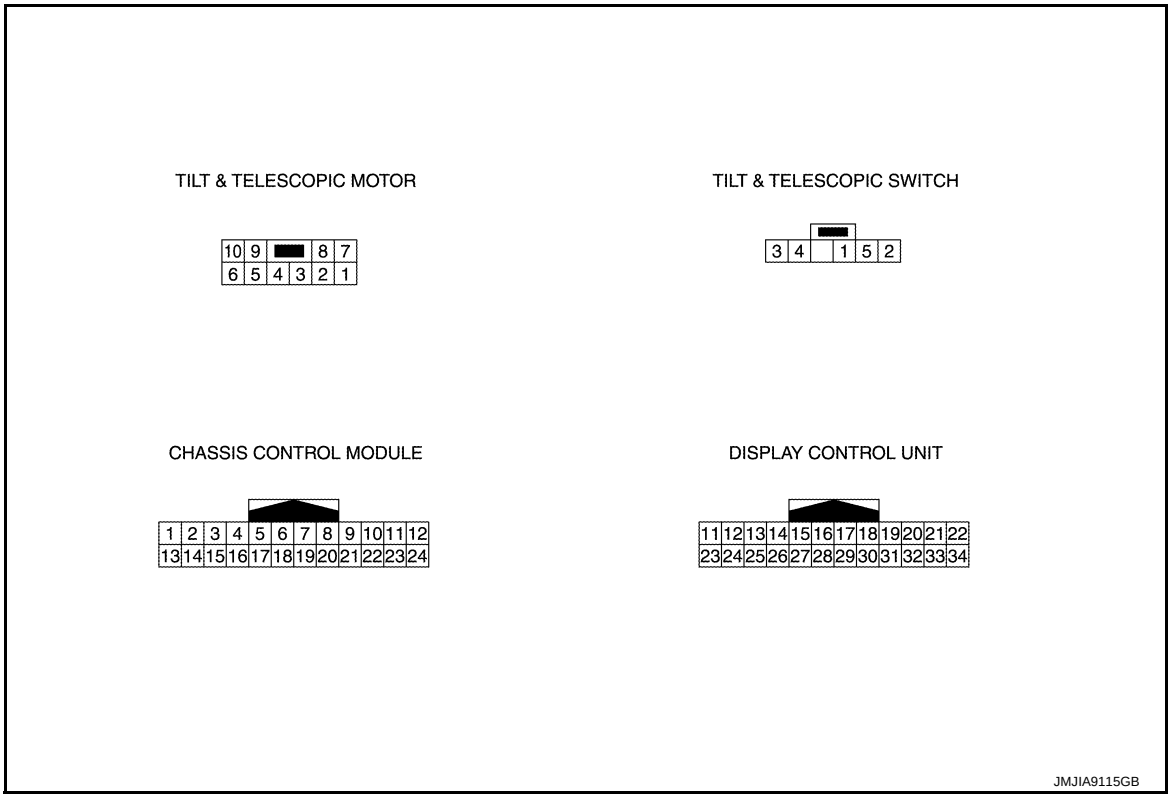



POWER WINDOW MAIN SWITCH
(DOOR MIRROR REMOTE CONTROL SWITCH)
MIRROR SWITCH
CHANGEOVER SWITCH
N R L U D L N R
27 Right signal
24 Left signal
26 Up signal
25 Down signal
28 Changeover switch RH signal
23 Changeover switch LH signal
To previous page
A
B
SEAT MEMORY SWITCH
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
Memory indicator 1 signal
Memory indicator 2 signal
Set switch signal
Memory Switch 1 signal
Memory Switch 2 signal
TILT & TELESCOPIC SWITCH
TILT SWITCH
Up signal
Down signal
Frontward signal
Backward signal
TELESCOPIC SWITCH
TELESCOPIC MOTOR
Backward signal
Sensor ground
Sensor signal(front/back)
Sensor power supply
Frontward signal
AUTOMATIC DRIVE POSITIONER CONTROL UNIT
DRIVER SEAT CONTROL UNIT
TILT MOTOR
Up signal
Sensor ground
Sensor signal(up/down)
Sensor power supply
Down signal
DOOR MIRROR (DRIVER SIDE)
Sensor power supply
Sensor signal(up/down)
Sensor ground
Down/right signal
Sensor signal (left/right)
Left signal
POWER SEAT SWITCH
SLIDING SWITCH
LIFTING SWITCH (REAR)
LIFTING SWITCH (FRONT)
RECLINING SWITCH
Forward signal
Backward signal
Up signal
Down signal
Forward signal
Backward signal
To previous page
C
DOOR MIRROR (PASSENGER SIDE)
UART COMMUNICATION
JMJIA9117GB


BCM
(GREEN)
(BLACK)
IPDM E/R
DRIVER SEAT CONTROL UNIT
AUTOMATIC DRIVE POSITIONER CONTROL UNIT
COMBINATION METER
CAN GATEWAY
SEAT MEMORY SWITCH
FRONT DOOR SWITCH (DRIVER SIDE)
POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH)
DOOR MIRROR (DRIVER SIDE)
DOOR MIRROR (PASSENGER SIDE)
POWER SEAT SWITCH
SLIDING MOTOR
RECLINING MOTOR
LIFTING MOTOR (FRONT)
LIFTING MOTOR (REAR)
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
DATA LINK CONNECTOR
JMJIA9118GB

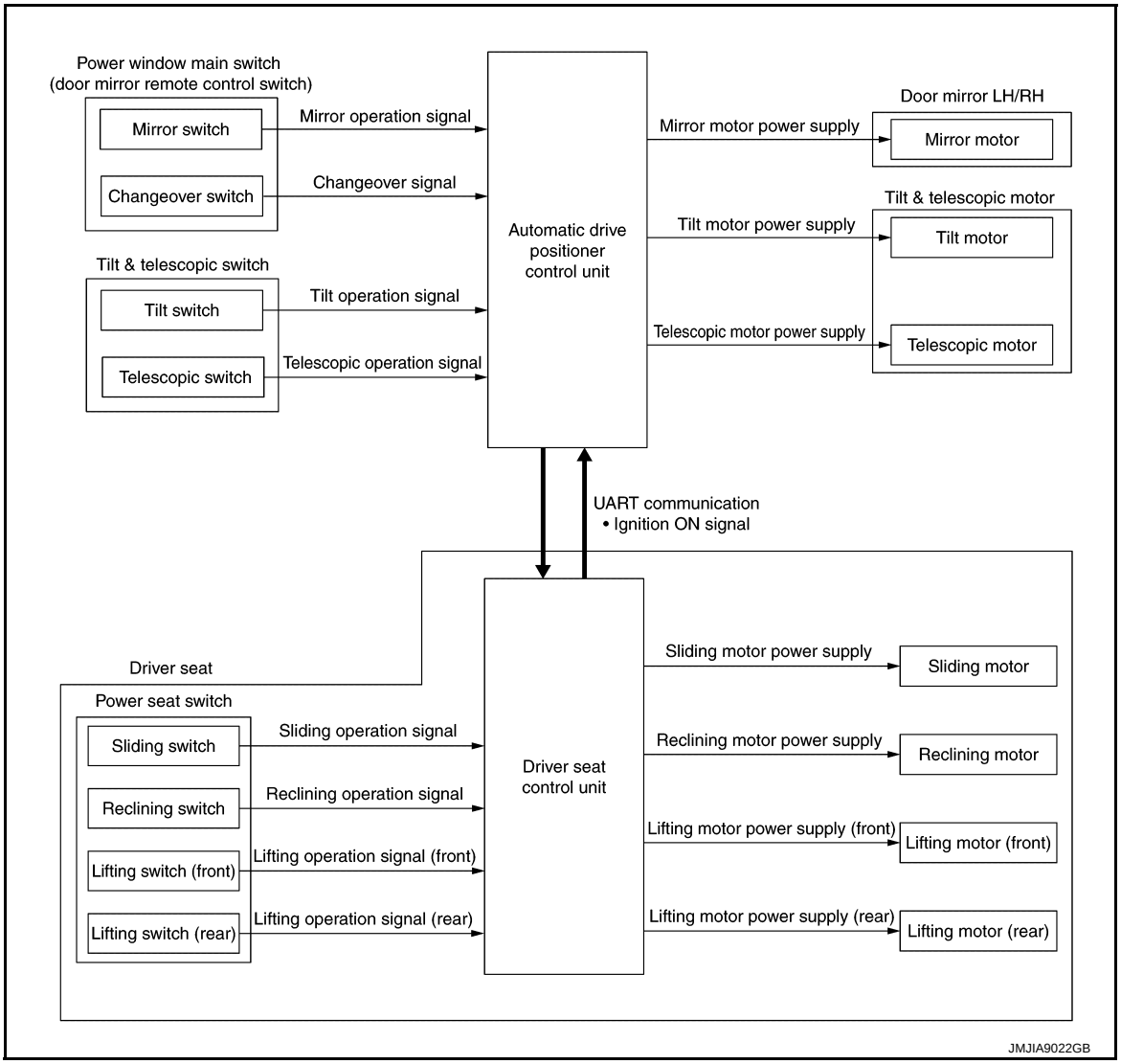


MANUAL FUNCTION

MANUAL FUNCTION : System Description

INFOID:0000000013509079

SYSTEM DIAGRAM



DESCRIPTION

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

Operation procedure

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

NOTE:

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

DETAIL FLOW

Seat

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

NOTE:
The power seat can be operated manually regardless of the ignition switch position.

Tilt & Telescopic

Order	Input	Output	Control unit condition
1	Tilt & telescopic switch	—	The tilt & telescopic switch signal is inputted to the automatic drive positioner control unit when the tilt & telescopic switch is operated.
2	—	Motors (Tilt, telescopic)	The automatic drive positioner control unit actuates each motor according to the operation of the tilt & telescopic switch.

NOTE:
The tilt & telescopic can be operated manually when ignition switch is in either ACC or ON position.

Door Mirror

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

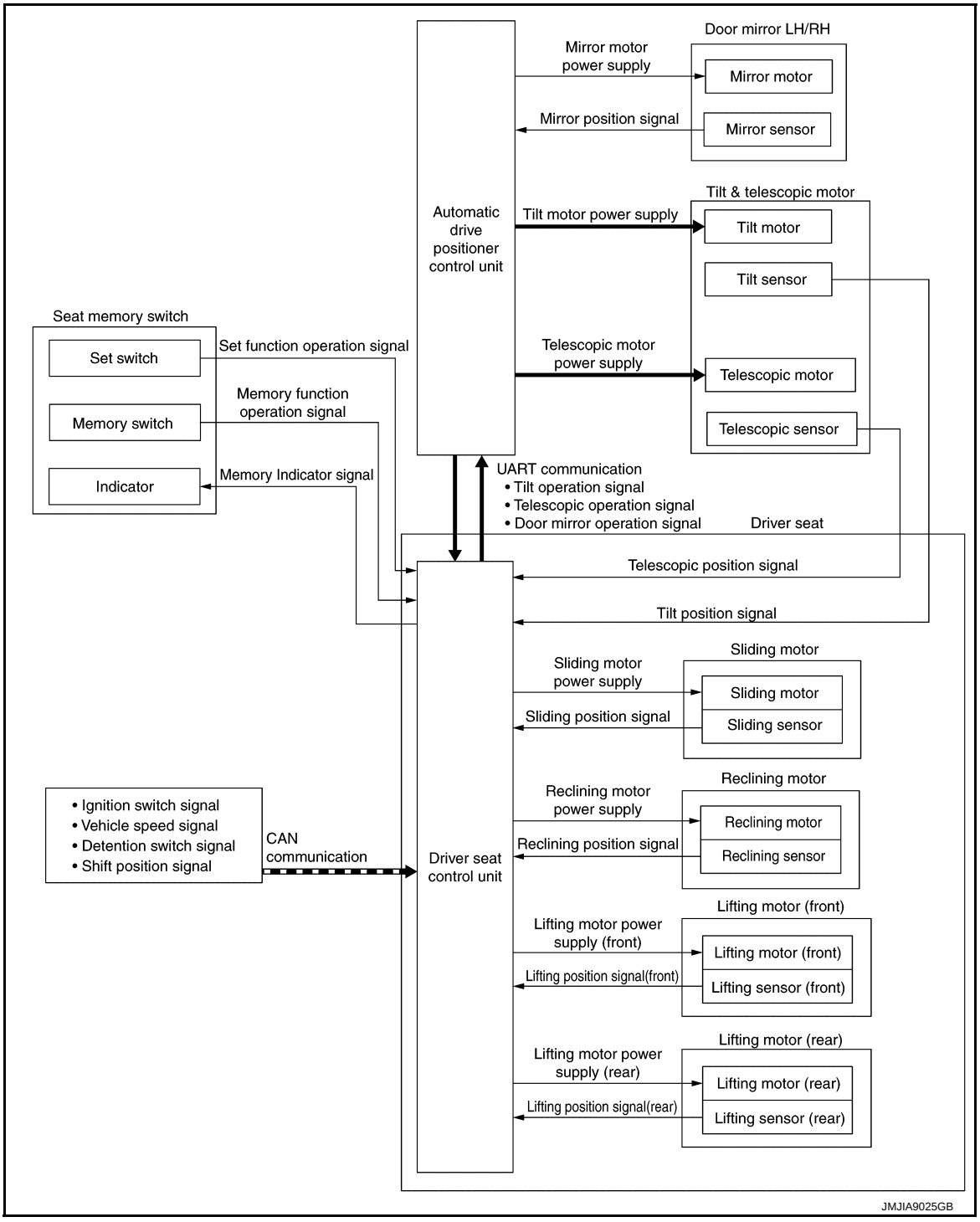
NOTE:
The door mirrors can be operated manually when ignition switch is in either ACC or ON position.

MEMORY FUNCTION

MEMORY FUNCTION : System Description

INFOID:0000000013509080

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
IPDM E/R	Detention switch signal

Component	Signal
BCM	Ignition switch signal
ECM	Shift position signal

DESCRIPTION

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

NOTE:

Further information for the memory storage procedure. Refer to ADP-69, "Description".

Operation Procedure

1. Apply parking brake.
2. Shift position P position.
3. Push desired memory switch.
4. Driver seat, steering and door mirror will move to the memorized position.

Operation Condition

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

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

Detail Flow

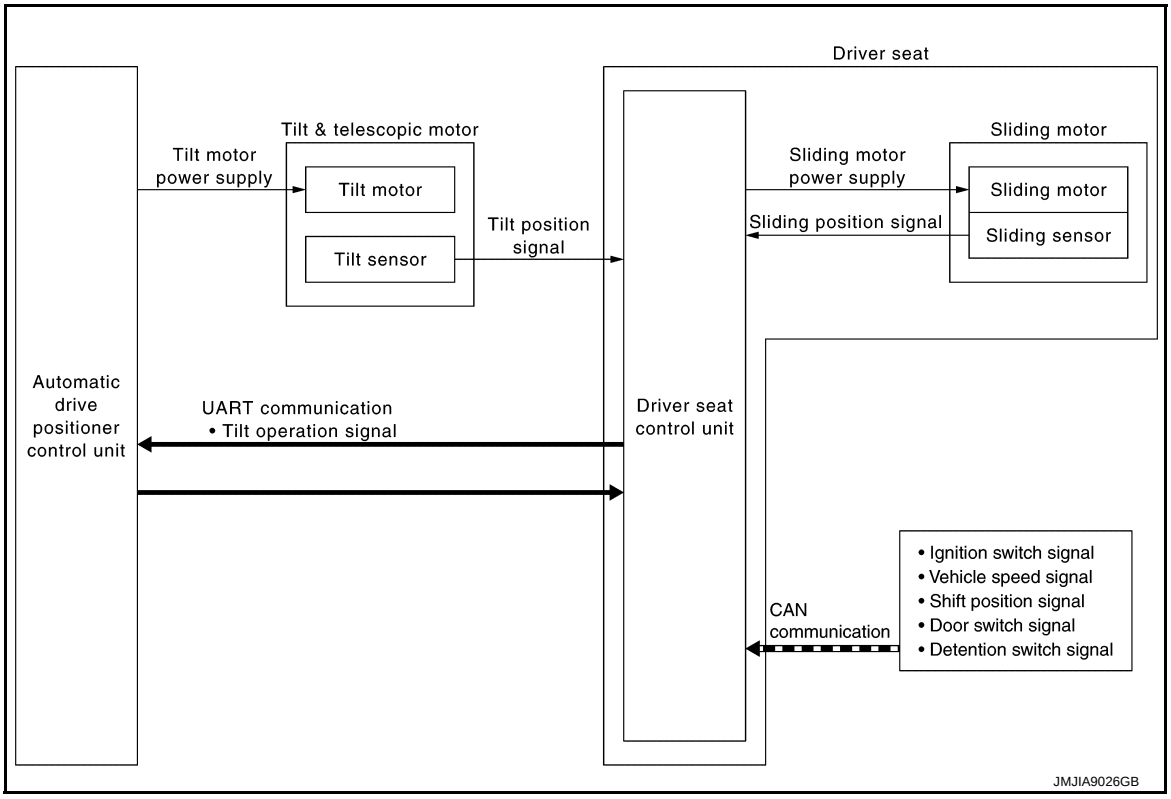
Order	Input	Output	Control unit condition
1	Memory switch	—	The memory switch signal is inputted to the driver seat control unit when memory switch 1 or 2 is operated.
2	—	Motors (Seat, Steering, door mirror)	Driver seat control unit operates each motor of seat when it recognizes the memory switch pressed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

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Description

INFOID:0000000013509081

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

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Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	• Ignition switch signal • Door switch signal
ECM	Shift position signal
IPDM E/R	Detention switch signal

DESCRIPTION

- When exiting, the condition is satisfied, the seat is moved backward 40 mm (1.57 in) from normal sitting position and the steering is moved to the most upper position.
- The seat slide amount and the steering operation at entry/exit operation can be changed.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-70, "Description".

Operation Procedure

1. Shift position P position.
2. Open the driver door with ignition switch in OFF position.
3. Driver seat and steering column will move to the exiting position.

Operation Condition

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

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

Detail Flow

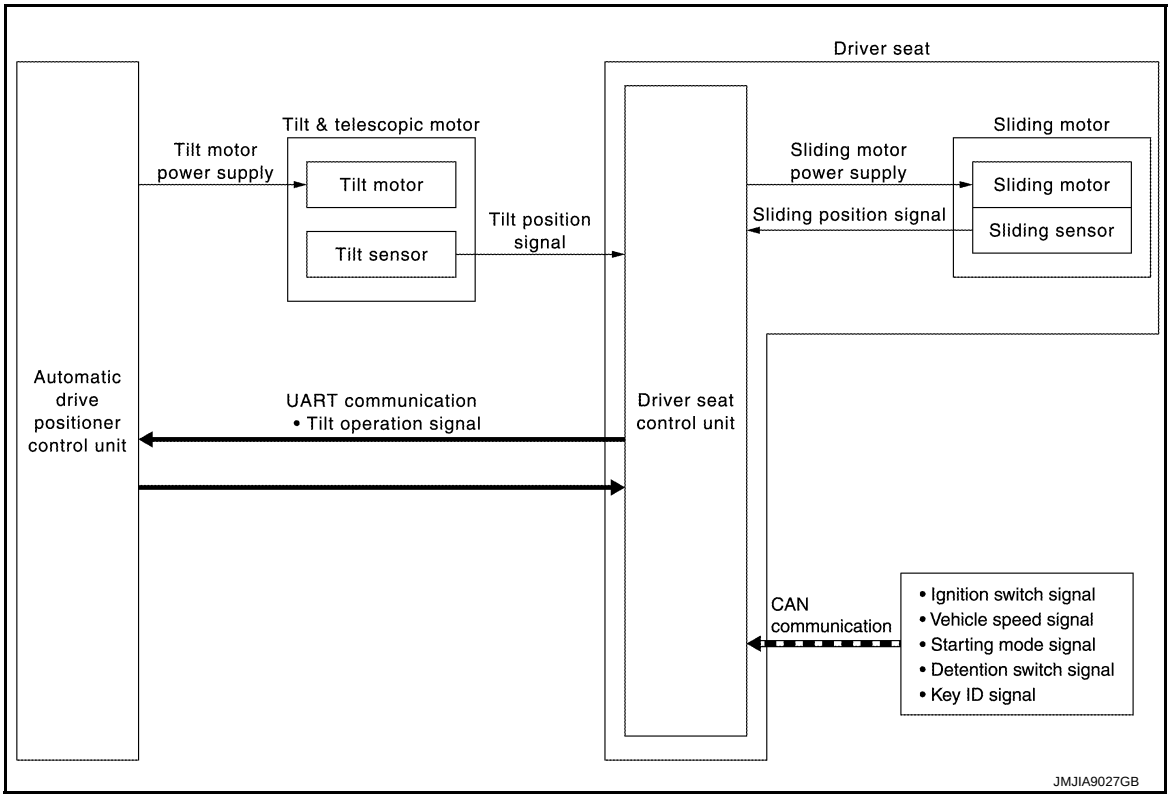
Order	Input	Output	Control unit condition
1	Door switch (Driver side)	—	Driver seat control unit receives door switch signal (driver side/ open) from BCM via CAN communication.
2	—	Motors (Sliding, tilt)	Driver seat control unit operates the seat sliding motor, which recognizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor to auto drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor for a constant amount.
3	Sensor (Sliding, tilt)	—	Each sensor monitors the operating positions of seat and steering, and then stops the operation of each motor when steering reaches to the tilt top position and seat reaches to the rear most position.

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Description

INFOID:0000000013509082

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	• Ignition switch signal • Key ID signal
IPDM E/R	Detention switch signal

DESCRIPTION

- This function allows the driver side seat and the steering column to return from the exiting position to the position before the exiting function is operated when the ignition switch is operated from OFF to ACC when the driver enters the vehicle.
- If the ignition switch is operated with any Intelligent Key other than that used before the exiting function is operated, the driver side seat and the steering column will return to the driver position registered for that Intelligent Key.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-70, "Description".

Operation Condition

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

Operation Procedure

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

Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Vehicle speed	0 Km/h (0 MPH)
Starter	OFF
Transmission	A/T
CONSULT	Not connected

Detail Flow

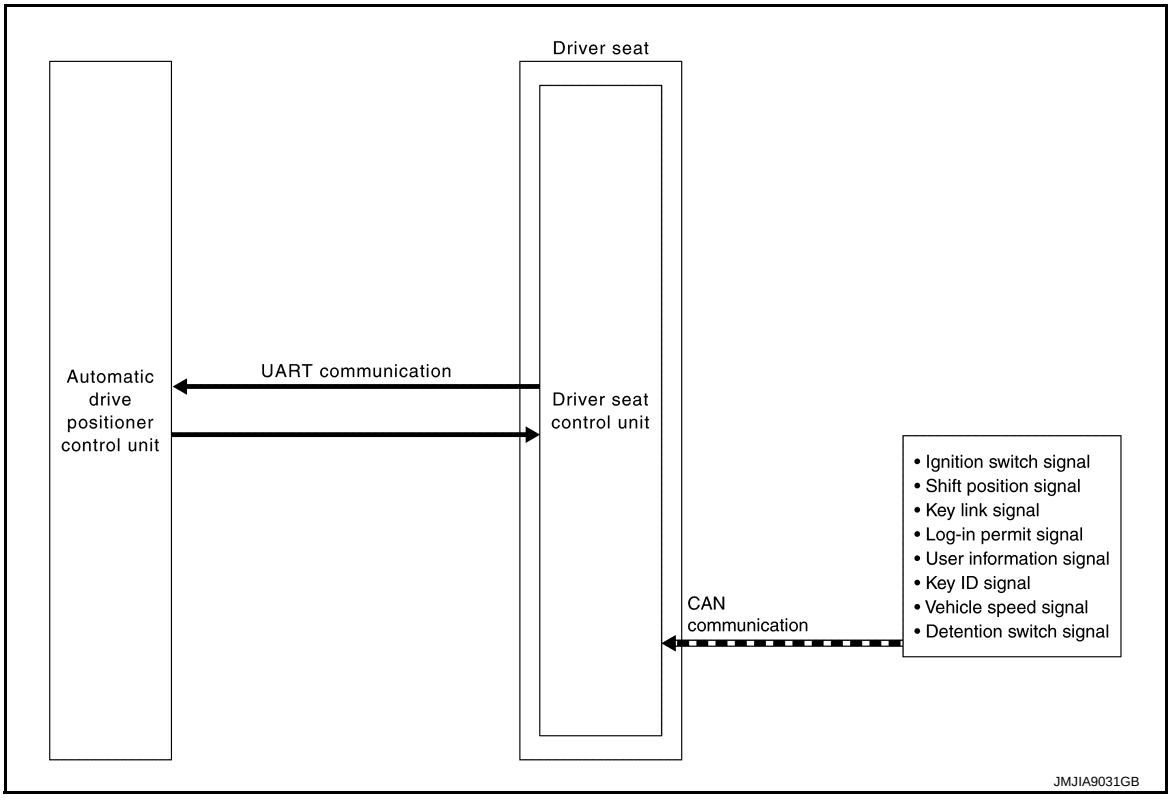
Order	Input	Output	Control unit condition
1	Ignition switch	—	Driver seat control unit receives the signals of [ignition switch signal] from BCM via CAN communication.
2	—	Motors (Sliding, tilt)	Driver seat control unit operates the sliding motor when the operating conditions are satisfied and requests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

LOG-IN FUNCTION

LOG-IN FUNCTION : System Description

INFOID:0000000013509083

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	• Ignition switch signal • Key ID signal
ECM	Shift position signal
Chassis control module	• Key link signal • Log-in permit signal
Display control unit	User information signal
IPDM E/R	Detention switch signal

DESCRIPTION

Log-in function is the function that registers the setting status of various systems and retrieves the status for each Intelligent Key as desired.

Registered information is automatically adjusted to the driving position (seat, steering column, and door mirror position) registered by unlocking the driver side door with the Intelligent Key (Intelligent Key interlock function) or by operating the user selection function on the display.

When user selection is performed by display operation, the user information registered with another Intelligent Key can also be retrieved.

For details on Intelligent Key interlock function, refer to ADP-28, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description".

NOTE:

For the registration of the log-in function, the status is automatically registered as one of the following vehicle statuses when the ignition switch is turned to OFF. For details on registration, refer to DMS-28, "LOG-IN FUNCTION : Work Flow".

Item	Request status
Ignition position	ON
Driver side door	Close
Navigation system	Activated
CONSULT	Not connected

Operation Procedure

1. Turn ignition switch ON.
2. Push desired user change switch on display.
3. Driver seat, steering and door mirror will move to the memorized position.

Operation Condition

All of the following conditions must be satisfied in order to retrieve the registration information of the log-in function.

If one of the following conditions is not satisfied, the interlocked operation of the driving position for log- in function is interrupted.

Item	Request status
Ignition position	ON
Navigation system	Activated
Initialization	Done
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror remote control switch • Set switch • Memory switch	OFF (Not operated)

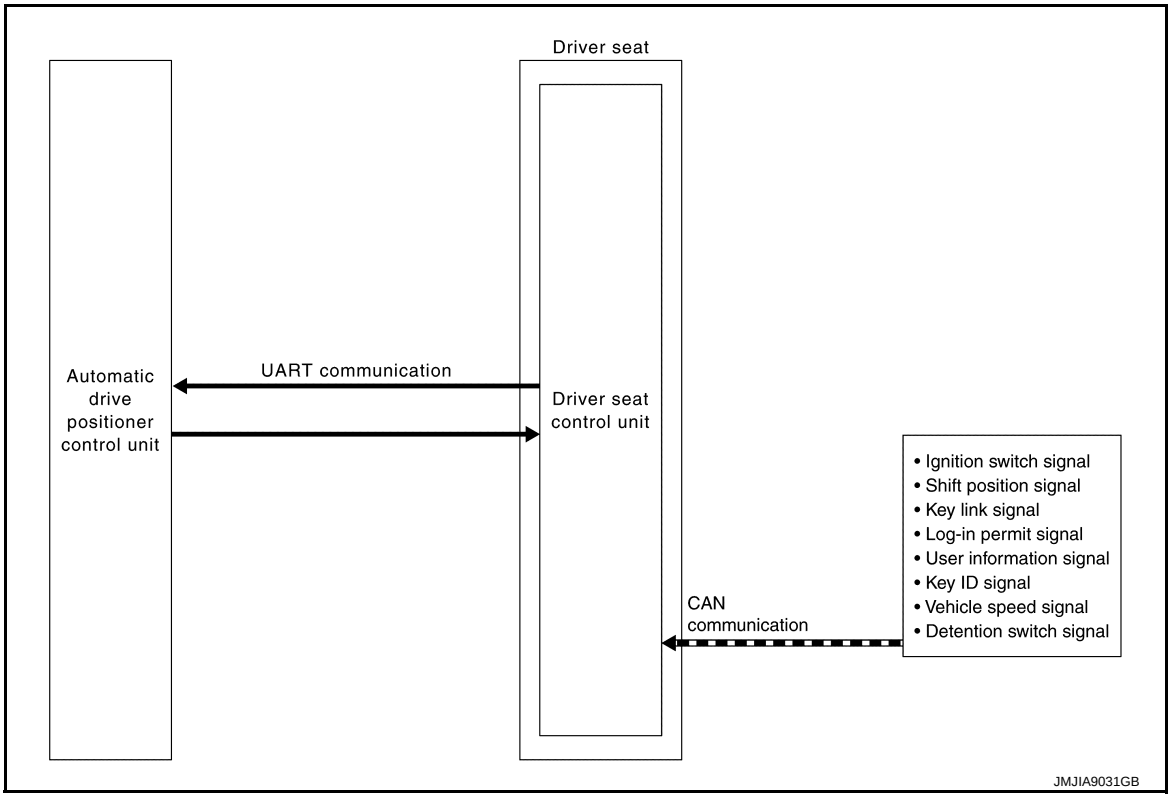
Item	Request status
A/T shift selector	P position
Log-in function memory	Registered
Vehicle speed	0 km/h (0 MPH)
CONSULT	Not connected

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000013509084

SYSTEM DIAGRAM



INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signal are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
BCM	• Ignition switch signal • Key ID signal
ECM	Shift position signal
Chassis control module	• Key link signal • Log-in permit signal
Display control unit	User information signal
IPDM E/R	Detention switch signal

DESCRIPTION

- When ignition switch is OFF, and door unlock operation is performed using Intelligent Key or driver side door request switch or one touch unlock sensor, driver seat automatically adjusts to a driving position other than seat sliding. Seat sliding and steering column tilt perform return operation and are set to standby status.

- In standby status, when ignition switch is operated from OFF to ACC, return operation sets seat sliding and steering column tilt to a registered position.

NOTE:
When starter signal turns ON during return operation, the operation is interrupted, starter signal turns from ON to OFF, and operation restarts.

Operation Procedure

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

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
Log-in function setting registration	Registered
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Transmission	A/T
CONSULT	Not connected

Detail Flow

Order	Input	Output	Control unit condition
1	• Door unlock signal (CAN) • Key ID signal (CAN)	—	When the following function is performed, the driver seat control unit transmits the unlock signal from BCM via CAN communication and receives the Key ID signal. • Unlock door: Intelligent Key • Unlock door: front request switch (driver side) • Unlock door: one touch unlock sensor
2	—	—	Driver seat control unit performs the seat slide and steering tilt move directly to the exit assist function. Other loads move to the exit assist function after performing log-in function.
3	—	—	Driver seat control unit performs the entry assist function.

Fail-Safe

INFOID:0000000013493168

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-71
	CONTROL UNIT (CAN)	U1010	ADP-72
	EEPROM	B2130	ADP-81
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-79
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-73
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-75
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-77

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function

INFOID:0000000012792031

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

APPLICATION ITEMS

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

SELF-DIAGNOSIS RESULTS

Refer to ADP-42, "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
SET SW	“On/Off”	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW 1	“On/Off”	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	“On/Off”	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW–FR	“On/Off”	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW–RR	“On/Off”	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW–FR	“On/Off”	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW–RR	“On/Off”	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW–UP	“On/Off”	×	×	ON/OFF status judged from the lifting switch front (up) signal.
LIFT FR SW–DN	“On/Off”	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW–UP	“On/Off”	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW–DN	“On/Off”	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW–UP	“On/Off”	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW–DN	“On/Off”	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW–RH	“On/Off”	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CON SW–LH	“On/Off”	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW–R	“On/Off”	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW–L	“On/Off”	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	“On/Off”	×	×	ON/OFF status judged from the tilt switch (up) signal.
TILT SW-DOWN	“On/Off”	×	×	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	“On/Off”	×	×	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	“On/Off”	×	×	ON/OFF status judged from the telescoping switch (backward) signal.
DETENT SW	“On/Off”	×	×	The selector lever position “OFF (P position) / ON (other than P position)” judged from the detention switch signal.
STARTER SW	“On/Off”	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SLIDE PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U–D	“V”	–	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R–L	“V”	–	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U–D	“V”	–	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R–L	“V”	–	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TELESCO PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
VEHICLE SPEED	—	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
P RANG SW CAN	“On/Off”	×	×	ON/OFF status judged from the P range switch signal.
R RANGE (CAN)	“On/Off”	×	×	ON/OFF status judged from the R range switch signal.
DOOR SW–FL	“On/Off”	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW–FR	“On/Off”	×	×	ON/OFF status judged from the door switch (front passenger side) signal.
IGN ON SW	“On/Off”	×	×	ON/OFF status judged from the ignition switch signal.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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	“LHD”	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	“AT/MT”	×	×	AT/MT status judged from transmission.
STEERING STATUS	“LOCK/UNLOCK”	×	×	LOCK/UNLOCK status judged from steering lock unit.
INITIAL STATE	DONE/YET	×	×	Displays the default status of the log-in function.
USER1 REGIST	DONE/YET	×	×	Displays the USER1 registration or non-registration status of the log-in function.
USER2 REGIST	DONE/YET	×	×	Displays the USER2 registration or non-registration status of the log-in function.
USER3 REGIST	DONE/YET	×	×	Displays the USER3 registration or non-registration status of the log-in function.
USER4 REGIST	DONE/YET	×	×	Displays the USER4 registration or non-registration status of the log-in function.
LOGIN USER	USER1/ USER2/ USER3/ USER4	×	×	Displays the current log-in user with the log-in function.
USER1 SW	On/Off	×	×	ON/OFF status judged from user1 change switch signal.
USER2 SW	On/Off	×	×	ON/OFF status judged from user2 change switch signal.
USER3 SW	On/Off	×	×	ON/OFF status judged from user3 change switch signal.
USER4 SW	On/Off	×	×	ON/OFF status judged from user4 change switch signal.
LOGIN USER CHANGE	PRBT/PRMT	×	×	Display the user change permission or inhibition status of the log-in function.
KEY LINK FUNCTION	On/Off	×	×	Displays the ON/OFF status of the Intelligent Key interlock function.
KEY NUMBER	“KEY 1/KEY 2/ KEY 3/KEY 4”	—	—	**NOTE:** This item is displayed, but cannot be monitored
KEY 1	“NO REG/ ACT/INACT”	—	—	**NOTE:** This item is displayed, but cannot be monitored
KEY 2	“NO REG/ ACT/INACT”	—	—	**NOTE:** This item is displayed, but cannot be monitored
KEY 3	“NO REG/ ACT/INACT”	—	—	**NOTE:** This item is displayed, but cannot be monitored
KEY 4	“NO REG/ ACT/INACT”	—	—	**NOTE:** This item is displayed, but cannot be monitored
Log-in user setting 1	“Off/User1/ User2/User3/ User4”	×	×	The user number that is used for transmitting the settings of the log-in function is displayed.
Log-in user setting 2	“Off/User1/ User2/User3/ User4”	×	×	The user number that is used for receiving the settings of the log-in function is displayed.
Log-in user setting copy status	“On/Off”	×	×	The copy status of the Log-in function is displayed with “On/Off”.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

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

WORK SUPPORT

Work item	Content	Item
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 TILT SETTING	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	ON
		OFF
EXIT SEAT SLIDE SETTING	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	ON
		OFF

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

List of ECU Reference

INFOID:0000000012792032

ECU	Reference
BCM	BCS-36, "Reference Value"
	BCS-61, "Fail-safe"
	BCS-62, "DTC Inspection Priority Chart"
	BCS-63, "DTC Index"

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000013496320

VALUES ON THE DIAGNOSIS TOOL

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

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

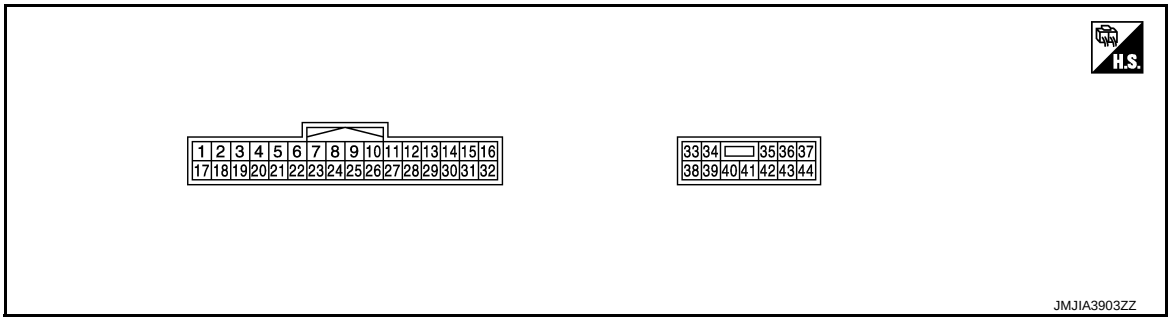
Monitor Item	Condition		Value/Status
TILT SW-DOWN	Tilt switch	Downward	ON
		Other than the above	OFF
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than the above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
		Other than the above	OFF
DETENT SW	A/T selector lever	P position	OFF
		Other than the above	ON
STARTER SW	Ignition position	Cranking	ON
		Other than the above	OFF
SLIDE PULSE	Seat sliding	Forward	The numeral value decreases *
		Backward	The numeral value increases*
		Other than the above	No change to numeral value*
RECLN PULSE	Seat reclining	Forward	The numeral value decreases*
		Backward	The numeral value increases *
		Other than the above	No change to numeral value*
LIFT FR PULSE	Seat lifter (front)	Up	The numeral value decreases *
		Down	The numeral value increases *
		Other than the above	No change to numeral value*
LIFT RR PULSE	Seat lifter (rear)	Up	The numeral value decreases *
		Down	The numeral value increases *
		Other than the above	No change to numeral value*
MIR/SEN RH U–D	Door mirror (passenger side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R–L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U–D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R–L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
TILT PULSE	Tilt position	Upward	The numeral value decreases *
		Downward	The numeral value increases *
		Other than the above	No change to numeral value*
TELESCO PULSE	Telescopic position	Forward	The numeral value decreases *
		Backward	The numeral value increases *
		Other than the above	No change to numeral value*
STEERING STATUS	Steering lock unit	LOCK	LOCK
		unlock	UNLOCK
VEHICLE SPEED	The condition of vehicle speed is displayed		km/h
P RANG SW CAN	A/T selector lever	P position	ON
		Other than the above	OFF
R RANGE (CAN)	A/T selector lever	R position	ON
		Other than the above	OFF

Monitor Item	Condition		Value/Status
DOOR SW-FL	Driver door	Open	ON
		Close	OFF
DOOR SW-FR	Passenger door	Open	ON
		Close	OFF
IGN ON SW	Ignition switch	ON position	ON
		Other than the above	OFF
ACC ON SW	Ignition switch	ACC or ON position	ON
		Other than the above	OFF
KEY ON SW	Intelligent Key	Inserted is key slot	ON
		Inserted is not key slot	OFF
KEYLESS ID	UNLOCK button of Intelligent Key is pressed		1,2,3,4or5
KYLS DR UNLK	Intelligent Key or driver side door request switch		ON
			OFF
VHCL SPEED (ABS)	CAN signal from ABS	Received	ON
		Not received	OFF
HANDLE	The BCM for handle position is displayed		LHD
TRANSMISSION	Transmission type is displayed		AT
			MT
INITIAL STATE	Displays the default status of the log-in function.		DONE
			YET
USER1 REGIST	Displays the USER1 registration status of the log-in function.		DONE
			YET
USER2 REGIST	Displays the USER2 registration status of the log-in function.		DONE
			YET
USER3 REGIST	Displays the USER3 registration status of the log-in function.		DONE
			YET
USER4 REGIST	Displays the USER4 registration status of the log-in function.		DONE
			YET
LOGIN USER	Displays the current log-in user with the log-in function.		USER1, USER2, USER3, USER4
USER1 SW	User1 change switch		ON
			OFF
USER2 SW	User2 change switch		ON
			OFF
USER3 SW	User3 change switch		ON
			OFF
USER4 SW	User4 change switch		ON
			OFF
LOGIN USER CHANGE	Display the user change permission or inhibition status of the log-in function.	Prohibit	PRBT
		Permit	PRMT
KEY LINK FUNCTION	Displays the ON/OFF status of the Intelligent Key interlock function.		ON
			OFF
KEY NUMBER	**NOTE:** This item is displayed, but cannot be monitored		KEY 1
KEY 1	**NOTE:** This item is displayed, but cannot be monitored		NO REG

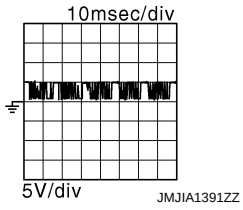
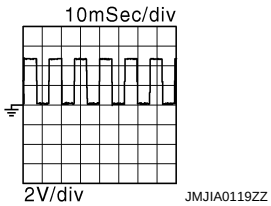
Monitor Item	Condition		Value/Status
KEY 2	**NOTE:** This item is displayed, but cannot be monitored		NO REG
KEY 3	**NOTE:** This item is displayed, but cannot be monitored		NO REG
KEY 4	**NOTE:** This item is displayed, but cannot be monitored		NO REG
Log-in user setting 1	The user number that is used for transmitting the settings of the log-in function is displayed.		Off/User1/User2/User3/User4
Log-in user setting 2	The user number that is used for receiving the settings of the log-in function is displayed.		Off/User1/User2/User3/User4
Log-in user setting copy status	Log-in user setting	Waiting	On
		Copying	Off

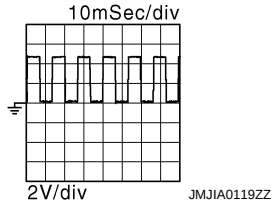
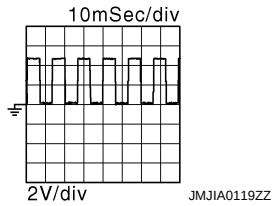
*: The value at the position attained when the battery is connected is regarded as 32768.

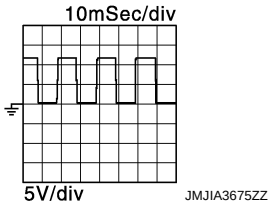
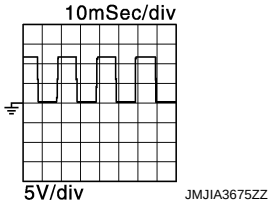
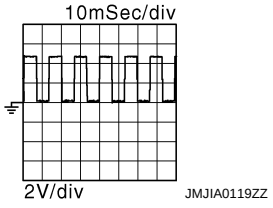
TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
1 (L)	—	CAN-H	—	—		—
2 (BR)	Ground	UART communication (TX/RX)	Input/ output	Ignition switch ON		
4 (P)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Other than the above	0 or 5 V

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
5 (V)	Ground	Telescopic sensor signal	Input	Steering telescopic	Operate	
					Other than the above	0 or 5 V
6 (GY)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0 - 1 V
					Other than the above	4 - 6 V
7 (G)	Ground	Memory indicator 2 signal	Output	Memory indicator 2	Illuminate	0 - 1 V
					Other than the above	9 - 16 V
8 (V)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0 - 1 V
					Other than the above	9 - 16 V
9 (W)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0 - 1 V
					Other than the above	9 - 16 V
10 (O)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0 - 1 V
					Other than the above	9 - 16 V
11 (G)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0 - 1 V
					Other than the above	9 - 16 V
12 (SB)	Ground	Sensor power supply	Output	—		9 - 16 V
17 (P)	—	CAN-L	—	—		—
18 (LG)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Other than the above	0 or 5 V

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
19 (W)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	
					Other than the above	0 or 12 V
20 (GY)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Other than the above	0 or 12 V
21 (SB)	Ground	Tilt sensor signal	Input	Steering tilt	Operate	
					Other than the above	0 or 5 V
22 (O)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0 - 1 V
					Other than the above	4 - 6 V
23 (W)	Ground	Memory indicator 1 signal	Output	Memory indicator 1	Illuminate	0 - 1 V
					Other than the above	9 - 16 V
24 (P)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0 - 1 V
					Other than the above	9 - 16 V
25 (Y)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0 - 1 V
					Other than the above	9 - 16 V
26 (GY)	Ground	Lifting switch (front) up signal	Input	Lifting switch (front)	Operate (up)	0 - 1 V
					Other than the above	9 - 16 V
27 (L)	Ground	Lifting switch (rear) up signal	Input	Lifting switch (rear)	Operate (up)	0 - 1 V
					Other than the above	9 - 16 V

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
28 (Y)	Ground	Set switch signal	Input	Set switch	Press	0 - 1 V
					Other than the above	4 - 6 V
33 (R)	Ground	Battery power supply	Input	—		9 - 16 V
34 (V)	Ground	Sliding motor backward output signal	Out-put	Seat sliding	Operate (backward)	9 - 16 V
					Other than the above	0 - 1 V
35 (Y)	Ground	Reclining motor forward output signal	Out-put	Seat reclining	Operate (forward)	9 - 16 V
					Other than the above	0 - 1 V
36 (O)	Ground	Lifting motor (front) down out-put signal	Out-put	Seat lifting (front)	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V
38 (P)	Ground	Sliding motor forward output signal	Out-put	Seat sliding	Operate (forward)	9 - 16 V
					Other than the above	0 - 1 V
39 (W)	Ground	Reclining motor backward output signal	Out-put	Seat reclining	Operate (backward)	9 - 16 V
					Other than the above	0 - 1 V
40 (GY)	Ground	Lifting motor (front) up output signal	Out-put	Seat lifting (front)	Operate (up)	9 - 16 V
					Other than the above	0 - 1 V
41 (L)	Ground	Lifting motor (rear) up output signal	Out-put	Seat lifting (rear)	Operate (up)	9 - 16 V
					Other than the above	0 - 1 V
42 (G)	Ground	Lifting motor (rear) down out-put signal	Out-put	Seat lifting (rear)	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V
43 (B)	Ground	Ground	—	—		0 - 1 V

Fail-Safe

INFOID:0000000012792034

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-71
	CONTROL UNIT (CAN)	U1010	ADP-72
	EEPROM	B2130	ADP-81
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-79

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-73
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-75
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-77

DTC Index

INFOID:0000000012792035

CONSULT display	Timing*1		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-71
CONTROL UNIT (CAN) [U1010]	0	1-39	Control unit	ADP-72
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-73
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-75
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-77
UART COMM [B2128]	0	1-39	UART communication	ADP-79
EEPROM [B2130]	0	1-39	EEPROM	ADP-81

*1:

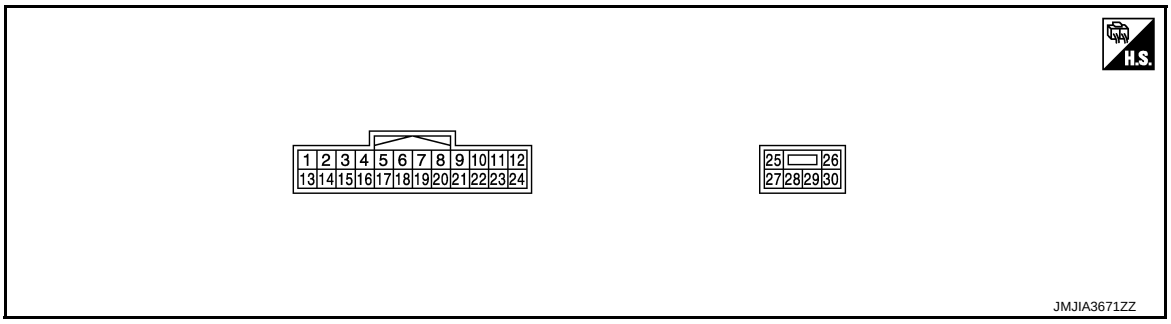
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

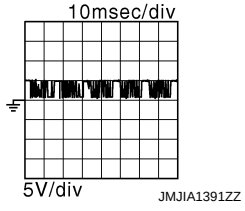
Reference Value

INFOID:0000000013508903

TERMINAL LAYOUT



PHYSICAL VALUES

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

Terminal No. (wire color)		Description		Condition		Voltage
+	-	Signal name	Input/ Output			
10 (W/B)	Ground	Door mirror motor (passenger side) up/right output signal	Output	Door mirror RH	Operate (up/right)	9 - 16 V
					Other than the above	0 - 1 V
11 (BR)	Ground	Door mirror motor (passenger side) down/left output signal	Output	Door mirror RH	Operate (down/left)	9 - 16 V
					Other than the above	0 - 1 V
12 (Y)	Ground	Door mirror motor (driver side) down/right output signal	Output	Door mirror (LH)	Operate (down/right)	9 - 16 V
					Other than the above	0 - 1 V
13 (LG)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0 - 1 V
					Other than the above	4 - 6 V
14 (W)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0 - 1 V
					Neutral or RH	4 - 6 V
15 (SB)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0 - 1 V
					Other than the above	4 - 6 V
16 (L)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0 - 1 V
					Other than the above	4 - 6 V
17 (L)	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 (B)	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)
19 (G)	Ground	Telescopic switch backward signal	Input	Telescopic switch	Operate (backward)	0 - 1 V
					Other than the above	4 - 6 V
20 (Y)	Ground	Ground (sensor)	—	—		0 - 1 V
21 (W)	Ground	Door mirror motor sensor power supply	Input	—		4 - 6 V
22 (SB)	Ground	Door mirror motor (passenger side) down/right output signal	Output	Door mirror (RH)	Operate (down/right)	9 - 16 V
					Other than the above	0 - 1 V
23 (P)	Ground	Door mirror motor (driver side) up/right output signal	Output	Door mirror (LH)	Operate (up/right)	9 - 16 V
					Other than the above	0 - 1 V

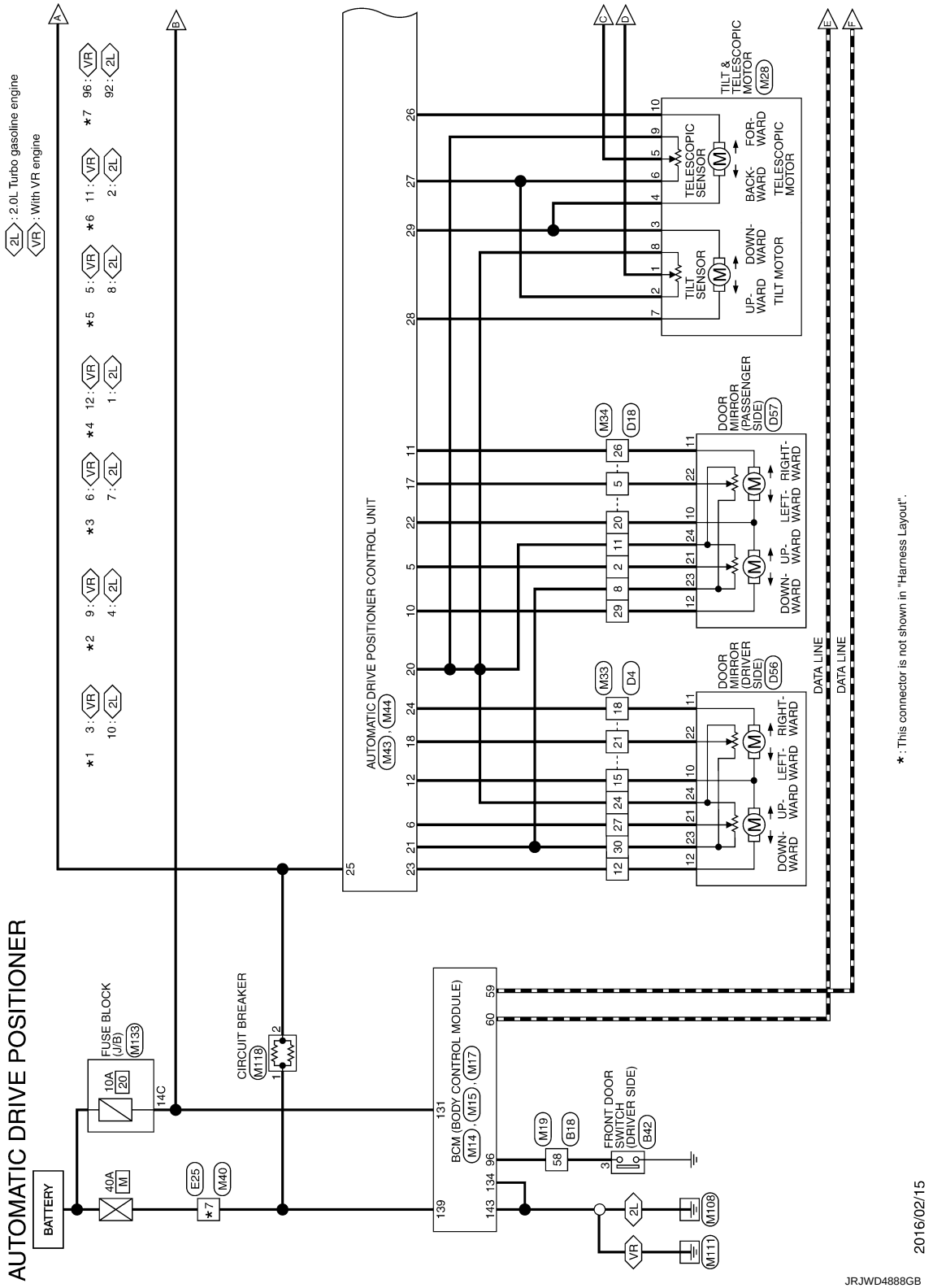
Terminal No. (wire color)		Description		Condition		Voltage
+	-	Signal name	Input/ Output			
24 (W/B)	Ground	Door mirror motor (driver side) down/left output signal	Output	Door mirror (LH)	Operate (down/left)	9 - 16 V
					Other than the above	0 - 1 V
25 (SB)	Ground	Battery power supply	Input	—		9 - 16 V
26 (G)	Ground	Telescopic motor backward output signal	Output	Steering telescopic	Operate (backward)	9 - 16 V
					Other than the above	0 - 1 V
27 (W)	Ground	Tilt & telescopic sensor power supply	Output	—		9 - 16 V
28 (BR)	Ground	Tilt motor down output signal	Output	Steering tilt	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V
29 (L)	Ground	Tilt motor up output signal	Output	Steering tilt	Operate (up)	9 - 16 V
					Other than the above	0 - 1 V
		Telescopic motor forward output signal		Steering telescopic	Operate (forward)	9 - 16 V
					Other than the above	0 - 1 V
30 (B)	Ground	Ground (power)	—	—		0 - 1 V

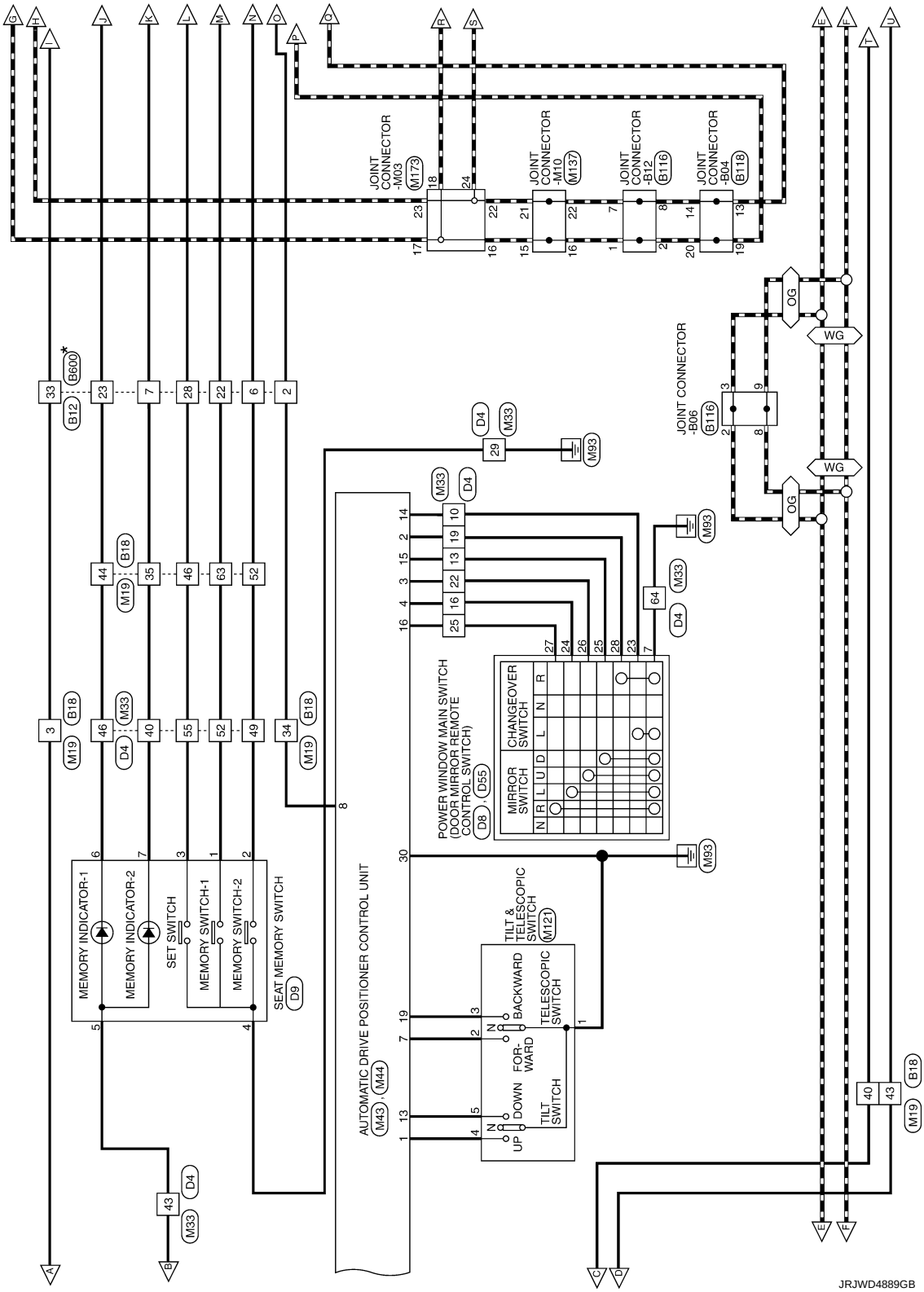
WIRING DIAGRAM

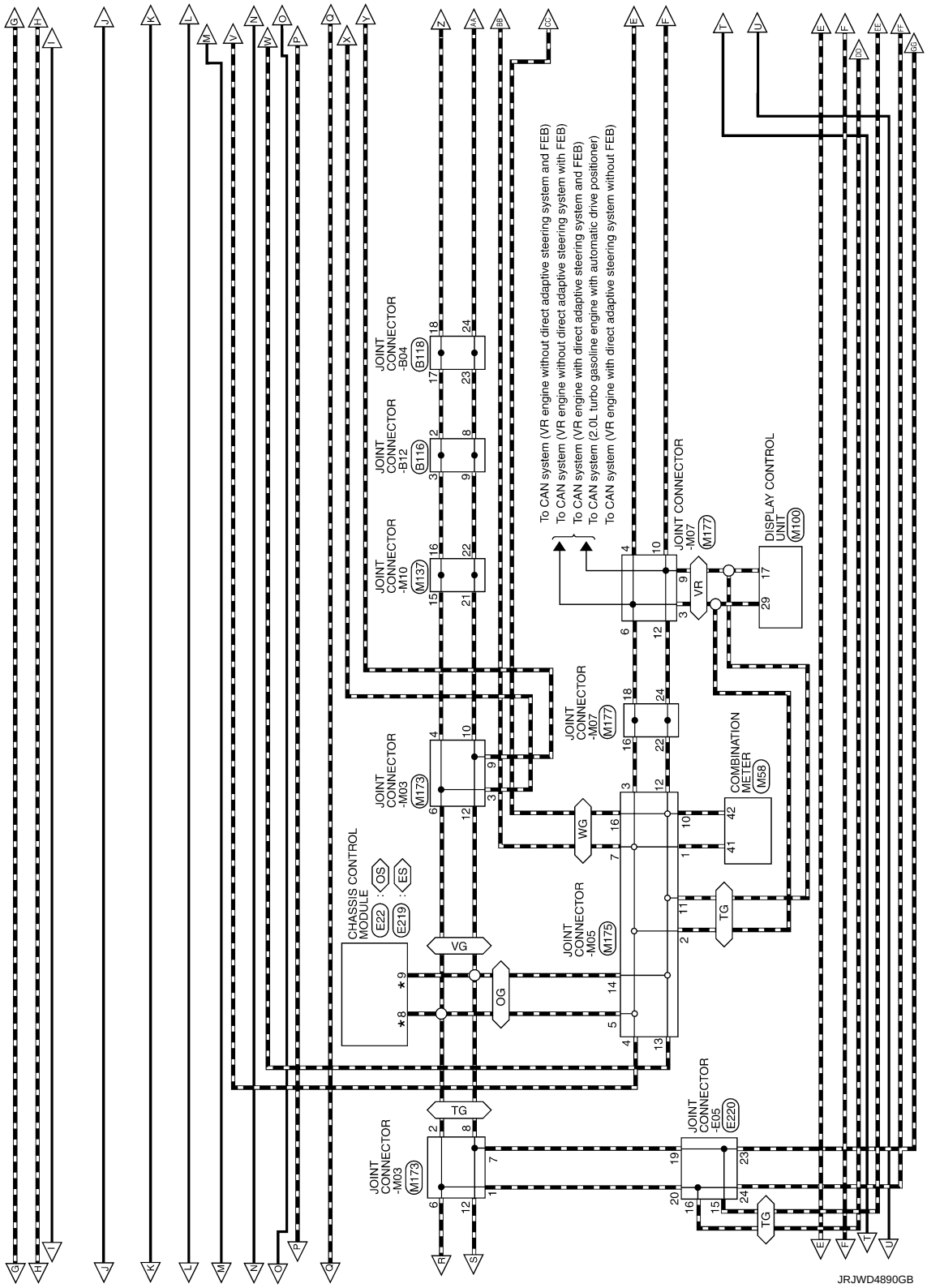
AUTOMATIC DRIVE POSITIONER SYSTEM

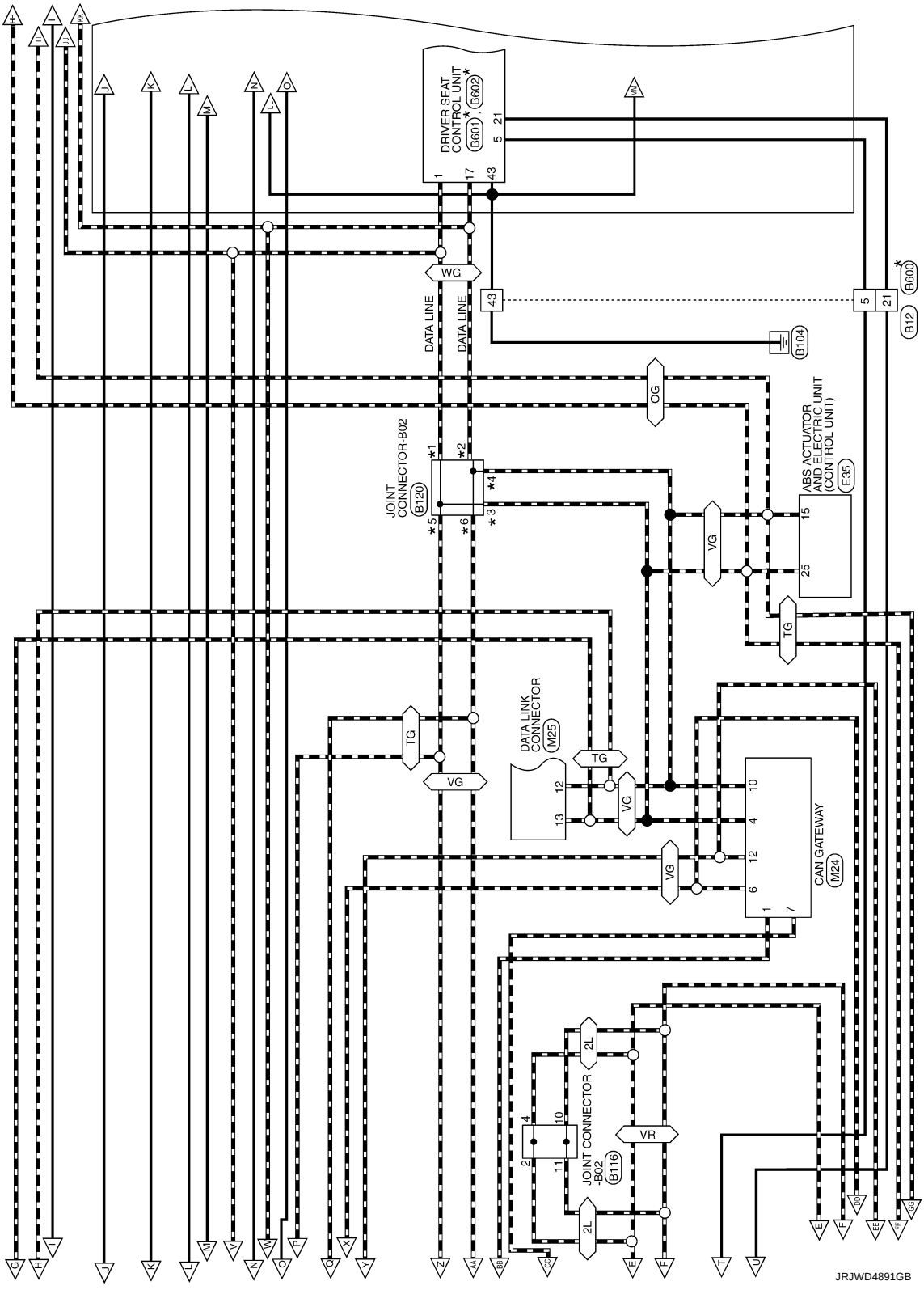
Wiring Diagram

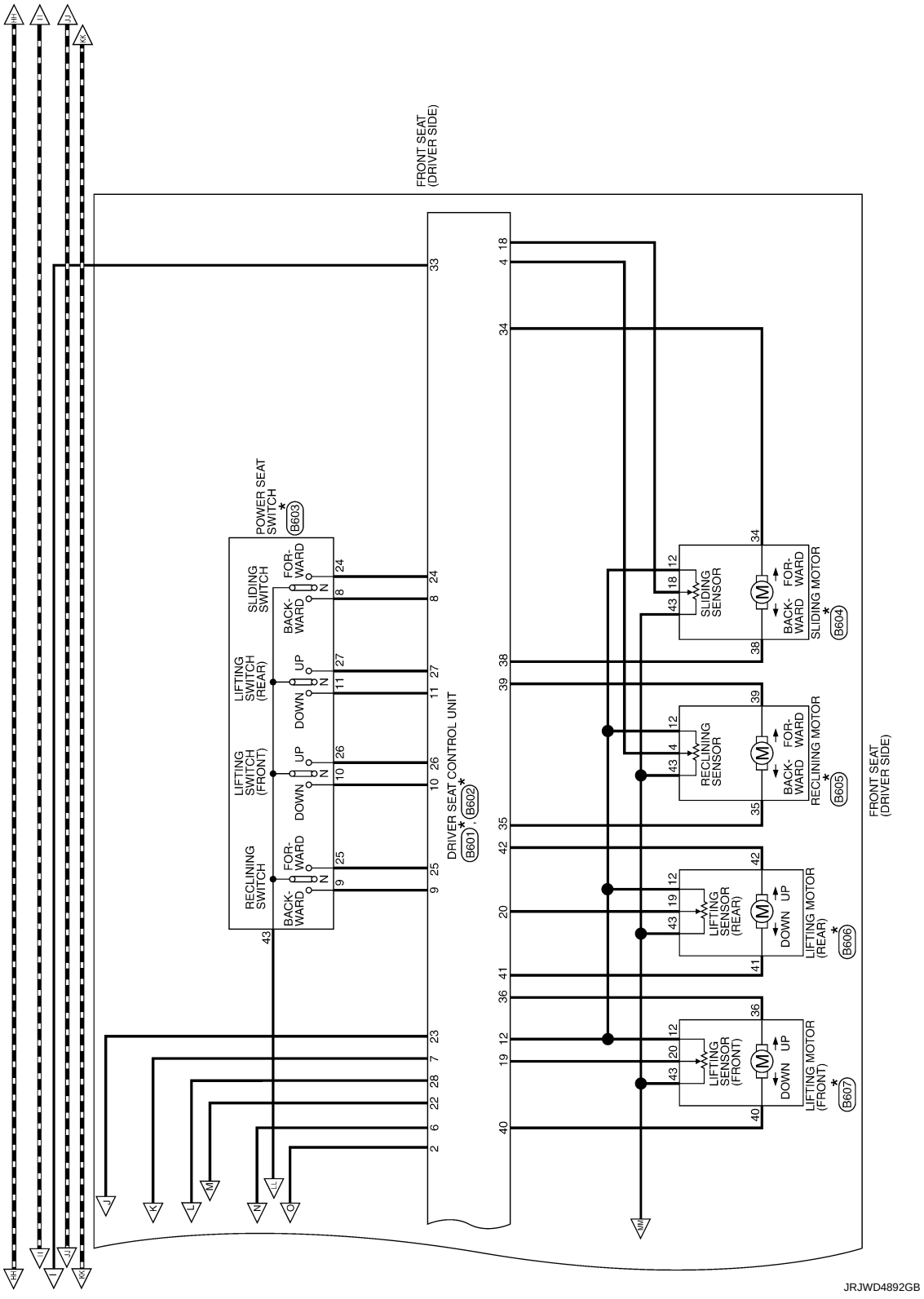
INFOID:0000000012792037

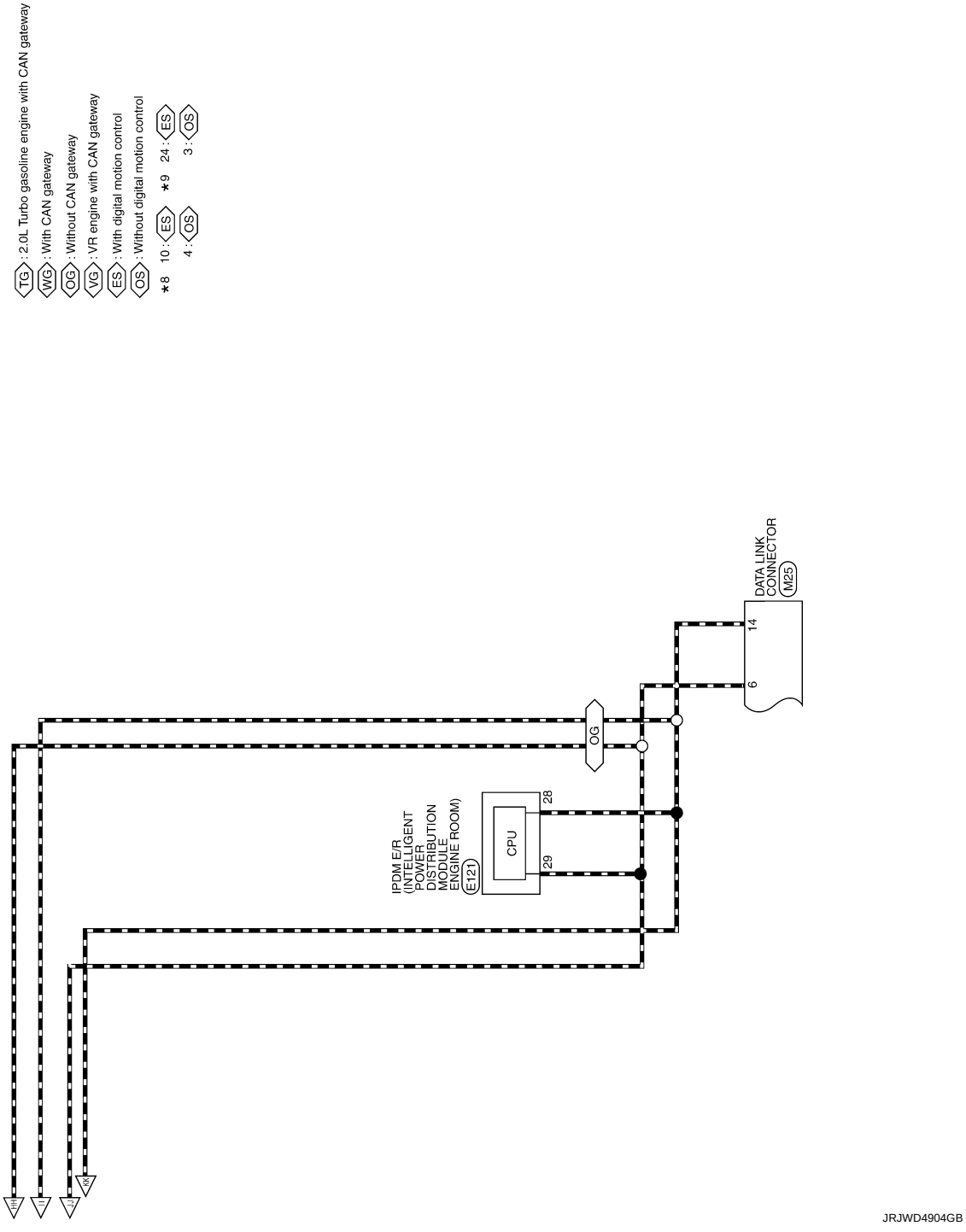



JOINT CONNECTOR -M03 (M173)
JOINT CONNECTOR -M10 (M137)
JOINT CONNECTOR -B12 (B116)
JOINT CONNECTOR -B04 (B118)
JOINT CONNECTOR -B06 (B116)
OG
WG
POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) (D8), (D55)
MIRROR SWITCH
CHANGEOVER SWITCH
AUTOMATIC DRIVE POSITIONER CONTROL UNIT (M43), (M44)
TILT & TELESCOPIC SWITCH (M121)
TILT SWITCH
TELESCOPIC SWITCH
SEAT MEMORY SWITCH (D9)
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
JRJWD4889GB


To CAN system (VR engine without direct adaptive steering system and FEB)
To CAN system (VR engine without direct adaptive steering system with FEB)
To CAN system (VR engine with direct adaptive steering system and FEB)
To CAN system (2.0L turbo gasoline engine with automatic drive positioner)
To CAN system (VR engine with direct adaptive steering system without FEB)
JOINT CONNECTOR -B04 (B118)
JOINT CONNECTOR -B12 (B116)
JOINT CONNECTOR -M10 (M137)
JOINT CONNECTOR -M07 (M177)
DISPLAY CONTROL UNIT (M100)
VR
JOINT CONNECTOR -M03 (M173)
COMBINATION METER (M58)
WG
CHASSIS CONTROL MODULE (E22 : OS, E219 : ES)
VG
OG
JOINT CONNECTOR -M05 (M175)
TG
JOINT CONNECTOR -E05 (E220)
JRJWD4890GB


DRIVER SEAT CONTROL UNIT
B601
B602
WG
DATA LINE
DATA LINE
B600
B12
B104
OG
JOINT CONNECTOR-B02
B120
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
E35
VG
TG
DATA LINK CONNECTOR
M25
CAN GATEWAY
M24
2L
JOINT CONNECTOR -B02
B116
VR
JRJWD4891GB


FRONT SEAT (DRIVER SIDE)
POWER SEAT SWITCH *1 (B603)
SLIDING SWITCH
FOR-WARD
BACK-WARD
LIFTING SWITCH (REAR)
UP
DOWN
LIFTING SWITCH (FRONT)
RECLINING SWITCH
DRIVER SEAT CONTROL UNIT *1 (B601), (B602)
SLIDING SENSOR
SLIDING MOTOR *1 (B604)
RECLINING SENSOR
RECLINING MOTOR *1 (B605)
LIFTING SENSOR (REAR)
LIFTING MOTOR (REAR) *1 (B606)
LIFTING SENSOR (FRONT)
LIFTING MOTOR (FRONT) *1 (B607)
FRONT SEAT (DRIVER SIDE)
JRJWD4892GB


TG : 2.0L Turbo gasoline engine with CAN gateway
WG : With CAN gateway
OG : Without CAN gateway
VG : VR engine with CAN gateway
ES : With digital motion control
OS : Without digital motion control
*8 10 : ES
4 : OS
*9 24 : ES
3 : OS
DATA LINK CONNECTOR
M25
14
6
OG
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E121
CPU
28
29
JRJWD4904GB

AUTOMATIC DRIVE POSITIONER

Connector No.	B12
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

28	21	5	2		43	1	17
23	7	33	22	45	6	47	48	46

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	LG	-
5	P	-
6	V	-
7	P	- [Without Gateway]
17	R	- [With Gateway]
21	BG	-
22	BR	-
23	BG	-
28	R	-
33	L	-
43	B	-
45	G	-
46	BG	-
47	R	-
48	GR	-

Connector No.	B18
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-
3	L	-
4	LG	-
5	Y	-
6	R	-
7	V	-
8	LG	-
10	BG	-
11	BG	-
12	LG	-
13	GR	-
14	R	-
15	L	-
16	V	-
18	W	-
19	BR	-
20	W	-
22	R	-
23	V	-
24	R	- [With 2.0L turbo gasoline engine]
24	Y	- [With VR30 engine]
25	P	- [With 2.0L turbo gasoline engine and without gateway]
25	V	- [With 2.0L turbo gasoline engine and with gateway]
25	W	- [With VR30 engine]
26	G	-
27	R	-
28	R	-
31	B	- [With VR30 engine]
31	BR	- [With 2.0L turbo gasoline engine]
32	B	-
33	B	-
34	LG	-
35	P	-
36	W	-
37	SB	-
38	LG	-
40	P	-
41	SB	-
42	BR	-
43	BG	-
44	BG	-
46	R	-
50	W	-
51	SB	-
52	V	-
53	LG	-

54	R	-
55	R	-
57	W	-
58	V	-
59	GR	-
60	G	-
61	G	-
62	BG	-
63	BR	-
64	Y	-
66	R	-
70	R	-
71	W	-
72	B	-
73	W	-
74	L	-
75	R	- [Without paddle shift]
75	V	- [With paddle shift]
76	BR	-
77	B	-
78	SB	-
79	V	- [With VR30 engine]
79	W	- [With 2.0L turbo gasoline engine]
81	B	-
82	R	-
83	BG	-
84	L	-
85	R	- [Without paddle shift]
85	V	- [With paddle shift]
86	B	-
88	G	-
89	V	- [With 2.0L turbo gasoline engine]
89	W	- [With VR30 engine]
91	GR	-
94	GR	-
96	Y	-
97	V	-
98	BR	- [With VR30 engine and with BOSE system]
98	Y	- [Except with VR30 engine and with BOSE system]

Connector No.	B42
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	TH04FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	V	-

Connector No.	B116
Connector Name	JOINT CONNECTOR-B06
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	L	-
3	L	-
4	L	-
5	L	-
6	L	-
7	R	-
8	R	- [With Gateway]
8	V	- [Without Gateway]
9	R	- [With Gateway]
9	V	- [Without Gateway]
10	R	- [With VR30 engine]
10	V	- [With 2.0L turbo gasoline engine]
11	V	-
12	P	- [With Gateway]
12	R	- [Without Gateway]
13	SHIELD	-
14	SHIELD	-

JRJWD4893GB

AUTOMATIC DRIVE POSITIONER

15	B	- [With 2.0L turbo gasoline engine]
15	SHIELD	- [With VR30 engine]
16	L	- [With VR30 engine]
16	SHIELD	- [With 2.0L turbo gasoline engine]
17	L	- [With VR30 engine]
17	SHIELD	- [With 2.0L turbo gasoline engine]
18	L	- [With VR30 engine]
18	SHIELD	- [With 2.0L turbo gasoline engine]
19	L	- [With 2.0L turbo gasoline engine]
19	SHIELD	- [With VR30 engine]
20	L	- [With 2.0L turbo gasoline engine]
20	SHIELD	- [With VR30 engine]
21	L	-
22	P	-
23	P	-
24	P	- [With VR30 engine]
24	Y	- [With 2.0L turbo gasoline engine]

Connector No.	B118
Connector Name	JOINT CONNECTOR-B04
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	- [With VR30 engine]
1	SHIELD	- [With 2.0L turbo gasoline engine]
2	LG	- [With VR30 engine]
2	SHIELD	- [With 2.0L turbo gasoline engine]
3	SHIELD	-
4	LG	- [With VR30 engine]
4	SHIELD	- [With 2.0L turbo gasoline engine]
5	LG	- [With VR30 engine]
5	SHIELD	- [With 2.0L turbo gasoline engine]
6	LG	- [With VR30 engine]
6	SHIELD	- [With 2.0L turbo gasoline engine]
7	R	- [Color of wire differs depending on production]
7	V	- [Color of wire differs depending on production]
8	LG	- [With 2.0L turbo gasoline engine]
8	R	- [With VR30 engine and without paddle shift]
8	V	- [With VR30 engine and with paddle shift]
9	LG	- [With 2.0L turbo gasoline engine]
9	R	- [With VR30 engine and without paddle shift]
9	V	- [With VR30 engine and with paddle shift]
10	LG	- [With 2.0L turbo gasoline engine]
10	SHIELD	- [With VR30 engine]
11	LG	- [With 2.0L turbo gasoline engine]
11	SHIELD	- [With VR30 engine]
12	LG	- [With 2.0L turbo gasoline engine]
12	SHIELD	- [With VR30 engine]
13	L	- [With VR30 engine]
13	P	- [With 2.0L turbo gasoline engine and without gateway]
13	R	- [With 2.0L turbo gasoline engine and with gateway]
14	L	- [With VR30 engine]
14	P	- [With 2.0L turbo gasoline engine and without gateway]
14	R	- [With 2.0L turbo gasoline engine and with gateway]
15	L	- [With VR30 engine]
15	R	- [With 2.0L turbo gasoline engine]
16	L	-
17	L	
18	L	-
19	L	- [With 2.0L turbo gasoline engine]
19	SHIELD	- [With VR30 engine]
20	L	- [With 2.0L turbo gasoline engine]
20	SHIELD	- [With VR30 engine]
21	L	- [With 2.0L turbo gasoline engine]
21	SHIELD	- [With VR30 engine]
22	R	-
23	R	-
24	R	-

Connector No.	B120
Connector Name	JOINT CONNECTOR-B02
Connector Type	24342_4GA2A

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	R	-
3	L	- [With VR30 engine]
4	L	- [With 2.0L turbo gasoline engine]
4	R	- [With VR30 engine]
5	L	-
6	L	-
7	L	-
8	L	- [With 2.0L turbo gasoline engine]
9	L	- [With VR30 engine]
9	R	- [With 2.0L turbo gasoline engine]
10	R	- [With VR30 engine]
11	R	-
12	R	-
13	W	-
14	W	-
15	W	-
17	SHIELD	-
18	B	-
19	B	- [With 2.0L turbo gasoline engine]
19	GR	- [With VR30 engine]
20	GR	- [With VR30 engine]
20	SHIELD	- [With 2.0L turbo gasoline engine]
21	B	- [With 2.0L turbo gasoline engine]
21	GR	- [With VR30 engine]
22	W	-
23	W	-
24	W	-

Connector No.	B600
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

17	1	43			2	5	21	28
46	48	47	6	45	22	33	7	23

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-
2	-	-
5	-	-
6	-	-
7	-	-
17	-	-
21	-	-
22	-	-
23	-	-
28	-	-
33	-	-
43	-	-
45	-	-
46	-	-
47	-	-
48	-	-

Connector No.	B601
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FW-NH

H.S.

1	2	3	4	5	6	7	8	9	10	11	12			
17	18	19	20	21	22	23	24	25	26	27	28			

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-H
2	BR	UART (TX/RX)
3	R	START SW
4	P	PULSE (RECLINER)
5	V	PULSE (TELESCOPIC)
6	GY	ADDRESS 2
7	G	IND 2
8	V	SLIDE SW (BACKWARD)
9	W	RECLINER SW (BACKWARD)
10	O	TILT SW (DOWNWARD)
11	G	LIFTER SW (DOWNWARD)
12	SB	POWER SUPPLY (ENCODER)
17	P	CAN-L
18	LG	PULSE (SLIDE SENSOR)
19	W	PULSE (LIFTER FRONT)
20	GY	PULSE (LIFTER REAR)
21	SB	PULSE (TILT SENSOR)
22	O	ADDRESS 1
23	W	IND 1
24	P	SLIDE SW (FORWARD)
25	Y	RECLINER SW (FORWARD)
26	GY	TILT SW (UPWARD)
27	L	LIFTER SW (UPWARD)
28	Y	SET SW

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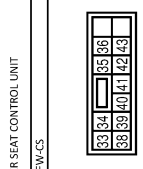
Connector No.	B602
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
33	R	BAT (PTC)
34	V	SLIDE MOTOR (BACKWARD)
35	Y	RECLINER MOTOR (FORWARD)
36	O	TILT MOTOR (DOWNWARD)
38	P	SLIDE MOTOR (FORWARD)
39	W	RECLINER MOTOR (BACKWARD)
40	GY	TILT MOTOR (UPWARD)
41	L	REAR LIFTER MOTOR (UPWARD)
42	G	REAR LIFTER MOTOR (DOWNWARD)
43	B	GND

Connector No.	B603
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS

Terminal No.	Color Of Wire	Signal Name [Specification]
8	V	SLIDE SW (BACKWARD)
9	W	RECLINER SW (BACKWARD)
10	O	TILT SW (DOWNWARD)
11	G/B	LIFTER SW (DOWNWARD)
24	P	SLIDE SW (FORWARD)
25	Y	RECLINER SW (FORWARD)
26	GY	TILT SW (UPWARD)
27	L	LIFTER SW (UPWARD)
43	B	GND

Connector No.	B604
Connector Name	SLIDING MOTOR
Connector Type	YAZAKI_7123-1460

Terminal No.	Color Of Wire	Signal Name [Specification]
12	SB	-
18	LG	-
34	V	-
38	P	-
43	B	-

Connector No.	B605
Connector Name	RECLINING MOTOR
Connector Type	YAZAKI_7123-1460

Terminal No.	Color Of Wire	Signal Name [Specification]
4	P	-
12	SB	-
35	Y	-
39	W	-
43	B	-

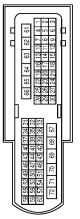
Connector No.	B606
Connector Name	LIFTING MOTOR (REAR)
Connector Type	YAZAKI_7123-1460

Terminal No.	Color Of Wire	Signal Name [Specification]
12	SB	-
19	-	-
20	GY	-
41	L	-
42	G	-
43	B	-

Connector No.	B607
Connector Name	LIFTING MOTOR (FRONT)
Connector Type	YAZAKI_7123-1460

Terminal No.	Color Of Wire	Signal Name [Specification]
12	SB	-
19	W	-
20	-	-
36	O	-
40	GY	-
43	B	-

Connector No.	D4
Connector Name	WIRE TO WIRE
Connector Type	NH60FW-TS12



Terminal No.	Color Of Wire	Signal Name [Specification]
2	SB	-
4	BG	-
5	R	-
6	V	-
7	LG	-
8	G	-
9	GR	-
10	Y	-
11	SHIELD	-
12	BG	-
13	L	-
14	B	-
15	Y	-
16	GR	-
17	R	-
18	GR	-
19	R	-
20	W	-
21	LG	-
22	W	-
23	L	-
24	G	-
25	BR	-
26	R	-
27	BR	-
28	V	-
29	B	-
30	W	-
31	P	-
32	Y	-
33	BR	-
34	L	-
35	R	-
36	GR	-
37	G	-
40	LG	- [Color of wire differs depending on production]

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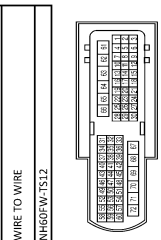
40	P	- [Color of wire differs depending on production]
41	L	-
43	BG	-
44	Y	-
46	W	-
47	R	-
49	BR	-
50	B	-
52	V	-
53	GR	-
55	GR	- [Color of wire differs depending on production]
55	SB	- [Color of wire differs depending on production]
56	BR	-
57	R	-
58	L	-
59	V	-
60	G	-
61	BG	-
62	Y	-
63	SB	-
64	B	-
65	Y	-
66	BR	-
68	Y	-
69	L	-
70	W	-
71	LG	-
72	P	-

Connector No.	D8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS16FW-CS

H.S.

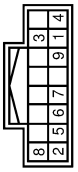


Terminal No.	Color Of Wire	Signal Name
3	V	ENCODER POWER SUPPLY
4	Y	IGNITION POWER SUPPLY
5	G	FRONT POWER WINDOW MOTOR [DRIVER SIDE] DOWN SIGNAL
6	L	FRONT POWER WINDOW MOTOR [DRIVER SIDE] UP SIGNAL
7	B	GROUND
9	BR	BATTERY POWER SUPPLY

10	B	ENCODER GROUND
11	GR	ENCODER SIGNAL 1
12	BR	ENCODER SIGNAL 2
13	SB	POWER WINDOW SERIAL LINK
15	V	DOOR KEY CYLINDER SWITCH LOCK SIGNAL
16	Y	DOOR KEY CYLINDER SWITCH UNLOCK SIGNAL

Connector No.	D9
Connector Name	SEAT MEMORY SWITCH
Connector Type	TH16FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	BR	-
3	GR	- [Color of wire differs depending on production]
3	SB	- [Color of wire differs depending on production]
4	B	-
5	BG	-
6	W	-
7	LG	- [Color of wire differs depending on production]
7	P	- [Color of wire differs depending on production]
8	L	-
9	G	-

Connector No.	D18
Connector Name	WIRE TO WIRE
Connector Type	NH60FW-TS12

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	P	-
4	SB	-
5	L	-
7	BR	-
8	V	-
9	G	-
11	SHIELD	-
12	GR	-
13	BG	-
14	B	-
16	W	-
17	L	-
18	R	-
19	B	-
20	W	-
21	G	-
22	GR	-
23	BG	-
24	B	-
25	BR	-
26	V	-
27	G	-
28	V	-
29	Y	-
30	R	-
49	LG	-
52	P	-
55	L	-
56	Y	-
57	R	-
58	SB	-
59	R	-
60	G	-
63	B	-
64	Y	-
65	BR	-
66	GR	-
69	W	-
70	L	-
71	BG	-
72	Y	-

Connector No.	D55
Connector Name	POWER WINDOW MAIN SWITCH[DOOR MIRROR REMOTE CONTROL SWITCH]
Connector Type	TH12FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
22	V	-
23	Y	-
24	GR	-
25	L	-
26	W	-
27	BR	-
28	R	-

Connector No.	D56
Connector Name	DOOR MIRROR [DRIVER SIDE]
Connector Type	TH24MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	R	-
3	G	-
5	B	-
6	W	-
7	L	-
8	SB	-
9	P	-
10	Y	-
11	GR	-
12	BG	-
13	V	-
14	B	-

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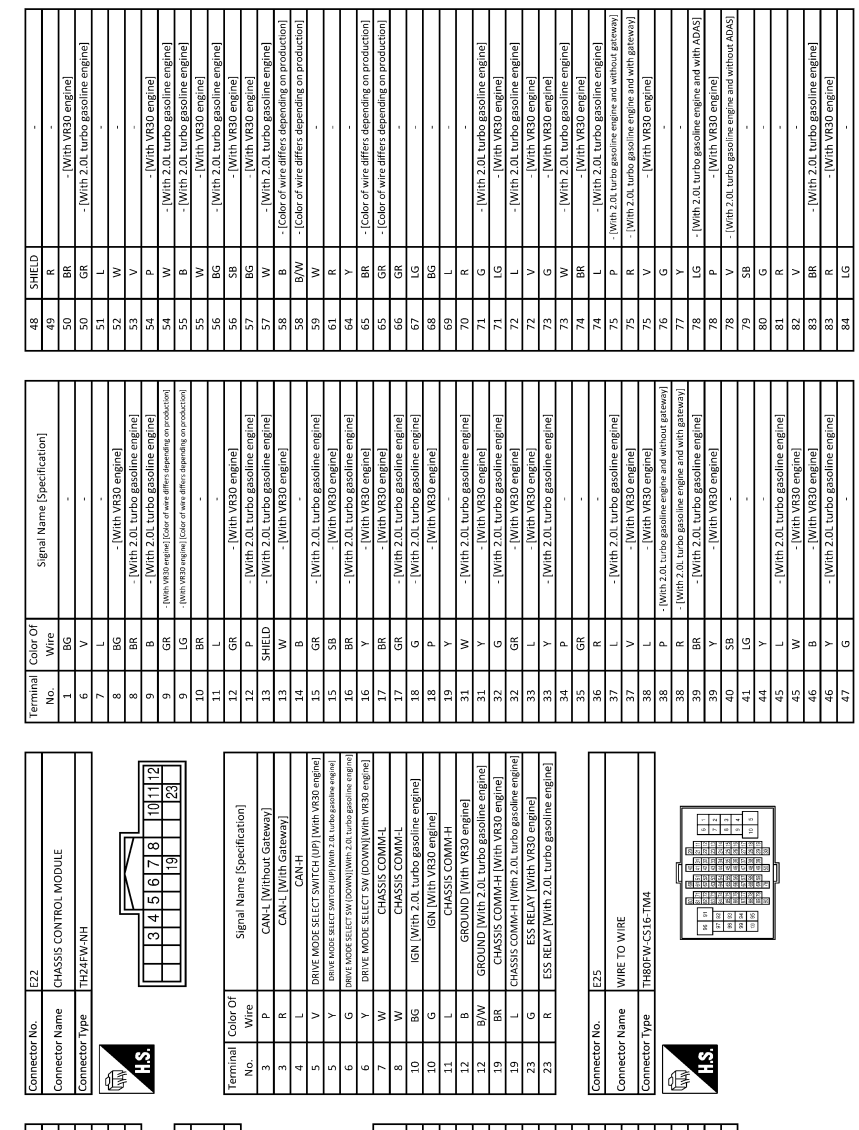
AUTOMATIC DRIVE POSITIONER
Connector No. E22
Connector Name CHASSIS CONTROL MODULE
Connector Type TH24FW-NH
H.S.
Connector No. D57
Connector Name DOOR MIRROR (PASSENGER SIDE)
Connector Type TH24MW-NH
H.S.
Connector No. E25
Connector Name WIRE TO WIRE
Connector Type TH80FW-CS16-TM4
H.S.
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AUTOMATIC DRIVE POSITIONER

86	BG	-
87	G	-
89	LG	-
90	G	- [With VR30 engine]
90	GR	- [With 2.0L turbo gasoline engine]
91	G	-
93	BG	-
94	GR	- [With VR30 engine]
94	L	- [With 2.0L turbo gasoline engine]
95	BG	- [With VR30 engine]
95	P	- [With 2.0L turbo gasoline engine and without gateway]
95	R	- [With 2.0L turbo gasoline engine and with gateway]
96	W	-
97	LG	-
98	L	-
99	LG	- [With 2.0L turbo gasoline engine]
99	P	- [With VR30 engine]
100	SHIELD	-

18	V	RR RH WHEEL SENSOR POWER SUPPLY [With VR30 engine]
19	SB	FR LH WHEEL SENSOR SIGNAL
20	BG	FR LH WHEEL SENSOR POWER SUPPLY
25	L	CAN-H
28	G	VACUUM SENSOR POWER SUPPLY
30	R	VDC OFF SW SIGNAL
32	SHIELD	VACUUM SENSOR GROUND
34	G	IGN

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH32FW-NH

	19			22	23			27	28	29		31	32	33	34	
	35	36	37	38			41				43					

Terminal No.	Color Of Wire	Signal Name [Specification]
19	L	- [With 2.0L turbo gasoline engine]
19	P	- [With VR30 engine]
22	BG	-
23	GR	- [With VR30 engine]
23	LG	- [With 2.0L turbo gasoline engine and without Anti theft diode]
23	P	- [With 2.0L turbo gasoline engine and with Anti theft diode]
27	GR	-
28	P	-
29	L	-
31	G	-
32	SB	-
33	SB	-
34	Y	-
35	G	-
36	SB	- [With VR30 engine]
36	W	- [With 2.0L turbo gasoline engine]
37	GR	-
38	BR	-
41	GR	-
43	V	-

Connector No.	E219
Connector Name	CHASSIS CONTROL MODULE
Connector Type	TH28FW

1		3	4	5	6		8	9	10		12	13	14	
15		17		19		21	22	23	24	25	26		28	

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	ACTUATOR (FL)-L
3	BR	ACTUATOR (RR)-H
4	BG	IGN
5	W	CHASSIS COMM-L
6	B	GROUND
8	BR	CHASSIS COMM-H [Color of wire differs depending on production]
8	L	CHASSIS COMM-H [Color of wire differs depending on production]
9	G	DRIVE MODE SELECT SW (DOWN) [Color of wire differs depending on production]
9	Y	DRIVE MODE SELECT SW (DOWN) [Color of wire differs depending on production]
10	L	CAN-H
12	G	ACTUATOR (FR)-H
13	G	ESS RELAY
14	L	ACTUATOR (RL)-L
15	Y	ACTUATOR (RR)-L
17	V	ACTUATOR (FL)-H
19	L	CHASSIS COMM-H
21	W	CHASSIS COMM-L
22	V	DRIVE MODE SELECT SWITCH (UP)
23	B	GROUND
24	P	CAN-L [Without Gateway]
24	R	CAN-L [With Gateway]
25	G	IGN
26	V	ACTUATOR (RL)-H
28	R	ACTUATOR (FR)-L

Connector No.	E220
Connector Name	JOINT CONNECTOR-E05
Connector Type	N-H24FB-J

1		3	4	5	6		8	9	10		12	13	14	
15		17		19		21	22	23	24	25	26		28	

Terminal No.	Color Of Wire	Signal Name [Specification]
3	W	-
4	L	-
7	W	-
8	L	-
11	W	-
12	L	-
15	P	- [Without Gateway]
15	R	- [With Gateway]
16	L	-
19	P	- [Without Gateway]
19	R	- [With Gateway]
20	L	-
23	P	- [Without Gateway]
23	R	- [With Gateway]
24	L	-

Connector No.	M14
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

65	66				69	70													
73	74	75	76	77	78	79		81				85							
89	90							97	98	99	100	101	102	103	104	105	106	107	108

Terminal No.	Color Of Wire	Signal Name [Specification]
48	R	PUSH-BTN IGN SW ILL PWR
52	G	DONGLE LINK
54	V	COMM LINE
55	R	RAIN SENSOR
59	P	CAN-L

Connector No.	E35
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	SAZ30FB-SJZ4-U

2		25		28		30		32		34									4
	15		17		19		20												
1		5		7		8		9		10				13					3

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
2	B	GND
3	G	VALVE BATTERY [With VR30 engine]
3	P	VALVE BATTERY [With 2.0L turbo gasoline engine]
4	Y	MOTOR BATTERY
5	LG	STOP LAMP SW SIGNAL [With ADAS]
5	V	STOP LAMP SW SIGNAL [With ASCD]
7	GR	RR LH WHEEL SENSOR SIGNAL
8	G	RR LH WHEEL SENSOR POWER SUPPLY
9	BR	FR RH WHEEL SENSOR SIGNAL
10	GR	FR RH WHEEL SENSOR POWER SUPPLY
13	R	VACUUM SENSOR SIGNAL
15	P	CAN-L [Without Gateway]
15	R	CAN-L [With gateway]
17	Y	RR RH WHEEL SENSOR SIGNAL
18	LG	RR RH WHEEL SENSOR POWER SUPPLY [With 2.0L turbo gasoline engine]

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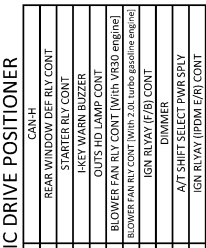
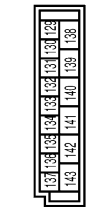
Terminal No.	Color Of Wire	Signal Name [Specification]
60	L	CAN-H
61	G	REAR WINDOW DEF RLY CONT
62	R	STARTER RLY CONT
64	V	I-KEY WARN BUZZER
65	B	OUTS HD LAMP CONT
66	B	BLOWER FAN RLY CONT [With VR30 engine]
66	Y	BLOWER FAN RLY CONT [With 2.0L turbo gasoline engine]
67	W/B	IGN RLYAY (F/B) CONT
68	R	DIMMER
69	GR	A/T SHIFT SELECT PWR SPLY
70	B	IGN RLYAY (PDM E/R) CONT
71	G	DR DOOR REQ SW
72	SB	PASS DOOR REQ SW
75	BR	COMBI SW INPUT 5
76	BG	COMBI SW INPUT 4
77	V	COMBI SW INPUT 3
78	Y	COMBI SW INPUT 2
79	LG	COMBI SW INPUT 1
80	L	TR LID OPNR SW

Connector No.	M15
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FGY-NH



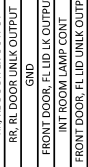
Terminal No.	Color Of Wire	Signal Name [Specification]
82	W	REAR LH DOOR SW
83	L	TR LID OPEN REQ SW
85	P	TR ROOM LAMP CONT
91	GR	TRUNK LID OPEN
92	W	TURN SIG RH OUTPUT [SIDE,REAR]
93	G	REAR RH DOOR SW
94	GR	PASSENGER DOOR SW
96	V	DRIVER DOOR SW
97	R	TR ROOM LAMP SW
99	GR	INSIDE KEY ANT (TRUNK) -
100	W	INSIDE KEY ANT (TRUNK) +
101	BG	REAR BMPR ANT -
102	LG	REAR BMPR ANT +
103	Y	TURN SIG LH OUTPUT [SIDE,REAR]

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHA6-SA



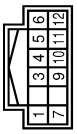
Terminal No.	Color Of Wire	Signal Name [Specification]
129	LG	INT ROOM LAMP PWR SPLY
130	P	PASS DOOR UNLK OUTPUT
131	Y	BAT (FUSE)
132	V	RR, RL DOOR LK OUTPUT
133	BR	RR, RL DOOR UNLK OUTPUT
134	B	GND
135	V	FRONT DOOR, FL LID LK OUTPUT
136	V	INT ROOM LAMP CONT
137	LG	FRONT DOOR, FL LID UNLK OUTPUT
138	P	REAR DOORS ACT PWR SPLY [With VR30 engine]
138	R	REAR DOORS ACT PWR SPLY [With 2.0L turbo gasoline engine]
139	W	BAT (F/L)
140	BR	IGN ON
141	R	PWR SPLY (BAT)
142	R	FRONT DOORS, FL LID ACT PWR SPLY
143	B	GND

Connector No.	M19
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-
3	SB	-
4	BR	-
5	Y	-
6	R	-
7	W	-
8	V	-
10	BG	-
11	BR	-
12	LG	-
13	GR	-
14	R	-
15	L	-
16	V	-
18	W	-
19	BR	-
20	W	-
22	SB	-
23	R	-
24	R	- [With 2.0L turbo gasoline engine]
24	Y	- [With VR30 engine]
25	P	- [With 2.0L turbo gasoline engine]
25	W	- [With VR30 engine]
26	G	-
27	R	-
28	R	-
31	BR	-
32	B	-
33	B	-
34	V	-
35	P	-
36	W	-
37	SB	-
38	LG	-
40	P	-
41	G	-
42	BR	-
43	BR	-
44	BR	-
46	BG	-
50	W	-
51	Y	-
52	V	-
53	LG	-
54	R	-
55	R	-
57	W	-
58	V	-
59	BG	-
60	G	-
61	G	-
62	BG	-
63	BR	-
64	Y	-
66	R	-
70	LG	-
71	W	-
72	B	-
73	W	-
74	L	-
75	W	-
76	BR	-
77	B	-
78	SB	-
79	P	- [With VR30 engine]
79	W	- [With 2.0L turbo gasoline engine]
81	B	-
82	R	-
83	BG	-
84	L	-
85	W	-
86	B	-
88	G	-
89	V	- [With 2.0L turbo gasoline engine]
89	W	- [With VR30 engine]
91	GR	-
94	GR	-
96	W	-
97	V	-
98	BR	- [With VR30 engine and with BOSE system]
98	Y	- [Except with VR30 engine and with BOSE system]

Connector No.	M24
Connector Name	CAN GATEWAY
Connector Type	TH12FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-H (CAN COMMUNICATION CIRCUIT 1)
3	W	BATTERY POWER SUPPLY
4	L	CAN-H (CAN COMMUNICATION CIRCUIT 2)
5	B	GROUND
6	L	CAN-H (CAN COMMUNICATION CIRCUIT 2)
7	P	CAN-L (CAN COMMUNICATION CIRCUIT 1)

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9	R	IGNITION POWER SUPPLY [With VR30 engine and without ISS]
9	W	IGNITION POWER SUPPLY [Except with VR30 engine and without ISS]
10	R	CAN-L (CAN COMMUNICATION CIRCUIT 2)
11	B	GROUND
12	R	CAN-L (CAN COMMUNICATION CIRCUIT 2)

Connector No.	M25
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	M_CAN_L
4	B	EARTH
5	B	EARTH
6	L	CAN-H
7	V	KLINE [With 2.0L turbo gasoline engine]
7	W	KLINE [With VR30 engine]
8	W	IGN_SW
11	SB	M_CAN_H
12	R	CAN-L
13	L	CAN-H
14	P	CAN-L
16	W	POWER

Connector No.	M28
Connector Name	TILT & TELESCOPIC MOTOR
Connector Type	NS10FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	W	-
3	L	-
4	L	-
5	P	-
6	W	-
7	BR	-
8	Y	-
9	Y	-
10	G	-

Connector No.	M33
Connector Name	WIRE TO WIRE
Connector Type	NH60MW-TS12

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
4	G	-
5	G	-
6	R	-
7	R	-
8	GR	-
9	GR	-
10	W	-
11	SHIELD	-
12	P	-
13	SB	-
14	LG	-
15	Y	-
16	Y	-
17	P	-
18	W/B	-
19	LG	- [With DRPO]
19	Y	- [Without DRPO]
20	V	-
21	B	-
22	BG	- [Without DRPO]
22	G	- [With DRPO]

Terminal No.	Color Of Wire	Signal Name [Specification]
23	L	-
24	Y	-
25	BG	- [Without DRPO]
25	L	- [With DRPO]
26	Y	-
27	GR	-
28	V	-
29	B	-
30	W	-
31	B	-
32	SB	-
33	L	-
34	BR	-
35	LG	-
36	W	-
37	B	-
40	P	-
41	SB	-
43	W	- [Except with VR30 engine and without ISS]
43	Y	- [With VR30 engine and without ISS]
44	BG	-
46	BR	-
47	G	-
49	V	-
50	B	-
52	BR	-
53	B	-
55	BG	-
56	LG	-
57	V	-
58	R	-
59	G	-
60	L	-
61	G	-
62	R	-
63	V	-
64	B	-
65	R	-
66	BR	-
68	P	-
69	V	-
70	W	-
71	LG	-
72	V	-

Connector No.	M34
Connector Name	WIRE TO WIRE
Connector Type	NH60MW-TS12

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
4	G	- [With DRPO]
4	SB	- [Without DRPO]
5	L	-
6	R	-
7	R	-
8	W	-
9	GR	-
10	V	-
11	Y	-
13	LG	-
14	W	-
16	G	-
17	B	-
18	W	-
19	B	- [With DRPO]
20	SB	- [Without DRPO]
20	Y	- [Without DRPO]
21	SHIELD	-
22	B	-
23	BG	- [Without DRPO]
23	P	- [With DRPO]
24	G	-
25	LG	- [Without DRPO]
26	BG	- [With DRPO]
26	BR	- [With DRPO]
27	R	-
28	SB	-
29	BG	- [Without DRPO]
29	W/B	- [With DRPO]
30	L	-
49	P	-
52	V	-
55	B	-
56	SB	-

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57	G	-
58	G	-
59	LG	-
60	R	-
63	B	-
64	R	-
65	BR	-
66	Y	-
69	BR	-
70	Y	-
71	SB	-
72	W	-

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
6	W/B	-
7	V	-
8	BG	- [With VR30 engine]
8	BR	- [With 2.0L turbo gasoline engine]
9	LG	- [With VR30 engine]
9	P	- [With 2.0L turbo gasoline engine]
10	W	-
11	W	- [With VR30 engine]
11	Y	- [With 2.0L turbo gasoline engine]
12	B	- [With VR30 engine]
12	BR	- [With 2.0L turbo gasoline engine]
13	GR	- [With VR30 engine]
13	SHIELD	- [With 2.0L turbo gasoline engine]
14	B	-
15	BG	- [With 2.0L turbo gasoline engine]
15	SB	- [With VR30 engine]
16	B	- [With VR30 engine]
16	BR	- [With 2.0L turbo gasoline engine]
17	LG	-
18	B	- [With VR30 engine]
18	W/B	- [With 2.0L turbo gasoline engine]

19	Y	-
31	W	-
32	G	- [With 2.0L turbo gasoline engine]
32	V	- [With VR30 engine]
33	L	- [With VR30 engine]
33	Y	- [With 2.0L turbo gasoline engine]
34	P	-
35	BG	-
36	G	-
37	B	- [With VR30 engine]
37	L	- [With 2.0L turbo gasoline engine]
38	L	- [With VR30 engine]
38	P	- [With 2.0L turbo gasoline engine and without gateway]
38	R	- [With 2.0L turbo gasoline engine and with gateway]
39	R	- [With 2.0L turbo gasoline engine]
39	Y	- [With VR30 engine]
40	GR	-
41	L	-
44	BR	-
45	L	- [With 2.0L turbo gasoline engine]
45	W	- [With VR30 engine]
46	G	- [With VR30 engine]
46	Y	- [With 2.0L turbo gasoline engine]
47	BG	- [With 2.0L turbo gasoline engine]
47	R	- [With VR30 engine]
48	SHIELD	-
49	B	- [With VR30 engine]
49	G	- [With 2.0L turbo gasoline engine]
50	B	- [With 2.0L turbo gasoline engine]
50	BR	- [With VR30 engine]
51	L	-
52	W	-
53	G	-
54	SB	- [With 2.0L turbo gasoline engine]
54	Y	- [With VR30 engine]
55	B	- [With 2.0L turbo gasoline engine]
55	P	- [With VR30 engine]
56	BG	- [With 2.0L turbo gasoline engine]
56	GR	- [With VR30 engine]
57	GR	- [With VR30 engine]
57	P	- [With 2.0L turbo gasoline engine]
58	B	-
59	SB	-
61	W/B	-
64	Y	-
65	R	-
66	P	- [Color of wire differs depending on production]
66	V	- [Color of wire differs depending on production]
67	LG	-
68	BG	-

69	L	-
70	R	-
71	V	- [With VR30 engine]
71	W	- [With 2.0L turbo gasoline engine]
72	L	- [With 2.0L turbo gasoline engine]
72	LG	- [With VR30 engine]
73	R	- [With VR30 engine]
73	W	- [With 2.0L turbo gasoline engine]
74	BR	- [With VR30 engine]
74	L	- [With 2.0L turbo gasoline engine]
75	B	- [With VR30 engine]
75	P	- [With 2.0L turbo gasoline engine and without gateway]
75	R	- [With 2.0L turbo gasoline engine and with gateway]
76	W/B	-
77	SB	-
78	G	- [With VR30 engine]
78	LG	- [With 2.0L turbo gasoline engine]
79	R	-
80	G	-
81	R	-
82	LG	-
83	BR	- [With 2.0L turbo gasoline engine]
83	R	- [With VR30 engine]
84	V	-
86	V	-
87	G	-
89	V	-
90	G	- [With VR30 engine]
90	V	- [With 2.0L turbo gasoline engine]
91	W	-
92	G	-
93	BR	-
94	GR	- [With VR30 engine]
94	L	- [With 2.0L turbo gasoline engine]
95	BR	- [With VR30 engine]
95	P	[With 2.0L turbo gasoline engine and without gateway]
95	R	- [With 2.0L turbo gasoline engine and with gateway]
96	W	-
97	LG	-
98	Y	-
99	BR	- [With VR30 engine]
99	LG	- [With 2.0L turbo gasoline engine]
100	SHIELD	-

Connector No.	M43
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	TH24FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	UPWARD
2	LG	MIRROR_SELECT_SW_RH
3	G	UPWARD
4	Y	LEFTWARD
5	R	MIRROR_SENSOR
6	GR	MIRROR_SENSOR
7	GR	FRONTWARD
8	V	RX/TX
10	W/B	MIRROR_MOTOR
11	BR	MIRROR_MOTOR
12	Y	MIRROR_MOTOR
13	LG	DOWNWARD
14	W	MIRROR_SELECT_SW_LH
15	SB	DOWNWARD
16	L	RIGHTWARD
17	L	MIRROR_SENSOR
18	B	MIRROR_SENSOR
19	G	BACKWARD
20	Y	SENS_GND
21	W	POWER_SUPPLY
22	SB	MIRROR_MOTOR
23	P	MIRROR_MOTOR
24	W/B	MIRROR_MOTOR

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AUTOMATIC DRIVE POSITIONER

Connector No.	M44
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS06FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
25	SB	BAT
26	G	BACKWARD
27	W	POWER_SUPPLY(SENSOR_for_16V)
28	BR	DOWNWARD
29	L	UPWARD/FORWARD
30	B	GND(POWER SYSTEM)

Connector No.	M58
Connector Name	COMBINATION METER
Connector Type	TH12FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
41	L	CAN-H
42	P	CAN-L
43	B	ILLUMINATION CONTROL SIGNAL
44	Y	FUEL LEVEL SENSOR GROUND
45	W	BATTERY POWER SUPPLY
46	BG	IGNITION SIGNAL [Except with VR30 engine and without ISS]
46	R	IGNITION SIGNAL [With VR30 engine and without ISS]
47	SB	AV COMMUNICATION SIGNAL (H)
48	LG	AV COMMUNICATION SIGNAL (L)
51	BR	FUEL LEVEL SENSOR SIGNAL
52	B	GROUND

Connector No.	M100
Connector Name	DISPLAY CONTROL UNIT
Connector Type	TH24FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
16	LG	AV COMM (L)
17	P	CAN-L
19	R	DIMMER SIGNAL
20	BR	REVERSE SIGNAL
22	B	GND
26	BR	CAMERA SWITCH SIGNAL
28	SB	AV COMM (H)
29	L	CAN-H
30	R	IGN [For VR30 engine]
30	W	IGN [For 2.0L turbo gasoline engine]
31	R	VEHICLE SPEED SIGNAL (8-PULSE)
33	SB	ACC [Except for VR30 engine and with ISS]
33	V	ACC [For VR30 engine and with ISS]
34	Y	BAT

Connector No.	M118
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	SB	-

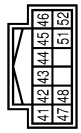
Connector No.	M121
Connector Name	TILT & TELESCOPIC SWITCH
Connector Type	TK06FGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
2	GR	TELESCOPIC_FR
3	G	TELESCOPIC_RR
4	Y	TILT_UP
5	LG	TILT_DOWN

Connector No.	M133
Connector Name	FUSE BLOCK (J/B)
Connector Type	TH40FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	V	-
12C	L	-
13C	L	-
14C	Y	-
15C	R	-
16C	R	-
17C	L	-
18C	BG	- [Without DRPO]
18C	P	- [With DRPO]
19C	B	-
1C	R	-
20C	W	-
21C	L	-
22C	L	-
23C	L	-

25C	LG	
26C	SB	-
27C	P	-
28C	W	-
29C	W	-
2C	R	-
30C	R	-
31C	W	-
32C	R	-
33C	B	- [With VR30 engine]
33C	R	- [With 2.0L turbo gasoline engine]
34C	W/B	-
35C	SB	-
36C	R	-
37C	W	-
38C	SB	-
39C	V	-
3C	P	-
40C	G	-
4C	P	-
5C	P	-
6C	G	-
7C	G	-
8C	G	-
9C	V	-

Connector No.	M137
Connector Name	JOINT CONNECTOR-M10
Connector Type	24342_4GA2A

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	B	-
3	B	-
4	B	-
5	B	-
7	B	-
8	B	-
9	B	-
10	B	-

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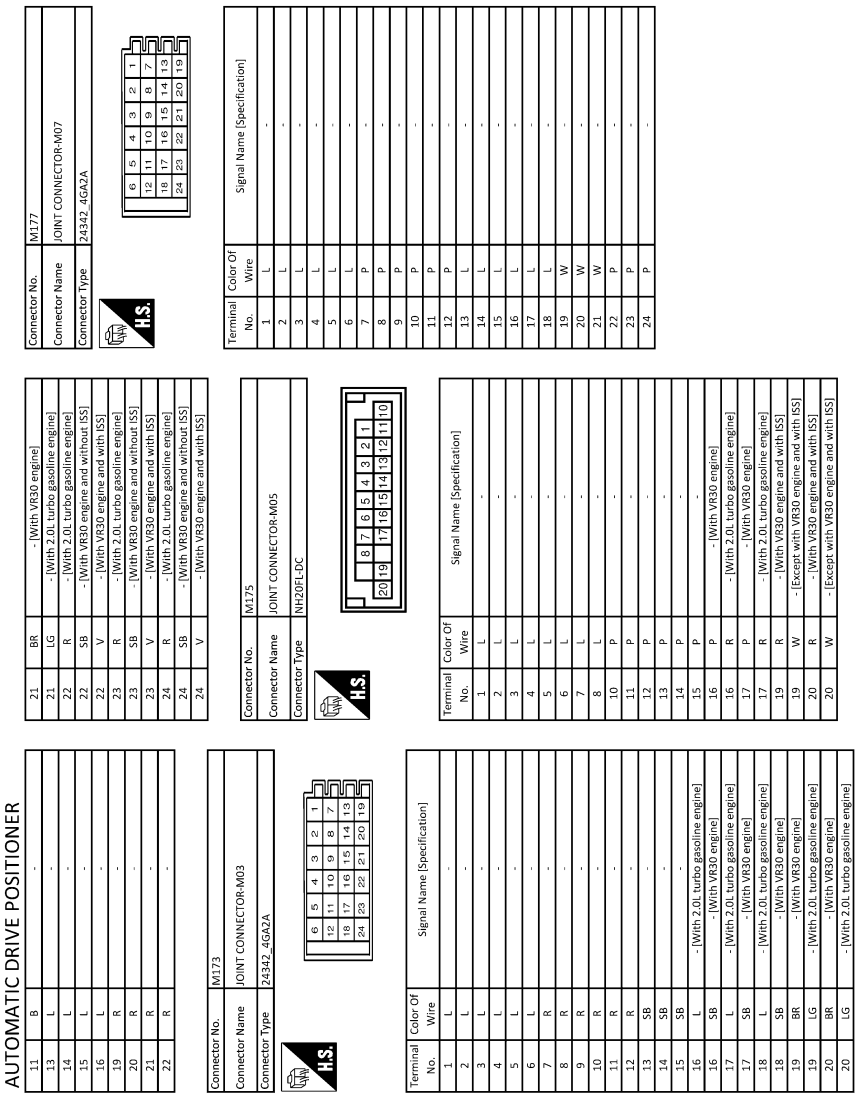

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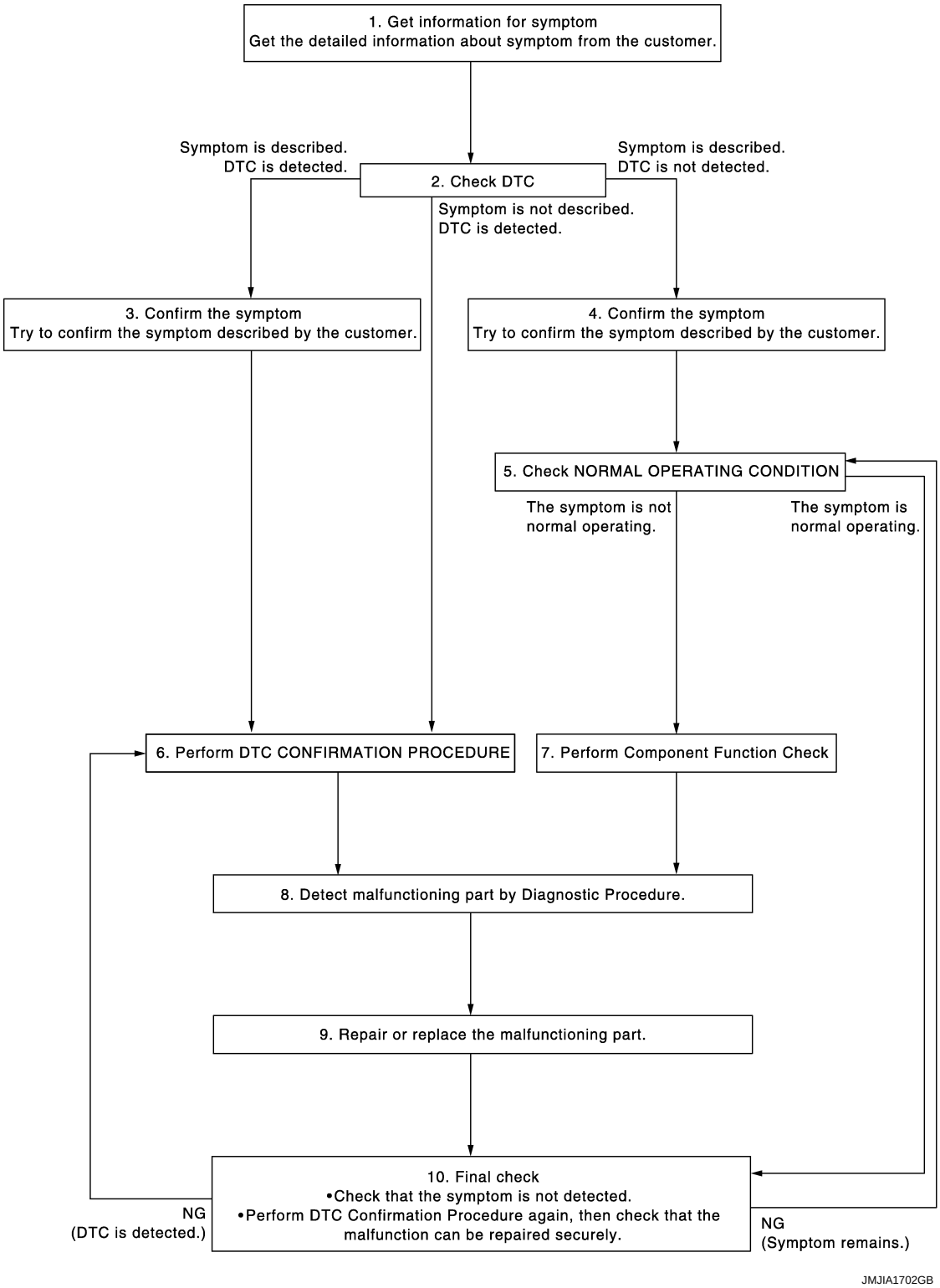
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000013509441

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check “Self Diagnostic Result” with CONSULT. Refer to ADP-42, "DTC Index".

Is any symptom described and any DTC is displayed?

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5.CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-151, "Description".

Is the incident normal operation?

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

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

7.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

>> GO TO 9.

9.REPARE OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the malfunctioning part.

>> GO TO 10.

10.FINAL CHECK

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

Are all malfunctions corrected?

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000012792039

Entry/exit assist function is reset to the following condition when the battery terminal is disconnected. For details, refer to ADP-66, "Work Procedure".

Function	Condition	Procedure
Entry/exit assist	ON	Perform initialization
		Set slide amount*1

*1: Default value is 40mm.

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

Work Procedure

INFOID:0000000012792040

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-68, "Description".

>> GO TO 2.

2.SYSTEM SETTING

Perform system setting. Refer to ADP-70, "Description".

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

Description

INFOID:0000000012792041

Each function is reset to the following condition when the driver seat control unit is replaced. For details, refer to ADP-67, "Work Procedure".

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

*1: Default value is 40mm.

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

Work Procedure

INFOID:0000000012792042

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-68, "Description".

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to ADP-69, "Description".

>> GO TO 3.

3.LOG-IN STORAGE

Perform memory storage. Refer to DMS-17, "LOG-IN FUNCTION : System Description".

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to ADP-70, "Description".

>> END

SYSTEM INITIALIZATION

Description

INFOID:0000000012792043

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. For details, refer to ADP-68, "Work Procedure".

Work Procedure

INFOID:0000000012792044

INITIALIZATION PROCEDURE

1. CHOOSE METHOD

There are two initialization methods.

Which method do you use?

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

2. WITH DOOR SWITCH

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

>> END

3. WITH VEHICLE SPEED

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

>> END

MEMORY STORING

Description

INFOID:0000000012792045

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. For details, refer to ADP-69, "Work Procedure".

Work Procedure

INFOID:0000000012792046

Memory Storage Procedure

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

NOTE:

Memory registration can be performed with no restrictions of the shift position, vehicle speed, and ignition switch position.

1. REGISTRATION METHOD

1. Adjust driver seat, steering column 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:
   - When registration is performed correctly, the memory indicator blinks for 5 seconds and a buzzer integrated in the combination meter sounds.
   - If memory is stored in the same memory switch, the previous memory will be deleted.
4. Confirm the operation of each part with memory operation.

>> END

SYSTEM SETTING

Description

INFOID:0000000012792047

The settings of the automatic driving positioner system can be changed, using CONSULT, the display unit in the center of the instrument panel and the set switch. Always check the settings before and after disconnecting the battery terminal or replacing driver seat control unit. For details, refer to ADP-70, "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. [40mm/80mm/150mm]	x	—	40mm
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	x	x	ON
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	x		ON

Work Procedure

INFOID:0000000012792048

1. CHOOSE METHOD

There are two ways of setting method.

Which method do you choose?

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

2. WITH CONSULT

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

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

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

>> GO TO 4.

3. WITH SET SWITCH

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

>> GO TO 4.

4. CONFIRM THE OPERATION

Check the entry/exit assist function setting is changed.

Is the setting changed?

YES >> END
NO >> GO TO 1.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

DTC Description

INFOID:0000000012792049

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to LAN-60, "CAN COMMUNICATION SYSTEM : CAN System Specification Chart".

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
U1000	CAN COMM CIRCUIT (CAN communication circuit)	• Driver seat control unit cannot communicate to other control units. • When driver seat control unit cannot communicate CAN communication signal continuously for 2 seconds or more.

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON and wait at least 2 seconds or more.

>> GO TO 2.

2.STEP 2

Check “Self diagnostic result” with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-71, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
NO–2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000012792050

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result”.

Is DTC “U1000” displayed?

YES >> Refer to LAN-41, "Trouble Diagnosis Flow Chart".
NO >> GO TO 2

2.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

U1010 CONTROL UNIT (CAN)

DTC Description

INFOID:0000000012792051

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
U1010	CONTROL UNIT (CAN) [Control unit (CAN)]	When detecting error during the initial diagnosis of CAN controller of driver seat control unit.

POSSIBLE CAUSE

Driver seat control unit

FAIL-SAFE

Only manual functions operate normally.

Diagnosis Procedure

INFOID:0000000012792052

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".

B2112 SLIDING MOTOR

DTC Description

INFOID:0000000012792053

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2112	SEAT SLIDE (Seat slide)	The driver seat control unit detects the output of sliding motor output terminal for 0.1 second or more even if the sliding switch is not input.

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

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-73, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
NO–2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000012792054

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-73, "DTC Description".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

2.CHECK SLIDING MOTOR CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Sliding motor			
Connector	Terminals		
B604	38	Ground	0
	34		

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)
Driver seat control unit			
Connector	Terminals		
B602	38	Ground	0 - 1
	34		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

B2113 RECLINING MOTOR

DTC Description

INFOID:0000000012792055

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2113	SEAT RECLINING (Seat reclining)	The driver seat control unit detects the output of reclining motor output terminal for 0.1 second or more even if the reclining switch is not input.

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

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-75, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
NO–2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000012792056

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-75, "DTC Description".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

2.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Reclining motor			
Connector	Terminals		
B605	39	Ground	0
	35		

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)
Driver seat control unit			
Connector	Terminals		
B602	39	Ground	0 - 1
	35		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

B2116 TILT MOTOR

DTC Description

INFOID:0000000012792057

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2116	STEERING TILT (Steering tilt)	The automatic drive positioner control unit detects the output of tilt motor output terminal for 0.1 second or more even if the tilt switch is not input.

POSSIBLE CAUSE

- Automatic drive positioner control unit
- Tilt motor harness is shorted

FAIL-SAFE

Only manual functions, except steering tilt, operate normally.

DTC CONFIRMATION PROCEDURE

1.SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-77, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
NO–2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000012792058

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-77, "DTC Description".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

2.CHECK TILT MOTOR CIRCUIT (POWER SHORT)

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

(+)		(-)	Voltage (V) (Approx.)
Tilt & telescopic motor			
Connector	Terminals		
M28	7	Ground	0
	3		

Is the inspection result normal?

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

3.CHECK AUTOMATIC DRIVER POSITIONER CONROL UNIT OUTPUT SIGNAL

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

(+)		(-)	Voltage (V)
Automatic drive positioner control unit			
Connector	Terminals		
M44	28	Ground	0 - 1
	29		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

B2128 UART COMMUNICATION LINE

DTC Description

INFOID:0000000012792059

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

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2128	UART COMM (Universal asynchronous receiver transmitter communication)	The communication between driver seat control unit and auto drive positioner control unit is interrupted for 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

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-79, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
NO–2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000012792060

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-79, "DTC Description".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-45, "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 connector.
3. Check continuity between driver seat control unit harness connector and automatic drive positioner control unit harness connector.

Driver seat control unit		Automatic drive positioner control unit		Continuity
Connector	Terminal	Connector	Terminal	
B601	2	M43	8	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	2		Not existed

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

B2130 EEPROM

DTC Description

INFOID:0000000012792061

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detecting condition
B2130	EEPROM (EEPROM is malfunction)	Driver seat control unit detected CPU malfunction.

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

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

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-81, "Diagnosis Procedure".
NO–1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
NO–2 >> Confirmation after repair: INSPECTION END.

Diagnosis Procedure

INFOID:0000000012792062

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-81, "DTC Description".

Is the DTC displayed again?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

POWER SUPPLY AND GROUND CIRCUIT
DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012792063

1.CHECK FUSE

Check that the following fusible link is not blown (open).

Signal name	Fuse No.
Battery power supply	M (40 A)

Is the fusible link blown (open)?

YES >> Replace the blown (open) fusible link after repairing the affected circuit if a fusible link is blown (open).
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Voltage (V)
Driver seat control unit			
Connector	Terminals		
B602	33	Ground	9 - 16

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	43		Existed

Is the inspection result normal?

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

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:0000000012792064

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-66, "Description".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012792065

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

1.CHECK FUSE

Check that the following fusible link is not blown (open).

Signal name	Fuse No.
Battery power supply	M (40 A)

Is the fusible link blown (open)?

YES >> Replace the blown (open) fusible link after repairing the affected circuit if a fusible link is blown (open).
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Voltage (V)
Automatic drive positioner control unit			
Connector	Terminals		
M44	25	Ground	9 - 16

Is the inspection result normal?

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

3.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		
M44	30		Existed

Is the inspection result normal?

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:0000000012792066

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-66, "Work Procedure".

SLIDING SWITCH

Component Function Check

INFOID:0000000012792067

1.CHECK FUNCTION

1. Select “SLIDE SW-FR”, “SLIDE SW-RR” in “Data monitor” mode with CONSULT.
2. Check sliding switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-84, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792068

1.CHECK SLIDING SWITCH SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	8	Ground	9 - 16
	24		

Is the inspection result normal?

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

2.CHECK SLIDING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	8	B603	8	Existed
	24		24	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	8		Not existed
	24		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to ADP-85, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792069

1.CHECK SLIDING SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

RECLINING SWITCH

Component Function Check

INFOID:0000000012792070

1.CHECK FUNCTION

1. Select “RECLN SW-FR”, “RECLN SW-RR” in “Data monitor” mode with CONSULT.
2. Check reclining switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-86, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792071

1.CHECK RECLINING SWITCH SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	9	Ground	9 - 16
	25		

Is the inspection result normal?

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

2.CHECK RECLINING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	9	B603	9	Existed
	25		25	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	9		Not existed
	25		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SWITCH

Refer to ADP-87, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792072

1.CHECK RECLINING SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

LIFTING SWITCH (FRONT)

Component Function Check

INFOID:0000000012792073

1.CHECK FUNCTION

1. Select “LIFT FR SW-UP”, “LIFT FR SW-DN” in “Data monitor” mode with CONSULT.
2. Check lifting switch (front) signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-88, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792074

1.CHECK LIFTING SWITCH (FRONT) SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	10	Ground	9 - 16
	26		

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	10	B603	10	Existed
	26		26	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	10		Not existed
	26		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-89, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792075

1.CHECK LIFTING SWITCH (FRONT)

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

LIFTING SWITCH (REAR)

Component Function Check

INFOID:0000000012792076

1.CHECK FUNCTION

1. Select “LIFT RR SW-UP”, “LIFT RR SW-DN” in “Data monitor” mode with CONSULT.
2. Check lifting switch (rear) signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-90, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792077

1.CHECK LIFTING SWITCH (REAR) SIGNAL

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

(+)		(-)	Voltage (V)
Power seat switch			
Connector	Terminals		
B603	11	Ground	9 - 16
	27		

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	11	B603	11	Existed
	27		27	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	11		Not existed
	27		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-91, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792078

1.CHECK LIFTING SWITCH (REAR)

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to SE-115, "Removal and Installation".

TILT SWITCH

Component Function Check

INFOID:0000000012792079

1.CHECK FUNCTION

1. Select “TILT SW-UP”, “TILT SW-DOWN” in “Data monitor” mode with CONSULT.
2. Check tilt switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-92, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792080

1.CHECK TILT SWITCH SIGNAL

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

(+)		(-)	Voltage (V)
Tilt & telescopic switch			
Connector	Terminals		
M121	4	Ground	4 - 6
	5		

Is the inspection result normal?

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

2.CHECK TILT SWITCH CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	
M43	1	M121	4	Existed
	13		5	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	1		Not existed
	13		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK TILT SWITCH

Refer to ADP-93, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace tilt & telescopic switch. Refer to ADP-155, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792081

1.CHECK TILT SWITCH

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

Tilt switch		Condition		Continuity
Terminal				
1	4	Tilt switch (upward)	Operate	Existed
			Release	Not existed
	5	Tilt switch (downward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace tilt & telescopic switch. Refer to ADP-155, "Removal and Installation".

TELESCOPIC SWITCH

Component Function Check

INFOID:0000000012792082

1.CHECK FUNCTION

1. Select “TELESCO SW-FR”, “TELESCO SW-RR” in “Data monitor” mode with CONSULT.
2. Check telescopic switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-94, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792083

1.CHECK TELESCOPIC SWITCH SIGNAL

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

(+)		(-)	Voltage (V)
Tilt & telescopic switch			
Connector	Terminals		
M121	2	Ground	4 - 6
	3		

Is the inspection result normal?

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

2.CHECK TELESCOPIC SWITCH CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	
M43	7	M121	2	Existed
	19		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	7		Not existed
	19		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC SWITCH

Refer to ADP-95, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace tilt & telescopic switch. Refer to ADP-155, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792084

1.CHECK TELESCOPIC SWITCH

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

Telescopic switch		Condition		Continuity
Terminal				
1	2	Telescopic switch (forward)	Operate	Existed
			Release	Not existed
	3	Telescopic switch (backward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace tilt & telescopic switch. Refer to ADP-155, "Removal and Installation".

SEAT MEMORY SWITCH

Component Function Check

INFOID:0000000012792085

1.CHECK FUNCTION

1. Select “MEMORY SW 1”, “MEMORY SW 2”, “SET SW” in “Data monitor” mode with CONSULT.
2. Check seat memory switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-96, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792086

1.CHECK SEAT MEMORY SWITCH SIGNAL

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

(+)		(-)	Voltage (V)
Seat memory switch			
Connector	Terminals		
D9	1	Ground	4 - 6
	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 connector.
3. Check continuity between driver seat control unit harness connector and seat memory switch harness connector.

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	22	D9	1	Existed
	6		2	
	28		3	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	22		Not existed
	6		
	28		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D9	4		Existed

Is the inspection result normal?

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

4.CHECK SEAT MEMORY SWITCH

Refer to ADP-97, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace seat memory switch. Refer to ADP-154, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792087

1.CHECK SEAT MEMORY SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace seat memory switch. Refer to ADP-154, "Removal and Installation".

POWER WINDOW MAIN SWITCH
CHANGEOVER SWITCH

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000012792088

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.
NO >> Refer to ADP-98, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000012792089

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Power window main switch (door mirror remote control switch)			
Connector	Terminal		
D55	23	Ground	4 - 6
	28		

Is the inspection result normal?

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

2.CHECK CHANGEOVER SWITCH CIRCUIT

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

Automatic drive positioner control unit		Power window main switch (door mirror remote control switch)		Continuity
Connector	Terminal	Connector	Terminal	
M43	2	D55	28	Existed
	14		23	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	2		Not existed
	14		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between power window main switch (door mirror remote control switch) harness connector and ground.

Power window main switch (door mirror remote control switch)		Ground	Continuity
Connector	Terminal		
D8	7		Existed

Is the inspection result normal?

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

4.CHECK CHANGEOVER SWITCH

Check changeover switch on power window main switch (door mirror remote control switch).
Refer to MIR-35, "CHANGEOVER SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power window main switch (door mirror remote control switch). Refer to PWC-81, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000012792090

1.CHECK CHANGEOVER SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch (door mirror remote control switch) connector.
3. Check continuity between power window main switch (door mirror remote control switch) terminals.

Power window main switch (door mirror remote control switch)		Condition		Continuity
Terminal				
23	7	Changeover switch	LEFT	Existed
			Other than the above	Not existed
28			RIGHT	Existed
			Other than the above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power window main switch (door mirror remote control switch). Refer to PWC-81, "Removal and Installation".

MIRROR SWITCH

MIRROR SWITCH : Component Function Check

INFOID:0000000012792091

1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Mirror switch function is OK.
NO >> Refer to ADP-100, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000012792092

1.CHECK MIRROR SWITCH INPUT SIGNAL

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

(+)		(-)	Voltage (V)
Power window main switch (door mirror remote control switch)			
Connector	Terminal		
D55	24	Ground	4 - 6
	25		
	26		
	27		

Is the inspection result normal?

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

2.CHECK MIRROR SWITCH CIRCUIT

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

Automatic drive positioner control unit		Power window main switch (door mirror remote control switch)		Continuity
Connector	Terminal	Connector	Terminal	
M43	3	D55	26	Existed
	4		24	
	15		25	
	16		27	

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

Automatic drive positioner control unit			Continuity
Connector	Terminal		
M43	3	Ground	Not existed
	4		
	15		
	16		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH) GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between power window main switch (door mirror remote control switch) harness connector and ground.

Power window main switch (door mirror remote control switch)		Ground	Continuity
Connector	Terminal		
D8	7		Existed

Is the inspection result normal?

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

4. CHECK MIRROR SWITCH

Check mirror switch on power window main switch (door mirror remote control switch).
Refer to MIR-33, "MIRROR SWITCH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace power window main switch (door mirror remote control switch). Refer to PWC-81, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:0000000012792093

1. CHECK MIRROR SWITCH

1. Turn ignition switch OFF.
2. Disconnect power window main switch (door mirror remote control switch) connector.
3. Check continuity between power window main switch (door mirror remote control switch) terminals.

Power window main switch (door mirror remote control switch)		Condition		Continuity
Terminal				
24	7	Mirror switch	LEFT	Existed
			Other than the above	Not existed
25			DOWN	Existed
			Other than the above	Not existed
26			UP	Existed
			Other than the above	Not existed
27			RIGHT	Existed
			Other than the above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power window main switch (door mirror remote control switch). Refer to PWC-81, "Removal and Installation".

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012792094

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

Power seat switch		Ground	Continuity
Connector	Terminal		
B603	43		Existed

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000012792095

1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

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

Tilt & telescopic switch		Ground	Continuity
Connector	Terminal		
M121	1		Existed

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

SLIDING SENSOR

Component Function Check

INFOID:0000000012792096

1.CHECK FUNCTION

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

Monitor item	Condition		Value
SLIDE PULSE	Seat sliding	Operate (forward)	Change (increase)*1
		Operate (backward)	Change (decrease)*1
		Release	No change*1

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

Is the indication normal?

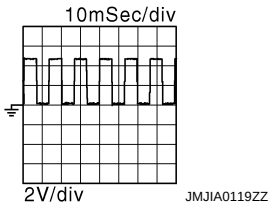
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-104, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792097

1.CHECK SLIDING SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	18	Ground	Seat sliding	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "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 connector.
3. Check continuity between driver seat control unit harness connector and sliding sensor harness connector.

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	18	B604	18	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	18		Not existed

Is the inspection result normal?

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

3. CHECK SLIDING SENSOR POWER SUPPLY

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

(+)		(-)	Voltage (V)
Sliding motor			
Connector	Terminals		
B604	12	Ground	9 - 16

Is the inspection result normal?

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

4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B604	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

5. CHECK SLIDING SENSOR GROUND

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

Sliding motor		Ground	Continuity
Connector	Terminal		
B604	43		Existed

Is the inspection result normal?

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

RECLINING SENSOR

Component Function Check

INFOID:0000000012792098

1.CHECK FUNCTION

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

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

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

Is the indication normal?

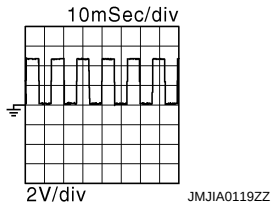
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-106, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792099

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		Signal (Reference value)
Connector	Terminals				
B601	4	Ground	Seat reclining	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> GO TO 2.

2.CHECK RECLINING SENSOR CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	4	B605	4	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	4		Not existed

Is the inspection result normal?

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

3.CHECK RECLINING SENSOR POWER SUPPLY

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

(+)		(-)	Voltage (V)
Reclining motor			
Connector	Terminals		
B605	12	Ground	9 - 16

Is the inspection result normal?

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

4.CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B605	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK RECLINING SENSOR GROUND

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

Reclining motor		Ground	Continuity
Connector	Terminal		
B605	43		Existed

Is the inspection result normal?

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

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:0000000012792100

1.CHECK FUNCTION

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

Monitor item	Condition		Value
LIFT FR PULSE	Seat lifting (front)	Operate (up)	Change (increase)*1
		Operate (down)	Change (decrease)*1
		Release	No change*1

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

Is the indication normal?

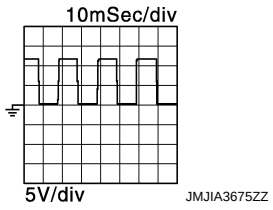
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-108, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000013509002

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

1. Turn ignition switch ON.
2. Read the voltage signal lifting sensor harness connector and ground with an oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	19	Ground	Seat Lifting (front)	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

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

2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B601	19	B607	19	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	19		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

3. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B607	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

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

4. CHECK LIFTING SENSOR (FRONT) GROUND

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

Lifting motor (front)		Ground	Continuity
Connector	Terminal		
B607	43		Existed

Is the inspection result normal?

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

LIFTING SENSOR (REAR)

Component Function Check

INFOID:0000000012792102

1.CHECK FUNCTION

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

Monitor item	Condition		Value
LIFT RR PULSE	Seat lifting (rear)	Operate (up)	Change (increase)*1
		Operate (down)	Change (decrease)*1
		Release	No change*1

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

Is the indication normal?

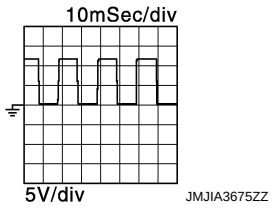
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-110, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000013509698

1.CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.
2. Read the voltage signal lifting sensor harness connector and ground with an oscilloscope.

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	20	Ground	Seat Lifting (rear)	Operate	 JMJIA3675ZZ
				Other than the above	0 or 5

Is the inspection result normal?

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

2.CHECK LIFTING SENSOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B601	20	B606	20	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	20		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

3. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Drive seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B601	12	B606	12	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	12		Not existed

Is the inspection result normal?

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

4. CHECK LIFTING SENSOR (REAR) GROUND

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

Lifting motor (rear)		Ground	Continuity
Connector	Terminal		
B606	43		Existed

Is the inspection result normal?

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

TILT SENSOR

Component Function Check

INFOID:0000000012792104

1.CHECK FUNCTION

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

Monitor item	Condition		Value
TILT PULSE	Steering tilt	Operate (up)	Change (increase)*1
		Operate (down)	Change (decrease)*1
		Release	No change*1

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

Is the indication normal?

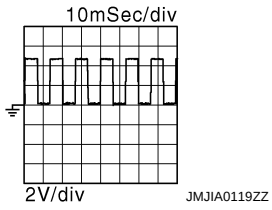
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-112, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792105

1.CHECK TILT SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminal				
B601	21	Ground	Steering tilt	Operate	 JMJIA0119ZZ
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> GO TO 2.

2.CHECK TILT SENSOR CIRCUIT

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

Driver seat control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	21	M28	1	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	21		Not existed

Is the inspection result normal?

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

3. CHECK TILT SENSOR POWER SUPPLY

1. Turn ignition switch ON.
2. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Voltage (V)
Tilt & telescopic motor			
Connector	Terminals		
M28	2	Ground	9 - 16

Is the inspection result normal?

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

4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	27	M28	2	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

5. CHECK TILT SENSOR GROUND CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	M28	8	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

YES >> Replace tilt & telescopic motor.
NO >> Repair or replace harness or connector.

TELESCOPIC SENSOR

Component Function Check

INFOID:0000000012792106

1.CHECK FUNCTION

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

Monitor item	Condition		Value
TELESCO PULSE	Steering telescopic	Operate (forward)	Change (increase)*1
		Operate (backward)	Change (decrease)*1
		Release	No change*1

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

Is the indication normal?

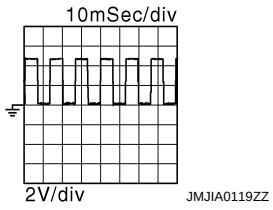
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-115, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792107

1.CHECK TELESCOPIC SENSOR SIGNAL

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

(+) Driver seat control unit		(-)	Condition		Signal (Reference value)
Connector	Terminals				
B601	5	Ground	Steering telescopic	Operate	
				Other than the above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> GO TO 2.

2.CHECK TELESCOPIC SENSOR CIRCUIT

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

Driver seat control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
B601	5	M28	5	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	5		Not existed

Is the inspection result normal?

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

3.CHECK TELESCOPIC SENSOR POWER SUPPLY

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

(+)		(-)	Voltage (V)
Tilt & telescopic motor			
Connector	Terminals		
M28	6	Ground	9 - 16

Is the inspection result normal?

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

4.CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	27	M28	6	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	M28	9	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

YES >> Replace tilt & telescopic motor.
NO >> Repair or replace harness or connector.

MIRROR SENSOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000012792108

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-118, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000012792109

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

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

(+)		(-)	Voltage (V)
Door mirror (driver side)			
Connector	Terminals		
D56	23	Ground	4 - 6

Is the inspection result normal?

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

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

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	21	D56	23	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	21		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

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

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	D56	24	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

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

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	6	D56	21	Existed
	18		22	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	6		Not existed
	18		

Is the inspection result normal?

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

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000012792110

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to ADP-120, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000012792111

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

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

(+)		(-)	Voltage (V)
Door mirror (passenger side)			
Connector	Terminals		
D57	23	Ground	4 - 6

Is the inspection result normal?

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

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

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

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	21	D57	23	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	21		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

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

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

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	20	D57	24	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	20		Not existed

Is the inspection result normal?

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

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

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

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	5	D57	21	Existed
	17		22	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M43	5		Not existed
	17		

Is the inspection result normal?

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

SLIDING MOTOR

Component Function Check

INFOID:0000000012792112

1.CHECK FUNCTION

1. Select “SEAT SLIDE” in “Active test” mode with CONSULT.
2. Check the sliding motor operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-122, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792113

1.CHECK SLIDING MOTOR POWER SUPPLY

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

(+)		(-)	Condition		Voltage (V)
Sliding motor					
Connector	Terminal				
B604	38	Ground	SEAT SLIDE	OFF	0 - 1
				FR (forward)	9 - 16
				RR (backward)	0 - 1
	34			OFF	0 - 1
				FR (forward)	0 - 1
				RR (backward)	9 - 16

Is the inspection result normal?

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

2.CHECK SLIDING MOTOR CIRCUIT

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B602	34	B604	34	Existed
	38		38	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	34		Not existed
	38		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

RECLINING MOTOR

Component Function Check

INFOID:0000000012792114

1.CHECK FUNCTION

1. Select “SEAT RECLINING” in “Active test” mode with CONSULT.
2. Check the reclining motor operation.

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

Is the operation of relevant parts normal?

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

Diagnosis Procedure

INFOID:0000000012792115

1.CHECK RECLINING MOTOR POWER SUPPLY

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

(+)		(-)	Condition		Voltage (V)
Reclining motor					
Connector	Terminal				
B605	35	Ground	SEAT RECLINING	OFF	0 - 1
				FR (forward)	9 - 16
				RR (backward)	0 - 1
	39			OFF	0 - 1
				FR (forward)	0 - 1
				RR (backward)	9 - 16

Is the inspection result normal?

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

2.CHECK RECLINING MOTOR CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B602	35	B605	35	Existed
	39		39	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	35		Not existed
	39		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

LIFTING MOTOR (FRONT)

Component Function Check

INFOID:0000000012792116

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

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

Diagnosis Procedure

INFOID:0000000012792117

1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

(+)		(-)	Condition		Voltage (V)
Lifting motor (front)					
Connector	Terminal				
B607	40	Ground	SEAT LIFTER FR	OFF	0 - 1
				UP	9 - 16
				DWN (DOWN)	0 - 1
	36			OFF	0 - 1
				UP	0 - 1
				DWN (DOWN)	9 - 16

Is the inspection result normal?

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

2.CHECK LIFTING MOTOR (FRONT) CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B602	40	B607	40	Existed
	36		36	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	40		Not existed
	36		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

LIFTING MOTOR (REAR)

Component Function Check

INFOID:0000000012792118

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

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

Diagnosis Procedure

INFOID:0000000012792119

1.CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

(+)		(-)	Condition		Voltage (V)
Lifting motor (rear)					
Connector	Terminal				
B606	42	Ground	SEAT LIFTER RR	OFF	0 - 1
				UP	0 - 1
				DWN (DOWN)	9 - 16
	41			OFF	0 - 1
				UP	9 - 16
				DWN (DOWN)	0 - 1

Is the inspection result normal?

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

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B602	42	B606	42	Existed
	41		41	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B602	42		Not existed
	41		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

TILT MOTOR

Component Function Check

INFOID:0000000012792120

1.CHECK FUNCTION

1. Select “TILT MOTOR” in “Active test” mode with CONSULT.
2. Check the tilt motor operation.

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

Is the operation of relevant parts normal?

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

Diagnosis Procedure

INFOID:0000000012792121

1.CHECK TILT MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic motor connector.
3. Turn ignition switch ON.
4. Perform “Active test” (“TILT MOTOR”) with CONSULT.
5. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Tilt & telescopic motor					
Connector	Terminals				
M28	7	Ground	TILT MOTOR	OFF	0 - 1
				UP	0 - 1
				DWN (down)	9 - 16
	3			OFF	0 - 1
				UP	9 - 16
				DWN (down)	0 - 1

Is the inspection result normal?

YES >> Replace tilt & telescopic motor.
NO >> GO TO 2.

2.CHECK TILT MOTOR CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	28	M28	7	Existed
	29		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	28		Not existed
	29		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

TELESCOPIC MOTOR

Component Function Check

INFOID:0000000012792122

1.CHECK FUNCTION

1. Select “TELESCO MOTOR” in “Active test” mode with CONSULT.
2. Check the telescopic motor operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-132, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792123

1.CHECK TELESCOPIC MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect tilt & telescopic motor connector.
3. Turn ignition switch ON.
4. Perform “Active test” (“TELESCO MOTOR”) with CONSULT.
5. Check voltage between tilt & telescopic motor harness connector and ground.

(+)		(-)	Condition		Voltage (V)
Tilt & telescopic motor					
Connector	Terminals				
M28	10	Ground	TELESCO MOTOR	OFF	0 - 1
				FR (forward)	0 - 1
				RR (backward)	9 - 16
	4			OFF	0 - 1
				FR (forward)	9 - 16
				RR (backward)	0 - 1

Is the inspection result normal?

YES >> Replace tilt & telescopic motor (built in steering column assembly).
NO >> GO TO 2.

2.CHECK TELESCOPIC MOTOR CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M44	26	M28	10	Existed
	29		4	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M44	26		Not existed
	29		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

Component Function Check

INFOID:0000000012792124

1.CHECK DOOR MIRROR MOTOR FUNCTION

1. Select “MIRROR MOTOR RH” and “MIRROR MOTOR LH”in “Active test” mode with CONSULT.
2. Check the door mirror motor operation.

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 >> INSPECTION END.
NO >> Refer to ADP-134, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792125

1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+)		(-)	Condition		Voltage (V)
Door mirror					
Connector	Terminals				
D56 (Driver side) D57 (Passenger side)	10	Ground	MIRROR MOTOR RH/LH	DOWN / RIGHT	9 - 16
				Other than the above	0 - 1
	11			LEFT	9 - 16
				Other than the above	0 - 1
	12			UP	9 - 16
				Other than the above	0 - 1

Is the inspection result normal?

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

2.CHECK DOOR MIRROR MOTOR CIRCUIT

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

[Driver side]

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	12	D56	10	Existed
	23		12	
	24		11	

[Passenger side]

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M43	22	D57	10	Existed
	10		12	
	11		11	

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

[Driver side]

Automatic drive positioner control unit			
Connector	Terminal	Ground	Continuity
M43	12		Not existed
	23		
	24		

[Passenger side]

Automatic drive positioner control unit			
Connector	Terminal	Ground	Continuity
M43	22		Not existed
	10		
	11		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-153, "Removal and Installation".
NO >> Repair or replace harness or connector.

3. CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-135, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> Replace door mirror. Refer to MIR-50, "DOOR MIRROR : Removal and Installation".

Component Inspection

INFOID:0000000012792126

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-51, "DOOR MIRROR : Disassembly and Assembly".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace door mirror. Refer to MIR-50, "DOOR MIRROR : Removal and Installation".

2. CHECK DOOR MIRROR MOTOR-II

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

Door mirror			Operational direction
Connector	Terminal		
	(+)	(-)	
D56 (Driver side) D57 (Passenger side)	10	11	RIGHT
	11	10	LEFT
	12	10	UP
	10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror. Refer to MIR-50, "DOOR MIRROR : Removal and Installation".

SEAT MEMORY INDICATOR

Component Function Check

INFOID:0000000012792127

1.CHECK FUNCTION

1. Select “MEMORY SW INDCTR” in “Active test” mode with CONSULT.
2. Check the memory indicator operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-137, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792128

1.CHECK SEAT MEMORY INDICATOR OPERATION

Check seat memory indicator operation.

Which is the malfunctioning indicator?

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

2.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).

Signal name	Fuse No.
Battery power supply	20 (10 A)

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the affected circuit if a fuse is blown (open).
NO >> GO TO 3.

3.CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+)		(-)	Voltage (V)
Seat memory switch			
Connector	Terminals		
D9	5	Ground	9 - 16

Is the inspection result normal?

YES >> Replace seat memory switch. Refer to ADP-154, "Removal and Installation".
NO >> Repair or replace harness or connector.

4.CHECK MEMORY INDICATOR CIRCUIT

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B601	7	D9	7	Existed
	23		6	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B601	7		Not existed
	23		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-152, "Removal and Installation".
NO >> Repair or replace harness or connector.

SYMPTOM DIAGNOSIS

MANUAL FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000012792129

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

Check driver seat control unit power supply and ground circuit.
Refer to ADP-82, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

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

Check automatic drive positioner control unit power supply and ground circuit.
Refer to ADP-82, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

POWER SEAT

POWER SEAT : Diagnosis Procedure

INFOID:0000000012792130

1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check power seat switch ground circuit.
Refer to ADP-102, "Diagnosis Procedure".

Is the inspection result normal?

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

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

TILT & TELESCOPIC

TILT & TELESCOPIC : Diagnosis Procedure

INFOID:0000000012792131

1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Check tilt & telescopic switch ground circuit.
Refer to ADP-103, "Diagnosis Procedure".

Is the inspection result normal?

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

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000012792132

1.CHECK SLIDING MECHANISM

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

Is the inspection result normal?

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

2.CHECK SLIDING SWITCH

Check sliding switch.
Refer to ADP-84, "Component Function Check".

Is the inspection result normal?

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

3.CHECK SLIDING MOTOR

Check sliding motor.
Refer to ADP-122, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000012792133

1.CHECK RECLINING MECHANISM

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

Is the inspection result normal?

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

2.CHECK RECLINING SWITCH

Check reclining switch.
Refer to ADP-86, "Component Function Check".

Is the inspection result normal?

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

3.CHECK RECLINING MOTOR

Check reclining motor.
Refer to ADP-124, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000012792134

1.CHECK LIFTING (FRONT) MECHANISM

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

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (FRONT)

Check lifting switch (front).
Refer to ADP-88, "Component Function Check".

Is the inspection result normal?

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

3.CHECK LIFTING MOTOR (FRONT)

Check lifting motor (front).
Refer to ADP-126, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000012792135

1.CHECK LIFTING (REAR) MECHANISM

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

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (REAR)

Check lifting switch (rear).
Refer to ADP-90, "Component Function Check".

Is the inspection result normal?

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

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).
Refer to ADP-128, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000012792136

1.CHECK STEERING TILT MECHANISM

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

Is the inspection result normal?

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

2.CHECK TILT SWITCH

Check tilt switch.
Refer to ADP-92, "Component Function Check".

Is the inspection result normal?

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

3.CHECK TILT MOTOR

Check tilt motor.
Refer to ADP-130, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:0000000012792137

1.CHECK STEERING TELESCOPIC MECHANISM

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CHECK TELESCOPIC SWITCH

Check telescopic switch.
Refer to ADP-92, "Component Function Check".

Is the inspection result normal?

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

3.CHECK TELESCOPIC MOTOR

Check telescopic motor.
Refer to ADP-130, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:0000000012792138

1.CHECK DOOR MIRROR MECHANISM

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

Is the inspection result normal?

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

2.CHECK POWER WINDOW MAIN SWITCH (DOOR MIRROR REMOTE CONTROL SWITCH)

Check mirror switch and change over switch.
Refer to ADP-99, "MIRROR SWITCH : Component Function Check" (mirror switch), ADP-98, "CHANGEOVER SWITCH : Component Function Check" (change over switch).

Is the inspection result normal?

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

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-134, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

MEMORY FUNCTION DOES NOT OPERATE

ALL COMPONENT

ALL COMPONENT : Diagnosis Procedure

INFOID:0000000012792139

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

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

2.PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE

1. Perform initialization procedure.
   Refer to ADP-68, "Work Procedure".
2. Perform memory storing procedure.
   Refer to ADP-69, "Work Procedure".
3. Check memory function.
   Refer to ADP-21, "MEMORY FUNCTION : System Description".

Is the inspection result normal?

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

3.CHECK SEAT MEMORY SWITCH

Check seat memory switch.
Refer to ADP-96, "Component Function Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000012792140

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-140, "SEAT SLIDING : Diagnosis Procedure".

2.CHECK SLIDING SENSOR

Check sliding sensor.
Refer to ADP-104, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000012792141

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-140, "SEAT RECLINING : Diagnosis Procedure".

2.CHECK RECLINING SENSOR

Check reclining sensor.
Refer to ADP-104, "Component_Function_Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000012792142

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-141, "SEAT LIFTING (FRONT) : Diagnosis Procedure".

2.CHECK LIFTING SENSOR (FRONT)

Check lifting sensor (front).
Refer to ADP-108, "Component_Function_Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000012792143

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-141, "SEAT LIFTING (REAR) : Diagnosis Procedure".

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).
Refer to ADP-110, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000012792144

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-142, "STEERING TILT : Diagnosis Procedure".

2.CHECK TILT SENSOR

Check steering tilt sensor.
Refer to ADP-112, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:0000000012792145

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-142, "STEERING TELESCOPIC : Diagnosis Procedure".

2.CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.
Refer to ADP-115, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:0000000012792146

1.CHECK MANUAL OPERATION

Check manual operation.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to ADP-143, "DOOR MIRROR : Diagnosis Procedure".

2.CHECK MIRROR SENSOR

Check mirror sensor.
Refer to ADP-118, "DRIVER SIDE : Component Function Check". (Driver side)
Refer to ADP-119, "PASSENGER SIDE : Component Function Check". (Passenger side)

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012792147

1.CHECK SYSTEM SETTING

1. Check system setting.
   Refer to ADP-70, "Work Procedure".
2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.
NO >> GO TO 2.

2.PERFORM SYSTEM INITIALIZATION

1. Perform system initialization.
   Refer to ADP-68, "Work Procedure".
2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.
NO >> GO TO 3.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check front door switch (driver side).
Refer to DLK-117, "Component_Function_Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012792148

1.CHECK LOG-IN FUNCTION

Check Log-in function is performed.
Refer to DMS-17, "LOG-IN FUNCTION : System Description".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Refer to DMS-28, "LOG-IN FUNCTION : Work Flow".

2.CHECK REMOTE KEYLESS ENTRY FUNCTUION

Check door lock/unlock using Intelligent Key button operation.
Refer to DLK-149, "ALL DOOR REQUEST SWITCHES : Diagnosis Procedure".

Does door lock /unlock with Intelligent Key button?

YES >> GO TO 3.
NO >> Refer to DLK-152, "Diagnosis Procedure".

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check the intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012792149

1.CHECK MEMORY INDICATOR

Check memory indicator.
Refer to ADP-137, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

NORMAL OPERATING CONDITION

Description

INFOID:0000000012792150

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

Symptom	Cause	Action to take	Reference page
Entry/exit assist function and seat synchronization do not operate.	No initialization has been performed.	Perform initialization.	ADP-68
	Entry/exit assist function is disabled. **NOTE:** The entry/exit assist function and seat synchronization function are disabled before delivery (initial setting).	Change the settings.	ADP-70
Telescopic does not operate by entry/exit assist function.	Telescopic is not interlocked with entry/exit assist function.	—	Exit assist function: ADP-23 Entry assist function: ADP-25
Entry assist function does not operate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	ADP-69
Lumbar support and side support do not perform memory operation.	The lumbar support system and side support system are controlled independently with no link to the automatic drive positioner system.	—	Lumbar support system: SE-15 Side support system: SE-15
Memory function, log-in function, entry/exit assist function function, or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-21 Log-in function: ADP-26 Exit assist function: ADP-23 Entry assist function: ADP-25 Intelligent Key interlock function: ADP-28

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

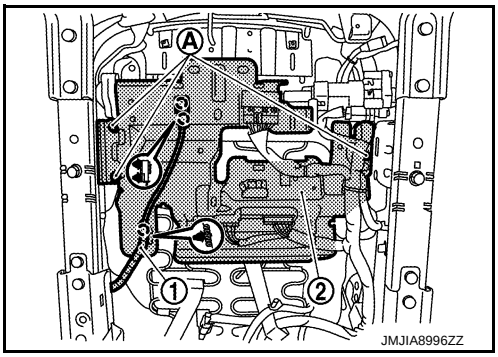
Removal and Installation

INFOID:0000000012792151

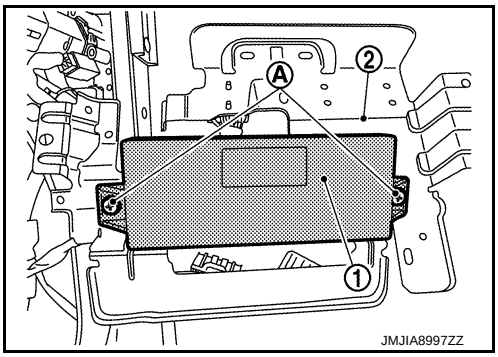
REMOVAL

1. Remove driver seat. Refer to SE-83, "Removal and Installation".
2. Remove mounting bolts Ⓐ and clip of the side air bag harness ① from the harness mounting bracket ②.

   : Clip
3. Disconnect driver seat control unit connector.



4. Remove mounting bolt Ⓐ.
5. Remove driver seat control unit ① from the harness mounting bracket ②.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to ADP-67, "Description".

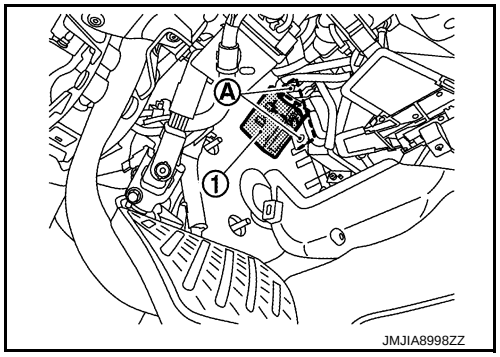
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

INFOID:0000000012792152

REMOVAL

1. Remove instrument lower panel LH. Refer to IP-13, "Removal and Installation".
2. Remove mounting screws Ⓐ.
3. Disconnect automatic drive positioner control unit connector.
4. Remove automatic drive positioner control unit ①.



INSTALLATION

Install in the reverse order of removal.

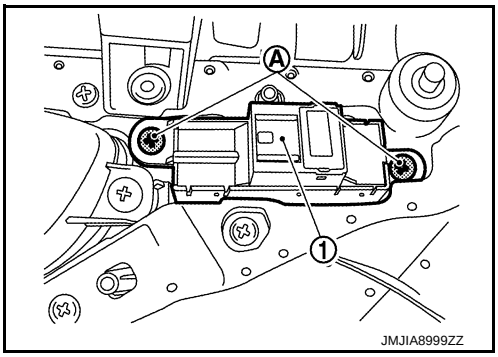
SEAT MEMORY SWITCH

Removal and Installation

INFOID:0000000012792153

REMOVAL

1. Remove front door finisher LH. Refer to INT-14, "FRONT DOOR FINISHER : Removal and Installation".
2. Remove mounting screws Ⓐ.
3. Remove seat memory switch ①.



INSTALLATION

Install in the reverse order of removal.

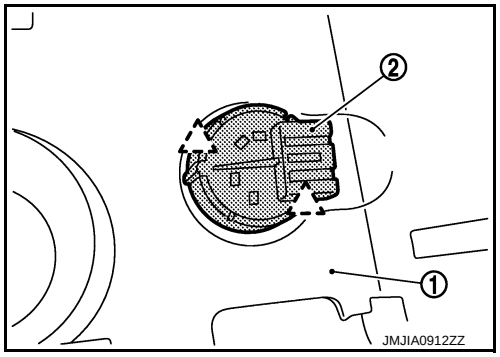
TILT&TELESCOPIC SWITCH

Removal and Installation

INFOID:0000000012792154

REMOVAL

1. Remove steering column lower cover. Refer to IP-13, "Removal and Installation".
2. Press pawls and remove tilt & telescopic switch ② from the steering column lower cover ①.



: Pawl

INSTALLATION

Install in the reverse order of removal.