

SECTION **ADP**

AUTOMATIC DRIVE POSITIONER

CONTENTS

BASIC INSPECTION	5	
DIAGNOSIS AND REPAIR WORK FLOW	5	
Work Flow	5	
INSPECTION AND ADJUSTMENT	8	
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	8	
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description	8	
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	8	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	8	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description	8	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement	8	
SYSTEM INITIALIZATION	9	
SYSTEM INITIALIZATION : Description	9	
SYSTEM INITIALIZATION : Special Repair Requirement	9	
MEMORY STORING	9	
MEMORY STORING : Description	9	
MEMORY STORING : Special Repair Requirement	10	
SYSTEM SETTING	10	
SYSTEM SETTING : Description	11	
SYSTEM SETTING : Special Repair Requirement	11	
SYSTEM DESCRIPTION	12	
AUTOMATIC DRIVE POSITIONER SYSTEM	12	
AUTOMATIC DRIVE POSITIONER SYSTEM	12	
AUTOMATIC DRIVE POSITIONER SYSTEM :		
System Diagram	12	
AUTOMATIC DRIVE POSITIONER SYSTEM :		
System Description	13	
AUTOMATIC DRIVE POSITIONER SYSTEM :		
Component Parts Location	14	
AUTOMATIC DRIVE POSITIONER SYSTEM :		
Component Description	15	
MANUAL FUNCTION	16	
MANUAL FUNCTION : System Diagram	17	
MANUAL FUNCTION : System Description	17	
MANUAL FUNCTION : Component Parts Location	19	
MANUAL FUNCTION : Component Description	20	
MEMORY FUNCTION	21	
MEMORY FUNCTION : System Diagram	22	
MEMORY FUNCTION : System Description	22	
MEMORY FUNCTION : Component Parts Location	24	
MEMORY FUNCTION : Component Description	25	
EXIT ASSIST FUNCTION	26	
EXIT ASSIST FUNCTION : System Diagram	27	
EXIT ASSIST FUNCTION : System Description	27	
EXIT ASSIST FUNCTION : Component Parts Location	29	
EXIT ASSIST FUNCTION :		
Component Description	30	
ENTRY ASSIST FUNCTION	31	
ENTRY ASSIST FUNCTION : System Diagram	32	
ENTRY ASSIST FUNCTION : System Description	32	
ENTRY ASSIST FUNCTION : Component Parts Location	34	
ENTRY ASSIST FUNCTION :		
Component Description	35	
INTELLIGENT KEY INTERLOCK FUNCTION	36	

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

INTELLIGENT KEY INTERLOCK FUNCTION :		AUTOMATIC DRIVE POSITIONER CONTROL	
System Diagram	37	UNIT : Diagnosis Procedure	55
INTELLIGENT KEY INTERLOCK FUNCTION :		AUTOMATIC DRIVE POSITIONER CONTROL	
System Description	37	UNIT : Special Repair Requirement	56
INTELLIGENT KEY INTERLOCK FUNCTION :		SLIDING SWITCH	57
Component Parts Location	39	Description	57
INTELLIGENT KEY INTERLOCK FUNCTION :		Component Function Check	57
Component Description	40	Diagnosis Procedure	57
		Component Inspection	58
DIAGNOSIS SYSTEM (DRIVER SEAT CON-		RECLINING SWITCH	59
TROL UNIT)	41	Description	59
Diagnosis Description	41	Component Function Check	59
CONSULT Function	41	Diagnosis Procedure	59
		Component Inspection	60
DTC/CIRCUIT DIAGNOSIS	44	LIFTING SWITCH (FRONT)	61
U1000 CAN COMM CIRCUIT	44	Description	61
Description	44	Component Function Check	61
DTC Logic	44	Diagnosis Procedure	61
Diagnosis Procedure	44	Component Inspection	62
Special Repair Requirement	44	LIFTING SWITCH (REAR)	63
		Description	63
U1010 CONTROL UNIT (CAN)	45	Component Function Check	63
Description	45	Diagnosis Procedure	63
DTC Logic	45	Component Inspection	64
Diagnosis Procedure	45	TILT SWITCH	65
		Description	65
B2130 EEPROM	46	Component Function Check	65
DTC Logic	46	Diagnosis Procedure	65
Diagnosis Procedure	46	Component Inspection	66
B2112 SLIDING MOTOR	47	TELESCOPIC SWITCH	67
Description	47	Description	67
DTC Logic	47	Component Function Check	67
Diagnosis Procedure	47	Diagnosis Procedure	67
		Component Inspection	68
B2113 RECLINING MOTOR	49	SEAT MEMORY SWITCH	69
Description	49	Description	69
DTC Logic	49	Component Function Check	69
Diagnosis Procedure	49	Diagnosis Procedure	69
		Component Inspection	70
B2116 TILT MOTOR	51	DOOR MIRROR REMOTE CONTROL	
Description	51	SWITCH	72
DTC Logic	51	CHANGEOVER SWITCH	72
Diagnosis Procedure	51	CHANGEOVER SWITCH : Description	72
		CHANGEOVER SWITCH : Component Function	
B2128 UART COMMUNICATION LINE	53	Check	72
Description	53	CHANGEOVER SWITCH : Diagnosis Procedure...	72
DTC Logic	53	CHANGEOVER SWITCH : Component Inspec-	
Diagnosis Procedure	53	tion	73
POWER SUPPLY AND GROUND CIRCUIT	55	MIRROR SWITCH	73
DRIVER SEAT CONTROL UNIT	55	MIRROR SWITCH : Description	74
DRIVER SEAT CONTROL UNIT :		MIRROR SWITCH : Component Function Check...	74
Diagnosis Procedure	55		
DRIVER SEAT CONTROL UNIT : Special Repair			
Requirement	55		
AUTOMATIC DRIVE POSITIONER CONTROL			
UNIT	55		

MIRROR SWITCH : Diagnosis Procedure	74	Diagnosis Procedure	102
MIRROR SWITCH : Component Inspection	75		
POWER SEAT SWITCH GROUND CIRCUIT77		RECLINING MOTOR 104	
Diagnosis Procedure	77	Description	104
TILT & TELESCOPIC SWITCH GROUND CIRCUIT78		Component Function Check	104
Diagnosis Procedure	78	Diagnosis Procedure	104
FRONT DOOR SWITCH (DRIVER SIDE)79		LIFTING MOTOR (FRONT) 106	
Description	79	Description	106
Component Function Check	79	Component Function Check	106
Diagnosis Procedure	79	Diagnosis Procedure	106
Component Inspection	80	LIFTING MOTOR (REAR) 108	
SLIDING SENSOR81		Description	108
Description	81	Component Function Check	108
Component Function Check	81	Diagnosis Procedure	108
Diagnosis Procedure	81	TILT MOTOR 110	
RECLINING SENSOR84		Description	110
Description	84	Component Function Check	110
Component Function Check	84	Diagnosis Procedure	110
Diagnosis Procedure	84	TELESCOPIC MOTOR 112	
LIFTING SENSOR (FRONT)87		Description	112
Description	87	Component Function Check	112
Component Function Check	87	Diagnosis Procedure	112
Diagnosis Procedure	87	DOOR MIRROR MOTOR 114	
LIFTING SENSOR (REAR)90		Description	114
Description	90	Component Function Check	114
Component Function Check	90	Diagnosis Procedure	114
Diagnosis Procedure	90	Component Inspection	115
TILT SENSOR93		SEAT MEMORY INDICATOR 116	
Description	93	Description	116
Component Function Check	93	Component Function Check	116
Diagnosis Procedure	93	Diagnosis Procedure	116
TELESCOPIC SENSOR95		ECU DIAGNOSIS INFORMATION 118	
Description	95	DRIVER SEAT CONTROL UNIT 118	
Component Function Check	95	Reference Value	118
Diagnosis Procedure	95	Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -	124
MIRROR SENSOR98		Fail Safe	135
DRIVER SIDE98		DTC Index	136
DRIVER SIDE : Description	98	AUTOMATIC DRIVE POSITIONER CONTROL UNIT 137	
DRIVER SIDE : Component Function Check	98	Reference Value	137
DRIVER SIDE : Diagnosis Procedure	98	Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -	140
PASSENGER SIDE99		BCM (BODY CONTROL MODULE) 152	
PASSENGER SIDE : Description	99	Reference Value	152
PASSENGER SIDE : Component Function Check	99	Wiring Diagram - BCM -	175
PASSENGER SIDE : Diagnosis Procedure	100	Fail-safe	190
SLIDING MOTOR 102		DTC Inspection Priority Chart	191
Description	102	DTC Index	192
Component Function Check	102	SYMPTOM DIAGNOSIS 195	

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

ADP SYSTEM SYMPTOMS	195	Diagnosis Procedure	206
Symptom Table	195		
ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION	196	NORMAL OPERATING CONDITION	207
Diagnosis Procedure	196	Description	207
MEMORY INDICATE DOES NOT OPERATE .	197	PRECAUTION	208
Diagnosis Procedure	197	PRECAUTIONS	208
ALL COMPONENTS OF POWER SEAT DO NOT OPERATE	198	FOR USA AND CANADA	208
Diagnosis Procedure	198	FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	208
MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE	199	FOR USA AND CANADA : Precautions for Removing of Battery Terminal	208
SEAT SLIDING	199	FOR MEXICO	208
SEAT SLIDING : Diagnosis Procedure	199	FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	208
SEAT RECLINING	199	FOR MEXICO : Precautions for Removing of Battery Terminal	209
SEAT RECLINING : Diagnosis Procedure	199	REMOVAL AND INSTALLATION	210
SEAT LIFTING (FRONT)	200	DRIVER SEAT CONTROL UNIT	210
SEAT LIFTING (FRONT) : Diagnosis Procedure	200	Exploded View	210
SEAT LIFTING (REAR)	201	Removal and Installation	210
SEAT LIFTING (REAR) : Diagnosis Procedure	201	AUTOMATIC DRIVE POSITIONER CONTROL UNIT	211
STEERING TILT	201	Exploded View	211
STEERING TILT : Diagnosis Procedure	201	Removal and Installation	211
STEERING TELESCOPIC	202	SEAT MEMORY SWITCH	212
STEERING TELESCOPIC : Diagnosis Procedure	202	Exploded View	212
DOOR MIRROR	203	Removal and Installation	212
DOOR MIRROR : Diagnosis Procedure	203	POWER SEAT SWITCH	213
ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE	204	Exploded View	213
Diagnosis Procedure	204	Removal and Installation	213
INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE	205	TILT&TELESCOPIC SWITCH	214
Diagnosis Procedure	205	Exploded View	214
ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE	206	Removal and Installation	214

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

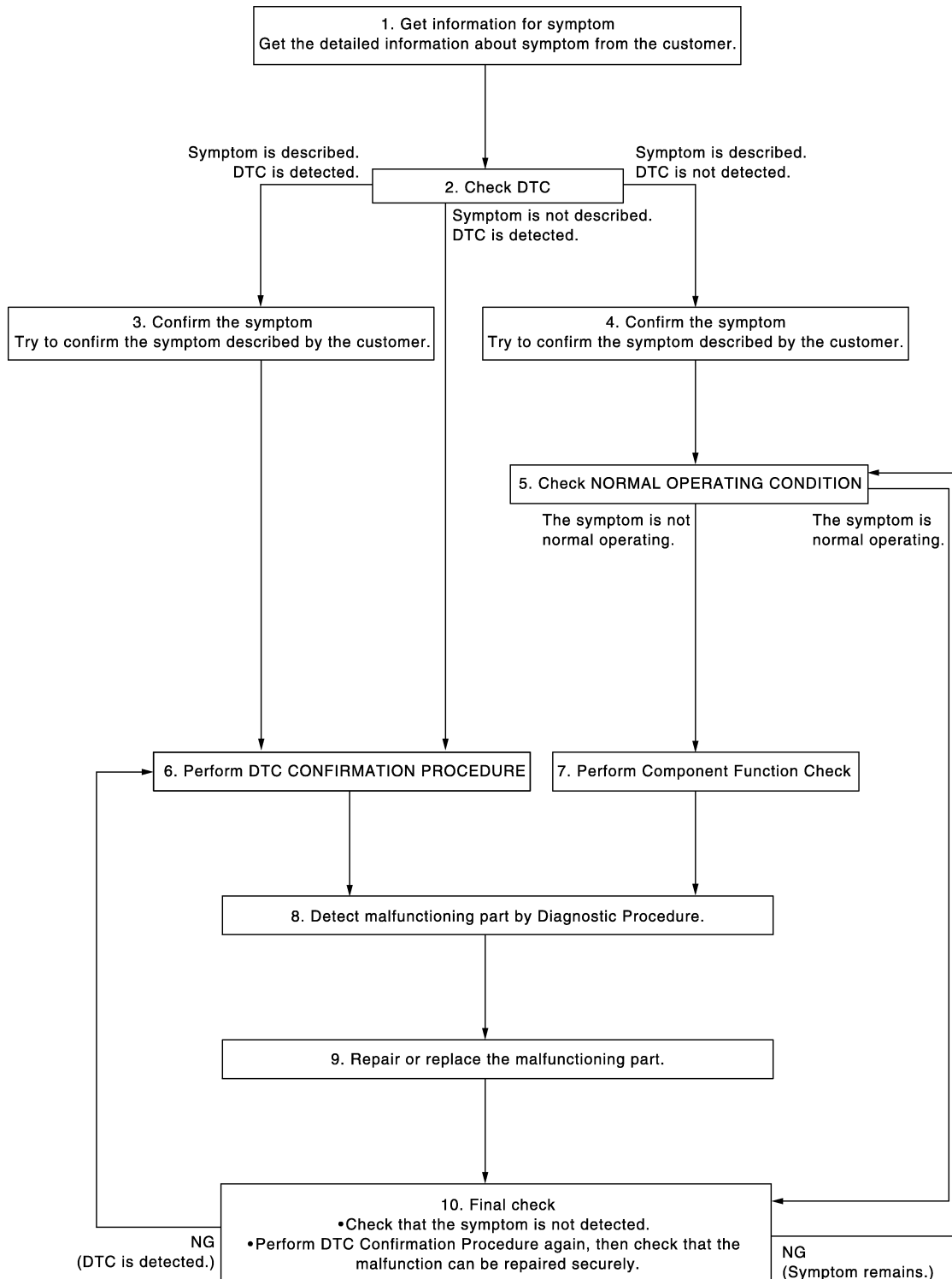
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000009720619

OVERALL SEQUENCE



JMJIA1702GB

DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT. Refer to [ADP-136, "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-207, "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-44, "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?

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

ADP

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000009720620

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:000000009720621

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:000000009720622

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-

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

requirement

INFOID:000000009720623

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:000000009720624

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:000000009720625

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:000000009720626

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.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

MEMORY STORING : Special Repair Requirement

INFOID:000000009720627

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

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

SYSTEM SETTING : Description

INFOID:000000009720628

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

Setting Change

x: Applicable

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

SYSTEM SETTING : Special Repair Requirement

INFOID:000000009720629

1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

With set switch>>GO TO 2.

With CONSULT>>GO TO 4.

2. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

>> GO TO 3.

3. 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

4. WITH CONSULT - STEP 1

Select "Work support".

>> GO TO 5.

5. WITH CONSULT - 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

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

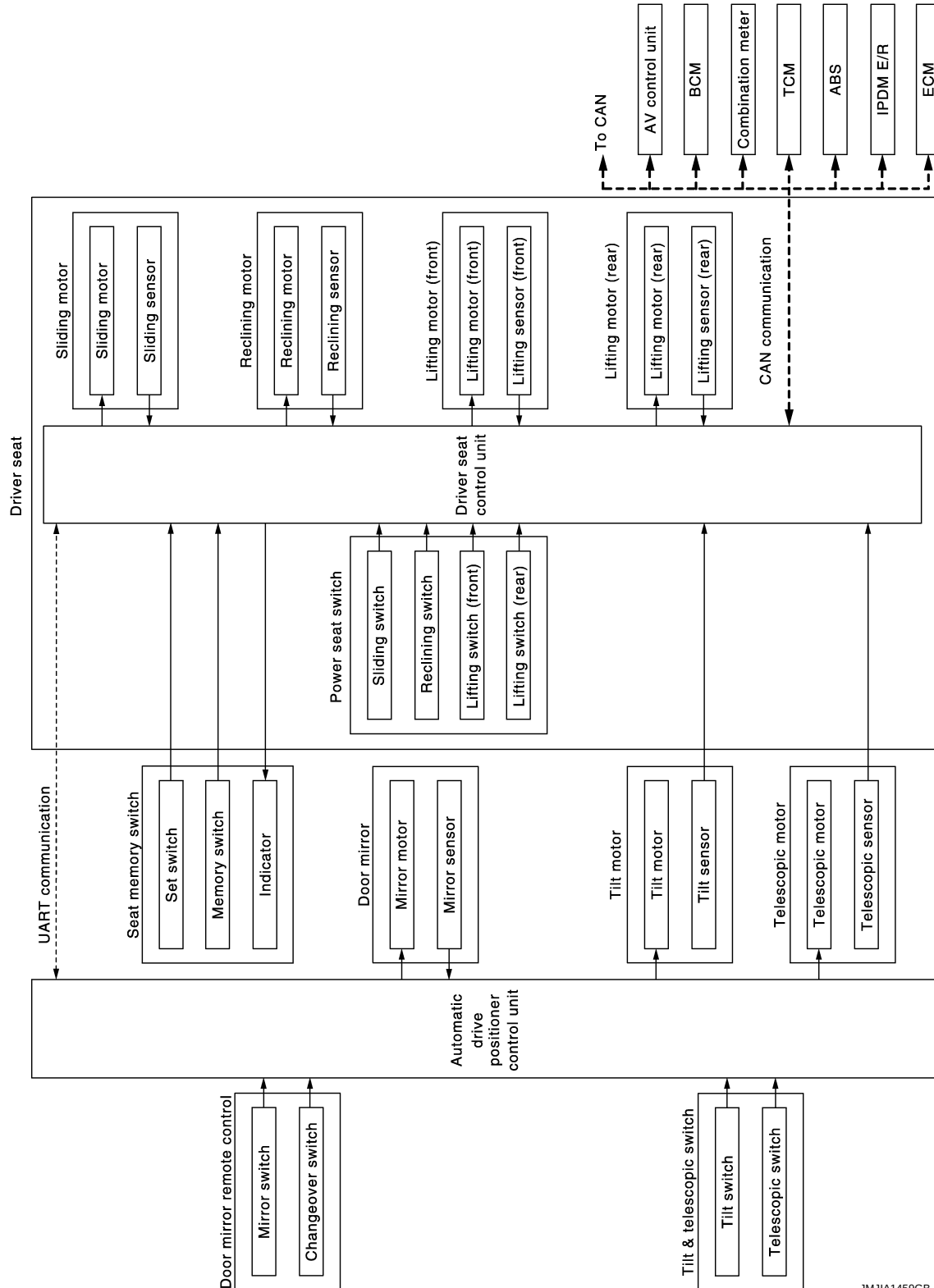
SYSTEM DESCRIPTION

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram

INFOID:000000009720630



JMJIA1459GB

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:000000009720631

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:

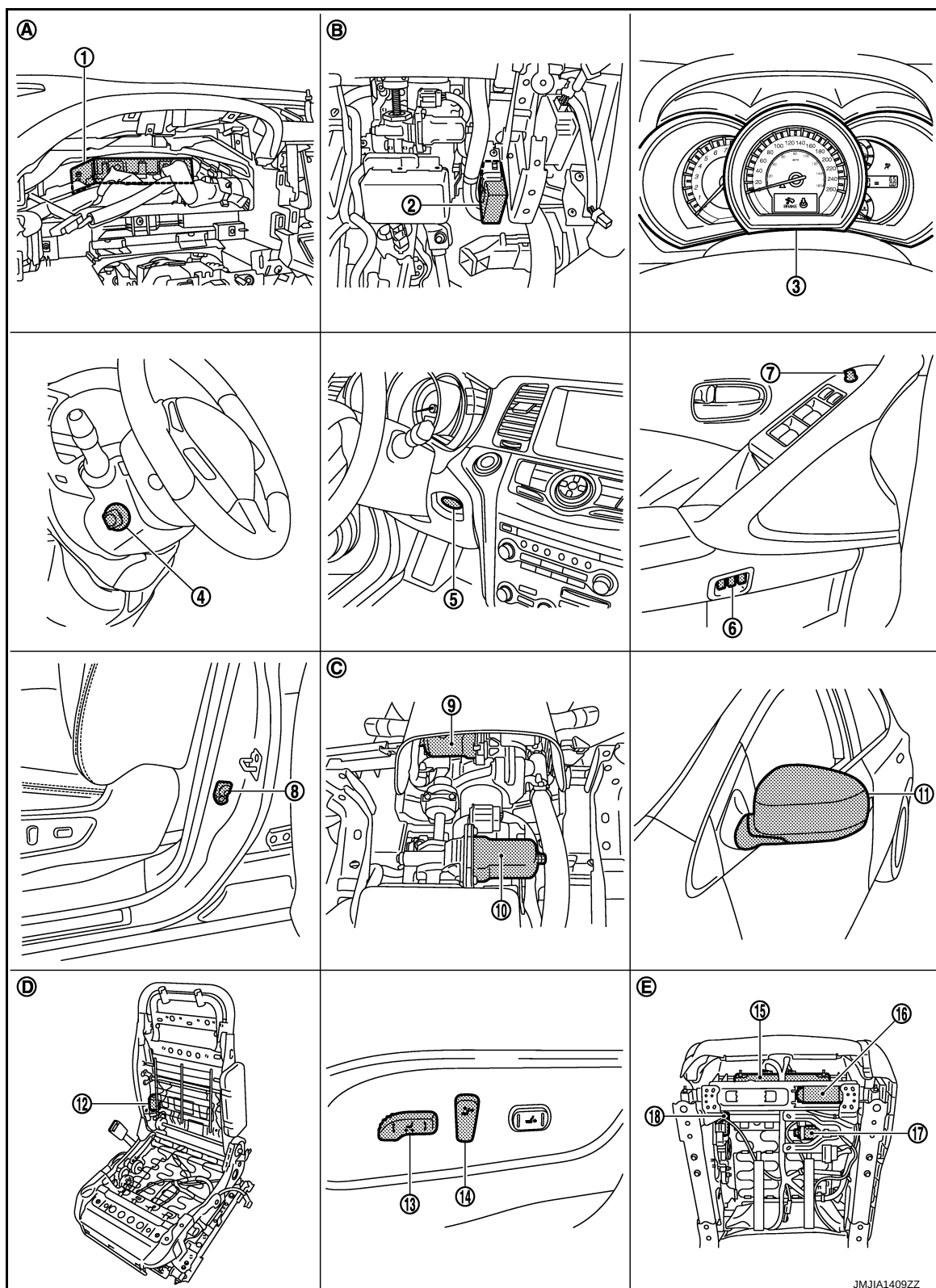
The lumbar support system and the side support system are controlled independently with no link to the automatic drive positioner system.

ADP

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Parts Location INFOID:000000009720632



- | | | |
|--|--|---------------------------|
| 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 |

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

- | | | |
|---|--|--|
| 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:000000009720633

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 - Handle position : LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
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 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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

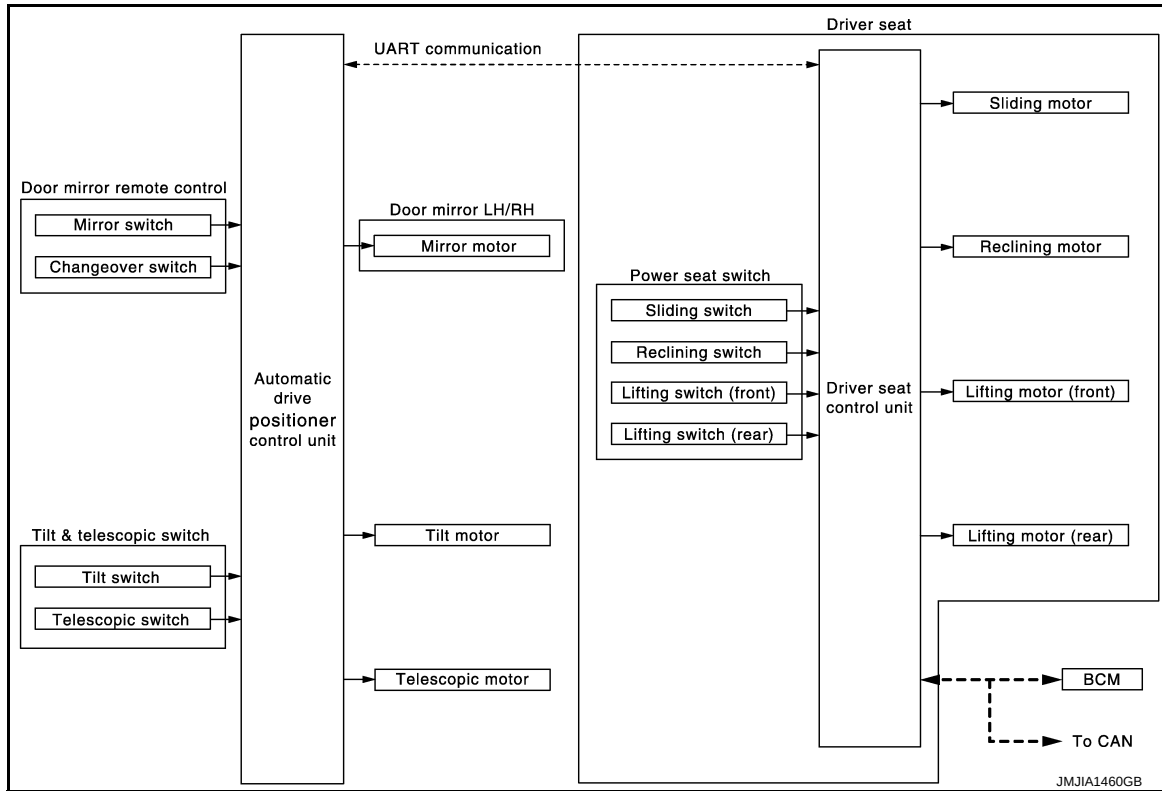
MANUAL FUNCTION

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

MANUAL FUNCTION : System Diagram

INFOID:000000009720634



MANUAL FUNCTION : System Description

INFOID:000000009720635

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

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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:

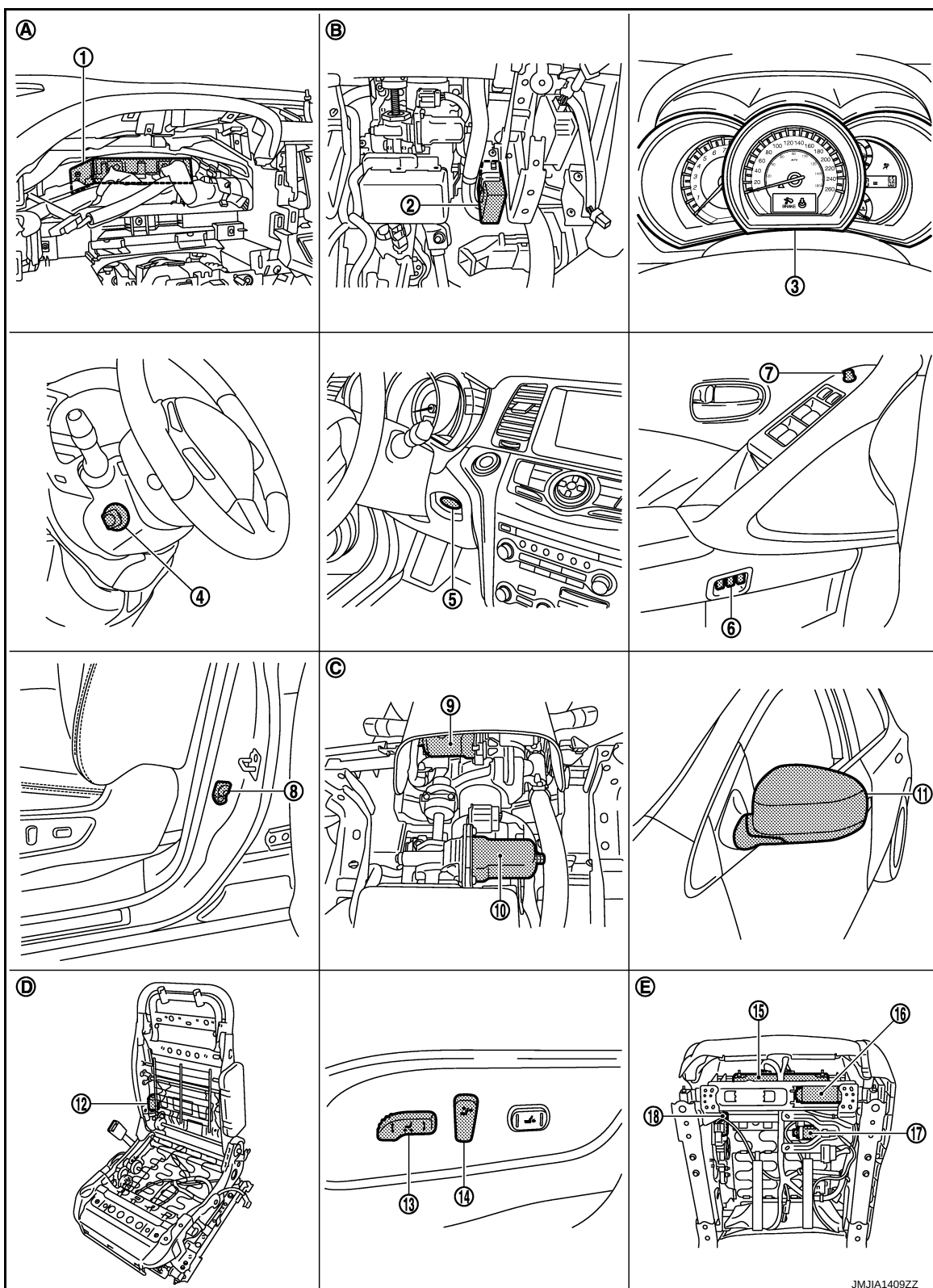
The door mirrors can be operated manually when ignition switch is in either ACC or ON position. The ignition switch signal (ACC/ON) is transmitted from BCM to the driver seat control unit via CAN communication and from the driver seat control unit to the automatic drive positioner control unit via UART communication. UART communication line malfunction and CAN communication line malfunction are detected, the door mirror cannot be operated.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

MANUAL FUNCTION : Component Parts Location

INFOID:000000009720636



- | | | |
|--|--|---------------------------|
| 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 |

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

- | | | |
|---|--|--|
| 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:000000009720637

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 • Handle position : LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
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 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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

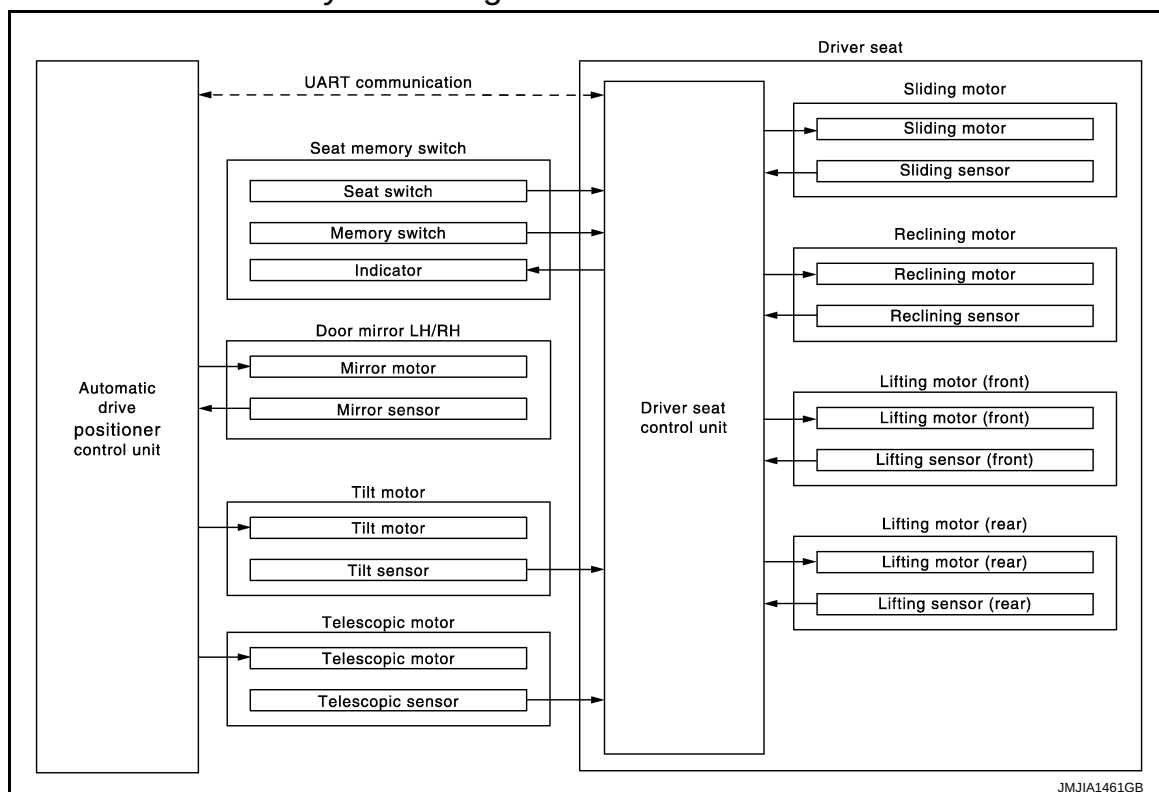
MEMORY FUNCTION

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

MEMORY FUNCTION : System Diagram

INFOID:000000009720638



MEMORY FUNCTION : System Description

INFOID:000000009720639

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)
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

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

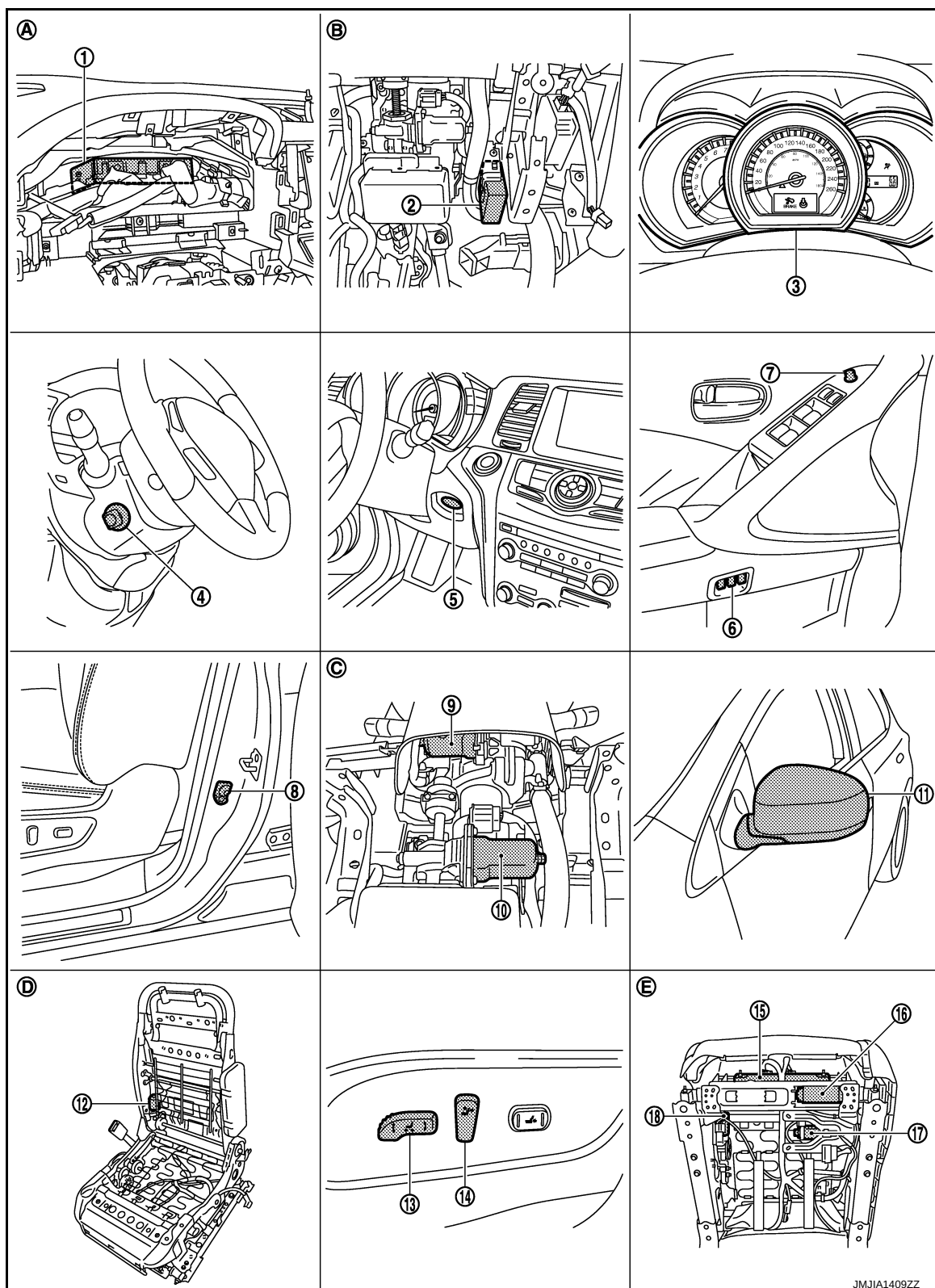
ADP

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

MEMORY FUNCTION : Component Parts Location

INFOID:000000009720640



JMJ1A1409ZZ

- | | | |
|--|--|---------------------------|
| 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 |

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

- | | | |
|---|--|--|
| 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:000000009720641

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 - Handle position : LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
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 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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

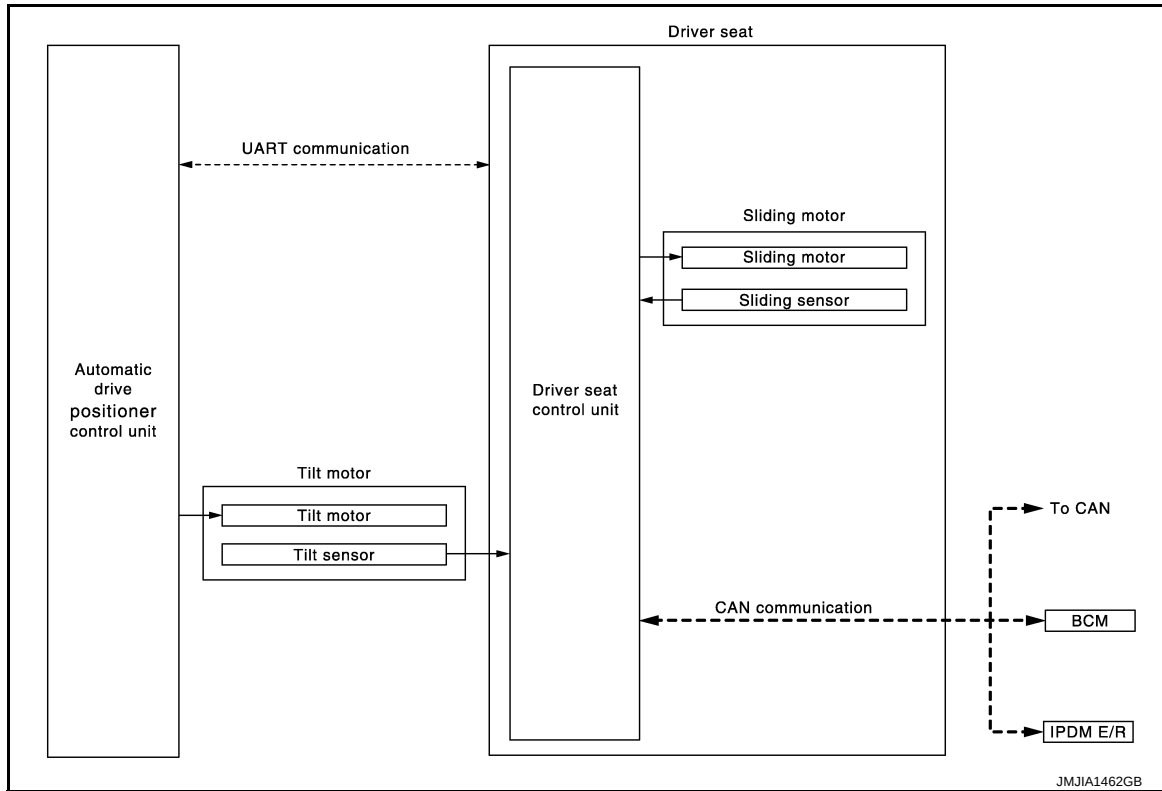
EXIT ASSIST FUNCTION

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

EXIT ASSIST FUNCTION : System Diagram

INFOID:000000009720642



EXIT ASSIST FUNCTION : System Description

INFOID:000000009720643

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)
Selector lever	P position

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

DETAIL FLOW

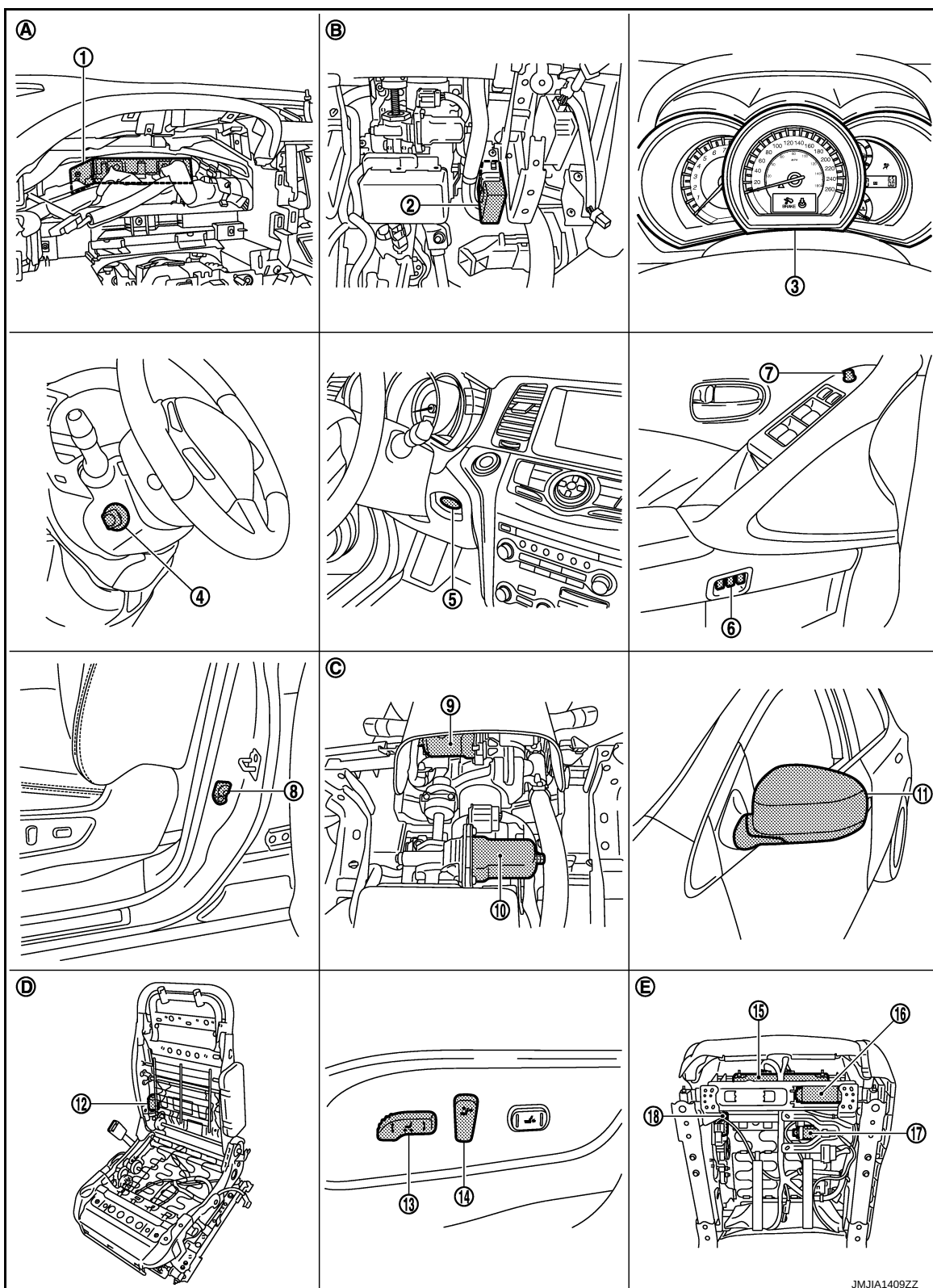
Order	Input	Output	Control unit condition
1	Door switch (Driver side)	—	Driver seat control unit receives door switch signal (driver side/ open) from BCM via CAN communication.
2	—	Motors (Seat sliding, tilt)	Driver seat control unit operates the seat sliding motor, which recog- nizes that the driver 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 au- tomatic drive positioner control unit operates each motor for a con- stant amount.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

EXIT ASSIST FUNCTION : Component Parts Location

INFOID:000000009720644



- | | | |
|--|--|---------------------------|
| 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 |

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

- | | | |
|---|--|--|
| 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:000000009720645

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 • Handle position : LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
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 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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

ENTRY ASSIST FUNCTION

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

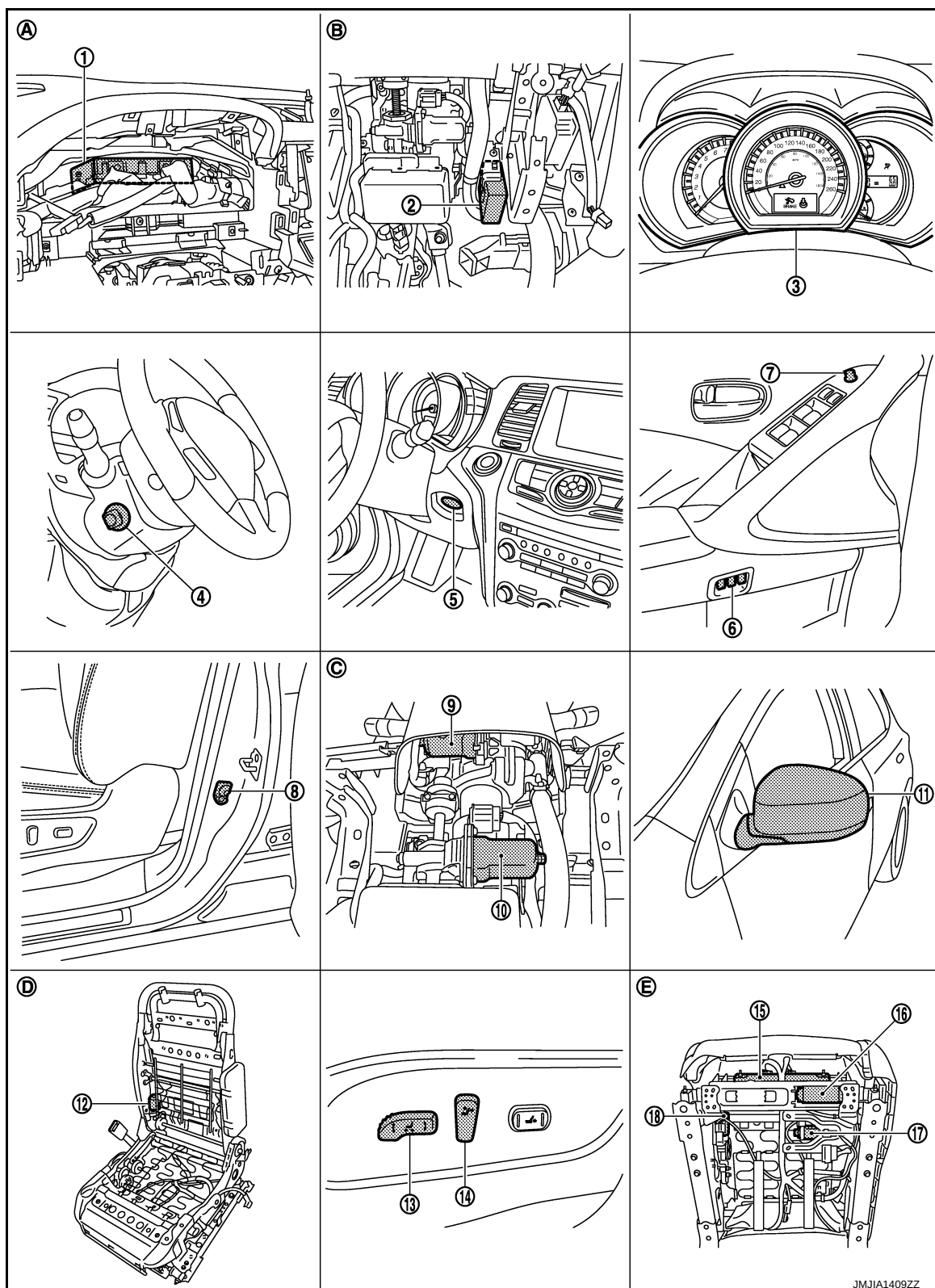
P

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

ENTRY ASSIST FUNCTION : Component Parts Location

INFOID:000000009720648



- | | | |
|--|--|---------------------------|
| 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 |

JMJ1A1409ZZ

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

- | | | |
|---|--|--|
| 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 | |

ENTRY ASSIST FUNCTION : Component Description

INFOID:000000009720649

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 - Handle position : LHD
Combination meter / ABS	Transmit the vehicle speed signal to the driver seat control unit via CAN communication.
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 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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

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.

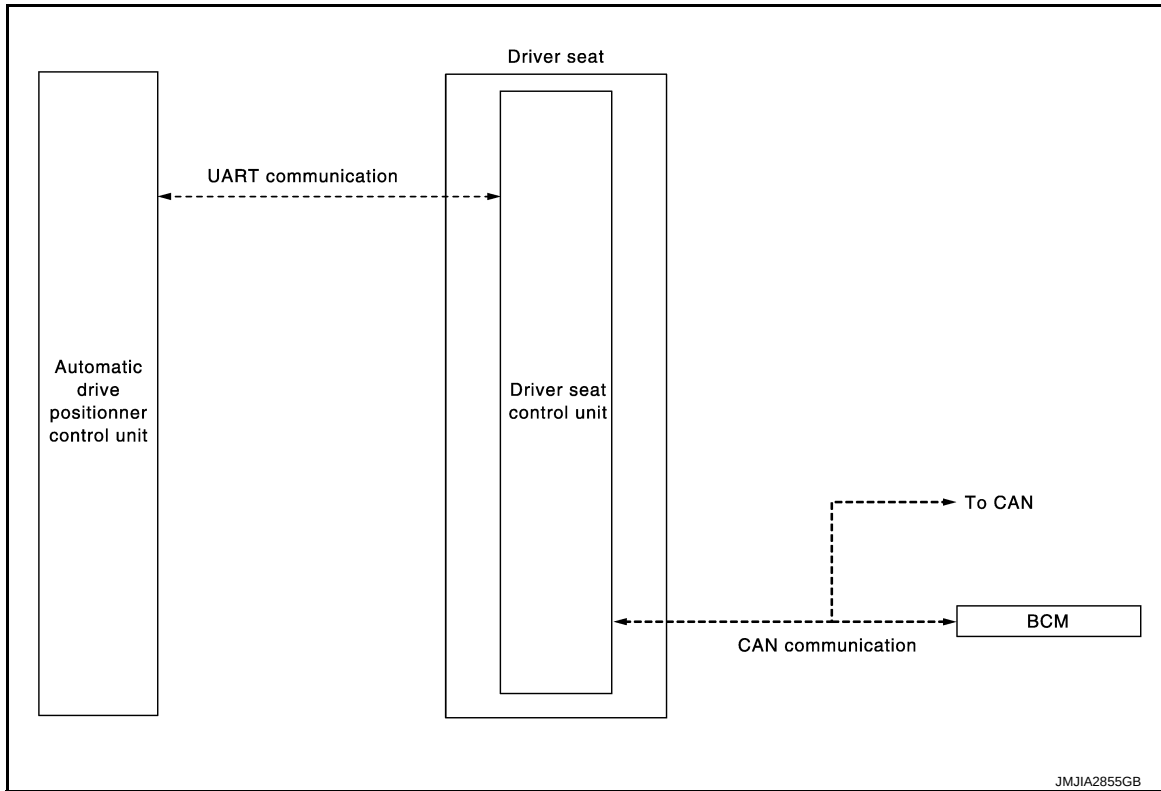
INTELLIGENT KEY INTERLOCK FUNCTION

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

INFOID:0000000009720650



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:0000000009720651

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
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror control switch • Set switch • Memory switch	OFF (Not operated)
Selector lever	P position

DETAIL FLOW

AUTOMATIC DRIVE POSITIONER SYSTEM

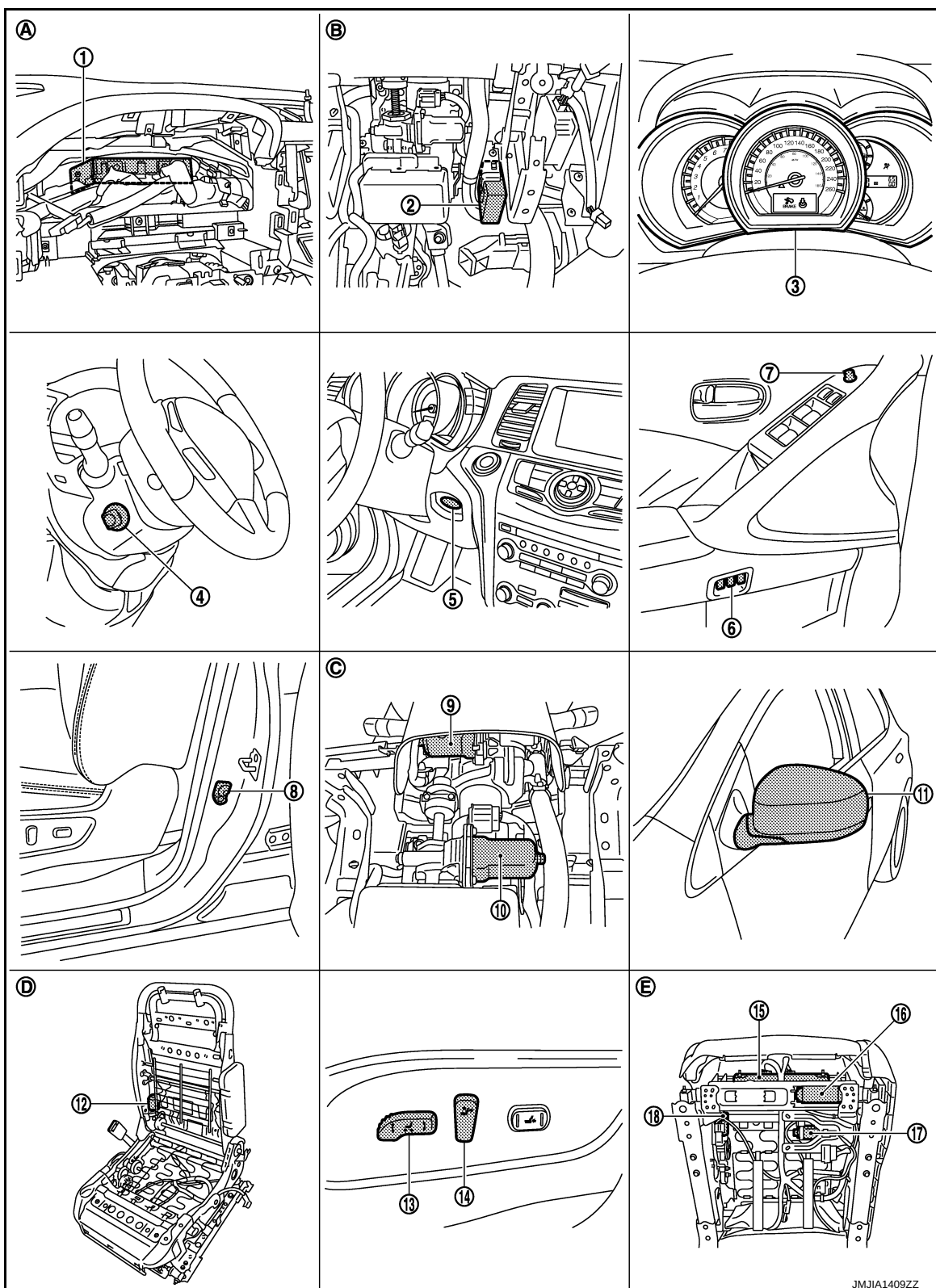
< SYSTEM DESCRIPTION >

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.

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location INFOID:000000009720652



- | | | |
|--|--|---------------------------|
| 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 |

AUTOMATIC DRIVE POSITIONER SYSTEM

< SYSTEM DESCRIPTION >

- | | | |
|---|---|---|
| 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 | |

INTELLIGENT KEY INTERLOCK FUNCTION : Component Description

INFOID:000000009720653

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)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

Diagnosis Description

INFOID:000000009720654

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

DIAGNOSTIC MODE

Diagnostic mode [AUTO DRIVE POS.]	Description
WORK SUPPORT	Changes the setting of each function.
SELF-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 Function

INFOID:000000009720655

SELF-DIAGNOSIS RESULTS

Refer to [ADP-136, "DTC Index"](#).

DATA MONITOR

NOTE:

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

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW 1	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (up) signal.
LIFT FR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (down) signal.

ADP

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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.
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.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
IGN ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ignition switch signal.
ACC ON SW	"ON/OFF"	×	×	ON/OFF status judged from the ACC switch signal.
KEY ON SW	"ON/OFF"	×	×	ON/OFF status judged from the key on switch signal.
KEYLESS ID	—	×	×	Key ID status judged from the key ID signal.
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock actuator output switch signal.
VHCL SPEED (ABS)	"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	NOTE: This item is displayed, but cannot monitored			

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

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:000000009720656

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:000000009720657

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.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to [ADP-44, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000009720658

Refer to [LAN-18, "Trouble Diagnosis Flow Chart"](#).

Special Repair Requirement

INFOID:000000009720659

Refer to [ADP-9, "SYSTEM INITIALIZATION : Description"](#).

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

Description

INFOID:000000009720660

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-29, "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000009720661

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:000000009720662

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.Refer to [ADP-210, "Removal and Installation"](#).

ADP

B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

INFOID:000000009720663

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.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to [ADP-46, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000009720664

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-46, "DTC Logic"](#).

Is the DTC displayed again?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

2.REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to [ADP-210, "Removal and Installation"](#).

>> INSPECTION END

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

Description

INFOID:000000009720665

- 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:000000009720666

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.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-47, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000009720667

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-47, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-44, "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.

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
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-210, "Removal and Installation"](#)

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

Description

INFOID:000000009720668

- 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:000000009720669

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.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-49, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000009720670

ADP

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-49, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-44, "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.

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
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-210, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

Description

INFOID:000000009720671

- 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:000000009720672

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.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-51. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000009720673

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-51. "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-44. "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.

(+) Tilt motor		(-)	Voltage (V) (Approx.)
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 CONTROL UNIT OUTPUT SIGNAL

1. Connect automatic drive positioner control unit connector.

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

(+) Automatic drive positioner control unit		(-)	Voltage (V) (Approx.)
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-211, "Removal and Installation"](#).

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

INFOID:0000000009720674

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:0000000009720675

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.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to [ADP-53, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000009720676

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-51, "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.
NO >> Check intermittent incident. Refer to [GI-44, "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.

B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).
NO >> Repair or replace harness or connector.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000009720677

1.CHECK POWER SUPPLY CIRCUIT

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

(+) Driver seat control unit		(-)	Voltage (V) (Approx.)
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:000000009720678

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:000000009720679

NOTE:

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

1.CHECK POWER SUPPLY CIRCUIT

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

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

Is the inspection result normal?

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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:000000009720680

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

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Description

INFOID:000000009720681

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:000000009720682

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-57, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720683

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.

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK SLIDING SWITCH

Refer to [ADP-58, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [ADP-213, "Removal and Installation"](#)

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720684

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-213, "Removal and Installation"](#).

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Description

INFOID:000000009720685

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:000000009720686

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-59, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720687

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.

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SWITCH

Refer to [ADP-60, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [ADP-213, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720688

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-213, "Removal and Installation"](#).

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description

INFOID:000000009720689

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:000000009720690

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-61, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720691

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.

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to [ADP-62, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [ADP-213, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720692

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-213, "Removal and Installation"](#).

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description

INFOID:000000009720693

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:000000009720694

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-63, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720695

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.

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to [ADP-64, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to [ADP-213, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720696

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-213, "Removal and Installation"](#).

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TILT SWITCH

Description

INFOID:000000009720697

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:000000009720698

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-65, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720699

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	5
	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.

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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-211, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK TILT SWITCH

Refer to [ADP-66, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to [ADP-214, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720700

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-214, "Removal and Installation"](#).

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Description

INFOID:000000009720701

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:000000009720702

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-67, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720703

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	5
	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.

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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-211, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC SWITCH

Refer to [ADP-68, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to [ADP-214, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720704

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-214, "Removal and Installation"](#).

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Description

INFOID:000000009720705

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:000000009720706

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-69. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720707

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.

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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		Not existed
B452	27		
	28		
	29		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-210, "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		Existed
D13	4		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK SEAT MEMORY SWITCH

Refer to [ADP-70, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to [ADP-212, "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720708

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

< DTC/CIRCUIT DIAGNOSIS >

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-212, "Removal and Installation"](#).

ADP

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:000000009720709

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:000000009720710

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.

NO >> Refer to [ADP-72, "CHANGEOVER SWITCH : Diagnosis Procedure"](#).

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:000000009720711

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.

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-211, "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-73, "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-44, "Intermittent Incident"](#).

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000009720712

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
	11			Other than above	Not existed
				RIGHT	Existed
					Other than above

Is the inspection result normal?

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

MIRROR SWITCH

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SWITCH : Description

INFOID:000000009720713

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:000000009720714

1.CHECK MIRROR SWITCH FUNCTION

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

Monitor item	Condition	
MIR CON SW-UP/DN	When operating the mirror switch toward the up or down side.	: ON
	Other than 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-74, "MIRROR SWITCH : Diagnosis Procedure"](#).

MIRROR SWITCH : Diagnosis Procedure

INFOID:000000009720715

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.

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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-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 MIRROR SWITCH

Check door mirror remote control switch (mirror switch).

Refer to [ADP-75, "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-44, "Intermittent Incident"](#).

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:000000009720716

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

DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000009720717

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-44, "Intermittent Incident"](#).
- NO >> Repair or replace harness or connector.

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

ADP

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000009720718

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-44, "Intermittent Incident"](#).
- NO >> Repair or replace harness.

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

FRONT DOOR SWITCH (DRIVER SIDE)

Description

INFOID:000000009720719

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

Component Function Check

INFOID:000000009720720

1.CHECK FUNCTION

1. Select "DOOR SW-DR" in "Data monitor" mode with CONSULT.
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

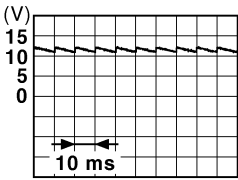
NO >> Perform diagnosis procedure. Refer to [ADP-79, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720721

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?

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace BCM. Refer to [BCS-98, "Exploded View"](#).

NO >> Repair or replace harness or connector.

3. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Refer to [ADP-80, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front door switch (driver side). Refer to [DLK-358, "Removal and Installation"](#)

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-44, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000009720722

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-358, "Removal and Installation"](#).

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Description

INFOID:000000009720723

- 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:000000009720724

1.CHECK FUNCTION

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

Monitor item	Condition		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

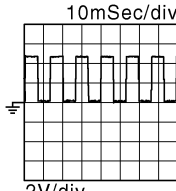
NO >> Perform diagnosis procedure. Refer to [ADP-81, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720725

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	
			Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-210, "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.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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-210. "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.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

- A
- B
- C
- D
- E
- F
- G
- H
- I
- ADP
- K
- L
- M
- N
- O
- P

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Description

INFOID:000000009720726

- 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:000000009720727

1.CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

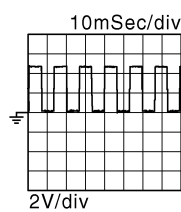
NO >> Perform diagnosis procedure. Refer to [ADP-84, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720728

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-210, "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.

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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-210, "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?

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

Description

INFOID:000000009720729

- 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:000000009720730

1.CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

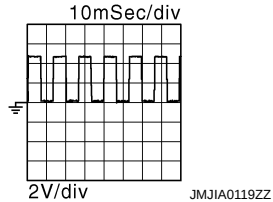
NO >> Perform diagnosis procedure. Refer to [ADP-87, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720731

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-210, "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.

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

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-210, "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?

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

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

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description

INFOID:000000009720732

- 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:000000009720733

1.CHECK FUNCTION

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

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

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

Is the indication normal?

YES >> INSPECTION END

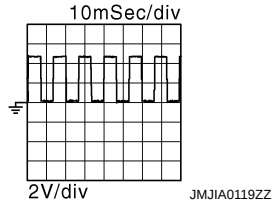
NO >> Perform diagnosis procedure. Refer to [ADP-90, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720734

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-210, "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.

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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.

Lifting motor (rear)		Voltage (V) (Approx.)
Connector	Terminals	
B456	33	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-210, "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?

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TILT SENSOR

Description

INFOID:000000009720735

- 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:000000009720736

1.CHECK FUNCTION

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

Monitor item	Condition		Value
TILT PULSE	Steering column	Operate (UP-WARD)	Change (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

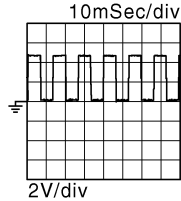
NO >> Perform diagnosis procedure. Refer to [ADP-93, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720737

1.CHECK TILT SENSOR SIGNAL

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

(+)		(-)	Condition		Voltage (V) (Approx.)
Driver seat control unit					
Connector	Terminals				
B452	30	Ground	Steering column	Operate	
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-210, "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.

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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-211, "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

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Description

INFOID:000000009720738

- 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:000000009720739

1.CHECK FUNCTION

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

Monitor item	Condition		Valve
TELESCO PULSE	Steering column	Operate (forward)	Change (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

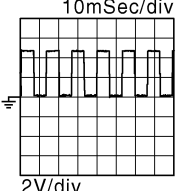
NO >> Perform diagnosis procedure. Refer to [ADP-95. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720740

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-210, "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.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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-211, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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

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

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace telescopic motor.

NO >> Repair or replace harness or connector.

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SENSOR DRIVER SIDE

DRIVER SIDE : Description

INFOID:000000009720741

- 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:000000009720742

1.CHECK FUNCTION

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

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

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-98. "DRIVER SIDE : Diagnosis Procedure"](#).

DRIVER SIDE : Diagnosis Procedure

INFOID:000000009720743

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.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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-211, "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:000000009720744

- 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:000000009720745

1.CHECK FUNCTION

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

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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-100. "PASSENGER SIDE : Diagnosis Procedure"](#).

PASSENGER SIDE : Diagnosis Procedure

INFOID:000000009720746

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-211. "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.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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.

ADP

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

Description

INFOID:000000009720747

- 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:000000009720748

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-102. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720749

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.
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	

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

ADP

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING MOTOR

Description

INFOID:000000009720750

- 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:000000009720751

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-104. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720752

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-III
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.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

ADP

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (FRONT)

Description

INFOID:000000009720753

- 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:000000009720754

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-106. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720755

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.
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.

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

ADP

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING MOTOR (REAR)

Description

INFOID:000000009720756

- 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:000000009720757

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-108. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720758

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.
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.

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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-210, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

ADP

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TILT MOTOR

Description

INFOID:000000009720759

- 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:000000009720760

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-110, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720761

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.
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.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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-211. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

ADP

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC MOTOR

Description

INFOID:000000009720762

- 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:000000009720763

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-112, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720764

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-III
5. Check voltage between telescopic motor harness connector and ground.

(+)		(−)	Condition		Voltage (V) (Approx.)
Telescopic motor					
Connector	Terminals				
M117	1	Ground	TELESCOPIC MO- TOR	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.

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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-211, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

ADP

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR MOTOR

Description

INFOID:000000009720765

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:000000009720766

1.CHECK DOOR MIRROR MOTOR FUNCTION

Check the operation with "MIRROR MOTOR RH" and "MIRROR MOTOR LH" in "ACTIVE TEST" mode with CONSULT.

Refer to [ADP-41, "CONSULT Function"](#).

Is the inspection result normal?

- YES >> Door mirror motor function is OK.
NO >> Refer to [ADP-114, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720767

1.CHECK DOOR MIRROR MOTOR INPUT SIGNAL

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

(+)Door mirror		(-)	Condition		Voltage (V) (Approx.)
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	

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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		Not existed
M75	12		
	23		
	24		

[Door mirror passenger side]

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

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-211, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to [ADP-115, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).
NO >> Replace door mirror. Refer to [MIR-72, "DOOR MIRROR ASSEMBLY : Removal and Installation"](#).

Component Inspection

INFOID:000000009720768

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

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description

INFOID:000000009720769

- 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:000000009720770

1.CHECK FUNCTION

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

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to [ADP-116, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000009720771

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-212, "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.

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between driver seat control unit harness connector and seat memory switch 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-210. "Removal and Installation"](#).
- NO >> Repair or replace harness or connector.

ADP

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:000000009720772

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

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

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
TILT SW-UP	Tilt switch	Upward	ON
		Other than above	OFF
TILT SW-DOWN	Tilt switch	Downward	ON
		Other than above	OFF
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
		Other than above	OFF
DETENT SW	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	NOTE: This item is displayed, but cannot be monitored		
VEHICLE SPEED	The condition of vehicle speed is displayed		km/h
P RANG SW CAN	Selector lever	P position	ON
		Other than above	OFF

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

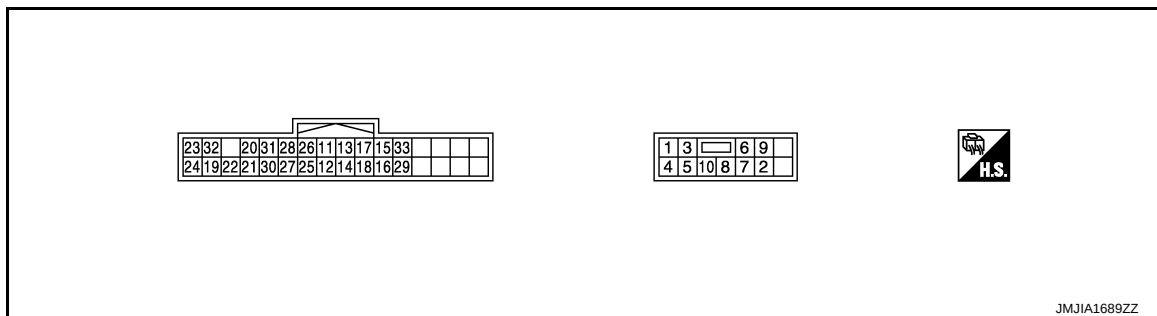
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
R RANGE (CAN)	Selector lever	R position	ON
		Other than above	OFF
DOOR SW-FL	Driver door	Open	ON
		Close	OFF
DOOR SW-FR	Passenger door	Open	ON
		Close	OFF
IGN ON SW	Ignition switch	ON position	ON
		Other than 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

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
4 (G/R)	Ground	Sliding motor forward out- put 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
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 out- put 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 out- put 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 sig- nal	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 sig- nal	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 sig- nal	Input	Seat lifting switch (front)	Operate (up)	0
					Release	Battery voltage

A

B

C

D

E

F

G

H

I

ADP

K

L

M

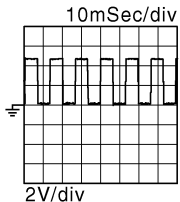
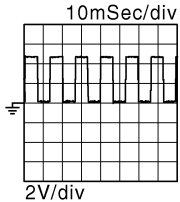
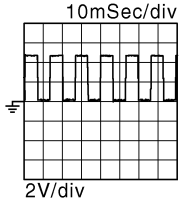
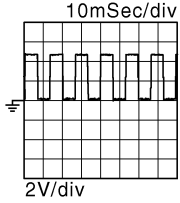
N

O

P

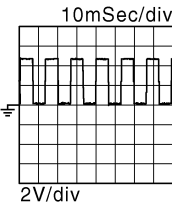
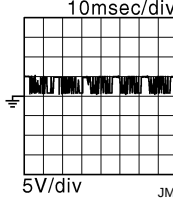
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
19 (G/Y)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	 JMJA0119ZZ
					Stop	0 or 5
20 (R/Y)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	 JMJA0119ZZ
					Stop	0 or 5
21 (L/Y)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	 JMJA0119ZZ
					Stop	0 or 5
22 (BR/Y)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	 JMJA0119ZZ
					Stop	0 or 5
23 (P)	—	CAN-H	—	—	—	—
24 (P/L)	—	CAN-L	—	—	—	—
25 (G/O)	Ground	Memory indicator 1 signal	Output	Memory indicator 1	Illuminate	1
					Other than above	Battery voltage
26 (L/O)	Ground	Memory indicator 2 signal	Output	Memory indicator 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

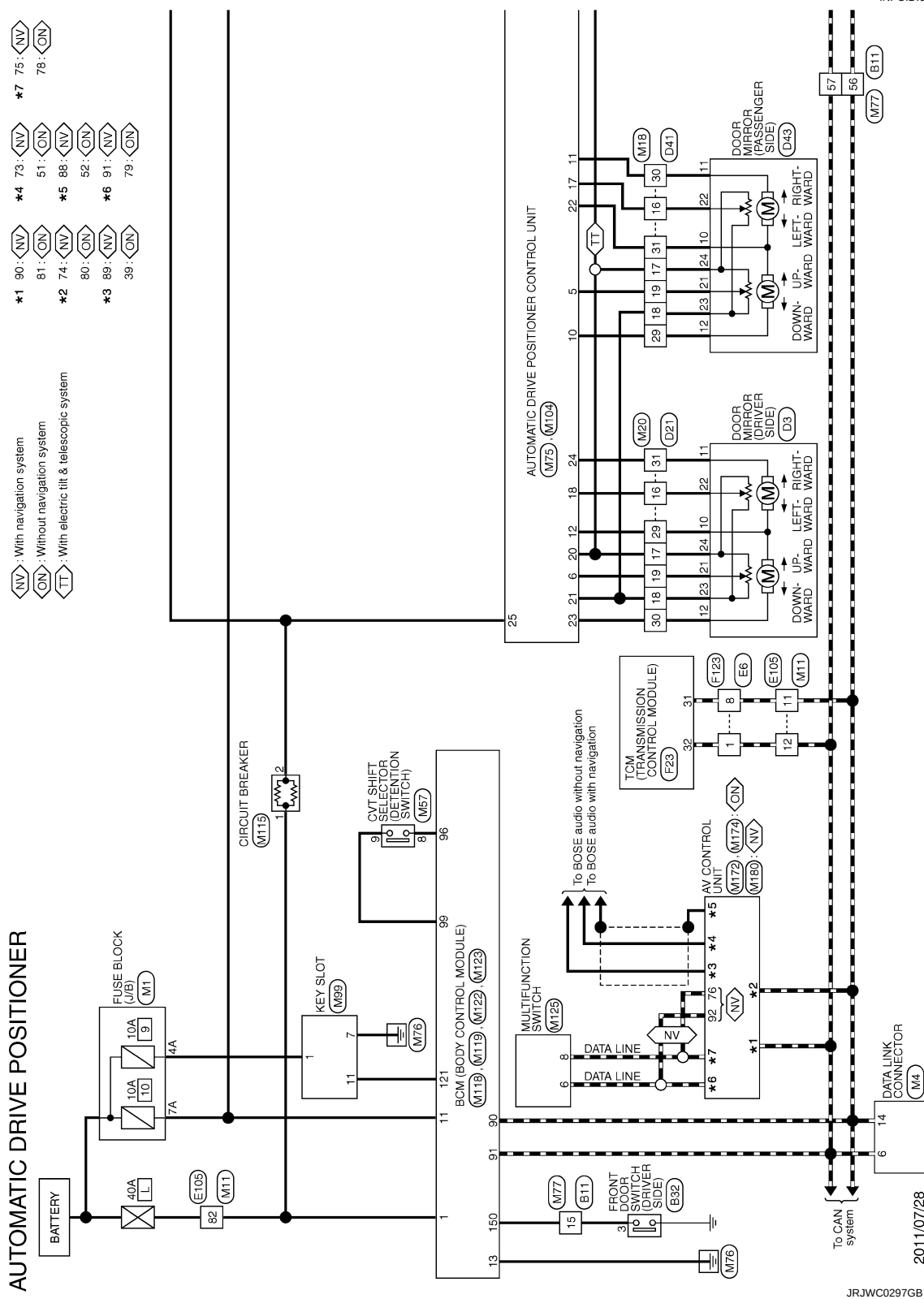
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
30 (BR)	Ground	Tilt sensor signal	Input	Tilt	Operate	
					Other than above	0 or 5
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

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

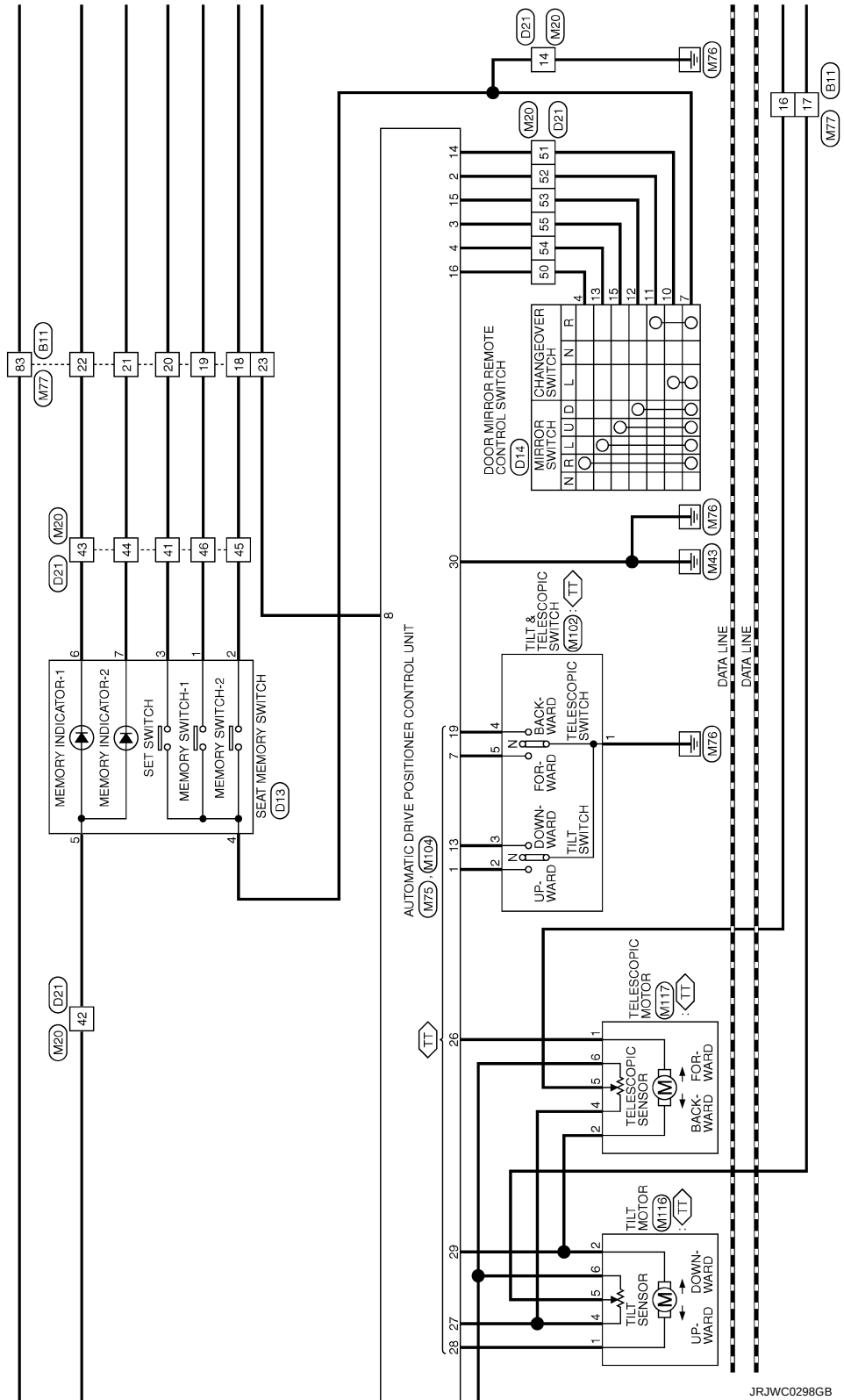
ADP



DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

ⓉⓉ : With electric tilt & telescopic system



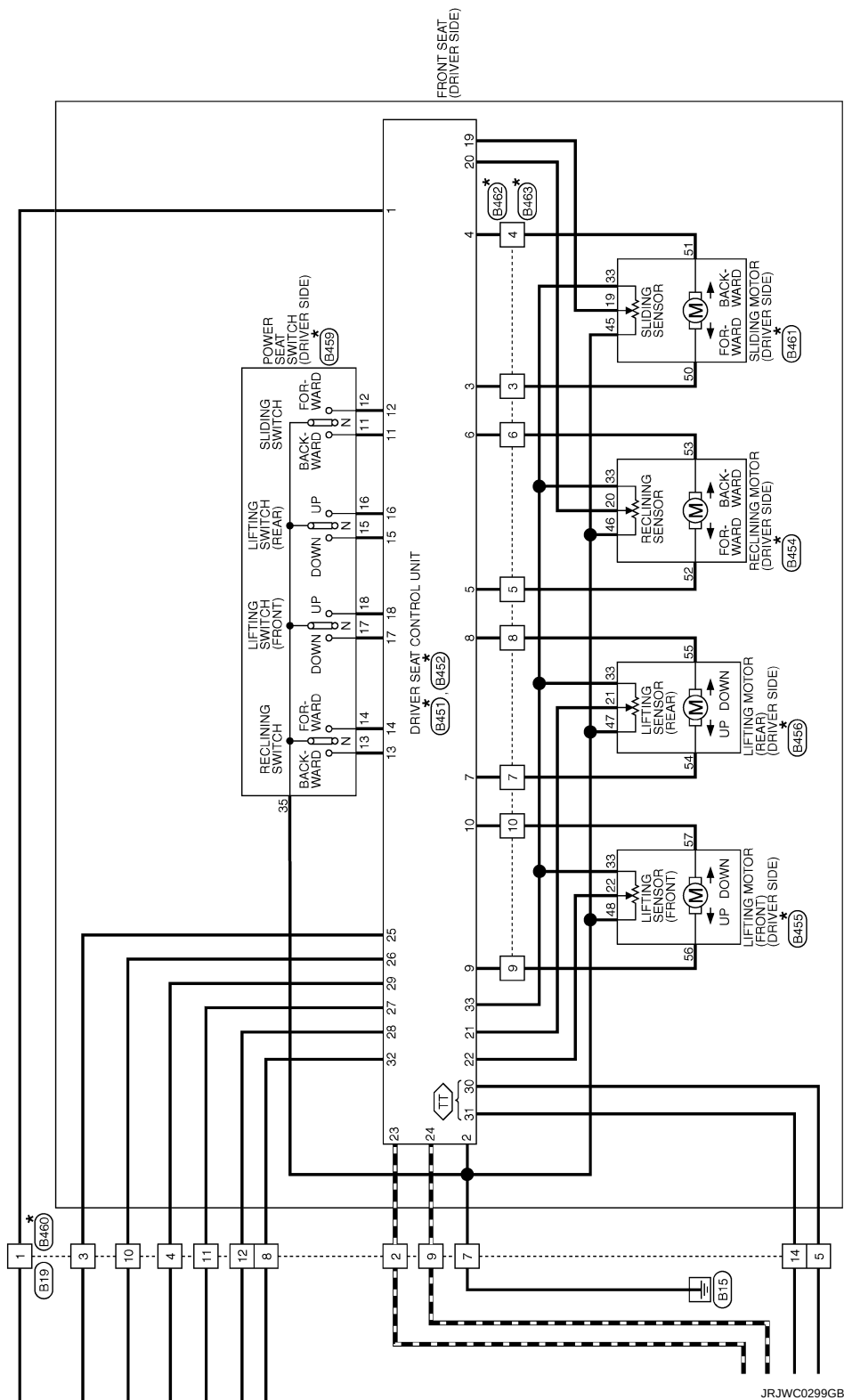
JRJWC0298GB

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

TT : With electric tilt & telescopic system
 * : This connector is not shown in "Harness Layout".



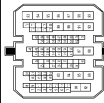
JRJWC0299GB

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

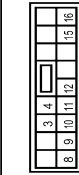
Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	
2	R	
3	R/L	
4	R/W	
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	R	
30	P	
31	BR	
32	SB	
34	SB	
35	SHIELD	
36	LG	
37	LG	
40	Y	
41	GR	

42	G	
43	G	
44	LG	
45	SB	
47	V	
48	GR	
49	SHIELD	
49	B	
49	BR	
50	G	
50	R/W	
51	R	
51	R/L	
52	B	
53	LG	
54	BR	
55	P	
56	L	
56	R	
59	R	
59	SHIELD	
60	B	
60	Y	
61	R/L	
62	R/W	
63	LG	
64	Y	
65	BR	
66	L	
66	V	
67	G	
67	GR	
68	BR	
68	R	
69	SHIELD	
70	W/R	
71	B/R	
72	Y	
73	LG	
74	SB	
75	L	
76	G	
77	R	
78	B	
80	W	
81	R	
82	L	

83	BR	
84	G	
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	



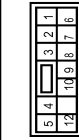
Connector No.	B19
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Connector No.	B32
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	TH04FW-NH



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

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS16FW-CS



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	

JRJWC3021GB

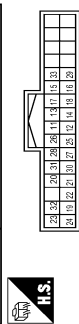
A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

Connector No.	B452
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FN



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	G	-
3	W	-
4	R	-
5	G	-
6	W	-
7	R	-
8	Y	-
9	B	-
10	W	-
11	R	-
12	Y	-
13	L	-
14	B	-
15	Y/B	-
16	Y/R	-
17	LG/B	-
18	LG/R	-
19	G/Y	-
20	R/Y	-
21	L/Y	-
22	BR/Y	-
23	P	-
24	P/L	-
25	G/O	-
26	L/O	-
27	V	-
28	V/W	-
29	O/L	-
30	BR	-
31	BR/W	-
32	W/L	-
33	W	-

Connector No.	B454
Connector Name	RECLINING MOTOR (DRIVER SIDE)
Connector Type	F 609B-0344

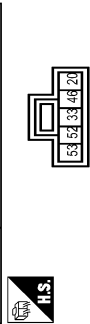


Terminal No.	Color Of Wire	Signal Name [Specification]
22	RY	-
23	W	-
46	B/W	-
52	V	-
53	R/L	-



Terminal No.	Color Of Wire	Signal Name [Specification]
22	BR/Y	-
33	W	-
46	P/B	-
56	L/R	-
57	L/B	-

Connector No.	B456
Connector Name	LIFTING MOTOR (REAR) (DRIVER SIDE)
Connector Type	F 609B-0344

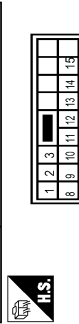


Terminal No.	Color Of Wire	Signal Name [Specification]
23	W	-
33	W	-
47	Y/G	-
54	L	-
55	L/W	-



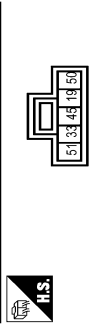
Terminal No.	Color Of Wire	Signal Name [Specification]
11	O/B	-
12	G/W	-
13	R/G	-
14	R/W	-
15	Y/B	-
16	Y/R	-
17	L/O/B	-
35	B	-

Connector No.	B460
Connector Name	WIRE TO WIRE
Connector Type	NS1BMW-CS



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

Connector No.	B461
Connector Name	SLIDING MOTOR (DRIVER SIDE)
Connector Type	F 609B-0344



Terminal No.	Color Of Wire	Signal Name [Specification]
19	G/Y	-
33	W	-
45	W/B	-
50	G	-

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

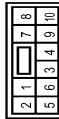
31	G/R	-
----	-----	---

Connector No.	B462
Connector Name	WIRE TO WIRE
Connector Type	NS10PW-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	-

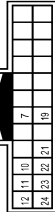
Connector No.	B463
Connector Name	WIRE TO WIRE
Connector Type	NS10PW-CS



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

10	L/B	-
38	Y/W	-
39	Y	-

Connector No.	D03
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	-

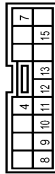
Connector No.	D13
Connector Name	SEAT MEMORY SWITCH
Connector Type	A08FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	SB	-
3	P	-
4	B	-
5	GR	-
6	L	-

7	W	-
---	---	---

Connector No.	D14
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Type	TK16FR



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	TH40PW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	B	-
4	W	-
5	SB	-
6	P	-
7	BR	-
8	BR	-

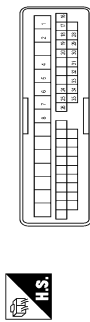
9	GR	-
10	V	-
11	O	-
14	B	-
15	LG	-
16	G	-
17	Y	-
18	GR	-
19	BR	-
20	LG	-
24	P	-
25	V	-
26	W	-
27	R	-
29	V	-
30	SB	-
31	BR	-
32	R	-
33	G	-
34	Y	-
35	L	-
41	P	-
42	GR	-
43	L	-
44	W	-
45	SB	-
46	R	-
50	V	-
51	O	- [Without automatic drive positioner]
52	P	- [With automatic drive positioner]
53	L	- [Without automatic drive positioner]
54	LG	- [Without automatic drive positioner]
54	SB	- [With automatic drive positioner]
55	LG	- [Without automatic drive positioner]
55	O	- [Without automatic drive positioner]

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

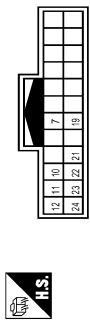
AUTOMATIC DRIVE POSITIONER

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



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

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



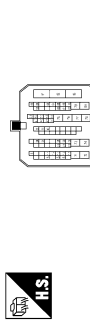
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
10	BR	-
11	SB	-
12	V	-
19	B	-
21	BR	-
22	G	-
23	GR	-
24	Y	-

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK18MG7-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	Y	-
4	R	-
8	V	-
10	P	-
11	G	-
12	BR	-
13	SB	-
14	B	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH100W-CS10-M3



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
24	L	-
25	G	-
26	W	-
30	Y	-
38	R	-
39	L	-
40	B	-
47	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
65	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	G	- [With iPod without navigation system]
78	V	- [Without iPod and navigation system]
79	Y	- [With navigation system]
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	TH40FE-R28-L-TH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P/B	TRANSMISSION RANGE SWITCH 2
2	P/L	TRANSMISSION RANGE SWITCH 3
3	G/O	TRANSMISSION RANGE SWITCH 4
4	GR	TRANSMISSION RANGE SWITCH 3 (MONITOR)
5	B	GROUND
7	W	SENSOR GROUND
8	G/W	CLOCK (SEL 2)
9	GR	CLOCK (SEL 1)
10	BR/R	DATA I/O (SEL 3)
11	BR/W	TRANSMISSION RANGE SWITCH 1
13	V	CVT FLUID TEMPERATURE SENSOR
14	R/W	PRIMARY PRESSURE SENSOR
15	V/W	SECONDARY PRESSURE SENSOR
19	G/B	REVERSE LAMP RELAY
20	R/B	STARTER RELAY

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

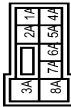
AUTOMATIC DRIVE POSITIONER

Terminal No.	Color	Wire	Signal Name [Specification]
25	W/R		SENSOR GROUND
26	W/R		SENSOR GROUND
27	R/G		STEP MOTOR C
28	R		STEP MOTOR C
29	O/B		STEP MOTOR B
30	G/R		STEP MOTOR A
31	P		CAN-L
32	L		CAN-H
33	LG		PRIMARY SPEED SENSOR
34	LG/R		SECONDARY SPEED SENSOR
37	V/R		LOCK-UP SELECT SOLENOID VALVE
38	L/W		TORQUE CONVERTER CLUTCH SOLENOID VALVE
39	W/B		SECONDARY PRESSURE SOLENOID VALVE
40	R/Y		LINE PRESSURE SOLENOID VALVE
42	B		GROUND
43	S		POWER SUPPLY
47	L/R		POWER SUPPLY MEMORY BACK-UP)
48	Y		POWER SUPPLY

Connector No.	Terminal No.	Wire	Signal Name [Specification]
F123			
WIRE TO WIRE			
TK1810Y-1V			

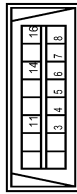


Connector No.	Terminal No.	Wire	Signal Name [Specification]
M1			
FUSE BLOCK (J/B)			
NS6FW-M2			



Terminal No.	Color	Wire	Signal Name [Specification]
1A			
7			
7A			
8A			
14			
16			
5A			
4A			
7A			
8A			

Connector No.	Terminal No.	Wire	Signal Name [Specification]
M4			
DATA LINK CONNECTOR			
BD18FW			



Terminal No.	Color	Wire	Signal Name [Specification]
3			
4			
5			
6			
7			
8			
11			
14			
16			

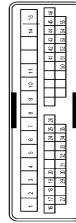
Connector No.	Terminal No.	Wire	Signal Name [Specification]
M11			
WIRE TO WIRE			
TH10FW-CS10-M3			



Terminal No.	Color	Wire	Signal Name [Specification]
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

Terminal No.	Color	Wire	Signal Name [Specification]
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

Connector No.	Terminal No.	Wire	Signal Name [Specification]
M18			
WIRE TO WIRE			
TH40MM-CS15			



Terminal No.	Color	Wire	Signal Name [Specification]
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

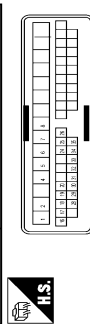
DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

24	G	-
25	Y	-
26	P	-
28	R	-
29	GR	-
30	G	-
31	V	-
32	P	-
33	P	-
34	BR	-
35	R	-

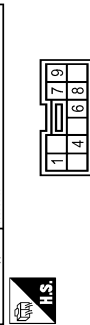
Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH44MM-CSI3



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	W	-
4	B	- [With BOSE system and base audio without P-od] - [With P-od without BOSE system] - [With BOSE system and base audio without P-od]
5	G	-
6	V	-
7	BR	-
8	W	-
9	SB	-
10	L	-
11	G	-
14	B	-
15	GR	-
17	Y	-
18	W	-
19	Y	-
20	SB	-
24	P	-
25	V	-
26	W	-

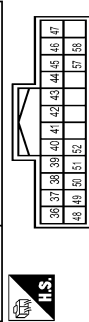
27	R	-
28	R	-
30	L	-
31	SB	-
32	W	-
33	P	-
34	BR	-
35	R	-
41	LG	-
42	LG	-
43	BR	-
44	Y	-
45	P	-
46	P	-
50	V	-
51	BG	-
52	GR	- [With automatic drive positioner] - [Without automatic drive positioner]
53	L	- [With automatic drive positioner] - [Without automatic drive positioner]
54	G	- [With automatic drive positioner] - [Without automatic drive positioner]
55	GR	- [With automatic drive positioner] - [Without automatic drive positioner]
55	SB	- [With automatic drive positioner] - [Without automatic drive positioner]

Connector No.	M57
Connector Name	CVT SHIFT SELECTOR
Connector Type	TK10PW



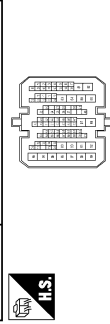
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
4	B	-
7	B	-
8	Y	-
9	V	-

Connector No.	M75
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	UPWARD
2	GR	SELECT RH
3	SB	UPWARD
4	LG	LEFTWARD
5	R	MIR SENS UP DOWN (RH)
6	Y	MIR SENS UP DOWN (LH)
7	P	FORWARD
8	LG	RETX
10	GR	MIR MTR UP (RH)
11	G	MIR MTR UP (LH)
12	R	MIR MTR DOWN RIGHT (LH)
13	LG	DOWNWARD
14	BG	SELECT LH
15	L	DOWNWARD
17	W	MIR SENS LEFT & RIGHT (RH)
18	L	MIR SENS LEFT & RIGHT (LH)
19	G	BACKWARD
20	Y	SENS GND
21	W	SENS POWER
22	V	MIR MTR DOWN RIGHT (RH)
23	L	MIR MTR UP (LH)
24	SB	MIR MTR LEFT (LH)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH88FW-CSI9



Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	-
2	SHIELD	-
3	W	-
4	R	-
6	W	-
7	G	-
8	SHIELD	-
9	W	-
10	R	-
11	G	-
12	B	-
13	P	-
14	R	-
15	SB	-
16	Y	-
17	Y	-
18	P	-
19	P	-
20	LG	-
21	Y	-
22	BR	-
23	LG	-
24	SB	-
25	Y	-
27	Y	-
28	R	-
30	Y	-
31	W	-
32	BR	-
34	Y	-
35	B	-
36	G	-
37	Y	-
40	BR	-
41	LG	-
42	SB	-

DRIVER SEAT CONTROL UNIT

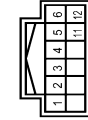
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

46	G	-
47	SG	-
48	SG	-
49	Y	-
50	R	-
51	GR	-
52	SHIELD	-
53	BR	-
54	R	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	R	-
60	SHIELD	-
61	R	-
62	W	-
63	LG	-
64	Y	-
65	R	-
66	V	-
67	G	-
68	EG	-
69	SHIELD	-
70	L	-
71	P	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	W	-
79	W	-
80	W	-
81	L	-
82	L	-
83	GR	- [Without automatic drive positioner] - [With automatic drive positioner]
84	W	-

84	R	-
85	V	-
86	W	-
87	R	-
88	G	-
89	B	-
90	V	-
91	G	-
92	BR	-
93	P	-
94	V	-
95	W	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	M69
Connector Name	KEY SLOT
Connector Type	TH12FW-RH



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	GROUND
11	Y	KEY SWITCH SIGNAL

Connector No.	M102
Connector Name	TILT & TELESCOPIC SWITCH
Connector Type	TK08EGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	LG	-
3	LG	-
4	G	-
5	P	-

Connector No.	M104
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS06FW-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	GROUND

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



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

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



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

JRJWC3027GB

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

Connector No.	M117
Connector Name	TELESCOPIC MOTOR
Connector Type	NS96W-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	LG	-
3	LG	-
4	P	-
5	R	-
6	Y	-

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (+/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (IGN)

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	INTERIOR ROOM LAMP POWER SUPPLY
2	W	PASSENGER DOOR UNLOCK OUTPUT
3	W	STEP LAMP CONT
4	W	ALL DOOR FUEL LID LOCK OUTPUT
5	G	DRIVER DOOR UNLOCK OUTPUT
6	P	REAR DOOR UNLOCK OUTPUT
7	LG	BAT (FUSE)
8	B	GROUND
9	O	PUSH-BUTTON IGNITION SW ILL GND
10	L	ACC IND
11	G	TURN SIGNAL RH
12	GR	TURN SIGNAL LH
13	Y	INT ROOM LAMP CONT

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



Terminal No.	Color Of Wire	Signal Name [Specification]
72	B	ROOM ANT-
73	W	ROOM ANT+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	NATS ANT AMP

81	O	NATS ANT AMP
82	BR	IGN RELAY (F) CONT
83	P	KEYLESS ENTRY RECEIVER COMMI
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL CONT
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW

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



DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

Connector No.	M172
Connector Name	AV CONTROL UNIT
Connector Type	TH24FW-NH



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

Terminal No.	Wire	Signal Name [Specification]
36	GR	SIGNAL VCC
37	GB	SIGNAL GND
38	G	UP
39	L	COMM (DSP+ CONT)
40	W	RGB AREA(Y/S) SIGNAL
41	SHIELD	SHIELD
42	B	RGB SYNC
43	G	RGB (R/RED) SIGNAL
44	L	RGB (G/GREEN) SIGNAL
45	Y	RGB (B/BLUE) SIGNAL
46	W	—
47	R	—
48	Y	INVERTER VCC
49	BR	INVERTER GND
50	R	VP
51	LG	—
52	B	—
57	SHIELD	SHIELD
58	B	—

Connector No.	M174
Connector Name	AV CONTROL UNIT
Connector Type	TH32FW-NH



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

Terminal No.	Wire	Signal Name [Specification]
76	LG	AV COMM (L)
77	SB	AV COMM (H)
78	LG	AV COMM (L)
79	SB	AV COMM (H)
80	P	CAN-L
81	L	CAN-H
82	V	SW GND
86	SHIELD	SHIELD
87	R	TEL VOICE SIGNAL (+)
88	L	TEL VOICE SIGNAL (-)
92	V	VEHICLE SPEED SIGNAL (8-PULSE)
94	G	PARKING BRAKE (Without ESE system)
96	W	REVERSE
98	W	DISK ELECT SIGNAL
102	W	AUX SOUND SIGNAL GND
103	B	AUX SOUND SIGNAL LH (+)
104	R	AUX SOUND SIGNAL RH (+)

Connector No.	M180
Connector Name	AV CONTROL UNIT
Connector Type	TH32FW-NH



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

Terminal No.	Wire	Signal Name [Specification]
65	LG	PARKING BRAKE
67	L	—
68	LG	SHIELD
71	SHIELD	SHIELD
72	B	MICROPHONE VCC
73	R	COMM (CONT - DSP)
74	P	CAN-L
75	LG	AV COMM (L)
76	LG	AV COMM (L)
78	R	ILLUMINATION SIGNAL
80	G	IGNITION
81	SB	REVERSE
82	V	VEHICLE SPEED SIGNAL (8-PULSE)
83	B	—

Fail Safe

The fail-safe mode may be activated if the following symptoms are observed.

JRJWC3029GB

INFOID:000000009720774

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions operate normally.	CAN communication	U1000	ADP-44
	CONTROL UNIT	U1010	ADP-45
	EEPROM	B2130	ADP-46
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-53
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-47
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-49
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-51

DTC Index

INFOID:000000009720775

CONSULT display	Timing ^{*1}		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-44
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-45
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-47
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-49
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-51
UART COMM [B2128]	0	1-39	UART communication	ADP-53
EEPROM [B2130]	0	1-39	EEPROM	ADP-46

*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

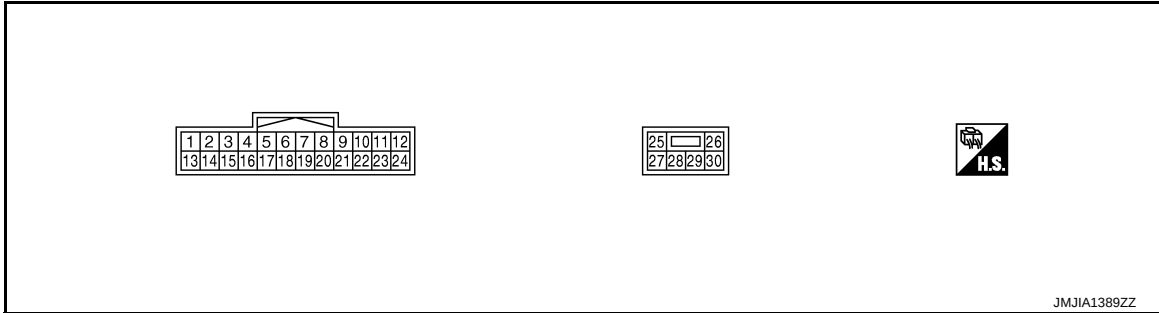
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000009720776

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 (pas- senger 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 (driv- er 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 for- ward signal	Input	Telescopic switch	Operate (forward)	0
					Other than above	5
8 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
10 (GR)	Ground	Door mirror motor (pas- senger side) up output signal	Output	Door mirror RH	Operate (up)	Battery voltage
					Other than above	0
11 (G)	Ground	Door mirror motor (pas- senger side) left output signal	Output	Door mirror RH	Operate (left)	Battery voltage
					Other than above	0
12 (R)	Ground	Door mirror motor (driv- er side) down output sig- nal	Output	Door mirror (LH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (driv- er side) right output sig- nal			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 (BG)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0
					Neutral or RH	5
15 (L)	Ground	Mirror switch down sig- nal	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 (pas- senger 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 (driv- er 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 back- ward signal	Input	Telescopic switch	Operate (back- ward)	0
					Other than above	5
20 (Y)	Ground	Ground	—	—		0
21 (W)	Ground	Door mirror motor sen- sor power supply	Input	—		5

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

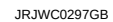
< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output			
22 (V)	Ground	Door mirror motor (pas- senger side) down out- put signal	Output	Door mirror (RH)	Operate (down)	Battery voltage
		Door mirror motor (pas- senger side) right output signal			Other than above	0
					Operate (right)	Battery voltage
					Other than above	0
23 (L)	Ground	Door mirror motor (driv- er side)up output signal	Output	Door mirror (LH)	Operate (up)	Battery voltage
					Other than above	0
24 (SB)	Ground	Door mirror motor (driv- er 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 back- ward output signal	Output	Steering tele- scopic	Operate (back- ward)	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 sig- nal	Output	Steering tilt	Operate (up)	Battery voltage
					Other than above	0
		Telescopic motor for- ward output signal		Steering tele- scopic	Operate (forward)	Battery voltage
					Other than above	0
30 (B)	Ground	Ground	—	—		0

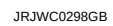
A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

< ECU DIAGNOSIS INFORMATION >

INFOID:0000000010037622



< ECU DIAGNOSIS INFORMATION >

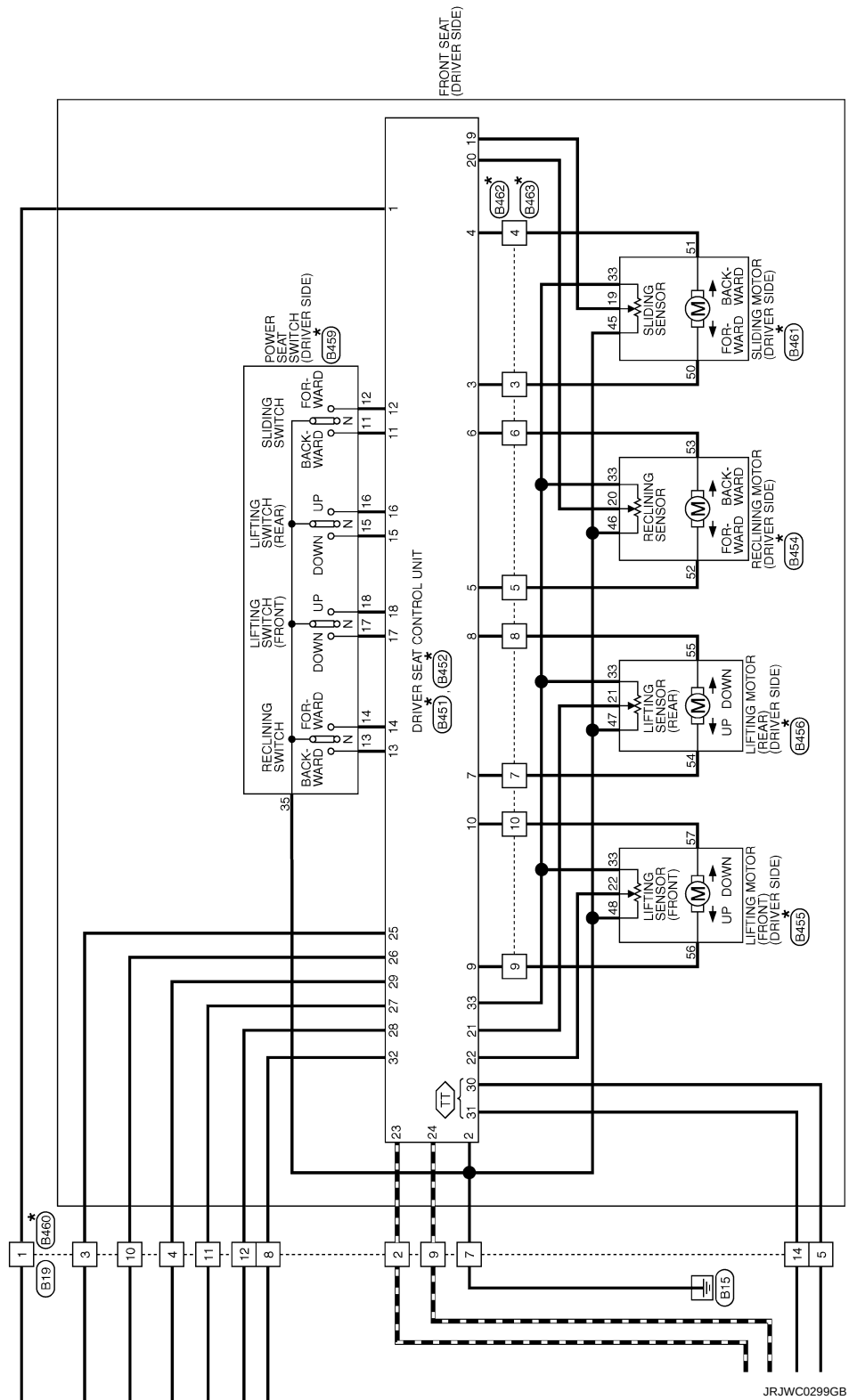


A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

TT : With electric tilt & telescopic system
 * : This connector is not shown in "Harness Layout".



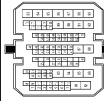
JRJWC0299GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

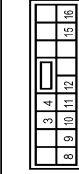
Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS19



Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	
2	R	
3	R/L	
4	R/W	
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	R	
30	P	
31	BR	
32	SB	
34	SB	
35	SHIELD	
36	LG	
37	LG	
40	Y	
41	GR	

42	G	
43	G	
46	LG	
47	SB	
47	V	
48	GR	
48	SHIELD	
49	B	
49	BR	
50	G	
50	R/W	
51	R	
51	R/L	
52	B	
53	LG	
54	BR	
55	P	
56	L	
56	R	
59	R	
59	SHIELD	
60	B	
60	Y	
61	R/L	
62	R/W	
63	LG	
64	Y	
65	BR	
66	R	
66	L	
67	V	
67	GR	
68	BR	
68	R	
69	SHIELD	
70	W/R	
71	B/R	
72	Y	
73	LG	
74	SB	
75	L	
76	G	
77	R	
78	B	
80	W	
81	R	
82	L	

83	BR	
84	G	
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	CO	
99	O	



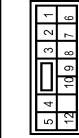
Connector No.	B19
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

Connector No.	B32
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	TH04FW-NH



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

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS16FW-CS



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	

JRJWC3021GB

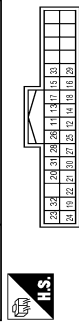
A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

Connector No.	B452
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FN

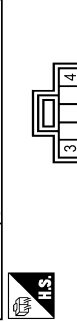


Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	G	-
3	W	-
4	R	-
5	G	-
6	W	-
7	Y	-
8	B	-
9	W	-
10	Y	-
11	R	-
12	G	-
13	W	-
14	R	-
15	Y	-
16	G	-
17	LG/B	-
18	LG/R	-
19	G/Y	-
20	R/Y	-
21	L/Y	-
22	BR/Y	-
23	P	-
24	P/L	-
25	G/O	-
26	U/O	-
27	V	-
28	V/W	-
29	O/L	-
30	BR	-
31	BR/W	-
32	W/L	-
33	W	-

Connector No.	B454
Connector Name	RECLINING MOTOR (DRIVER SIDE)
Connector Type	F 609B-0344



Terminal No.	Color Of Wire	Signal Name [Specification]
22	RY	-
23	W	-
46	B/W	-
52	V	-
53	R/L	-

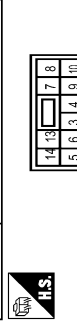


Terminal No.	Color Of Wire	Signal Name [Specification]
22	BR/Y	-
33	W	-
48	P/B	-
56	L/R	-
57	L/B	-

Connector No.	B456
Connector Name	LIFTING MOTOR (REAR) (DRIVER SIDE)
Connector Type	F 609B-0344

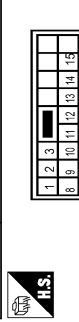


Terminal No.	Color Of Wire	Signal Name [Specification]
23	W	-
33	W	-
47	Y/G	-
54	L	-
55	L/W	-



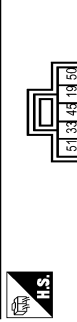
Terminal No.	Color Of Wire	Signal Name [Specification]
11	O/B	-
12	G/W	-
13	R/G	-
14	R/W	-
15	Y/B	-
16	Y/R	-
17	LG/R	-
35	B	-

Connector No.	B460
Connector Name	WIRE TO WIRE
Connector Type	NS1BMW-CS



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

Connector No.	B461
Connector Name	SLIDING MOTOR (DRIVER SIDE)
Connector Type	F 609B-0344



Terminal No.	Color Of Wire	Signal Name [Specification]
19	G/Y	-
33	W	-
45	W/B	-
50	G	-

JRJWC3022GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

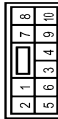
31	G/R	-
----	-----	---

Connector No.	B462
Connector Name	WIRE TO WIRE
Connector Type	NS10PW-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.	B463
Connector Name	WIRE TO WIRE
Connector Type	NS10PW-CS



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

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	-

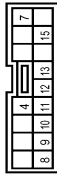
Connector No.	D13
Connector Name	SEAT MEMORY SWITCH
Connector Type	A68FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	SB	-
3	P	-
4	B	-
5	GR	-
6	L	-

7	W	-
---	---	---

Connector No.	D14
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Type	TK16FR



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	TH40PW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	B	-
4	B	-
5	W	-
6	SB	-
7	P	-
8	BR	-

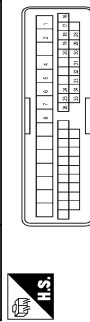
9	GR	-
10	Y	-
11	O	-
14	B	-
15	LG	-
16	G	-
17	Y	-
18	GR	-
19	BR	-
20	LG	-
24	P	-
25	V	-
26	W	-
27	R	-
29	Y	-
30	SB	-
31	BR	-
32	R	-
33	G	-
34	Y	-
35	L	-
41	P	-
42	GR	-
43	L	-
44	W	-
45	SB	-
46	R	-
50	V	-
51	O	- [Without automatic drive positioner]
52	P	- [With automatic drive positioner]
53	L	- [Without automatic drive positioner]
54	LG	- [Without automatic drive positioner]
54	SB	- [With automatic drive positioner]
55	LG	- [Without automatic drive positioner]
55	O	- [Without automatic drive positioner]

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

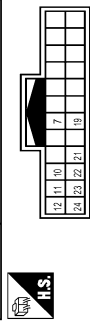
AUTOMATIC DRIVE POSITIONER

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



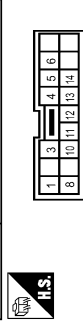
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	G	-
3	BR	-
4	B	-
5	W	-
6	P	-
7	O	-
8	B	-
16	G	-
17	Y	-
18	GR	-
19	BR	-
20	LG	-
24	LG	-
25	W	-
26	O	-
28	G	-
29	V	-
30	SB	-
31	BR	-
32	R	-
33	G	-
34	Y	-
35	L	-

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



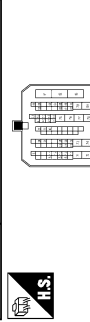
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
10	BR	-
11	SB	-
12	V	-
19	B	-
21	BR	-
22	G	-
23	GR	-
24	Y	-

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK18MG7-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	Y	-
4	R	-
8	BR	-
8	V	-
10	P	-
11	G	-
12	BR	-
13	SB	-
14	B	-

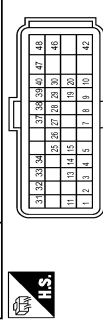
Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH100W-CS10-M3



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	-
3	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
24	L	-
25	G	-
26	W	-
30	Y	-
38	R	-
39	L	-
40	B	-
47	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
65	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	G	- [With iPod without navigation system]
78	V	- [Without iPod and navigation system]
79	Y	- [With navigation system]
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	TH40FE-R28-L-TH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P/B	TRANSMISSION RANGE SWITCH 2
2	P/L	TRANSMISSION RANGE SWITCH 3
3	G/O	TRANSMISSION RANGE SWITCH 4
4	GR	TRANSMISSION RANGE SWITCH 3 (MONITOR)
5	B	GROUND
7	W	SENSOR GROUND
8	G/W	CLOCK (SEL 2)
9	GR	CLOCK (SEL 1)
10	BR/R	DATA I/O (SEL 3)
11	BR/W	TRANSMISSION RANGE SWITCH 1
13	V	CVT FLUID TEMPERATURE SENSOR
14	R/W	PRIMARY PRESSURE SENSOR
15	V/W	SECONDARY PRESSURE SENSOR
19	G/B	REVERSE LAMP RELAY
20	R/B	STARTER RELAY

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

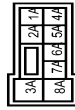
AUTOMATIC DRIVE POSITIONER

Terminal No.	Color	Wire	Signal Name [Specification]
25	W/R		SENSOR GROUND
26	R		SENSOR GROUND
27	P/G		STEP MOTOR C
28	R		STEP MOTOR C
29	O/B		STEP MOTOR B
30	G/R		STEP MOTOR A
31	P		CAN-L
32	L		CAN-H
33	LG		PRIMARY SPEED SENSOR
34	LG/R		SECONDARY SPEED SENSOR
37	V/R		LOCK-UP SELECT SOLENOID VALVE
38	L/W		TORQUE CONVERTER CLUTCH SOLENOID VALVE
39	W/B		SECONDARY PRESSURE SOLENOID VALVE
40	R/Y		LINE PRESSURE SOLENOID VALVE
42	B		GROUND
43	S		POWER SUPPLY
47	L/R		POWER SUPPLY MEMORY BACK-UP)
48	Y		POWER SUPPLY

Connector No.	Terminal No.	Wire	Signal Name [Specification]
F123			
WIRE TO WIRE			
TK1810Y-1V			

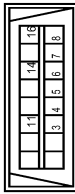


Connector No.	Terminal No.	Wire	Signal Name [Specification]
M1			
FUSE BLOCK (J/B)			
NS6FW-M2			



Terminal No.	Color	Wire	Signal Name [Specification]
1A	Y		
7A	G		
8A	Y		
4A	GR		
7A	LG		
8A	Y		

Connector No.	Terminal No.	Wire	Signal Name [Specification]
M4			
DATA LINK CONNECTOR			
BD18FW			

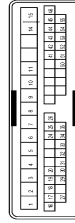


Terminal No.	Color	Wire	Signal Name [Specification]
3	LG		
4	B		
5	B		
6	L		
7	BR		
8	G		
14	SB		
16	Y		

Connector No.	Terminal No.	Wire	Signal Name [Specification]
M11			
WIRE TO WIRE			
TH10FW-CS10-M3			



Terminal No.	Color	Wire	Signal Name [Specification]
3	PA		
4	PL		
5	CO		
6	G		
8	R		
11	P		
12	L		
13	V		
14	Y		
15	R		
20	W		
21	BR		
22	LG		
24	Y		
26	BR		
28	L		
30	R		
39	L		
40	B		
47	P		
48	L		
49	W		
50	GR		
51	LG		
52	Y		
53	SB		
54	P		
55	LG		
56	V		
60	Y		
61	GR		
62	BR		
63	V		



Connector No.	Terminal No.	Wire	Signal Name [Specification]
M18			
WIRE TO WIRE			
TH40MM-CS15			

Terminal No.	Color	Wire	Signal Name [Specification]
64	SHIELD		
65	Y		
66	R		
67	W		
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	BG		

Terminal No.	Color	Wire	Signal Name [Specification]
1	G		
2	V		
4	L		
4	W		
5	B		
5	BR		
5	W		
6	GR		
7	G		
8	B		
16	W		
17	Y		
18	W		
19	R		
20	SB		

JRJWC3025GB

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

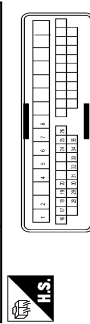
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

24	G	-
25	Y	-
26	P	-
28	R	-
29	GR	-
30	G	-
31	V	-
32	Y	-
33	P	-
34	BR	-
35	R	-

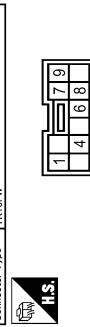
Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH44MM-CSI3



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	W	-
4	B	- [With BOSE system and base audio without P-od] - [With P-od without BOSE system] - [With BOSE system and base audio without P-od]
5	G	-
6	V	-
7	BR	-
8	W	-
9	SB	-
10	L	-
11	G	-
14	B	-
15	GR	-
17	Y	-
18	W	-
19	Y	-
20	SB	-
24	P	-
25	V	-
26	W	-

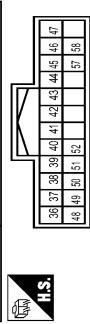
27	R	-
28	R	-
30	L	-
31	SB	-
32	W	-
33	P	-
34	BR	-
35	R	-
41	LG	-
42	LG	-
43	BR	-
44	Y	-
45	P	-
46	P	-
50	V	-
51	GR	-
52	GR	- [With automatic drive positioner] - [Without automatic drive positioner]
53	L	- [With automatic drive positioner] - [Without automatic drive positioner]
54	G	- [With automatic drive positioner] - [Without automatic drive positioner]
55	GR	- [With automatic drive positioner] - [Without automatic drive positioner]

Connector No.	M57
Connector Name	CVT SHIFT SELECTOR
Connector Type	TK10PW



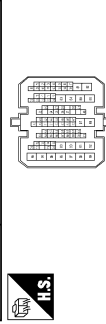
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
4	B	-
7	B	-
8	Y	-
9	V	-

Connector No.	M75
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	UPWARD
3	SB	SELECT BN
4	LG	UPWARD
5	R	LEFTWARD
6	Y	MIR SENS UP DOWN (RH)
7	P	FORWARD
8	LG	RX/TX
10	GR	MIR MTR UP (RH)
11	G	MIR MTR LEFT (RH)
12	R	MIR MTR DOWN RIGHT (LH)
13	LG	DOWNWARD
14	BL	SELECT LH
15	L	DOWNWARD
17	W	MIR SENS LEFT & RIGHT (RH)
18	L	MIR SENS LEFT & RIGHT (LH)
19	G	BACKWARD
20	Y	SENS GND
21	W	SENS POWER
22	V	MIR MTR DOWN RIGHT (RH)
23	L	MIR MTR UP (LH)
24	SB	MIR MTR LEFT (LH)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH88FW-CSI9



Terminal No.	Color Of Wire	Signal Name [Specification]
2	SHIELD	-
3	W	-
4	R	-
6	W	-
7	G	-
8	SHIELD	-
9	W	-
10	R	-
11	G	-
12	B	-
13	P	-
14	R	-
15	SB	-
16	Y	-
17	Y	-
18	P	-
19	P	-
20	LG	-
21	Y	-
22	BR	-
23	LG	-
24	SB	-
25	Y	-
27	Y	-
28	R	-
30	Y	-
31	W	-
32	BR	-
34	Y	-
35	B	-
36	G	-
37	Y	-
40	BR	-
41	LG	-
42	SB	-

JRJCW3026GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

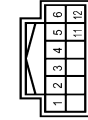
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

46	G	-
47	SG	-
48	Y	-
49	BR	-
50	LG	-
51	R	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	R	-
60	B	-
61	R	-
62	W	-
63	LG	-
64	Y	-
65	R	-
66	V	-
67	G	-
68	EG	-
69	SHIELD	-
70	L	-
71	P	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	B	-
79	W	-
80	W	-
81	L	-
82	L	-
83	GR	- [Without automatic drive positioner] - [With automatic drive positioner]
84	W	-

84	R	-
85	V	-
86	W	-
87	R	-
88	G	-
89	B	-
90	V	-
91	G	-
92	BR	-
93	P	-
94	V	-
95	W	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	M69
Connector Name	KEY SLOT
Connector Type	TH1ZFV-AH



Connector No.	M102
Connector Name	TILT & TELESCOPIC SWITCH
Connector Type	TK08EGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	LG	-
3	LG	-
4	G	-
5	P	-

Connector No.	M104
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS06FW-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	GROUND

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



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

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



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

JRJWC3027GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

Connector No.	M117
Connector Name	TELESCOPIC MOTOR
Connector Type	NS96W-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	—
2	LG	—
3	—	—
4	P	—
5	R	—
6	Y	—

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (+/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (IGN)

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	INTERIOR ROOM LAMP POWER SUPPLY
2	GR	PASSENGER DOOR UNLOCK OUTPUT
3	—	—
4	W	STEP LAMP CONT
5	—	—
6	—	—
7	W	ALL DOOR FUEL LID LOCK OUTPUT
8	—	—
9	G	DRIVER DOOR UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (FUSE)
12	B	GROUND
13	B	PUSH-BUTTON IGNITION SW ILL GND
14	O	ACC IND
15	L	TURN SIGNAL RH
16	—	—
17	G	TURN SIGNAL LH
18	BR	—
19	Y	INT ROOM LAMP CONT

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



Terminal No.	Color Of Wire	Signal Name [Specification]
72	B	ROOM ANT-
73	W	ROOM ANT+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	NATS ANT AMP

81	O	NATS ANT AMP
82	BR	IGN RELAY (E) CONT
83	P	KEYLESS ENTRY RECEIVER COMMI
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL CONT
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW

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



AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER

Connector No.	M172
Connector Name	AV CONTROL UNIT
Connector Type	TH24FW-NH



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

Terminal No.	Color	Wire	Signal Name [Specification]
36	GR		SIGNAL VCC
37	GB		SIGNAL GND
38	G		UP
39	L		COMM (DSP+ CONT)
40	W		RGB AREA(Y/S) SIGNAL
41			SHIELD
42	B		RGB SYNC
43	G		RGB (R/RED) SIGNAL
44	L		RGB (G/GREEN) SIGNAL
45	Y		RGB (B/BLUE) SIGNAL
46	W		—
47	R		—
48	Y		INVERTER VCC
49	BR		INVERTER GND
50	R		VP
51	LG		—
52	B		—
57			SHIELD
58	B		—

Connector No.	M174
Connector Name	AV CONTROL UNIT
Connector Type	TH32FW-NH



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

Terminal No.	Color	Wire	Signal Name [Specification]
76	LG		AV COMM (L)
77	SB		AV COMM (H)
78	LG		AV COMM (L)
79	SB		AV COMM (H)
80	P		CAN-L
81	L		CAN-H
82	V		SW GND
86			SHIELD
87	R		TEL VOICE SIGNAL (+)
88	L		TEL VOICE SIGNAL (-)
92	V		VEHICLE SPEED SIGNAL (8-PULSE)
93	G		PARKING BRAKE (Without EOE system)
94	W		REVERSE
95	SB		DISK ELECT SIGNAL
96	W		AUX SOUND SIGNAL GND
102	W		AUX SOUND SIGNAL LH (+)
103	B		AUX SOUND SIGNAL RH (+)
104	R		—

Connector No.	M180
Connector Name	AV CONTROL UNIT
Connector Type	TH32FW-NH



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

Terminal No.	Color	Wire	Signal Name [Specification]
65	LG		PARKING BRAKE
67	L		—
68	LG		SHIELD
71			SHIELD
72	B		MICROPHONE VCC
73	R		COMM (CONT - DSP)
74	P		CAN-L
75	LG		AV COMM (L)
76	SB		AV COMM (H)
78	R		ILLUMINATION SIGNAL
80	G		IGNITION
81	SB		REVERSE
82	V		VEHICLE SPEED SIGNAL (8-PULSE)
83	B		—

87	W		MICROPHONE SIGNAL
88	W		—
89	L		CAN-H
91	SB		AV COMM (H)
92	SB		AV COMM (H)

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

ADP

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000010037623

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT 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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
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
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

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
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
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: The item is indicated, but not monitored.	Off
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off
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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	A
	Selector lever in P or N position	On	
SFT P -MET	Selector lever in any position other than P	Off	B
	Selector lever in P position	On	
SFT N -MET	Selector lever in any position other than N	Off	C
	Selector lever in N position	On	
ENGINE STATE	Engine stopped	Stop	D
	While the engine stalls	Stall	
	At engine cranking	Crank	
	Engine running	Run	
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off	E
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off	F
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off	
VEH SPEED 1	While driving	Equivalent to speedometer reading	G
VEH SPEED 2	While driving	Equivalent to speedometer reading	H
DOOR STAT-DR	Driver door is locked	LOCK	
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Driver door is unlocked	UNLOCK	I
DOOR STAT-AS	Passenger door is locked	LOCK	
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door is unlocked	UNLOCK	ADP
ID OK FLAG	Power supply position in LOCK position	Reset	
	Power supply position in any position other than LOCK	Set	K
PRMT ENG STRT	The engine start is prohibited	Reset	
	The engine start is permitted	Set	L
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset	
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off	M
	Intelligent Key is inserted into key slot	On	
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key	N
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—	
CONFIRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet	O
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done	P
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	

BCM (BODY CONTROL MODULE)

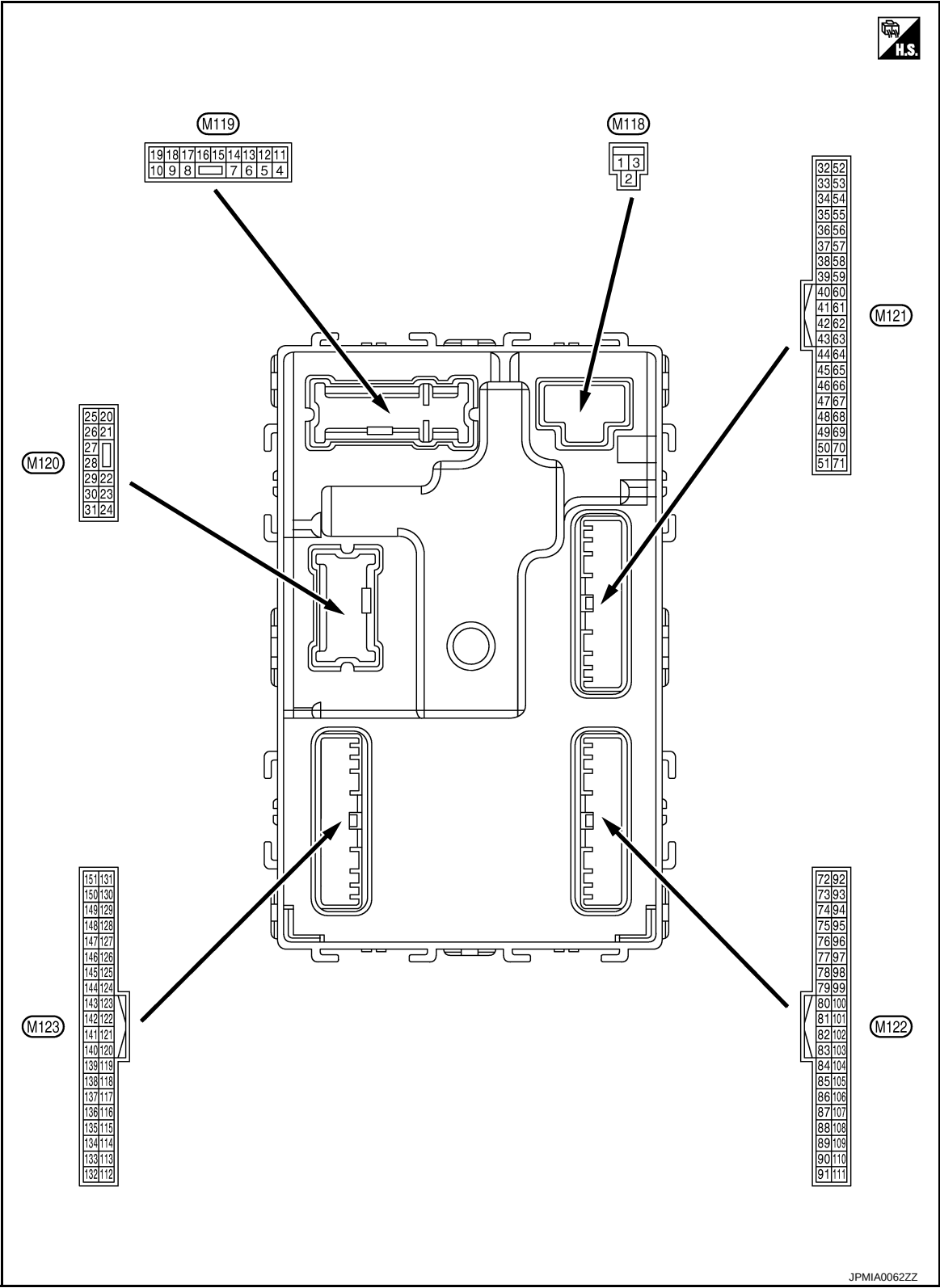
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

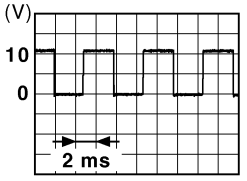
TERMINAL LAYOUT



PHYSICAL VALUES

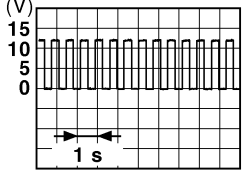
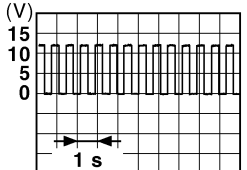
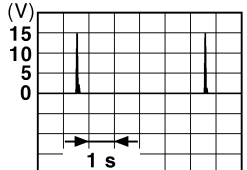
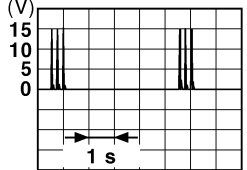
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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 (IGN)	Output	Ignition switch ON		Battery voltage
4 (P/W)	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 UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (W)	Ground	Step lamp control	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 UN- LOCK	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

BCM (BODY CONTROL MODULE)

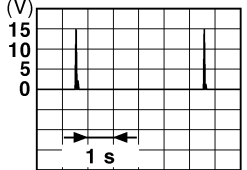
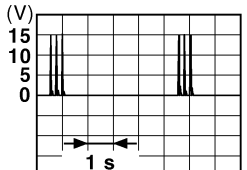
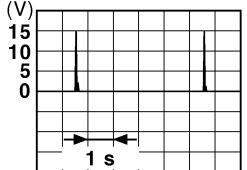
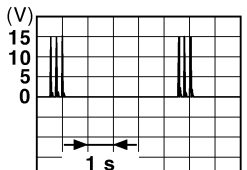
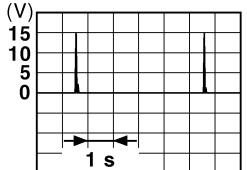
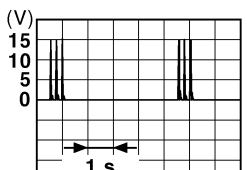
< ECU DIAGNOSIS INFORMATION >

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	 6.5 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 6.5 V
19 (Y)	Ground	Interior room lamp 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 anten- na (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	
					When Intelligent Key is not in the passenger compart- ment	

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

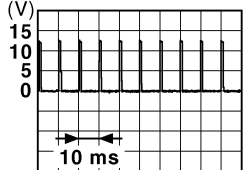
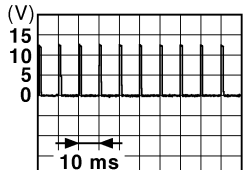
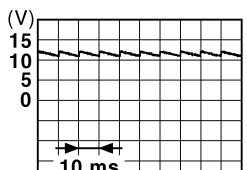
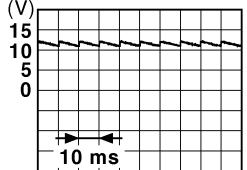
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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
60 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (R)	Ground	Back door request switch	Input	Back door re- quest switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (GR)	Ground	Intelligent key warn- ing buzzer control	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	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

A

B

C

D

E

F

G

H

I

ADP

K

L

M

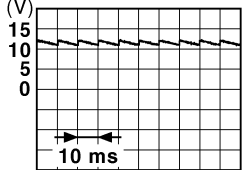
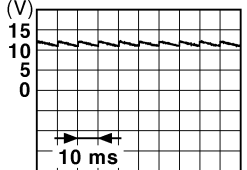
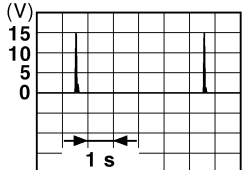
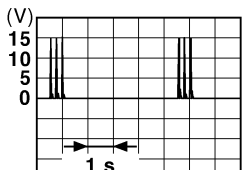
N

O

P

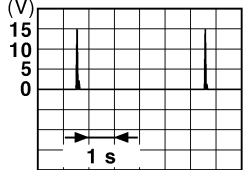
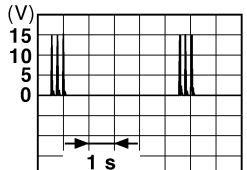
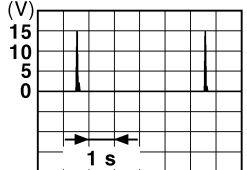
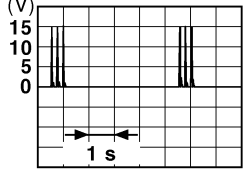
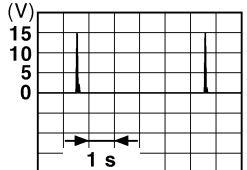
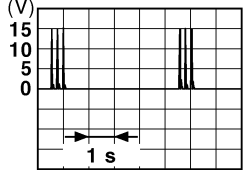
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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
				Rear RH door switch	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
				Rear LH door switch	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 compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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 compart- ment	 JMKIA0062GB	A
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB	B
74 (Y)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB	C
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB	D
75 (LG)	Ground	Passenger door an- tenna (+)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB	E
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB	F

A

B

C

D

E

F

G

H

I

ADP

K

L

M

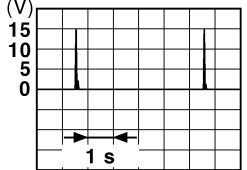
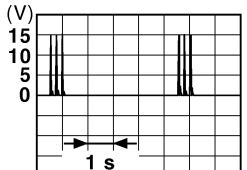
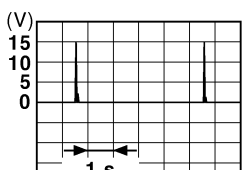
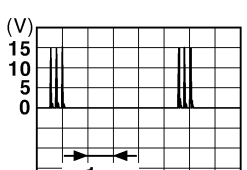
N

O

P

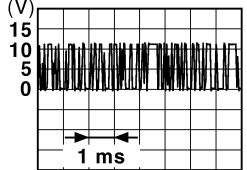
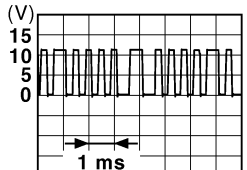
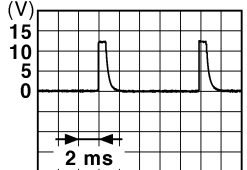
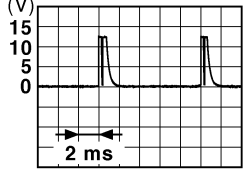
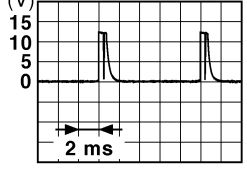
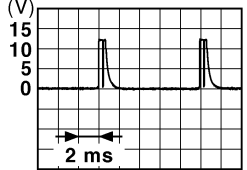
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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 operat- ed 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 operat- ed 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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
83 (P)	Ground	Remote keyless entry receiver communica- tion	Input/ Output	During waiting	 JMKIA0064GB
				When operating either button on Intelligent Key	 JMKIA0065GB
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	 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

A

B

C

D

E

F

G

H

I

ADP

K

L

M

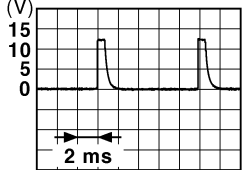
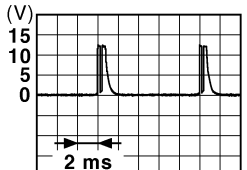
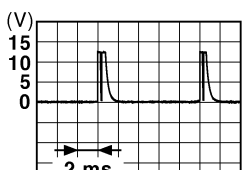
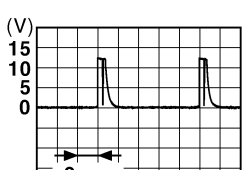
N

O

P

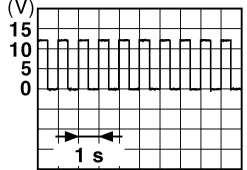
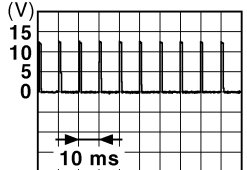
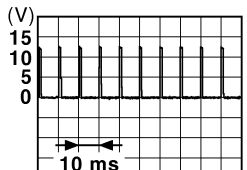
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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
90 (P)	Ground	CAN-L	Input/ Output	—	—	—
91 (L)	Ground	CAN-H	Input/ Output	—	—	—

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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
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

A

B

C

D

E

F

G

H

I

ADP

K

L

M

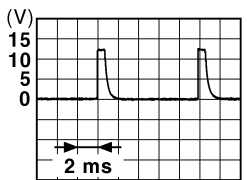
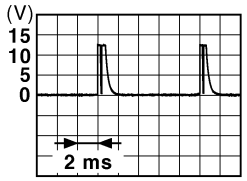
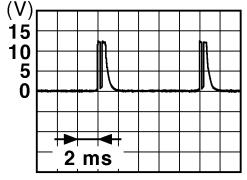
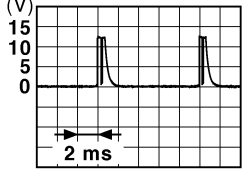
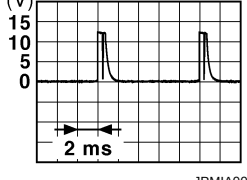
N

O

P

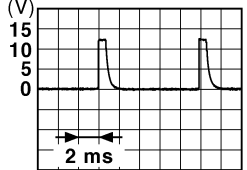
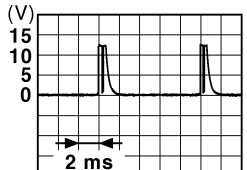
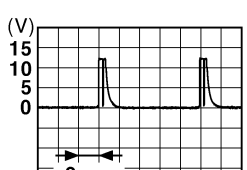
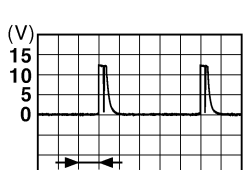
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	 JPMIA0041GB 1.4 V
					 JPMIA0037GB 1.3 V
					 JPMIA0036GB 1.3 V
					 JPMIA0038GB 1.3 V
					 JPMIA0039GB 1.3 V

BCM (BODY CONTROL MODULE)

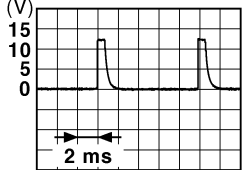
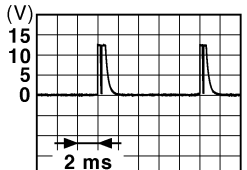
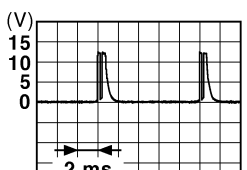
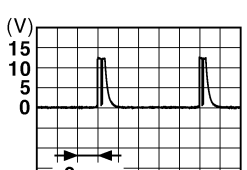
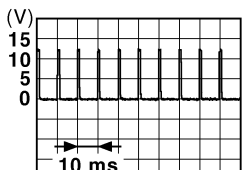
< ECU DIAGNOSIS INFORMATION >

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)  1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)  1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)  1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)  1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6  1.3 V

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

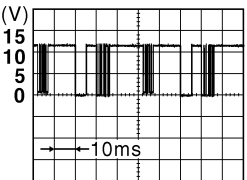
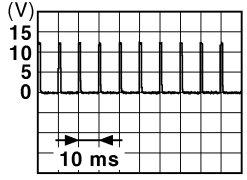
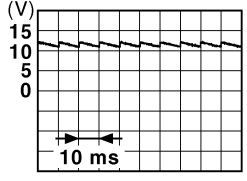
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent 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

BCM (BODY CONTROL MODULE)

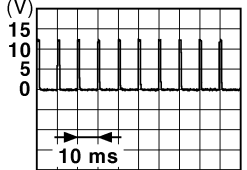
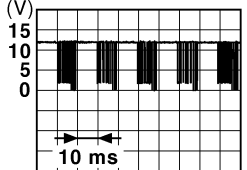
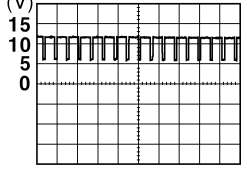
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		 8.7 V
113 (P/B)	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)	 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
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 11.8 V
					ON (When passenger door opens)	0 V

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

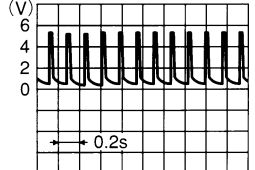
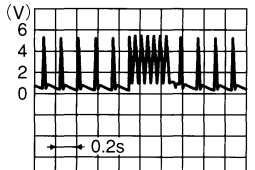
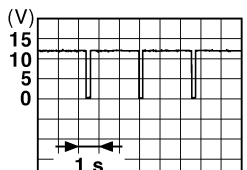
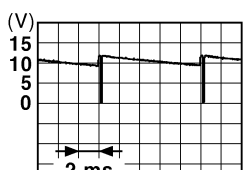
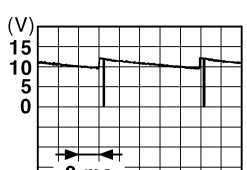
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
130 (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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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	

A

B

C

D

E

F

G

H

I

ADP

K

L

M

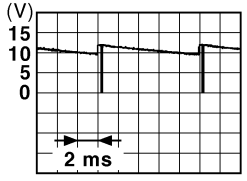
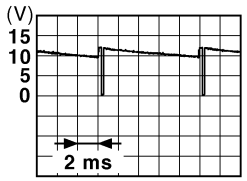
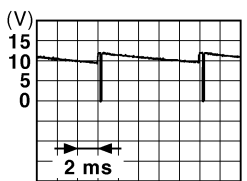
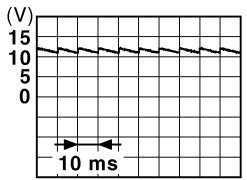
N

O

P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

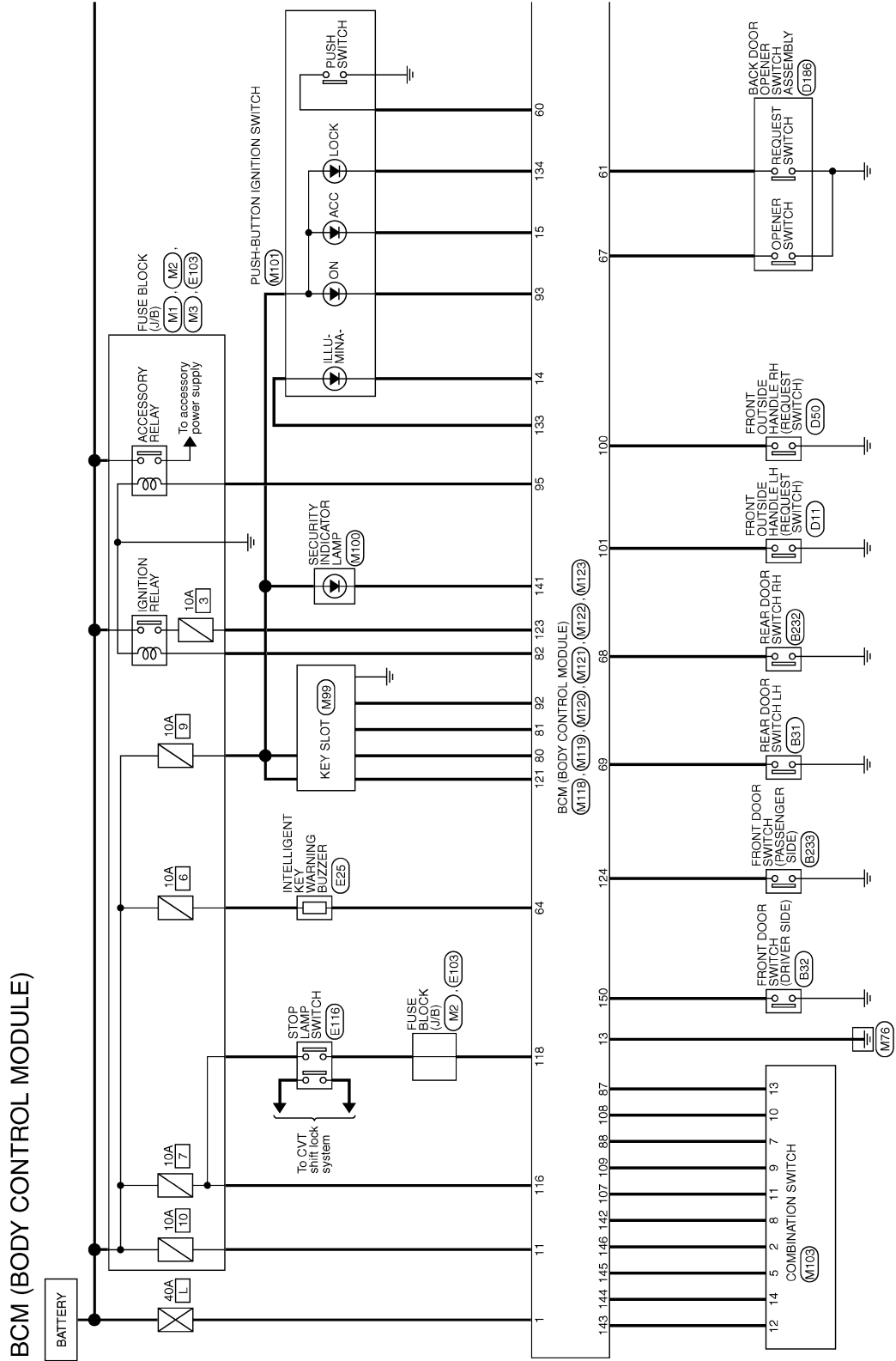
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
144 (P)	Ground	Combination switch OUTPUT 2	Output	Combination switch	0 V
				All switches OFF (Wiper intermittent dial 4)	
				Front washer switch ON (Wiper intermittent dial 4)	
				Rear wiper switch ON (Wiper intermittent dial 4)	
				Rear washer switch ON (Wiper intermittent dial 4)	
				Any of the conditions below with all switches OFF	 JPMA0033GB
				• 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)	0 V
				All switches OFF	
				Front wiper switch INT/ AUTO	
				Front wiper switch LO	
				Lighting switch AUTO	 JPMA0034GB
146 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	0 V
				All switches OFF	
				Front fog lamp switch ON	
				Lighting switch 2ND	
				Lighting switch PASS	
				Turn signal switch LH	 JPMA0035GB
150 (SB)	Ground	Driver door switch	Input	Driver door switch	
				OFF (When driver door closes)	 JPMA0011GB
				ON (When driver door opens)	
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	0 V
				Active	
				Not activated	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000010037624

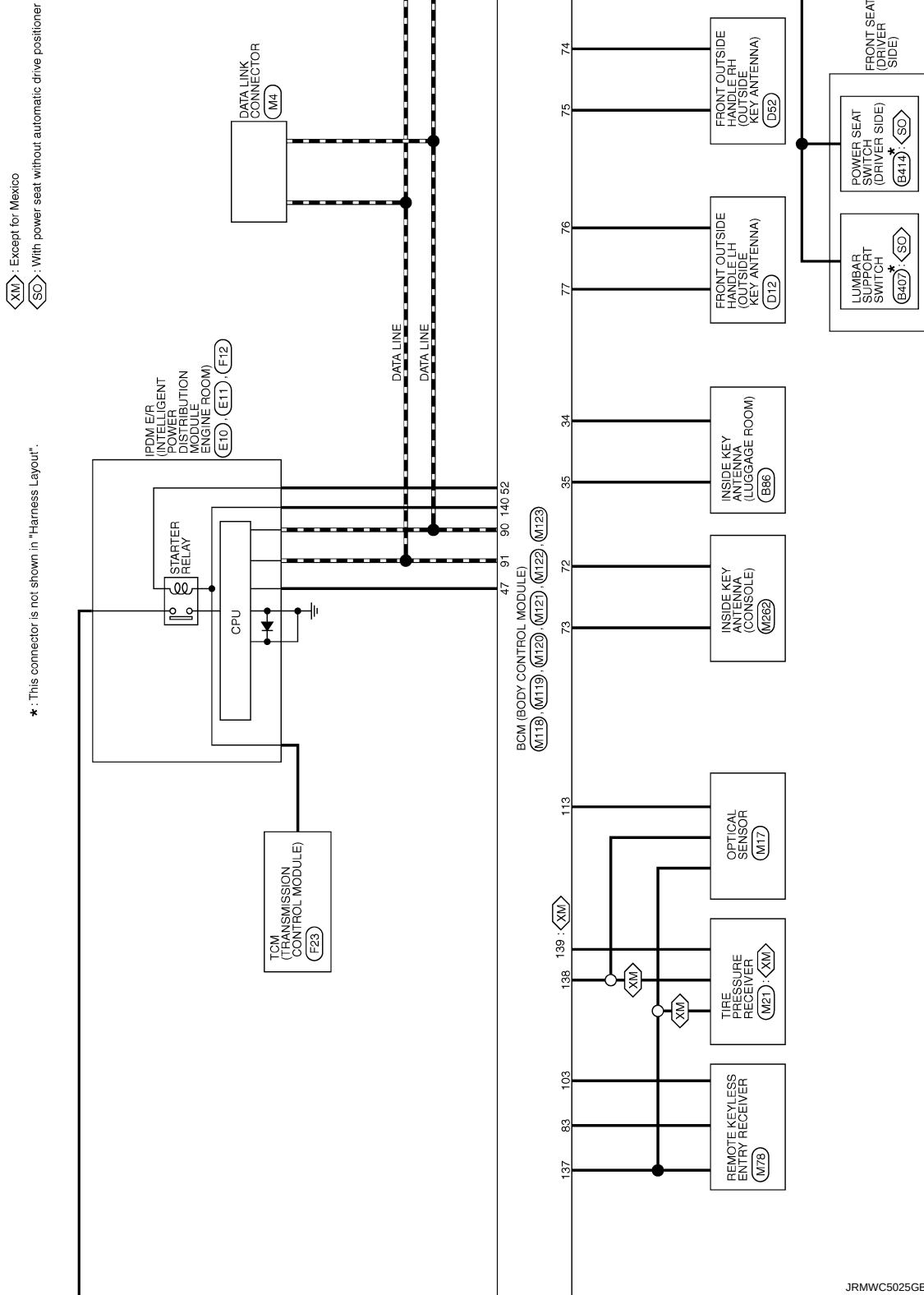


2011/07/28

JRMWC5024GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



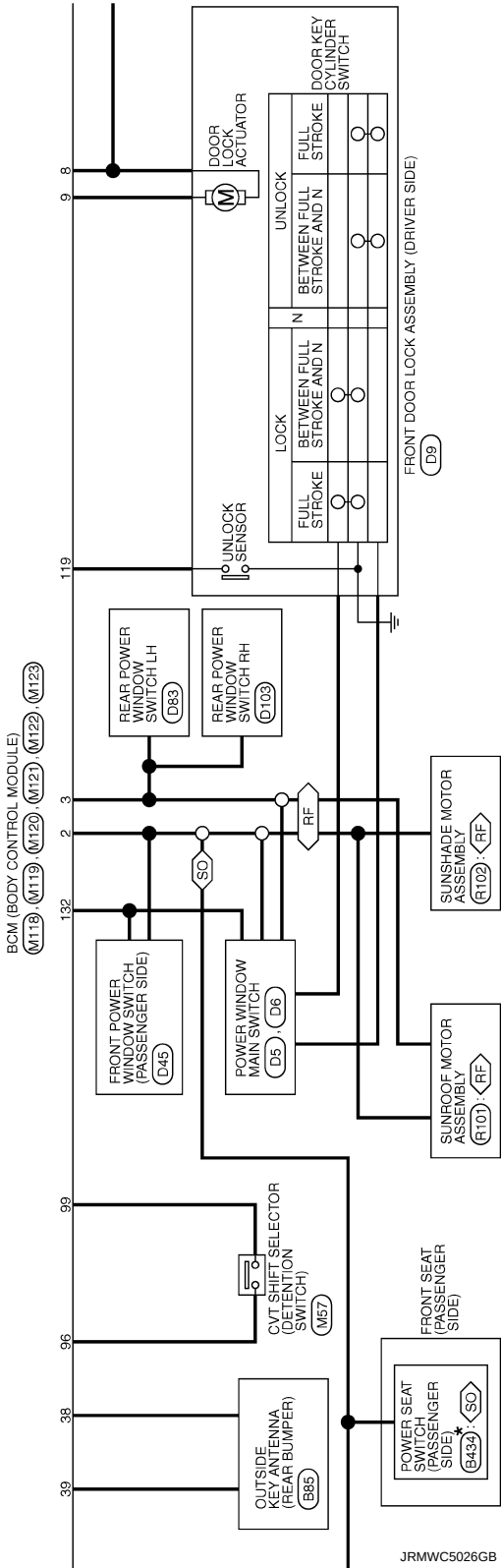
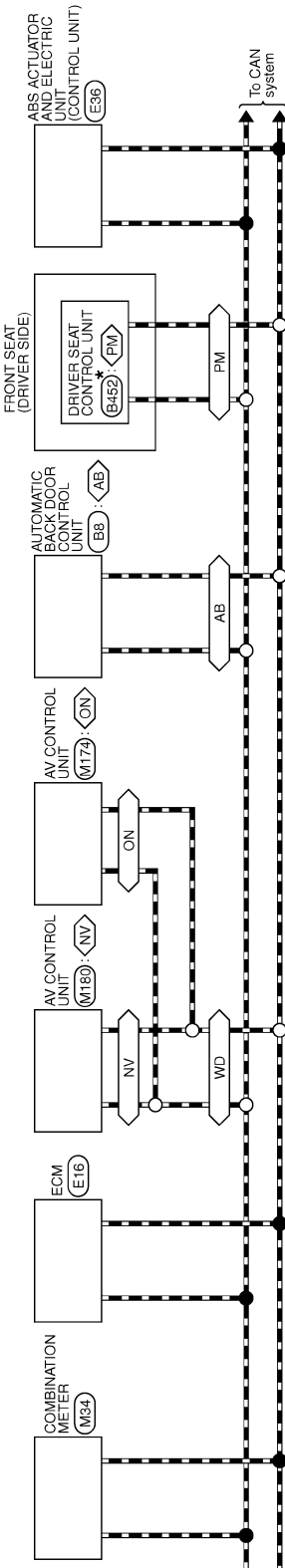
JRMWC5025GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

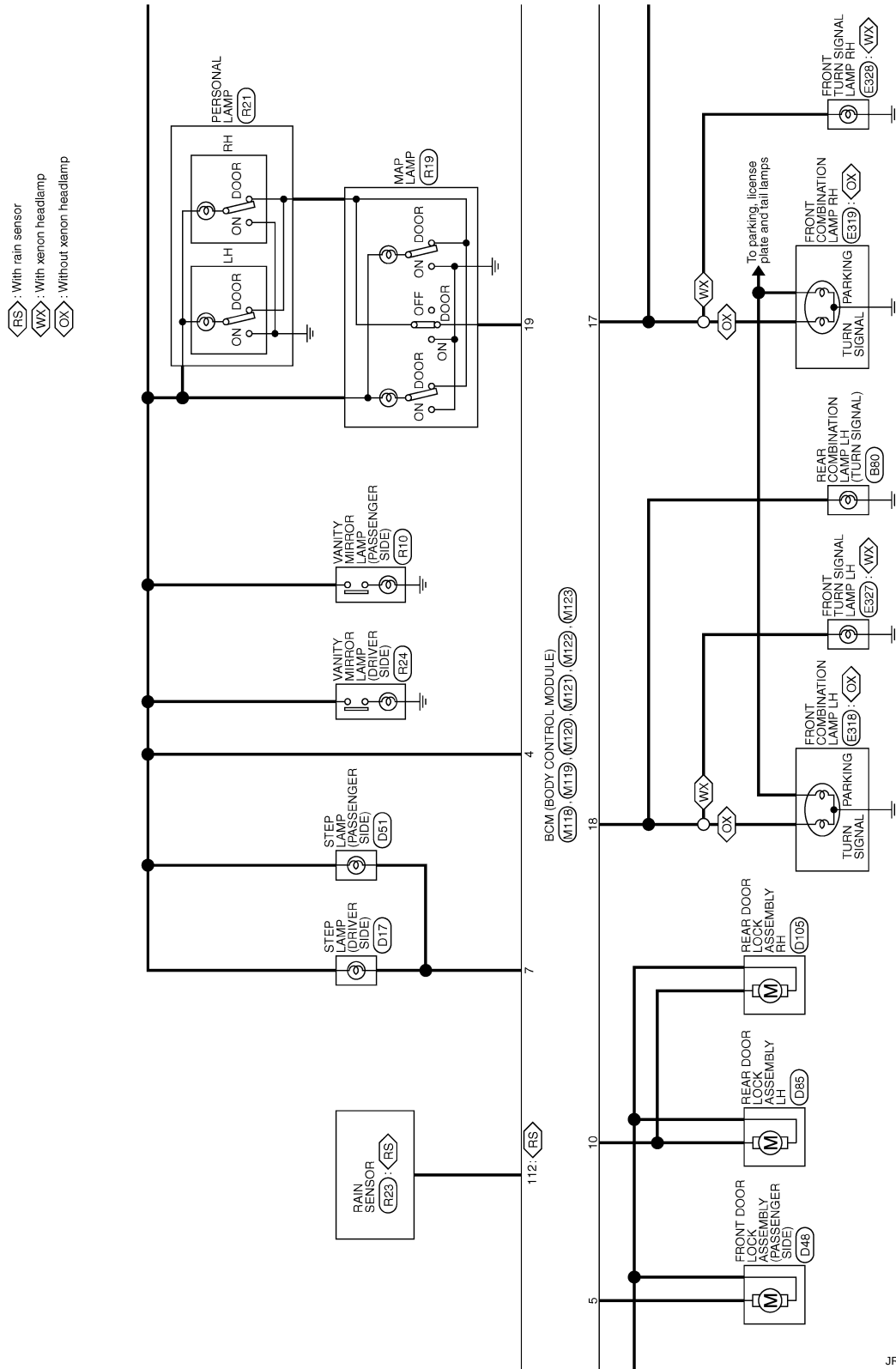
- NV : With navigation system
- ON : Without navigation system
- RF : With sunroof
- PM : With automatic drive positioner
- SO : With power seat without automatic drive positioner
- AB : With automatic back door
- WD : With color display

★ : This connector is not shown in "Harness Layout".



BCM (BODY CONTROL MODULE)

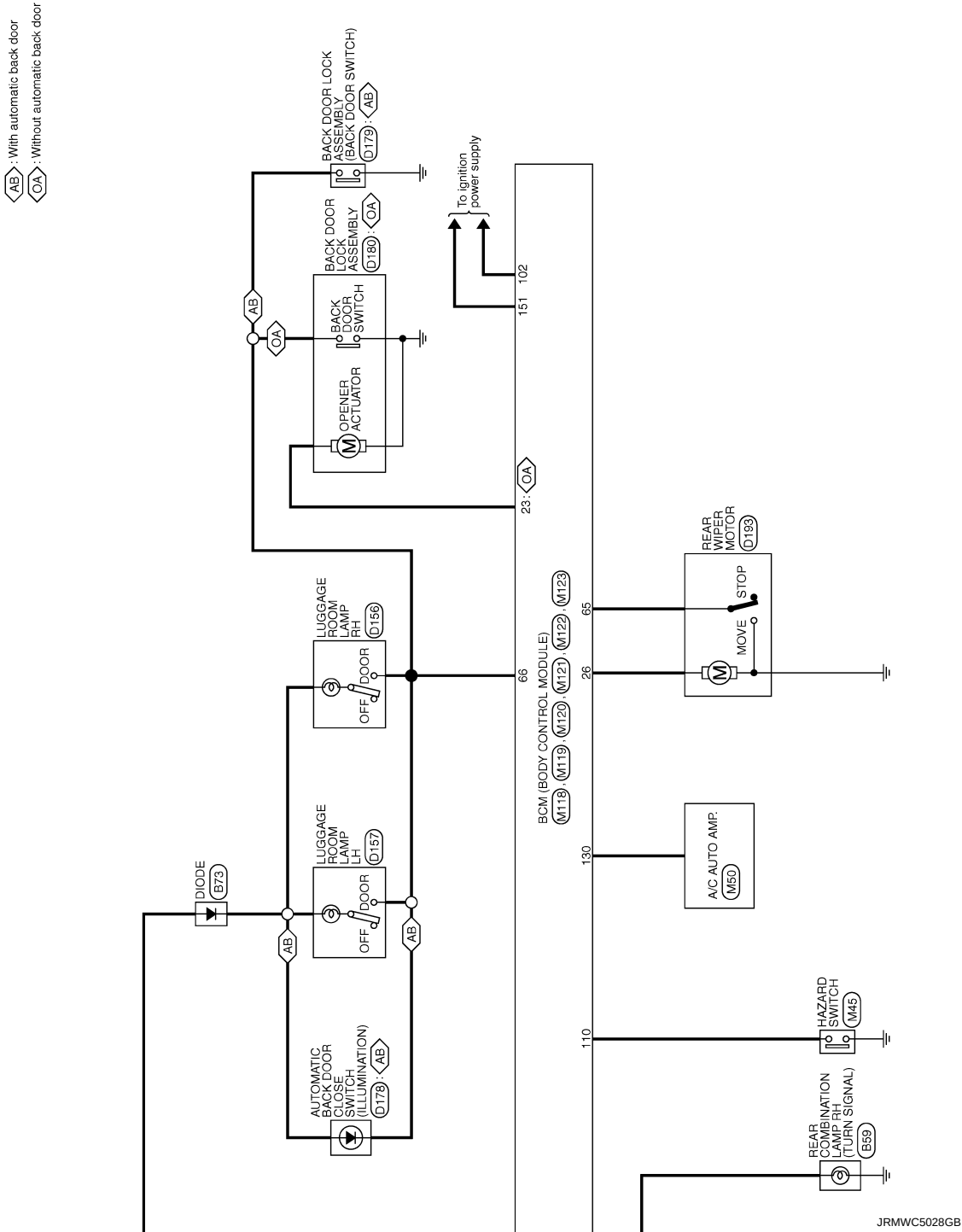
< ECU DIAGNOSIS INFORMATION >



JRMWC5027GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

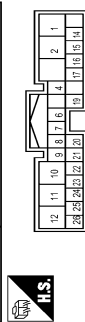


BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	B8
Connector Name	AUTOMATIC BACK DOOR CONTROL UNIT
Connector Type	TH20FW-TB6



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BUTTER
2	Y	ABD SW
3	Y	ABD CLOSE SW
4	L	CAN-H
5	P	CAN-L
6	LG	HALF LATCH SW
7	GR	IGN
8	SB	BAT
9	V	CLOSURE MTR (CLOSE)
10	R	CLOSURE MTR (OPEN)
11	O	TOUCH SENS LH
12	W	TOUCH SENS RH
13	P	MAIN SW
14	L	CLOSE SW
15	B	GROUND
16	GR	GROUND
17	BR	ENCODER B
18	Y	ENCODER A
19	G	ENCODER PWR

Connector No.	B51
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH44FW-RH



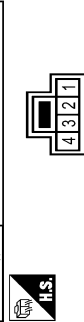
Terminal No.	3
Color Of Wire	BR
Signal Name [Specification]	-

Connector No.	B32
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	TH44FW-RH



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

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS44MW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without rear view camera]
2	BR	- [With rear view camera]
3	P	-
4	L	-

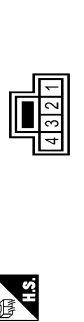


Connector No.	B73
Connector Name	DICDE
Connector Type	2435-0562

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

Terminal No.	2
Color Of Wire	L
Signal Name [Specification]	-

Connector No.	B60
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS44MW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	P	-
3	L	-

Connector No.	B85
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FCY



Terminal No.	1
Color Of Wire	R
Signal Name [Specification]	-

Terminal No.	2
Color Of Wire	G
Signal Name [Specification]	-

Connector No.	B86
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FCY



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

Terminal No.	2
Color Of Wire	B
Signal Name [Specification]	-

JRMWE5830GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	B232
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH05FW-NH



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

Connector No.	B233
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	TH05FW-NH



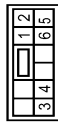
Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-

Connector No.	B407
Connector Name	LUMBAR SUPPORT SWITCH
Connector Type	NS04FBR-CS



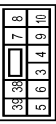
Terminal No.	Color Of Wire	Signal Name [Specification]
11	O	-
12	LG	-
13	Y/W	-
14	Y	-

Connector No.	B414
Connector Name	POWER SEAT SWITCH (DRIVER SIDE)
Connector Type	NS10FW-CS



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	-

Connector No.	B434
Connector Name	POWER SEAT SWITCH (PASSENGER SIDE)
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	B	-
4	G	-
5	G/R	-
6	V	-
7	R/L	-

Connector No.	B432
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH05FW



Terminal No.	Color Of Wire	Signal Name [Specification]
11	O/B	-
12	G/W	-
13	R/G	-
14	R/W	-
15	V/B	-
17	LG/B	-
18	LG/R	-
19	G/Y	-
20	R/Y	-
21	L/Y	-
22	BR/Y	-
23	P	-
24	P/L	-
25	O/O	-
26	L/O	-
27	V	-
28	V/W	-
29	O/L	-
30	BR/W	-
31	BR/L	-
32	W/L	-
33	W	-

Connector No.	D5
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS10FW-CS



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

Connector No.	D6
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS05FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	-
19	LG	-

JRMWE5831GB

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	D9
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ERBFGY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	P	-
4	B	-
5	R	-
6	L	-

Connector No.	D11
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RH02FB



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

Connector No.	D12
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RH02MGY



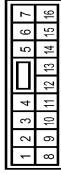
Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	V	-

Connector No.	D17
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	CO2FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D45
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	R	-
3	L	-
4	LG	-
5	P	-
6	B	-
7	Y	-
8	G	-
9	O	-

Connector No.	D48
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	ERBFGY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-

Connector No.	D50
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RH02FB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	O	-
2	B	-

Connector No.	D51
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	CO2FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-

JRMWE5832GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	D82
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	HK02M0GY



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

Connector No.	D83
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS08FW-CS



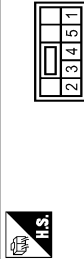
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D85
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	ED08GY-RS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	G	-

Connector No.	D103
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS08FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D105
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	ED08GY-RS



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

Connector No.	D156
Connector Name	LUGGAGE ROOM LAMP RH
Connector Type	CL04FW



Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D157
Connector Name	LUGGAGE ROOM LAMP LH
Connector Type	CL04FW



Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D178
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Type	TK08FGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	O	-
2	B	-
3	W	-
4	LG	-

JRMWE5833GB

A
B
C
D
E
F
G
H
I
ADP
K
L
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	D179
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NSDBW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	Y	-
4	G	-
5	L	-
6	W	-
7	LG	-
8	B	-

Connector No.	D180
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NSDBW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	B	-
3	LG	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TH64MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	B	-
4	Y	-

Connector No.	D183
Connector Name	REAR WIPER MOTOR
Connector Type	C004FW-TV



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
3	GR	-
4	O	-

Connector No.	E10
Connector Name	ECU-5 INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH09FW-CS12-M4-TV



Terminal No.	Color Of Wire	Signal Name [Specification]
5	Y	-
7	GR	-
10	BR	-
12	B	-
13	SB	-
15	W	-
16	R	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	ECU-5 INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH09FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E16
Connector Name	ECM
Connector Type	RM24FB-R28-L-H



Terminal No.	Color Of Wire	Signal Name [Specification]
81	W	ACCELERATOR PEDAL POSITION SENSOR 1
82	O	ACCELERATOR PEDAL POSITION SENSOR 2
83	BR	SENSOR POWER SUPPLY
84	B	SENSOR GROUND
85	Y	SENSOR GROUND
86	SB	EVAP CONTROL SYSTEM PRESSURE SENSOR
87	GR	SENSOR POWER SUPPLY
88	O	DATA LINK CONNECTOR
91	L	SENSOR POWER SUPPLY
92	BR	SENSOR GROUND
93	BR	IGNITION SWITCH
94	GR	ENGINE SPEED OUTPUT SIGNAL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

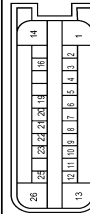
Terminal No.	Color Of Wire	Signal Name [Specification]
85	Y	FUEL TANK TEMPERATURE SENSOR
87	GR	SENSOR GROUND
87	R	CAN COMMUNICATION LINE (CAN+L)
88	L	CAN COMMUNICATION LINE (CAN-H)
100	G	SENSOR GROUND
102	R	PNP SIGNAL
104	SB	SENSOR GROUND
105	V	POWER SUPPLY FOR ECM
106	SB	STOP LAMP SWITCH
107	B	ECM GROUND
108	B	ECM GROUND
109	W	EVAP CANISTER VENT CONTROL VALVE
110	G	ASD BRAKE SWITCH
111	B	ECM GROUND
112	B	ECM GROUND

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	PK03FBR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
3	GR	-

Connector No.	E36
Connector Name	ABS ACTIVATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	AEZ22FB-AJZ4-LH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	VALVE / ECU SUPPLY
2	Y	WSS RL SIG (-)
3	L	WSS RL PWR (+)
4	GR	CLUSTER SUPPLY
5	B	WSS FR PWR (+)
6	W	WSS FR SIG (-)
7	LG	LIS
8	V	WSS FL SIG (-)
9	W	WSS FL PWR (+)
10	SB	CLUSTER GND
11	P	WSS RR PWR (+)
12	V	WSS RR SIG (-)
13	B/W	MOTOR GND
14	G	MOTOR SUPPLY
15	SB	RLS
16	BR	CAN 2 H
18	GR	IGN
20	P	CAN 1 L
21	P	VDG OFF SW
22	Y	CAN 1 H
23	L	CAN 1 H
25	W	CAN 2 L
26	B/W	VALVE / ECU GND

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	G	-
12F	V	-
13	L	-
14	LG	-
15	BR	-
16	Y	-
17	R	-
18	GR	-

Connector No.	E116
Connector Name	STOP LAMP SWITCH
Connector Type	MD4FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-
4	Y	-

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03FBR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03FBR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-

Connector No.	E327
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	RS02FCY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-

JRMWE5835GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	E32B
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	RS22FCY



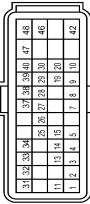
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	—
2	B	—

Connector No.	F12
Connector Name	IPM 2-PI INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CS12-M4



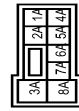
Terminal No.	Color Of Wire	Signal Name [Specification]
48	W	—
49	R/B	—
51	L/G	—
52	Y/G	—
53	R/W	—
54	G/W	—
55	W/L	—
56	R/Y	—
57	O	—
58	Y	—
59	W/B	—
70	W	—
72	R/B	—
75	L/G	—
76	S/B	—
77	GR	—
80	B	—

Connector No.	F23
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40FB-R2B-L-RH



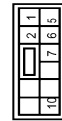
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R/B	TRANSMISSION RANGE SWITCH 2
2	P/G	TRANSMISSION RANGE SWITCH 3
3	G/O	TRANSMISSION RANGE SWITCH 4
4	GR	TRANSMISSION RANGE SWITCH 3 (MONITOR)
5	B	GROUND
7	W	SENSOR GROUND
8	G/W	CLOCK (SEL 2)
9	L/R	CHP SELECT (SEL 1)
10	BR/R	DATA I/O (SEL 3)
11	BR/W	TRANSMISSION RANGE SWITCH 1
13	V	O/V FLUID TEMPERATURE SENSOR
14	R/W	PRIMARY PRESSURE SENSOR
15	V/W	SECONDARY PRESSURE SENSOR
19	O/B	REVERSE LAMP-RELAY
20	GR	SENSOR GROUND
25	W/R	SENSOR GROUND
26	L/O	SENSOR POWER
27	R/G	STEP MOTOR D
28	R	STEP MOTOR C
29	O/B	STEP MOTOR B
30	G/R	STEP MOTOR A
31	P	CAN-H
32	L	CAN-L
33	L/G	PRIMARY SPEED SENSOR
34	L/G/R	SECONDARY SPEED SENSOR
37	V/R	LOOK-UP SELECT SOLENOID VALVE
38	L/W	TORQUE CONVERTER CLUTCH SOLENOID VALVE
39	W/B	SECONDARY PRESSURE SOLENOID VALVE
40	Y/T	LINE PRESSURE SOLENOID VALVE
42	B	GROUND
46	Y	POWER SUPPLY
47	L/R	POWER SUPPLY (MEMORY BACK-UP)
48	Y	POWER SUPPLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSD6FW-M2



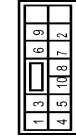
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	G	—
2A	Y	—
3A	Y	—
4A	GR	—
7A	L/G	—
8A	Y	—

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSD6FW-CS



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

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSD2FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	BR	—
11C	SB	—
12C	O	—
8C	BR	—
7C	B	—
8C	G	—
9C	GR	—

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



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L/G	—
4	B	—
5	B	—
6	L	—
7	BR	—
8	SP	—
11	SP	—
14	P	—
16	Y	—

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	—
2	Y	—
3	P	—

Connector No.	M21
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK06FW



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

Connector No.	M24
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	BATTERY POWER SUPPLY
2	G	IGNITION SWITCH SIGNAL
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL SIGNAL
8	SB	TRIP RESET SIGNAL
9	W	SW ILL POWER
10	LG	METER CONTROL SWITCH GROUND
11	L	ENTER SWITCH SIGNAL
12	R	SELECT SWITCH SIGNAL
13	V	ILLUMINATION CONTROL SWITCH SIGNAL (-)
14	GR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
15	BR	AIR BAG SIGNAL
18	L	AMBIENT SENSOR SIGNAL
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-L
22	P	CAN-H
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	ALTERNATOR SIGNAL
26	G	PARKING BRAKE SWITCH SIGNAL
27	V	WASHER FLUID LEVEL SWITCH SIGNAL
29	R	WASHER LEVEL SWITCH SIGNAL
30	P	VEHICLE SPEED SIGNAL (2-PULSE)
31	V	VEHICLE SPEED SIGNAL (8-PULSE)
32	LG	OVERDRIVE CONTROL SWITCH SIGNAL
34	G	FUEL LEVEL SENSOR SIGNAL
35	SB	SEAT BELT BUZZER SWITCH SIGNAL (DRIVER SIDE)
36	R	SEAT BELT BUZZER SWITCH SIGNAL (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TK04FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	—
2	B	—
3	B	—
4	R/Y	—

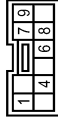
Connector No.	M50
Connector Name	A/C AUTO AMP.
Connector Type	SA040FW



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	G	LAN SIG (Without colour display)
10	L	LAN SIG (With colour display)
11	R	VACTR
15	BR	SUN SENS
16	G	INTAKE SENS (With colour display)
16	G	INTAKE SENS (Without colour display)
19	B	IGN
20	G	GROUND
26	GR	RR DEF F/B
27	BR	RR DEF ON
32	L	FAN PWM
34	P	AMB POWER (With colour display)

34	V	AMB POWER (Without colour display)
35	G	AMB POWER (With colour display)
36	L	AMB SENS (Without colour display)
36	LG	INCAR SENS
37	SB	SENS GND (Without colour display)
37	Y	SENS GND (With colour display)
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	GROUND
2	P	SIGNAL
4	L	+12V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Connector No.	M99
Connector Name	KEY SLOT
Connector Type	TH12FN-NH



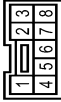
Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BAT
2	GR	CLOCK
3	GR	DATA
4	GR	ILL BAT
5	R	ILL
6	R	GROUND
7	B	KEY SWITCH SIGNAL
11	Y	

Connector No.	M100
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TKG2FBR



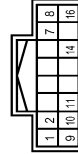
Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	O	-

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



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
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	-
2	Y	OUTPUT 4
3	BG	FR
4	W	IGN
5	W	OUTPUT 3
6	B	GROUND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1

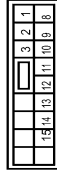
13	B	INPUT 5
14	P	OUTPUT 2

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MD0FE-LC



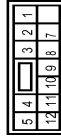
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (IGN)

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



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

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FN-CS



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

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH46FOY-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	B	LUGGAGE ROOM ANT-
35	W	LUGGAGE ROOM ANT+
38	L	REAR BUMPER ANT-
39	BR	REAR BUMPER ANT+
47	L	IGN RELAY (IPDM E/R) CONT
52	R	STARTER RELAY CONT
60	BR	PUSH SW
61	R	BACK DOOR OPENER REQUEST SW
64	GR	TRAY WARM BUZZER
65	O	REAR WIPER STOP POSITION
67	V	REAR WIPER WASH FLUID
69	L/G	BACK DOOR CHIRMS SW
68	W	REAR RH DOOR SW
69	R	REAR LH DOOR SW

JRMWE5838GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

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



34	50	65	82		03	02	01	00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												</
----	----	----	----	--	----	----	----	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)			
Connector No.	R10	Connector No.	R21
Connector Name	VANITY MIRROR LAMP (PASSENGER SIDE)	Connector Name	PERSONAL LAMP
Connector Type	MCA02FW	Connector Type	TQ4QFW-NH
 			
Terminal No.	1	Terminal No.	1
Color Of Wire	P/W	Color Of Wire	B
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	2	Terminal No.	2
Color Of Wire	P/W	Color Of Wire	B
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	3	Terminal No.	3
Color Of Wire	P/W	Color Of Wire	SB
Signal Name [Specification]	-	Signal Name [Specification]	-
Connector No.	R19	Connector No.	R23
Connector Name	MAP LAMP	Connector Name	RAIN SENSOR
Connector Type	TQ4QFW	Connector Type	JAB03QFB
 			
Terminal No.	1	Terminal No.	1
Color Of Wire	P/W	Color Of Wire	Y/R
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	2	Terminal No.	2
Color Of Wire	Y	Color Of Wire	R
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	3	Terminal No.	3
Color Of Wire	B	Color Of Wire	B
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	4	Terminal No.	4
Color Of Wire	SB	Color Of Wire	-
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	5	Terminal No.	5
Color Of Wire	R/Y	Color Of Wire	-
Signal Name [Specification]	-	Signal Name [Specification]	-
Terminal No.	6	Terminal No.	6
Color Of Wire	R/L	Color Of Wire	-
Signal Name [Specification]	-	Signal Name [Specification]	-
Connector No.	R101	Connector No.	R102
Connector Name	SUNROOF MOTOR ASSEMBLY	Connector Name	SUNSHADE MOTOR ASSEMBLY
Connector Type	YEADQFY	Connector Type	YEADQFY
 			
Terminal No.	1	Terminal No.	1
Color Of Wire	B	Color Of Wire	B
Signal Name [Specification]	GROUND	Signal Name [Specification]	GROUND
Terminal No.	2	Terminal No.	2
Color Of Wire	O	Color Of Wire	B
Signal Name [Specification]	IGN	Signal Name [Specification]	IGN
Terminal No.	3	Terminal No.	3
Color Of Wire	L	Color Of Wire	G
Signal Name [Specification]	PUSH SW	Signal Name [Specification]	BAT
Terminal No.	4	Terminal No.	4
Color Of Wire	Y	Color Of Wire	P
Signal Name [Specification]	OPEN SW	Signal Name [Specification]	VEHICLE SPEED (2-PULSE)
Terminal No.	5	Terminal No.	5
Color Of Wire	LG	Color Of Wire	COMM
Signal Name [Specification]	BAT	Signal Name [Specification]	VEHICLE SPEED (2-PULSE)
Terminal No.	6	Terminal No.	6
Color Of Wire	R	Color Of Wire	BR
Signal Name [Specification]	COMM	Signal Name [Specification]	2ND SW
Terminal No.	7	Terminal No.	7
Color Of Wire	P	Color Of Wire	W
Signal Name [Specification]	VEHICLE SPEED (2-PULSE)	Signal Name [Specification]	2ND SW
Terminal No.	8	Terminal No.	8
Color Of Wire	BR	Color Of Wire	P
Signal Name [Specification]	2ND SW	Signal Name [Specification]	VEHICLE SPEED (2-PULSE)
Terminal No.	9	Terminal No.	9
Color Of Wire	W	Color Of Wire	W
Signal Name [Specification]	2ND SW	Signal Name [Specification]	VEHICLE SPEED (2-PULSE)
Terminal No.	10	Terminal No.	10
Color Of Wire	V	Color Of Wire	V
Signal Name [Specification]	CLOSE SW	Signal Name [Specification]	CLOSE SW

JRMWE5840GB

INFOID:0000000010037625

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
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
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent - Starter motor relay control signal - Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled - IGN relay (IPDM E/R) control signal: OFF (Battery voltage) - Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) - Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled - Power position changes to ACC - Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

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

- More than 1 minute is passed after the rear wiper stop.
- Turn rear wiper switch OFF.
- Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:000000010037626

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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	• 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 • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
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:0000000010037627

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-18. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-42
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-43
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-44
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-42
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-45
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-46
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-48
B2195: ANTI SCANNING	×	—	—	—	SEC-49
B2553: IGNITION RELAY	—	×	—	—	PCS-50
B2555: STOP LAMP	—	×	—	—	SEC-50
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-52
B2557: VEHICLE SPEED	×	×	×	—	SEC-54
B2560: STARTER CONT RELAY	×	×	×	—	SEC-55
B2562: LOW VOLTAGE	—	×	—	—	BCS-45
B2601: SHIFT POSITION	×	×	×	—	SEC-56
B2602: SHIFT POSITION	×	×	×	—	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-61
B2604: PNP SW	×	×	×	—	SEC-64
B2605: PNP SW	×	×	×	—	SEC-66
B2608: STARTER RELAY	×	×	×	—	SEC-68
B260A: IGNITION RELAY	×	×	×	—	PCS-52
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-70
B2614: ACC RELAY CIRC	—	×	×	—	PCS-54
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-57
B2616: IGN RELAY CIRC	—	×	×	—	PCS-60
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-72
B2618: BCM	×	×	×	—	PCS-63
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-75
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-78
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-71
C1704: LOW PRESSURE FL	—	—	—	×	WT-23
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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
C1708: [NO DATA] FL	—	—	—	×	WT-25
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-28
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-29
C1734: CONTROL UNIT	—	—	—	×	WT-30

ADP SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

ADP SYSTEM SYMPTOMS

Symptom Table

INFOID:000000009720783

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-196
			Memory indicator 1 or 2 does not operate.	—	ADP-197
2	Manual function	Perform manual function (Refer to ADP-17).	All components of power seat do not operate.	—	ADP-198
			All components of tilt&telescopic do not operate.	—	ADP-206
3	Manual function and memory function	Perform manual function (Refer to ADP-17 .) and memory function (Refer to ADP-22).	Manual function or memory function does not operate. (for specific part)	Sliding	ADP-199
				Reclining	ADP-199
				Lifting (front)	ADP-200
				Lifting (rear)	ADP-201
				Steering tilt	ADP-201
				Steering telescopic	ADP-202
				Door mirror	ADP-203
4	Entry/exit assist function	Perform entry/exit assist function. Exit assist function: Refer to ADP-27 Entry assist function: Refer to ADP-32	Entry/exit assist function does not operate.	—	ADP-204
5	Intelligent Key inter lock function	Perform Intelligent Key inter lock function (Refer to ADP-37).	Intelligent Key inter lock function does not operate.	—	ADP-205

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

< SYMPTOM DIAGNOSIS >

ALL PARTS DO NOT OPERATE IN MEMORY FUNCTION

Diagnosis Procedure

INFOID:000000009720784

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-69, "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-55, "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-55, "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-44, "Intermittent Incident"](#).

NO >> GO TO 1.

MEMORY INDICATE DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009720785

1.CHECK MEMORY INDICATOR

Check memory indicator.

Refer to [ADP-116, "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-44, "Intermittent Incident"](#).

NO >> GO TO 1.

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

ALL COMPONENTS OF POWER SEAT DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

ALL COMPONENTS OF POWER SEAT DO NOT OPERATE

Diagnosis Procedure

INFOID:000000009720786

1.CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check power seat switch ground circuit.

Refer to [ADP-77, "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-44, "Intermittent Incident"](#).

NO >> GO TO 1.

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

INFOID:000000009720787

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-57, "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-102, "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-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-44, "Intermittent Incident"](#).

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

INFOID:000000009720788

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-59, "Component Function Check"](#).

Is the inspection result normal?

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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

3.CHECK RECLINING MOTOR

Check reclining motor.

Refer to [ADP-104, "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-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-44, "Intermittent Incident"](#).
NO >> GO TO 1.

SEAT LIFTING (FRONT)

SEAT LIFTING (FRONT) : Diagnosis Procedure

INFOID:000000009720789

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-61, "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-106, "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-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.

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Is the result normal?

- YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).
NO >> GO TO 1.

SEAT LIFTING (REAR)

SEAT LIFTING (REAR) : Diagnosis Procedure

INFOID:000000009720790

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-63, "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-108, "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-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-44, "Intermittent Incident"](#).
NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:000000009720791

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-65, "Component Function Check"](#).

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

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-110, "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-93, "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-44, "Intermittent Incident"](#).
NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

INFOID:000000009720792

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-67, "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-112, "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-95, "Component Function Check"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.

5.CONFIRM THE OPERATION

MANUAL FUNCTION OR MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-44, "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR MIRROR

DOOR MIRROR : Diagnosis Procedure

INFOID:000000009720793

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-74, "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-114, "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-98, "DRIVER SIDE : Component Function Check"](#). (Driver side)

Refer to [ADP-99, "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-44, "Intermittent Incident"](#).

NO >> GO TO 1.

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009720794

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-44, "Intermittent Incident"](#).
NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009720795

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-37, "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-210, "Removal and Installation"](#).

A

B

C

D

E

F

G

H

I

ADP

K

L

M

N

O

P

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

< SYMPTOM DIAGNOSIS >

ALL COMPONENTS OF TILT & TELESCOPIC SWITCH DO NOT OPERATE

Diagnosis Procedure

INFOID:000000009720796

1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Check tilt & telescopic switch ground circuit.

Refer to [ADP-78, "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-44, "Intermittent Incident"](#).

NO >> GO TO 1.

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000009720797

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-32
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-27
			Entry assist function: ADP-32
			Intelligent Key interlock function: ADP-37

A
B
C
D
E
F
G
H
I

K
L
M
N
O
P

ADP

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000009720798

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR USA AND CANADA : Precautions for Removing of Battery Terminal

INFOID:0000000010037778

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

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

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

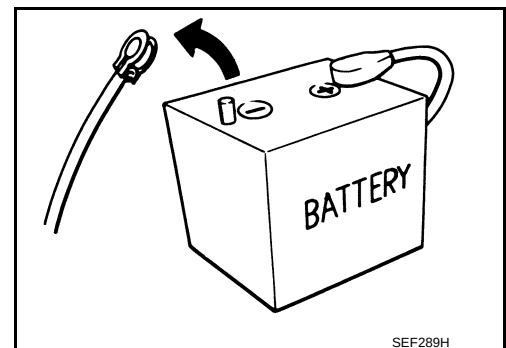
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.

FOR MEXICO

FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and



SEF289H

PRECAUTIONS

< PRECAUTION >

"SEAT BELT PRE-TENSIONER"

INFOID:000000009720799

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:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR MEXICO : Precautions for Removing of Battery Terminal

INFOID:0000000010037779

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

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

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

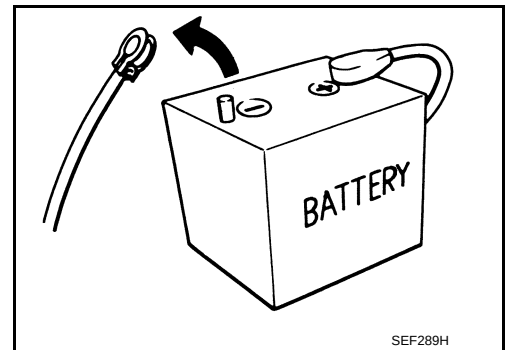
NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.



ADP

DRIVER SEAT CONTROL UNIT

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

DRIVER SEAT CONTROL UNIT

Exploded View

INFOID:000000009720800

Refer to [SE-92, "Exploded View"](#).

Removal and Installation

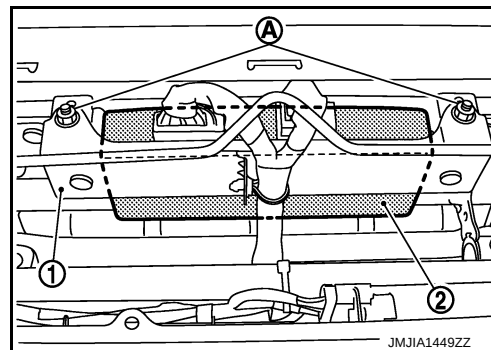
INFOID:000000009720801

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the driver seat (1). Refer to [SE-98, "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

< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

INFOID:000000009720802

Refer to [IP-14, "Exploded View"](#).

Removal and Installation

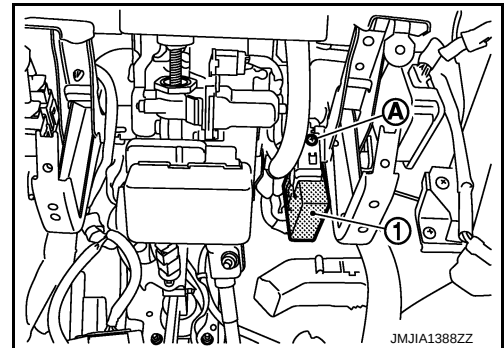
INFOID:000000009720803

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the instrument driver lower panel. Refer to [IP-15, "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"](#).

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

ADP

SEAT MEMORY SWITCH

< REMOVAL AND INSTALLATION >

SEAT MEMORY SWITCH

Exploded View

INFOID:000000009720804

Refer to [INT-13, "FRONT DOOR FINISHER : Exploded View"](#).

Removal and Installation

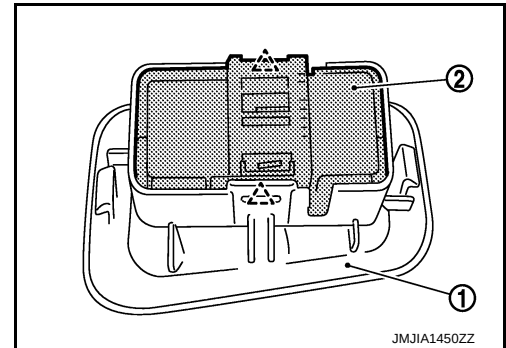
INFOID:000000009720805

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the seat memory finisher (1). Refer to [INT-13, "FRONT DOOR FINISHER : Removal and Installation"](#).
2. Press pawls and remove seat memory switch (2) from seat memory 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"](#).

POWER SEAT SWITCH

< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

Exploded View

INFOID:000000009720806

Refer to [SE-92, "Exploded View"](#).

Removal and Installation

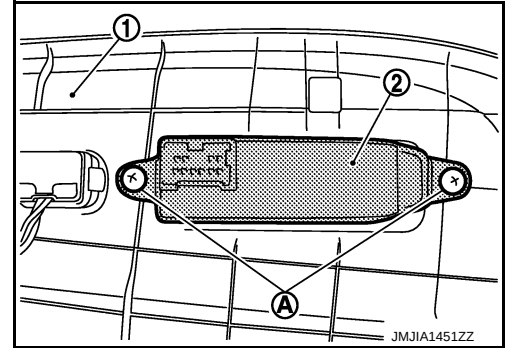
INFOID:000000009720807

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-98, "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 clamp 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"](#).

A
B
C
D
E
F
G
H
I
K
L
M
N
O
P

ADP

TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

Exploded View

INFOID:000000009720808

Refer to [JP-14, "Exploded View"](#).

Removal and Installation

INFOID:000000009720809

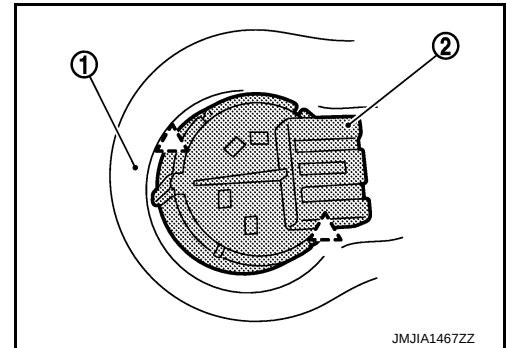
REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove the steering column mask (1). Refer to [JP-15, "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"](#).