SECTION ADP
AUTOMATIC DRIVE POSITIONER

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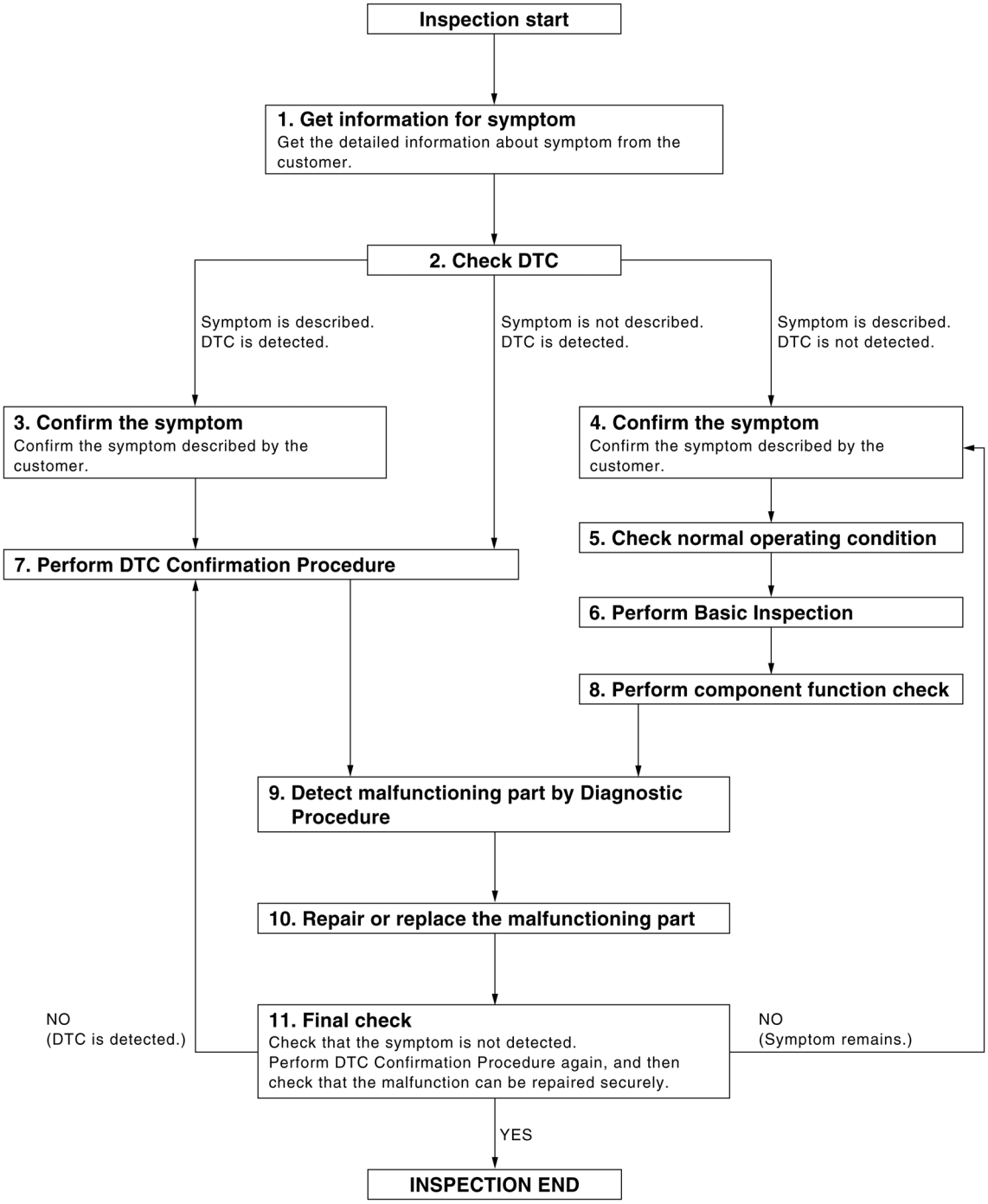
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000010051676

WORK FLOW



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DETAILED FLOW

1. GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is displayed.
- Record DTC and freeze frame data (Print them out with CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related service bulletins for information.

Is any symptom described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.
Symptom is not described, DTC is detected>>GO TO 5.
Symptom is described, DTC is not detected>>GO TO 4.

3. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in “DATA MONITOR” mode and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 7.

4. CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT to the vehicle in “DATA MONITOR ” mode and check real time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

5. CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-166, "Description".

>> GO TO 6.

6. PERFORM BASIC INSPECTION

Isolate the malfunctioning part with the basic inspection. Refer to ADP-8, "Preliminary Check".

>> GO TO 8.

7. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC Confirmation Procedure for the displayed DTC, and then check that DTC is detected again.
At this time, always connect CONSULT to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-63, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC Confirmation Procedure is not included in Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC Confirmation Procedure.

Is DTC detected?

YES >> GO TO 9.
NO >> GO TO 11.

8. PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning part.

>> GO TO 9.

9. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to diagnostic procedure of the system.

>> GO TO 10.

10. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during diagnostic procedure.

>> GO TO 11.

11. FINAL CHECK

Check that the symptom is not detected. Perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction has been repaired securely.

Has the malfunction been repaired?

YES >> Inspection End.
NO >> GO TO 4.

INSPECTION AND ADJUSTMENT

Preliminary Check

INFOID:0000000010051677

1. FOREIGN OBJECTS

Check the following:
- objects on or behind the seats that could cause binding
- objects under the seats that may be interfering with the seat's moving parts
- objects under pedals that may interfere with movement

Are there any foreign objects that could be causing interference?

YES >> Remove objects.
NO >> GO TO 2

2. WIRING CONNECTIONS

1. Disconnect harness connectors.
2. Check terminals for damage or loose connections.
3. Reconnect harness connectors.

Are any connectors damaged or loose?

YES >> Repair or replace damaged parts.
NO >> GO TO 3

3. POWER AND GROUND

Check power supply and ground circuits for control unit. Refer to ADP-47, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> Refer to ADP-119, "DTC Index".
NO >> Repair or replace as necessary.

Special Repair Requirement

INFOID:0000000010051678

Refer to Owner's Manual for Automatic Drive Positioner system operating instructions.

SYSTEM DESCRIPTION

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram

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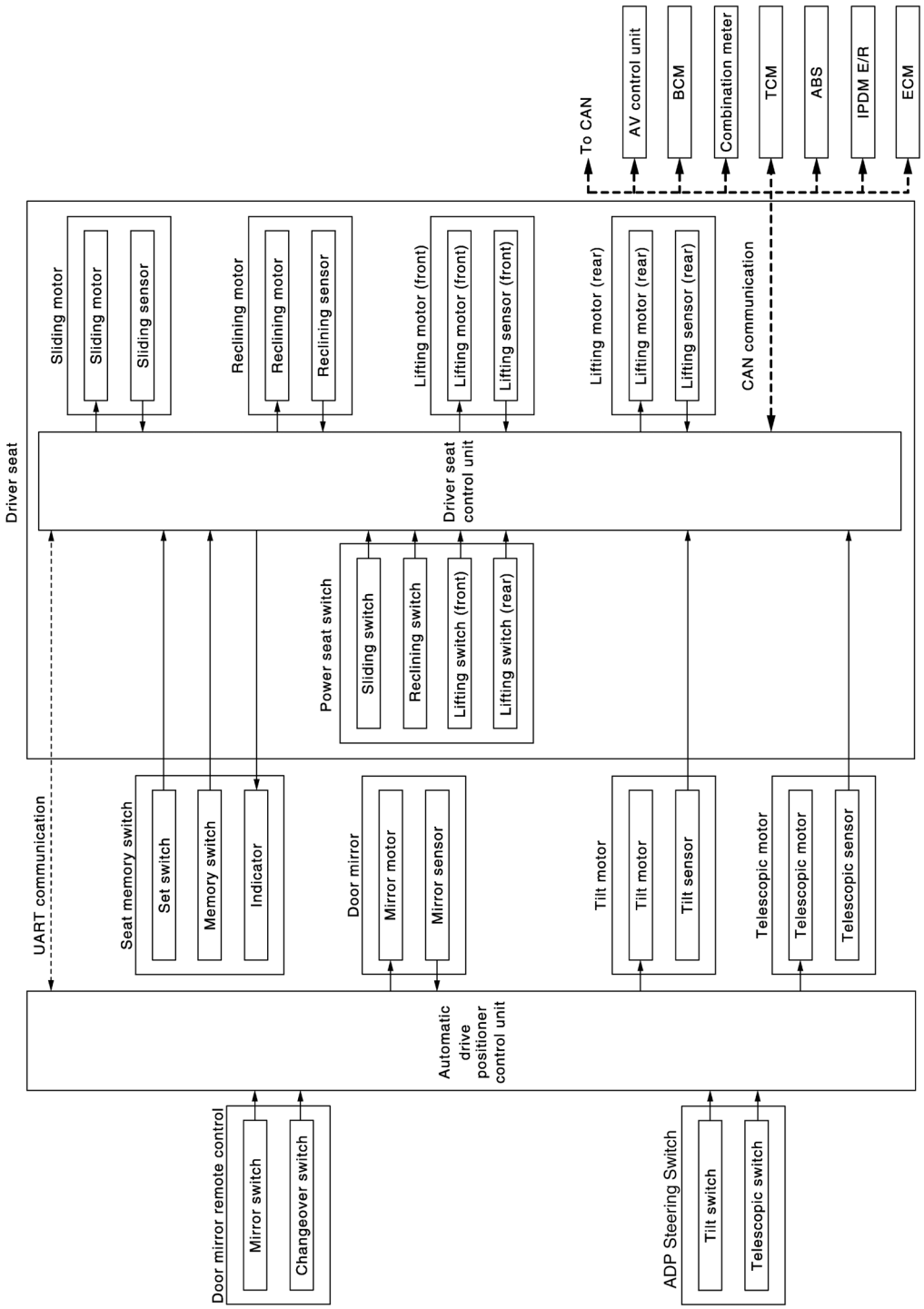

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AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:0000000010051680

OUTLINE

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

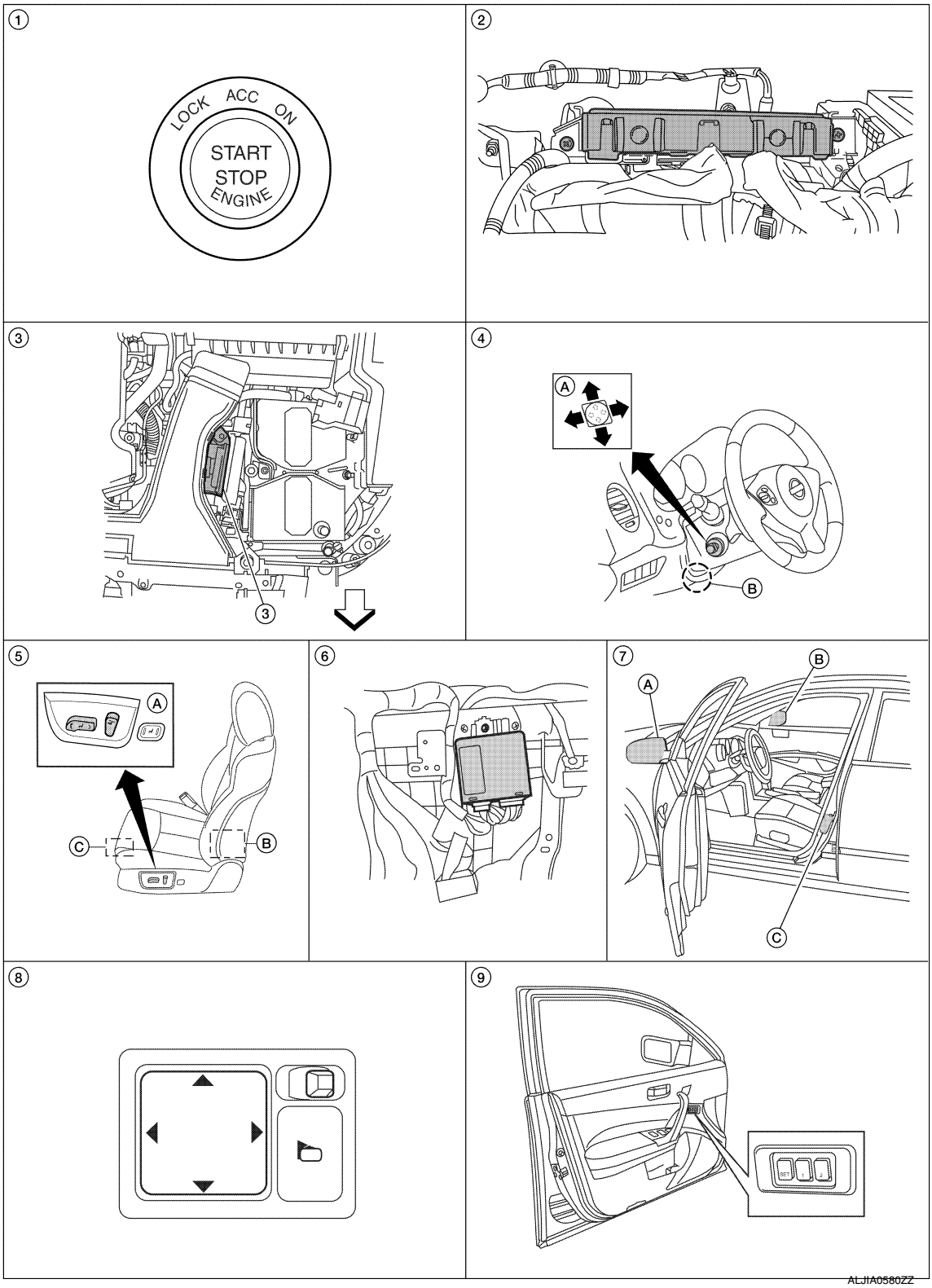
Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, ADP steering switch or door mirror remote control switch.
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).
Entry/Exit assist function	Exit	On exit, the seat moves backward and the steering column moves upward.
	Entry	On entry, the seat and steering column returns from exiting position to the previous driving position.
Intelligent Key interlock function		Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.

NOTE:

The lumbar support system is controlled independently with no link to the automatic drive positioner system.

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Parts Location

INFOID:0000000010051681



1. Push-button ignition switch M38
2. BCM M16, M17, M18, M19 (view with instrument panel removed)
3. TCM F15
4. A. ADP steering switch M39
   B. Tilt motor M71, telescopic motor M73
5. A. Power seat switch LH B213
   B. Reclining motor B222
   C. Driver seat control unit B203, B211
6. Automatic drive positioner control unit M63, M67 (view with instrument panel removed)

7. A. Door mirror LH D4
   B. Door mirror RH D107
   C. Front door switch LH B8
   ⇦: Front
8. Door mirror remote control switch M108
9. Seat memory switch D13

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description

INFOID:0000000010051682

CONTROL UNITS

Item	Function
Driver seat control unit	• Main unit of automatic drive positioner system • It is connected to the CAN. • It communicates with the automatic drive positioner control unit via UART communication.
Automatic drive positioner control unit	• It communicates with the driver seat control unit via UART communication. • Perform various controls with the instructions of driver seat control unit. • Perform the controls of the pedal adjusting, door mirror and the seat memory switch.
BCM	Transmits the following status to the driver seat control unit via CAN communication. • Front door LH: OPEN/CLOSE • Ignition switch position: ACC/ON • Door lock: UNLOCK (with Intelligent Key or remote keyless entry request switch operation) • Key ID • Key switch: Insert/Pull out Intelligent Key • Starter: CRANKING/OTHER
Combination meter	Transmits the vehicle speed signal to the driver seat control unit via CAN communication.
AV control unit	The setting change of auto drive positioner system can be performed on the display.
TCM	Transmits the shift position signal (P range) to the driver seat control unit via CAN communication.

INPUT PARTS

Switches

Item	Function
Key slot	The key switch is installed to detect the key inserted/removed status.
Front door switch LH	Detect front door (driver side) open/close status.
Transmission range switch (built into CVT control valve assembly)	Detect the P range position of CVT selector lever.
Set switch	The registration and system setting can be performed with its operation.
Seat memory switch 1/2	The registration and operation can be performed with its operation.
Power seat switch	The following switch is installed. • Reclining switch • Lifting switch (front) • Lifting switch (rear) • Sliding switch The specific parts can be operated with the operation of each switch.
ADP steering switch	The following switch is installed. • Tilt switch • Telescopic switch The specific parts can be operated with the operation of each switch.
Door mirror remote control switch	The following switch is installed. • Mirror switch • Changeover switch The specific parts can be operated with the operation of each switch.

Sensors

Item	Function
Door mirror sensor (LH/RH)	Detect the up/down and left/right position of outside mirror face.
Tilt and telescopic sensors	Detect the up/down and front/rear position of steering column.
Lifting sensor (front)	Detect the up/down position of seat lifting (front).
Lifting sensor (rear)	Detect the up/down position of seat lifting (rear).
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the front/rear position of seat.

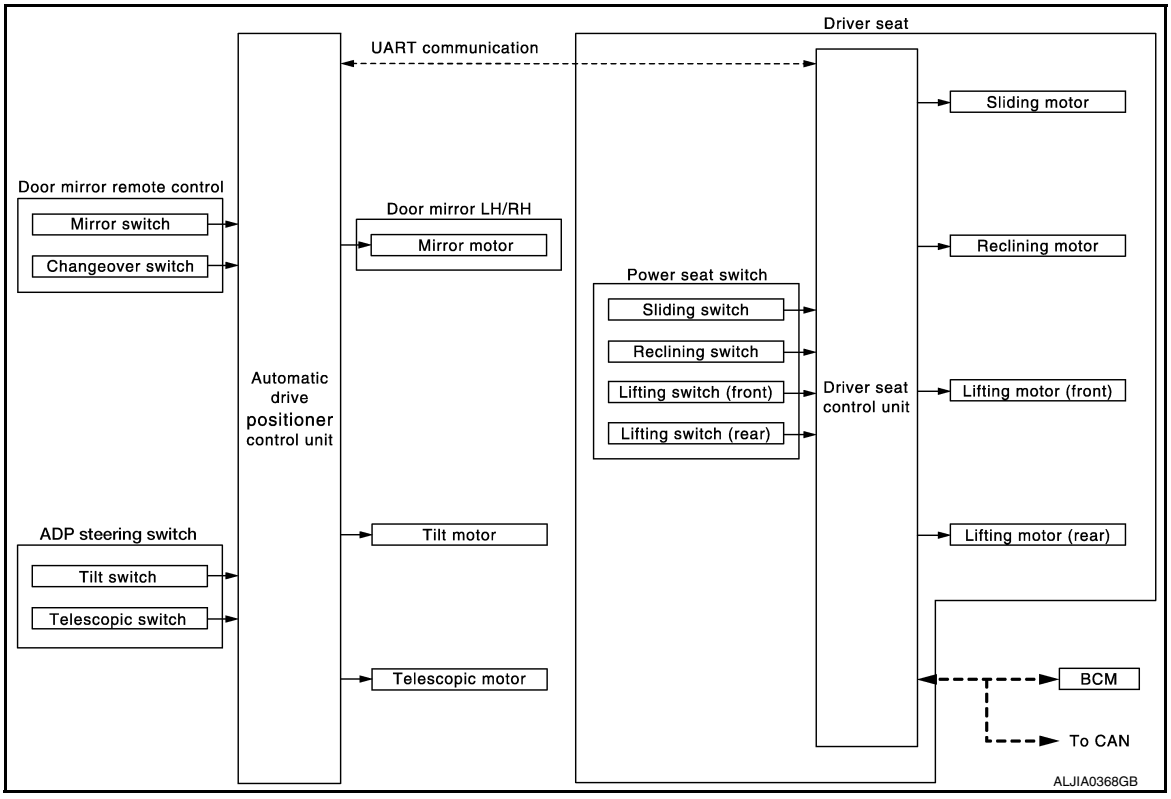
OUTPUT PARTS

Item	Function
Door mirror motor (LH/RH)	Move the outside mirror face up/down and left/right.
Tilt and telescopic motors	Move the steering column up/down and front/rear.
Lifting motor (front)	Move the seat lifting (front) up/down.
Lifting motor (rear)	Move the seat lifting (rear) up/down.
Reclining motor	Tilt and raise up the seatback.
Sliding motor	Slide the seat forward/backward.
Seat memory indicator	Illuminates or flashes according to the registration/operation status.

MANUAL FUNCTION

MANUAL FUNCTION : System Diagram

INFOID:0000000010051683



MANUAL FUNCTION : System Description

INFOID:0000000010051684

OUTLINE

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

OPERATION PROCEDURE

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

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.

Tilt and Telescopic

Order	Input	Output	Control unit condition
1	ADP steering switch	—	The ADP steering switch signal is input to the automatic drive positioner control unit when the ADP steering switch is operated.
2	—	Motors (tilt, telescopic)	The automatic drive positioner control unit actuates the motors according to the operation of the ADP steering switch signal.
3	Sensors (tilt, telescopic)	—	The automatic drive positioner control unit recognizes any operation limit of each actuator via each sensor and will not operate the motors anymore at that time.

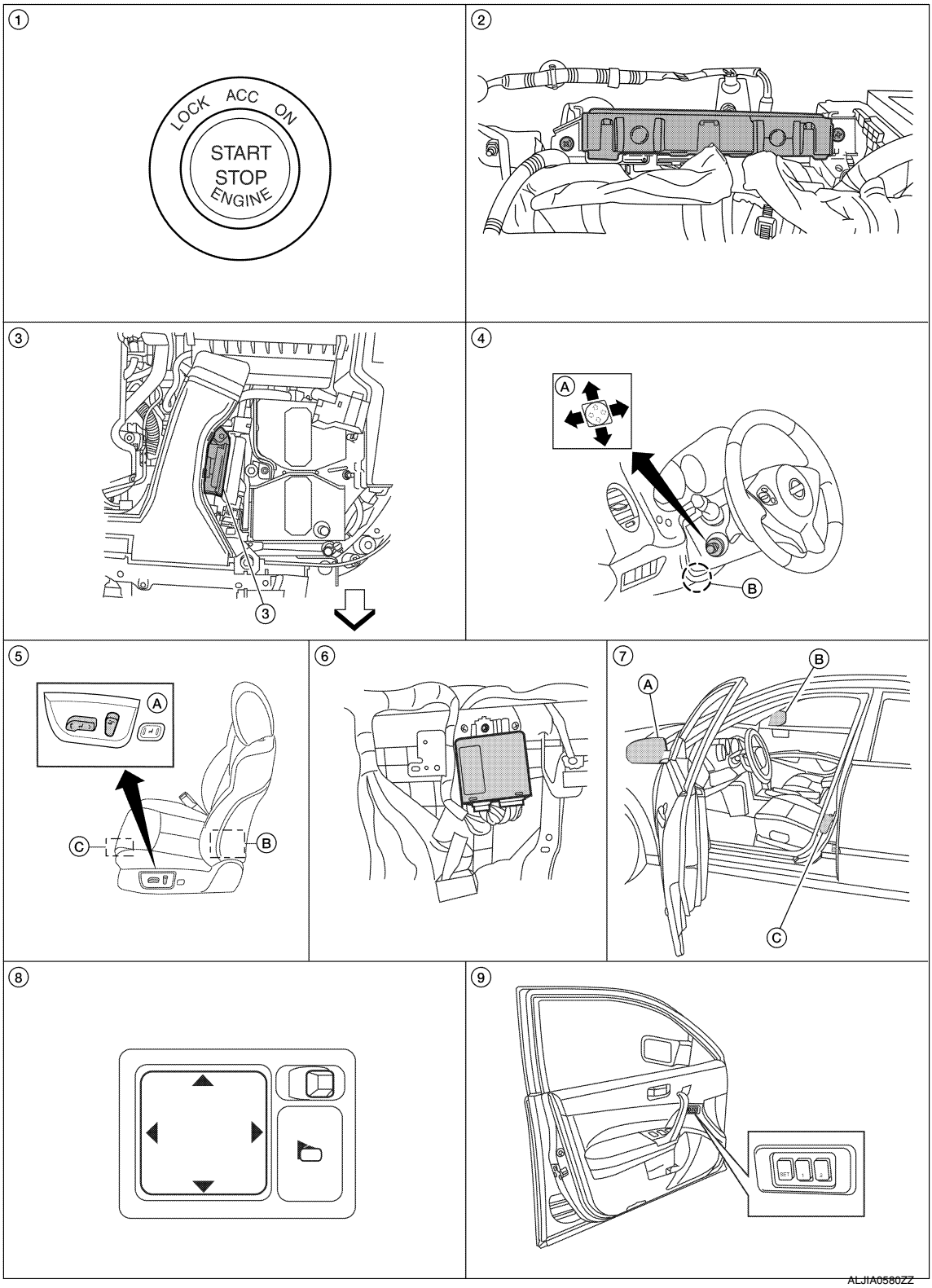
Door Mirror

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

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

MANUAL FUNCTION : Component Parts Location

INFOID:0000000010051685



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3. TCM F15
4. A. ADP steering switch M39
   B. Tilt motor M71, telescopic motor M73
5. A. Power seat switch LH B213
   B. Reclining motor B222
   C. Driver seat control unit B203, B211
6. Automatic drive positioner control unit M63, M67 (view with instrument panel removed)

7. A. Door mirror LH D4
   B. Door mirror RH D107
   C. Front door switch LH B8
   ⇦: Front
8. Door mirror remote control switch M108
9. Seat memory switch D13

MANUAL FUNCTION : Component Description

INFOID:0000000010051686

CONTROL UNITS

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

INPUT PARTS

Switches

Item	Function
Power seat switch	The following switch is installed. • Reclining switch • Lifting switch (front) • Lifting switch (rear) • Sliding switch The specific parts can be operated with the operation of each switch.
ADP steering switch	The following switch is installed. • Tilt switch • Telescopic switch The specific parts can be operated with the operation of each switch.
Door mirror remote control switch	The following switch is installed. • Mirror switch • Changeover switch The specific parts can be operated with the operation of each switch.

Sensors

Item	Function
Tilt and telescopic sensors	Detect the up/down and front/back position of steering column.

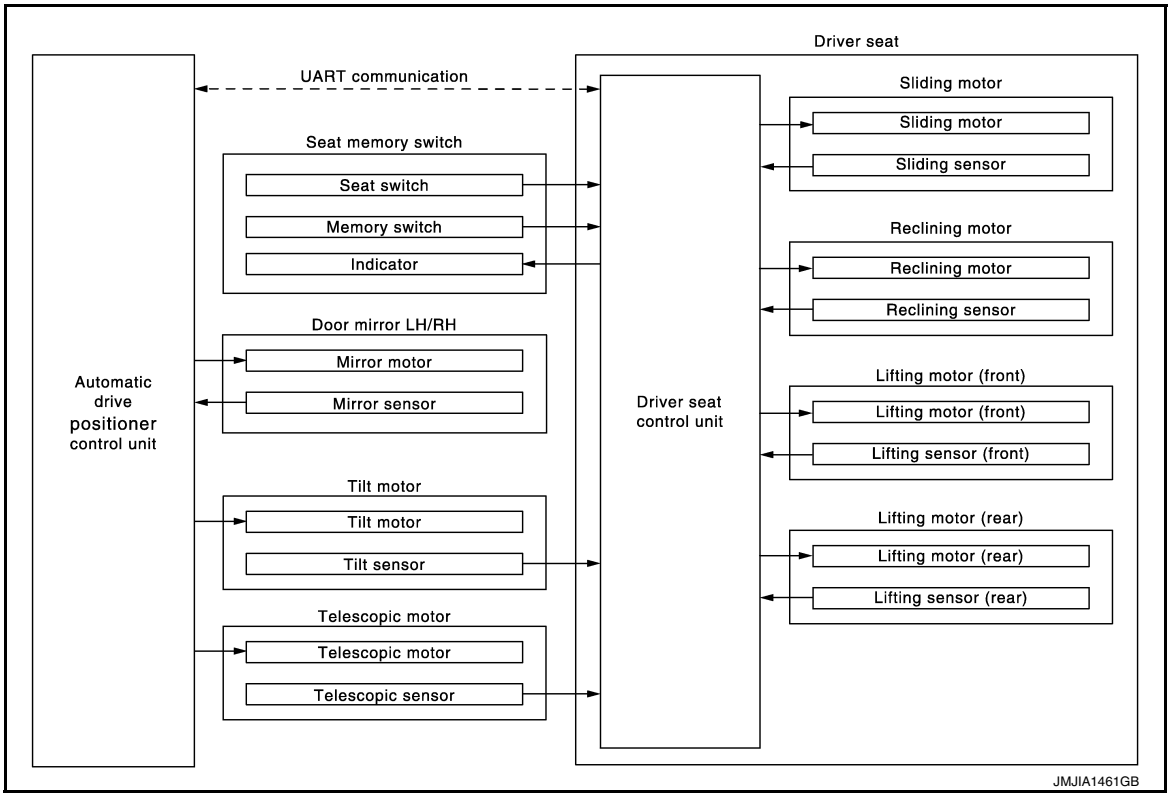
OUTPUT PARTS

Item	Function
Door mirror motor (LH/RH)	Move the outside mirror face up/down and left/right.
Tilt and telescopic motors	Move the steering column up/down and front/back.
Lifting motor (front)	Move the seat lifter (front) up/down.
Lifting motor (rear)	Move the seat lifter (rear) up/down.
Reclining motor	Tilt and raise up the seatback.
Sliding motor	Slide the seat forward/backward.

MEMORY FUNCTION

MEMORY FUNCTION : System Diagram

INFOID:0000000010051687



MEMORY FUNCTION : System Description

INFOID:0000000010051688

OUTLINE

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

NOTE:

Further information for the memory storage procedure. Refer to Owner's Manual.

OPERATION PROCEDURE

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

OPERATION CONDITION

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

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

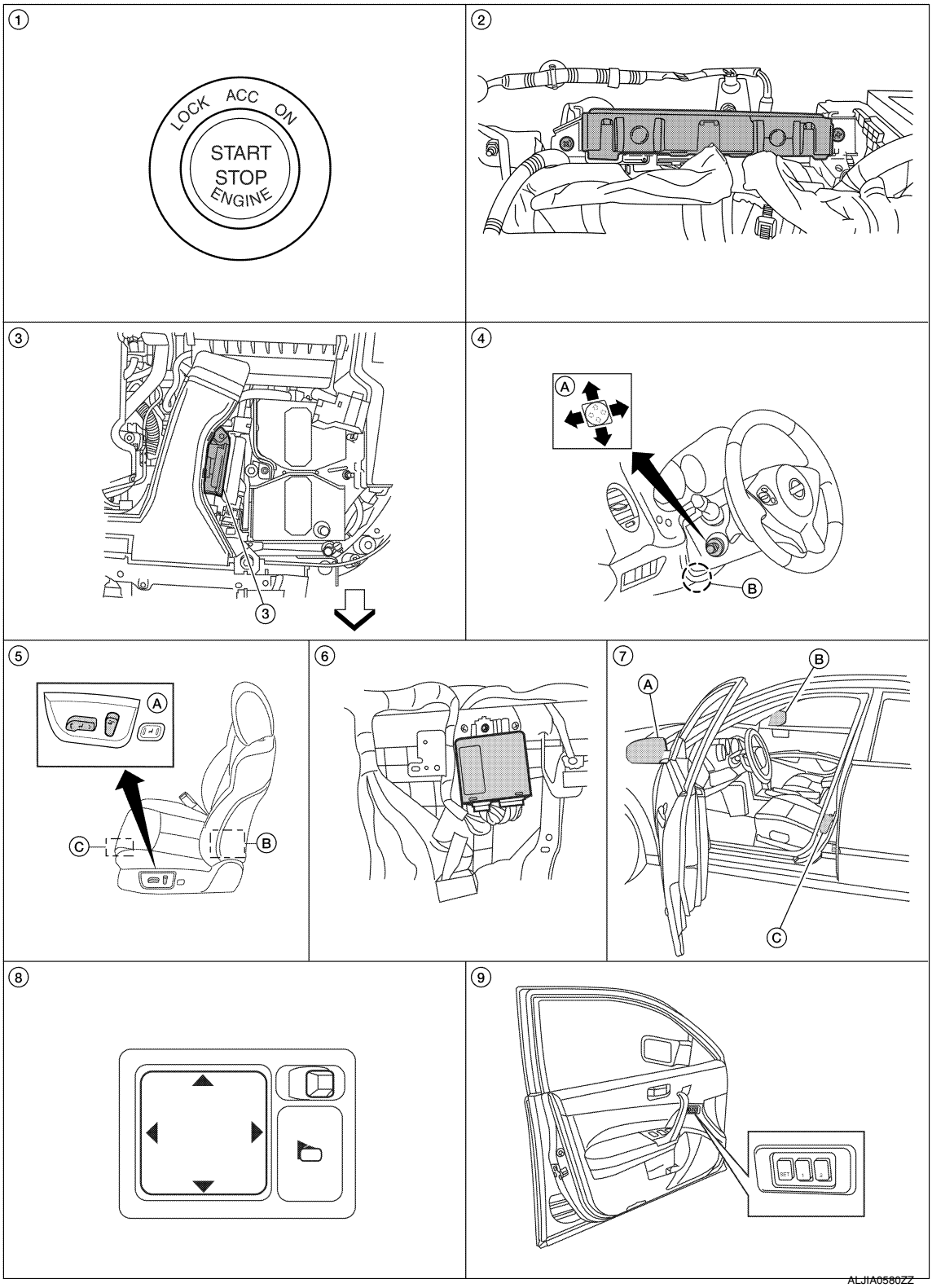
However, the memory operation can be performed for 45 seconds after opening the front door LH (front door switch LH OFF → ON) even if the ignition switch is OFF.

DETAIL FLOW

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

MEMORY FUNCTION : Component Parts Location

INFOID:0000000010051689



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5. A. Power seat switch LH B213
   B. Reclining motor B222
   C. Driver seat control unit B203, B211
6. Automatic drive positioner control unit M63, M67 (view with instrument panel removed)

7. A. Door mirror LH D4
   B. Door mirror RH D107
   C. Front door switch LH B8
8. Door mirror remote control switch M108
9. Seat memory switch D13

⇦: Front

MEMORY FUNCTION : Component Description

INFOID:0000000010051690

CONTROL UNITS

Item	Function
Driver seat control unit	• The address of each part is recorded. • Operates each motor of seat to the registered position. • Requests the operations of steering column and door mirrors to automatic drive positioner control unit
Automatic drive positioner control unit	Operates the steering column and door mirrors with the instructions from the driver seat control unit.

INPUT PARTS

Switches

Item	Function
Memory switch 1/2	The registration and memory function can be performed with its operation.

Sensors

Item	Function
Door mirror sensor (LH/RH)	Detect the up/down and left/right position of outside mirror face.
Tilt and telescopic sensors	Detect the up/down and front/rear position of steering column.
Lifting sensor (front)	Detect the up/down position of seat lifting (front).
Lifting sensor (rear)	Detect the up/down position of seat lifting (rear).
Reclining sensor	Detect the tilt of seatback.
Sliding sensor	Detect the front/rear position of seat.

OUTPUT PARTS

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

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Diagram

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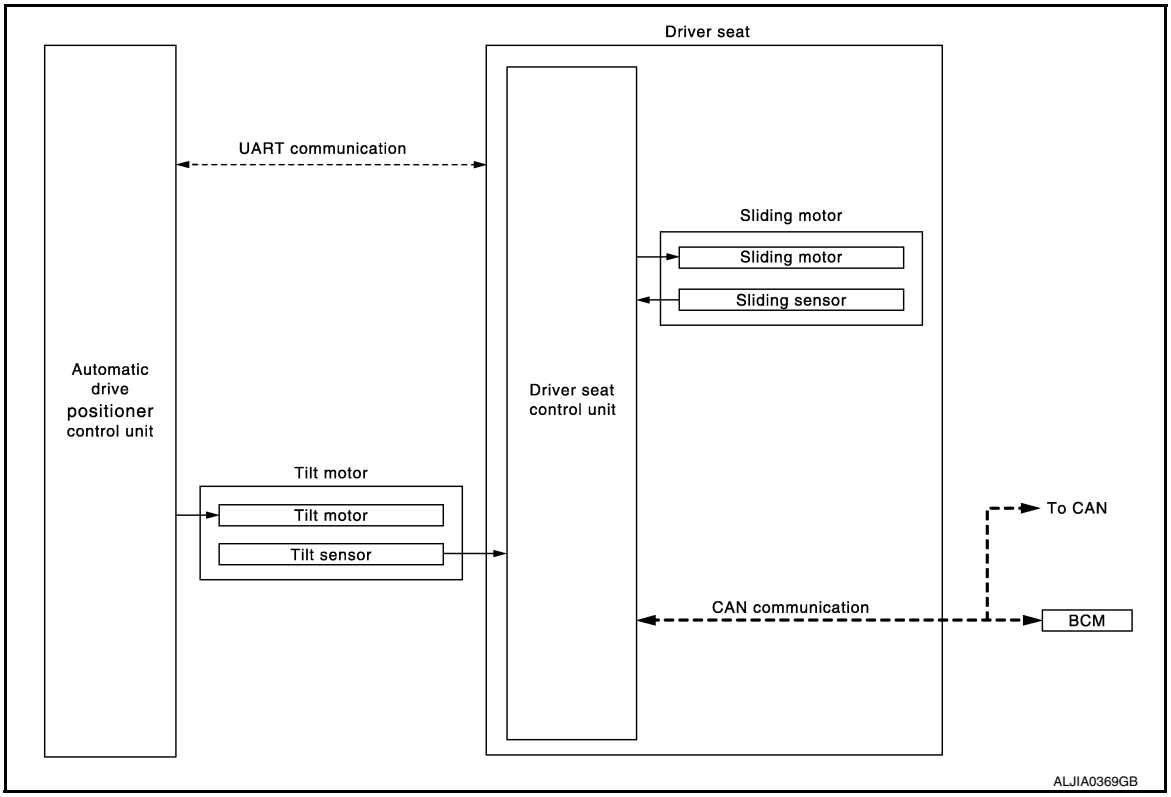


EXIT ASSIST FUNCTION : System Description

INFOID:0000000010051692

OUTLINE

When exiting, if the conditions are satisfied, the seat is moved backward from normal sitting position and the steering column is moved up.
The seat slide amount at entry/exit operation can be changed.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to Owner's Manual.

OPERATION PROCEDURE

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

OPERATION CONDITION

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

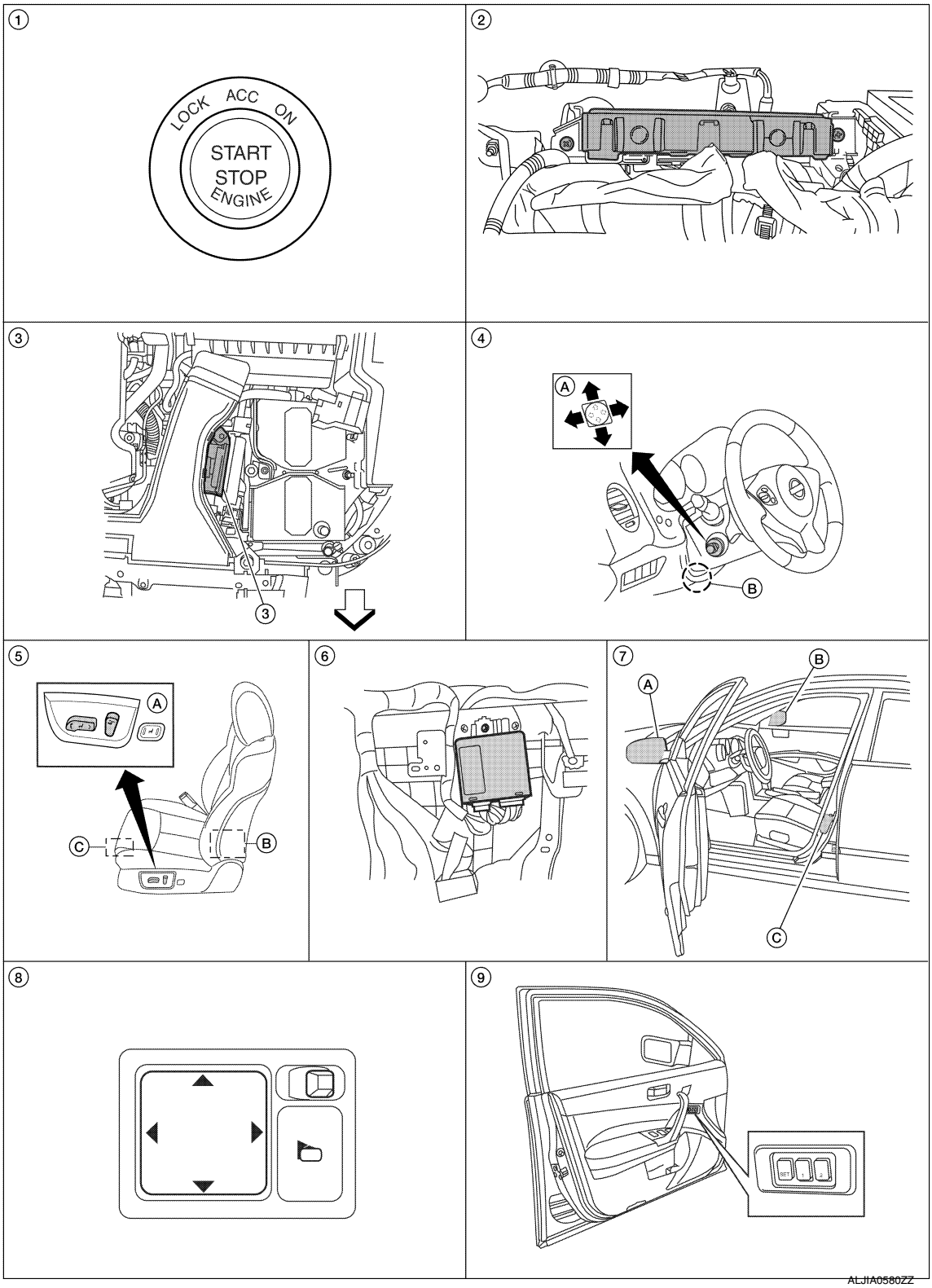
Item	Request status
Ignition switch	OFF
System setting [Entry/exit assist function]	ON
Initialization	Done
Switch inputs • Power seat switch • ADP steering switch • Door mirror remote control switch • Set switch • Seat memory switch	OFF (Not operated)
CVT selector lever	P position

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Front door switch LH	—	Driver seat control unit receives front door switch LH signal (open) from BCM via CAN communication.
2	—	Motors (seat sliding, 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.

EXIT ASSIST FUNCTION : Component Parts Location

INFOID:0000000010051693



1. Push-button ignition switch M38
2. BCM M16, M17, M18, M19 (view with instrument panel removed)
3. TCM F15
4. A. ADP steering switch M39
   B. Tilt motor M71, telescopic motor M73
5. A. Power seat switch LH B213
   B. Reclining motor B222
   C. Driver seat control unit B203, B211
6. Automatic drive positioner control unit M63, M67 (view with instrument panel removed)

7. A. Door mirror LH D4
   B. Door mirror RH D107
   C. Front door switch LH B8
8. Door mirror remote control switch M108
9. Seat memory switch D13

⇦: Front

EXIT ASSIST FUNCTION : Component Description

INFOID:0000000010051694

CONTROL UNITS

Item	Function
Driver seat control unit	• Operates the seat sliding motor for a constant amount. • Requests operation of the tilt motor from the automatic drive positioner control unit.
Automatic drive positioner control unit	Operates the tilt motor with the request from the driver seat control unit.
BCM	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. • Front door LH: OPEN/CLOSE • Key switch signal • Ignition switch signal

INPUT PARTS

Switches

Item	Function
Front door switch LH	Detect front door LH open/close status.

Sensors

Item	Function
Tilt sensor	Detect the up/down position of steering column.
Sliding sensor	Detect the front/rear position of seat.

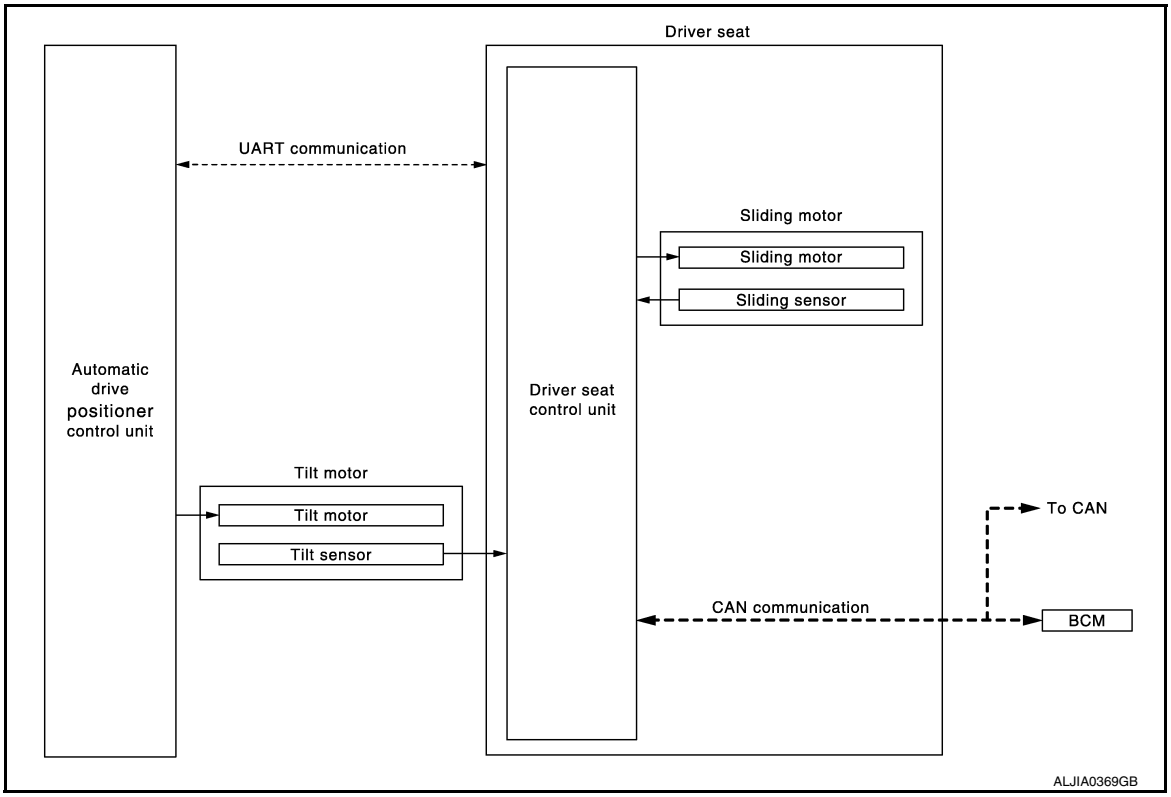
OUTPUT PARTS

Item	Function
Tilt motor	Move the steering column up/down.
Sliding motor	Slide the seat forward/backward.

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Diagram

INFOID:0000000010051695



ENTRY ASSIST FUNCTION : System Description

INFOID:0000000010051696

OUTLINE

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

NOTE:

- This function is set to OFF before delivery (initial setting).
- Further information for the system setting procedure. Refer to Owner's Manual.

OPERATION PROCEDURE

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

OPERATION CONDITION

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

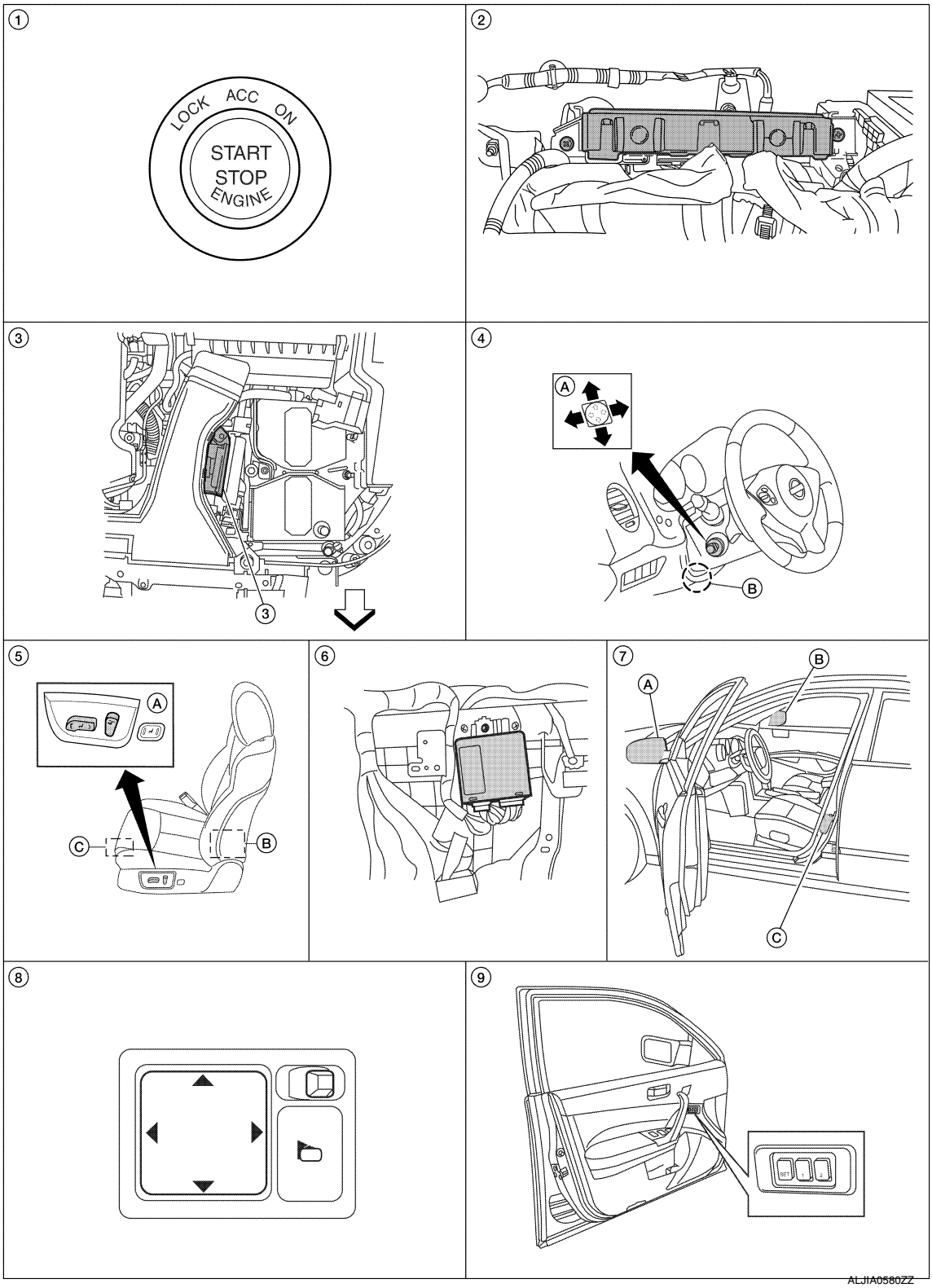
Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs • Power seat switch • ADP steering switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
CVT selector lever	P position

DETAIL FLOW

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

ENTRY ASSIST FUNCTION : Component Parts Location

INFOID:0000000010051697



1. Push-button ignition switch M38
2. BCM M16, M17, M18, M19 (view with instrument panel removed)
3. TCM F15
4. A. ADP steering switch M39
   B. Tilt motor M71, telescopic motor M73
5. A. Power seat switch LH B213
   B. Reclining motor B222
   C. Driver seat control unit B203, B211
6. Automatic drive positioner control unit M63, M67 (view with instrument panel removed)

7. A. Door mirror LH D4
   B. Door mirror RH D107
   C. Front door switch LH B8
8. Door mirror remote control switch M108
9. Seat memory switch D13

⇦: Front

ENTRY ASSIST FUNCTION : Component Description

INFOID:0000000010051698

CONTROL UNITS

Item	Function
Driver seat control unit	According to the ignition signal and front door switch LH signal from BCM, • Operates the seat sliding motor for a constant amount. • Requests the operation of tilt motor to automatic drive positioner control unit.
Automatic drive positioner control unit	Operates the tilt motor with the instructions from the driver seat control unit.
BCM	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. • Front door LH: OPEN/CLOSE • Ignition switch position: ACC/ON

INPUT PARTS

Switches

Item	Function
Front door switch LH	Detect front door LH open/close status.

Sensors

Item	Function
Tilt sensor	Detect the up/down position of steering column.
Sliding sensor	Detect the front/rear position of seat.

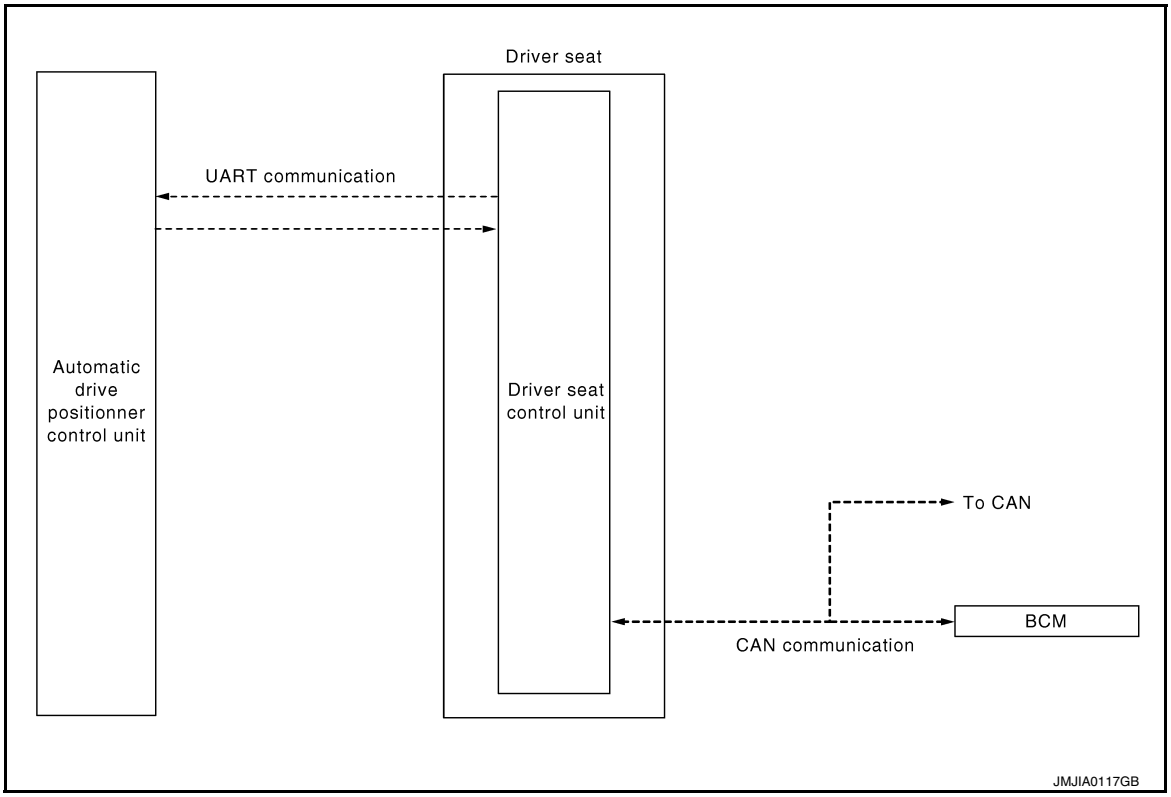
OUTPUT PARTS

Item	Function
Tilt motor	Move the steering column up/down.
Sliding motor	Slide the seat forward/backward.

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

INFOID:0000000010051699



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000010051700

OUTLINE

When unlocking doors by using Intelligent Key or door request switch (driver side), seat slide and steering tilt move directly to the exit assist function.
Other loads move to the exit assist function after performing memory function.
Then performs the entry assist function.

OPERATION PROCEDURE

1. Unlock doors by using Intelligent Key or door request switch (driver side) .
2. The system performs exit assist operation and memory operation.

NOTE:
Further information for Intelligent Key interlock function. Refer to Owner's Manual.

OPERATION CONDITION

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

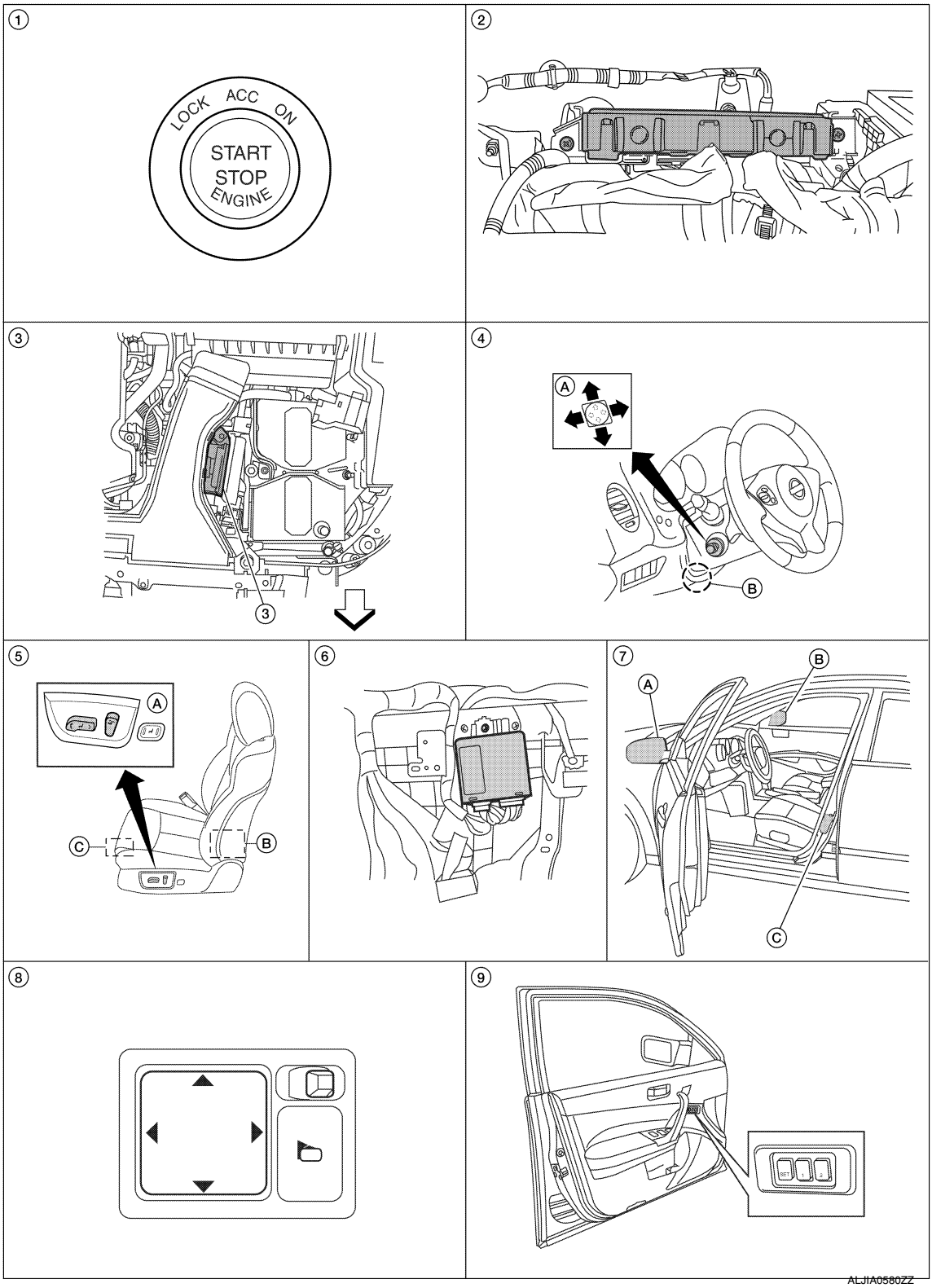
Item	Request status
Ignition position	OFF
Switch inputs • Power seat switch LH • ADP steering switch • Door mirror remote control switch • Set switch • Seat memory switch	OFF (Not operated)
CVT selector lever	P position

DETAIL FLOW

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

INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location

INFOID:0000000010051701



1. Push-button ignition switch M38
2. BCM M16, M17, M18, M19 (view with instrument panel removed)
3. TCM F15
4. A. ADP steering switch M39
   B. Tilt motor M71, telescopic motor M73
5. A. Power seat switch LH B213
   B. Reclining motor B222
   C. Driver seat control unit B203, B211
6. Automatic drive positioner control unit M63, M67 (view with instrument panel removed)

7. A. Door mirror LH D4
   B. Door mirror RH D107
   C. Front door switch LH B8
8. Door mirror remote control switch M108
9. Seat memory switch D13

⇦: Front

INTELLIGENT KEY INTERLOCK FUNCTION : Component Description

INFOID:0000000010051702

CONTROL UNITS

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

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

Diagnosis Description

INFOID:0000000010051703

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

DIAGNOSTIC MODE

Diagnostic mode [AUTO DRIVE POS.]	Description
WORK SUPPORT	Changes the setting of each function.
SELF DIAGNOSTIC RESULT	Performs self-diagnosis for the auto drive positioner system and displays the results.
DATA MONITOR	Displays input signals transmitted from various switches and sensors to driver seat control unit in real time.
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.

CONSULT Function (AUTO DRIVE POS.)

INFOID:0000000010051704

SELF-DIAGNOSIS RESULTS

Refer to ADP-119, "DTC Index".

DATA MONITOR

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
SET SW	“ON/OFF”	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW1	“ON/OFF”	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW2	“ON/OFF”	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW–RR	“ON/OFF”	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW–RR	“ON/OFF”	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch front (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.
MIR CON SW–LH	“ON/OFF”	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CHNG SW–R	“ON/OFF”	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW–L	“ON/OFF”	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	“ON/OFF”	–	×	ON/OFF status judged from the ADP steering switch (up) signal.
TILT SW-DOWN	“ON/OFF”	–	×	ON/OFF status judged from the ADP steering switch (down) signal.
TELESCO SW-FR	“ON/OFF”	–	×	ON/OFF status judged from the ADP steering switch (forward) signal.
TELESCO SW-RR	“ON/OFF”	–	×	ON/OFF status judged from the ADP steering switch (backward) signal.
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.
STEERING STATUS	“LOCK/UNLOCK”	×	×	LOCK/UNLOCK status judged from the steering lock unit.
DOOR SW–FL	“OPEN/CLOSED”	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW–FR	“OPEN/CLOSED”	×	×	ON/OFF status judged from the door switch (front passenger side) signal.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
IGN ON SW	“ON/OFF”	×	×	ON/OFF status judged from the ignition switch signal.
ACC ON SW	“ON/OFF”	×	×	ON/OFF status judged from the ACC switch signal.
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)	“RCV”	×	×	Vehicle speed status judged from vehicle speed signal.
HANDLE	“RHD/LHD”	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	“A/T”	×	×	CVT status judged from transmission.

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 (1.6 in)
		80 mm (3.1 in)
		150 mm (6 in)
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

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000010051705

Refer to LAN-24, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000010051706

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. STEP 1

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2

2. STEP 2

Check “Self diagnostic result” with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-36, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010051707

Refer to LAN-15, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

INFOID:0000000010051708

Refer to Owner’s Manual.

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000010051709

Refer to LAN-24, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000010051710

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000010051711

1. REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

B2130 EEPROM

DTC Logic

INFOID:0000000010051712

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detects?

YES >> Refer to ADP-38, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010051713

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-38, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

>> Inspection End.

B2112 SLIDING MOTOR

Description

INFOID:0000000010051714

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

DTC Logic

INFOID:0000000010051715

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detects?

YES >> Refer to ADP-39, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010051716

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-43, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-41, "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		
B205	2	Ground	0
	6		

Is the inspection result normal?

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

3.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B211	36	Ground	0
	44		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

Description

INFOID:0000000010051717

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

DTC Logic

INFOID:0000000010051718

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detects?

YES >> Refer to ADP-41, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010051719

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-41, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-41, "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		
B222	1	Ground	0
	5		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B211	35	Ground	0
	43		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

B2116 TILT MOTOR

Description

INFOID:0000000010051720

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

DTC Logic

INFOID:0000000010051721

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detects?

YES >> Refer to ADP-43, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010051722

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-43, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK TILT MOTOR CIRCUIT (POWER SHORT)

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

(+)		(–)	Voltage (V) (Approx.)
Tilt motor			
Connector	Terminals		
M71	1	Ground	0
	2		

Is the inspection result normal?

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

3. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Automatic drive positioner control unit			
Connector	Terminals		
M67	28	Ground	0
	29		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

B2128 UART COMMUNICATION LINE

Description

INFOID:0000000010051723

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

DTC Logic

INFOID:0000000010051724

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC is detects?

YES >> Refer to ADP-45, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000010051725

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-45, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

2. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit connector	Terminal	Automatic drive positioner control unit connector	Terminal	Continuity
B203	15	M63	8	Yes

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

Driver seat control unit connector	Terminal	Ground	Continuity
B203	15		No

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".
NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000010062176

Regarding Wiring Diagram information, refer to BCS-67, "Wiring Diagram".

1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuses or fusible link are blown.

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	H
11		10
24		7

Is the fuse or fusible link blown?

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

2. CHECK POWER SUPPLY CIRCUIT

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

Terminals			Voltage (Approx.)
(+)		(–)	
BCM		Ground	
Connector	Terminal		
M16	1		Battery voltage
M17	11		
M18	24		

Is the measurement normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M17	13		Yes

Does continuity exist?

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

DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000010051727

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

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK POWER SUPPLY CIRCUIT

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

Terminals			Power source	Condition	Voltage (V) (Approx.)
(+)		(–)			
Driver seat control unit connector	Terminal				
B211	37	Ground	Battery power supply	Ignition switch OFF	Battery voltage

Is the inspection result normal?

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

2. CHECK GROUND CIRCUIT

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

Driver seat control unit connector	Terminal	Ground	Continuity
B211	39		Yes

Is the inspection result normal?

YES >> Driver seat control unit power supply and ground circuit are OK.
NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:0000000010051728

1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to Owner's Manual.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

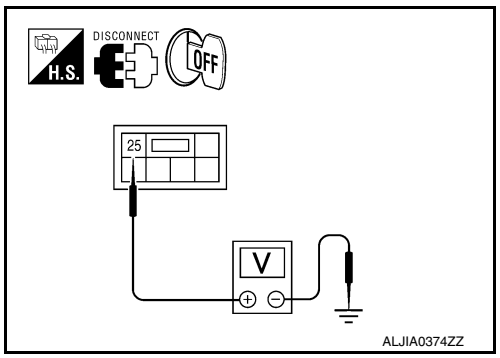
INFOID:0000000010051729

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

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK POWER SUPPLY CIRCUIT

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



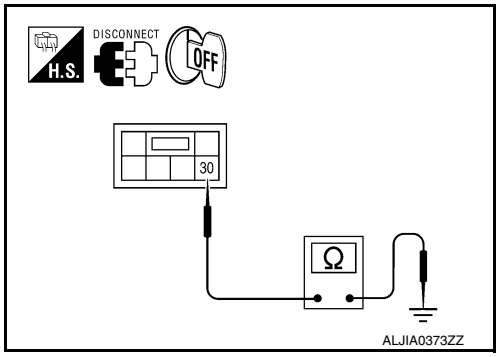
Terminals			Voltage (V) (Pyrex.)
(+)		(–)	
Automatic drive positioner control unit connector	Terminal		
M67	25	Ground	Battery voltage

Is the inspection result normal?

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

2. CHECK GROUND CIRCUIT

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



Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M67	30		Yes

Is the inspection result normal?

YES >> Automatic drive positioner control unit power supply and ground circuit are OK.
NO >> Repair or replace harness.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:0000000010051730

1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to Owner's Manual.

SLIDING SWITCH

Description

INFOID:0000000010051731

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

Component Function Check

INFOID:0000000010051732

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-50, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051733

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK SLIDING SWITCH SIGNAL

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

Driver seat control unit connector	Terminals		Condition		Voltage (V) (Approx.)
	(+)	(–)			
B203	9	Ground	Sliding switch	Operate (backward)	0
				Release	Battery voltage
	25			Operate (forward)	0
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK SLIDING SWITCH CIRCUIT

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

Driver seat control unit connector	Terminal	Power seat switch LH connector	Terminal	Continuity
B203	9	B213	6	Yes
	25		7	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B203	9		No
	25		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

Driver seat control unit connector	Terminals		Voltage (V) (Approx.)
	(+)	(–)	
B203	9	Ground	Battery voltage
	25		

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

4. CHECK SLIDING SWITCH

Refer to ADP-51, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace malfunctioning part.

Component Inspection

INFOID:0000000010051734

1. CHECK SLIDING SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

RECLINING SWITCH

Description

INFOID:0000000010051735

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

Component Function Check

INFOID:0000000010051736

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-52, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051737

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK RECLINING SWITCH SIGNAL

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

Driver seat control unit connector	Terminals		Condition		Voltage (V) (Approx.)
	(+)	(–)			
B203	24	Ground	Reclining switch	Operate (forward)	0
				Release	Battery voltage
	8			Operate (backward)	0
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK RECLINING SWITCH CIRCUIT

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

Driver seat control unit connector	Terminal	Power seat switch LH connector	Terminal	Continuity
B203	24	B213	5	Yes
	8		10	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B203	24		No
	8		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

Driver seat control unit connector	Terminals		Voltage (V) (Approx.)
	(+)	(–)	
B203	8	Ground	Battery voltage
	24		

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

4. CHECK RECLINING SWITCH

Refer to ADP-51, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000010051738

1. CHECK RECLINING SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

LIFTING SWITCH (FRONT)

Description

INFOID:0000000010051739

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

Component Function Check

INFOID:0000000010051740

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-54, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051741

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK LIFTING SWITCH SIGNAL

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

Driver seat control unit connector	Terminals		Condition		Voltage (V) (Approx.)
	(+)	(–)			
B203	7	Ground	Lifting switch (front)	Operate (down)	0V
				Release	Battery voltage
	23			Operate (up)	0V
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

Driver seat control unit connector	Terminal	Power seat switch LH connector	Terminal	Continuity
B203	7	B213	1	Yes
	23		2	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B203	7		No
	23		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

Driver seat control unit connector	Terminals		Voltage (V) (Approx.)
	(+)	(–)	
B203	7	Ground	Battery voltage
	23		

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

4. CHECK LIFTING SWITCH (FRONT)

Refer to ADP-55, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000010051742

1. CHECK LIFTING SWITCH (FRONT)

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

Terminal		Condition		Continuity
Power seat switch LH				
3	1	Lifting switch front (down)	Operate	Yes
			Release	No
	2	Lifting switch front (up)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

LIFTING SWITCH (REAR)

Description

INFOID:0000000010051743

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

Component Function Check

INFOID:0000000010051744

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-56, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051745

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

Driver seat control unit connector	Terminals		Condition		Voltage (V) (Approx.)
	(+)	(–)			
B203	6	Ground	Lifting switch (rear)	Operate (down)	0
				Release	Battery voltage
	22			Operate (up)	0
				Release	Battery voltage

Is the inspection result normal?

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

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seat control unit connector	Terminal	Power sear switch LH connector	Terminal	Continuity
B203	6	B213	8	Yes
	22		9	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B203	6		No
	22		

Is the inspection result normal?

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

3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

Driver seat control unit connector	Terminals		Voltage (V) (Approx.)
	(+)	(–)	
B203	6	Ground	Battery voltage
	22		

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".

4. CHECK LIFTING SWITCH (REAR)

Refer to ADP-57, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000010051746

1. CHECK LIFTING SWITCH (REAR)

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace power seat switch LH. Refer to SE-77, "DRIVER SIDE : Disassembly and Assembly".

TILT SWITCH

Description

INFOID:0000000010051747

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

Component Function Check

INFOID:0000000010051748

1. CHECK FUNCTION

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

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

Is the indication normal?

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

Diagnosis Procedure

INFOID:0000000010051749

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK TILT SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
ADP steering switch (tilt switch)			
Connector	Terminals		
M39	4	Ground	5
	5		

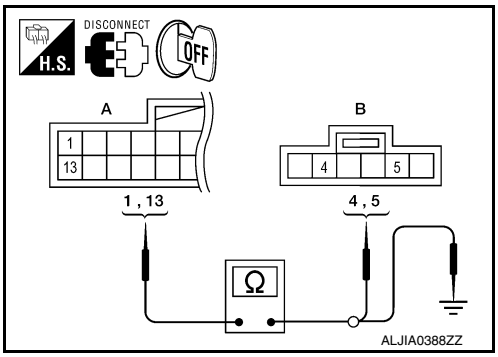
Is the inspection result normal?

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

2. CHECK TILT SWITCH CIRCUIT

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

Automatic drive positioner control unit		ADP steering switch (tilt switch)		Continuity
Connector	Terminal	Connector	Terminal	
M63 (A)	1	M39 (B)	4	Yes
	13		5	



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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M63 (A)	1		No
	13		

Is the inspection result normal?

YES >> Replace automatic drive positioner unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK TILT SWITCH

Refer to ADP-59, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace ADP steering switch (tilt switch). Refer to ADP-172, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000010051750

1. CHECK TILT SWITCH

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

ADP steering switch (tilt switch)		Condition		Continuity
Terminal				
1	4	Tilt switch (upward)	Operate	Yes
			Release	No
	5	Tilt switch (downward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace ADP steering switch (tilt switch). Refer to ADP-172, "Removal and Installation".

TELESCOPIC SWITCH

Description

INFOID:0000000010051751

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

Component Function Check

INFOID:0000000010051752

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-60, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051753

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK TELESCOPIC SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
ADP steering switch (telescopic switch)			
Connector	Terminals		
M39	2	Ground	5
	3		

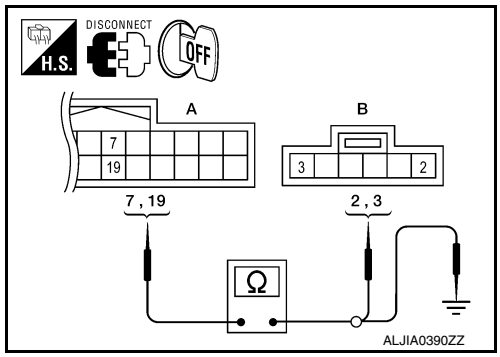
Is the inspection result normal?

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

2. CHECK TELESCOPIC SWITCH CIRCUIT

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

Automatic drive positioner control unit		ADP steering switch (telescopic switch)		Continuity
Connector	Terminal	Connector	Terminal	
M63 (A)	7	M39 (B)	2	Yes
	19		3	



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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M63 (A)	7		No
	19		

Is the inspection result normal?

YES >> Replace automatic drive positioner unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK TELESCOPIC SWITCH

Refer to ADP-61, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace ADP steering switch (telescopic switch). Refer to ADP-172, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000010051754

1. CHECK TELESCOPIC SWITCH

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

ADP steering switch (telescopic switch)		Condition		Continuity
Terminal				
1	2	Telescopic switch (forward)	Operate	Yes
			Release	No
	3	Telescopic switch (backward)	Operate	Yes
			Release	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace ADP steering switch (telescopic switch). Refer to ADP-172, "Removal and Installation".

SEAT MEMORY SWITCH

Description

INFOID:0000000010051755

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

Component Function Check

INFOID:0000000010051756

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-62, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051757

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK SEAT MEMORY SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B203	11	Ground	5
	21		
	27		

Is the inspection result normal?

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

2. CHECK MEMORY SWITCH CIRCUIT

1. Disconnect seat memory switch.
2. 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	
B203	11	D13	2	Yes
	21		3	
	27		1	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	11		No
	21		
	27		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D13	4		Yes

Is the inspection result normal?

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

4. CHECK SEAT MEMORY SWITCH

Refer to ADP-63, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace seat memory switch. Refer to ADP-171, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000010051758

1. CHECK SEAT MEMORY SWITCH

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace seat memory switch. Refer to ADP-171, "Removal and Installation".

DOOR MIRROR REMOTE CONTROL SWITCH
CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:0000000010051759

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

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000010051760

1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-65, "CHANGEOVER SWITCH : Diagnosis Procedure".

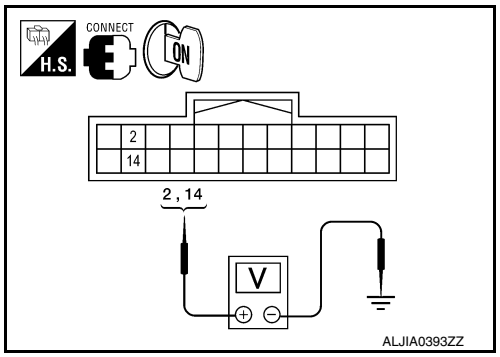
CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000010051761

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK CHANGEOVER SWITCH SIGNAL

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



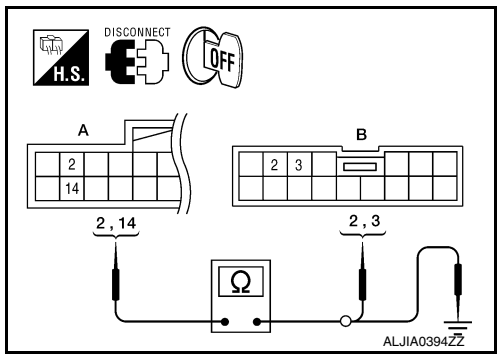
Terminals			Change over switch condition	Voltage (V) (Approx.)
(+)		(-)		
Automatic drive positioner control unit connector	Terminal			
M63	2	Ground	RIGHT	0
			Other than above	5
	14		LEFT	0
			Other than above	5

Is the inspection result normal?

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

2. CHECK HARNESS CONTINUITY

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



Automatic drive positioner control unit connector	Terminal	Door mirror remote control switch connector	Terminal	Continuity
M63 (A)	2	M108 (B)	3	Yes
	14		2	

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

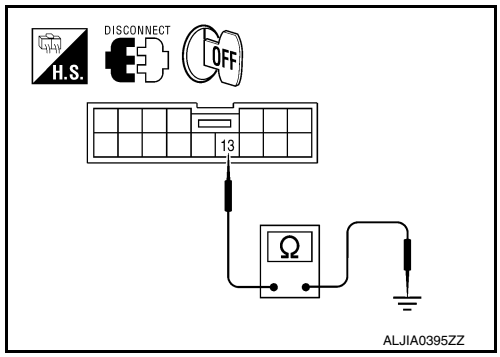
Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	2		No
	14		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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



Door mirror remote control switch connector	Terminal	Ground	Continuity
M108	13		Yes

Is the inspection result normal?

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

4. CHECK CHANGEOVER SWITCH

Check changeover switch.
Refer to ADP-66, "CHANGEOVER SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace door mirror remote control switch. Refer to IP-10, "Exploded View".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000010051762

1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

Terminal	Change over switch condition	Continuity
Door mirror remote control switch		

2	13	LEFT	Yes
		Other than above	No
3		RIGHT	Yes
		Other than above	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace door mirror remote control switch. Refer to IP-10, "Exploded View".

MIRROR SWITCH

MIRROR SWITCH : Description

INFOID:0000000010051763

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

MIRROR SWITCH : Component Function Check

INFOID:0000000010051764

1. CHECK FUNCTION

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

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

Is the indication normal?

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

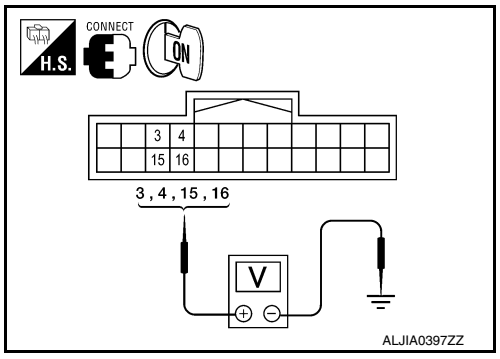
MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000010051765

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK MIRROR SWITCH FUNCTION

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



Terminals			Mirror switch Condition	Voltage (V) (Approx.)
(+)		(–)		
Automatic drive positioner control unit connector	Terminal			
M63	3	Ground	UP	0
			Other than above	5
	4		LEFT	0
			Other than above	5
	15		DOWN	0
			Other than above	5
	16		RIGHT	0
			Other than above	5

Is the inspection result normal?

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

2. CHECK HARNESS CONTINUITY

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

Automatic drive positioner control unit connector	Terminal	Door mirror remote control switch connector	Terminal	Continuity
M63	3	M108	6	Yes
	4		5	
	15		14	
	16		4	

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

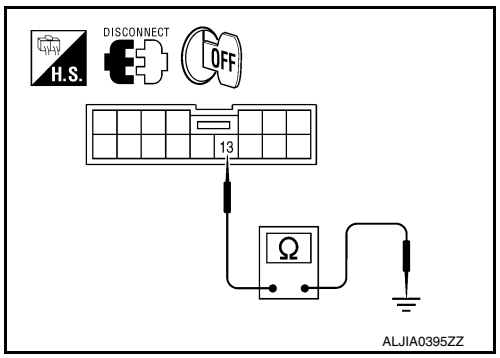
Automatic drive positioner control unit connector	Terminal		Continuity
M63	3	Ground	No
	4		
	15		
	16		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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



Door mirror remote control switch connector	Terminal	Ground	Continuity
M108	13		Yes

Is the inspection result normal?

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

4. CHECK MIRROR SWITCH

Check mirror switch.
Refer to ADP-69, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace door mirror remote control switch. Refer to IP-10, "Exploded View".

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

MIRROR SWITCH : Component Inspection

INFOID:0000000010051766

1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Terminal		Mirror switch condition	Continuity
Door mirror remote control switch			
4	13	RIGHT	Yes
		Other than above	No
5		LEFT	Yes
		Other than above	No
6		UP	Yes
		Other than above	No
14		DOWN	Yes
		Other than above	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace door mirror remote control switch. Refer to IP-10, "Exploded View".

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

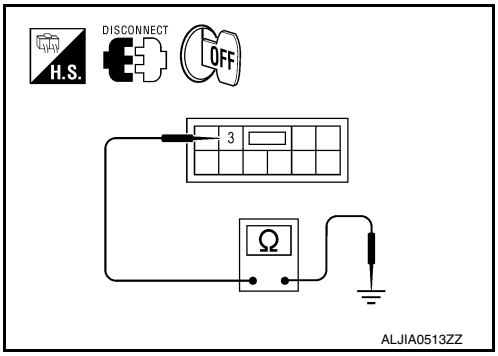
INFOID:0000000010051767

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT

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

Power seat switch LH connector	Terminal	Ground	Continuity
B213	3		Yes



Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Repair or replace harness.

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

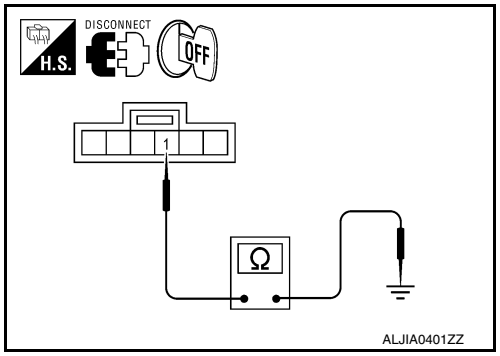
Diagnosis Procedure

INFOID:0000000010051768

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

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

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



ADP steering switch (tilt & telescopic switch)		Ground	Continuity
Connector	Terminal		
M39	1		Yes

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-41, "Intermittent Incident".

NO >> Repair or replace harness.

FRONT DOOR SWITCH (DRIVER SIDE)

Description

INFOID:0000000010051769

Detects front door LH open/close condition.

Component Function Check

INFOID:0000000010051770

1. CHECK FUNCTION

1. Select “DOOR SW-FL” in “DATA MONITOR” mode with CONSULT.
2. Check the front door switch signal under the following conditions.

Monitor item	Condition		Status
DOOR SW-FL	Front door switch LH	Open	ON
		Close	OFF

Is the indication normal?

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

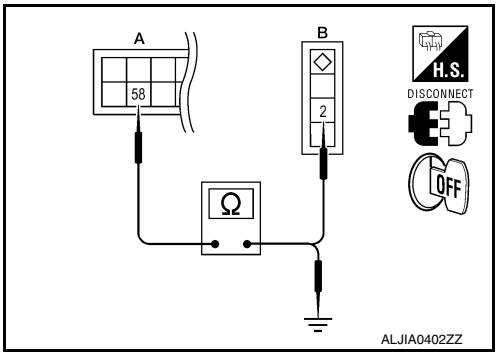
Diagnosis Procedure

INFOID:0000000010051771

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK FRONT DOOR SWITCH LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM.
3. Check continuity between BCM connector and front door switch LH connector.



BCM connector	Terminal	Front door switch LH connector	Terminal	Continuity
M18 (A)	58	B8 (B)	2	Yes

4. Check continuity between BCM connector and ground.

BCM connector	Terminal	Ground	Continuity
M18 (A)	58		No

Is the inspection result normal?

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

2. CHECK FRONT DOOR SWITCH LH

Refer to ADP-73, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 3
NO >> Replace front door switch LH. Refer to DLK-230, "Removal and Installation".

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

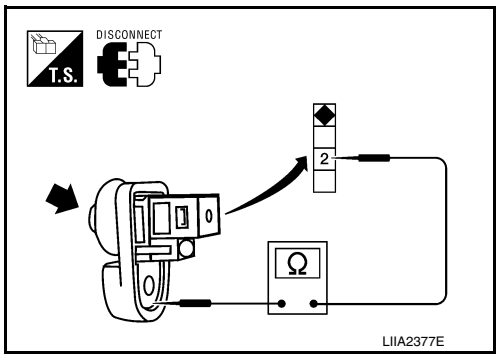
YES >> Replace BCM. Refer to BCS-79, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000010051772

1. CHECK FRONT DOOR SWITCH LH

1. Turn ignition switch OFF.
2. Disconnect front door switch LH.
3. Check continuity between front door switch LH terminals.



Terminal		Condition		Continuity
Front door switch LH				
2	Ground part of door switch	Front door switch LH	Pushed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace front door switch LH. Refer to DLK-230, "Removal and Installation".

SLIDING SENSOR

Description

INFOID:0000000010051773

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

Component Function Check

INFOID:0000000010051774

1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-74, "Diagnosis Procedure".

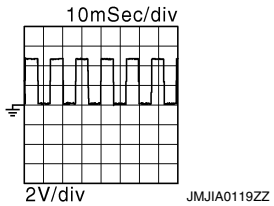
Diagnosis Procedure

INFOID:0000000010051775

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK SLIDING SENSOR SIGNAL

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

Terminals			Condition		Voltage signal
(+)		(–)			
Driver’s seat control unit	Terminal				
B203	31	Ground	Seat sliding	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> GO TO 2

2. CHECK SLIDING SENSOR CIRCUIT

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

Driver seat control unit		Front power seat LH (sliding motor)		Continuity
Connector	Terminal	Connector	Terminal	
B203	31	B206	12	Yes

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

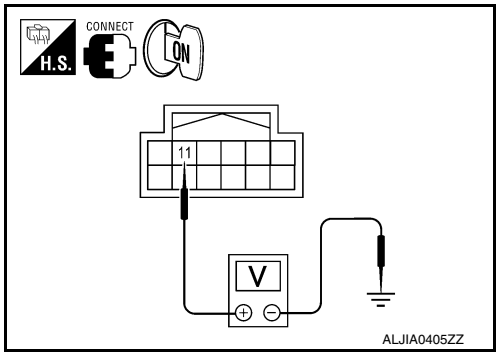
Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	31		No

Is the inspection result normal?

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

3. CHECK SLIDING SENSOR POWER SUPPLY

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



(+)		(–)	Voltage (V) (Approx.)
Sliding motor			
Connector	Terminals		
B206	11	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Front power seat LH (sliding motor)		Continuity
Connector	Terminal	Connector	Terminal	
B203	5	B206	11	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK SLIDING SENSOR GROUND

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

Sliding motor		Ground	Continuity
Connector	Terminal		
B206	17		Yes

Is the inspection result normal?

YES >> Replace front power seat LH (sliding motor). Refer to SE-68, "Removal and Installation".
NO >> Repair or replace harness.

RECLINING SENSOR

Description

INFOID:0000000010051776

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

Component Function Check

INFOID:0000000010051777

1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-77, "Diagnosis Procedure".

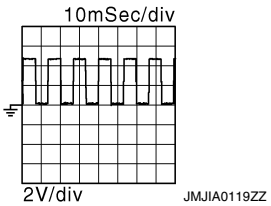
Diagnosis Procedure

INFOID:0000000010051778

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK RECLINING SENSOR SIGNAL

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

Terminals			Condition		Voltage signal
(+)		(–)			
Driver seat control unit	Terminal				
B203	13	Ground	Seat reclining	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "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.
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	
B203	13	B222	3	Yes

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

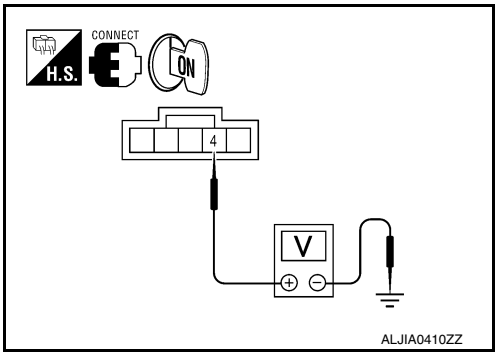
Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	13		No

Is the inspection result normal?

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

3. CHECK RECLINING SENSOR POWER SUPPLY

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



(+)		(–)	Voltage (V) (Approx.)
Reclining motor			
Connector	Terminals		
B222	4	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B203	5	B222	4	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	5		No

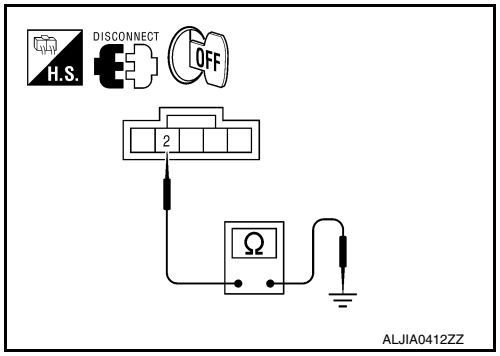
Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

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		
B222	2		Yes



Is the inspection result normal?

YES >> Replace reclining motor. Refer to SE-68, "Removal and Installation".

NO >> Repair or replace harness.

LIFTING SENSOR (FRONT)

Description

INFOID:0000000010051779

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

Component Function Check

INFOID:0000000010051780

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-80, "Diagnosis Procedure".

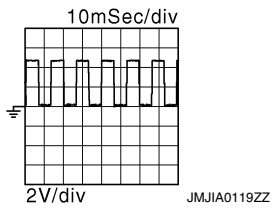
Diagnosis Procedure

INFOID:0000000010051781

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

Terminals			Condition		Voltage signal
(+)		(–)			
Driver seat control unit connector	Terminal				
B203	30	Ground	Seat lifting (front)	Operate	 JMJIA0119ZZ
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> GO TO 2

2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

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

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

Driver seat control unit		Front power seat LH [lifting motor (front)]		Continuity
Connector	Terminal	Connector	Terminal	
B203	30	B206	10	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	30		No

Is the inspection result normal?

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

3. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Front power seat LH [lifting motor (front)}			
Connector	Terminals		
B206	9	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Front power seat LH [lifting motor (front)]		Continuity
Connector	Terminal	Connector	Terminal	
B203	5	B206	9	Yes

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

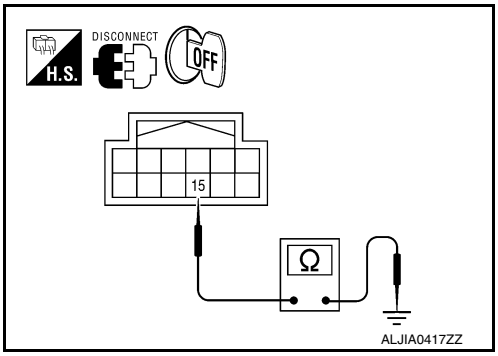
Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK LIFTING SENSOR (FRONT) GROUND

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



Front power seat LH [lifting motor (front)]		Ground	Continuity
Connector	Terminal		
B206	15		Yes

Is the inspection result normal?

YES >> Replace front power seat LH [lifting motor (front)]. Refer to SE-68, "Removal and Installation".

NO >> Repair or replace harness.

LIFTING SENSOR (REAR)

Description

INFOID:0000000010051782

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

Component Function Check

INFOID:0000000010051783

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-83, "Diagnosis Procedure".

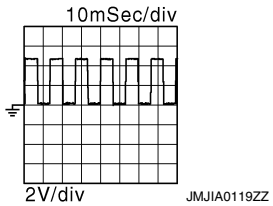
Diagnosis Procedure

INFOID:0000000010051784

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

Terminals			Condition		Voltage signal
(+)		(–)			
Driver seat control unit connector	Terminal				
B203	29	Ground	Seat lifting (rear)	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> GO TO 2

2. CHECK LIFTING SENSOR (REAR) CIRCUIT

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

Driver seat control unit		Front power seat LH [lifting motor (rear)]		Continuity
Connector	Terminal	Connector	Terminal	
B203	29	B206	8	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	29		No

Is the inspection result normal?

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

3. CHECK LIFTING SENSOR (REAR) POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Front power seat LH [lifting motor (rear)]			
Connector	Terminals		
B206	7	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

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

Driver seat control unit		Front power seat LH [lifting motor (rear)]		Continuity
Connector	Terminal	Connector	Terminal	
B203	5	B206	7	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	5		No

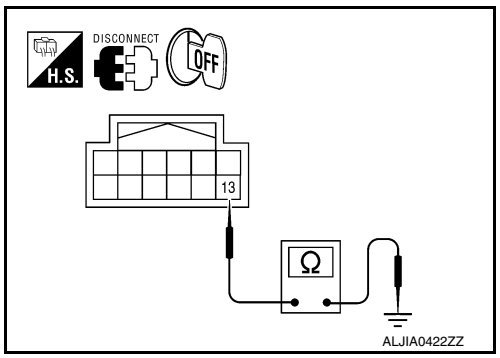
Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK LIFTING SENSOR (REAR) GROUND

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

Front power seat LH [lifting motor (rear)]		Ground	Continuity
Connector	Terminal		
B206	13		Yes



Is the inspection result normal?

YES >> Replace front power seat LH [lifting motor (rear)]. Refer to SE-68, "Removal and Installation".

NO >> Repair or replace harness.

TILT SENSOR

Description

INFOID:0000000010051785

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

Component Function Check

INFOID:0000000010051786

1.CHECK FUNCTION

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

Monitor item	Condition		Value
TILT PULSE	Steering column	Operate (UP-WARD)	Change (decrease)
		Operate (DOWN-WARD)	Change (increase)
		Release	No change

Is the indication normal?

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

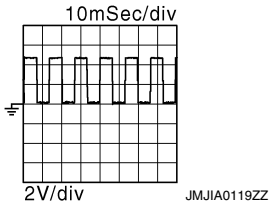
Diagnosis Procedure

INFOID:0000000010051787

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK TILT SENSOR SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B203	28	Ground	Steering column	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> GO TO 2

2. CHECK TILT SENSOR CIRCUIT

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

Driver seat control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
B203	28	M71	5	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	28		No

Is the inspection result normal?

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

3. CHECK TILT SENSOR POWER SUPPLY

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

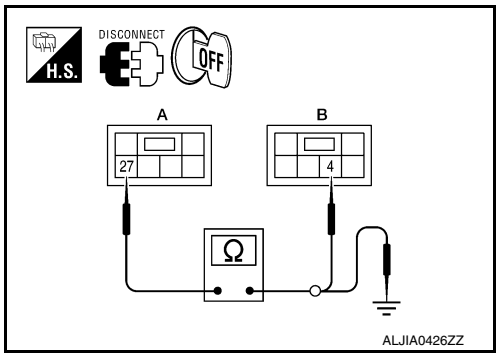
(+)		(–)	Voltage (V) (Approx.)
Tilt motor			
Connector	Terminals		
M71	4	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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



Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M67 (A)	27	M71 (B)	4	Yes

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

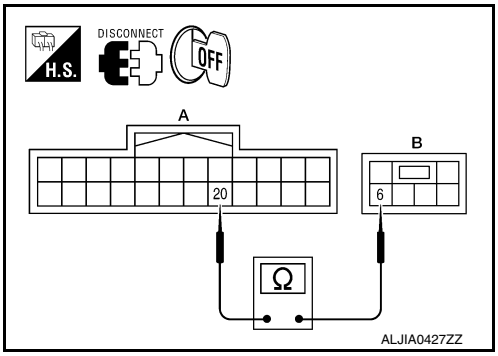
Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M67 (A)	27		No

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".
NO >> Repair or replace harness or connector.

5. CHECK TILT SENSOR GROUND CIRCUIT

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



Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M63 (A)	20	M71 (B)	6	Yes

Is the inspection result normal?

YES >> Replace tilt motor. Refer to ST-18, "Removal and Installation".

NO >> Repair or replace harness.

TELESCOPIC SENSOR

Description

INFOID:0000000010051788

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

Component Function Check

INFOID:0000000010051789

1.CHECK FUNCTION

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

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

Is the indication normal?

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

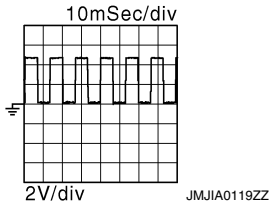
Diagnosis Procedure

INFOID:0000000010051790

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK TELESCOPIC SENSOR SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminals				
B203	12	Ground	Steering column	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> GO TO 2

2. CHECK TELESCOPIC SENSOR CIRCUIT

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

Driver seat control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
B203	12	M73	5	Yes

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B203	12		No

Is the inspection result normal?

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

3. CHECK TELESCOPIC SENSOR POWER SUPPLY

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

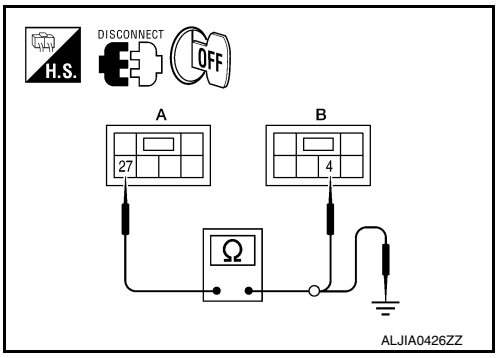
(+)		(–)	Voltage (V) (Approx.)
Telescopic motor			
Connector	Terminals		
M73	4	Ground	Battery voltage

Is the inspection result normal?

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

4. CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

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



Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M67 (A)	27	M73 (B)	4	Yes

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

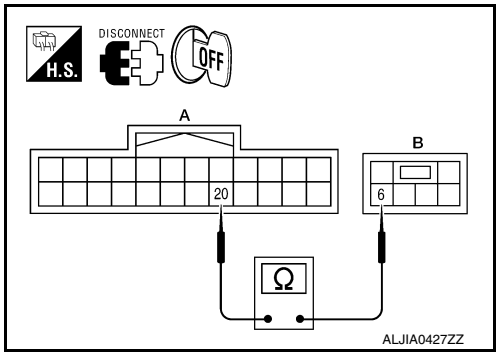
Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M67 (A)	27		No

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".
NO >> Repair or replace harness.

5. CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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



Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M63 (A)	20	M73 (B)	6	Yes

Is the inspection result normal?

YES >> Replace telescopic motor. Refer to ST-20, "Removal and Installation".

NO >> Repair or replace harness.

MIRROR SENSOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000010051791

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

DRIVER SIDE : Component Function Check

INFOID:0000000010051792

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 LH	Close to peak	3.4V
		Close to valley	0.6V
MIR/SEN LH R-L		Close to right edge	3.4V
		Close to left edge	0.6V

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-92, "DRIVER SIDE : Diagnosis Procedure".

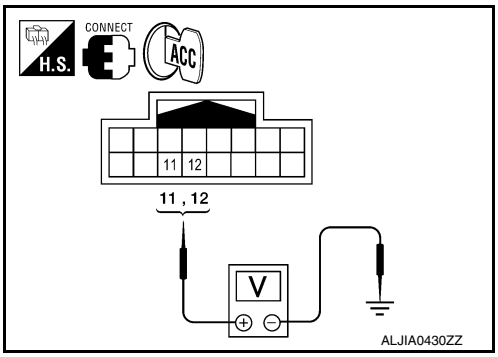
DRIVER SIDE : Diagnosis Procedure

INFOID:0000000010051793

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK DOOR MIRROR LH SENSOR SIGNAL

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



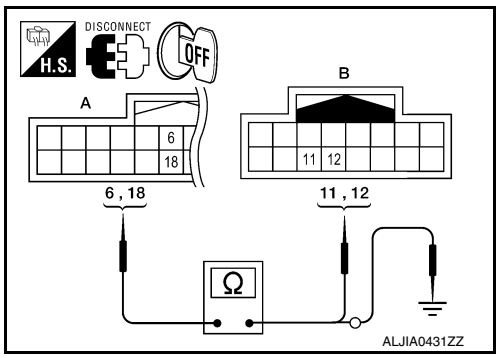
Terminals			Condition		Voltage (V) (Approx.)
(+)		(–)			
Door mirror LH connector	Terminal				
D4	12	Ground	Door mirror LH	Close to peak	3.4
				Close to valley	0.6
	11			Close to right edge	3.4
				Close to left edge	0.6

Is the inspection result normal?

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

2. CHECK DOOR MIRROR LH SENSOR CIRCUIT 1

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



Automatic drive positioner control unit connector	Terminal	Door mirror LH connector	Terminal	Continuity
M63 (A)	6	D4 (B)	12	Yes
	18		11	

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

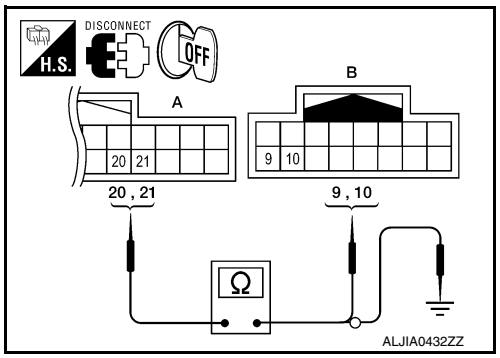
Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	6		No
	18		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR LH SENSOR CIRCUIT 2

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



Automatic drive positioner control unit connector	Terminal	Door mirror LH connector	Terminal	Continuity
M63 (A)	20	D4 (B)	9	Yes
	21		10	

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

Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	20		No
	21		

Is the inspection result normal?

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

4. CHECK TILT MOTOR ADJUSTING OPERATION

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

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror LH). Refer to MIR-19, "Removal and Installation".
NO >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000010051794

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

PASSENGER SIDE : Component Function Check

INFOID:0000000010051795

1. CHECK FUNCTION

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

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

Is the indication normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-94, "PASSENGER SIDE : Diagnosis Procedure".

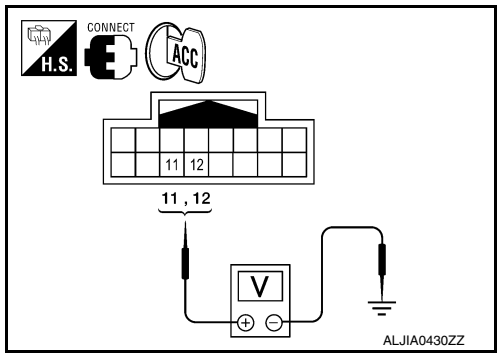
PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000010051796

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK DOOR MIRROR RH SENSOR SIGNAL

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



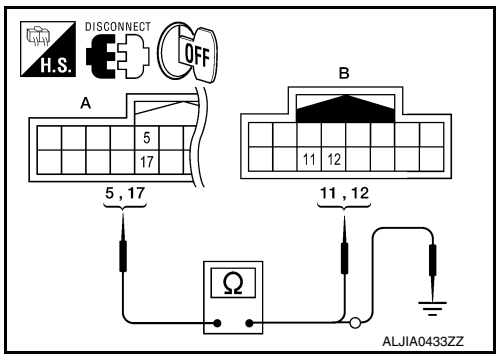
Terminals			Condition		Voltage (V) (Approx.)
(+)		(–)			
Door mirror RH connector	Terminal				
D107	12	Ground	Door mirror RH	Close to peak	3.4
				Close to valley	0.6
	11			Close to right edge	3.4
				Close to left edge	0.6

Is the inspection result normal?

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

2. CHECK DOOR MIRROR RH SENSOR CIRCUIT 1

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



Automatic drive positioner control unit connector	Terminal	Door mirror RH connector	Terminal	Continuity
M63 (A)	5	D107 (B)	12	Yes
	17		11	

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

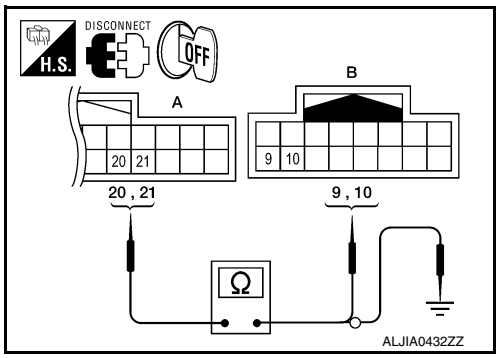
Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	5		No
	17		

Is the inspection result normal?

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

3. CHECK DOOR MIRROR RH SENSOR CIRCUIT 2

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



Automatic drive positioner control unit connector	Terminal	Door mirror RH connector	Terminal	Continuity
M63 (A)	20	D107 (B)	9	Yes
	21		10	

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

Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	20		No
	21		

Is the inspection result normal?

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

4. CHECK TILT MOTOR ADJUSTING OPERATION

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

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror RH). Refer to MIR-19, "Removal and Installation".
NO >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

SLIDING MOTOR

Description

INFOID:0000000010051797

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

Component Function Check

INFOID:0000000010051798

1. CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-97, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051799

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK SLIDING MOTOR LH POWER SUPPLY

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

Terminal			Test Item		Voltage (V) (Approx.)
(+)		(-)			
Driver seat control unit connector	Terminal				
B211	36	Ground	SEAT SLIDE	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	44			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace front power seat LH [sliding motor]. Refer to SE-68, "Removal and Installation".
NO >> GO TO 2

2. CHECK SLIDING MOTOR LH CIRCUIT

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

Driver seat control unit connector	Terminal	Front power seat LH [sliding motor] connector	Terminal	Continuity
B211	36	B205	6	Yes
	44		2	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B211	36		No
	44		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

RECLINING MOTOR

Description

INFOID:0000000010051800

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

Component Function Check

INFOID:0000000010051801

1. CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> Inspection End.
NO >> Perform diagnosis procedure. Refer to ADP-99, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051802

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK RECLINING MOTOR POWER SUPPLY

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

Terminal			Test Item		Voltage (V) (Approx.)
(+)		(-)			
Driver seat control unit connector	Terminal				
B211	43	Ground	SEAT RECLINING	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	35			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace reclining motor. (Built in seatback assembly). Refer to SE-68, "Removal and Installation".
NO >> GO TO 2

2. CHECK RECLINING MOTOR CIRCUIT

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

Driver seat control unit connector	Terminal	Reclining motor connector	Terminal	Continuity
B211	35	B222	5	Yes
	43		1	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B211	35		No
	43		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

LIFTING MOTOR (FRONT)

Description

INFOID:0000000010051803

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

Component Function Check

INFOID:0000000010051804

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-101, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051805

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

Terminal			Test Item		Voltage (V) (Approx.)
(+)		(-)			
Driver seat control unit connector	Terminal				
B211	34	Ground	SEAT LIFTER FR	OFF	0
				UP	0
				DWN (down)	Battery voltage
	42			OFF	0
				UP	Battery voltage
				DWN (down)	0

Is the inspection result normal?

YES >> Replace front power seat LH [lifting motor (front)]. Refer to SE-68, "Removal and Installation".
NO >> GO TO 2

2. CHECK LIFTING MOTOR (FRONT) CIRCUIT

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

Driver seat control unit connector	Terminal	Front power seat LH [lifting motor (front)] connector	Terminal	Continuity
B211	34	B205	5	Yes
	42		4	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B211	34		No
	42		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

LIFTING MOTOR (REAR)

Description

INFOID:0000000010051806

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

Component Function Check

INFOID:0000000010051807

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-103, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051808

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

Terminal			Test Item		Voltage (V) (Approx.)
(+)		(-)			
Driver seat control unit connector	Terminal				
B211	40	Ground	SEAT LIFTER RR	OFF	0
				UP	0
				DWN (down)	Battery voltage
	41			OFF	0
				UP	Battery voltage
				DWN (down)	0

Is the inspection result normal?

YES >> Replace front power seat LH [lifting motor (rear)]. Refer to SE-126, "Removal and Installation".
NO >> GO TO 2

2. CHECK LIFTING MOTOR (REAR) CIRCUIT

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

Driver seat control unit connector	Terminal	Front power seat LH [lifting motor (rear)] connector	Terminal	Continuity
B211	41	B205	1	Yes
	40		3	

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

Driver seat control unit connector	Terminal	Ground	Continuity
B211	41		No
	40		

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

TILT MOTOR

Description

INFOID:0000000010051809

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

Component Function Check

INFOID:0000000010051810

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-105, "Diagnosis Procedure".

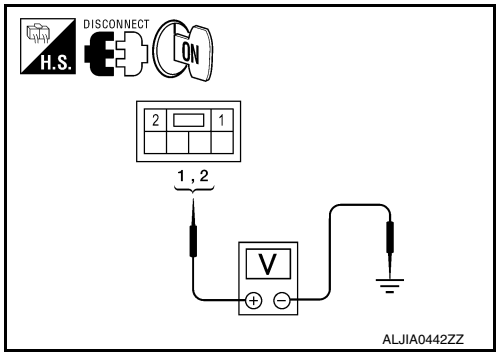
Diagnosis Procedure

INFOID:0000000010051811

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK TILT MOTOR POWER SUPPLY

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



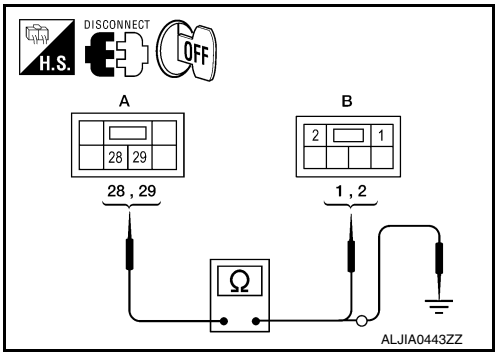
(+) Tilt motor		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
M71	1	Ground	TILT MOTOR	OFF	0
				UP	0
				DWN (down)	Battery voltage
	2			OFF	0
				UP	Battery voltage
				DWN (down)	0

Is the inspection result normal?

YES >> Replace tilt motor. Refer to ST-18, "Removal and Installation".
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 motor harness connector.



Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M67 (A)	28	M71 (B)	1	Yes
	29		2	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M67 (A)	28		No
	29		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".
NO >> Repair or replace harness.

TELESCOPIC MOTOR

Description

INFOID:0000000010051812

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

Component Function Check

INFOID:0000000010051813

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-107, "Diagnosis Procedure".

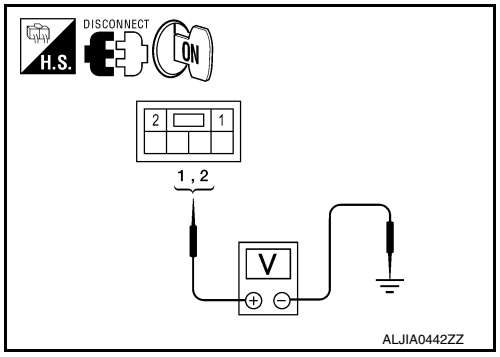
Diagnosis Procedure

INFOID:0000000010051814

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK TELESCOPIC MOTOR POWER SUPPLY

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



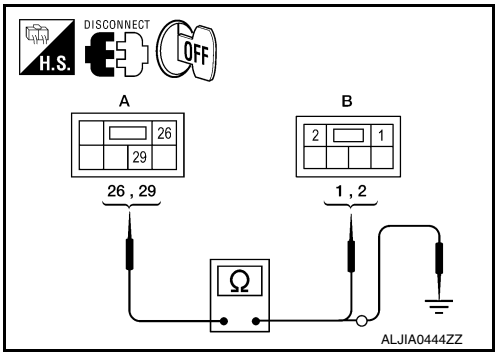
(+) Telescopic motor		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
M73	1	Ground	TELE-SCOPIC MOTOR	OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage
	2			OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0

Is the inspection result normal?

YES >> Replace telescopic motor. (Built in steering column assembly). Refer to ST-20, "Removal and Installation".
NO >> GO TO 2

2.CHECK TELESCOPIC MOTOR CIRCUIT

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



Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M67 (A)	29	M73 (B)	2	Yes
	26		1	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M67 (A)	29		No
	26		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".
NO >> Repair or replace harness.

DOOR MIRROR MOTOR

Description

INFOID:0000000010051815

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

Component Function Check

INFOID:0000000010051816

1. CHECK DOOR MIRROR MOTOR FUNCTION

Check the operation with “MIRROR MOTOR RH” and “MIRROR MOTOR LH” in “ACTIVE TEST” mode with CONSULT.
Refer to ADP-33, "CONSULT Function (AUTO DRIVE POS.)".

Is the inspection result normal?

YES >> Door mirror motor function is OK.
NO >> Refer to ADP-109, "Diagnosis Procedure".

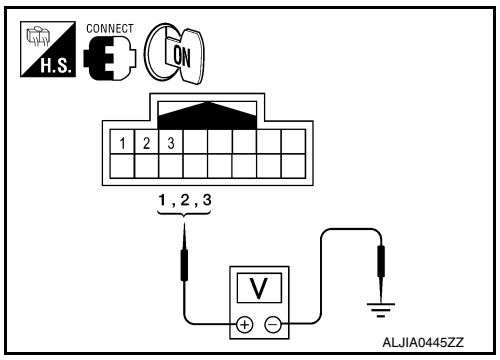
Diagnosis Procedure

INFOID:0000000010051817

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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



Terminals			Door mirror remote control switch condition	Voltage (V) (Approx.)
(+)		(–)		
Door mirror connector	Terminal			
D4 (LH) D107 (RH)	1	Ground	UP	Battery voltage
			Other than above	0
	2		LEFT	Battery voltage
			Other than above	0
	3		DOWN / RIGHT	Battery voltage
			Other than above	0

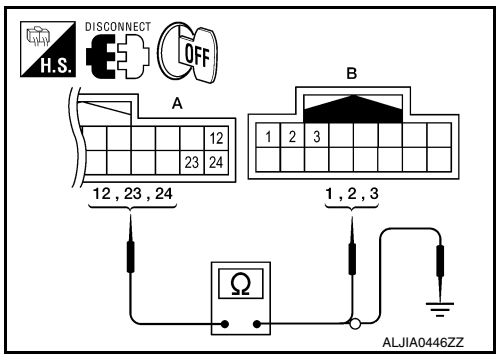
Is the inspection result normal?

YES >> Refer to ADP-111, "Component Inspection".
NO >> GO TO 2

2. CHECK HARNESS CONTINUITY

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

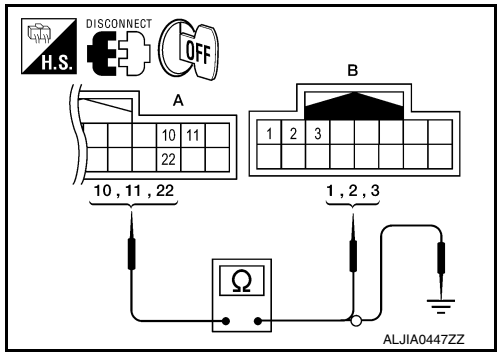
Door mirror LH



Automatic drive positioner control unit connector	Terminal	Door mirror LH connector	Terminal	Continuity
M63 (A)	12	D4 (B)	3	Yes
	23		1	
	24		2	

Door mirror RH

Automatic drive positioner control unit connector	Terminal	Door mirror RH connector	Terminal	Continuity
M63 (A)	10	D107 (B)	1	Yes
	11		2	
	22		3	



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

Door mirror LH

Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	12		No
	23		
	24		

Door mirror RH

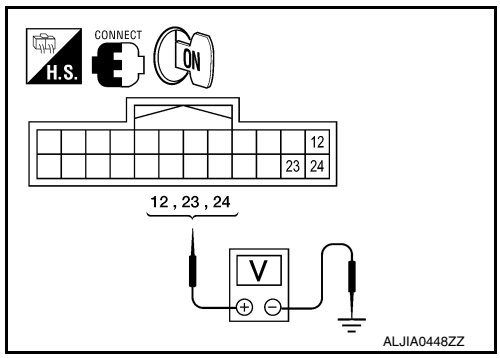
Automatic drive positioner control unit connector	Terminal	Ground	Continuity
M63 (A)	10		No
	11		
	22		

Is the inspection result normal?

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

3. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

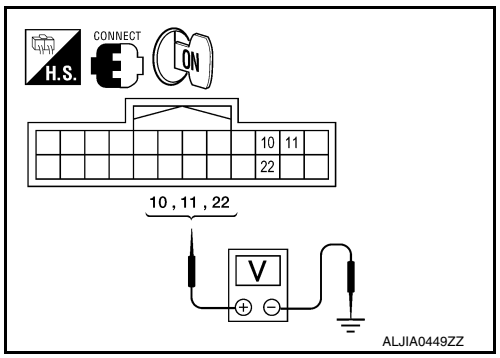


Door mirror LH

Terminals			Mirror switch condition	Voltage (V) (Approx.)
(+)		(-)		
Automatic drive positioner control unit connector	Terminal			
M63	12	Ground	DOWN / RIGHT	Battery voltage
			Other than above	0
	23		UP	Battery voltage
			Other than above	0
	24		LEFT	Battery voltage
			Other than above	0

Door mirror RH

Terminals			Mirror switch condition	Voltage (V) (Approx.)
(+)		(-)		
Automatic drive positioner control unit connector	Terminal			
M63	10	Ground	UP	Battery voltage
			Other than above	0
	11		LEFT	Battery voltage
			Other than above	0
	22		DOWN / RIGHT	Battery voltage
			Other than above	0



Is the inspection result normal?

YES >> GO TO 4
NO >> Replace automatic drive positioner control unit. Refer to ADP-170, "Removal and Installation".

4. CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-111, "Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".
NO >> Replace door mirror actuator. Refer to MIR-19, "Removal and Installation".

Component Inspection

INFOID:0000000010051818

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-19, "Exploded View".

Is the inspection result normal?

YES >> GO TO 2
NO >> Replace door mirror actuator. Refer to MIR-19, "Removal and Installation".

2. CHECK DOOR MIRROR MOTOR-II

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

Door mirror connector	Terminal		Operational direction
	(+)	(–)	
D4 (LH) D107 (RH)	3	2	RIGHT
	2	3	LEFT
	1	3	UP
	3	1	DOWN

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace door mirror actuator. Refer to MIR-19, "Removal and Installation".

SEAT MEMORY INDICATOR LAMP

Description

INFOID:0000000010051819

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

Component Function Check

INFOID:0000000010051820

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-112, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010051821

Regarding Wiring Diagram information, refer to ADP-150, "Wiring Diagram".

1. CHECK SEAT MEMORY INDICATOR CIRCUIT

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

Driver seat control unit connector	Terminal	Seat memory switch connector	Terminal	Continuity
B203	10	D13	7	Yes
	26		6	

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

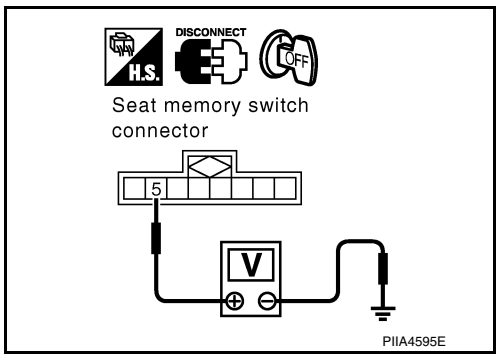
Driver seat control unit connector	Terminal		Continuity
B203	10	Ground	No
	26		

Is the inspection result normal?

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

2. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.



Seat memory switch connector	Terminals		Voltage (V) (Approx.)
	(+)	(–)	
D13	5	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK MEMORY INDICATOR

Refer to ADP-113, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4
NO >> Replace seat memory switch. Refer to ADP-171, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-169, "Removal and Installation".
NO >> Repair or replace the malfunctioning part.

Component Inspection

INFOID:0000000010051822

1. CHECK SEAT MEMORY INDICATOR

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

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace seat memory switch. Refer to ADP-171, "Removal and Installation".

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000010051823

VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

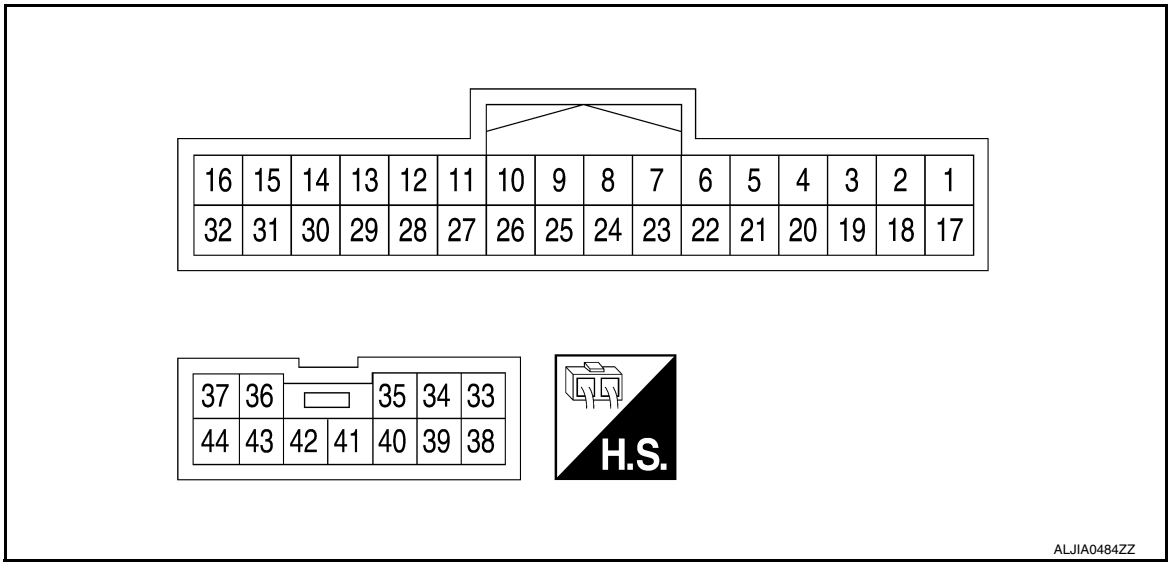
Monitor Item	Condition		Value/Status
SET SW	Set switch	Push	ON
		Release	OFF
MEMORY SW1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
		Release	OFF
SLIDE SW–FR	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW–RR	Sliding switch (backward)	Operate	ON
		Release	OFF
RECLN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

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

Monitor Item	Condition		Value/Status
DOOR SW-FR	Passenger door	Open	OPEN
		Close	CLOSED
IGN ON SW	Ignition switch	ON position	ON
		Other than above	OFF
ACC ON SW	Ignition switch	ACC or ON position	ON
		Other than above	OFF
KEY ON SW	Intelligent Key	Inserted in key slot	ON
		Not Inserted in key slot	OFF
KEYLESS ID	UNLOCK button of Intelligent Key is pressed		1, 2, 3, 4 or 5
KYLS DR UNLK	Intelligent Key or driver side door request switch	ON	ON
		OFF	OFF
VHCL SPEED (ABS)	CAN signal from ABS	Received	ON
		Not received	OFF
HANDLE	Driving position		LHD
			RHD
TRANSMISSION	Transmission type		A/T

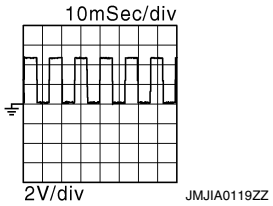
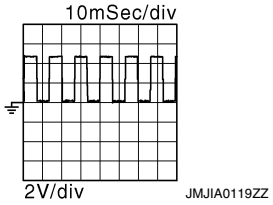
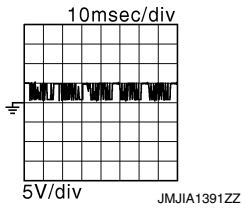
*: The value at the position attained when the battery is connected is regarded as 32768.

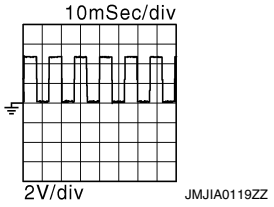
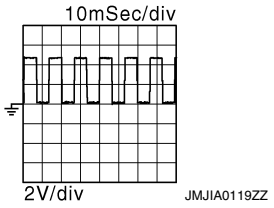
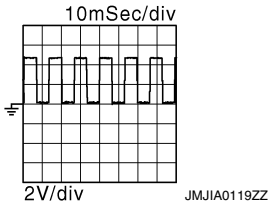
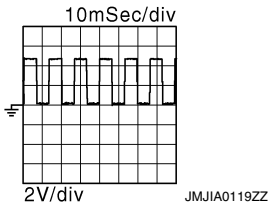
TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
5 (R/L)	Ground	Sensor power supply	Output	—		Battery voltage
6 (B)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0
					Release	Battery voltage
7 (L/B)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0
					Release	Battery voltage

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

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

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

Fail Safe

INFOID:0000000010051824

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-36
	CONTROL UNIT	U1010	ADP-37
	EEPROM	B2130	ADP-38
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-45
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-39
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-41
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-43

DTC Index

INFOID:0000000010051825

CONSULT display	Timing*1		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-36
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-37
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-39

CONSULT display	Timing[*1]		Item	Reference page
	Current malfunction	Previous malfunction		
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-41
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-43
UART COMM [B2128]	0	1-39	UART communication	ADP-45
EEPROM [B2130]	0	1-39	EEPROM	ADP-38

*1:

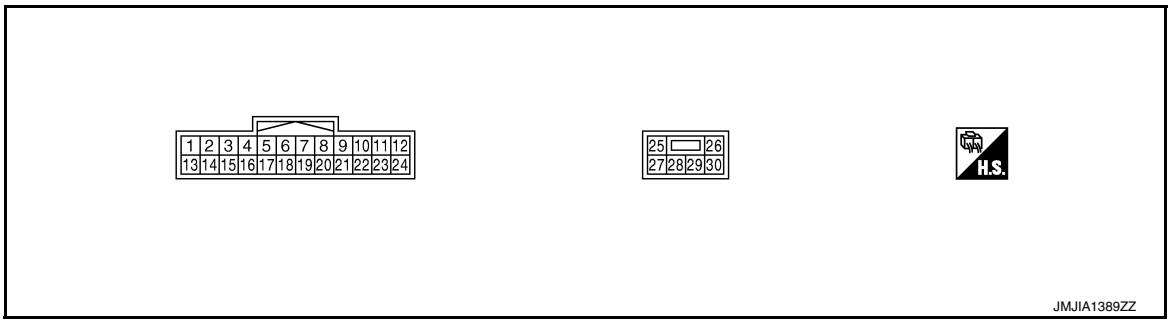
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

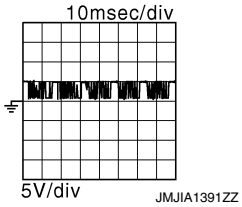
Reference Value

INFOID:0000000010051826

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
1 (Y)	Ground	Tilt switch up signal	Input	Tilt switch	Operate (up)	0
					Other than above	5
2 (V/W)	Ground	Changeover switch RH signal	Input	Changeover switch position	RH	0
					Neutral or LH	5
3 (Y/B)	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0
					Other than above	5
4 (V/W)	Ground	Mirror switch left signal	Input	Mirror switch	Operated (left)	0
					Other than above	5
5 (GR)	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 (W)	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 (P)	Ground	Telescopic switch forward signal	Input	Telescopic switch	Operate (forward)	0
					Other than above	5
8 (R)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
10 (G)	Ground	Door mirror motor (passenger side) up output signal	Output	Door mirror RH	Operate (up)	Battery voltage
					Other than above	0
11 (V)	Ground	Door mirror motor (passenger side) left output signal	Output	Door mirror RH	Operate (left)	Battery voltage
					Other than above	0
12 (Y)	Ground	Door mirror motor (driver side) down output signal	Output	Door mirror (LH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (driver side) right output signal			Operate (right)	Battery voltage
					Other than above	0
13 (LG)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
					Other than above	5
14 (O)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0
					Neutral or RH	5
15 (L/B)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0
					Other than above	5
16 (V)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
					Other than above	5
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 (L)	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
					Other than above	5
20 (P)	Ground	Ground	—	—		0
21 (BR)	Ground	Door mirror motor sensor power supply	Input	—		5

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
22 (Y)	Ground	Door mirror motor (passenger side) down output signal	Output	Door mirror (RH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (passenger side) right output signal			Operate (right)	Battery voltage
					Other than above	0
23 (GR)	Ground	Door mirror motor (driver side) up output signal	Output	Door mirror (LH)	Operate (up)	Battery voltage
					Other than above	0
24 (V)	Ground	Door mirror motor (driver side) left output signal	Output	Door mirror (LH)	Operate (left)	Battery voltage
					Other than above	0
25 (R/Y)	Ground	Power source	Input	—		Battery voltage
26 (V)	Ground	Telescopic motor backward output signal	Output	Steering telescopic	Operate (backward)	Battery voltage
					Other than above	0
27 (L)	Ground	Tilt and telescopic motor power source		—		Battery voltage
28 (G)	Ground	Tilt motor down output signal	Output	Steering tilt	Operate (down)	Battery voltage
					Other than above	0
29 (W/B)	Ground	Tilt motor up output signal	Output	Steering tilt	Operate (up)	Battery voltage
					Other than above	0
		Telescopic motor forward output signal		Steering telescopic	Operate (forward)	Battery voltage
					Other than above	0
30 (B)	Ground	Ground	—	—		0

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000010062243

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs
- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
DOOR SW-DR	Driver door closed	OFF
	Driver door opened	ON
DOOR SW-AS	Passenger door closed	OFF
	Passenger door opened	ON

Monitor Item	Condition	Value/Status
DOOR SW-RR	Rear door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON
DOOR SW-BK	Trunk door closed	OFF
	Trunk door opened	ON
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Power door lock switch LOCK	ON
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
	When outside of the vehicle is dark	Close to 0 V
REQ SW -DR	When front door request switch is not pressed (driver side)	OFF
	When front door request switch is pressed (driver side)	ON
REQ SW -AS	When front door request switch is not pressed (passenger side)	OFF
	When front door request switch is pressed (passenger side)	ON
REQ SW -RL	When rear door request switch is not pressed (driver side)	OFF
	When rear door request switch is pressed (driver side)	ON

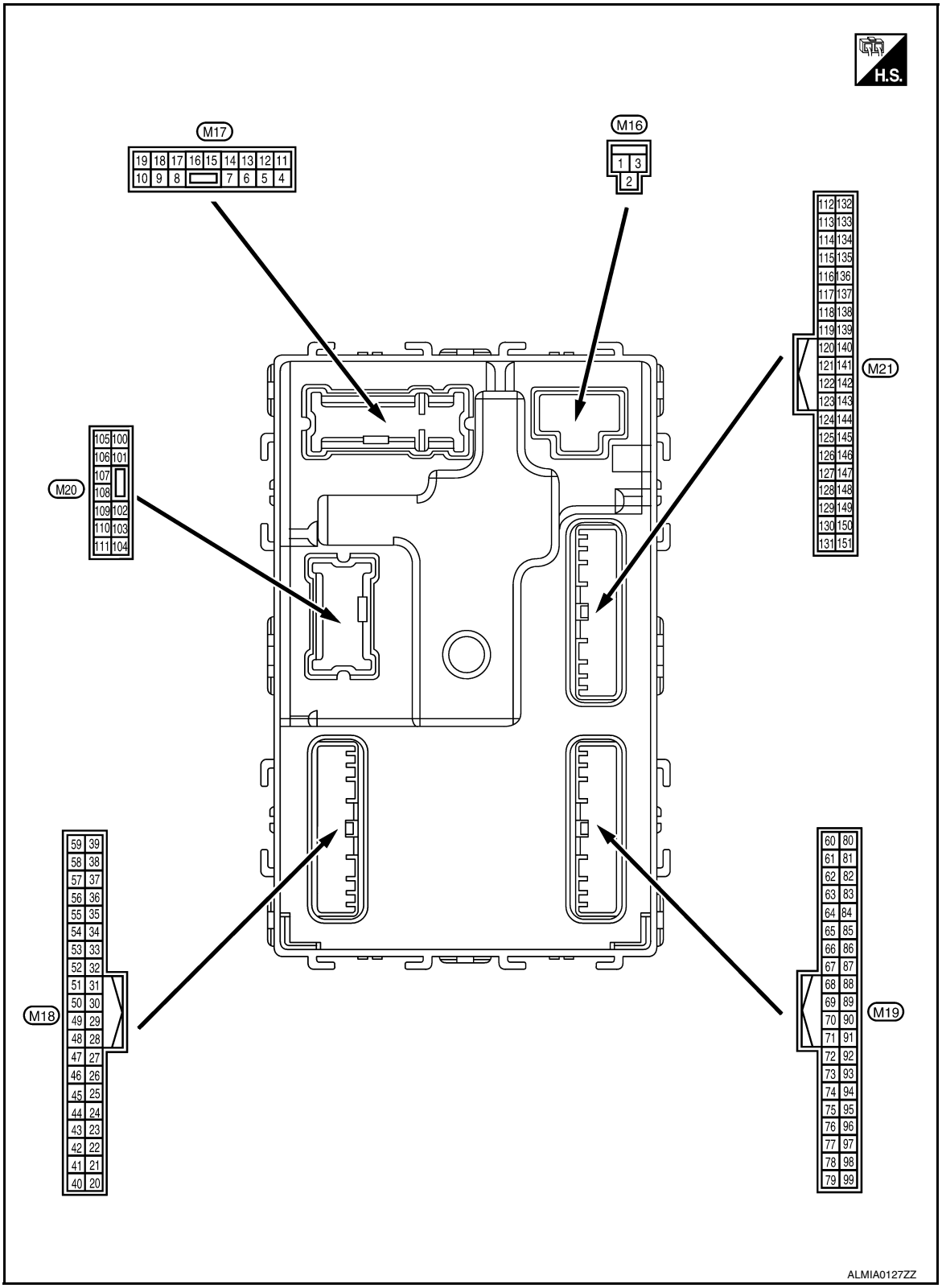
Monitor Item	Condition	Value/Status
REQ SW -RR	When rear door request switch is not pressed (passenger side)	OFF
	When rear door request switch is pressed (passenger side)	ON
REQ SW -BD/TR	When trunk opener request switch is not pressed	OFF
	When trunk opener request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY2 -F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
ACC RLY -F/B	Ignition switch OFF	OFF
	Ignition switch ACC or ON	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
UNLK SEN -DR	Driver door UNLOCK status	OFF
	Driver door LOCK status	ON
PUSH SW -IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY1 -F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN -IPDM	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
SFT P -MET	When selector lever is in any position other than P	OFF
	When selector lever is in P position	ON
SFT N -MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
DOOR STAT-AS	Passenger door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET

Monitor Item	Condition	Value/Status
PRMT ENG STRT	When the engine start is prohibited	RESET
	When the engine start is permitted	SET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET
	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE
TP 4	The ID of fourth key is not registered to BCM	YET
	The ID of fourth key is registered to BCM	DONE
TP 3	The ID of third key is not registered to BCM	YET
	The ID of third key is registered to BCM	DONE
TP 2	The ID of second key is not registered to BCM	YET
	The ID of second key is registered to BCM	DONE
TP 1	The ID of first key is not registered to BCM	YET
	The ID of first key is registered to BCM	DONE
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE
	When ID of front LH tire transmitter is not registered	YET
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE
	When ID of front RH tire transmitter is not registered	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE
	When ID of rear RH tire transmitter is not registered	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE
	When ID of rear LH tire transmitter is not registered	YET

Monitor Item	Condition	Value/Status
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON
BUZZER	Tire pressure warning alarm is not sounding	OFF
	Tire pressure warning alarm is sounding	ON

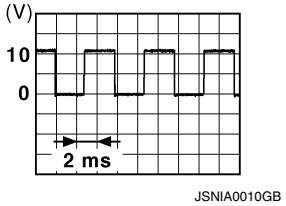
Terminal Layout

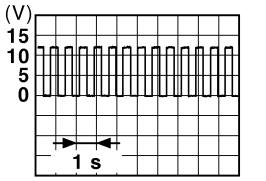
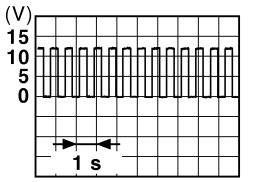
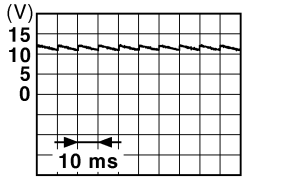
INFOID:0000000010062244

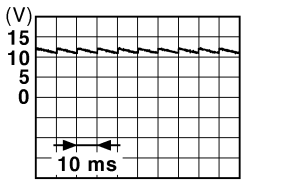
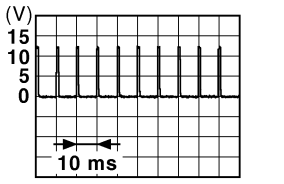
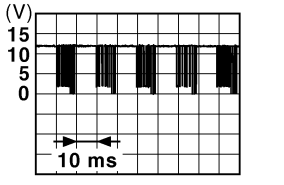


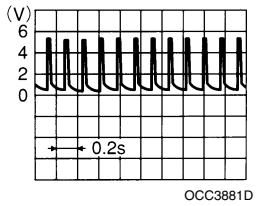
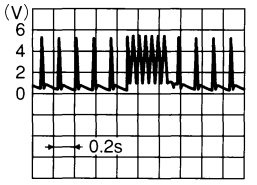
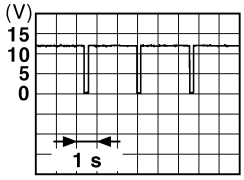
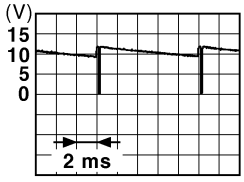
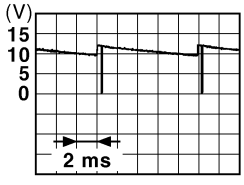
Physical Values

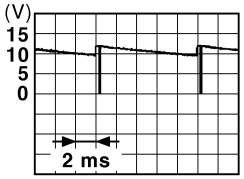
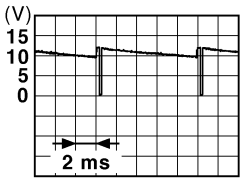
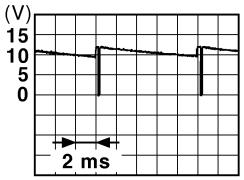
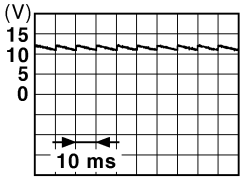
INFOID:0000000010062245

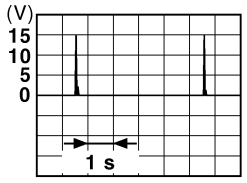
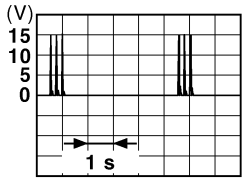
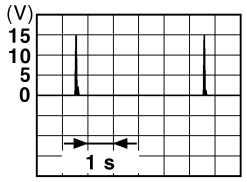
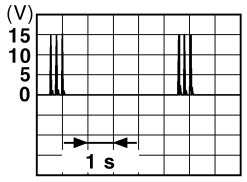
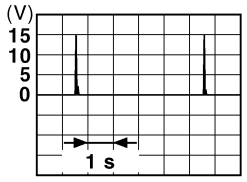
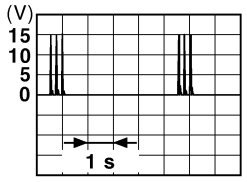
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON	0V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage
					Other than LOCK (actuator is not activated)	0V
9 (L)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
10 (G)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
14 (GR/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0V

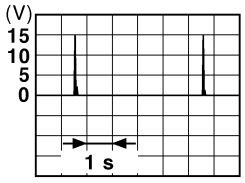
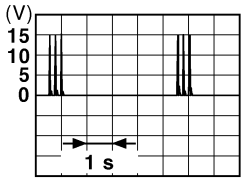
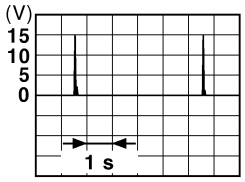
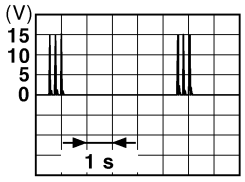
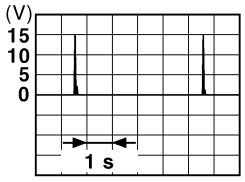
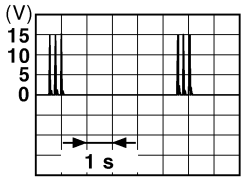
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
24 (R/W)	Ground	Stop lamp switch 1	Input	—		Battery voltage
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is released)	0V
					ON (brake pedal is depressed)	Battery voltage
27 (O)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 JPMIA0011GB 11.8V
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0V
31 (G)	Ground	Rear window defogger feedback signal	Input	Rear window defogger switch	OFF	0V
					ON	Battery voltage

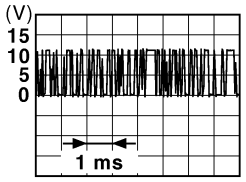
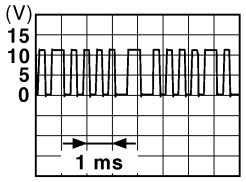
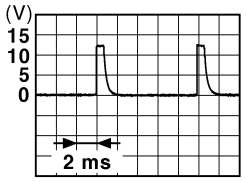
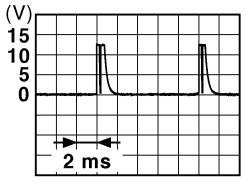
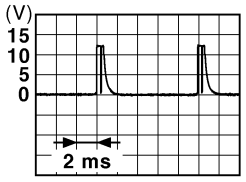
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 JPMIA0011GB 11.8 V
					ON (when front door RH opens)	0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1V
					ON	0V
38 (GR/ W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	5V
					ON	0V
40 (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Engine switch (push switch) illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V

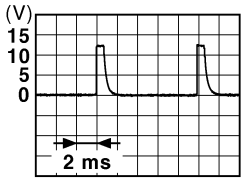
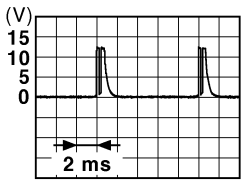
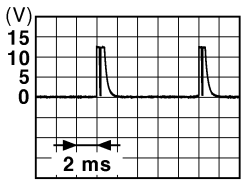
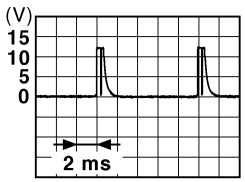
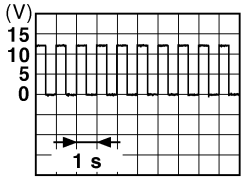
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
48 (R/G)	Ground	Selector lever transmission range switch signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 JPMIA0014GB 11.3V
					OFF	Battery voltage
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Lighting switch 1ST	 JPMIA0031GB 10.7V
					Lighting switch high-beam	
					Lighting switch 2ND	
					Turn signal switch RH	
51 (L/W)	Ground	Combination switch OUTPUT 1	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	

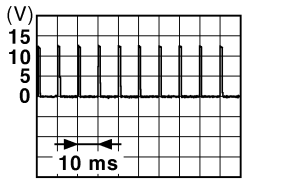
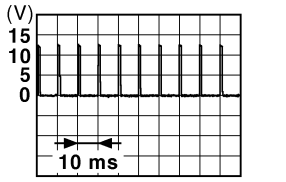
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
52 (G/B)	Ground	Combination switch OUTPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • WIper intermittent dial 5 • Wiper intermittent dial 6	
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front wiper switch INT	 JPMIA0034GB 10.7V
					Front wiper switch LO	
					Lighting switch AUTO	
54 (G/Y)	Ground	Combination switch OUTPUT 4	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	0V
					Front fog lamp switch ON	 JPMIA0035GB 10.7V
					Lighting switch 2ND	
					Lighting switch flash-to-pass	
					Turn signal switch LH	
57 (W)	Ground	Tire pressure warning check switch	Input	—		5V
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	 JPMIA0011GB 11.8V
					ON (front door LH OPEN)	0V
59 (G/R)	Ground	Rear window defogger relay	Output	Rear window defogger	Active	Battery voltage
					Not activated	0V

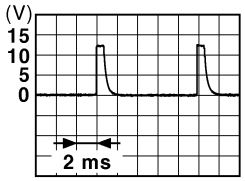
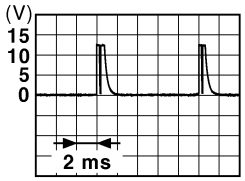
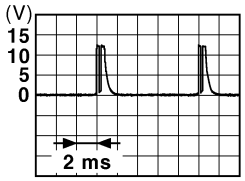
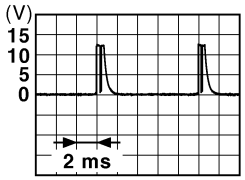
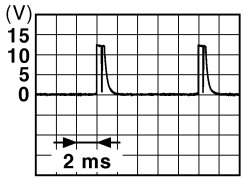
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
60 (B/R)	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
61 (W/R)	Ground	Center console antenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
62 (V)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

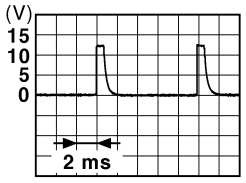
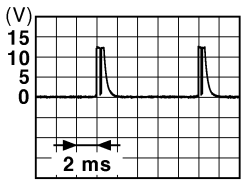
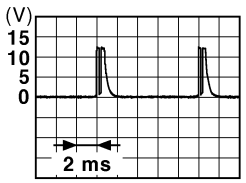
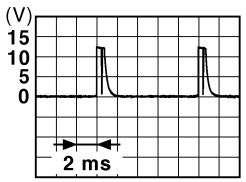
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
63 (P)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
64 (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
65 (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

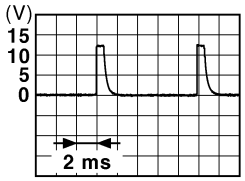
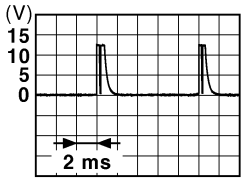
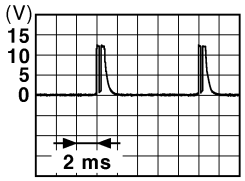
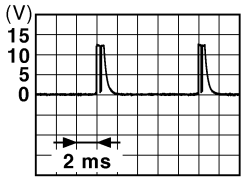
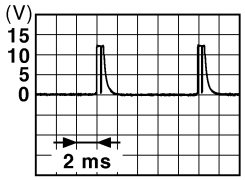
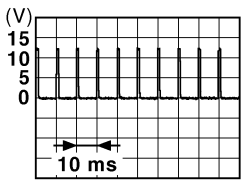
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
75 (R/Y)	Ground	Combination switch INPUT 5	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3V

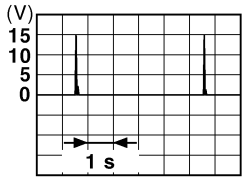
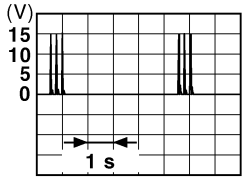
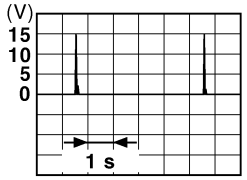
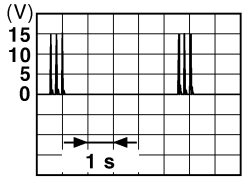
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
76 (R/G)	Ground	Combination switch INPUT 3	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3V
78 (P)	Ground	CAN-L	Input/ Output	—		—
79 (L)	Ground	CAN-H	Input/ Output	—		—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 JPMIA0015GB 6.5V
					ON	0V
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage

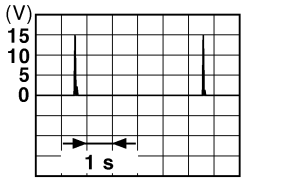
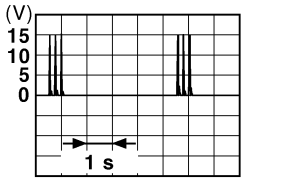
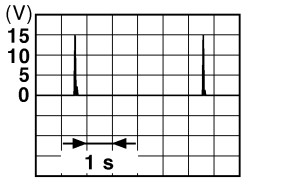
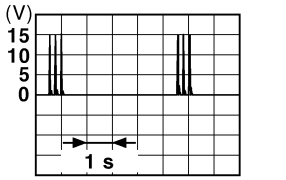
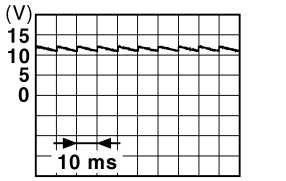
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT shift selector	Output	—		Battery voltage
87 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88 (R)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
89 (R)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
90 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

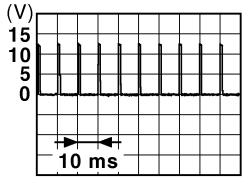
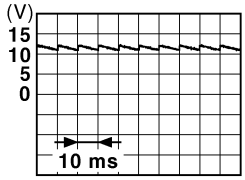
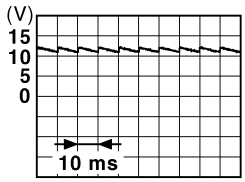
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
95 (R/W)	Ground	Combination switch INPUT 1	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Turn signal switch LH	 JPMIA0037GB 1.3V
					Turn signal switch RH	 JPMIA0036GB 1.3V
					Front wiper switch LO	 JPMIA0038GB 1.3V
					Front washer switch ON	 JPMIA0039GB 1.3V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
96 (P/B)	Ground	Combination switch INPUT 4	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 JPMIA0039GB 1.3V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
97 (R/B)	Ground	Combination switch INPUT 2	Output	Combination switch (Wiper intermittent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Lighting switch flash-to-pass	 JPMIA0037GB 1.3V
					Lighting switch 2ND	 JPMIA0036GB 1.3V
					Front wiper switch INT	 JPMIA0038GB 1.3V
					Front wiper switch HI	 JPMIA0040GB 1.3V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
103 (V)	Ground	Trunk lid opening.	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
					Close (trunk lid opener actuator is not activated)	0V
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V
					OFF	Battery voltage
114 (B)	Ground	Trunk room antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
115 (W)	Ground	Trunk room antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
118 (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
119 (BR/ W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
127 (BR/ W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
130 (W)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	 JPMIA0011GB 11.8V
					ON (trunk is open)	0V
132 (R)	Ground	Starter motor relay control	Output	Ignition switch ON	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
140 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
141 (BR)	Ground	Trunk opener request switch	Input	Trunk opener request switch	ON (pressed)	0V
					OFF (not pressed)	 JPMIA0016GB 1.0V
144 (GR)	Ground	Request switch buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148 (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 JPMIA0011GB 11.8V
					ON (when rear door RH opens)	0V
149 (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 JPMIA0011GB 11.8V
					ON (when rear door LH opens)	0V

Fail Safe

INFOID:0000000010062246

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal

Display contents of CONSULT	Fail-safe	Cancellation
B2562: LO VOLTAGE	Inhibit engine cranking	100 ms after the power supply voltage increases to more than 8.8 V
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B26E1: ENG STATE NO RECIV	Inhibit engine cranking	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)

DTC Inspection Priority Chart

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If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	• B2562: LO VOLTAGE
2	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM
4	• B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SWITCH • B2605: PNP SWITCH • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B261A: PUSH-BTN IGN SW • B26E1: ENG STATE NO RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG

Priority	DTC
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT
6	• B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

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NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	BCS-32
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-33
U0415: VEHICLE SPEED SIG	—	—	—	BCS-34
B2190: NATS ANTENNA AMP	×	—	—	SEC-37
B2191: DIFFERENCE OF KEY	×	—	—	SEC-40
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-41
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-42
B2553: IGNITION RELAY	—	—	—	PCS-46
B2555: STOP LAMP	—	—	—	SEC-43
B2556: PUSH-BTN IGN SW	—	×	—	SEC-46
B2557: VEHICLE SPEED	×	×	—	SEC-48
B2560: STARTER CONT RELAY	×	×	—	SEC-49

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2562: LOW VOLTAGE	—	—	—	BCS-35
B2601: SHIFT POSITION	×	×	—	SEC-50
B2602: SHIFT POSITION	×	×	—	SEC-53
B2603: SHIFT POSI STATUS	×	×	—	SEC-56
B2604: PNP SWITCH	×	×	—	SEC-59
B2605: PNP SWITCH	×	×	—	SEC-61
B2608: STARTER RELAY	×	×	—	SEC-63
B260A: IGNITION RELAY	×	×	—	PCS-48
B260F: ENG STATE SIG LOST	×	×	—	SEC-65
B2614: ACC RELAY CIRC	—	×	—	PCS-50
B2615: BLOWER RELAY CIRC	—	×	—	PCS-53
B2616: IGN RELAY CIRC	—	×	—	PCS-56
B2617: STARTER RELAY CIRC	×	×	—	SEC-67
B2618: BCM	×	×	—	PCS-59
B261A: PUSH-BTN IGN SW	—	×	—	PCS-60
B2622: INSIDE ANTENNA	—	—	—	DLK-60
B2623: INSIDE ANTENNA	—	—	—	DLK-63
B26E1: ENG STATE NO RES	×	×	—	SEC-66
C1704: LOW PRESSURE FL	—	—	×	WT-43
C1705: LOW PRESSURE FR	—	—	×	WT-43
C1706: LOW PRESSURE RR	—	—	×	WT-43
C1707: LOW PRESSURE RL	—	—	×	WT-43
C1708: [NO DATA] FL	—	—	×	WT-13
C1709: [NO DATA] FR	—	—	×	WT-13
C1710: [NO DATA] RR	—	—	×	WT-13
C1711: [NO DATA] RL	—	—	×	WT-13
C1712: [CHECKSUM ERR] FL	—	—	×	WT-15
C1713: [CHECKSUM ERR] FR	—	—	×	WT-15
C1714: [CHECKSUM ERR] RR	—	—	×	WT-15
C1715: [CHECKSUM ERR] RL	—	—	×	WT-15
C1716: [PRESSDATA ERR] FL	—	—	×	WT-17
C1717: [PRESSDATA ERR] FR	—	—	×	WT-17
C1718: [PRESSDATA ERR] RR	—	—	×	WT-17
C1719: [PRESSDATA ERR] RL	—	—	×	WT-17
C1720: [CODE ERR] FL	—	—	×	WT-15
C1721: [CODE ERR] FR	—	—	×	WT-15
C1722: [CODE ERR] RR	—	—	×	WT-15
C1723: [CODE ERR] RL	—	—	×	WT-15
C1724: [BATT VOLT LOW] FL	—	—	×	WT-15
C1725: [BATT VOLT LOW] FR	—	—	×	WT-15
C1726: [BATT VOLT LOW] RR	—	—	×	WT-15
C1727: [BATT VOLT LOW] RL	—	—	×	WT-15

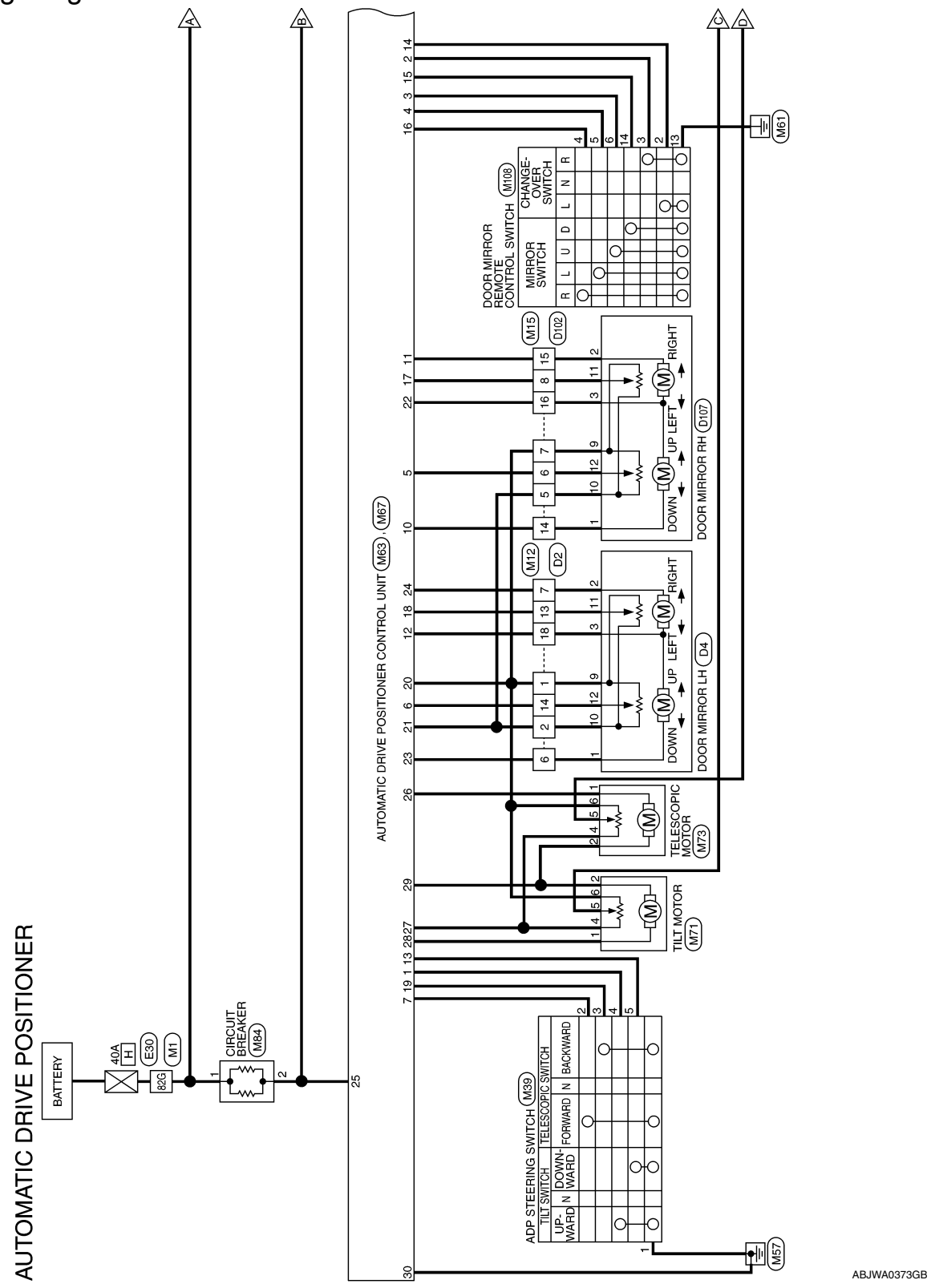
CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1729: VHCL SPEED SIG ERR	—	—	×	WT-19
C1734: CONTROL UNIT	—	—	×	WT-20

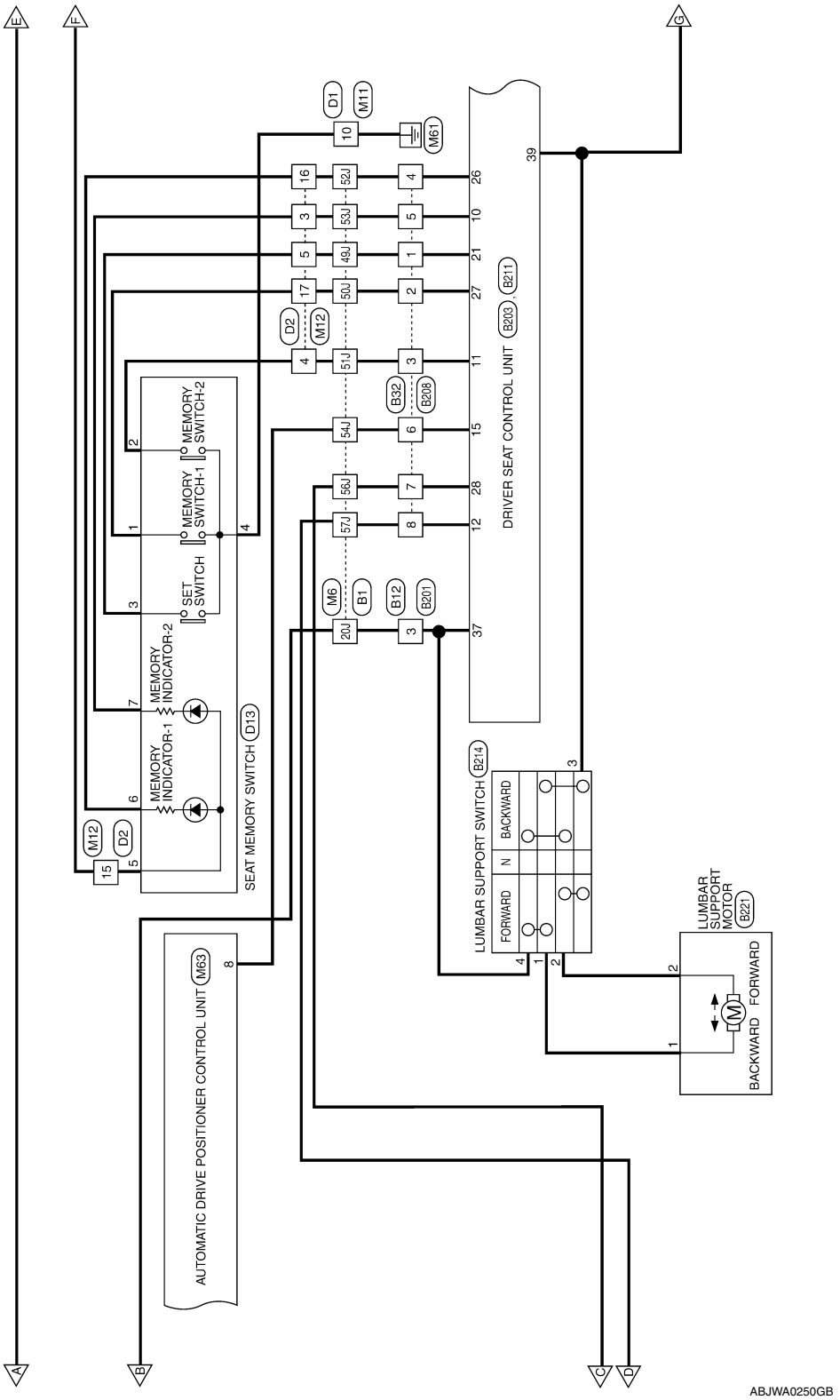
WIRING DIAGRAM

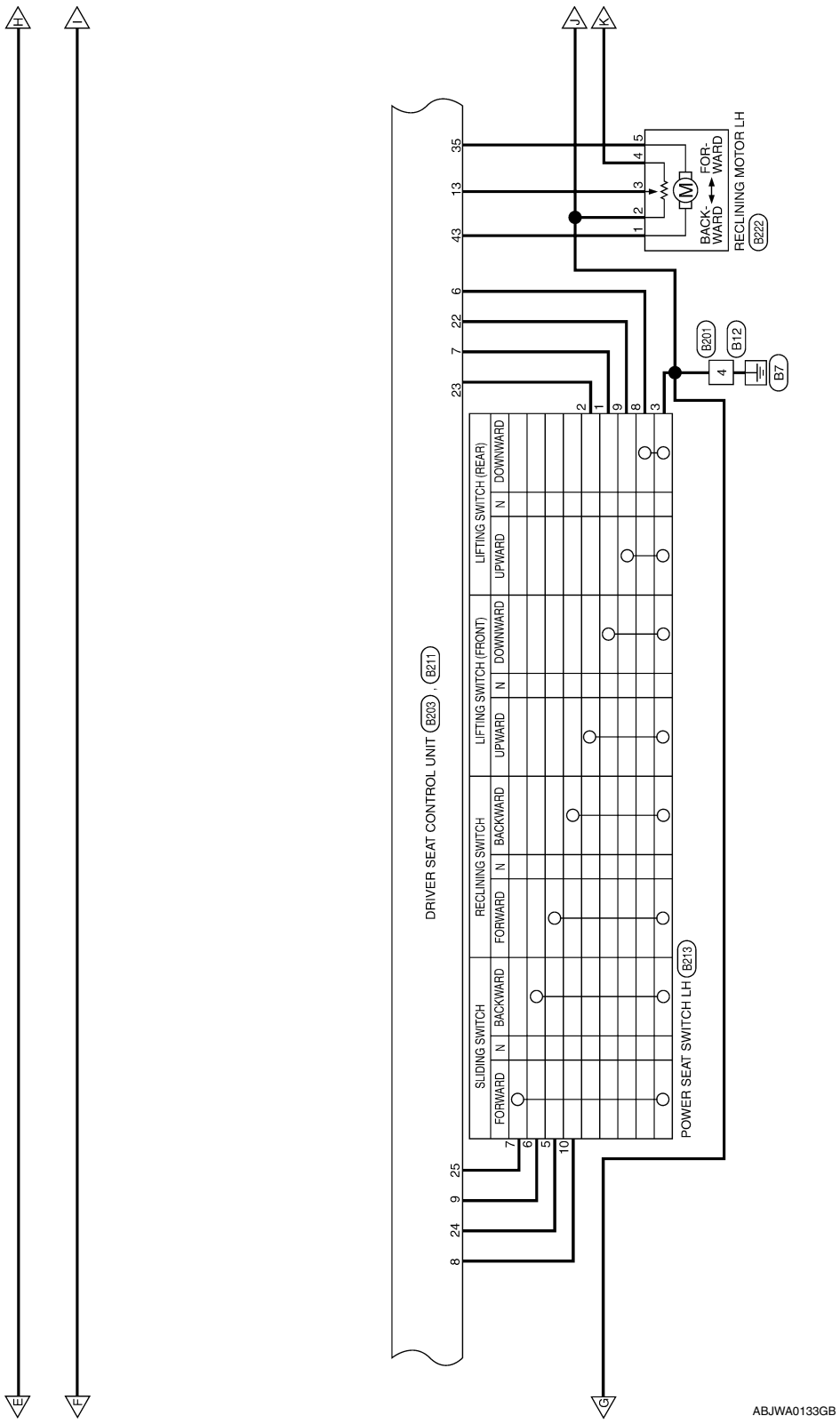
AUTOMATIC DRIVE POSITIONER

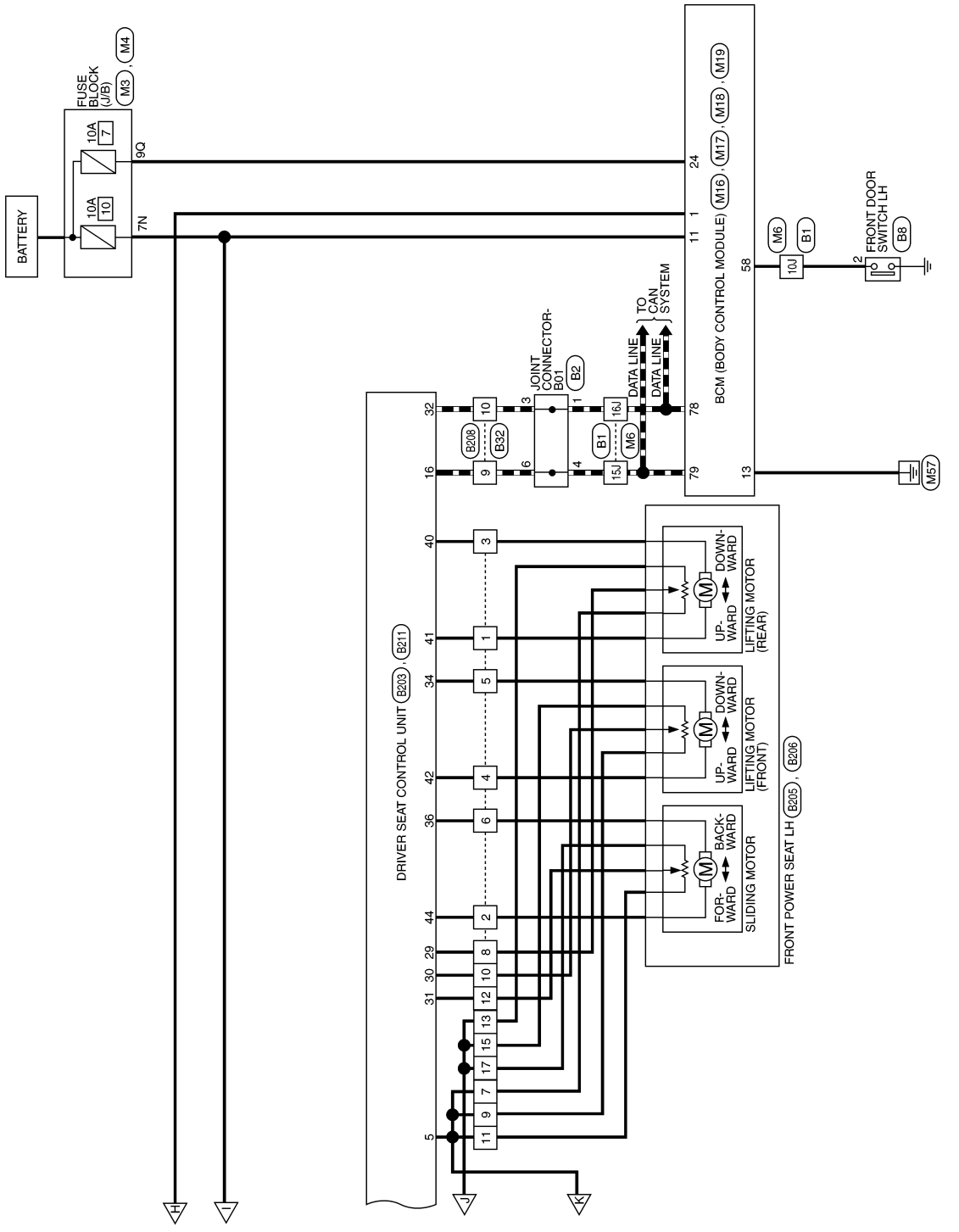
Wiring Diagram

INFOID:0000000010051833




E
F
G
A
B
C
D
D1
M11
10
M61
16
52J
4
26
3
53J
5
10
5
49J
1
21
17
50J
2
27
39
B211
B203
DRIVER SEAT CONTROL UNIT
D2
M12
4
51J
3
11
B32
B208
54J
6
15
56J
7
28
57J
8
12
M6
B1
B12
B201
20J
3
37
MEMORY SWITCH-2
MEMORY SWITCH-1
SET SWITCH
MEMORY INDICATOR-2
MEMORY INDICATOR-1
SEAT MEMORY SWITCH D13
M12
D2
15
5
AUTOMATIC DRIVE POSITIONER CONTROL UNIT M63
8
LUMBAR SUPPORT SWITCH B214
FORWARD
N
BACKWARD
LUMBAR SUPPORT MOTOR B221
FORWARD
BACKWARD
ABJWA0250GB


H
I
J
K
E
F
G
DRIVER SEAT CONTROL UNIT (B203), (B211)
POWER SEAT SWITCH LH (B213)
SLIDING SWITCH
FORWARD
N
BACKWARD
RECLINING SWITCH
FORWARD
N
BACKWARD
LIFTING SWITCH (FRONT)
UPWARD
N
DOWNWARD
LIFTING SWITCH (REAR)
UPWARD
N
DOWNWARD
RECLINING MOTOR LH (B222)
FOR-WARD
BACK-WARD
(B201)
(B12)
(B7)
ABJWA0133GB

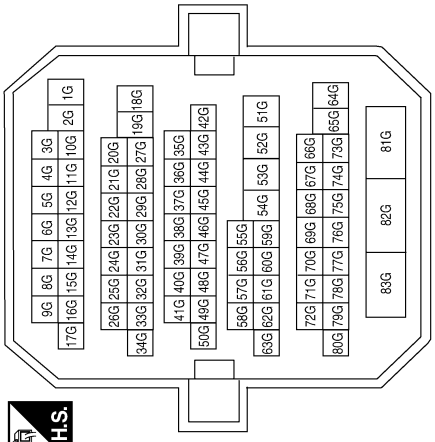


ABJWA0374GB

AUTOMATIC DRIVE POSITIONER CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
82G	W/B	–

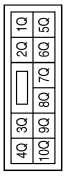
Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
7N	Y/R	–

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
9Q	R/W	–

ABJIA0483GB

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
10J	SB	–
15J	L	–
16J	P	–
20J	R/Y	–
49J	LG	–
50J	GR	–
51J	SB	–
52J	O	–
53J	Y	–
54J	R	–
56J	V	–
57J	R	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
10	B	–

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	P	–
2	BR	–
3	Y	–
4	SB	–
5	LG	–
6	GR	–

Terminal No.	Color of Wire	Signal Name
7	V	–
13	L	–
14	W	–
15	Y/R	–
16	O	–
17	GR	–
18	Y	–

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
5	BR	–
6	GR	–
7	P	–
8	L	–
14	G	–
15	V	–
16	Y	–

ABJIA0484GB

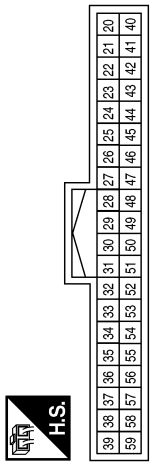
Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

Terminal No.	Color of Wire	Signal Name
1	W/B	BATT (F/L)

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

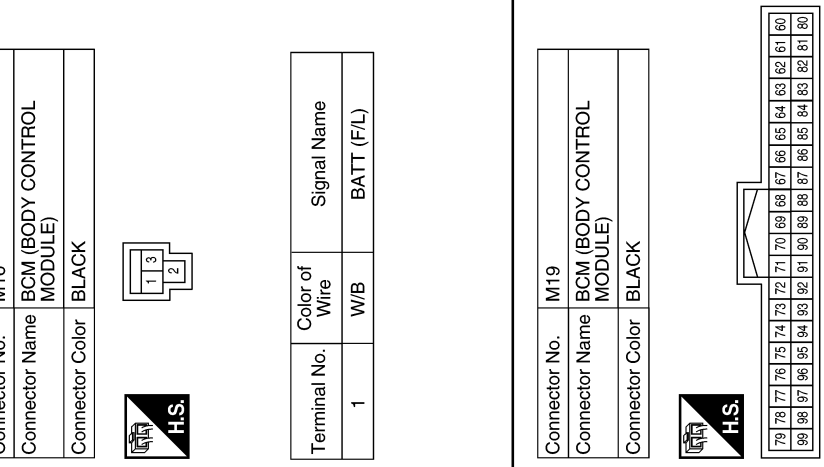
Terminal No.	Color of Wire	Signal Name
11	Y/R	BAT BCM FUSE
13	B	GND1

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



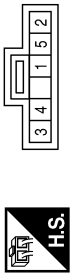
Terminal No.	Color of Wire	Signal Name
24	R/W	BRAKE SW 1
58	SB	DR DOOR SW

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

Connector No.	M39
Connector Name	ADP STEERING SWITCH
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
1	B	–
2	P	–
3	G	–
4	Y	–
5	LG	–

ABJIA0878GB

Connector No.	M63
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	UPWARD
2	V/W	SELECT RH
3	Y/B	UPWARD
4	V/W	LEFTWARD
5	GR	MIR SENS UP DOWN RH
6	W	MIR SENS UP DOWN LH
7	P	FORWARD
8	R	UART
9	–	–
10	G	MIR MTR UP DOWN RH
11	V	MIR MTR LEFT AND RIGHT RH
12	Y	MIR MTR CMN LH
13	LG	DOWNWARD
14	O	SELECT LH
15	L/B	DOWNWARD
16	V	RIGHTWARD
17	L	MIR SENS LEFT AND RIGHT RH
18	L	MIR SENS LEFT AND RIGHT LH
19	G	BACKWARD
20	P	SENS GND
21	BR	SENS PWR
22	Y	MIR MTR CMN RH
23	GR	MIR MTR UP DOWN LH
24	V	MIR MOTOR LEFT AND RIGHT LH

Connector No.	M67
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Color	WHITE

H.S.

25	26
27	28	29	30

Terminal No.	Color of Wire	Signal Name
25	R/Y	BAT
26	V	BACKWARD
27	L	STRG SENS VCC
28	G	DOWNWARD
29	W/B	UPWARD/FORWARD
30	B	GND

Connector No.	M71
Connector Name	TILT MOTOR
Connector Color	WHITE

H.S.

2	1
6	5	4	3

Terminal No.	Color of Wire	Signal Name
1	G	–
2	W/B	–
4	L	–
5	V	–
6	P	–

Connector No.	M73
Connector Name	TELESCOPIC MOTOR
Connector Color	WHITE

H.S.

2	1
6	5	4	3

Terminal No.	Color of Wire	Signal Name
1	V	–
2	W/B	–
4	L	–
5	R	–
6	P	–

ABJIA0879GB

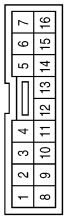
Connector No.	M84
Connector Name	CIRCUIT BREAKER
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W/B	–
2	R/Y	–

Connector No.	M108
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	BROWN

H.S.

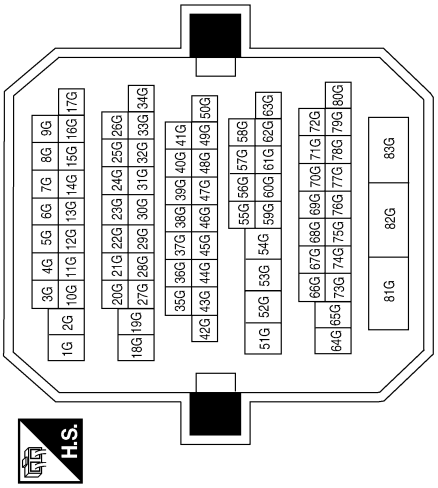


Terminal No.	Color of Wire	Signal Name
2	O	–
3	V/W	–
4	V	–
5	V/W	–
6	Y/B	–
13	B	–

Terminal No.	Color of Wire	Signal Name
14	L/B	–

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

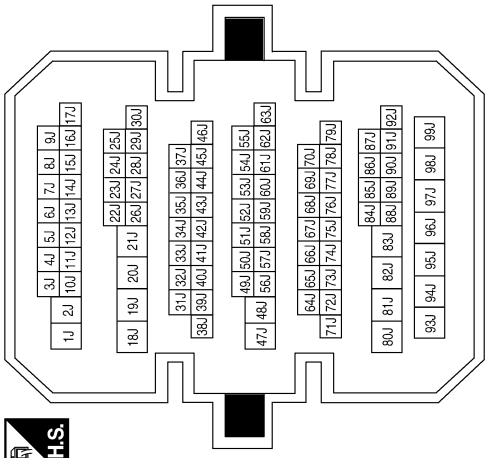


Terminal No.	Color of Wire	Signal Name
82G	LG	–

ABJIA0487GB

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

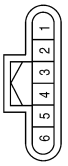
H.S.



Terminal No.	Color of Wire	Signal Name
10J	SB	–
15J	L	–
16J	P	–
20J	BR	–
49J	W	–
50J	V	–
51J	BR	–
52J	SB	–
53J	LG	–
54J	P	–
56J	Y	–
57J	R	–

Connector No.	B2
Connector Name	JOINT CONNECTOR-B01
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	P	–
3	P	–
4	L	–
6	L	–

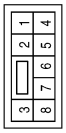
Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	SB	–

Connector No.	B12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
3	BR	–
4	B	– (WITH AUTOMATIC DRIVE POSITIONER)

ABJIA0488GB

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
3	R/Y	–
4	B	–

Terminal No.	Color of Wire	Signal Name
24	GR	RECLINER SW FORWARD
25	Y	SLIDE SW FORWARD
26	W/Y	IND 1
27	V/W	ADDRESS 1
28	L/R	PULSE TILT
29	G	PULSE REAR LIFTER
30	W/R	PULSE FRONT LIFTER
31	O	PULSE SLIDE
32	GR/B	CAN-L

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	W	–
2	V	–
3	BR	–
4	SB	–
5	LG	–
6	P	–
7	Y	–
8	R	–
9	L	–
10	P	–

Connector No.	B203
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	–	–
4	–	–
5	R/L	POWER SUPPLY ENCODER
6	B	REAR LIFTER SW DOWNWARD
7	L/B	FRONT LIFTER SW DOWNWARD
8	W	RECLINER SW BACKWARD
9	V	SLIDE SW BACKWARD
10	LG	IND 2
11	O/B	ADDRESS 2
12	P/Y	PULSE TELESCOPIC
13	W/B	PULSE RECLINER
14	–	–
15	Y/B	UART TX/RX
16	O/V	CAN-H
17	–	–
18	–	–
19	–	–
20	–	–
21	P/B	SET SW
22	R	REAR LIFTER SW UPWARD
23	O/Y	FRONT LIFTER SW UPWARD

ABJIA0489GB

Connector No.	B205
Connector Name	FRONT POWER SEAT LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	–
2	Y	–
3	B/R	–
4	O	–
5	L/G	–
6	V	–

Connector No.	B206
Connector Name	FRONT POWER SEAT LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
7	R/L	–
8	G	–
9	R/B	–
10	W/R	–
11	R	–
12	O	–

Terminal No.	Color of Wire	Signal Name
13	B	–
15	B	–
17	B	–

Connector No.	B208
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	P/B	–
2	V/W	–
3	O/B	–
4	W/Y	–
5	LG	–
6	Y/B	–
7	L/R	–
8	P/Y	–
9	O/V	–
10	GR/B	–

Connector No.	B211
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
33	–	–
34	L/G	FRONT LIFTER MOTOR DOWNWARD
35	GR	RECLINER MOTOR FORWARD
36	V	SLIDE MOTOR BACKWARD
37	R/Y	BAT (PTC)
38	–	–
39	B	GND

Terminal No.	Color of Wire	Signal Name
40	B/R	REAR LIFTER MOTOR DOWNWARD
41	R	REAR LIFTER MOTOR UPWARD
42	O	FRONT LIFTER MOTOR UPWARD
43	W	RECLINER MOTOR BACKWARD
44	Y	SLIDE MOTOR FORWARD

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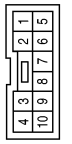
Connector No.	B213
Connector Name	POWER SEAT SWITCH LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	WHITE

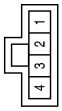
H.S.



Terminal No.	Color of Wire	Signal Name
1	L/B	–
2	O/Y	–
3	B	–
5	GR	–
6	V	–
7	Y	–
8	B	–
9	R	–
10	V	–

Connector No.	B214
Connector Name	LUMBAR SUPPORT SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	R/L	–
2	R/W	–
3	B	–
4	R/Y	–

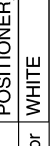
Connector No.	B221
Connector Name	LUMBAR SUPPORT MOTOR
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	R/L	–
2	R/W	–

Connector No.	B222
Connector Name	RECLINING MOTOR LH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Color	BLACK

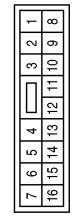
H.S.



Terminal No.	Color of Wire	Signal Name
1	W	–
2	B	–
3	W/B	–
4	R/G	–
5	GR	–

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
10	B	–

ABJIA0881GB

Connector No.	D4
Connector Name	DOOR MIRROR LH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	–
2	P	–
3	LG	–
9	Y	–
10	R	–
11	G	–
12	BR	–

Connector No.	D107
Connector Name	DOOR MIRROR RH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	–
2	P	–
3	LG	–
9	W/B	–
10	R	–
11	G	–
12	BR	–

Terminal No.	Color of Wire	Signal Name
15	GR	–
16	SB	–
17	V	–
18	LG	–

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
5	R	–
6	BR	–
7	W/B	–
8	G	–
14	V	–
15	P	–
16	LG	–

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	–
2	R	–
3	LG	–
4	BR	–
5	W	–
6	V	–
7	P	–
13	G	–
14	BR	–

Connector No.	D13
Connector Name	SEAT MEMORY SWITCH
Connector Color	WHITE

H.S.

3	5	6	7	2	1	4

Terminal No.	Color of Wire	Signal Name
1	V	–
2	BR	–
3	W	–
4	B	–
5	GR	–
6	SB	–
7	LG	–

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SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000010051834

NOTE:
Always perform the “Basic Inspection” before performing diagnosis in the following table. Refer to ADP-5, "Work Flow".

SYMPTOM 1

Symptom		Diagnosis procedure	Reference page
Manual functions (for specific part) do not operate	Sliding operation	Check sliding switch.	ADP-50
	Reclining operation	Check reclining switch.	ADP-52
	Lifting operation (front)	Check lifting switch (front).	ADP-54
	Lifting operation (rear)	Check lifting switch (rear).	ADP-56
	Tilt operation	Check tilt switch.	ADP-58
	Telescopic sensor	Check telescopic switch.	ADP-60
	Door mirror operation	1. Changeover switch.	ADP-65
		2. Mirror switch	ADP-67
	All parts of seat	Check power seat switch ground circuit.	ADP-70

SYMPTOM 2

Symptom		Diagnosis procedure	Reference page
Memory functions (for specific part) do not operate	Sliding operation	Check sliding sensor.	ADP-74
	Reclining operation	Check reclining sensor.	ADP-77
	Lifting operation (front)	Check lifting sensor (front).	ADP-80
	Lifting operation (rear)	Check lifting sensor (rear).	ADP-83
	Tilt operation	Check tilt sensor.	ADP-86
	Telescopic operation	Check telescopic sensor.	ADP-89
	Door mirror operation	Check door mirror sensor.	Driver side: ADP-92 Passenger side: ADP-94

SYMPTOM 3

Symptom		Diagnosis procedure	Reference page
Memory functions and manual functions (for specific part) do not operate	Sliding operation	Check sliding motor.	ADP-97
	Reclining operation	Check reclining motor.	ADP-99
	Lifting operation (front)	Check lifting motor (front).	ADP-101
	Lifting operation (rear)	Check lifting motor (rear).	ADP-103
	Tilt operation	Check tilt motor.	ADP-105
	Telescopic operation	Check telescopic motor.	ADP-107
	Door mirror operation	Check door mirror motor.	ADP-109

SYMPTOM 4

Symptom	Diagnosis procedure	Reference page
Entry/Exit assist function does not operate.	1. Check system setting.	ADP-21
	2. Perform initialization.	Refer to Owner's Manual.
	3. Check front door switch (driver side).	ADP-72
(Other automatic operations and Intelligent Key system are normal)	1. Check door lock function.	DLK-17
	2. Perform memory storing.	ADP-8

SYMPTOM 5

Symptom	Diagnosis procedure	Reference page
Memory indicators 1 and/or 2 do not illuminate.	1. Check seat memory switch.	ADP-62
	2. Check seat memory indicator.	ADP-112

NORMAL OPERATING CONDITION

Description

INFOID:0000000010051835

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

Symptom	Cause	Action to take	Reference page
Entry/Exit assist function does not operate.	No initialization has been performed.	Perform initialization.	Refer to Owner's Manual.
	Entry/exit assist function is disabled. **NOTE:** The entry/exit assist function is disabled before delivery (initial setting).	Change the settings.	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-25
Memory function, entry/exit assist function or Intelligent Key interlock function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-17
			Exit assist function: ADP-21
			Entry assist function: ADP-25
			Intelligent Key interlock function: ADP-29

PRECAUTION

PRECAUTIONS

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

INFOID:0000000009466225

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 SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

Precaution for Work

INFOID:0000000009735344

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

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

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

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

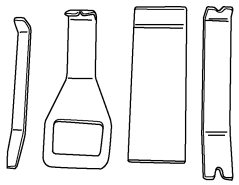
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000009466227

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

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

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

Removal and Installation

INFOID:0000000009466228

REMOVAL

NOTE:

The driver seat control unit is part of the driver seat.

1. Remove driver seat. Refer to SE-68, "Removal and Installation" (with climate controlled seats) or SE-126, "Removal and Installation" (without climate controlled seats).
2. Disconnect the harness connector from the driver seat control unit.
3. Remove driver seat control unit using a suitable tool.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Be sure to install the harness in the right place.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to ADP-8, "Special Repair Requirement".

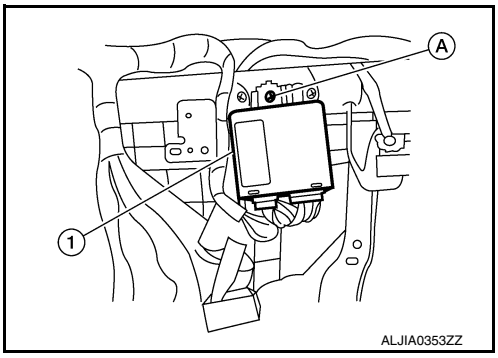
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

INFOID:0000000009466229

REMOVAL

1. Remove audio unit. Refer to AV-73, "Removal and Installation" (BASE AUDIO), AV-161, "Removal and Installation" (BOSE W/MONOCHROME DISPLAY), AV-481, "Removal and Installation" (BOSE W/COLOR DISPLAY), AV-652, "Removal and Installation" (BOSE W/COLOR DISPLAY W/NAVIGATION).
2. Remove the automatic drive positioner control unit screw (A).
3. Remove automatic drive positioner control unit (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Be sure to install the harness in the right place.

SEAT MEMORY SWITCH

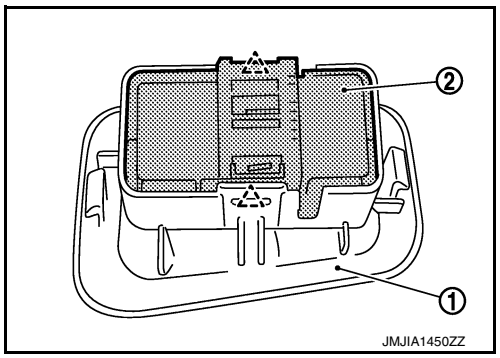
Removal and Installation

INFOID:0000000009466230

REMOVAL

1. Remove the seat memory finisher using a suitable tool (1). Refer to INT-18, "Removal and Installation".
2. Release the pawls and remove seat memory switch (2) from seat memory finisher (1).

: Pawl



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Be sure to install the harness in the right place.

TILT&TELESCOPIC SWITCH

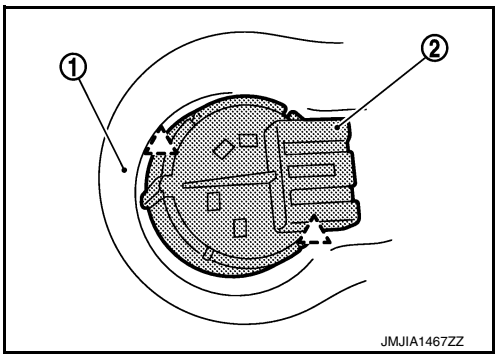
Removal and Installation

INFOID:0000000009466231

REMOVAL

1. Remove the steering column side cover (LH) (1). Refer to IP-13, "Removal and Installation".
2. Release the pawls and remove tilt & telescopic switch (2) from the steering column side cover (LH) (1).

: Pawl



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Be sure to install the harness in the right place.