SECTION ADP
AUTOMATIC DRIVE POSITIONER

CONTENTS

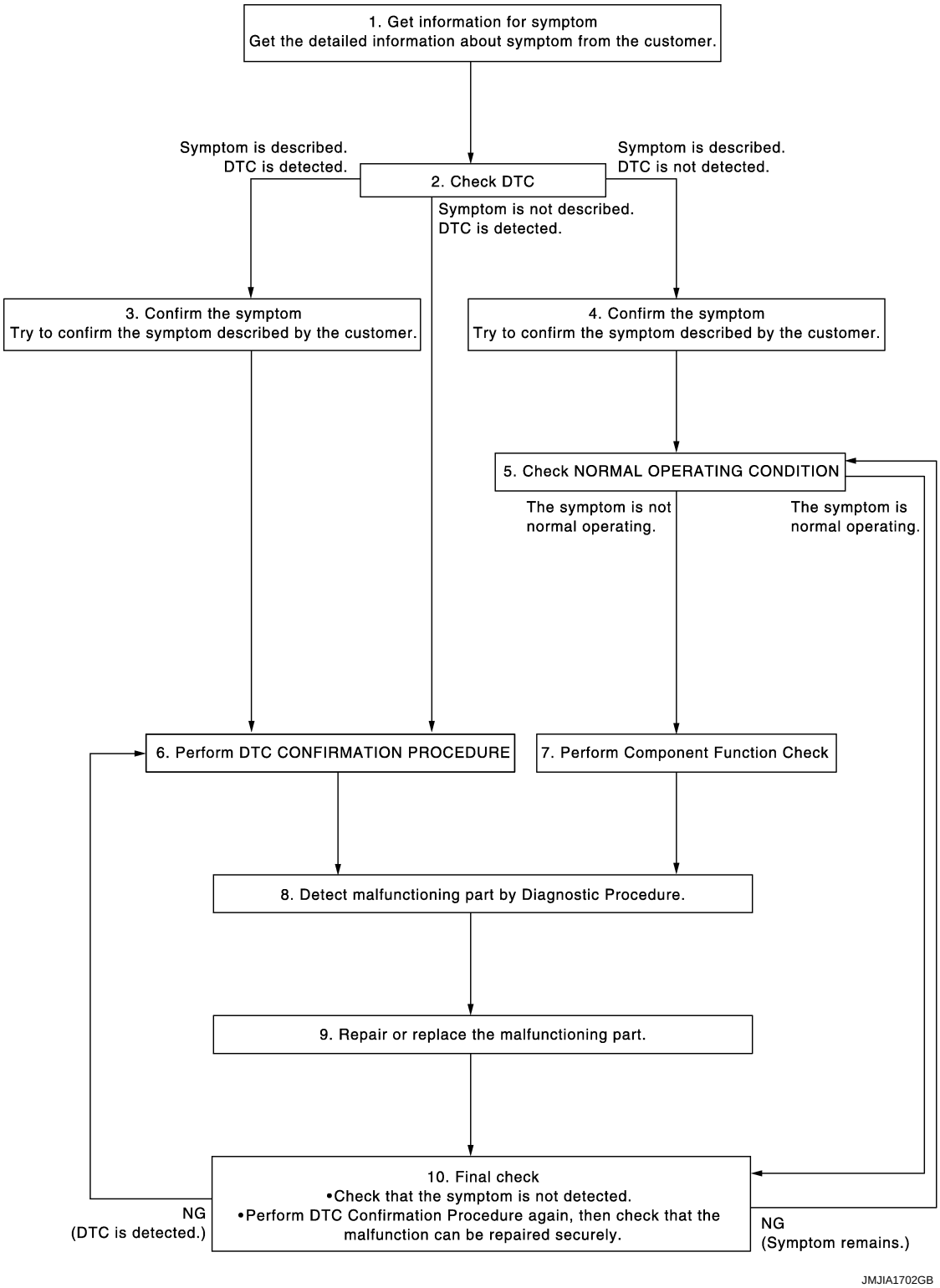
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000005515262

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check “Self Diagnostic Result” with CONSULT-III. Refer to ADP-133, "DTC Index"

Is any symptom described and any DTC is displayed?

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 6.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

>> GO TO 5.

5.CHECK NORMAL OPERATING CONDITION

Check normal operating condition. Refer to ADP-206, "Description".

Is the incident normal operation?

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

6.PERFORM DTC CONFIRMATION PROCEDURE

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 8.
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

7.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

8.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

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

>> GO TO 9.

9.REPARE OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the malfunctioning part.

>> GO TO 10.

10.FINAL CHECK

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

Are all malfunctions corrected?

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

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:0000000005515263

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

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

*1: Default value is 40mm.

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000005515264

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-9, "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2.SYSTEM SETTING

Perform system setting. Refer to ADP-11, "SYSTEM SETTING : Description".

>> GO TO 3.

3.MEMORY STORAGE

Perform memory storage. Refer to ADP-9, "MEMORY STORING : Description".

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:0000000005515265

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

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

*1: Default value is 40mm.

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

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Re-

quirement

INFOID:0000000005515266

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-9, "SYSTEM INITIALIZATION : Description".

>> GO TO 2.

2.SYSTEM SETTING

Perform system setting. Refer to ADP-11, "SYSTEM SETTING : Description".

>> GO TO 3.

3.MEMORY STORAGE

Perform memory storage. Refer to ADP-9, "MEMORY STORING : Description".

>> END

SYSTEM INITIALIZATION

SYSTEM INITIALIZATION : Description

INFOID:0000000005515267

Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced.
The entry/exit assist function will not operate normally if no initialization is performed.

SYSTEM INITIALIZATION : Special Repair Requirement

INFOID:0000000005515268

INITIALIZATION PROCEDURE

1. CHOOSE METHOD

There are two initialization methods.
Which method do you use?
With door switch>>GO TO 2.
With vehicle speed>>GO TO 4.

2. STEP A-1

Turn ignition switch from ACC to OFF position.

>> GO TO 3.

3. STEP A-2

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

>> END

4. STEP B-1

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

>> END

MEMORY STORING

MEMORY STORING : Description

INFOID:0000000005515269

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

MEMORY STORING : Special Repair Requirement

INFOID:0000000005515270

Memory Storage Procedure

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

1.STEP 1

Shift AT selector lever to P position.

>> GO TO 2.

2.STEP 2

Turn ignition switch ON.

>> GO TO 3.

3.STEP 3

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

>> GO TO 4.

4.STEP 4

1. Push set switch.
   NOTE:
   - Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
   - Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second.
2. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.
   NOTE:
   - To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.
   - To modify driver seat positions, memory indicator will be turned OFF for 0.5 second, then turned ON for 5 seconds.

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

Do you need linking of Intelligent Key?

YES >> GO TO 6.
NO >> GO TO 5.

5.STEP 5

Confirm the operation of each part with memory operation.

>> END

6.STEP 6

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

>> GO TO 7.

7.STEP 7

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

>> END

SYSTEM SETTING

SYSTEM SETTING : Description

INFOID:0000000005515271

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

Setting Change

×: Applicable

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

SYSTEM SETTING : Special Repair Requirement

INFOID:0000000005515272

1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

With display>>GO TO 2.
With set switch>>GO TO 4.
With CONSULT-III>>GO TO 6.

2. WITH DISPLAY - STEP 1

Turn ignition switch ON.

>> GO TO 3.

3. WITH DISPLAY - STEP 2

1. Push “SETTING” button.
2. Select “Comfort & convenience”.
3. Select “Lift Steering Wheel ON Exit”or “Slide Driver’s Seat Back ON Exit” on display, then push

- Lift Steering Wheel ON Exit: Entry/exit assist (steering column)
- Slide Driver's Seat Back On Exit: Entry/exit assist (seat)

>> END

4. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

>> GO TO 5.

5. WITH SET SWITCH - STEP 2

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

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

>> END

6. WITH CONSULT-III - STEP 1

Select “Work support”.

>> GO TO 7.

7. WITH CONSULT-III - STEP 2

1. Select “EXIT SEAT SLIDE SETTING”, “EXIT TILT SETTING” or “SEAT SLIDE VOLUME SET” then touch display to change between ON and OFF.
- EXIT SEAT SLIDE SETTING: Entry/exit assist (seat)
- EXIT TILT SETTING: Entry/exit assist (steering column)
2. Then touch “OK”.

>> END

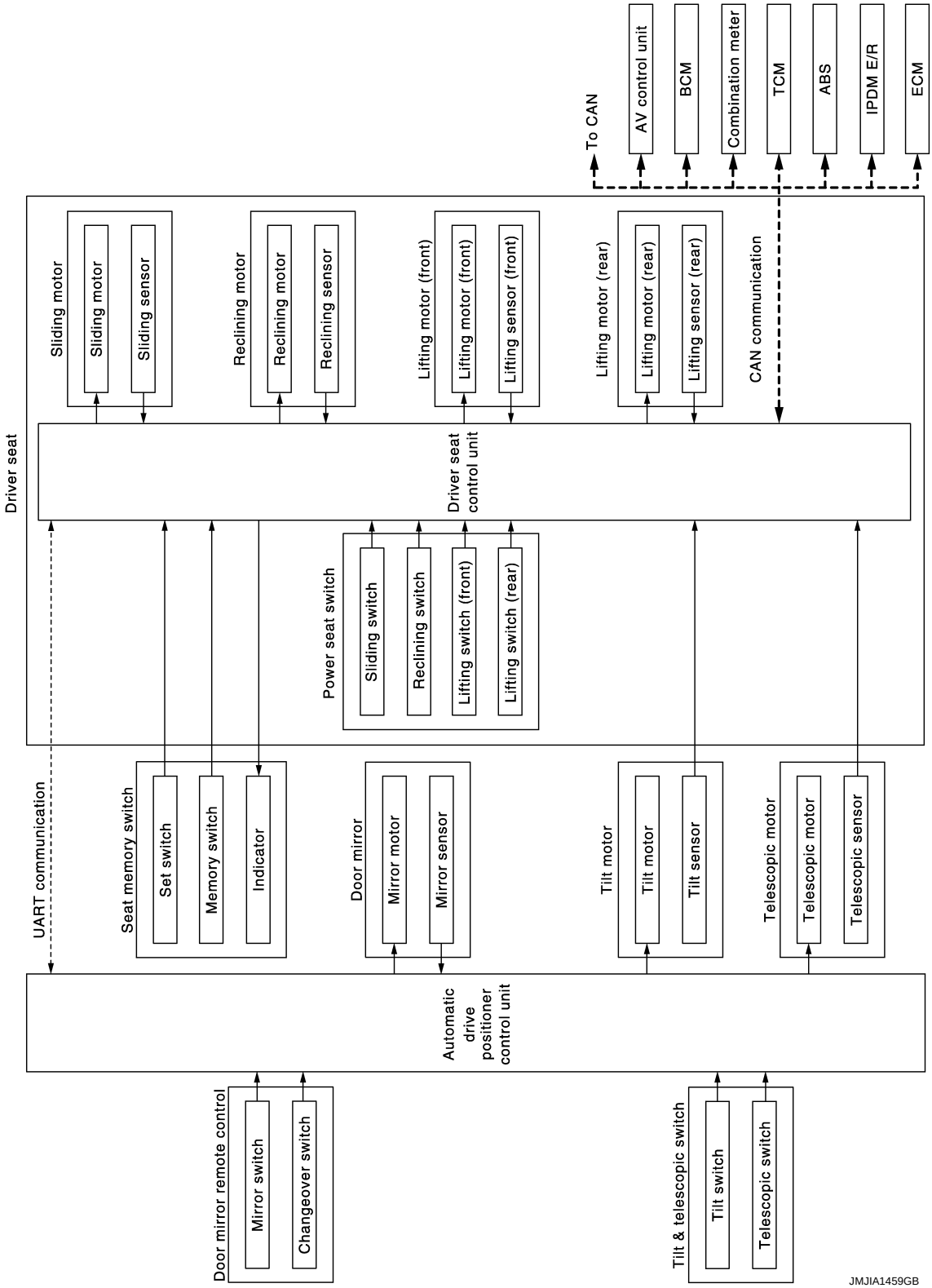
SYSTEM DESCRIPTION

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram

INFOID:0000000005515273



AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:0000000005515274

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.

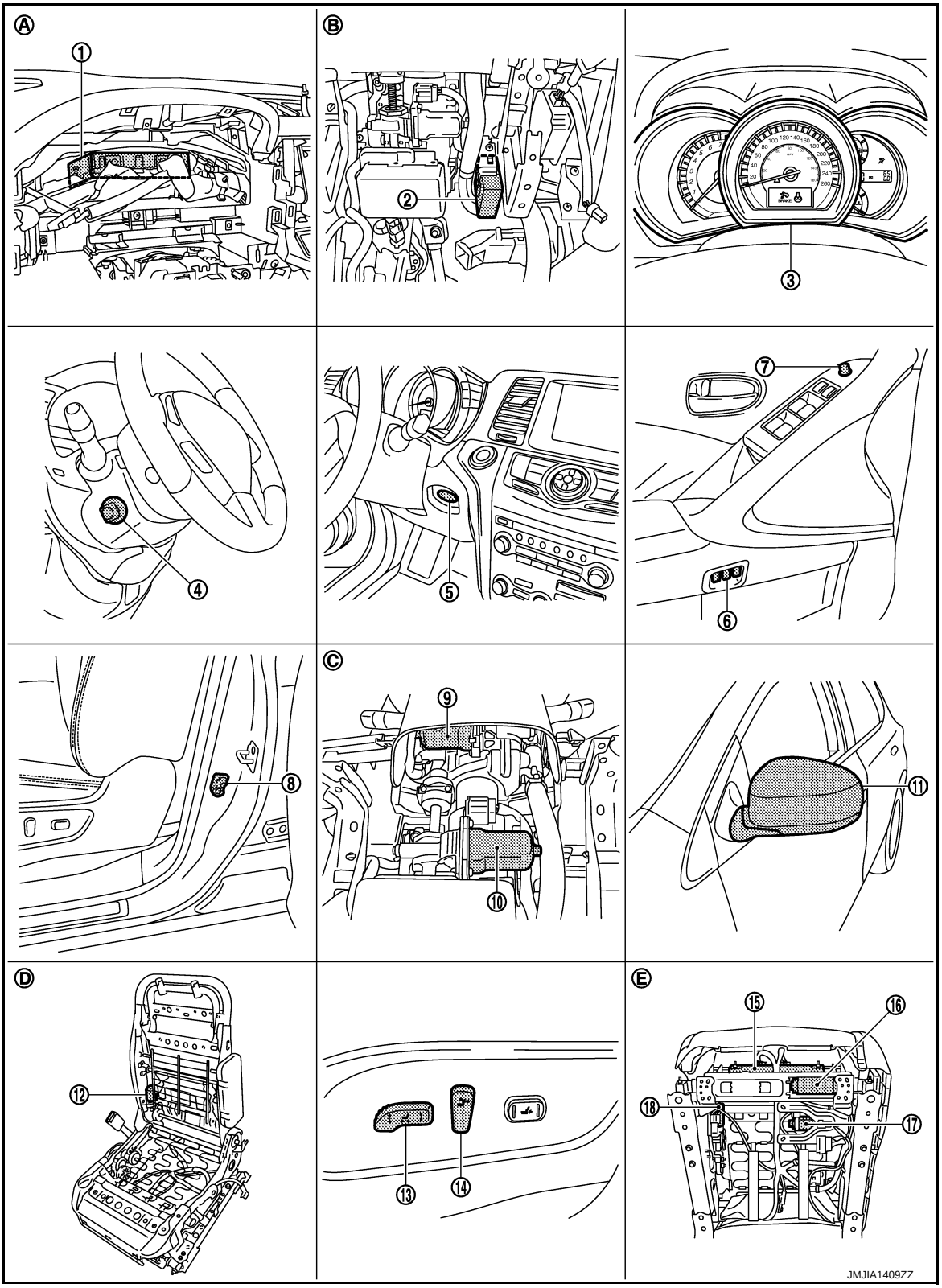
Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, tilt & telescopic switch or door mirror remote control switch.
Memory function		The seat, steering column and door mirror move to the stored driving 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 and the side support system are controlled independently with no link to the automatic drive positioner system.

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Parts Location

INFOID:0000000005515275



1. BCM M118, M119, M122, M123
2. Automatic drive positioner control unit M75, M104
3. Combination meter
4. Tilt & telescopic switch M102
5. Key slot M99
6. Seat memory switch D13
7. Door mirror remote control switch D14
8. Front door switch (driver side) B34
9. Tilt motor M116

10. Telescopic motor M117
11. Door mirror (driver side) D3
12. Reclining motor B461
13. Sliding, Lifting switch (Power seat switch B459)
14. Reclining switch (Power seat switch B459)
15. Driver seat control unit B451,B452
16. Sliding motor B461
17. Lifting motor (front) B455
18. Lifting motor (rear) B456

A. Behind the combination meter
B. View with instrument driver lower panel removed
C. View with instrument driver lower panel removed
D. View with seat cushion and seatback pad removed
E. Backside of the seat cushion

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description

INFOID:0000000005515276

CONTROL UNITS

Item	Function
Driver seat control unit	• Main units of automatic drive positioner system • It is connected to the CAN. • It communicates with the automatic drive positioner control 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 tilt & telescopic, door mirror switch.
BCM	Transmit the following status to the driver seat control unit via CAN communication. • Driver door: OPEN/CLOSE • Ignition switch position: ACC/ON • Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation) • Key ID • Key switch: Insert/Pull out Intelligent Key • Starter: CRANKING/OTHER • Steering lock unit status : Lock/Unlock • Handle position : LHD
Combination meter / ABS	Transmit 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	Transmit 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 (driver side)	Detect front door (driver side) open/close status.
CVT shift selector (detention switch)	Detect the P range position of A/T selector lever.
Set switch	The registration and system setting can be performed with its operation.
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.

Item	Function
Tilt & telescopic 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 (driver side/passenger side)	Detect the up/down and left/right position of outside mirror face.
Tilt and telescopic sensor	Detect the up/down and left/right 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.

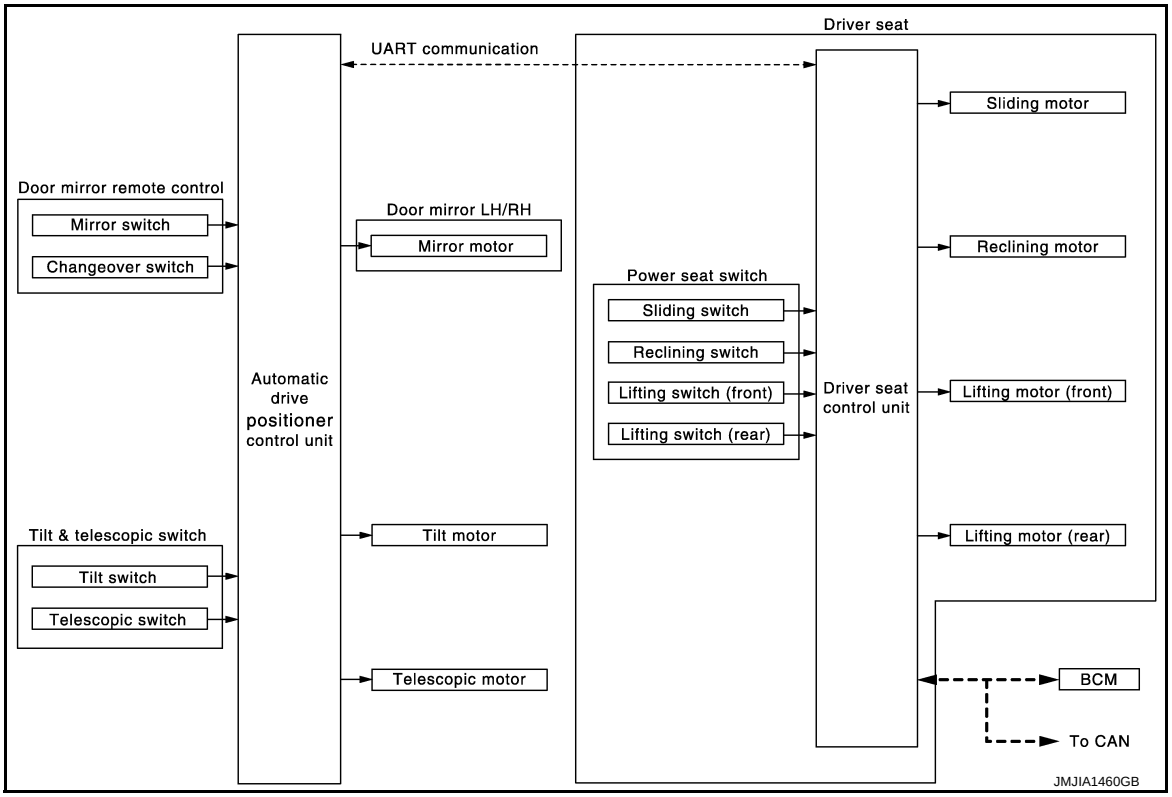
OUTPUT PARTS

Item	Function
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.
Tilt and telescopic motor	Move the steering column upward/downward and frontward/rearward.
Lifting motor (front)	Move the seat lifting (front) upward/downward.
Lifting motor (rear)	Move the seat lifting (rear) upward/downward.
Reclining motor	Tilt and raise up the seatback.
Sliding motor	Slide the seat frontward/rearward.
Memory indicator	Illuminates or flashes according to the registration/operation status.

MANUAL FUNCTION

MANUAL FUNCTION : System Diagram

INFOID:0000000005515277



MANUAL FUNCTION : System Description

INFOID:0000000005515278

OUTLINE

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

OPERATION PROCEDURE

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

NOTE:

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

DETAIL FLOW

Seat

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

Tilt & Telescopic

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

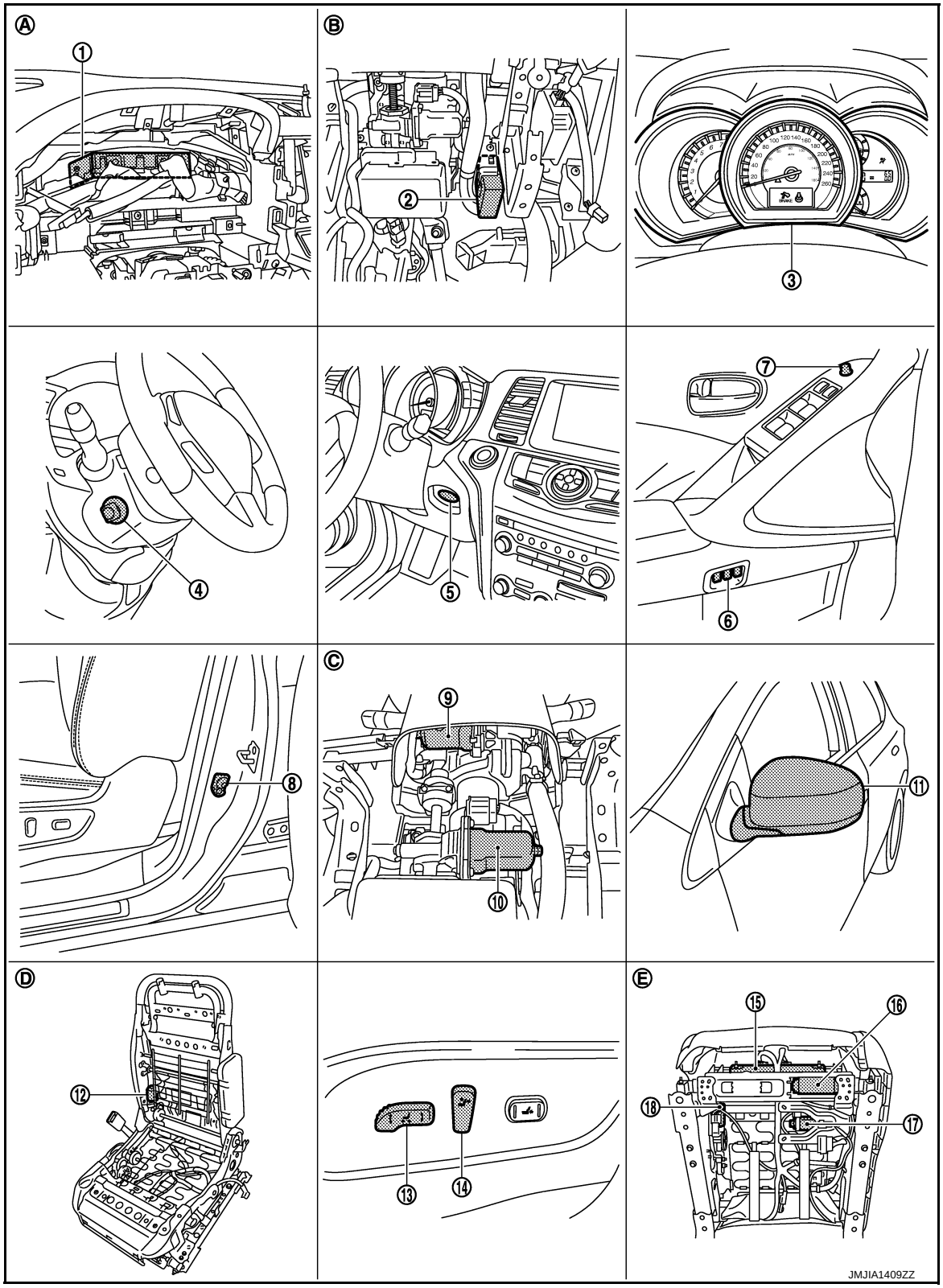
Door Mirror

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.
UART communication line malfunction and CAN communication line malfunction are detected, the door mirror cannot be operated.

MANUAL FUNCTION : Component Parts Location

INFOID:0000000005515279



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3. Combination meter
4. Tilt & telescopic switch M102
5. Key slot M99
6. Seat memory switch D13
7. Door mirror remote control switch D14
8. Front door switch (driver side) B34
9. Tilt motor M116

10. Telescopic motor M117
11. Door mirror (driver side) D3
12. Reclining motor B461
13. Sliding, Lifting switch (Power seat switch B459)
14. Reclining switch (Power seat switch B459)
15. Driver seat control unit B451,B452
16. Sliding motor B461
17. Lifting motor (front) B455
18. Lifting motor (rear) B456
A. Behind the combination meter
B. View with instrument driver lower panel removed
C. View with instrument driver lower panel removed
D. View with seat cushion and seatback pad removed
E. Backside of the seat cushion

MANUAL FUNCTION : Component Description

INFOID:0000000005515280

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 tilt & telescopic 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.
Tilt & telescopic 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.

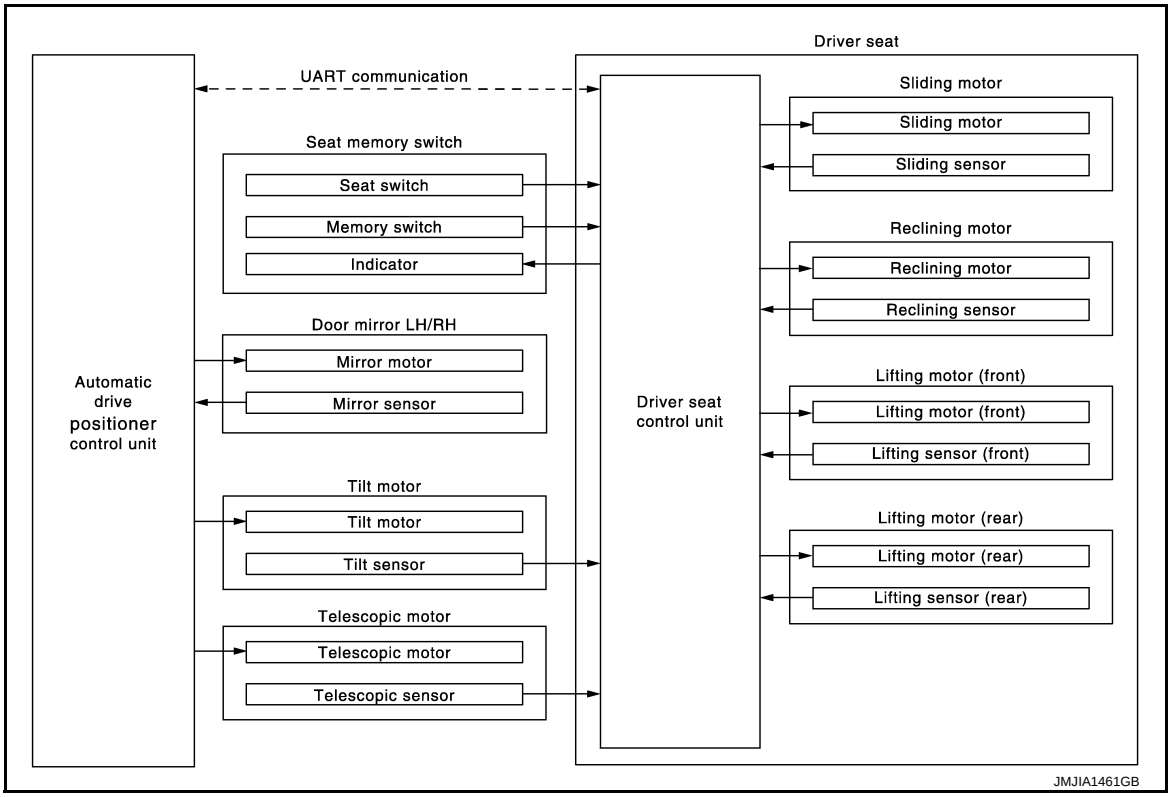
OUTPUT PARTS

Item	Function
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.
Tilt & telescopic motor	Move the steering column upward/downward and frontward/rearward.
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 frontward/rearward.

MEMORY FUNCTION

MEMORY FUNCTION : System Diagram

INFOID:0000000005515281



MEMORY FUNCTION : System Description

INFOID:0000000005515282

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 ADP-9, "MEMORY STORING : Description".

OPERATION PROCEDURE

1. Turn ignition switch ON
2. Shift position P position
3. Press desired memory switch.
4. Driver seat, steering and door mirror will move to the memorized position.

OPERATION CONDITION

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

Item	Request status
Ignition position	ON
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
A/T selector lever	P position

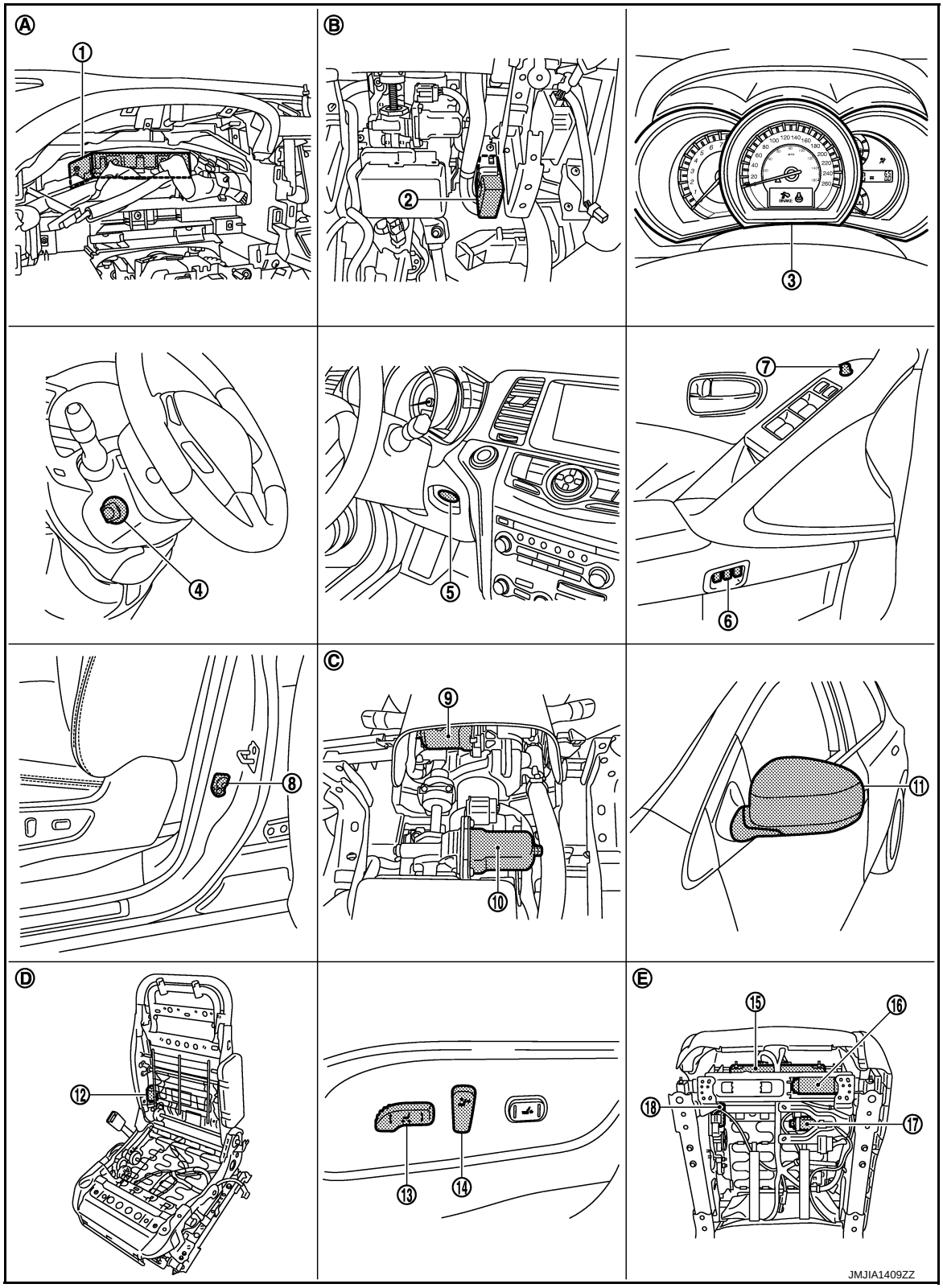
However, the memory operation can be performed for 45 seconds after opening the driver door (driver door switch OFF → ON) even if the ignition switch position is in OFF position.

DETAIL FLOW

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

MEMORY FUNCTION : Component Parts Location

INFOID:0000000005515283



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5. Key slot M99
6. Seat memory switch D13
7. Door mirror remote control switch D14
8. Front door switch (driver side) B34
9. Tilt motor M116

10. Telescopic motor M117
11. Door mirror (driver side) D3
12. Reclining motor B461
13. Sliding, Lifting switch (Power seat switch B459)
14. Reclining switch (Power seat switch B459)
15. Driver seat control unit B451,B452
16. Sliding motor B461
17. Lifting motor (front) B455
18. Lifting motor (rear) B456
A. Behind the combination meter
B. View with instrument driver lower panel removed
C. View with instrument driver lower panel removed
D. View with seat cushion and seatback pad removed
E. Backside of the seat cushion

MEMORY FUNCTION : Component Description

INFOID:0000000005515284

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 mirror to automatic drive positioner control unit
Automatic drive positioner control unit	Operates the steering column and door mirror with the instructions from the driver seat control.

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 (driver side/passenger side)	Detect the up/down and left/right position of outside mirror face.
Tilt & telescopic sensor	Detect the up/down and left/right 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.

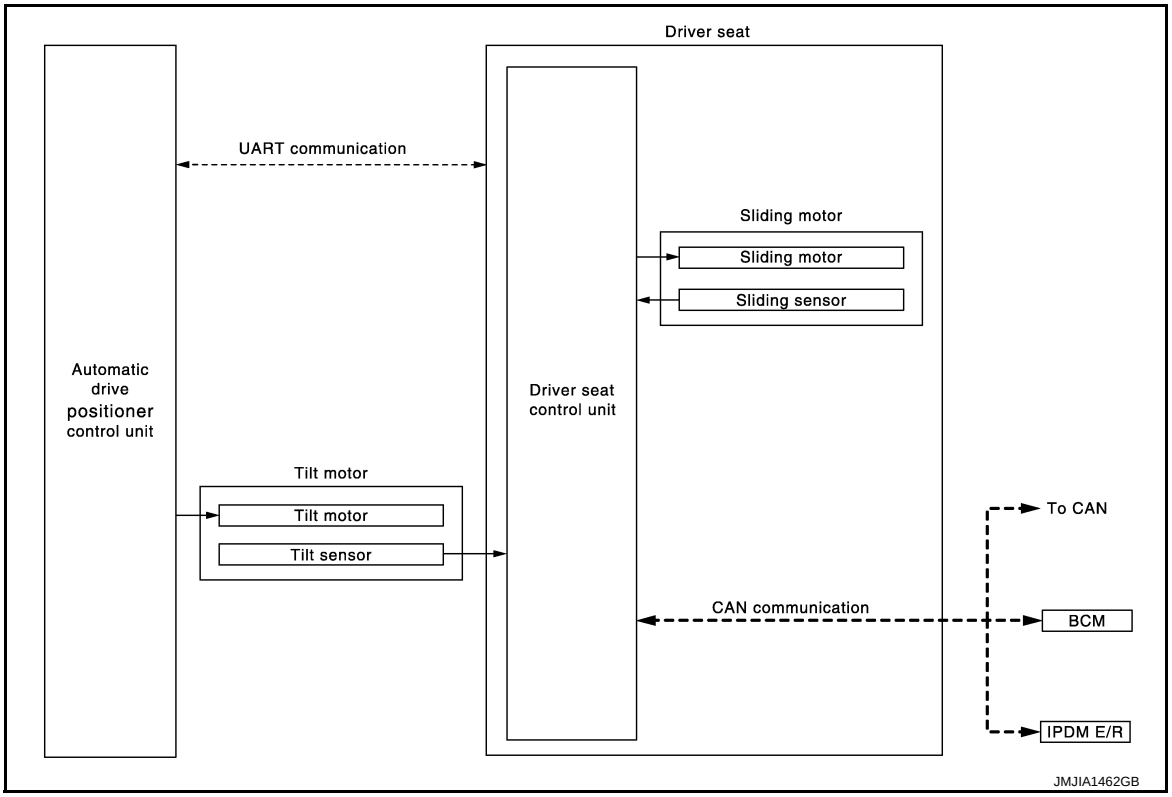
OUTPUT PARTS

Item	Function
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.
Tilt and telescopic motor	Move the steering column upward/downward and frontward/rearward.
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 frontward/rearward.
Memory indicator	Illuminates or blinks according to the registration/operation status.

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Diagram

INFOID:0000000005515285



EXIT ASSIST FUNCTION : System Description

INFOID:0000000005515286

OUTLINE

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

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-9, "SYSTEM INITIALIZATION : Description".

OPERATION PROCEDURE

1. Open the driver door with ignition switch in OFF position.(Intelligent Key is not inserted into key slot)
2. Driver seat and steering column will move to the exiting position.

OPERATION CONDITION

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

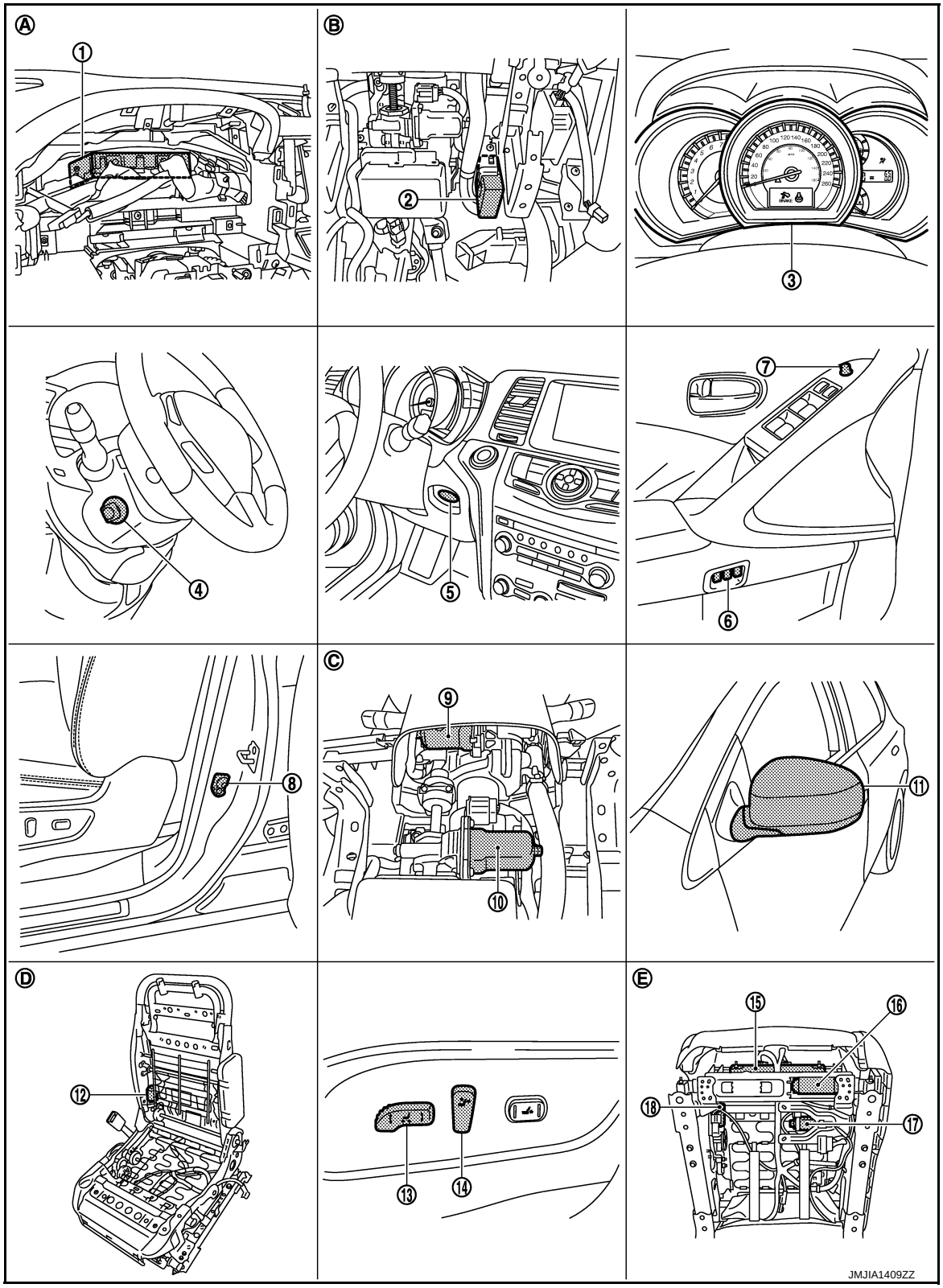
Item	Request status
Ignition position	OFF
System setting [Entry/exit assist function (seat/steering)]	ON
Initialization	Done
Key switch	OFF (Intelligent Key is not inserted into key slot)
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror remote control switch • Set switch • Memory switch	OFF (Not operated)
A/T selector lever	P position

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Door switch (Driver side)	—	Driver seat control unit receives door switch signal (driver side/ open) from BCM via CAN communication.
2	—	Motors (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:0000000005515287



1. BCM M118, M119, M122, M123
2. Automatic drive positioner control unit M75, M104
3. Combination meter
4. Tilt & telescopic switch M102
5. Key slot M99
6. Seat memory switch D13
7. Door mirror remote control switch D14
8. Front door switch (driver side) B34
9. Tilt motor M116

10. Telescopic motor M117
11. Door mirror (driver side) D3
12. Reclining motor B461
13. Sliding, Lifting switch (Power seat switch B459)
14. Reclining switch (Power seat switch B459)
15. Driver seat control unit B451,B452
16. Sliding motor B461
17. Lifting motor (front) B455
18. Lifting motor (rear) B456
A. Behind the combination meter
B. View with instrument driver lower panel removed
C. View with instrument driver lower panel removed
D. View with seat cushion and seatback pad removed
E. Backside of the seat cushion

EXIT ASSIST FUNCTION : Component Description

INFOID:0000000005515288

CONTROL UNITS

Item	Function
Driver seat control unit	• Operates the seat sliding motor for a constant amount. • Requests the operations of tilt motor to automatic drive positioner control unit.
Automatic drive positioner control unit	Operates the tilt motor with the request from the driver seat control.
BCM	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. • Door switch signal (front driver side) • Key switch signal • Ignition switch signal
IPDM E/R	Recognizes the following status and transmits it to the driver seat control unit via CAN communication. • Detent switch signal

INPUT PARTS

Switches

Item	Function
Front door switch (driver side)	Detect front door (driver side) 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.

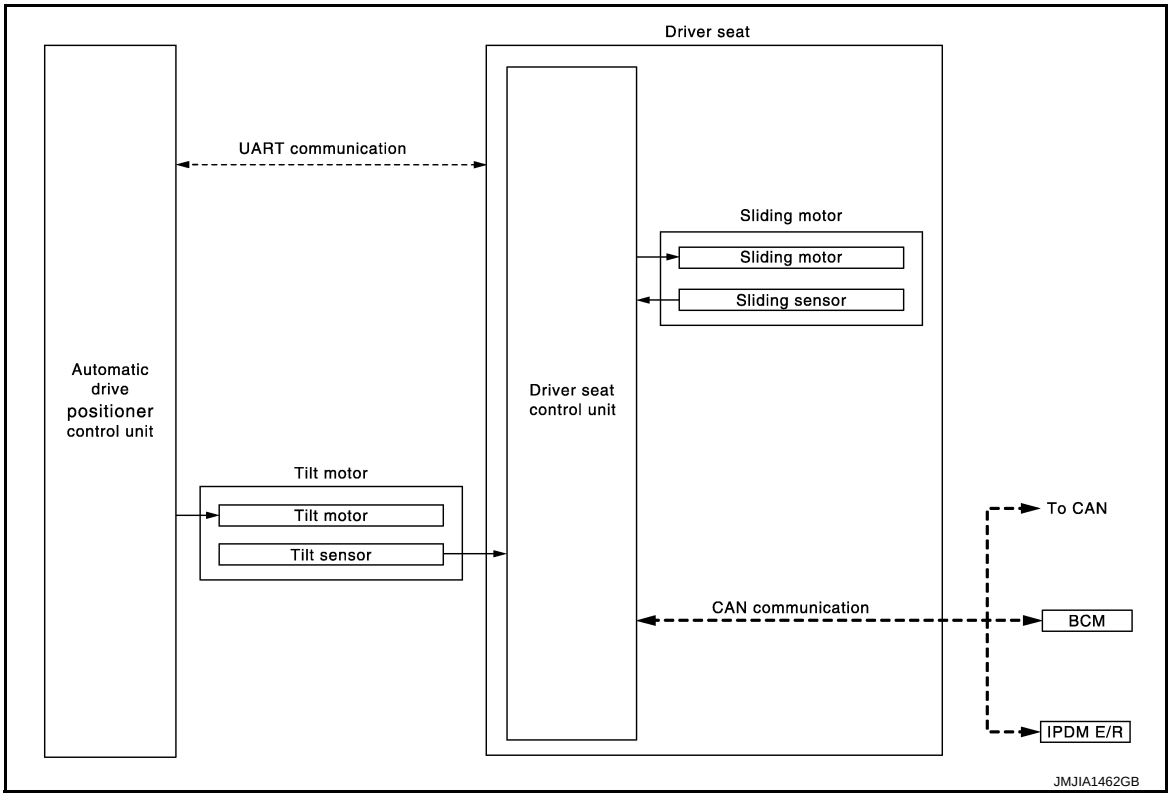
OUTPUT PARTS

Item	Function
Tilt motor	Move the steering column upward/downward.
Sliding motor	Slide the seat frontward/rearward.

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Diagram

INFOID:0000000005515289



ENTRY ASSIST FUNCTION : System Description

INFOID:0000000005515290

OUTLINE

The seat is in the exiting position when 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 ADP-9, "SYSTEM INITIALIZATION : Description".

OPERATION PROCEDURE

1. Turn the ignition switch ACC.
2. Driver seat 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.

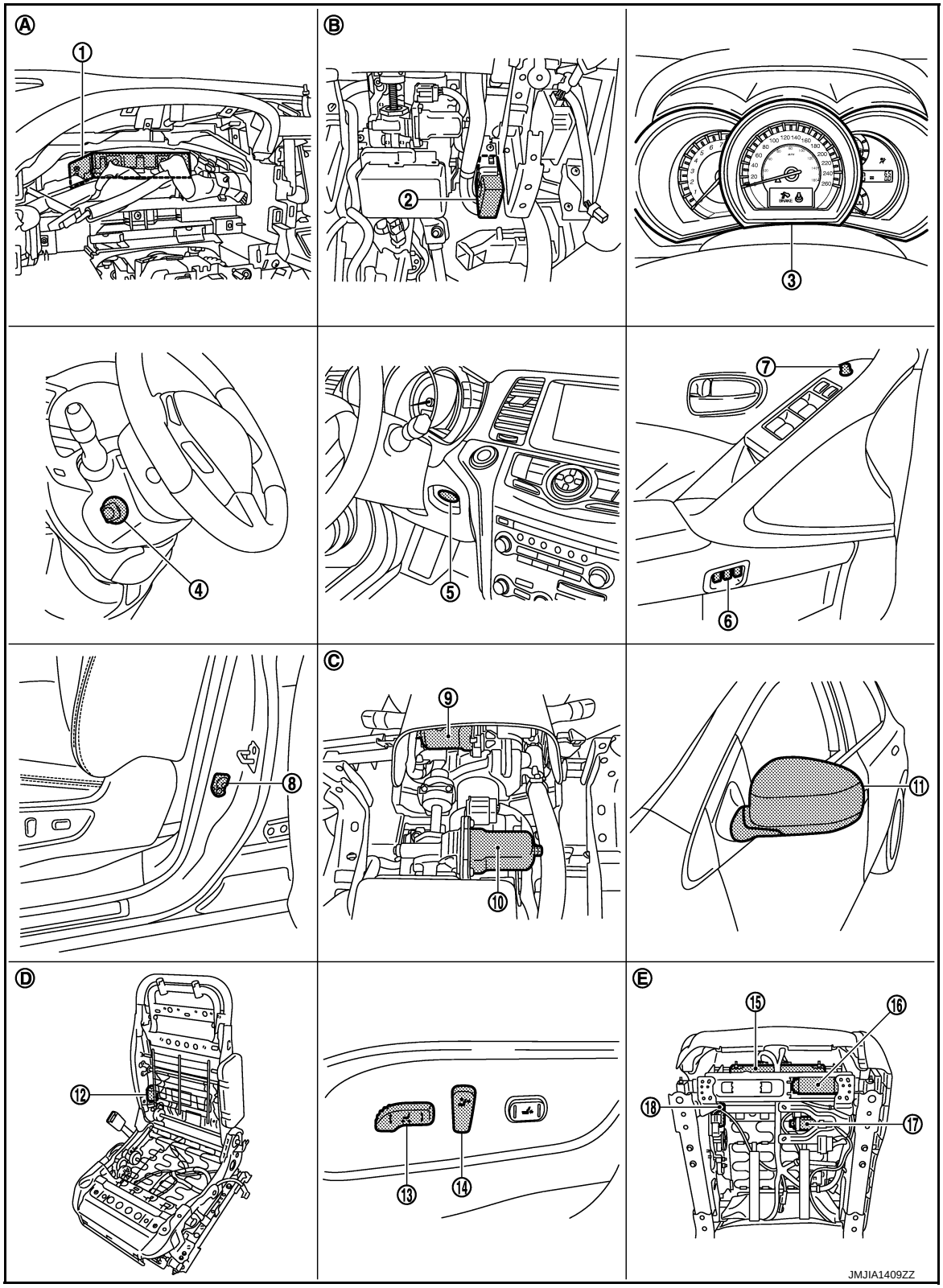
Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)

DETAIL FLOW

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

ENTRY ASSIST FUNCTION : Component Parts Location

INFOID:0000000005515291



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18. Lifting motor (rear) B456
A. Behind the combination meter
B. View with instrument driver lower panel removed
C. View with instrument driver lower panel removed
D. View with seat cushion and seatback pad removed
E. Backside of the seat cushion

ENTRY ASSIST FUNCTION : Component Description

INFOID:0000000005515292

CONTROL UNITS

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

INPUT PARTS

Sensors

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

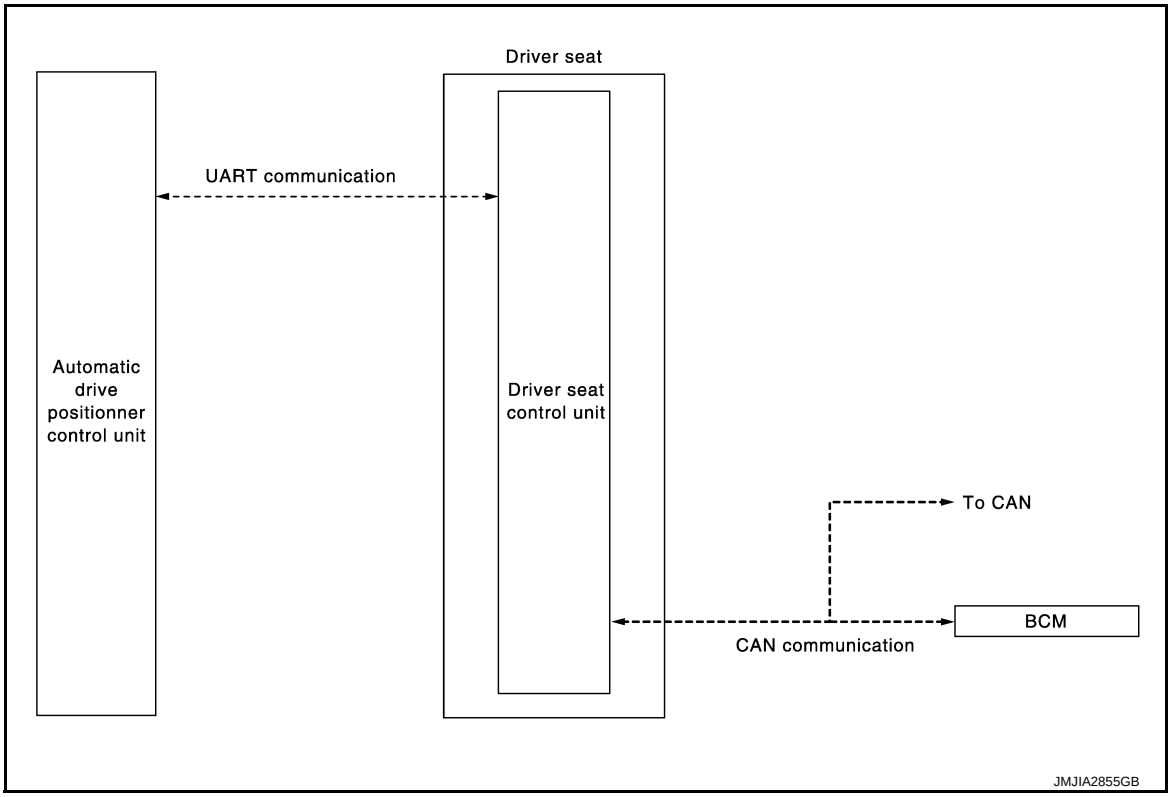
OUTPUT PARTS

Item	Function
Tilt motor	Move the steering column upward/downward.
Sliding motor	Slide the seat frontward/rearward.

INTELLIGENT KEY INTERLOCK FUNCTION

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

INFOID:0000000005515293



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000005515294

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.
After 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 ADP-9, "MEMORY STORING : Description".

OPERATION CONDITION

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

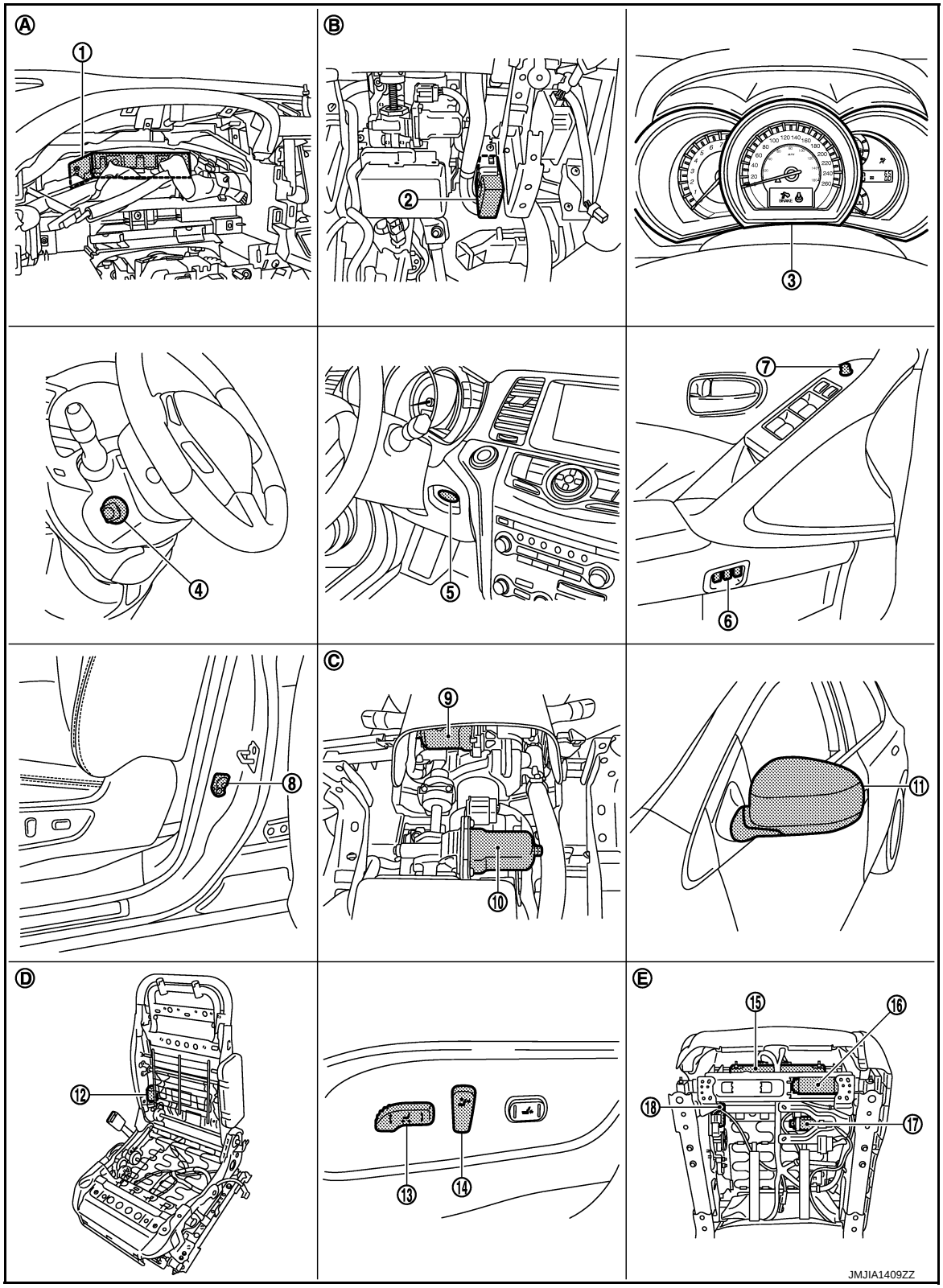
Item	Request status
Ignition position	OFF
Steering lock unit	LOCK
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
A/T selector lever	P position

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:0000000005515295



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16. Sliding motor B461
17. Lifting motor (front) B455
18. Lifting motor (rear) B456
A. Behind the combination meter
B. View with instrument driver lower panel removed
C. View with instrument driver lower panel removed
D. View with seat cushion and seatback pad removed
E. Backside of the seat cushion

INTELLIGENT KEY INTERLOCK FUNCTION : Component Description

INFOID:0000000005515296

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 mirror 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 CONTROL UNIT)

Diagnosis Description

INFOID:0000000005515297

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

DIAGNOSTIC MODE

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

CONSULT-III Function

INFOID:0000000005515298

SELF-DIAGNOSIS RESULTS

Refer to ADP-133, "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 SW 1	“ON/OFF”	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	“ON/OFF”	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW–RR	“ON/OFF”	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW–RR	“ON/OFF”	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch front (up) signal.
LIFT FR SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW–UP	“ON/OFF”	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW–DN	“ON/OFF”	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW–RH	“ON/OFF”	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
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 tilt switch (up) signal.
TILT SW-DOWN	“ON/OFF”	×	×	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	“ON/OFF”	×	×	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	“ON/OFF”	×	×	ON/OFF status judged from the telescoping switch (backward) signal.
DETENT SW	“ON/OFF”	×	×	The selector lever position “OFF (P position) / ON (other than P position)” judged from the detention switch signal.
STARTER SW	“ON/OFF”	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SLIDE PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U–D	“V”	–	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R–L	“V”	–	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U–D	“V”	–	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R–L	“V”	–	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TELESCO PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
VEHICLE SPEED	—	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
P RANG SW CAN	“ON/OFF”	×	×	ON/OFF status judged from the P range switch signal.
R RANGE (CAN)	“ON/OFF”	×	×	ON/OFF status judged from the R range switch signal.
DOOR SW–FL	“ON/OFF”	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW–FR	“ON/OFF”	×	×	ON/OFF status judged from the door switch (front passenger side) signal.
IGN ON SW	“ON/OFF”	×	×	ON/OFF status judged from the ignition switch signal.
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.

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
KEYLESS ID	—	×	×	Key ID status judged from the key ID signal.
KYLS DR UNLK	“ON/OFF”	×	×	ON/OFF status judged from the driver side door unlock actuator output switch signal.
VHCL SPEED (ABS)	“ON/OFF”	×	×	ON/OFF status judged from vehicle speed signal.
HANDLE	“RHD/LHD”	×	×	RHD/LHD status judged from handle position signal.
TRANSMISSION	“AT or CVT/MT”	×	×	AT or CVT/MT status judged from transmission.
STEERING STATUS	“LOCK/UNLOCK”	×	×	LOCK/UNLOCK status judged from steering lock unit.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

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

WORK SUPPORT

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

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:0000000005515299

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

DTC Logic

INFOID:0000000005515300

DTC DETECTION LOGIC

DTC No.	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-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-41, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005515301

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

Special Repair Requirement

INFOID:0000000005515302

Refer to ADP-9, "SYSTEM INITIALIZATION : Description".

U1010 CONTROL UNIT (CAN)

Description

INFOID:0000000005515303

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart, refer to LAN-27, "CAN Communication Signal Chart".

DTC Logic

INFOID:0000000005515304

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:0000000005515305

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.Refer to ADP-209, "Removal and Installation".

B2130 EEPROM

DTC Logic

INFOID:0000000005515306

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.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check “Self diagnostic result” with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-43, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005515307

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.
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-39, "Intermittent Incident".

2.REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

>> INSPECTION END

B2112 SLIDING MOTOR

Description

INFOID:0000000005515308

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

DTC Logic

INFOID:0000000005515309

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check “Self diagnostic result” with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-44, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005515310

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-44, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-39, "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		
B461	50	Ground	0
	51		

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		
B451	3	Ground	0
	4		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation"

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

Description

INFOID:0000000005515311

- The reclining motor is installed to the seatback frame.
- The reclining motor is activated with the driver seat control unit.
- Tilts the seatback frontward/rearward by changing the rotation direction of reclining motor.

DTC Logic

INFOID:0000000005515312

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check “Self diagnostic result” with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-46, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005515313

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-46, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-39, "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		
B454	52	Ground	0
	53		

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		
B451	5	Ground	0
	6		

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2116 TILT MOTOR

Description

INFOID:0000000005515314

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

DTC Logic

INFOID:0000000005515315

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2116	STEERING TILT	The automatic drive positioner control unit detects the output of reclining motor output terminal for 0.1 second or more even if the tilt switch is not input.	• Automatic drive positioner control unit • Tilt motor harness is shorted

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.STEP 2

Check “Self diagnostic result” with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-48, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005515316

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-48, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-39, "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		
M116	1	Ground	0
	2		

Is the inspection result normal?

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

3.CHECK AUTOMATIC DRIVER POSITIONER CONROL UNIT OUTPUT SIGNAL

1. Connect automatic drive positioner control unit connector.

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

(+)		(–)	Voltage (V) (Approx.)
Automatic drive positioner control unit			
Connector	Terminals		
M104	28	Ground	0
	29		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

B2128 UART COMMUNICATION LINE

Description

INFOID:0000000005515317

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

DTC Logic

INFOID:0000000005515318

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.PROCEDURE

Check “Self diagnostic result” with CONSULT-III.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to ADP-50, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005515319

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self diagnostic result” with CONSULT-III.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to ADP-48, "DTC Logic".

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

2.CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit		Automatic drive positioner control unit		Continuity
Connector	Terminal	Connector	Terminal	
B452	32	M75	8	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	32		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness or connector.

POWER SUPPLY AND GROUND CIRCUIT
DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:0000000005515320

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B451	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK GROUND CIRCUIT

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B451	2		Existed

Is the inspection result normal?

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

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:0000000005515321

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:0000000005515322

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

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage (V) (Approx.)
Automatic drive positioner control unit			
Connector	Terminals		
M104	25	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK GROUND CIRCUIT

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

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

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:0000000005515323

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

SLIDING SWITCH

Description

INFOID:0000000005515324

Sliding switch is equipped to the power seat switch on the seat cushion side surface. The operation signal is inputted to the driver seat control unit when the sliding switch is operated.

Component Function Check

INFOID:0000000005515325

1.CHECK FUNCTION

1. Select “SLIDE SW-FR”, “SLIDE SW-RR” in “Data monitor” mode with CONSULT-III.
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-54, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515326

1.CHECK SLIDING SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Power seat switch			
Connector	Terminals		
B459	11	Ground	Battery voltage
	12		

Is the inspection result normal?

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

2.CHECK SLIDING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B452	11	B459	11	Existed
	12		12	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	11		Not existed
	12		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to ADP-55, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515327

1.CHECK SLIDING SWITCH

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

Power seat switch (Sliding switch)		Condition		Continuity
Terminal				
35	11	Sliding switch (backward)	Operate	Existed
			Release	Not existed
	12	Sliding switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

RECLINING SWITCH

Description

INFOID:0000000005515328

Reclining switch is equipped to the power seat switch on the seat cushion side surface. The operation signal is inputted to the driver seat control unit when the reclining switch is operated.

Component Function Check

INFOID:0000000005515329

1.CHECK FUNCTION

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

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

Is the indication normal?

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

Diagnosis Procedure

INFOID:0000000005515330

1.CHECK RECLINING SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Power seat switch			
Connector	Terminals		
B459	13	Ground	Battery voltage
	14		

Is the inspection result normal?

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

2.CHECK RECLINING SWITCH CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B452	13	B459	13	Existed
	14		14	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	13		Not existed
	14		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK RECLINING SWITCH

Refer to ADP-57, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515331

1.CHECK RECLINING SWITCH

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

Power seat switch (Reclining switch)		Condition		Continuity
Terminal				
35	13	Reclining switch (backward)	Operate	Existed
			Release	Not existed
	14	Reclining switch (forward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

LIFTING SWITCH (FRONT)

Description

INFOID:0000000005515332

Lifting switch (front) is equipped to the power seat switch on the seat cushion side surface. The operation signal is inputted to the driver seat control unit when the lifting switch (front) is operated.

Component Function Check

INFOID:0000000005515333

1.CHECK FUNCTION

1. Select “LIFT FR SW-UP”, “LIFT FR SW-DN” in “Data monitor” mode with CONSULT-III.
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-58, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515334

1.CHECK LIFTING SWITCH (FRONT) SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Power seat switch			
Connector	Terminals		
B459	17	Ground	Battery voltage
	18		

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (FRONT) CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B452	17	B459	17	Existed
	18		18	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	17		Not existed
	18		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-59, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515335

1.CHECK LIFTING SWITCH (FRONT)

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

Power seat switch (lifting switch front)		Condition		Continuity
Terminal				
35	17	Lifting switch front (down)	Operate	Existed
			Release	Not existed
	18	Lifting switch front (up)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

LIFTING SWITCH (REAR)

Description

INFOID:0000000005515336

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

Component Function Check

INFOID:0000000005515337

1.CHECK FUNCTION

1. Select “LIFT RR SW-UP”, “LIFT RR SW-DN” in “Data monitor” mode with CONSULT-III.
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-60, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515338

1.CHECK LIFTING SWITCH (REAR) SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Power seat switch			
Connector	Terminals		
B459	15	Ground	Battery voltage
	16		

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (REAR) CIRCUIT

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

Driver seat control unit		Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	
B452	15	B459	15	Existed
	16		16	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	15		Not existed
	16		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-61, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515339

1.CHECK LIFTING SWITCH (REAR)

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

Power seat switch (lifting switch rear)		Condition		Continuity
Terminal				
35	15	Lifting switch rear (up)	Operate	Existed
			Release	Not existed
	16	Lifting switch rear (down)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace power seat switch. Refer to ADP-212, "Removal and Installation".

TILT SWITCH

Description

INFOID:0000000005515340

Tilt switch is equipped to the steering column. The operation signal is inputted to the automatic drive positioner control unit when the tilt switch is operated.

Component Function Check

INFOID:0000000005515341

1.CHECK FUNCTION

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

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

Is the indication normal?

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

Diagnosis Procedure

INFOID:0000000005515342

1.CHECK TILT SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Tilt & telescopic switch			
Connector	Terminals		
M102	2	Ground	Battery voltage
	3		

Is the inspection result normal?

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

2.CHECK TILT SWITCH CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	
M75	1	M102	2	Existed
	13		3	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	1		Not existed
	13		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK TILT SWITCH

Refer to ADP-63, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace tilt & telescopic switch. Refer to ADP-213, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515343

1.CHECK TILT SWITCH

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

Tilt switch		Condition		Continuity
Terminal				
1	2	Tilt switch (upward)	Operate	Existed
			Release	Not existed
	3	Tilt switch (downward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace tilt & telescopic switch. Refer to ADP-213, "Removal and Installation".

TELESCOPIC SWITCH

Description

INFOID:0000000005515344

Telescopic switch is equipped to the steering column. The operation signal is inputted to the automatic drive positioner control unit when the telescopic switch is operated.

Component Function Check

INFOID:0000000005515345

1.CHECK FUNCTION

1. Select “TELESCO SW-FR”, “TELESCO SW-RR” in “Data monitor” mode with CONSULT-III.
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-64, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515346

1.CHECK TELESCOPIC SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Tilt & telescopic switch			
Connector	Terminals		
M102	5	Ground	Battery voltage
	4		

Is the inspection result normal?

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

2.CHECK TELESCOPIC SWITCH CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector	Terminal	
M75	7	M102	5	Existed
	19		4	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	7		Not existed
	19		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC SWITCH

Refer to ADP-65, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace tilt & telescopic switch. Refer to ADP-213, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515347

1.CHECK TELESCOPIC SWITCH

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

Telescopic switch		Condition		Continuity
Terminal				
1	5	Telescopic switch (forward)	Operate	Existed
			Release	Not existed
	4	Telescopic switch (backward)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace tilt & telescopic switch. Refer to ADP-213, "Removal and Installation".

SEAT MEMORY SWITCH

Description

INFOID:0000000005515348

Memory switch and set switch is equipped on the seat memory switch installed to the driver side door trim. The operation signal is inputted to the driver seat control unit when the memory switch and set switch is operated.

Component Function Check

INFOID:0000000005515349

1.CHECK FUNCTION

1. Select “MEMORY SW 1”, “MEMORY SW 2”, “SET SW” in “Data monitor” mode with CONSULT-III.
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-66, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515350

1.CHECK SEAT MEMORY SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Driver seat control unit			
Connector	Terminals		
B452	27	Ground	5
	28		
	29		

Is the inspection result normal?

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

2.CHECK MEMORY SWITCH CIRCUIT

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B452	27	D13	1	Existed
	28		2	
	29		3	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	27		Not existed
	28		
	29		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

Seat memory switch		Ground	Continuity
Connector	Terminal		
D13	4		Existed

Is the inspection result normal?

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

4.CHECK SEAT MEMORY SWITCH

Refer to ADP-67, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace seat memory switch. Refer to ADP-211, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515351

1.CHECK SEAT MEMORY SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace seat memory switch. Refer to ADP-211, "Removal and Installation".

DOOR MIRROR REMOTE CONTROL SWITCH
CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:0000000005515352

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:0000000005515353

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.
NO >> Refer to ADP-69, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000005515354

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Door mirror remote control switch			
Connector	Terminal		
D14	10	Ground	5
	11		

Is the inspection result normal?

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

2.CHECK CHANGEOVER SWITCH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer toADP-210, "Removal and Installation" .
NO >> Repair or replace harness.

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

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

4.CHECK CHANGEOVER SWITCH

Check door mirror remote control switch (changeover switch).
Refer to ADP-70, "CHANGEOVER SWITCH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace door mirror remote control switch (changeover switch). Refer to MIR-75, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000005515355

1.CHECK CHANGEOVER SWITCH

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

Door mirror remote control switch			Condition		Continuity
Connector	Terminal				
D14	10	7	Changeover switch	LEFT	Existed
				Other than above	Not existed
	11			RIGHT	Existed
				Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror remote control switch. Refer to MIR-75, "Removal and Installation".

MIRROR SWITCH

MIRROR SWITCH : Description

INFOID:0000000005515356

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:0000000005515357

1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Mirror switch function is OK.
NO >> Refer to ADP-71, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000005515358

1.CHECK MIRROR SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Door mirror remote control switch			
Connector	Terminal		
D14	4	Ground	5
	12		
	13		
	15		

Is the inspection result normal?

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

2.CHECK MIRROR SWITCH CIRCUIT

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

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

Is the inspection result normal?

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

4.CHECK MIRROR SWITCH

Check door mirror remote control switch (mirror switch).
Refer to ADP-72, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace door mirror remote control switch (mirror switch). Refer to MIR-75, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:0000000005515359

1.CHECK MIRROR SWITCH

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

Door mirror remote control switch			Condition		Continuity
Connector	Terminal				
D14	4	7	Mirror switch	RIGHT	Existed
				Other than above	Not existed
	13			LEFT	Existed
				Other than above	Not existed
	15			UP	Existed
				Other than above	Not existed
	12			DOWN	Existed
				Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror remote control switch. Refer to MIR-75, "Removal and Installation".

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000005515360

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

Power seat switch		Ground	Continuity
Connector	Terminal		
B459	35		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness or connector.

TILT &TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000005515361

1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

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

Tilt & telescopic switch		Ground	Continuity
Connector	Terminal		
M102	1		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> Repair or replace harness.

FRONT DOOR SWITCH (DRIVER SIDE)

Description

INFOID:0000000005515362

Detects front door (driver side) open/close condition.

Component Function Check

INFOID:0000000005515363

1.CHECK FUNCTION

1. Select “DOOR SW-DR” in “Data monitor” mode with CONSULT-III.
2. Check the front door switch (driver side) signal under the following conditions.

Monitor item	Condition		Status
DOOR SW-DR	Front door switch (driver side)	Open	ON
		Close	OFF

Is the inspection result normal?

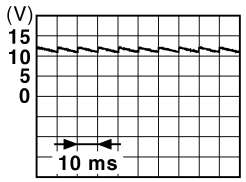
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-76, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515364

1.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door switch (driver side) connector.
3. Check signal between BCM connector and ground with oscilloscope.

(+)		(–)	Signal (Reference value)
Front door switch(driver side)			
Connector	Terminals		
B34	2	Ground	

JPMIA0011GB

Is the inspection result normal?

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

2.CHECK FRONT DOOR SWITCH (DRIVER SIDE) CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and front door switch (driver side) connector.

BCM		Front door switch(driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M123	150	B34	2	Existed

3. Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	150		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Exploded View".
NO >> Repair or replace harness or connector.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Refer to ADP-77, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace front door switch (driver side).Refer to DLK-360, "Removal and Installation"

4.CHECK INTERMITTENT INCIDENT

Refer to GI-39, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000005515365

1.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

1. Turn ignition switch OFF.
2. Disconnect front door switch (driver side) connector.
3. Check continuity between front door switch (driver side) terminals.

Terminal		Condition		Continuity
Front door switch (driver side)				
2	Ground part of door switch	Front door switch (driver side)	Pushed	Not existed
			Released	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace front door switch (driver side).Refer to DLK-360, "Removal and Installation".

SLIDING SENSOR

Description

INFOID:0000000005515366

- The sliding sensor is installed to the seat cushion frame.
- The pulse signal is inputted 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:0000000005515367

1.CHECK FUNCTION

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

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

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

Is the indication normal?

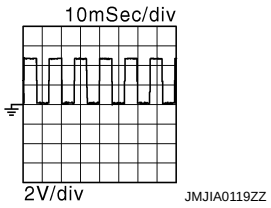
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-78, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515368

1.CHECK SLIDING SENSOR SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Signal (Reference value)
Connector	Terminals				
B452	19	Ground	Seat sliding	Operate	 JMJIA0119ZZ
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> GO TO 2.

2.CHECK SLIDING SENSOR CIRCUIT

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B452	19	B461	19	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	19		Not existed

Is the inspection result normal?

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

3. CHECK SLIDING SENSOR POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Sliding motor			
Connector	Terminals		
B461	33	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 connector.
3. Check continuity between driver seat control unit harness connector and sliding motor harness connector.

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B452	33	B461	33	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

5. CHECK SLIDING SENSOR GROUND

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

Sliding motor		Ground	Continuity
Connector	Terminal		
B461	45		Existed

Is the inspection result normal?

YES >> Replace sliding motor.

NO >> Repair or replace harness or connector.

RECLINING SENSOR

Description

INFOID:0000000005515369

- The reclining motor is installed to the seatback frame.
- The pulse signal is inputted 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:0000000005515370

1.CHECK FUNCTION

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

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

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

Is the indication normal?

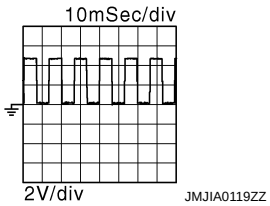
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-81, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515371

1.CHECK RECLINING SENSOR SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Signal (Reference value)
Connector	Terminals				
B452	20	Ground	Seat reclining	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> GO TO 2.

2.CHECK RECLINING SENSOR CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B452	20	B454	20	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	20		Not existed

Is the inspection result normal?

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

3.CHECK RECLINING SENSOR POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Reclining motor			
Connector	Terminals		
B454	33	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 connector.
3. Check continuity between driver seat control unit harness connector and reclining motor harness connector.

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B452	33	B454	33	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK RECLINING SENSOR GROUND

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

Reclining motor		Ground	Continuity
Connector	Terminal		
B454	46		Existed

Is the inspection result normal?

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

LIFTING SENSOR (FRONT)

Description

INFOID:0000000005515372

- The lifting sensor (front) is installed to the seat cushion frame.
- The pulse signal is inputted 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:0000000005515373

1.CHECK FUNCTION

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

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

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

Is the indication normal?

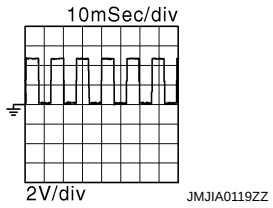
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-84, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515374

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B452	22	Ground	Seat Lifting (front)	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> GO TO 2.

2.CHECK LIFTING SENSOR (FRONT) CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B452	22	B455	22	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	22		Not existed

Is the inspection result normal?

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

3. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Lifting motor (front)			
Connector	Terminals		
B455	33	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 connector.
3. Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B452	33	B455	33	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (FRONT) GROUND

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

Lifting motor (front)		Ground	Continuity
Connector	Terminal		
B455	48		Existed

Is the inspection result normal?

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

LIFTING SENSOR (REAR)

Description

INFOID:0000000005515375

- The lifting sensor (rear) is installed to the seat cushion frame.
- The pulse signal is inputted 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:0000000005515376

1.CHECK FUNCTION

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

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

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

Is the indication normal?

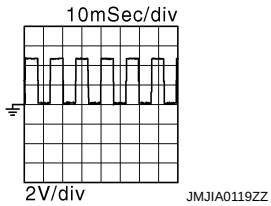
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-87, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515377

1.CHECK LIFTING SENSOR (REAR) SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B452	21	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-209, "Removal and Installation".
NO >> GO TO 2.

2.CHECK LIFTING SENSOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B452	21	B456	21	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	21		Not existed

Is the inspection result normal?

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

3.CHECK LIFTING SENSOR (REAR) POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Lifting motor (rear)			
Connector	Terminals		
B456	33	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 connector.
3. Check the continuity between driver seat control unit harness connector and lifting motor (rear) harness connector.

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B452	33	B456	33	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	33		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK LIFTING SENSOR (REAR) GROUND

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

Lifting motor (rear)		Ground	Continuity
Connector	Terminal		
B456	47		Existed

Is the inspection result normal?

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

TILT SENSOR

Description

INFOID:0000000005515378

- The tilt sensor is installed to the steering column assembly.
- The pulse signal is inputted 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:0000000005515379

1.CHECK FUNCTION

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

Monitor item	Condition		Value
TILT PULSE	Steering column	Operate (UP-WARD	Change (increase)*1
		Operate (DOWN-WARD)	Change (decrease)
		Release	No change*1

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

Is the indication normal?

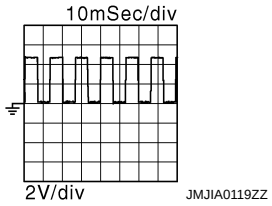
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-90, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515380

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				
B452	30	Ground	Steering column	Operate	 JMJIA0119ZZ
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "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 connector.
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	
B452	30	M116	5	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	5		Not existed

Is the inspection result normal?

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

3.CHECK TILT SENSOR POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Tilt motor			
Connector	Terminals		
M116	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 connector.
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	
M104	27	M116	4	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M104	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

5.CHECK TILT SENSOR GROUND CIRCUIT

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

Automatic drive positioner control unit		Tilt motor		Continuity
Connector	Terminal	Connector	Terminal	
M75	20	M116	6	Existed

Is the inspection result normal?

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

TELESCOPIC SENSOR

Description

INFOID:0000000005515381

- The telescopic sensor is installed to the steering column assembly.
- The pulse signal is inputted 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:0000000005515382

1.CHECK FUNCTION

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

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

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

Is the indication normal?

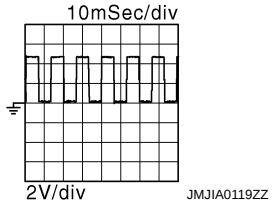
YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-92, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515383

1.CHECK TELESCOPIC SENSOR SIGNAL

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

(+) Driver seat control unit		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B452	31	Ground	Steering column	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "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 connector.
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	
B452	31	M117	5	Existed

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	31		Not existed

Is the inspection result normal?

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

3.CHECK TELESCOPIC SENSOR POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Telescopic motor			
Connector	Terminals		
M117	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 connector.
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	
M104	27	M117	4	Existed

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M104	27		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connecter.

5.CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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

Automatic drive positioner control unit		Telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	
M75	20	M117	6	Existed

Is the inspection result normal?

YES >> Replace telescopic motor.
NO >> Repair or replace harness or connecter.

MIRROR SENSOR
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000005515384

- The mirror sensor (driver side) is installed to the door mirror (driver side).
- The resistance of 2 sensors (horizontal and vertical) is changed when the door mirror (driver side) 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:0000000005515385

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-95, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000005515386

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

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

(+)		(–)	Voltage (V) (Approx.)
Door mirror (driver side)			
Connector	Terminals		
D3	23	Ground	5

Is the inspection result normal?

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

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

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND

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

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

Is the inspection result normal?

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

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

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

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	6	D3	21	Existed
	18		22	

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

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

Is the inspection result normal?

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

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000005515387

- The mirror sensor (passenger side) is installed to the door mirror (passenger side).
- The resistance of 2 sensors (horizontal and vertical) is changed when the door mirror (passenger side) 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:0000000005515388

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-97, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000005515389

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

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

(+)		(–)	Voltage (V) (Approx.)
Door mirror (passenger side)			
Connector	Terminals		
D43	23	Ground	5

Is the inspection result normal?

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

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

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

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

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

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

3. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR GROUND

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

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

Is the inspection result normal?

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

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR HARNESS CONTINUITY

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

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	5	D43	21	Existed
	17		22	

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

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

Is the inspection result normal?

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

SLIDING MOTOR

Description

INFOID:0000000005515390

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

Component Function Check

INFOID:0000000005515391

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

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

Diagnosis Procedure

INFOID:0000000005515392

1.CHECK SLIDING MOTOR POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Sliding motor					
Connector	Terminals				
B461	51	Ground	SEAT SLIDE	OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0
	50			OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage

Is the inspection result normal?

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

2.CHECK SLIDING MOTOR CIRCUIT

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

Driver seat control unit		Sliding motor		Continuity
Connector	Terminal	Connector	Terminal	
B451	4	B461	51	Existed
	3		50	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B451	4		Not existed
	3		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

RECLINING MOTOR

Description

INFOID:0000000005515393

- The reclining motor is installed to the seat back frame.
- 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:0000000005515394

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END
NO >> Perform diagnosis procedure. Refer to ADP-101, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515395

1.CHECK RECLINING MOTOR POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Reclining motor					
Connector	Terminals				
B454	53	Ground	SEAT RECLINING	OFF	0
				FR (forward)	Battery voltage
				RR (backward)	0
	52			OFF	0
				FR (forward)	0
				RR (backward)	Battery voltage

Is the inspection result normal?

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

2.CHECK RECLINING MOTOR CIRCUIT

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

Driver seat control unit		Reclining motor		Continuity
Connector	Terminal	Connector	Terminal	
B451	6	B454	53	Existed
	5		52	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B451	6		Not existed
	5		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

LIFTING MOTOR (FRONT)

Description

INFOID:0000000005515396

- The lifting motor (front) is installed to the seat cushion 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:0000000005515397

1.CHECK FUNCTION

1. Select “SEAT LIFTER FR” in “Active test” mode with CONSULT-III.
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-103, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515398

1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Lifting motor (front)					
Connector	Terminals				
B455	56	Ground	SEAT LIFTER FR	OFF	0
				UP	0
				DWN (down)	Battery voltage
	57			OFF	0
				UP	Battery voltage
				DWN (down)	0

Is the inspection result normal?

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

2.CHECK LIFTING MOTOR (FRONT) CIRCUIT

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

Driver seat control unit		Lifting motor (front)		Continuity
Connector	Terminal	Connector	Terminal	
B451	9	B455	56	Existed
	10		57	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B451	9		Not existed
	10		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

LIFTING MOTOR (REAR)

Description

INFOID:0000000005515399

- The lifting motor (rear) is installed to the seat cushion 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:0000000005515400

1.CHECK FUNCTION

1. Select “SEAT LIFTER RR” in “Active test” mode with CONSULT-III.
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-105, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515401

1.CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Lifting motor (rear)					
Connector	Terminals				
B456	55	Ground	SEAT LIFTER RR	OFF	0
				UP	Battery voltage
				DWN (DOWN)	0
	54			OFF	0
				UP	0
				DWN (DOWN)	Battery voltage

Is the inspection result normal?

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

2.CHECK LIFTING MOTOR (REAR) CIRCUIT

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

Driver seat control unit		Lifting motor (rear)		Continuity
Connector	Terminal	Connector	Terminal	
B451	8	B456	55	Existed
	7		54	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B451	8		Not existed
	7		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

TILT MOTOR

Description

INFOID:0000000005515402

- 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:0000000005515403

1.CHECK FUNCTION

1. Select “TILT MOTOR” in “Active test” mode with CONSULT-III.
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-107, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515404

1.CHECK TILT MOTOR POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Tilt motor					
Connector	Terminals				
M116	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. (Built in steering column assembly.)
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	
M104	28	M116	1	Existed
	29		2	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M104	28		Not existed
	29		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

TELESCOPIC MOTOR

Description

INFOID:0000000005515405

- 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:0000000005515406

1.CHECK FUNCTION

1. Select “TELESCO MOTOR” in “Active test” mode with CONSULT-III.
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-109, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515407

1.CHECK TELESCOPIC MOTOR POWER SUPPLY

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Telescopic motor					
Connector	Terminals				
M117	1	Ground	TELESCOPIC 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.)
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	
M75	29	M117	2	Existed
	26		1	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M75	29		Not existed
	26		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

Description

INFOID:0000000005515408

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:0000000005515409

1.CHECK DOOR MIRROR MOTOR FUNCTION

Check the operation with “MIRROR MOTOR RH” and “MIRROR MOTOR LH” in “ACTIVE TEST” mode with CONSULT-III
Refer to ADP-38, "CONSULT-III Function".

Is the inspection result normal?

YES >> Door mirror motor function is OK.
NO >> Refer to ADP-111, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515410

1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Door mirror					
Connector	Terminals				
D3 (Driver side) D43 (Passenger side)	12	Ground	Door mirror remote control switch	UP	Battery voltage
				Other than above	0
	11			LEFT	Battery voltage
				Other than above	0
	10			DOWN / RIGHT	Battery voltage
				Other than above	0

Is the inspection result normal?

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

2.CHECK DOOR MIRROR MOTOR CIRCUIT

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

[Door mirror driver side]

Automatic drive positioner control unit		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	12	D3	10	Existed
	23		12	
	24		11	

[Door mirror passenger side]

Automatic drive positioner control unit		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M75	22	D43	10	Existed
	10		12	
	11		11	

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

[Door mirror driver side]

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

[Door mirror passenger side]

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

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-210, "Removal and Installation".
NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.
Refer to ADP-112, "Component Inspection".

Is the inspection result normal?

YES >> Check intermittent incident.Refer to GI-39, "Intermittent Incident".
NO >> Replace door mirror. Refer to MIR-72, "DOOR MIRROR ASSEMBLY : Removal and Installation".

Component Inspection

INFOID:0000000005515411

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-71, "DOOR MIRROR ASSEMBLY : Exploded View".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace door mirror.Refer to MIR-72, "DOOR MIRROR ASSEMBLY : Removal and Installation".

2.CHECK DOOR MIRROR MOTOR-II

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

Door mirror			Operational direction
Connector	Terminal		
	(+)	(–)	
D3 (Driver side) D43 (Passenger side)	10	11	RIGHT
	11	10	LEFT
	12	10	UP
	10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror. Refer to MIR-72, "DOOR MIRROR ASSEMBLY : Removal and Installation".

SEAT MEMORY INDICATOR

Description

INFOID:0000000005515412

- Memory switch is equipped on the seat memory switch installed to the driver side door trim. The operation signal is inputted 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:0000000005515413

1.CHECK FUNCTION

1. Select “MEMORY SW INDCTR” in “Active test” mode with CONSULT-III.
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-113, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000005515414

1.CHECK SEAT MEMORY INDICATOR OPERATION

Check seat memory indicator operation.

Which is the malfunctioning indicator?

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

2.CHECK FUSE

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

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

Is the fuse blown?

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

3.CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

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

Is the inspection result normal?

YES >> Replace seat memory switch.Refer to ADP-211, "Removal and Installation".
NO >> Repair or replace harness or connector.

4.CHECK MEMORY INDICATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and seat memory switch connector.

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

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	
B452	25	D13	6	Existed
	26		7	

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

Driver seat control unit		Ground	Continuity
Connector	Terminal		
B452	25		Not existed
	26		

Is the inspection result normal?

YES >> Replace driver seat control unit.Refer to ADP-209, "Removal and Installation".
NO >> Repair or replace harness or connector.

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000005515415

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

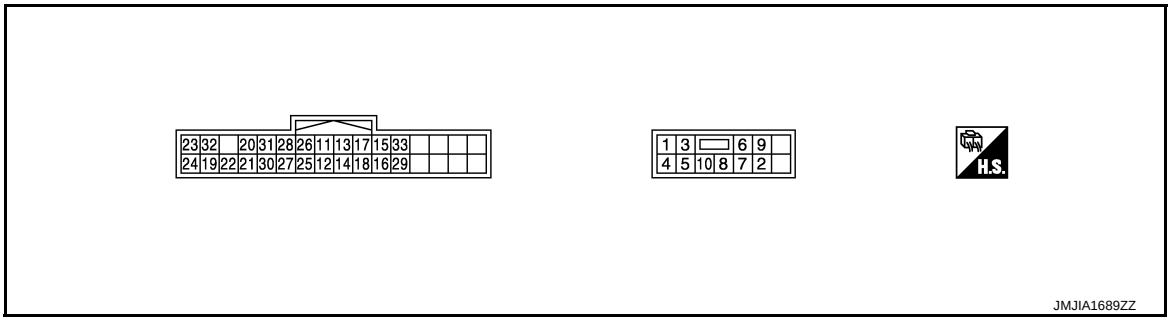
Monitor Item	Condition		Value/Status
SET SW	Set switch	Push	ON
		Release	OFF
MEMORY SW1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
		Release	OFF
SLIDE SW–FR	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW–RR	Sliding switch (backward)	Operate	ON
		Release	OFF
RECLN 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	A/T 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*
STEERING STATUS	Steering lock unit	LOCK	LOCK
		unlock	UNLOCK
VEHICLE SPEED	The condition of vehicle speed is displayed		km/h
P RANG SW CAN	A/T selector lever	P position	ON
		Other than above	OFF
R RANGE (CAN)	A/T selector lever	R position	ON
		Other than above	OFF
DOOR SW-FL	Driver door	Open	ON
		Close	OFF

Monitor Item	Condition		Value/Status
DOOR SW-FR	Passenger door	Open	ON
		Close	OFF
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 is key slot	ON
		Inserted is not key slot	OFF
KEYLESS ID	UNLOCK button of Intelligent Key is pressed		1,2,3,4or5
KYLS DR UNLK	Intelligent Key or driver side door request switch	ON	ON
		OFF	OFF
VHCL SPEED (ABS)	Can signal from ABS	Received	ON
		Not received	OFF
HANDLE	The BCM for handle position is displayed		LHD
			RHD
TRANSMISSION	Transmission type is displayed		AT or CVT
			MT

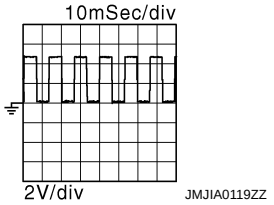
*: The value at the position attained when the battery is connected is regarded as 32768.

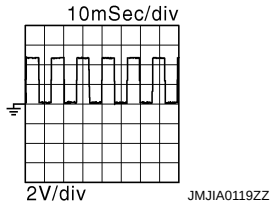
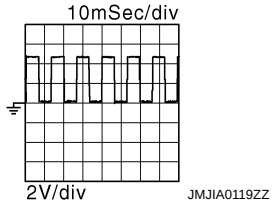
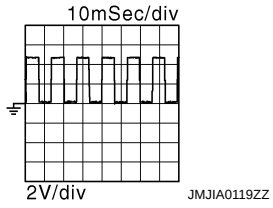
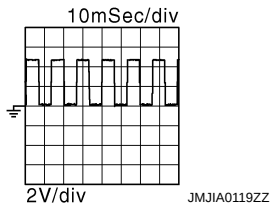
TERMINAL LAYOUT

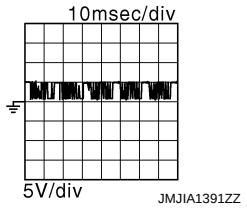


PHYSICAL VALUES

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
1 (R)	Ground	Power source	Input	—		Battery voltage
2 (B)	Ground	Ground (power)	—	—		0
3 (G)	Ground	Sliding motor backward output signal	Output	Seat sliding	Operate (backward)	Battery voltage
					Stop	0
4 (G/R)	Ground	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage
					Release	0
5 (V)	Ground	Reclining motor backward output signal	Output	Seat reclining	Operate (backward)	Battery voltage
					Stop	0

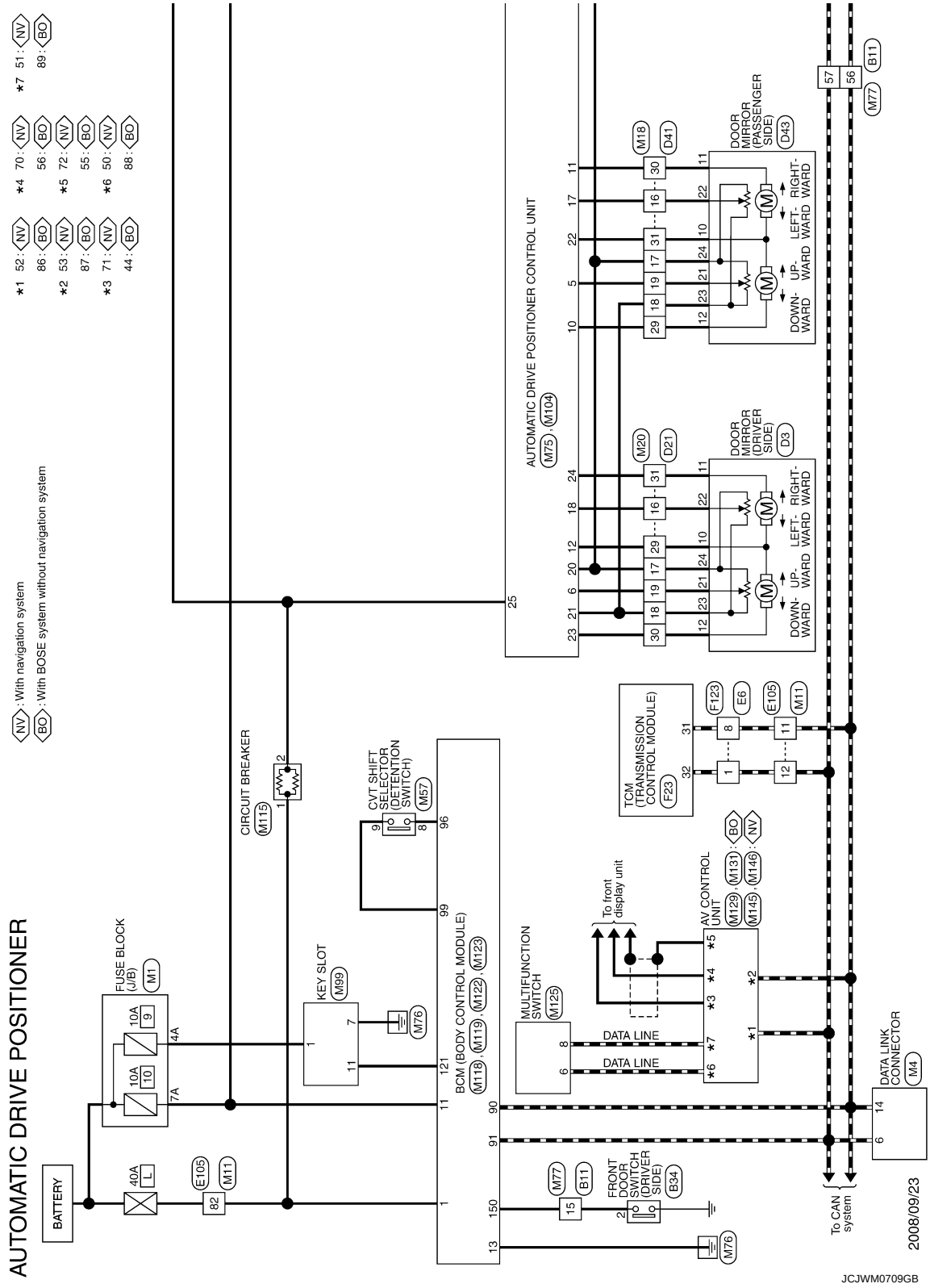
Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
6 (R/L)	Ground	Reclining motor forward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
					Release	0
7 (L)	Ground	Lifting motor (rear) down output signal	Output	Seat lifting (rear)	Operate (down)	Battery voltage
					Stop	0
8 (L/W)	Ground	Lifting motor (rear) up output signal	Output	Seat lifting (rear)	Operate (up)	Battery voltage
					Stop	0
9 (L/R)	Ground	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	Battery voltage
					Stop	0
10 (L/B)	Ground	Lifting motor (front) up output signal	Output	Seat lifting (front)	Operate (up)	Battery voltage
					Stop	0
11 (G/B)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0
					Release	Battery voltage
12 (G/W)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0
					Release	Battery voltage
13 (R/G)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0
					Release	Battery voltage
14 (R/W)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
					Release	Battery voltage
15 (Y/B)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0
					Release	Battery voltage
16 (Y/R)	Ground	Lifting switch (rear) up signal	Input	Seat lifting switch (rear)	Operate (up)	0
					Release	Battery voltage
17 (LG/B)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0
					Release	Battery voltage
18 (LG/R)	Ground	Lifting switch (front) up signal	Input	Seat lifting switch (front)	Operate (up)	0
					Release	Battery voltage
19 (G/Y)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Stop	0 or 5

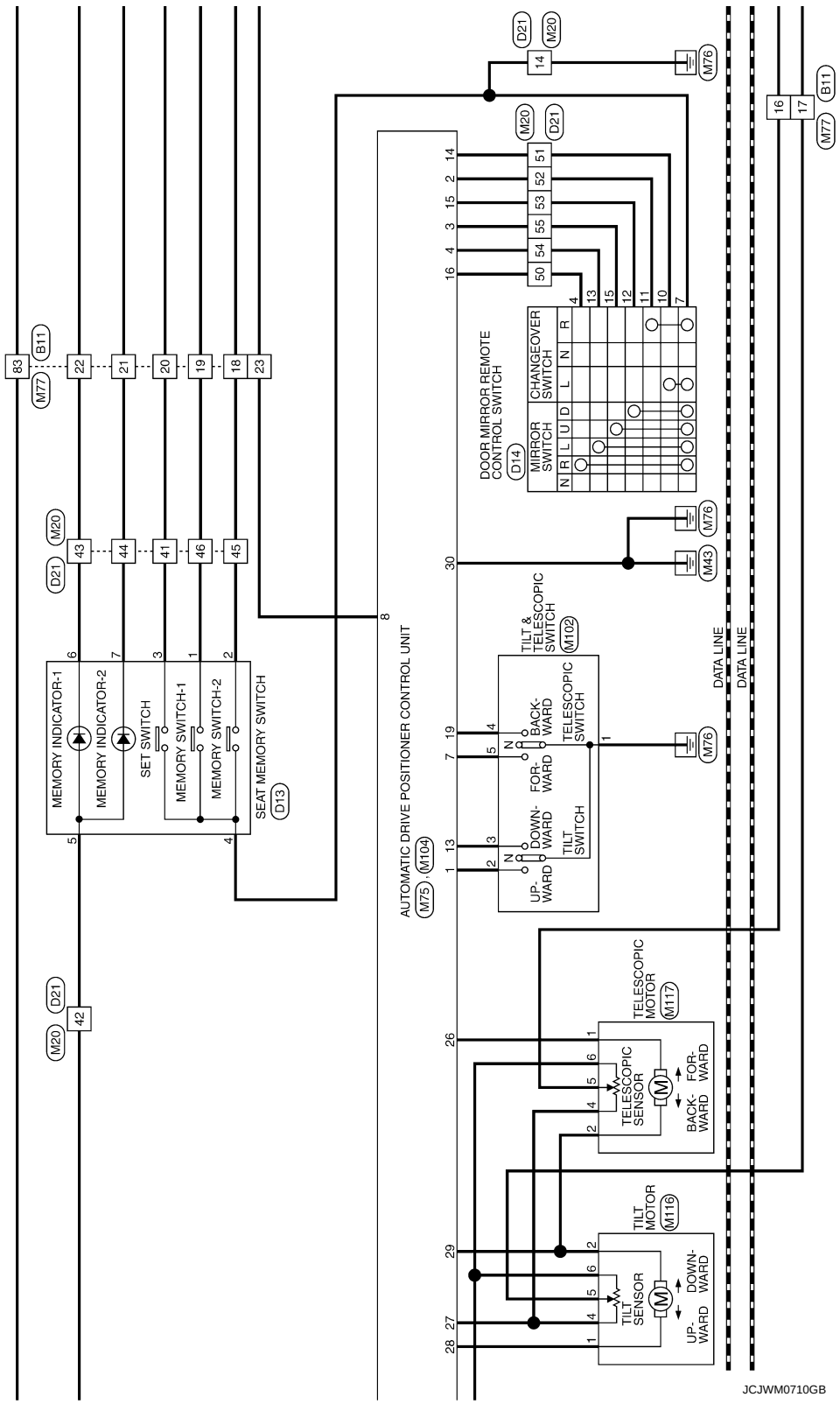
Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
20 (R/Y)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Stop	0 or 5
21 (L/Y)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Stop	0 or 5
22 (BR/Y)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	
					Stop	0 or 5
23 (P)	—	CAN-H	—	—		—
24 (P/L)	—	CAN-L	—	—		—
25 (G/O)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Illuminate	1
					Other than above	Battery voltage
26 (L/O)	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Illuminate	1
					Other than above	Battery voltage
27 (V)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0
					Other than above	5
28 (V/W)	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0
					Other than above	5
29 (O/L)	Ground	Set switch signal	Input	Set switch	Press	0
					Other than above	5
30 (BR)	Ground	Tilt sensor signal	Input	Tilt	Operate	
					Other than above	0 or 5

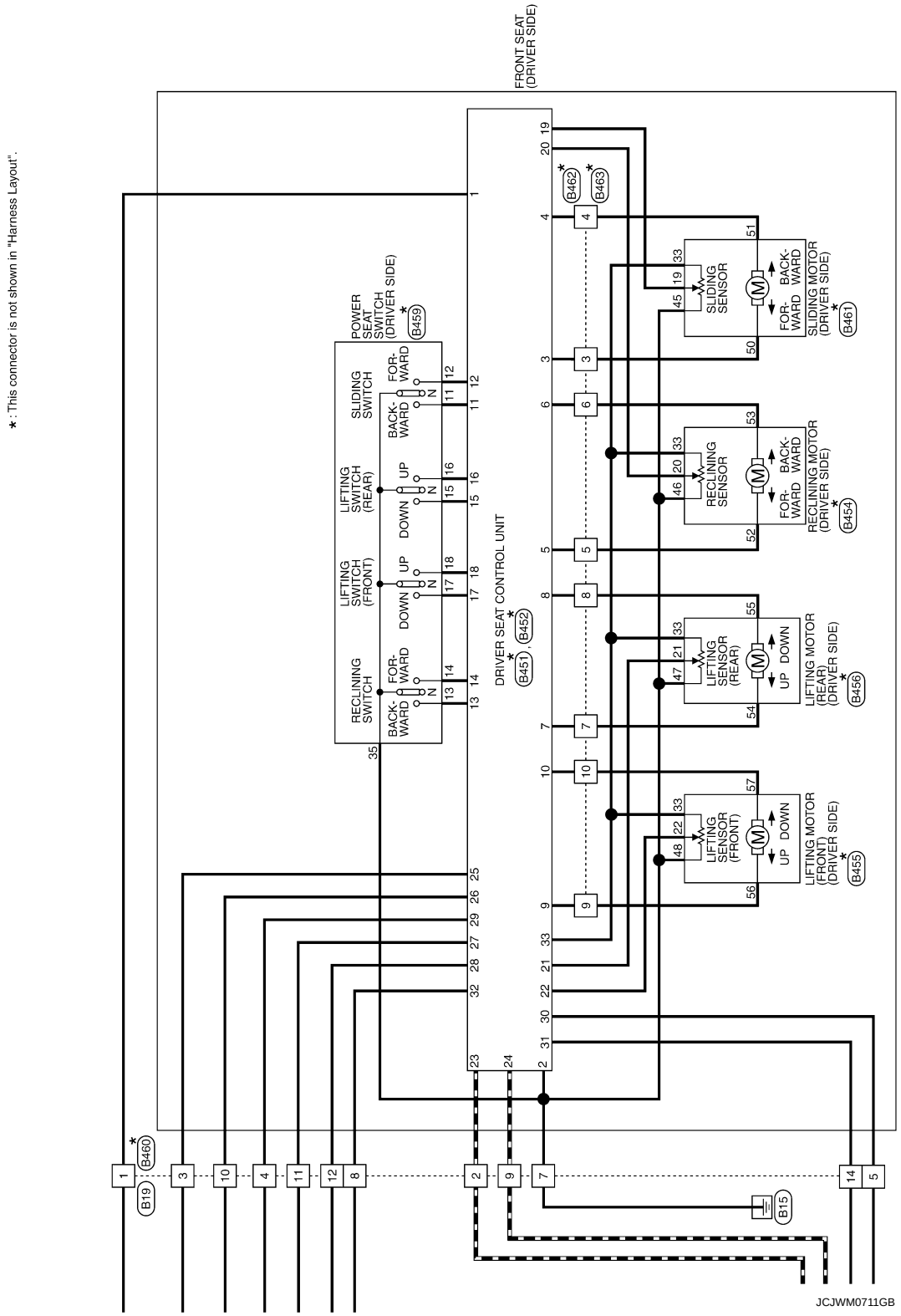
Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
31 (BR/W)	Ground	Telescopic sensor signal	Input	Telescopic	Operate	
					Other than above	0 or 5
32 (W/L)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		
33 (W)	Ground	Sensor power supply	Output	—		Battery voltage

Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

INFOID:0000000005515416




MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
SEAT MEMORY SWITCH
D13
AUTOMATIC DRIVE POSITIONER CONTROL UNIT
M75
M104
DOOR MIRROR REMOTE CONTROL SWITCH
D14
MIRROR SWITCH
CHANGEOVER SWITCH
TILT & TELESCOPIC SWITCH
M102
TELESCOPIC SWITCH
TILT SWITCH
BACK-WARD
FOR-WARD
UP-WARD
DOWN-WARD
TELESCOPIC MOTOR
M117
TELESCOPIC SENSOR
TILT MOTOR
M116
TILT SENSOR
DATA LINE
DATA LINE
M76
M43
M20
D21
M77
B11
JCJWM0710GB


∗: This connector is not shown in "Harness Layout".
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT
∗B451, ∗B452
POWER SEAT SWITCH (DRIVER SIDE) ∗B459
SLIDING SWITCH
FOR-WARD
BACK-WARD
LIFTING SWITCH (REAR)
UP
DOWN
LIFTING SWITCH (FRONT)
RECLINING SWITCH
SLIDING SENSOR
SLIDING MOTOR (DRIVER SIDE) ∗B461
RECLINING SENSOR
RECLINING MOTOR (DRIVER SIDE) ∗B454
LIFTING SENSOR (REAR)
LIFTING MOTOR (REAR) (DRIVER SIDE) ∗B456
LIFTING SENSOR (FRONT)
LIFTING MOTOR (FRONT) (DRIVER SIDE) ∗B455
∗B462
∗B463
∗B460
B19
B15
JCJWM0711GB

AUTOMATIC DRIVE POSITIONER

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	–
2	B	–
3	R/L	–
4	R/W	–
5	SB	–
6	P	–
7	V	–
8	SHIELD	–
9	BR/L	–
10	Y/G	–
11	Y/L	–
12	W/L	–
13	L	–
14	BR	–
15	SB	–
16	BR	–
17	V	–
18	SB	–
19	R	–
20	P	–
21	LG	–
22	W	–
23	Y	–
24	GR	–
25	Y	–
27	V	–
28	W/L	–
30	P	–
31	O	–
32	BR	–
34	SB	–
35	SHIELD	–
36	L/O	–
37	LG	–
40	Y	–
41	O	–
42	SB	–
43	G	–
44	BR	–
45	L	–
46	GR	–
47	V	–
48	GR	–[With rear view camera and telephone]
48	BR	–[With rear view camera without telephone]
49	Y	–
50	SHIELD	–
51	B	–
52	B	–
53	Y	–
54	LG	–
55	BR	–
56	P	–
57	L	–
58	R	–
59	SHIELD	–
60	B	–
61	R/L	–
62	R/W	–
63	LG	–
64	Y	–
66	GR	–
67	G	–
68	R	–
69	SHIELD	–
70	W/R	–
71	B/R	–
72	Y	–
73	LG	–
74	SB	–
75	L	–
76	G	–
77	R	–
78	SHIELD	–
79	B	–
80	W	–
81	R	–
82	L	–
83	BR	–
84	O	–
85	G	–
86	SB	–
87	R	–
88	G	–
89	GR	–
90	Y	–
91	G	–
92	BR	–
93	G	–
94	V	–
95	BR	–
96	GR	–
97	R	–
98	LG	–
99	O	–

Connector No.	B19
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	L	–
3	W	–
4	P	–
5	V	–
6	GR	–
7	B	–
8	Y	–
9	P	–
10	LG	–
11	R	–
12	SB	–
13	O	–
14	BR	–
15	G	–
16	B/W	–

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

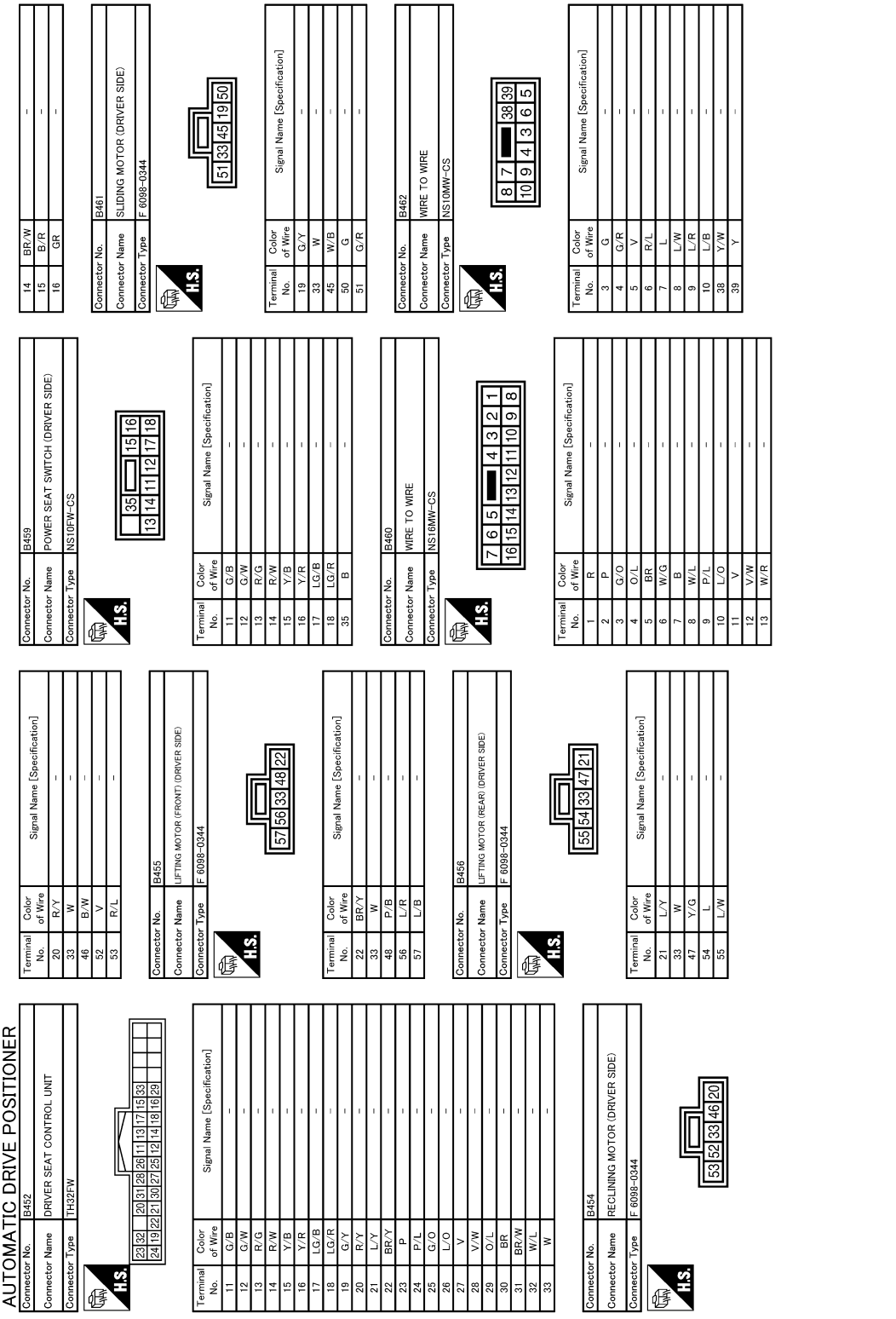
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	G	–
4	G/R	–
5	V	–
6	R/L	–
7	L	–
8	L/W	–
9	L/R	–
10	L/B	–

2	SB	–

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12FW-CS

H.S.

JCJWM1023GB



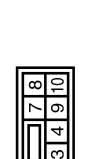
JCJWM1024GB

AUTOMATIC DRIVE POSITIONER

Connector No.	B463
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
3	G	–
4	G/R	–
5	V	–
6	R/L	–
7	L	–
8	L/W	–
9	L/R	–
10	L/B	–
38	Y/W	–
39	Y	–

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH

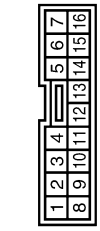


Terminal No.	Color of Wire	Signal Name [Specification]
7	LG	–
10	V	–
11	BR	–
12	SB	–
19	B	–
21	BR	–
22	G	–
23	GR	–
24	Y	–

Connector No.	D13
Connector Name	SEAT MEMORY SWITCH
Connector Type	A08FW

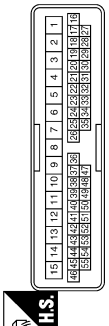
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	SB	–
3	P	–
4	B	–
5	GR	–
6	L	–
7	W	–

Connector No.	D14
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER)
Connector Type	TK16FBR



Terminal No.	Color of Wire	Signal Name [Specification]
4	V	–
7	B	–
8	Y	–
9	L	–
10	O	–
11	P	–
12	L	–
13	SB	–
15	LG	–

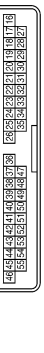
Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	G	–
3	P	–
4	B	–
5	W	–
6	SB	–
7	P	–
8	BR	–
9	GR	–
10	V	–
11	O	–
14	B	–
15	LG	–
16	G	–
17	Y	–
18	GR	–
19	BR	–
20	LG	–
24	P	–
25	V	–
26	W	–
29	V	–
30	SB	–
31	BR	–
32	R	–
33	G	–
34	Y	–
35	L	–
41	P	–
42	GR	–
43	L	–
44	W	–
45	SB	–
46	R	–
50	V	–
51	O	–
52	P	–[With automatic drive positioner]
52	L	–[Without automatic drive positioner]

53	L	–[With automatic drive positioner]
53	P	–[Without automatic drive positioner]
54	SB	–[With automatic drive positioner]
54	LG	–[Without automatic drive positioner]
55	LG	–[With automatic drive positioner]
55	O	–[Without automatic drive positioner]

Connector No.	D41
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–
4	B	–
5	W	–
6	P	–
7	O	–
8	B	–
16	G	–
17	Y	–
18	GR	–
19	BR	–
20	LG	–
24	LG	–
25	W	–
26	O	–
29	V	–
30	SB	–
31	BR	–
32	R	–
33	G	–
34	Y	–
35	L	–

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AUTOMATIC DRIVE POSITIONER

Connector No.	D43
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH

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 [Specification]
7	LG	–
10	BR	–
11	SB	–
12	V	–
19	B	–
21	BR	–
22	G	–
23	GR	–
24	Y	–

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK16MGY-1V

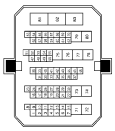
H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
3	Y	–
4	R	–
5	GR	–
6	V	–
8	P	–
10	W	–
11	G	–
12	BR	–
13	SB	–
14	B	–
15	O	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3

H.S.



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	–
3	Y	–
4	W	–
5	LG	–
6	GR	–
8	G	–
11	P	–
12	L	–
13	Y	–
14	O	–
15	BR	–
20	Y	–
21	BR	–
22	P	–
23	P	–
24	L	–
25	O	–
26	G	–
27	V	–
28	SB	–
29	W	–
30	Y	–
47	P	–
48	L	–
49	SB	–
50	GR	–
51	LG	–
52	V	–
53	GR	–
54	BR	–
55	Y	–
56	W/L	–
60	V	–
61	BR	–
62	O	–
63	L/O	–
64	SHIELD	–
66	W	–
67	BR	–
68	Y	–
69	SB	–
70	GR	–
71	SB	–
72	Y	–
73	L	–
74	W	–
75	BR	–
76	GR	–
77	O	–
78	V	–
79	Y	–
80	R	–
81	W	–
82	LG	–
83	O	–

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40FB-RZ8-L-RH

H.S.

31 32 33 34 35 36 37 38 39 40 47 48
21 22 23 24 25 26 27 28 29 30 45 46
11 12 13 14 15 16 17 18 19 20 43 44
1 2 3 4 5 6 7 8 9 10 41 42

Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3 MON
5	B	GND
7	W	SENSOR GND
8	G/W	CLOCK (SEL2)
9	L/R	CHIP SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(5V)
27	R/G	S/M-D
28	R	S/M-C

29	O/B	S/M-B
30	G/R	S/M-A
31	P	CAN-L
32	L	CAN-H
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/U&SEL-ON/OFF SOL
38	L/W	L/U&SEL LINEAR SOL
39	W/B	SEC-LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK16FGY-1V

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
3	G/R	–
4	G/B	–
5	R	–
6	L/R	–
8	P	–
10	Y/B	–
11	BR/W	–
12	BR	–
13	G	–
14	B	–
15	O	–

JCJWM1026GB

AUTOMATIC DRIVE POSITIONER

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

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

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	–
5	B	–
6	L	–
7	O	–
8	G	–
14	P	–
16	Y	–

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

H.S.

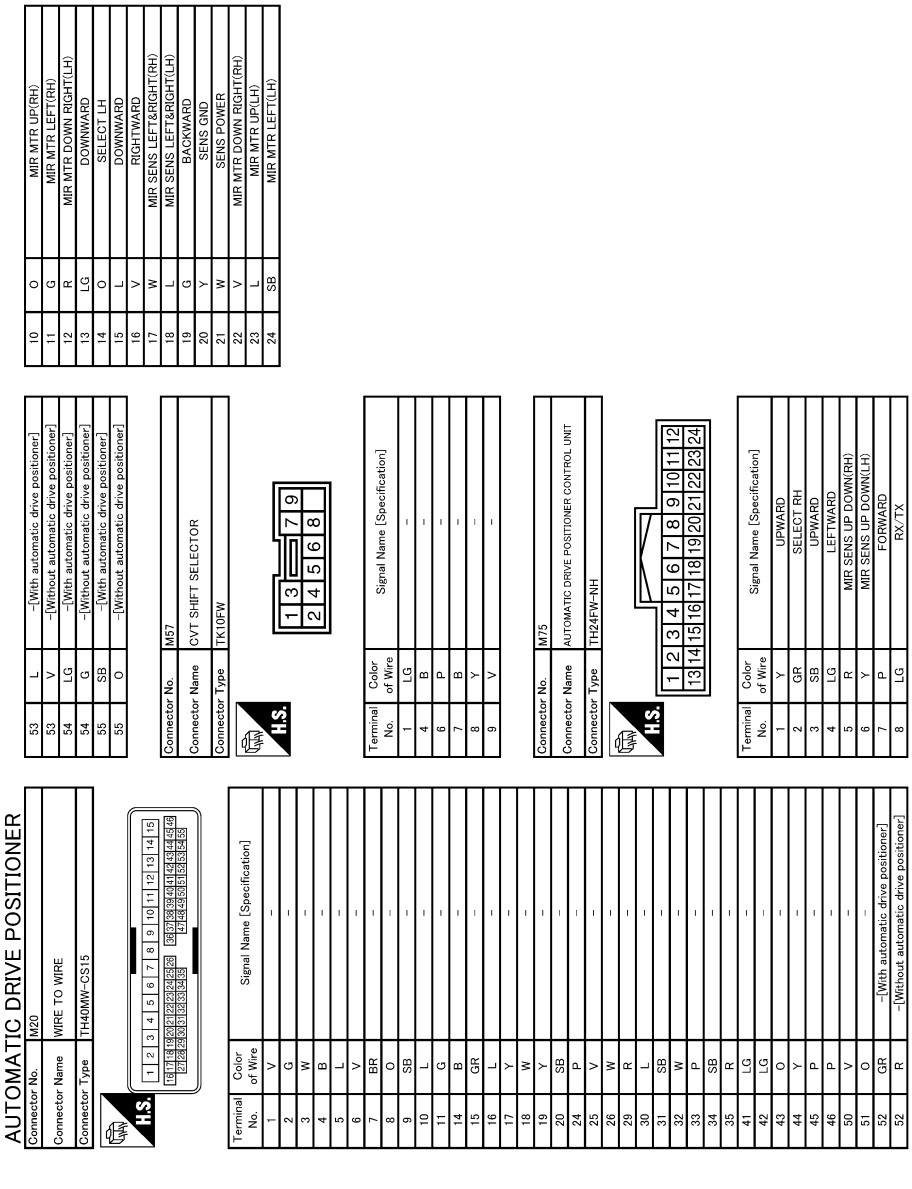
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	–
3	P	–
4	O	–
5	G	–
6	G	–
8	R	–
11	P	–
12	L	–
13	V	–
14	Y	–
15	R	–
20	Y	–
21	BR	–
22	G	–
23	P	–
24	Y	–
25	L	–
26	L	–
27	O	–
28	BR	–
29	L	–
30	R	–
47	P	–
48	L	–
49	W	–
50	GR	–
51	LG	–
52	Y	–
53	V	–
54	SB	–
55	P	–
56	SB	–
60	V	–
61	GR	–
62	O	–
63	V	–
64	SHIELD	–
66	W	–
67	R	–
68	W	–
69	P	–
70	G	–
71	G	–
72	BR	–
73	L	–
74	W	–
75	BR	–
76	R	–
77	G	–
78	Y	–
79	G	–
80	R	–
81	W	–
82	W	–
83	O	–

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–
4	W	–
5	B	–[With BOSE system]
5	BR	–[Without BOSE system]
6	GR	–
7	G	–
8	B	–
16	W	–
17	Y	–
18	W	–
19	R	–
20	SB	–
24	LG	–
25	Y	–
26	P	–
29	O	–
30	G	–
31	V	–
32	Y	–
33	P	–
34	SB	–
35	R	–

JCJWM1027GB



JCJWM1028GB

AUTOMATIC DRIVE POSITIONER

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	–
2	B	–
3	W	–
4	R	–
5	Y	–
6	W	–
7	G	–
8	SHIELD	–
9	W	–
10	R	–
11	G	–
12	B	–
13	O	–
14	R	–
15	SB	–
16	R	–
17	V	–
18	P	–
19	P	–
20	LG	–
21	Y	–
22	O	–
23	LG	–
24	SB	–
25	Y	–
27	Y	–
28	R	–
30	Y	–
31	W	–
32	BR	–
34	Y	–
35	SHIELD	–
36	G	–
37	Y	–
40	O	–
41	O	–
42	SB	–
43	L	–
44	V	–
45	P	–
46	R	–
47	Y	–
48	L	–
49	G	–
50	SHIELD	–
51	W	–
52	B	–
53	BR	–
54	B	–
55	G	–
56	P	–
57	L	–
58	SB	–
59	SHIELD	–
60	B	–
61	R	–
62	W	–
63	O	–
64	Y	–
66	L	–
67	R	–
68	G	–
69	SHIELD	–
70	L	–
71	R	–
72	LG	–
73	Y	–
74	R	–
75	P	–
76	L	–
77	BR	–
78	SHIELD	–
79	B	–
80	W	–
81	LG	–
82	L	–
83	W	–[With automatic drive positioner]
83	GR	–[With driver side power seat]
84	R	–
85	V	–[With front heated seat and passenger side power seat]
85	GR	[With front heated seat without passenger side power seat]
86	W	–
87	R	–
88	G	–
89	B	–
90	G	–
91	G	–
92	BR	–
93	P	–
94	V	–
95	O	–
96	SB	–
97	L	–
98	LG	–
99	Y	–

Connector No.	M99
Connector Name	KEY SLOT
Connector Type	TH12FW-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	SB	CLOCK
3	O	DATA
5	GR	ILL BAT
6	R	ILL
7	B	GND
11	Y	KEY SWITCH SIGNAL

Connector No.	M102
Connector Name	TILT & TELESCOPIC SWITCH
Connector Type	TK06FGY

H.S.

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

Connector No.	M104
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS08FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
25	W	UPWARD
26	L	BACKWARD
27	P	UPWARD
28	G	DOWNWARD
29	LG	UPWARD/FRONTWARD
30	B	GND

Connector No.	M115
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-P-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	–
2	W	–

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AUTOMATIC DRIVE POSITIONER

Connector No.	M116
Connector Name	TILT MOTOR
Connector Type	NS06FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	LG	–
4	P	–
5	V	–
6	Y	–

Connector No.	M117
Connector Name	TELESCOPIC MOTOR
Connector Type	NS06FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
2	LG	–
4	P	–
5	R	–
6	Y	–

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (FUSE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

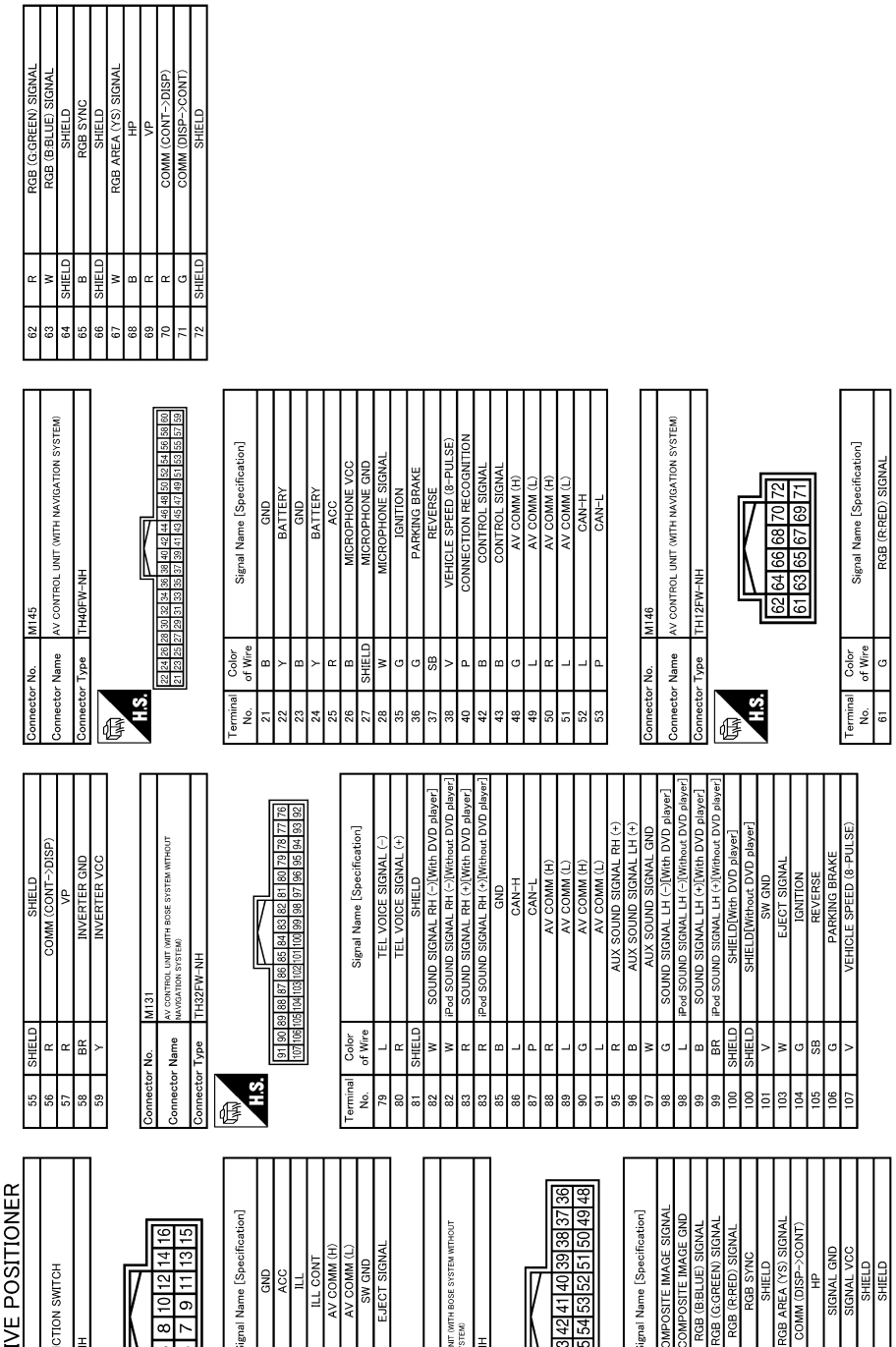
Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2–
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT–
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN–L
91	L	CAN–H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

JCJWM1030GB



JCJWM1031GB

Fail Safe

INFOID:0000000005515417

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-41
	CONTROL UNIT	U1010	ADP-42
	EEPROM	B2130	ADP-43
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-50
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-44
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-46
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-48

DTC Index

INFOID:0000000005515418

CONSULT-III display	Timing*1		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-41
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-42
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-44
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-46
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-48
UART COMM [B2128]	0	1-39	UART communication	ADP-50
EEPROM [B2130]	0	1-39	EEPROM	ADP-43

*1:

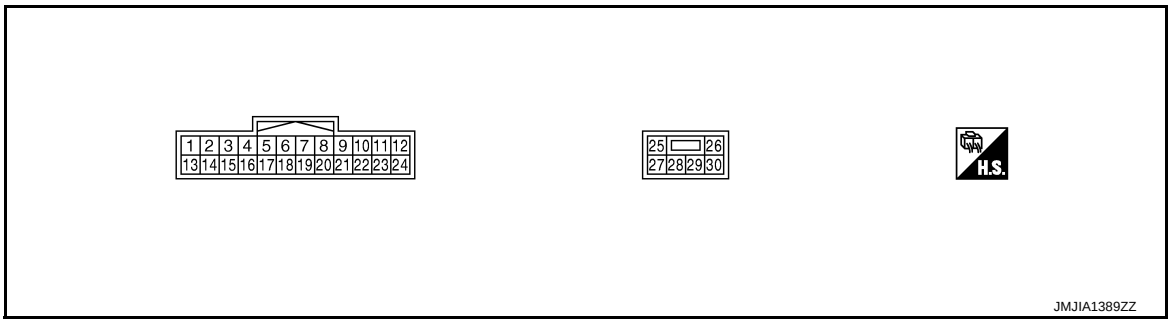
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

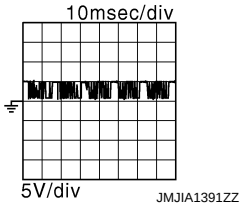
Reference Value

INFOID:0000000005515419

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 (GR)	Ground	Changeover switch RH signal	Input	Changeover switch position	RH	0
					Neutral or LH	5
3 (SB)	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0
					Other than above	5
4 (LG)	Ground	Mirror switch left signal	Input	Mirror switch	Operated (left)	0
					Other than above	5
5 (R)	Ground	Door mirror sensor (passenger side) up/down signal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)
6 (Y)	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 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
10 (O)	Ground	Door mirror motor (passenger side) up output signal	Output	Door mirror RH	Operate (up)	Battery voltage
					Other than above	0
11 (G)	Ground	Door mirror motor (passenger side) left output signal	Output	Door mirror RH	Operate (left)	Battery voltage
					Other than above	0
12 (R)	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)	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 (W)	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 (Y)	Ground	Ground	—	—		0
21 (W)	Ground	Door mirror motor sensor power supply	Input	—		5

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
22 (V)	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 (L)	Ground	Door mirror motor (driver side)up output signal	Output	Door mirror (LH)	Operate (up)	Battery voltage
					Other than above	0
24 (SB)	Ground	Door mirror motor (driver side)left output signal	Output	Door mirror (LH)	Operate (left)	Battery voltage
					Other than above	0
25 (W)	Ground	Power source	Input	—		Battery voltage
26 (L)	Ground	Telescopic motor backward output signal	Output	Steering telescopic	Operate (backward)	Battery voltage
					Other than above	0
27 (P)	Ground	Tilt&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 (LG)	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

Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

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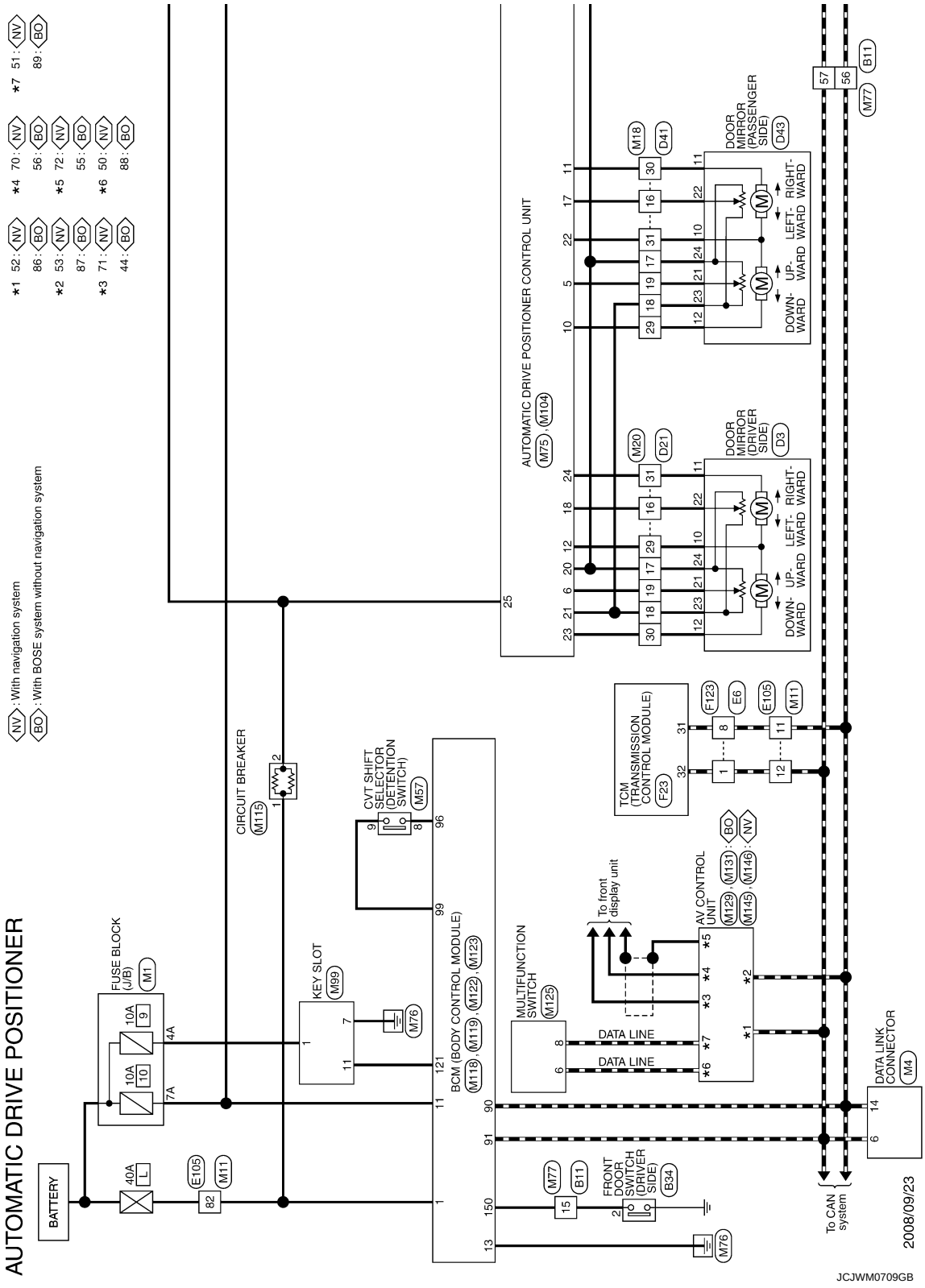
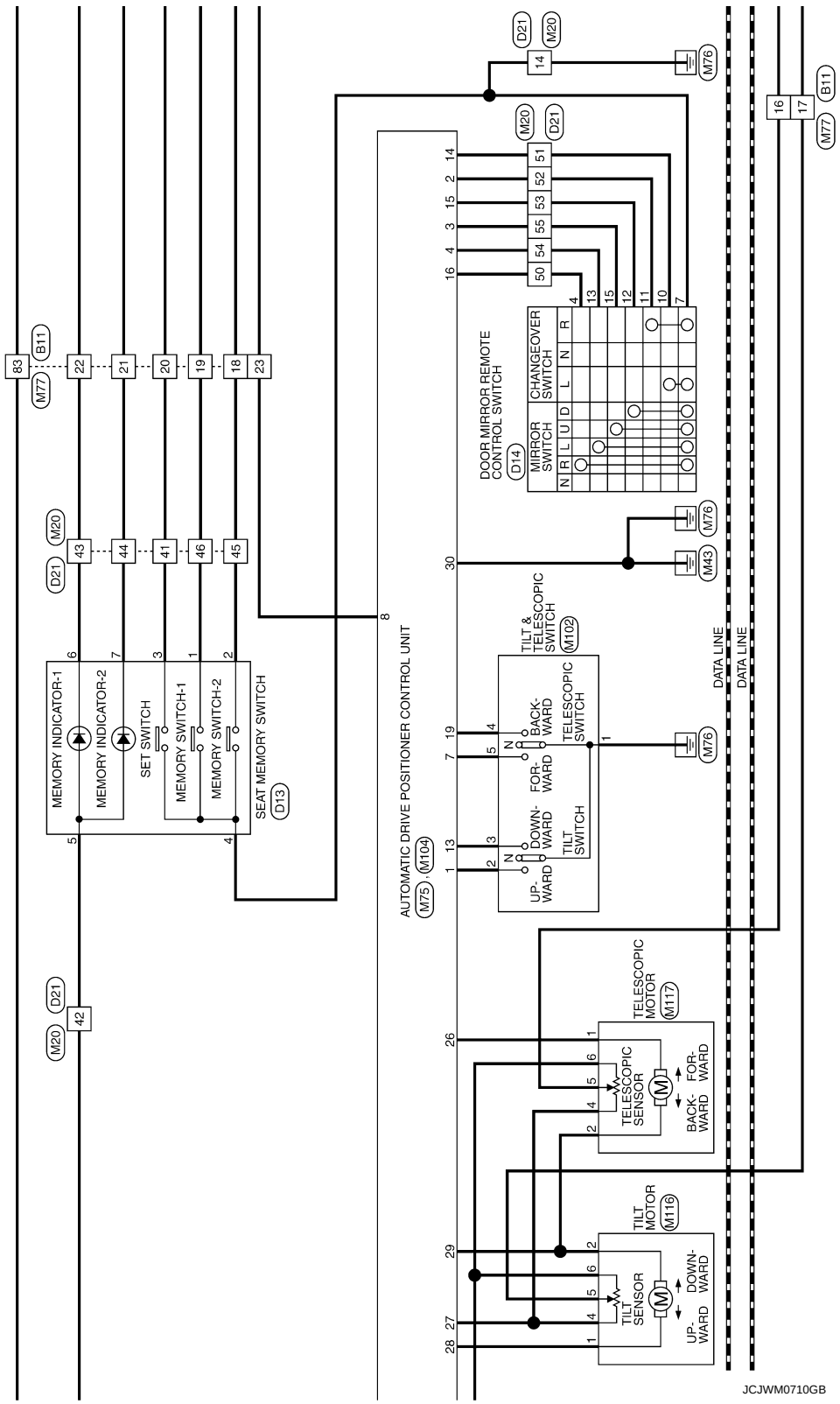
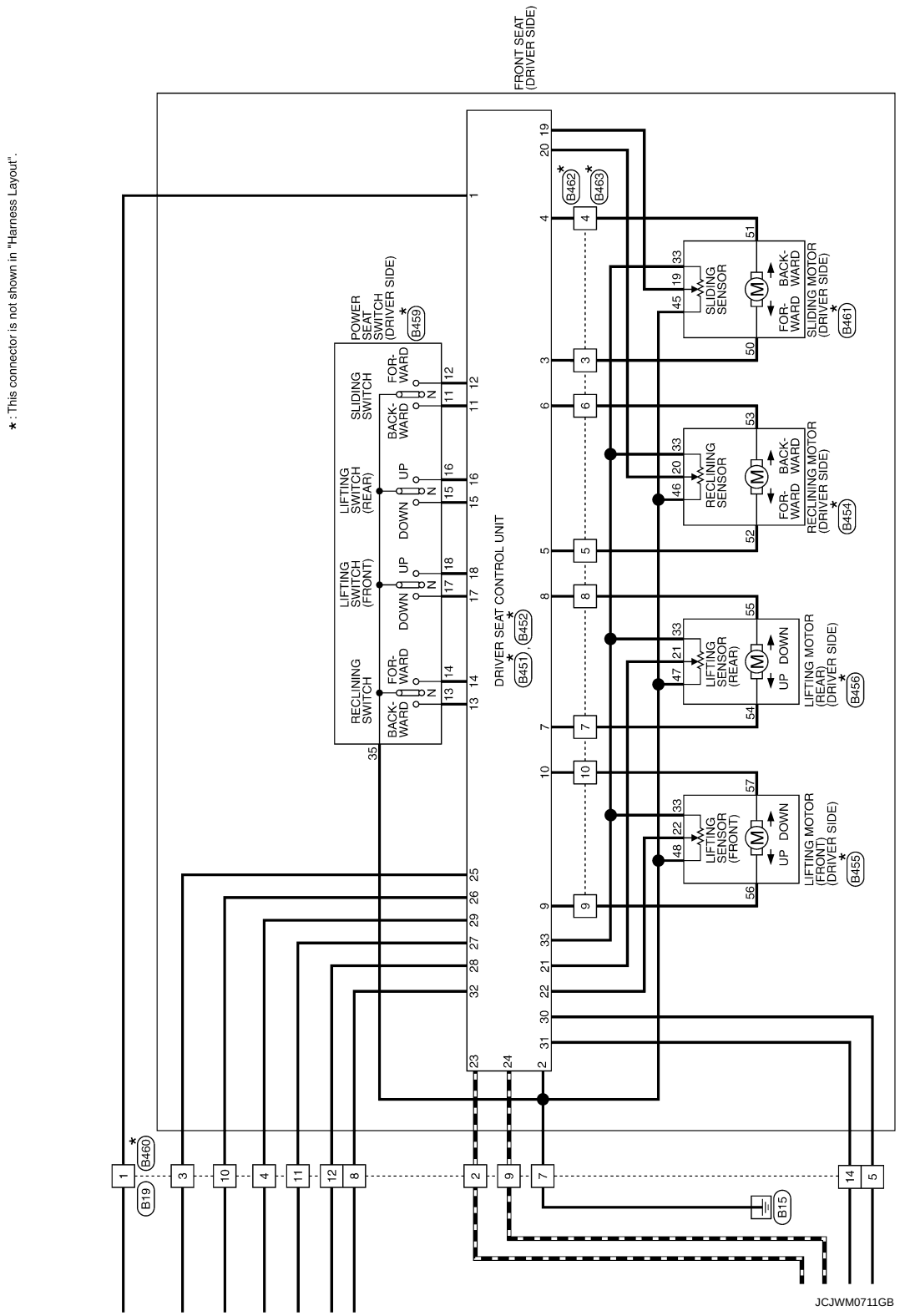



AUTOMATIC DRIVE POSITIONER CONTROL UNIT
(M75), (M104)
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
SEAT MEMORY SWITCH
(D13)
DOOR MIRROR REMOTE CONTROL SWITCH
(D14)
MIRROR SWITCH
CHANGEOVER SWITCH
TILT & TELESCOPIC SWITCH
(M102)
TELESCOPIC SWITCH
TILT SWITCH
BACK-WARD
FOR-WARD
UP-WARD
DOWN-WARD
TELESCOPIC MOTOR
(M117)
TELESCOPIC SENSOR
TILT MOTOR
(M116)
TILT SENSOR
DATA LINE
DATA LINE
JCJWM0710GB


∗: This connector is not shown in "Harness Layout".
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT
∗B451, ∗B452
POWER SEAT SWITCH (DRIVER SIDE) ∗B459
SLIDING SWITCH
FOR-WARD
BACK-WARD
LIFTING SWITCH (REAR)
UP
DOWN
LIFTING SWITCH (FRONT)
RECLINING SWITCH
SLIDING SENSOR
SLIDING MOTOR (DRIVER SIDE) ∗B461
RECLINING SENSOR
RECLINING MOTOR (DRIVER SIDE) ∗B454
LIFTING SENSOR (REAR)
LIFTING MOTOR (REAR) (DRIVER SIDE) ∗B456
LIFTING SENSOR (FRONT)
LIFTING MOTOR (FRONT) (DRIVER SIDE) ∗B455
∗B460
B19
∗B462
∗B463
B15
JCJWM0711GB

AUTOMATIC DRIVE POSITIONER

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	–
2	B	–
3	R/L	–
4	R/W	–
5	SB	–
6	P	–
7	V	–
8	SHIELD	–
9	BR/L	–
10	Y/G	–
11	Y/L	–
12	W/L	–
13	L	–
14	BR	–
15	SB	–
16	BR	–
17	V	–
18	SB	–
19	R	–
20	P	–
21	LG	–
22	W	–
23	Y	–
24	GR	–
25	Y	–
27	V	–
28	W/L	–
30	P	–
31	O	–
32	BR	–
34	SB	–
35	SHIELD	–
36	L/O	–
37	LG	–
40	Y	–
41	O	–
42	SB	–
43	G	–
44	BR	–
45	L	–
46	GR	–
47	V	–
48	GR	–[With rear view camera and telephone]
48	BR	–[With rear view camera without telephone]
49	Y	–
50	SHIELD	–
51	B	–
52	B	–
53	Y	–
54	LG	–
55	BR	–
56	P	–
57	L	–
58	R	–
59	SHIELD	–
60	B	–
61	R/L	–
62	R/W	–
63	LG	–
64	Y	–
66	GR	–
67	G	–
68	R	–
69	SHIELD	–
70	W/R	–
71	B/R	–
72	Y	–
73	LG	–
74	SB	–
75	L	–
76	G	–
77	R	–
78	SHIELD	–
79	B	–
80	W	–
81	R	–
82	L	–
83	BR	–
84	O	–
85	G	–
86	SB	–
87	R	–
88	G	–
89	GR	–
90	Y	–
91	G	–
92	BR	–
93	G	–
94	V	–
95	BR	–
96	GR	–
97	R	–
98	LG	–
99	O	–

Connector No.	B19
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	–
2	L	–
3	W	–
4	P	–
5	V	–
6	GR	–
7	B	–
8	Y	–
9	P	–
10	LG	–
11	R	–
12	SB	–
13	O	–
14	BR	–
15	G	–
16	B/W	–

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

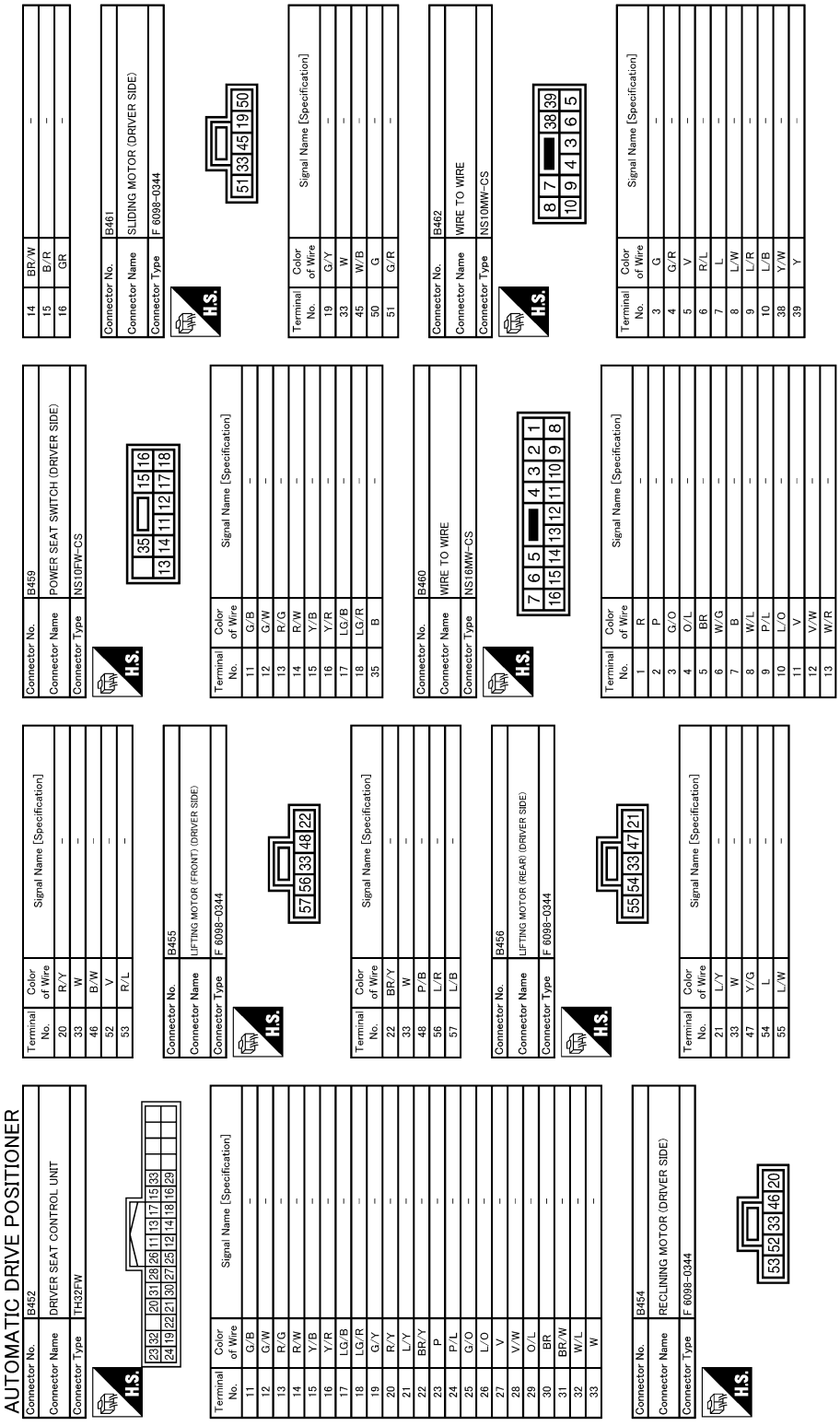
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	G	–
4	G/R	–
5	V	–
6	R/L	–
7	L	–
8	L/W	–
9	L/R	–
10	L/B	–

2	SB	–

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12FW-CS

H.S.

JCJWM1023GB



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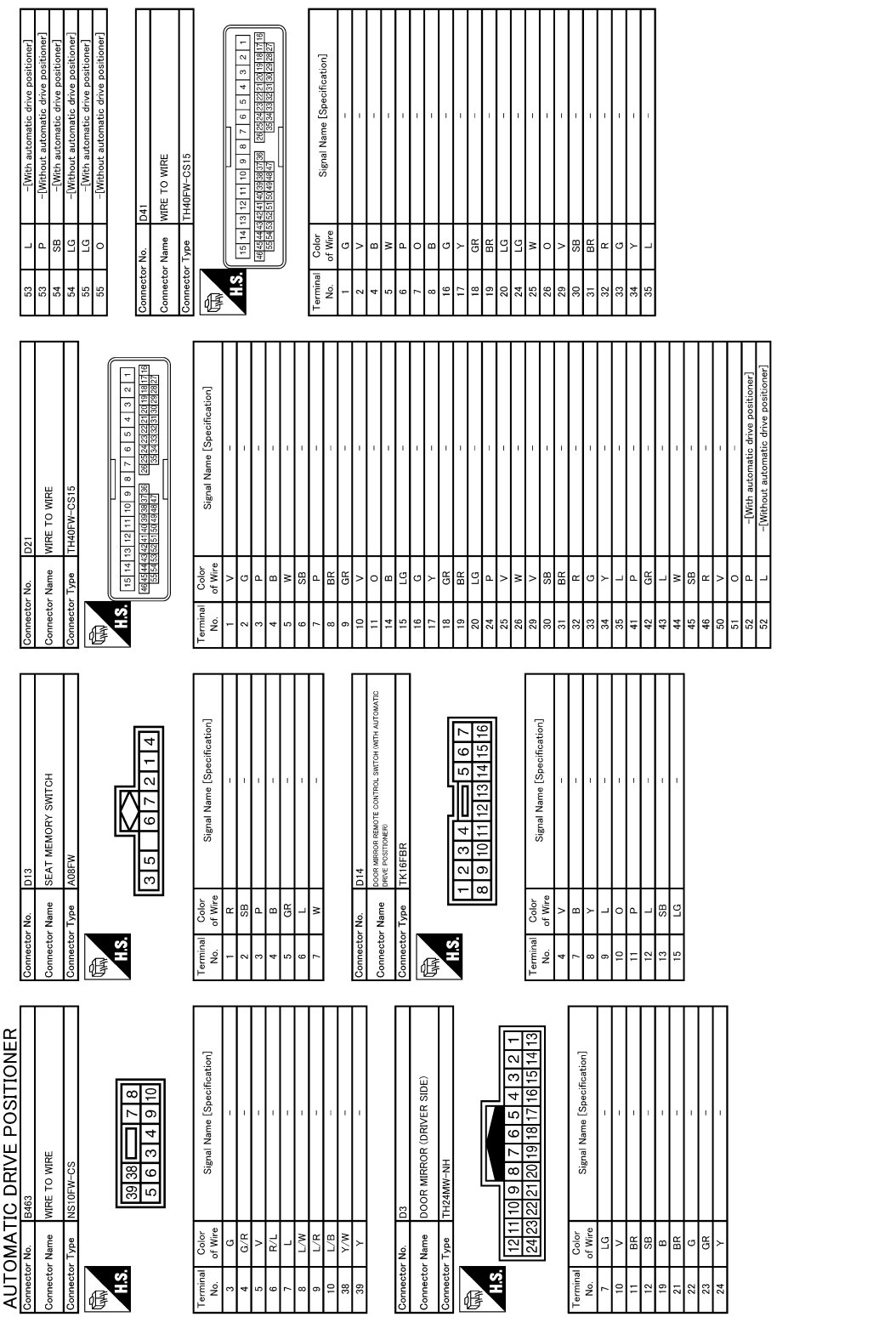


JCJWM1025GB

AUTOMATIC DRIVE POSITIONER

Connector No.	D43
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
7	LG	–
10	BR	–
11	SB	–
12	V	–
19	B	–
21	BR	–
22	G	–
23	GR	–
24	Y	–

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK16MGY-1V

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
3	Y	–
4	R	–
5	GR	–
6	V	–
8	P	–
10	W	–
11	G	–
12	BR	–
13	SB	–
14	B	–
15	O	–

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3

Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	–
3	Y	–
4	W	–
5	LG	–
6	GR	–
8	G	–
11	P	–
12	L	–
13	Y	–
14	O	–
15	BR	–
20	Y	–
21	BR	–
22	P	–
23	P	–
24	L	–
25	O	–
26	G	–
27	V	–
28	SB	–
29	W	–
30	Y	–
47	P	–
48	L	–
49	SB	–
50	GR	–
51	LG	–
52	V	–
53	GR	–
54	BR	–
55	Y	–
56	W/L	–
60	V	–
61	BR	–
62	O	–
63	L/O	–
64	SHIELD	–
66	W	–
67	BR	–
68	Y	–
69	SB	–
70	GR	–
71	SB	–
72	Y	–
73	L	–
74	W	–
75	BR	–
76	GR	–
77	O	–
78	V	–
79	Y	–
80	R	–
81	W	–
82	LG	–
83	O	–

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40FB-RZ8-L-RH

Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3 MON
5	B	GND
7	W	SENSOR GND
8	G/W	CLOCK (SEL2)
9	L/R	CHIP SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(5V)
27	R/G	S/M-D
28	R	S/M-C
29	O/B	S/M-B
30	G/R	S/M-A
31	P	CAN-L
32	L	CAN-H
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/U&SEL-ON/OFF SOL
38	L/W	L/U&SEL LINEAR SOL
39	W/B	SEC-LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK16FGY-1V

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
3	G/R	–
4	G/B	–
5	R	–
6	L/R	–
8	P	–
10	Y/B	–
11	BR/W	–
12	BR	–
13	G	–
14	B	–
15	O	–

JCJWM1026GB

AUTOMATIC DRIVE POSITIONER

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

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

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	–
5	B	–
6	L	–
7	O	–
8	G	–
14	P	–
16	Y	–

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

H.S.

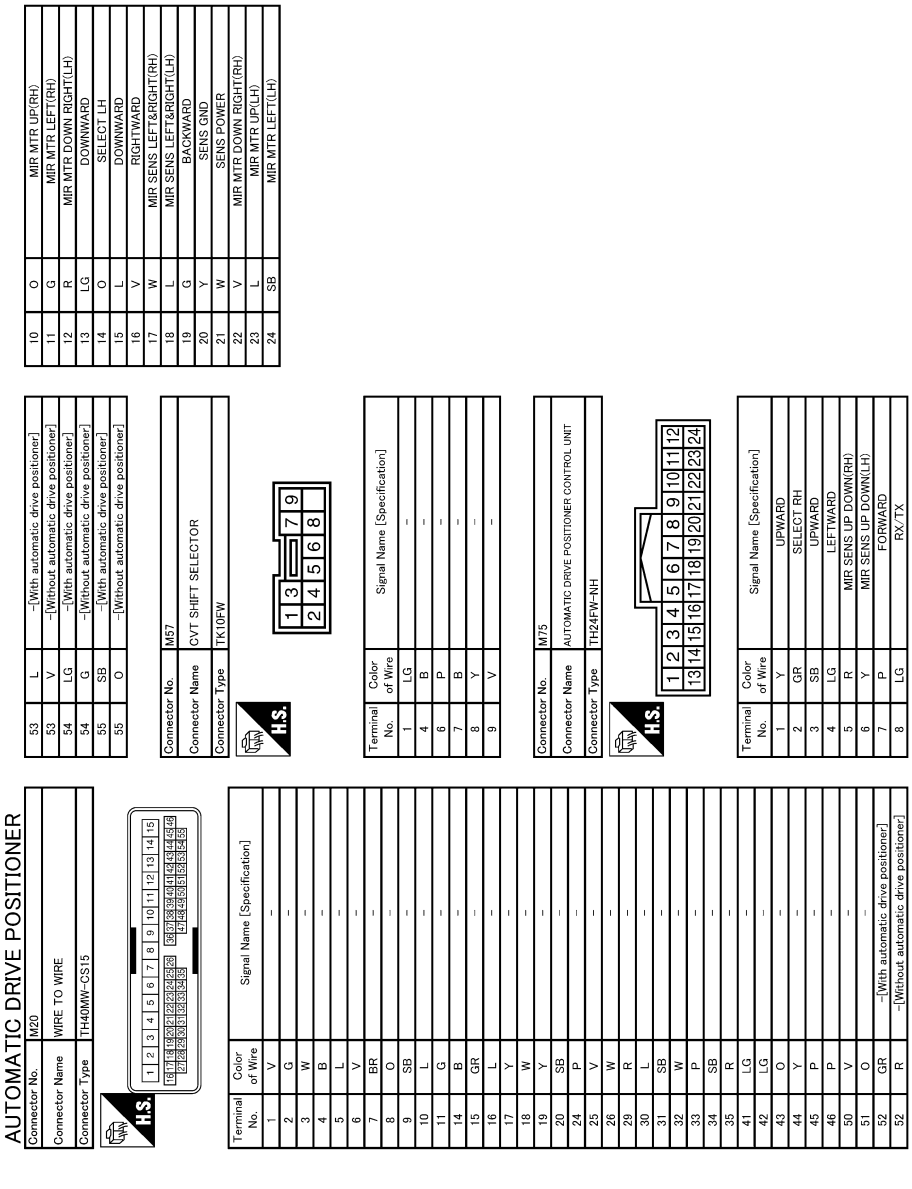
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	–
3	P	–
4	O	–
5	O	–
6	G	–
8	R	–
11	P	–
12	L	–
13	V	–
14	Y	–
15	R	–
20	Y	–
21	BR	–
22	G	–
23	P	–
24	Y	–
25	L	–
26	L	–
27	O	–
28	BR	–
29	L	–
30	R	–
47	P	–
48	L	–
49	W	–
50	GR	–
51	LG	–
52	Y	–
53	V	–
54	SB	–
55	P	–
56	SB	–
60	V	–
61	GR	–
62	O	–
63	V	–
64	SHIELD	–
66	W	–
67	R	–
68	W	–
69	P	–
70	G	–
71	G	–
72	BR	–
73	L	–
74	W	–
75	BR	–
76	R	–
77	G	–
78	Y	–
79	G	–
80	R	–
81	W	–
82	W	–
83	O	–

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

H.S.

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	V	–
4	W	–
5	B	–[With BOSE system]
5	BR	–[Without BOSE system]
6	GR	–
7	G	–
8	B	–
16	W	–
17	Y	–
18	W	–
19	R	–
20	SB	–
24	LG	–
25	Y	–
26	P	–
29	O	–
30	G	–
31	V	–
32	Y	–
33	P	–
34	SB	–
35	R	–

JCJWM1027GB



JCJWM1028GB

AUTOMATIC DRIVE POSITIONER

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19

Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	–
2	B	–
3	W	–
4	R	–
5	Y	–
6	W	–
7	G	–
8	SHIELD	–
9	W	–
10	R	–
11	G	–
12	B	–
13	O	–
14	R	–
15	SB	–
16	R	–
17	V	–
18	P	–
19	P	–
20	LG	–
21	Y	–
22	O	–
23	LG	–
24	SB	–
25	Y	–
27	Y	–
28	R	–
30	Y	–
31	W	–
32	BR	–
34	Y	–
35	SHIELD	–
36	G	–
37	Y	–
40	O	–
41	O	–
42	SB	–
43	L	–
44	V	–
45	P	–
46	R	–
47	Y	–
48	L	–
49	G	–
50	SHIELD	–
51	W	–
52	B	–
53	BR	–
54	B	–
55	G	–
56	P	–
57	L	–
58	SB	–
59	SHIELD	–
60	B	–
61	R	–
62	W	–
63	O	–
64	Y	–
66	L	–
67	R	–
68	G	–
69	SHIELD	–
70	L	–
71	R	–
72	LG	–
73	Y	–
74	R	–
75	P	–
76	L	–
77	BR	–
78	SHIELD	–
79	B	–
80	W	–
81	LG	–
82	L	–
83	W	–[With automatic drive positioner]
83	GR	–[With driver side power seat]
84	R	–
85	V	–[With front heated seat and passenger side power seat]
85	GR	–[With front heated seat without passenger side power seat]
86	W	–
87	R	–
88	G	–
89	B	–
90	G	–
91	G	–
92	BR	–
93	P	–
94	V	–
95	O	–
96	SB	–
97	L	–
98	LG	–
99	Y	–

Connector No.	M99
Connector Name	KEY SLOT
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	SB	CLOCK
3	O	DATA
5	GR	ILL BAT
6	R	ILL
7	B	GND
11	Y	KEY SWITCH SIGNAL

Connector No.	M102
Connector Name	TILT & TELESCOPIC SWITCH
Connector Type	TK06FGY

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

Connector No.	M104
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS08FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
25	W	UPWARD
26	L	BACKWARD
27	P	UPWARD
28	G	DOWNWARD
29	LG	UPWARD/FRONTWARD
30	B	GND

Connector No.	M115
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-P-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	–
2	W	–

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AUTOMATIC DRIVE POSITIONER

Connector No.	M116
Connector Name	TILT MOTOR
Connector Type	NS06FW-CS

H.S.

2		1
6	5	4	3

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	–
2	LG	–
4	P	–
5	V	–
6	Y	–

Connector No.	M117
Connector Name	TELESCOPIC MOTOR
Connector Type	NS06FW-CS

H.S.

2		1
6	5	4	3

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	–
2	LG	–
4	P	–
5	R	–
6	Y	–

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

1	3
2	

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.

4	5	6	7		8	9	10
11	12	13	14	15	16	17	18	19

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (FUSE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

81	80	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2–
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT–
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN–L
91	L	CAN–H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

H.S.

131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132

Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

JCJWM1030GB

AUTOMATIC DRIVE POSITIONER

Connector No.	M125
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH

H.S.

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

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	R	ACC
4	R	ILL
5	SB	ILL CONT
6	R	AV COMM (H)
8	L	AV COMM (L)
9	V	SW GND
14	W	EJECT SIGNAL

Connector No.	M129
Connector Name	AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)
Connector Type	TH24FW-NH

H.S.

47	46	45	44	43	42	41	40	39	38	37	36
59	58	57	56	55	54	53	52	51	50	49	48

Terminal No.	Color of Wire	Signal Name [Specification]
36	L	COMPOSITE IMAGE SIGNAL
37	P	COMPOSITE IMAGE GND
38	Y	RGB (B:BLUE) SIGNAL
39	L	RGB (G:GREEN) SIGNAL
40	G	RGB (R:RED) SIGNAL
41	B	RGB SYNC
42	SHIELD	SHIELD
43	W	RGB AREA (YS) SIGNAL
44	G	COMM (DISP->CONT)
45	G	HP
46	LG	SIGNAL GND
47	O	SIGNAL VCC
49	SHIELD	SHIELD
50	SHIELD	SHIELD
55	SHIELD	SHIELD
56	R	COMM (CONT->DISP)
57	R	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

Connector No.	M131
Connector Name	AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)
Connector Type	TH32FW-NH

H.S.

91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76
107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

Terminal No.	Color of Wire	Signal Name [Specification]
79	L	TEL VOICE SIGNAL (-)
80	R	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	W	SOUND SIGNAL RH (-)[With DVD player]
82	W	iPod SOUND SIGNAL RH (-)[Without DVD player]
83	R	SOUND SIGNAL RH (+)[With DVD player]
83	R	iPod SOUND SIGNAL RH (+)[Without DVD player]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	R	AV COMM (H)
89	L	AV COMM (L)
90	G	AV COMM (H)
91	L	AV COMM (L)
95	R	AUX SOUND SIGNAL RH (+)
96	B	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
98	G	SOUND SIGNAL LH (-)[With DVD player]
98	L	iPod SOUND SIGNAL LH (-)[Without DVD player]
99	B	SOUND SIGNAL LH (+)[With DVD player]
99	BR	iPod SOUND SIGNAL LH (+)[Without DVD player]
100	SHIELD	SHIELD[With DVD player]
100	SHIELD	SHIELD[Without DVD player]
101	V	SW GND
103	W	EJECT SIGNAL
104	G	IGNITION
105	SB	REVERSE
106	G	PARKING BRAKE
107	V	VEHICLE SPEED (8-PULSE)

Connector No.	M145
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Type	TH40FW-NH

H.S.

22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59

Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	R	ACC
26	B	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	W	MICROPHONE SIGNAL
35	G	IGNITION
36	G	PARKING BRAKE
37	SB	REVERSE
38	V	VEHICLE SPEED (8-PULSE)
40	P	CONNECTION RECOGNITION
42	B	CONTROL SIGNAL
43	B	CONTROL SIGNAL
48	G	AV COMM (H)
49	L	AV COMM (L)
50	R	AV COMM (H)
51	L	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M146
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Type	TH12FW-NH

H.S.

62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
61	G	RGB (R:RED) SIGNAL
62	R	RGB (G:GREEN) SIGNAL
63	W	RGB (B:BLUE) SIGNAL
64	SHIELD	SHIELD
65	B	RGB SYNC
66	SHIELD	SHIELD
67	W	RGB AREA (YS) SIGNAL
68	B	HP
69	R	VP
70	R	COMM (CONT->DISP)
71	G	COMM (DISP->CONT)
72	SHIELD	SHIELD

JCJWM1031GB

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000005681376

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

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/AUTO	Off
	Front wiper switch INT/AUTO	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
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
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
RR FOG SW	**NOTE:** The item is indicated, but not monitored.	Off

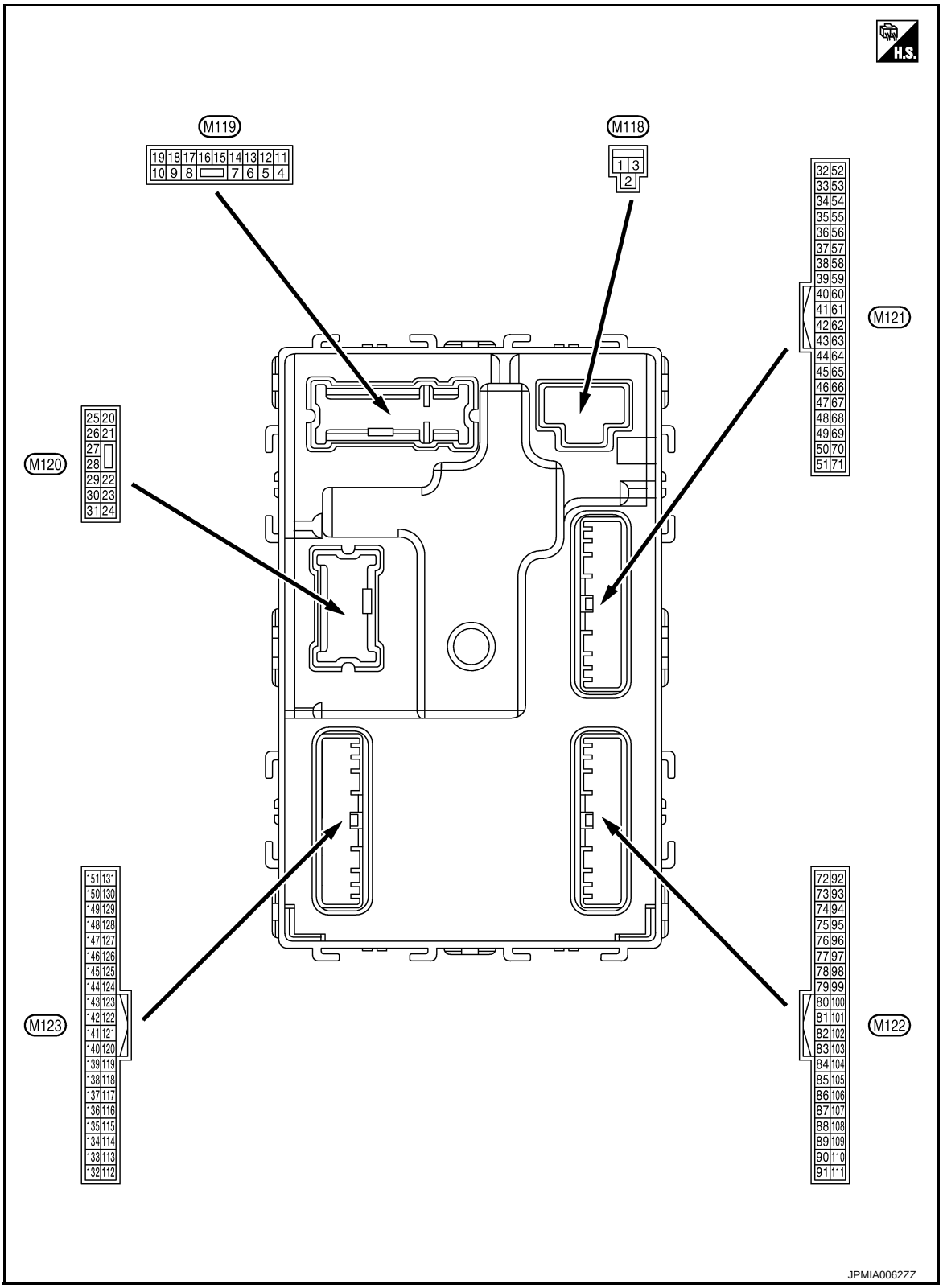
Monitor Item	Condition	Value/Status
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back 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
KEY CYL SW-TR	**NOTE:** The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW **NOTE:** For models with BOSE audio system this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TR CANCEL SW	**NOTE:** The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On

Monitor Item	Condition	Value/Status
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	**NOTE:** The item is indicated, but not monitored.	Off
CLUCH SW	**NOTE:** The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	Stop lamp switch 1 signal circuit is normal	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK **NOTE:** For models without steering lock unit this item is not displayed.	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK **NOTE:** For models without steering lock unit this item is not displayed.	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B **NOTE:** For models without steering lock unit this item is not displayed.	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On

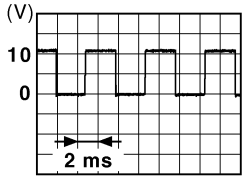
Monitor Item	Condition	Value/Status
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM **NOTE:** For models without steering lock unit this item is not displayed.	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM **NOTE:** For models without steering lock unit this item is not displayed.	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ **NOTE:** For models without steering lock unit this item is not displayed.	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On
VEH SPEED 1	While driving	Equivalent to speed-ometer reading
VEH SPEED 2	While driving	Equivalent to speed-ometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Power supply position in LOCK position	Reset
	Power supply position in any position other than LOCK	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	**NOTE:** The item is indicated, but not monitored.	Reset
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off
	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** The item is indicated, but not monitored.	—
CONFRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done

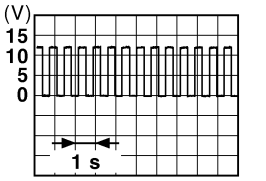
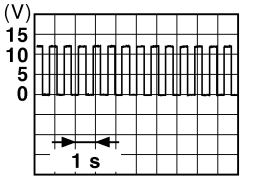
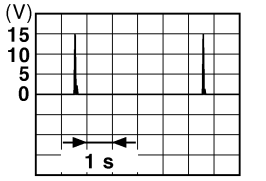
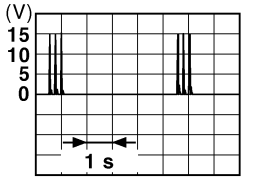
Monitor Item	Condition	Value/Status
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent 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	ID of front LH tire transmitter is registered	Done
	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
	ID of rear LH tire transmitter is not registered	Yet
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

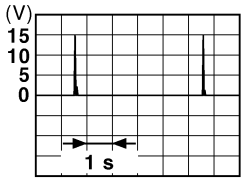
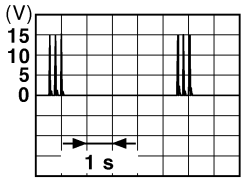
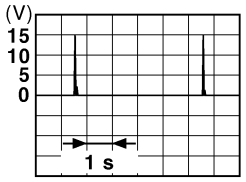
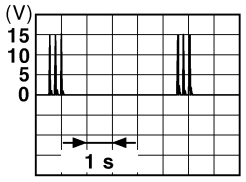
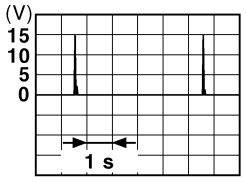
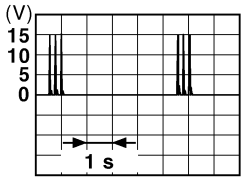
TERMINAL LAYOUT

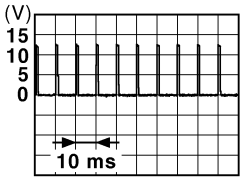
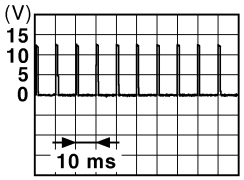
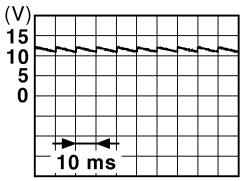
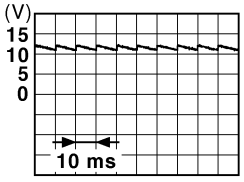


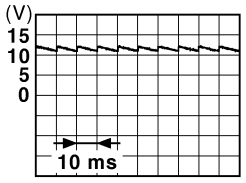
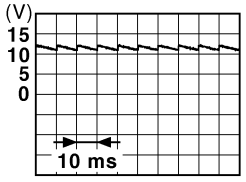
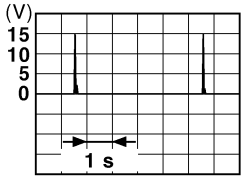
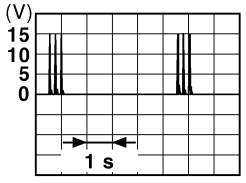
PHYSICAL VALUES

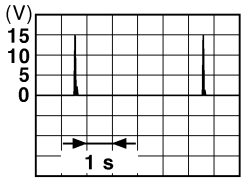
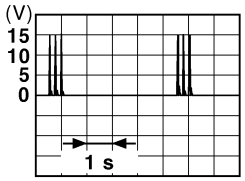
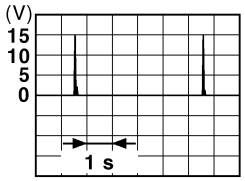
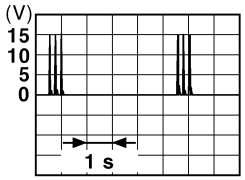
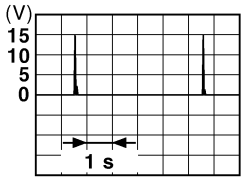
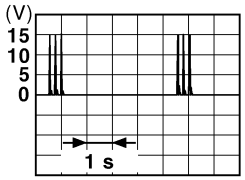
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (P)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (G)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (W)	Ground	Step lamp	Output	Step lamp	ON	0 V
					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)	0 V
9 (G)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (P)	Ground	Rear RH door and rear LH door UNLOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
					ACC	0 V

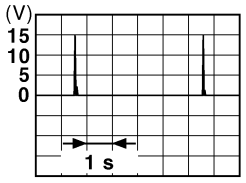
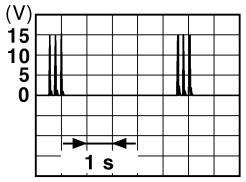
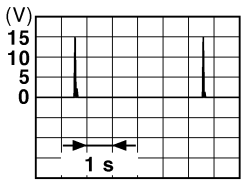
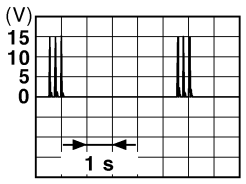
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
23 (BR)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
					Other than OPEN (Back door opener actuator is not activated)	0 V
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage
34 (B)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

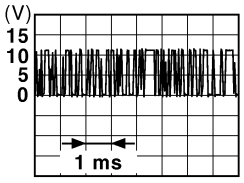
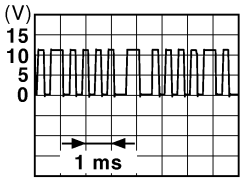
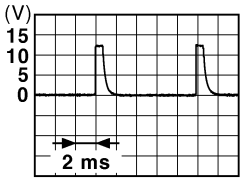
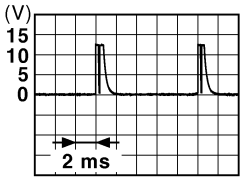
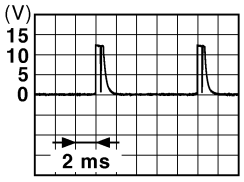
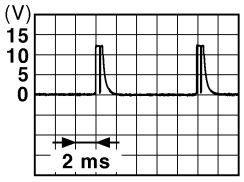
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
35 (W)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (L)	Ground	Rear bumper antenna (-)	Output	When the back door 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
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the back door 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
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

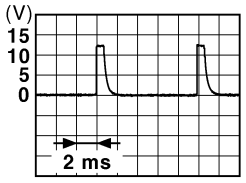
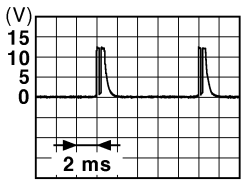
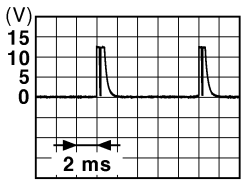
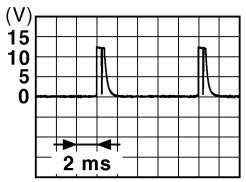
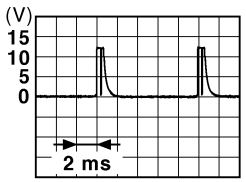
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
52 (R)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0.3 V
				Ignition switch OFF		0 V
61 (R)	Ground	Back door request switch	Input	Back door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (GR)	Ground	Warning buzzer	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	 JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	 JPMIA0011GB 11.8 V
					ON (When back door opens)	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V

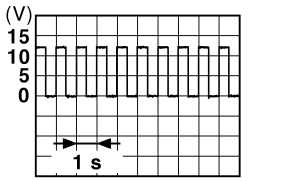
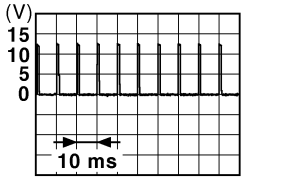
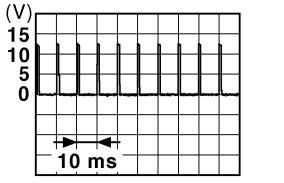
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	 JPMIA0011GB 11.8 V
					ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	 JPMIA0011GB 11.8 V
					ON (When rear LH door opens)	0 V
72 (B)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

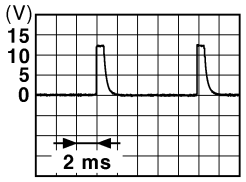
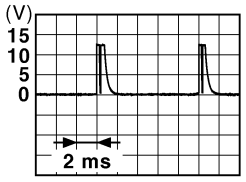
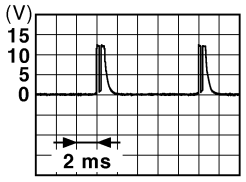
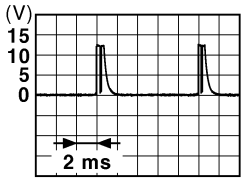
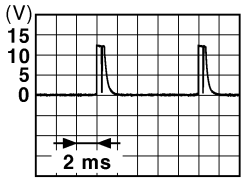
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
73 (W)	Ground	Room antenna (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
74 (Y)	Ground	Passenger door antenna (-)	Output	When the passenger door 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
75 (LG)	Ground	Passenger door antenna (+)	Output	When the passenger door 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

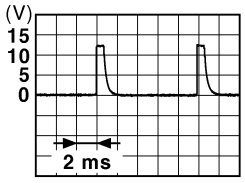
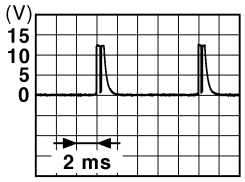
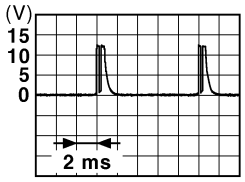
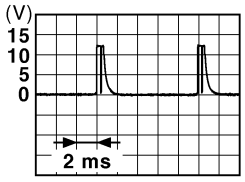
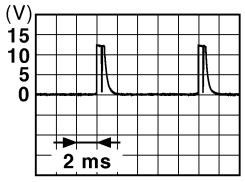
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
77 (P)	Ground	Driver door antenna (+)	Output	When the driver door 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
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

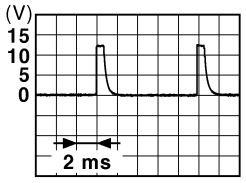
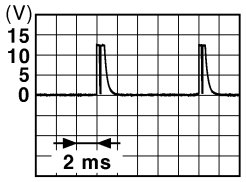
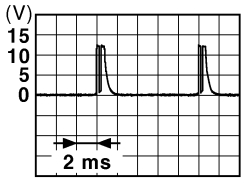
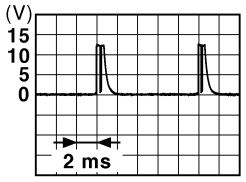
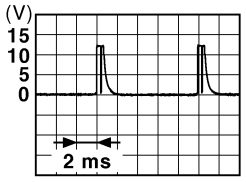
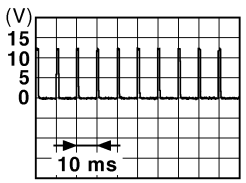
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
83 (P)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3 V

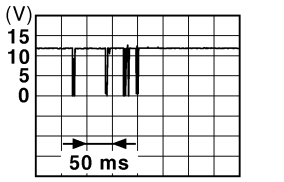
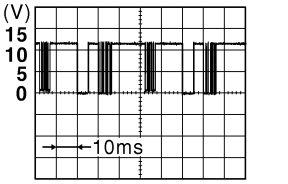
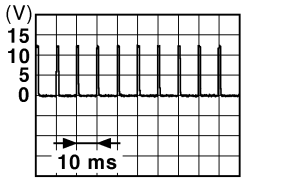
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output	—		—
91 (L)	Ground	CAN - H	Input/ Output	—		—

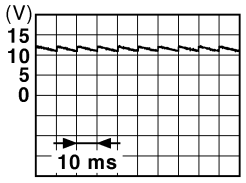
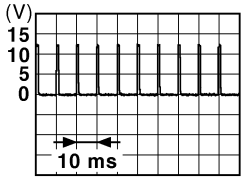
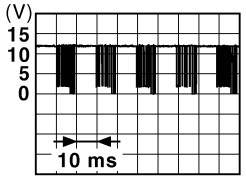
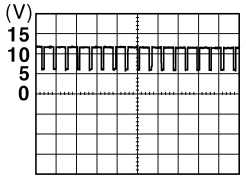
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
92 (R)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 JPMIA0015GB 6.5 V
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output	—		Battery voltage
97*1 (O)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98*1 (L)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (V)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

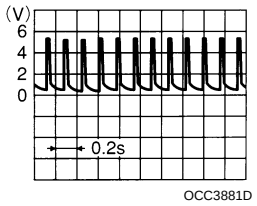
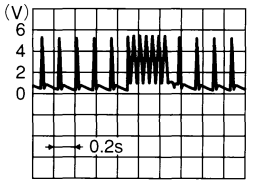
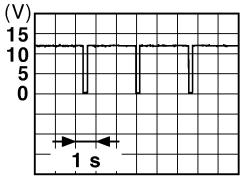
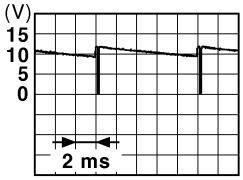
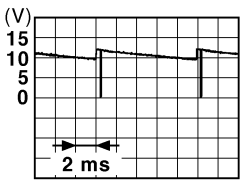
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
106*1 (Y)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

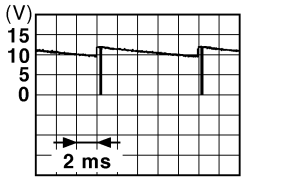
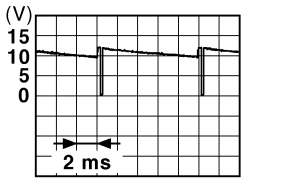
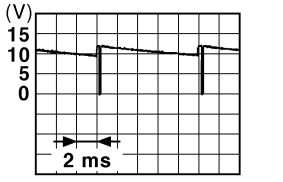
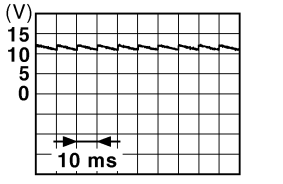
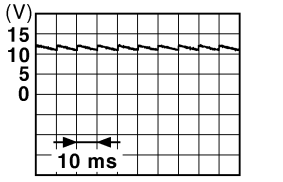
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)	 JPMIA0040GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 JPMIA0039GB 1.3 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND	 JPMIA0036GB 1.3 V
					Front wiper switch INT/ AUTO	 JPMIA0038GB 1.3 V
					Front wiper switch HI	 JPMIA0040GB 1.3 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	ON	0 V
					OFF	 JPMIA0012GB 1.1 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
111*1 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		 JPMIA0156GB 8.7 V
113 (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (GR)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
119 (W)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sensor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (unlock sensor switch ON)	0 V
121 (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		0 V
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V
130*2 (BR)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		Battery voltage
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF)	9.5 V
					ON (When tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF (ACC and ON indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
139 (O)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the conditions below with all switches 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			
144 (P)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
146 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	 JPMIA0035GB 10.7 V
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
149 (W)	Ground	Tire pressure warning check switch	Input	Ignition switch ON		 JPMIA0011GB 11.8 V
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	 JPMIA0011GB 11.8 V
					ON (When driver door opens)	0 V

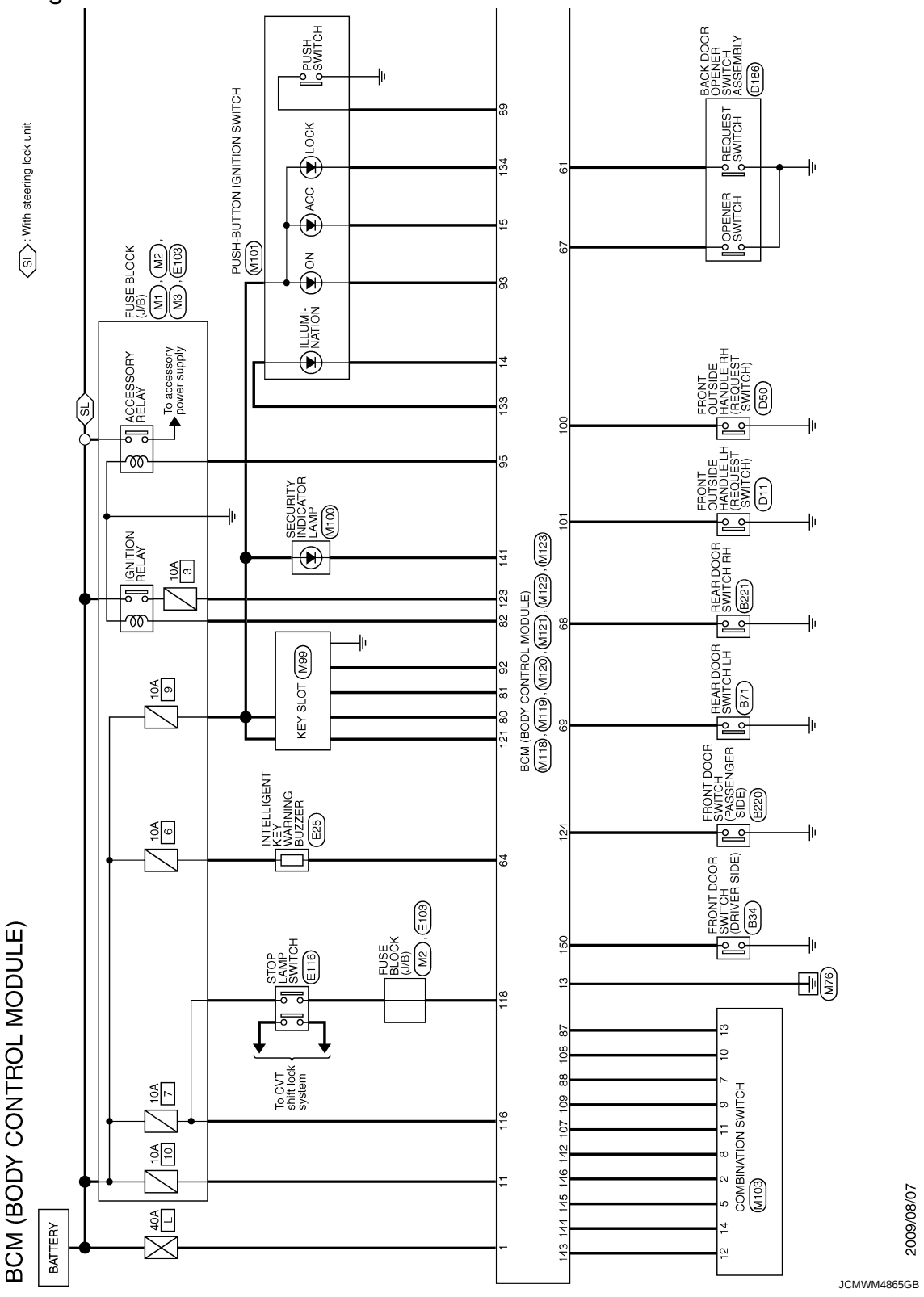
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

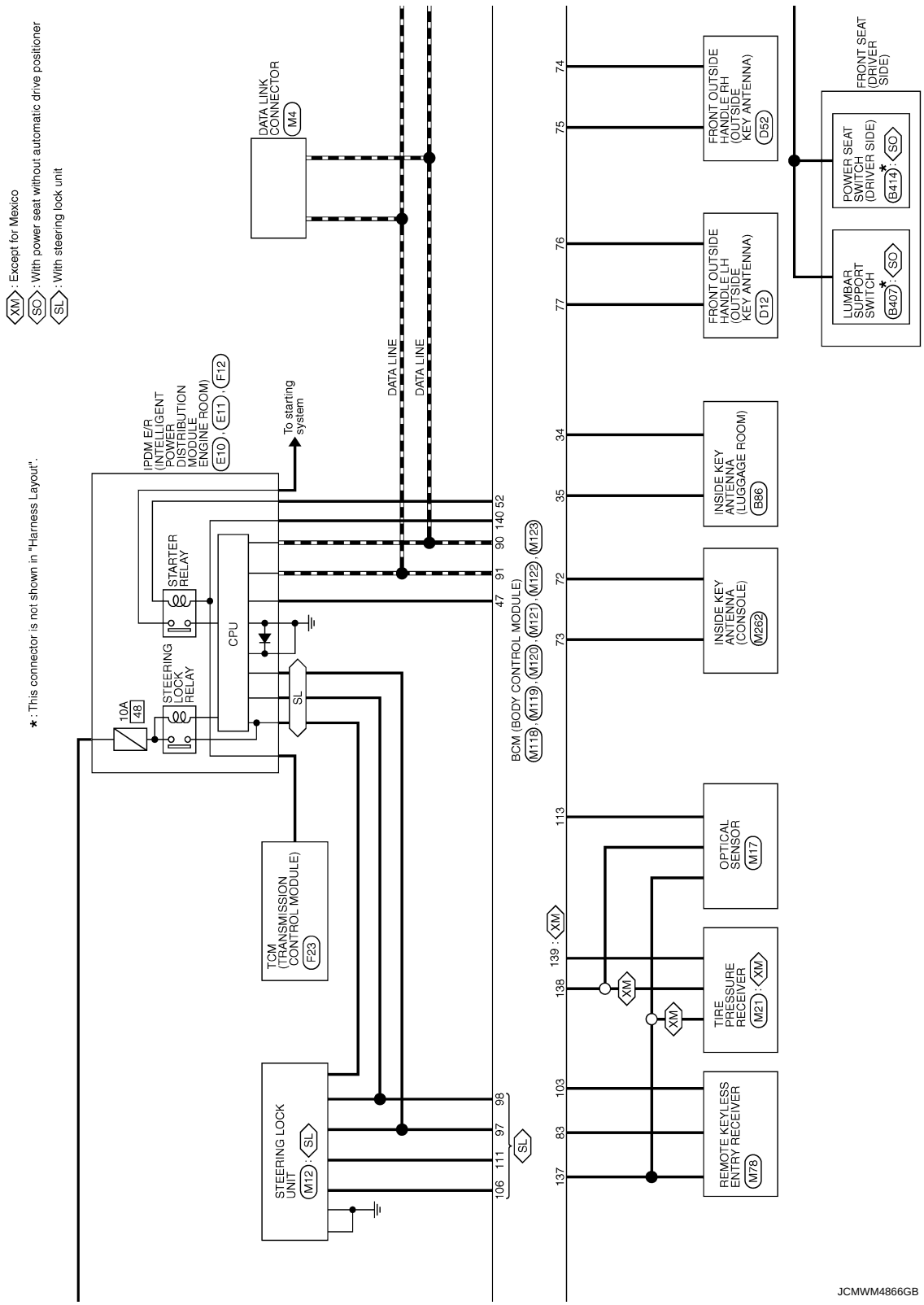
NOTE:

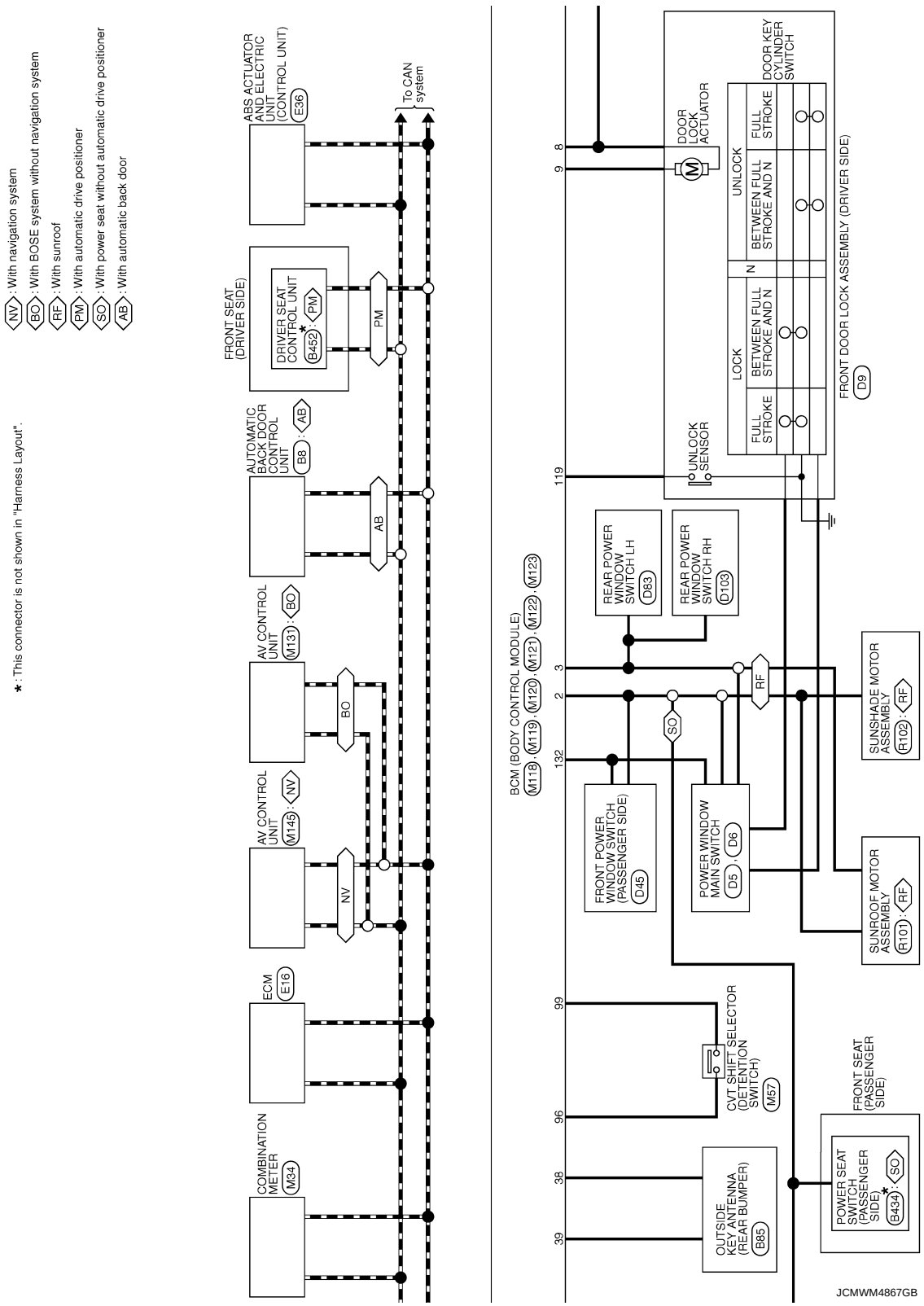
- *1: With steering lock unit
- *2: Without BOSE audio system

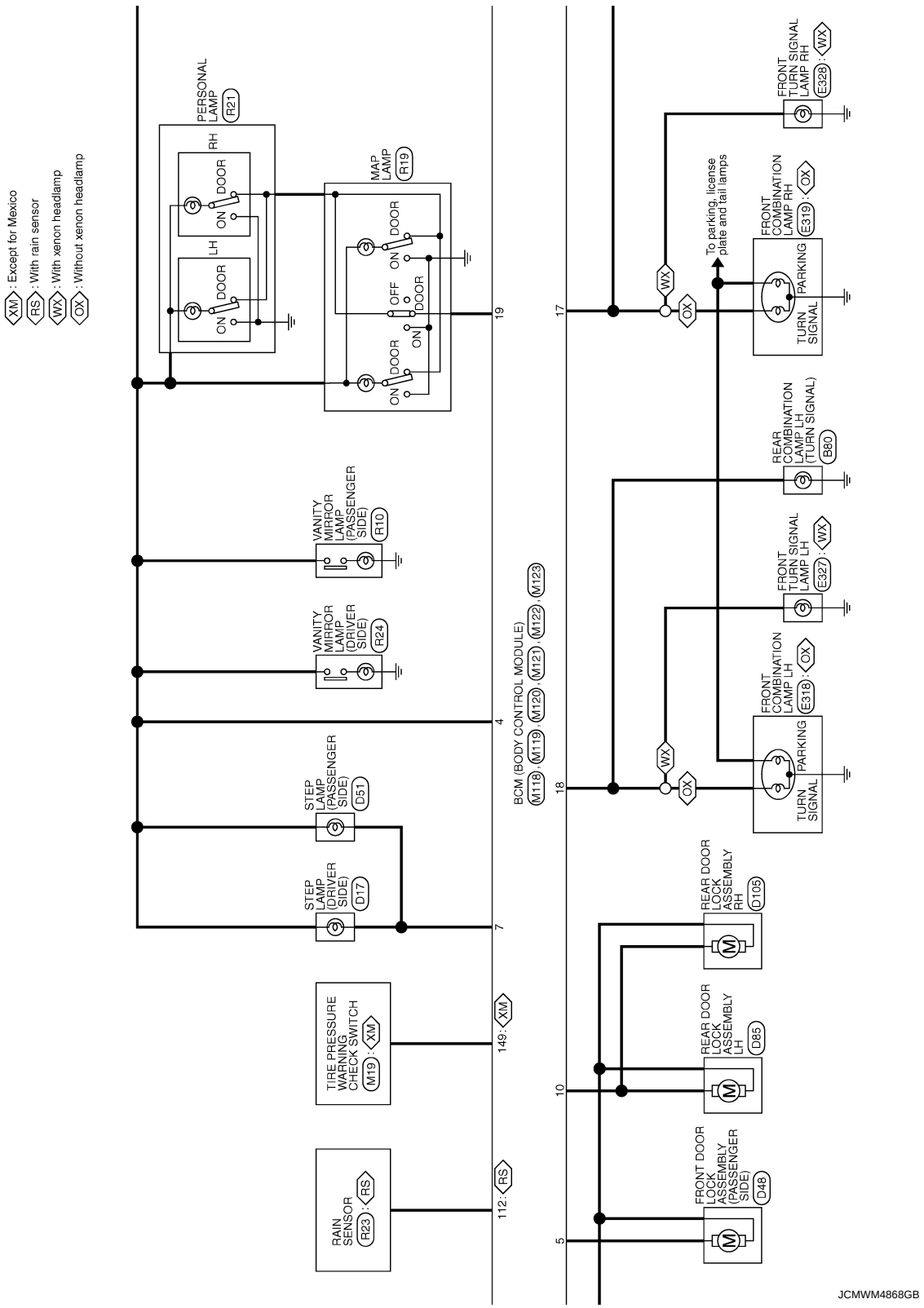
Wiring Diagram - BCM -

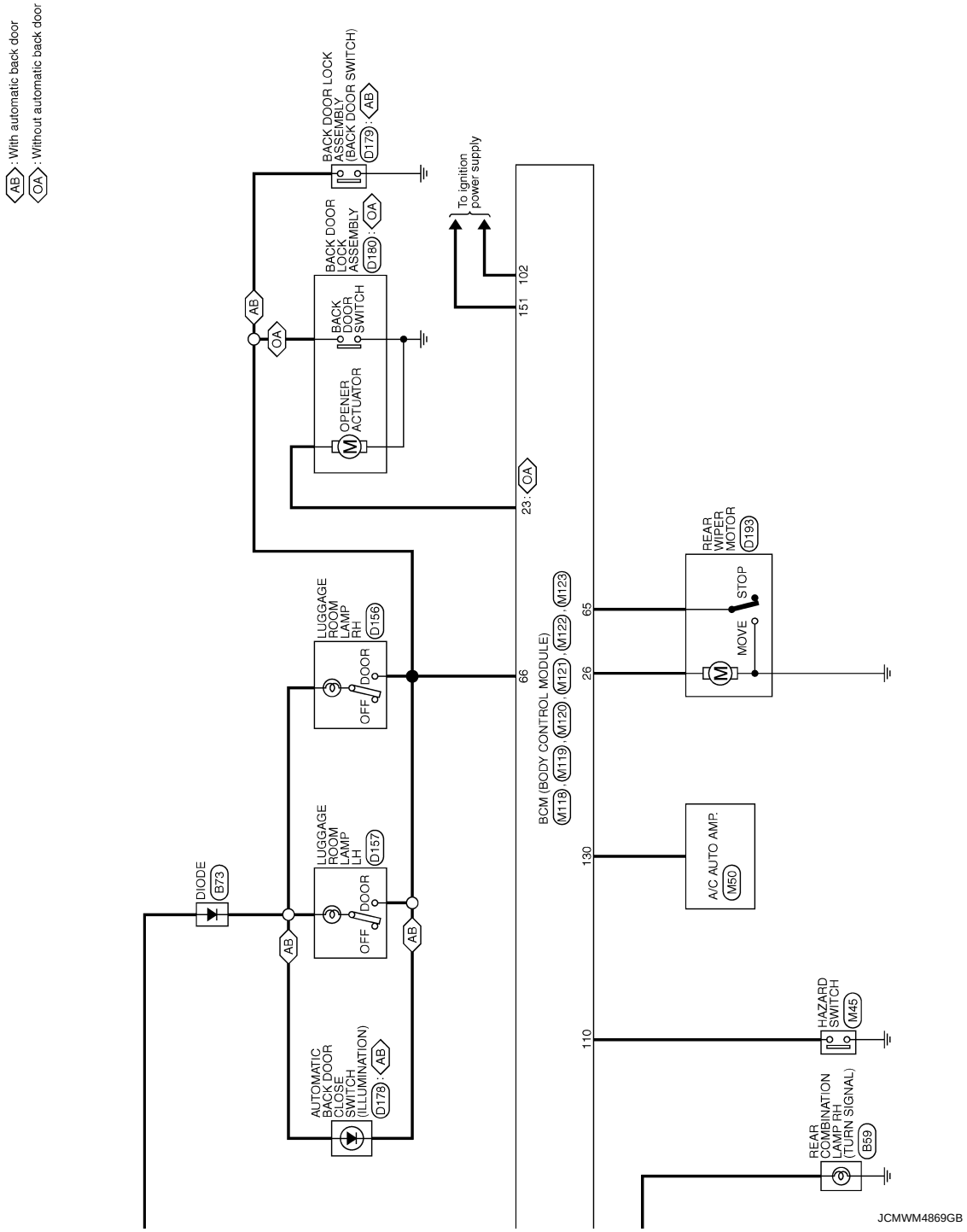
INFOID:0000000005681377

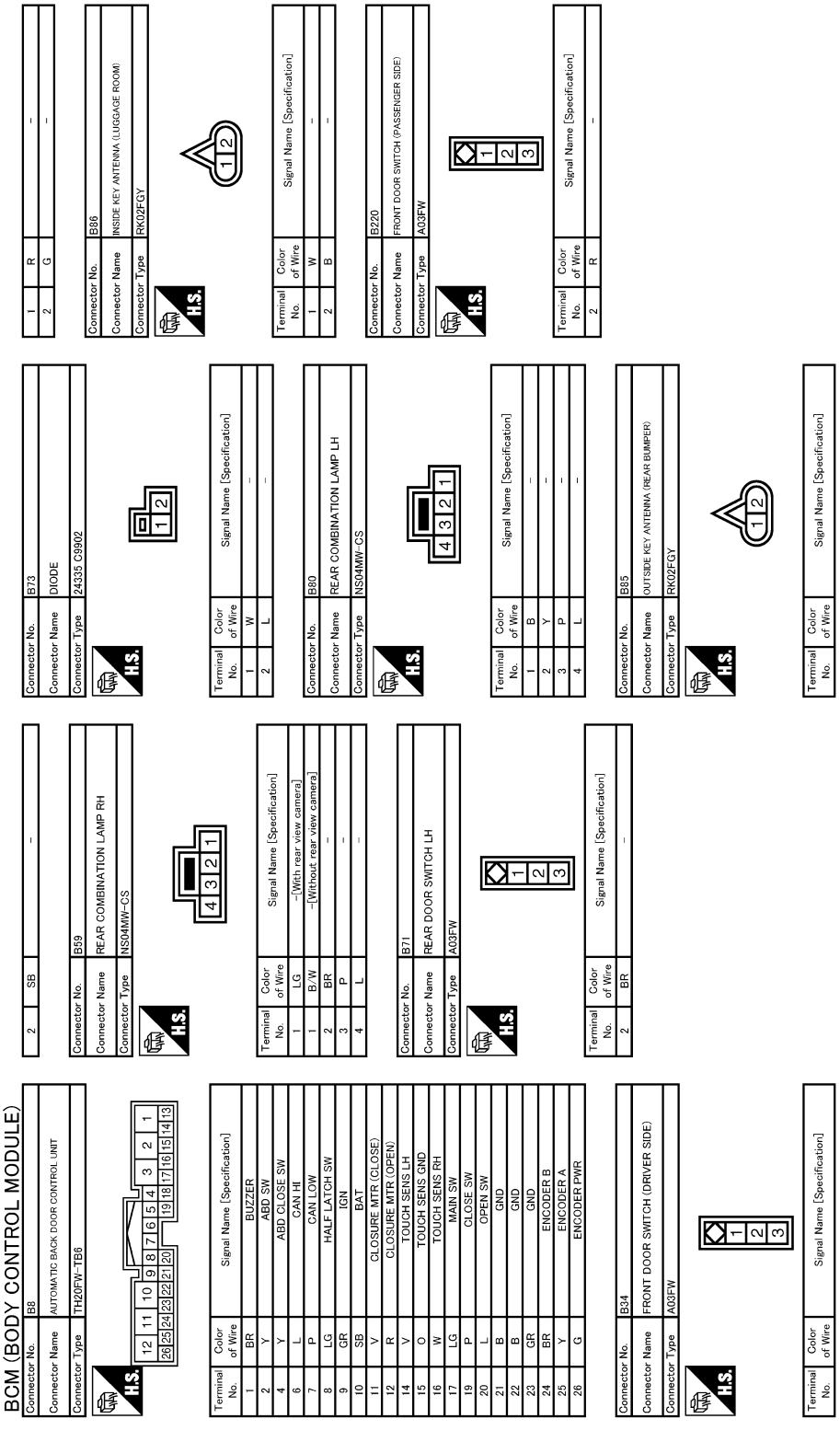



XM : Except for Mexico
SO : With power seat without automatic drive positioner
SL : With steering lock unit
*: This connector is not shown in "Harness Layout".
DATA LINK CONNECTOR M4
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E10, E11, F12
To starting system
DATA LINE
DATA LINE
STARTER RELAY
STEERING LOCK RELAY
10A 48
CPU
SL
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
47 91 90 140 52
TCM (TRANSMISSION CONTROL MODULE) F23
STEERING LOCK UNIT M12 : SL
106 111 97 98
SL
74 75 76 77 34 35 72 73 113 139 138 103 83 137
FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA) D52
FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA) D12
INSIDE KEY ANTENNA (LUGGAGE ROOM) B86
INSIDE KEY ANTENNA (CONSOLE) M262
OPTICAL SENSOR M17
TIRE PRESSURE RECEIVER M21 : XM
REMOTE KEYLESS ENTRY RECEIVER M78
FRONT SEAT (DRIVER SIDE)
POWER SEAT SWITCH (DRIVER SIDE) B414 : SO
LUMBAR SUPPORT SWITCH B407 : SO
JCMWM4866GB

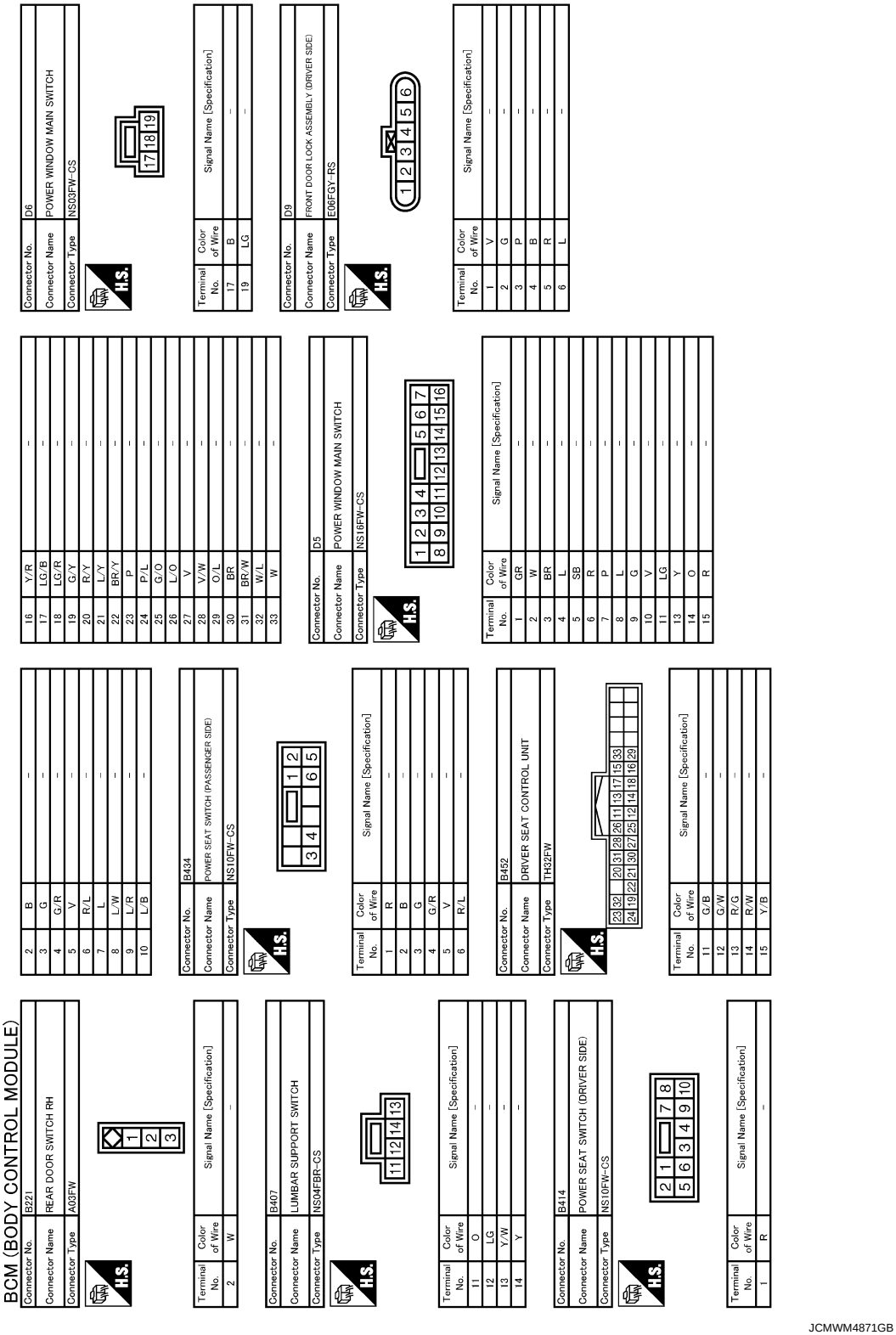

NV : With navigation system
BO : With BOSE system without navigation system
RF : With sunroof
PM : With automatic drive positioner
SO : With power seat without automatic drive positioner
AB : With automatic back door
* : This connector is not shown in "Harness Layout".
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E36
To CAN system
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT B452 *
PM
AUTOMATIC BACK DOOR CONTROL UNIT B8
AB
AV CONTROL UNIT M133 : BO
AV CONTROL UNIT M145 : NV
ECM E16
COMBINATION METER M34
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) D9
REAR POWER WINDOW SWITCH LH D83
REAR POWER WINDOW SWITCH RH D103
FRONT POWER WINDOW SWITCH (PASSENGER SIDE) D45
POWER WINDOW MAIN SWITCH D5 D6
SUNSHADE MOTOR ASSEMBLY R102 : RF
SUNROOF MOTOR ASSEMBLY R101 : RF
CVT SHIFT SELECTOR (DETENTION SWITCH) M57
OUTSIDE KEY ANTENNA (REAR BUMPER) B85
POWER SEAT SWITCH (PASSENGER SIDE) B434 * : SO
FRONT SEAT (PASSENGER SIDE)
JCMWM4867GB


XM : Except for Mexico
RS : With rain sensor
WX : With xenon headlamp
OX : Without xenon headlamp
PERSONAL LAMP R21
RH
LH
DOOR
ON
MAP LAMP R19
OFF
VANITY MIRROR LAMP (PASSENGER SIDE) R10
VANITY MIRROR LAMP (DRIVER SIDE) R24
STEP LAMP (PASSENGER SIDE) D51
STEP LAMP (DRIVER SIDE) D17
TIRE PRESSURE WARNING CHECK SWITCH M19 : XM
RAIN SENSOR R23 : RS
149 : XM
112 : RS
19
4
7
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
17
18
10
5
To parking, license plate and tail lamps
FRONT TURN SIGNAL LAMP RH E328 : WX
FRONT COMBINATION LAMP RH E319 : OX
REAR COMBINATION LAMP LH (TURN SIGNAL) B80
FRONT TURN SIGNAL LAMP LH E327 : WX
FRONT COMBINATION LAMP LH E318 : OX
TURN SIGNAL
PARKING
REAR DOOR LOCK ASSEMBLY RH D105
REAR DOOR LOCK ASSEMBLY LH D85
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D48
JCMWM4868GB

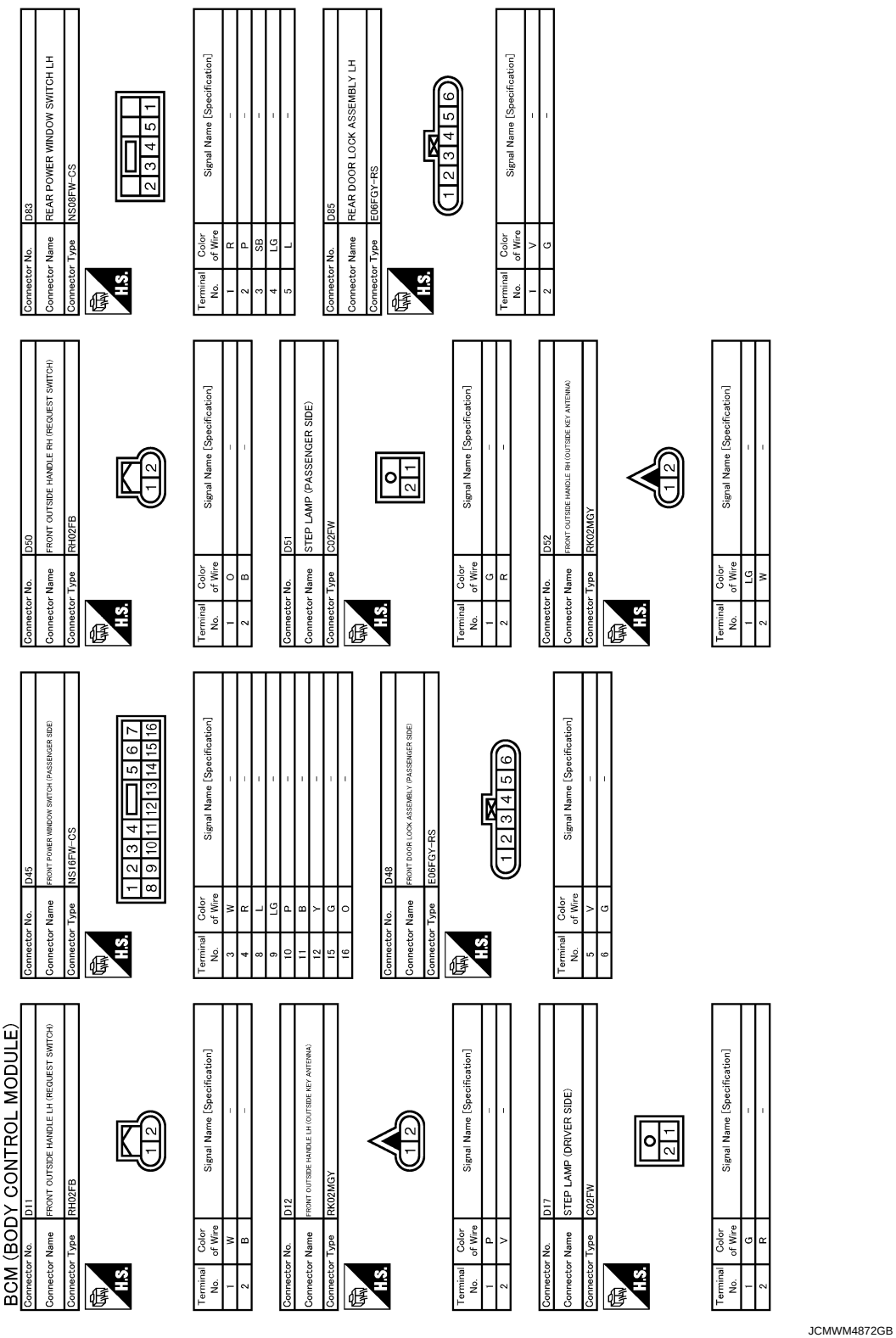

AB : With automatic back door
OA : Without automatic back door
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D179 : AB
BACK DOOR LOCK ASSEMBLY
D180 : OA
BACK DOOR SWITCH
OPENER ACTUATOR
To ignition power supply
151
102
23 : OA
LUGGAGE ROOM LAMP RH
D156
LUGGAGE ROOM LAMP LH
D157
DOOR
OFF
DIODE
B73
AUTOMATIC BACK DOOR CLOSE SWITCH (ILLUMINATION)
D178 : AB
BCM (BODY CONTROL MODULE)
M118
M119
M120
M121
M122
M123
66
65
26
130
110
REAR WIPER MOTOR
D193
STOP
MOVE
A/C AUTO AMP.
M50
HAZARD SWITCH
M45
REAR COMBINATION LAMP RH (TURN SIGNAL)
B59
JCMWM4869GB



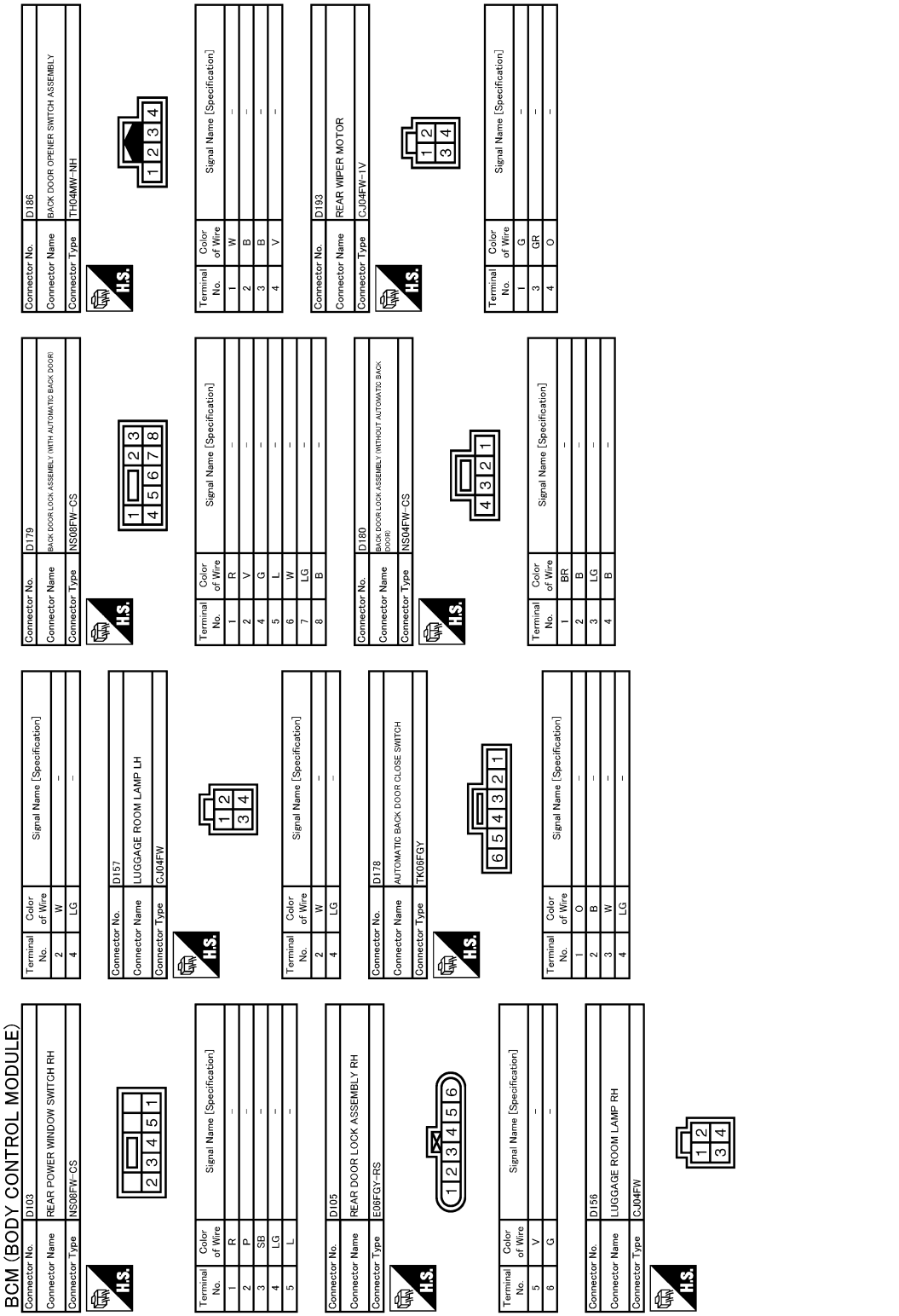
JCMWM4870GB



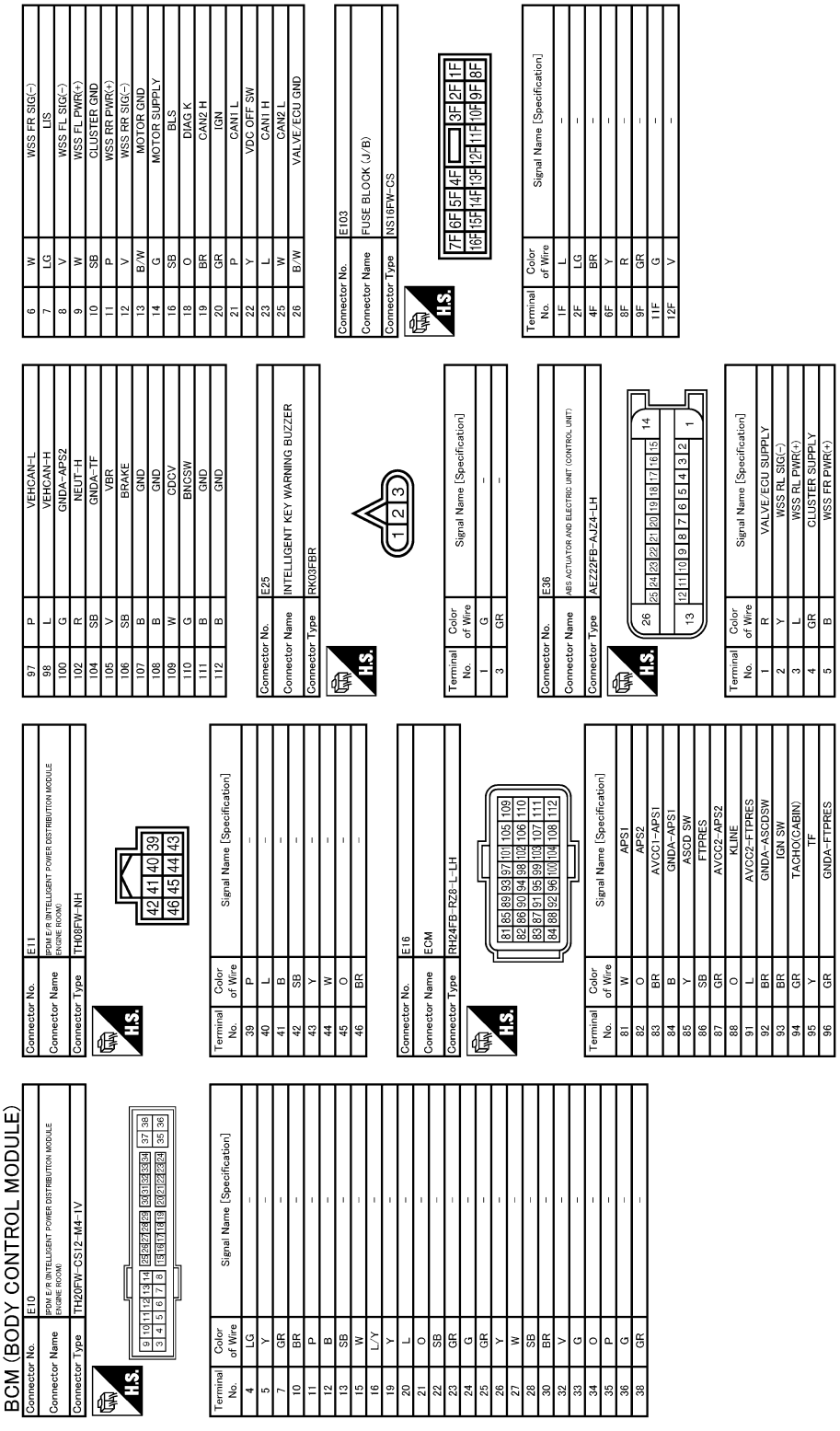
JCMWM4871GB



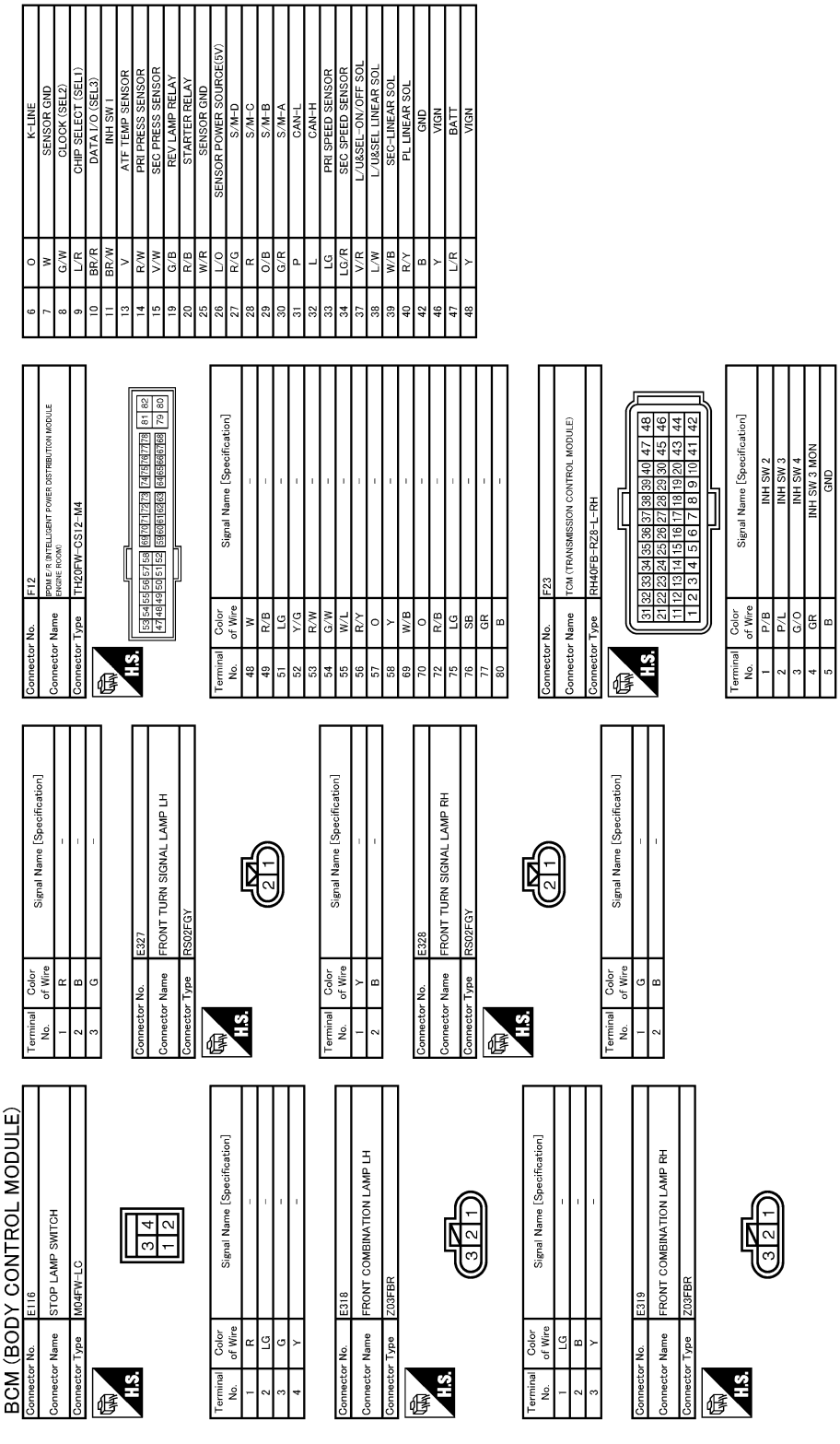
JCMWM4872GB



JCMWM4873GB



JCMWM4874GB



JCMWM4875GB

BCM (BODY CONTROL MODULE)

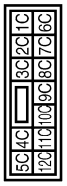
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

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

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS

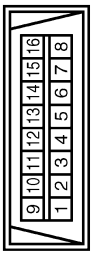
Terminal No.	Color of Wire	Signal Name [Specification]
1B	W	–
3B	L	–
4B	G	–
5B	L	–
6B	Y	–
7B	R	–
8B	R	–
9B	GR	–

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



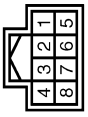
Terminal No.	Color of Wire	Signal Name [Specification]
6C	BR	–
7C	B	–
8C	G	–
9C	GR	–
10C	SB	–
11C	R	–
12C	O	–

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	–
5	B	–
6	L	–
7	O	–
8	G	–
14	P	–
16	Y	–

Connector No.	M12
Connector Name	STEERING LOCK UNIT
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	S/L 12V MECHANICAL(V1)
2	LG	S/L COM
3	O	S/L CONDITION 1
5	B	GND 1
6	B	GND 2
7	Y	S/L 12V CPU(V2)
8	L	S/L CONDITION 2

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	–
2	O	–
3	P	–

Connector No.	M19
Connector Name	TIRE PRESSURE WARNING CHECK SWITCH
Connector Type	TK02FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	–

Connector No.	M21
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	O	SIGNAL
4	V	POWER

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BCM (BODY CONTROL MODULE)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SW ILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	V	ILLUMINATION CONTROL SWITCH (+) (With automatic drive positioner)
13	Y	ILLUMINATION CONTROL SWITCH (+) (Without automatic drive positioner)
14	GR	ILLUMINATION CONTROL SWITCH (-)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TK04FW

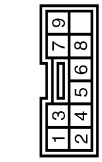
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	G	–
3	R	–
4	SB	–

Connector No.	M50
Connector Name	A/C AUTO AMP.
Connector Type	SAB40FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	CAN-H
2	P	CAN-L
6	L	TX(AMP.>SW&DISP)
7	P	RX(SW>AMP.)
10	L	LAN SIG
11	R	VACTR
15	O	SUN SENS
16	G	INTAKE SENS
17	R	ACC
19	B	GND
20	G	IGN
26	GR	RR DEF F/B
27	BR	RR DEF ON
32	L	FAN PWM
34	P	AMB POWER
35	L	AMB SENS
36	LG	INCAR SENS
37	Y	SENS GND

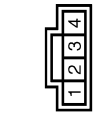
39	B	GND(POWER)
40	Y	BAT

Connector No.	M57
Connector Name	CVT SHIFT SELECTOR
Connector Type	TK10FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	–
4	B	–
6	P	–
7	B	–
8	Y	–
9	V	–

Connector No.	M78
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	P	SIGNAL
4	L	+12V

Connector No.	M99
Connector Name	KEY SLOT
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	SB	CLOCK
3	O	DATA
5	GR	ILL BAT
6	R	ILL
7	B	GND
11	Y	KEY SWITCH SIGNAL

Connector No.	M100
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	–
2	O	–

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BCM (BODY CONTROL MODULE)

Connector No.	M101
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	O	–
3	W	–
4	BR	–
5	R	–
6	L	–
7	P	–
8	GR	–

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (FUSE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
23	BR	BACK DOOR OPEN OUTPUT
26	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH

Terminal No.	Color of Wire	Signal Name [Specification]
34	B	LUGGAGE ROOM ANT1–
35	W	LUGGAGE ROOM ANT1+
38	L	REAR BUMPER ANT–
39	BR	REAR BUMPER ANT+
47	L	IGN RELAY IPDM E/R CONT
52	R	STARTER RELAY CONT
61	R	BACK DOOR OPENER REQUEST SW
64	GR	REQUEST SW BUZZER
65	O	REAR WIPER STOP POSITION
66	Y	BACK DOOR SW
67	LG	BACK DOOR OPENER SW
68	W	REAR RH DOOR SW
69	R	REAR LH DOOR SW

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2–
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT–
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN–L
91	L	CAN–H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

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BCM (BODY CONTROL MODULE)

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

H.S.

131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132

Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

Connector No.	M131
Connector Name	AV CONTROL UNIT (WITH BOSE SYSTEM WITHOUT NAVIGATION SYSTEM)
Connector Type	TH32FW-NH

H.S.

91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76
107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

Terminal No.	Color of Wire	Signal Name [Specification]
79	L	TEL VOICE SIGNAL (-)
80	R	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	W	SOUND SIGNAL RH (-)[With DVD player]
83	R	iPod SOUND SIGNAL RH (-)[Without DVD player]
83	R	SOUND SIGNAL RH (-)[With DVD player]
83	R	iPod SOUND SIGNAL RH (+) [Without DVD player]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	R	AV COMM (H)
89	L	AV COMM (L)
90	G	AV COMM (H)
91	L	AV COMM (L)
95	R	AUX SOUND SIGNAL RH (+)
96	B	AUX SOUND SIGNAL LH (+)
97	W	AUX SOUND SIGNAL GND
98	G	SOUND SIGNAL LH (-)[With DVD player]
98	L	iPod SOUND SIGNAL LH (-)[Without DVD player]
99	B	SOUND SIGNAL LH (+)[With DVD player]
99	BR	iPod SOUND SIGNAL LH (+)[Without DVD player]
100	SHIELD	SHIELD[With DVD player]
100	SHIELD	SHIELD [Without DVD player]
101	V	SW GND
103	W	EJECT SIGNAL
104	G	IGNITION
105	SB	REVERSE
106	G	PARKING BRAKE
107	V	VEHICLE SPEED (8-PULSE)

Connector No.	M145
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Type	TH40FW-NH

H.S.

22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57	59

Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	R	ACC
26	B	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	W	MICROPHONE SIGNAL
35	G	IGNITION
36	G	PARKING BRAKE
37	SB	REVERSE
38	V	VEHICLE SPEED (8-PULSE)
40	P	CONNECTION RECOGNITION
42	B	CONTROL SIGNAL
43	B	CONTROL SIGNAL
48	G	AV COMM (H)
49	L	AV COMM (L)
50	R	AV COMM (H)
51	L	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M262
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

H.S.

1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	–

2	B	–

Connector No.	R10
Connector Name	VANITY MIRROR LAMP (PASSENGER SIDE)
Connector Type	MCA02FW

H.S.

1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	–
2	P/W	–

Connector No.	R19
Connector Name	MAP LAMP
Connector Type	TK06FGY

H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name [Specification]
1	P/W	–
2	Y	–
3	B	–
4	SB	–
5	R/Y	–
6	R/L	–

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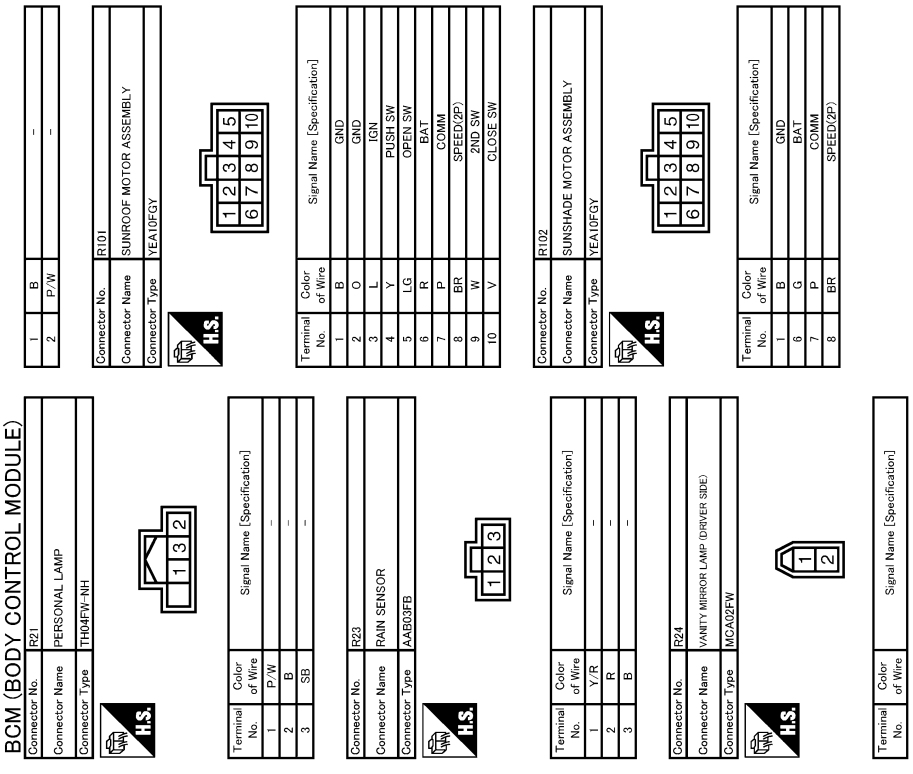

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Fail-safe

INFOID:0000000005681378

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
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	Ignition switch ON → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
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)
B2609: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When the following steering lock conditions agree • BCM steering lock control status • Steering lock condition No. 1 signal status • Steering lock condition No. 2 signal status
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 are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When any of the following conditions are fulfilled • Steering lock unit status signal (CAN) is received normally • The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
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
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	• Inhibit engine cranking • Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled • Steering condition No. 1 signal: LOCK (0V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:
The blinking speed is normal while activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:
If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.
When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. More than 1 minute is passed after the rear wiper stop.

2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000005681379

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM • U1010: CONTROL UNIT(CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • 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 SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • 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 • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000005681380

NOTE:
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-17, "COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	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	—	—	—	—	BCS-38
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L*	×	×	—	—	SEC-51
B2014: CHAIN OF S/L-BCM*	×	×	—	—	SEC-52
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-43
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-46
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-47
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-49
B2195: ANTI SCANNING	×	—	—	—	SEC-50
B2553: IGNITION RELAY	—	×	—	—	PCS-48
B2555: STOP LAMP	—	×	—	—	SEC-55
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-57
B2557: VEHICLE SPEED	×	×	×	—	SEC-59
B2560: STARTER CONT RELAY	×	×	×	—	SEC-60
B2562: LOW VOLTAGE	—	×	—	—	BCS-41
B2601: SHIFT POSITION	×	×	×	—	SEC-61
B2602: SHIFT POSITION	×	×	×	—	SEC-64
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2605: PNP SW	×	×	×	—	SEC-71
B2606: S/L RELAY*	×	×	×	—	SEC-73
B2607: S/L RELAY*	×	×	×	—	SEC-74
B2608: STARTER RELAY	×	×	×	—	SEC-76
B2609: S/L STATUS*	×	×	×	—	SEC-78
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260B: STEERING LOCK UNIT*	—	×	×	—	SEC-82
B260C: STEERING LOCK UNIT*	—	×	×	—	SEC-83
B260D: STEERING LOCK UNIT*	—	×	×	—	SEC-84
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-85
B2612: S/L STATUS*	×	×	×	—	SEC-88
B2614: ACC RELAY CIRC	—	×	×	—	PCS-52
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-55
B2616: IGN RELAY CIRC	—	×	×	—	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-92
B2618: BCM	×	×	×	—	PCS-61
B2619: BCM*	×	×	×	—	SEC-94
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-95
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-98
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26E9: S/L STATUS*	×	×	× (Turn ON for 15 seconds)	—	SEC-86
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-87
C1704: LOW PRESSURE FL	—	—	—	×	WT-25
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-27
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-30
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-32
C1734: CONTROL UNIT	—	—	—	×	WT-34

NOTE:

*: For models without steering lock unit this DTC is not applied.

SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000005515426

The diagnostics item numbers show the sequence for inspection. Inspection in order from item 1.

Order	Function	Operation procedure	Symptom	Diagnostic item	Reference page
1	Memory function	Perform memory storage (Refer to ADP-10.) and memory operation (Refer to ADP-22).	All parts do not operate in memory function.	—	ADP-195
			Memory indicator 1 or 2 does not operate.	—	ADP-196
2	Manual function	Perform manual function (Refer to ADP-18).	All components of power seat do not operate.	—	ADP-197
			All components of tilt&telescopic do not operate.	—	ADP-205
3	Manual function and memory function	Perform manual function (Refer to ADP-18.) and memory function (Refer to ADP-22.).	Manual function or memory function does not operate. (for specific part)	Sliding	ADP-198
				Reclining	ADP-198
				Lifting (front)	ADP-199
				Lifting (rear)	ADP-200
				Steering tilt	ADP-200
				Steering telescopic	ADP-201
				Door mirror	ADP-202
4	Entry/exit assist function	Perform entry/exit assist function. Exit assist function: Refer to ADP-26 Entry assist function: Refer to ADP-30	Entry/exit assist function does not operate.	—	ADP-203
5	Intelligent Key inter lock function	Perform Intelligent Key inter lock function (Refer to ADP-34).	Intelligent Key inter lock function does not operate.	—	ADP-204

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

Diagnosis Procedure

INFOID:0000000005515427

1.CHECK MEMORY FUNCTION

Check memory function.
Refer to ADP-22, "MEMORY FUNCTION : System Description".

Is the inspection result normal?

YES >> Memory function is normal.
NO >> GO TO 2.

2.CHECK SEAT MEMORY SWITCH

Check seat memory switch.
Refer to ADP-66, "Component Function Check".

Is the inspection result normal?

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

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

Check driver seat control unit power supply and ground circuit.
Refer to ADP-52, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

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

Check automatic drive positioner control unit power supply and ground circuit.
Refer to ADP-52, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE

1. Perform initialization procedure.
   Refer to ADP-9, "SYSTEM INITIALIZATION : Special Repair Requirement".
2. Perform memory storing procedure.
   Refer to ADP-10, "MEMORY STORING : Special Repair Requirement".
3. Check memory function.
   Refer to ADP-22, "MEMORY FUNCTION : System Description".

Is the inspection result normal?

YES >> Memory function is normal.
NO >> GO TO 6.

6.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005515428

1.CHECK MEMORY INDICATOR

Check memory indicator.
Refer to ADP-113, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

ALL COMPONENTS OF POWER SEAT DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000005515429

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:0000000005515430

1.CHECK SLIDING MECHANISM

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

Is the inspection result normal?

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

2.CHECK SLIDING SWITCH

Check sliding switch.
Refer to ADP-54, "Component Function Check".

Is the inspection result normal?

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

3.CHECK SLIDING MOTOR

Check sliding motor.
Refer to ADP-99, "Component Function Check".

Is the inspection result normal?

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

4.CHECK SLIDING SENSOR

Check sliding sensor.
Refer to ADP-78, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:0000000005515431

1.CHECK RECLINING MECHANISM

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

Is the inspection result normal?

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

2.CHECK RECLINING SWITCH

Check reclining switch.
Refer to ADP-56, "Component Function Check".

Is the inspection result normal?

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

3.CHECK RECLINING MOTOR

Check reclining motor.
Refer to ADP-101, "Component Function Check".

Is the inspection result normal?

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

4.CHECK RECLINING SENSOR

Check reclining sensor.
Refer to ADP-81, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:0000000005515432

1.CHECK LIFTING (FRONT) MECHANISM

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

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (FRONT)

Check lifting switch (front).
Refer to ADP-58, "Component Function Check".

Is the inspection result normal?

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

3.CHECK LIFTING MOTOR (FRONT)

Check lifting motor (front).
Refer to ADP-103, "Component Function Check".

Is the inspection result normal?

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

4.CHECK LIFTING SENSOR (FRONT)

Check lifting sensor (front).
Refer to ADP-84, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:0000000005515433

1.CHECK LIFTING (REAR) MECHANISM

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

Is the inspection result normal?

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

2.CHECK LIFTING SWITCH (REAR)

Check lifting switch (rear).
Refer to ADP-60, "Component Function Check".

Is the inspection result normal?

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

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).
Refer to ADP-105, "Component Function Check".

Is the inspection result normal?

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

4.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).
Refer to ADP-87, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:0000000005515434

1.CHECK STEERING TILT MECHANISM

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

Is the inspection result normal?

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

2.CHECK TILT SWITCH

Check tilt switch.
Refer to ADP-62, "Component Function Check".

Is the inspection result normal?

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

3. CHECK TILT MOTOR

Check tilt motor.
Refer to ADP-107, "Component Function Check".

Is the inspection result normal?

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

4. CHECK TILT SENSOR

Check steering tilt sensor.
Refer to ADP-90, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:0000000005515435

1. CHECK STEERING TELESCOPIC MECHANISM

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

Is the inspection result normal?

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

2. CHECK TELESCOPIC SWITCH

Check telescopic switch.
Refer to ADP-64, "Component Function Check".

Is the inspection result normal?

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

3. CHECK TELESCOPIC MOTOR

Check telescopic motor.
Refer to ADP-109, "Component Function Check".

Is the inspection result normal?

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

4. CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.
Refer to ADP-92, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5. CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:0000000005515436

1.CHECK DOOR MIRROR MECHANISM

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

Is the inspection result normal?

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

2.CHECK MIRROR SWITCH

Check mirror switch.
Refer to ADP-71, "MIRROR SWITCH : Component Function Check".

Is the inspection result normal?

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

3.CHECK MIRROR MOTOR

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

Is the inspection result normal?

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

4.CHECK MIRROR SENSOR

Check mirror sensor.
Refer to ADP-95, "DRIVER SIDE : Component Function Check". (Driver side)
Refer to ADP-96, "PASSENGER SIDE : Component Function Check". (Passenger side)

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005515437

1.CHECK SYSTEM SETTING

1. Check system setting.
   Refer to ADP-11, "SYSTEM SETTING : Special Repair Requirement".
2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.
NO >> GO TO 2.

2.PERFORM SYSTEM INITIALIZATION

1. Perform system initialization.
   Refer to ADP-9, "SYSTEM INITIALIZATION : Special Repair Requirement".
2. Check the operation.

Is the inspection result normal?

YES >> Entry/Exit function is OK.
NO >> GO TO 3.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check front door switch (driver side).
Refer to DLK-97, "WITH AUTOMATIC BACK DOOR : Component_Function_Check".

Is the inspection result normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000005515438

1.CHECK DOOR LOCK FUNCTION

Check door lock function.
Refer to DLK-10, "Work Flow".

Is the inspection result normal?

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

2.PERFORM MEMORY STORING PROCEDURE

1. Perform memory storing procedure.
   Refer to ADP-10, "MEMORY STORING : Special Repair Requirement".
2. Check Intelligent Key interlock function.
   Refer to ADP-34, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description".

Is the inspection result normal?

YES >> Intelligent Key inter lock function is normal.
NO >> Replace driver seat control unit. Refer to ADP-209, "Removal and Installation".

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000005515439

1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Check tilt & telescopic switch ground circuit.
Refer to ADP-75, "Diagnosis Procedure".

Is the inspection result normal?

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

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".
NO >> GO TO 1.

NORMAL OPERATING CONDITION

Description

INFOID:0000000005515440

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

Symptom	Cause	Action to take	Reference page
Entry/exit assist function and seat synchronization do not operate.	No initialization has been performed.	Perform initialization.	ADP-9
	Entry/exit assist function is disabled. **NOTE:** The entry/exit assist function and seat synchronization function are disabled before delivery (initial setting).	Change the settings.	ADP-11
Entry assist function does not operate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	ADP-30
Lumbar support does not perform memory operation.	The lumbar support system are controlled independently with no link to the automatic drive positioner system.	—	Lumbar support system: SE-8
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-22
			Exit assist function: ADP-26
			Entry assist function: ADP-30
			Intelligent Key interlock function: ADP-34

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000005716216

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

WARNING:

- **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 “SRS AIR BAG”.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

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

FOR MEXICO

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

INFOID:0000000005716220

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” 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 “SRS AIR BAG”.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s)**

with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.

- **When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

Exploded View

INFOID:0000000005515442

Refer to SE-105, "Exploded View".

Removal and Installation

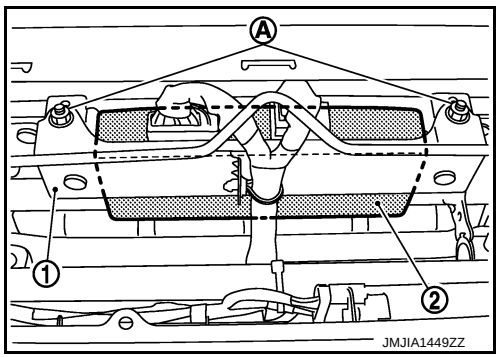
INFOID:0000000005515443

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the driver seat (1). Refer to SE-112, "Removal and Installation".
2. Remove the mounting nut (A).
3. Remove driver seat control unit (2).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

INFOID:0000000005515444

Refer to IP-12, "Exploded View".

Removal and Installation

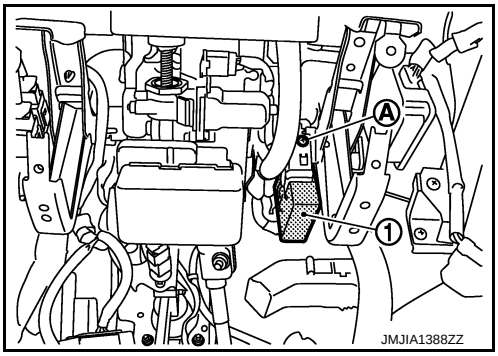
INFOID:0000000005515445

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the instrument driver lower panel. Refer to IP-13, "Removal and Installation".
2. Remove the screws (A).
3. Remove automatic drive positioner control unit (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

SEAT MEMORY SWITCH

Exploded View

INFOID:0000000005515446

Refer to INT-12, "FRONT DOOR FINISHER : Exploded View".

Removal and Installation

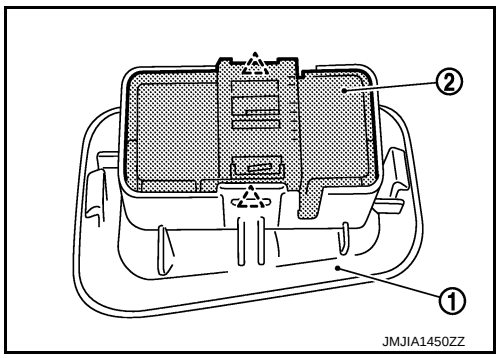
INFOID:0000000005515447

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the seat memory finisher (1). Refer to INT-12, "FRONT DOOR FINISHER : Removal and Installation".
2. Press pawls and remove seat memory switch (2) from seat memory finisher (1).



: Pawl

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

POWER SEAT SWITCH

Exploded View

INFOID:0000000005515448

Refer to SE-105, "Exploded View".

Removal and Installation

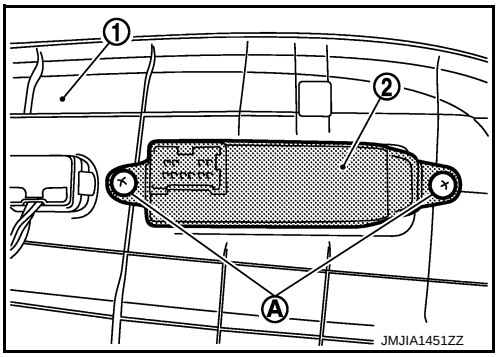
INFOID:0000000005515449

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the seat cushion outer finisher (1). Refer to SE-112, "Removal and Installation".
2. Remove the screws (A).
3. Remove the power seat switch (2) from the seat cushion outer finisher (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

TILT&TELESCOPIC SWITCH

Exploded View

INFOID:0000000005515450

Refer to IP-12, "Exploded View".

Removal and Installation

INFOID:0000000005515451

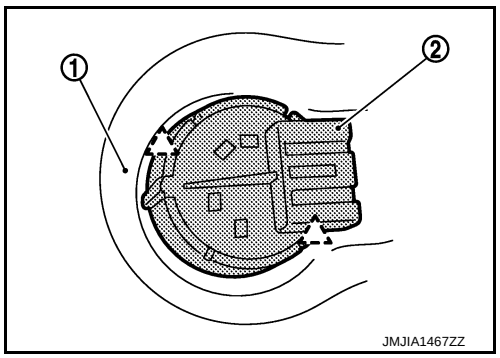
REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

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

: Pawl



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".