SECTION ADP AUTOMATIC DRIVE POSITIONER С

CONTENTS

BASIC INSPECTION5	AUTOMATIC DRIVE POSITIONER SYSTEM :	F
DIAGNOSIS AND REPAIR WORK FLOW5	System Diagram12 AUTOMATIC DRIVE POSITIONER SYSTEM :	
Work Flow5	System Description13	G
INSPECTION AND ADJUSTMENT8	AUTOMATIC DRIVE POSITIONER SYSTEM :	
INSPECTION AND ADJUSTMENT8	Component Parts Location14	
ADDITIONAL SERVICE WHEN REMOVING BAT-	AUTOMATIC DRIVE POSITIONER SYSTEM :	Н
TERY NEGATIVE TERMINAL8	Component Description15	
ADDITIONAL SERVICE WHEN REMOVING	MANUAL FUNCTION16	
BATTERY NEGATIVE TERMINAL : Description8	MANUAL FUNCTION : System Diagram	
ADDITIONAL SERVICE WHEN REMOVING	MANUAL FUNCTION : System Description	I
BATTERY NEGATIVE TERMINAL : Special Re-	MANUAL FUNCTION : Component Parts Loca-	
pair Requirement8	tion	
ADDITIONAL SERVICE WHEN REPLACING	MANUAL FUNCTION : Component Description20	ADP
CONTROL UNIT		
ADDITIONAL SERVICE WHEN REPLACING	SEAT SYNCHRONIZATION FUNCTION21	
CONTROL UNIT : Description	SEAT SYNCHRONIZATION FUNCTION : Sys-	K
ADDITIONAL SERVICE WHEN REPLACING	tem Diagram21	
CONTROL UNIT : Special Repair Requirement8	SEAT SYNCHRONIZATION FUNCTION : Sys-	
	tem Description	L
SYSTEM INITIALIZATION9	SEAT SYNCHRONIZATION FUNCTION : Com-	
SYSTEM INITIALIZATION : Description	ponent Parts Location	
SYSTEM INITIALIZATION : Special Repair Re-	SEAT SYNCHRONIZATION FUNCTION :	M
quirement9	Component Description24	1 V I
MEMORY STORING9	MEMORY FUNCTION25	
MEMORY STORING : Description9	MEMORY FUNCTION : System Diagram25	Ν
MEMORY STORING : Special Repair Require-	MEMORY FUNCTION : System Description25	IN
ment	MEMORY FUNCTION : Component Parts Loca-	
mont	tion27	
SYSTEM SETTING10	MEMORY FUNCTION : Component Description28	0
SYSTEM SETTING : Description10	EXIT ASSIST FUNCTION29	
SYSTEM SETTING : Special Repair Requirement		
11	EXIT ASSIST FUNCTION : System Diagram	Ρ
	EXIT ASSIST FUNCTION : System Description29	
SYSTEM DESCRIPTION12	EXIT ASSIST FUNCTION : Component Parts Lo-	
AUTOMATIC DRIVE POSITIONER SYSTEM12	cation	
AUTOMATIC DRIVE POSITIONER SYSTEM12	Component Description32	
	ENTRY ASSIST FUNCTION33	

А

В

D

Е

ENTRY ASSIST FUNCTION : System Diagram 33 ENTRY ASSIST FUNCTION : System Description	
ENTRY ASSIST FUNCTION : Component Parts Location 35 ENTRY ASSIST FUNCTION : 36 INTELLIGENT KEY INTERLOCK FUNCTION : 37 INTELLIGENT KEY INTERLOCK FUNCTION : 37 System Diagram 37 INTELLIGENT KEY INTERLOCK FUNCTION : 37 System Description 37 INTELLIGENT KEY INTERLOCK FUNCTION : 39 Component Parts Location 39 INTELLIGENT KEY INTERLOCK FUNCTION : 39 Component Parts Location 40 DIAGNOSIS SYSTEM (DRIVER SEAT C/U) 41 Diagnosis Description 41 CONSULT Function 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 Description 45 Description 45 Description 45 Description 45 Diagnosis Procedure 47 Description 47 Description 47 Diagnosis Procedure 47 Diagnosis Procedure 49 DTC Logic 49 DTC Logic 5	ENTRY ASSIST FUNCTION : System Description
ENTRY ASSIST FUNCTION : 36 INTELLIGENT KEY INTERLOCK FUNCTION	ENTRY ASSIST FUNCTION : Component Parts
INTELLIGENT KEY INTERLOCK FUNCTION 37 INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram 37 INTELLIGENT KEY INTERLOCK FUNCTION : System Description 37 INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location 39 INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location 40 DIAGNOSIS SYSTEM (DRIVER SEAT C/U) 41 41 Diagnosis Description 41 44 U1000 CAN COMM CIRCUIT 44 DTC Logic 44 DTC Logic 44 DTC Logic 44 B2112 SLIDING MOTOR 45 DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 Diagnosis Procedure 49 DTC Logic 47 Diagnosis Procedure 49 DTC Logic 49 DTC Logic 49 DTC Logic 49 DTC Logic 52 Diagnosis Procedure 52 DEscription 52 DEscription 52	ENTRY ASSIST FUNCTION :
System Diagram 37 INTELLIGENT KEY INTERLOCK FUNCTION : 37 System Description 37 INTELLIGENT KEY INTERLOCK FUNCTION : 39 Component Parts Location 39 INTELLIGENT KEY INTERLOCK FUNCTION : 40 DIAGNOSIS SYSTEM (DRIVER SEAT C/U) 41 Diagnosis Description 41 CONSULT Function 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 Description 44 DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 DTC Logic 47 DTC Logic 47 Dagnosis Procedure 47 Description 47 Description 49 Dagnosis Procedure 49 Description 49 Dagnosis Procedure 49 Diagnosis Procedure 52 Diagnosis Procedure 52 Diagnosis Procedure 52 Diagnosis Procedure 55 <tr< td=""><td></td></tr<>	
System Description 37 INTELLIGENT KEY INTERLOCK FUNCTION : Component Parts Location 39 INTELLIGENT KEY INTERLOCK FUNCTION : Component Description 40 DIAGNOSIS SYSTEM (DRIVER SEAT C/U) 41 Diagnosis Description 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 Dagnosis Procedure 44 Diagnosis Procedure 44 Bescription 45 Decial Repair Requirement 44 B2112 SLIDING MOTOR 45 DTC Logic 45 Diagnosis Procedure 47 Diagnosis Procedure 47 Diagnosis Procedure 49 Description 47 Diagnosis Procedure 49 Diagnosis Procedure 49 Diagnosis Procedure 49 Diagnosis Procedure 52 DTC Logic 52 DTC Logic 52 DTC Logic 52 DTC Logic 55	
Component Parts Location 39 INTELLIGENT KEY INTERLOCK FUNCTION : Component Description Component Description 40 DIAGNOSIS SYSTEM (DRIVER SEAT C/U) 41 Diagnosis Description 41 CONSULT Function 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 DTC Logic 44 Dagnosis Procedure 44 Diagnosis Procedure 44 Diagnosis Procedure 44 B2112 SLIDING MOTOR 45 Description 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 52 Description 52 DEscription 52 DEscription 52 DEscription 52 DTC Logic 52 Diagnosis Procedure 52 Diagnosis Procedure 55 DTC Logic 5	
INTELLIGENT KEY INTERLOCK FUNCTION : Component Description 40 DIAGNOSIS SYSTEM (DRIVER SEAT C/U) 41 Diagnosis Description 41 CONSULT Function 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 DTC Logic 44 DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 DEscription 45 DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 DTC Logic 49 DTC Logic 52 DTC Logic 55 DTC Logic 55 DTC Logic 55 <	
Diagnosis Description 41 CONSULT Function 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 Description 44 DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 DTC Logic 45 DTC Logic 45 DTC Logic 47 Description 47 DTC Logic 47 DTC Logic 47 Diagnosis Procedure 47 B2113 RECLINING MOTOR 47 DTC Logic 47 Diagnosis Procedure 49 DTC Logic 49 DTC Logic 49 Diagnosis Procedure 49 DTC Logic 52 DTC Logic 55 Diagnosis Procedure 55 DEscription	
CONSULT Function 41 DTC/CIRCUIT DIAGNOSIS 44 U1000 CAN COMM CIRCUIT 44 Description 44 DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 DTC Logic 47 DTC Logic 47 DTC Logic 47 DTC Logic 47 DTC Logic 49 DTC Logic 52 DTC Logic 55 Diagnosis Procedure 55 Description 55 DEscription 55 DEscript	
U1000 CAN COMM CIRCUIT 44 Description 44 DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 DC Logic 45 DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 DC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 DEscription 49 DTC Logic 49 DTC Logic 49 DTC Logic 52 Description 52 DEscription 52 DTC Logic 52 DTC Logic 52 DTC Logic 52 DTC Logic 55 DEscription 55 DTC Logic 55 DEscription 55 DTC Logic 55 DIGNOSIS Procedure 55 DEscription 55 DTC Logic 55	
Description 44 DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 DEscription 45 DTC Logic 45 DTC Logic 45 B2113 RECLINING MOTOR 47 DEscription 47 DTC Logic 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 49 Diagnosis Procedure 49 DTC Logic 52 Description 52 DTC Logic 55 Description 55 DEscription 55 DTC Logic 55 DTC Logic 55 DEscription 55	DTC/CIRCUIT DIAGNOSIS 44
DTC Logic 44 Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 Description 45 DTC Logic 45 DTC Logic 45 DTC Logic 45 B2113 RECLINING MOTOR 47 DTC Logic 47 DTC Logic 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 Description 49 DTC Logic 49 DTC Logic 52 DTC Logic 52 Diagnosis Procedure 52 DTC Logic 52 DTC Logic 52 DTC Logic 52 DTC Logic 55 DEscription 55 DEscription 55 DTC Logic 55 Diagno	U1000 CAN COMM CIRCUIT44
Diagnosis Procedure 44 Special Repair Requirement 44 B2112 SLIDING MOTOR 45 Description 45 DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 DTC Logic 47 Diagnosis Procedure 47 DEscription 47 DTC Logic 47 Diagnosis Procedure 49 Description 49 Description 49 DTC Logic 49 Diagnosis Procedure 49 Diagnosis Procedure 52 DTC Logic 55 Description 55 Description 55 DEscription 55 DTC Logic 55 Diagnosis Procedure 55 DTC Logic 55 Diagnosis Procedure 57 Diagnosis Procedure<	Description 44
Special Repair Requirement 44 B2112 SLIDING MOTOR 45 Description 45 DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 DTC Logic 47 Diagnosis Procedure 47 B2113 RECLINING MOTOR 47 Description 47 DTC Logic 47 Diagnosis Procedure 49 Description 49 DEscription 49 DTC Logic 49 Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 DTC Logic 52 DTC Logic 52 DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 Description 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 Description 57 Diagnosis Procedure 57 Diagnosis Procedure 57	
Description 45 DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 DTC Logic 47 Diagnosis Procedure 47 DEScription 47 B2118 TILT SENSOR 49 DESCRIPTION 49 DTC Logic 49 DTC Logic 49 DTC Logic 52 Description 52 DTC Logic 55 Description 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DTC Logic 57 Diagnosis Procedure 57 Diagnosis Procedure 57	
DTC Logic 45 Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 49 DTC Logic 49 Diagnosis Procedure 49 Diagnosis Procedure 52 Description 52 DTC Logic 52 Diagnosis Procedure 52 DTC Logic 52 Diagnosis Procedure 52 DTC Logic 52 Diagnosis Procedure 52 DTC Logic 55 Description 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DEscription 57 DTC Logic 57 Diagnosis Procedure 57	
Diagnosis Procedure 45 B2113 RECLINING MOTOR 47 Description 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 49 DTC Logic 49 DTC Logic 52 Diagnosis Procedure 52 DTC Logic 55 DEscription 55 DTC Logic 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DEscription 57 DTC Logic 57 Diagnosis Procedure 57	
Description 47 DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 49 DTC Logic 49 Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 DTC Logic 52 Diagnosis Procedure 52 DTC Logic 55 DTC Logic 55 DTC Logic 55 Diagnosis Procedure 55 DTC Logic 55 Diagnosis Procedure 55 Diagnosis Procedure 57 DTC Logic 57 Diagnosis Procedure 57	
DTC Logic 47 Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 49 Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 Description 52 DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 DEscription 55 DTC Logic 55 Diagnosis Procedure 55 Diagnosis Procedure 55 Diagnosis Procedure 55 Diagnosis Procedure 57	
Diagnosis Procedure 47 B2118 TILT SENSOR 49 Description 49 DTC Logic 49 Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 Description 52 DTC Logic 55 DEscription 55 DTC Logic 55 DTC Logic 55 Diagnosis Procedure 57 Diagnosis Procedure 57 DTC Logic 57 DTC Logic 57 Diagnosis Procedure 57 Diagnosis Procedure 57	
Description 49 DTC Logic 49 Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 Description 52 DTC Logic 52 DTC Logic 52 DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 DEscription 55 DTC Logic 55 Diagnosis Procedure 55 DTC Logic 55 Diagnosis Procedure 55 DTC Logic 55 Diagnosis Procedure 55 Diagnosis Procedure 55 Diagnosis Procedure 57 DTC Logic 57 DTC Logic 57 DTC Logic 57 Diagnosis Procedure 57	
DTC Logic 49 Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 Description 52 DTC Logic 52 DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 DEscription 55 DTC Logic 55 DTC Logic 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DTC Logic 57	B2118 TILT SENSOR 49
Diagnosis Procedure 49 B2119 TELESCOPIC SENSOR 52 Description 52 DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 DTC Logic 55 B2128 UART COMMUNICATION LINE 57 DTC Logic 57	
Description 52 DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 DEscription 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DTC Logic 57 DTC Logic 57 Diagnosis Procedure 57	
DTC Logic 52 Diagnosis Procedure 52 B2126 DETENT SW 55 Description 55 DTC Logic 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DTC Logic 57 DTC Logic 57 DTC Logic 57 Diagnosis Procedure 57	B2119 TELESCOPIC SENSOR 52
Diagnosis Procedure 52 B2126 DETENT SW 55 Description 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 DEscription 57 DTC Logic 57 Diagnosis Procedure 57 DTC Logic 57 DTC Logic 57 DTC Logic 57 Diagnosis Procedure 57	
Description 55 DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 Description 57 DTC Logic 57 DTC Logic 57 Diagnosis Procedure 57	
DTC Logic 55 Diagnosis Procedure 55 B2128 UART COMMUNICATION LINE 57 Description 57 DTC Logic 57 Diagnosis Procedure 57	B2126 DETENT SW55
Diagnosis Procedure55B2128 UART COMMUNICATION LINE57Description57DTC Logic57Diagnosis Procedure57	
Description	
Description	B2128 UART COMMUNICATION LINE
DTC Logic57 Diagnosis Procedure57	Description57
-	DTC Logic 57
POWER SUPPLY AND GROUND CIRCUIT 58	POWER SUPPLY AND GROUND CIRCUIT 58

BCM : Diagnosis Procedure
DRIVER SEAT CONTROL UNIT
AUTOMATIC DRIVE POSITIONER CONTROL
UNIT
AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement60
SLIDING SWITCH61
Description61
Component Function Check
Diagnosis Procedure61 Component Inspection62
RECLINING SWITCH 63
Description63 Component Function Check63
Diagnosis Procedure
Component Inspection
LIFTING SWITCH (FRONT)65
Description
Component Function Check65
Diagnosis Procedure
Component Inspection66
LIFTING SWITCH (REAR)
Description
Diagnosis Procedure
Component Inspection68
TILT SWITCH
Description
Component Function Check 69
Diagnosis Procedure
Component Inspection70
TELESCOPIC SWITCH71
Description
Component Function Check
Component Inspection
SEAT MEMORY SWITCH
Description
Component Function Check73
Diagnosis Procedure
Component Inspection74
DOOR MIRROR REMOTE CONTROL
SWITCH 76
CHANGEOVER SWITCH76

CHANGEOVER SWITCH : Description	.76
CHANGEOVER SWITCH : Component Function Check	
CHANGEOVER SWITCH : Diagnosis Procedure	.76
CHANGEOVER SWITCH : Component Inspec-	77
tion	
MIRROR SWITCH MIRROR SWITCH : Description	
MIRROR SWITCH : Description	.78
MIRROR SWITCH : Diagnosis Procedure	.78
MIRROR SWITCH : Component Inspection	.80
POWER SEAT SWITCH GROUND CIRCUIT	.81
Diagnosis Procedure	. 81
TILT & TELESCOPIC SWITCH GROUND CIR-	
CUIT	
Diagnosis Procedure	.82
DETENTION SWITCH	.83
Description	
Component Function Check	
Diagnosis Procedure	
Component Inspection	.84
FRONT DOOR SWITCH (DRIVER SIDE)	.85
Description	
Component Function Check	.85
Diagnosis Procedure Component Inspection	.85
SLIDING SENSOR	
Description	
Component Function Check Diagnosis Procedure	
•	
RECLINING SENSOR	
Description Component Function Check	.90
Diagnosis Procedure	
-	
LIFTING SENSOR (FRONT)	
Description Component Function Check	
Diagnosis Procedure	
LIFTING SENSOR (REAR)	
Description Component Function Check	
Diagnosis Procedure	
TILT SENSOR	
Description	
Component Function Check	
Diagnosis Procedure	
TELESCOPIC SENSOR	101
Description	
Component Function Check	101
Diagnosis Procedure	101

76	MIRROR SENSOR103	
۱ 76	DRIVER SIDE103	A
276	DRIVER SIDE : Description	
77	DRIVER SIDE : Component Function Check103 DRIVER SIDE : Diagnosis Procedure103	В
78	PASSENGER SIDE104	
78	PASSENGER SIDE : Description104	С
c78	PASSENGER SIDE : Component Function Check104	
78 80	PASSENGER SIDE : Diagnosis Procedure	
	SLIDING MOTOR	D
81	Description	
81		Е
2-	Diagnosis Procedure107	
82 82	RECLINING MOTOR109	
02	Description	F
83	Component Function Check	
83 83	Diagnosis Procedure109	G
83	LIFTING MOTOR (FRONT)111	
84	Description	
85	Component Function Check111 Diagnosis Procedure111	Н
85		
85	LIFTING MOTOR (REAR)	1
85 86	Component Function Check	1
	Diagnosis Procedure113	
87 87	TILT MOTOR115 A	DP
87	Description115	
87	Component Function Check	
90	g	K
90	TELESCOPIC MOTOR 117	
90	Description117 Component Function Check117	L
90	Diagnosis Procedure	
93	DOOR MIRROR MOTOR119	М
93 93	Description119	VI
93	Component Function Check119	
96	Diagnosis Procedure119 Component Inspection120	Ν
96		
96	SEAT MEMORY INDICATOR 122	\sim
96	Description122 Component Function Check122	0
99	Diagnosis Procedure122	
99	Component Inspection123	Ρ
99 99	ECU DIAGNOSIS INFORMATION124	
101	DRIVER SEAT CONTROL UNIT124	
101	Reference Value	
101	Wiring Diagram - AUTOMATIC DRIVE POSI- TIONER CONTROL SYSTEM	
101	Fail Safe	

DTC Index143
AUTOMATIC DRIVE POSITIONER CON- TROL UNIT
BCM (BODY CONTROL MODULE)162Reference Value162Wiring Diagram - BCM -186Fail-safe200DTC Inspection Priority Chart201DTC Index202
SYMPTOM DIAGNOSIS205
MANUAL FUNCTION DOES NOT OPERATE. 205
ALL COMPONENT
POWER SEAT 205 POWER SEAT : Diagnosis Procedure 205
STEERING POSITION FUNCTION DOES NOT OPERATE
SEAT SLIDING
SEAT RECLINING
SEAT LIFTING (FRONT)207 SEAT LIFTING (FRONT) : Diagnosis Procedure207
SEAT LIFTING (REAR)207 SEAT LIFTING (REAR) : Diagnosis Procedure207
STEERING TILT
STEERING TELESCOPIC208 STEERING TELESCOPIC : Diagnosis Procedure.208
DOOR MIRROR209 DOOR MIRROR : Diagnosis Procedure209
MEMORY FUNCTION DOES NOT OPERATE 210
ALL COMPONENT210 ALL COMPONENT : Diagnosis Procedure210
SEAT SLIDING
SEAT RECLINING
SEAT LIFTING (FRONT)211 SEAT LIFTING (FRONT) : Diagnosis Procedure211

SEAT LIFTING (REAR)
STEERING TELESCOPIC
STEERING TILT
DOOR MIRROR
MEMORY INDICATE DOES NOT OPERATE214 Diagnosis Procedure
SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE
ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE
INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE
NORMAL OPERATING CONDITION218 Description
PRECAUTION219
PRECAUTIONS
Work
DRIVER SEAT CONTROL UNIT
Exploded View
AUTOMATIC DRIVE POSITIONER CON- TROL UNIT
SEAT MEMORY SWITCH
POWER SEAT SWITCH224Exploded View224Removal and Installation224

< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009063410 B

А

OVERALL SEQUENCE



JMJIA1702GB

DETAILED FLOW

Revision: 2013 March

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-143, "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 <u>ADP-218, "Description"</u>.

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 <u>GI-42, "Intermittent Incident"</u>.

7.PERFORM COMPONENT FUNCTION CHECK

Perform the component function check for the isolated malfunctioning point.

>> GO TO 8.

 $\mathbf{8}$. 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.REPAIR OR REPLACE

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?

Revision: 2013 March

ADP-6

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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

L

Μ

Ν

Ο

Ρ

ADP

А

В

С

D

Е

F

G

Н

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

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

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

*: Default value is 40mm.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to <u>ADP-9, "SYSTEM INITIALIZATION : Description"</u>.

>> GO TO 2.

2.SYSTEM SETTING

Perform system setting. Refer to ADP-10, "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:000000009063413

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		Perform initialization
	ON	Set slide amount [*]
Intelligent Key interlock	Erased	Perform storing
Seat synchronization	OFF	_

*: Default value is 40mm.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

1.SYSTEM INITIALIZATION

Revision: 2013 March

< BASIC INSPECTION >	
Perform system initialization. Refer to ADP-9. "SYSTEM INITIALIZATION : Description".	А
>> GO TO 2.	\square
2.SYSTEM SETTING	В
Perform system setting. Refer to ADP-10, "SYSTEM SETTING : Description".	
>> GO TO 3.	С
3.MEMORY STORAGE	
Perform memory storage. Refer to ADP-9, "MEMORY STORING : Description".	D
>> END SYSTEM INITIALIZATION	Е
SYSTEM INITIALIZATION : Description	
Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is	F
replaced. The entry/exit assist function will not operate normally if no initialization is performed.	
SYSTEM INITIALIZATION : Special Repair Requirement	G
INITIALIZATION PROCEDURE	Н
1. CHOOSE METHOD	
There are two initialization methods.	
Which method do you use?	I
With door switch>>GO TO 2. With vehicle speed>>GO TO 4.	
2. STEP A-1	ADP
Turn ignition switch from ACC to OFF position.	
>> GO TO 3.	Κ
3. STEP A-2	
Driver door switch is ON (open) \rightarrow OFF (close) \rightarrow ON (open).	L
>> END 4. STEP B-1	M
Drive the vehicle at more than 25 km/h (16 MPH).	Ν
>> END MEMORY STORING	0
MEMORY STORING : Description	
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.	Ρ
MEMORY STORING : Special Repair Requirement	
Memory Storage Procedure	

< BASIC INSPECTION >

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

1.STEP 1

Shift A/T selector lever to P position.

>> GO TO 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:**

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).

NOTE:

Memory switch indicator lamp blinks for 5 seconds when registration is complete.

>> GO TO 7.

7.STEP 7

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

>> END SYSTEM SETTING

SYSTEM SETTING : Description

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

Setting Change

Revision: 2013 March

INFOID:000000009063419

< BASIC INSPECTION >

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]	х	_	40mm	
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	х	Y	OFF	
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	x	- X -	ON	
Seat synchronization	Seat synchronization can be selected: ON (operated) – OFF (not operated)	_	x	OFF	

SYSTEM SETTING : Special Repair Requirement

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

1. Turn ignition switch OFF.

- 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.

>> GO TO 3.

3. WITH SET SWITCH - STEP 2

- 1. Turn ignition switch ACC.
- 2. Push setting button and hold for more than 10 seconds, then confirm blinking of the memory switch indicator.
- Synchronization are ON: Memory switch indicator blink two times.
- Synchronization are OFF: Memory switch indicator blink once.

>> END

4. WITH CONSULT - STEP 1

Select "Work support".

>> GO TO 5.

5.	WITH CONSULT - STEP 2	
----	-----------------------	--

- 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

INFOID:000000009063420

Ε

F

ADP

Κ

L

M

Ν

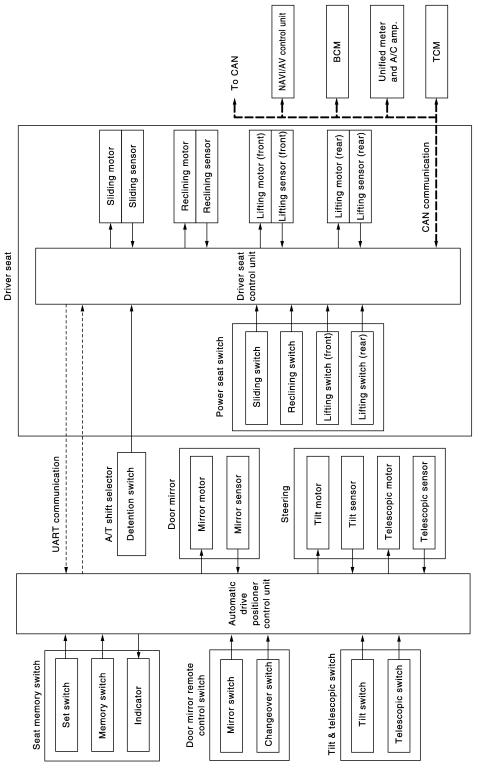
Ρ

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

AUTOMATIC DRIVE POSITIONER SYSTEM AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram



JMJIA3436GB

INFOID:000000009063421

< SYSTEM DESCRIPTION >

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:000000009063422

А

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.
Seat synchronization function		The positions of the steering column and door mirror are adjusted to the proper posi- tion automatically while linking with manual operation [seat sliding, seat lifting (rear) or seat reclining].
Memory function		The seat, steering column and outside mirror move to the stored driving position by pressing seat memory switch (1 or 2).
Entry/Exit assist function Entry		On exit, the seat moves backward and the steering column moves upward and for- ward.
		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

Н

Κ

L

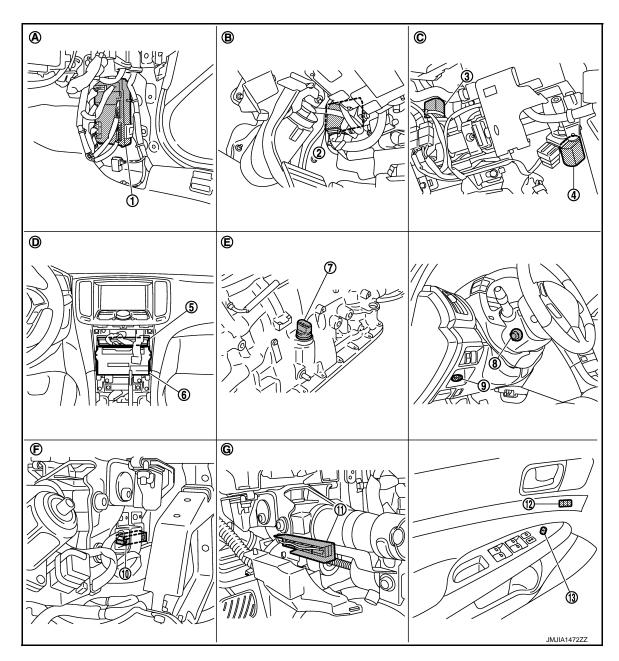
Μ

Ν

0

Ρ

< SYSTEM DESCRIPTION >



- 1. BCM M118, M119, M122, M123
- 4. Telescopic motor M49
- 7. AT assembly connector F51
- 10. Tilt sensor M48
- 13. Door mirror remote control switch D17
- A. Dash side lower (Passenger side)
- D. Behind cluster lid C
- G View with steering column cover lower and upper removed

- 2. Automatic drive positioner control unit 3. M51, M52
- 5. Unified meter and A/C amp. M67
- 8. Tilt & telescopic switch M31
- 11. Telescopic sensor M48
- B. View with instrument driver lower panel removed
- E. A/T assembly (TCM is built in A/T assembly)

- Tilt motor M49
- AV control unit With NAVI M87, M88 Without NAVI M83, M85
- 9. Key slot M22
- 12. Seat memory switch D5
- C. View with steering column cover lower and upper removed
- F. View with instrument driver lower panel removed

< SYSTEM DESCRIPTION >

		6				А
						В
		(٩		D
						Е
					JMJIA1473ZZ	F
14.	Front door switch (driver side) B16	15.	A/T shift selector (detention switch) M137	16.	Sliding, lifting switch (Power seat switch B459)	
17.	Reclining switch (power seat switch B459)	18.	Door mirror (driver side) D3	19.	Reclining motor B454	G
20.	Driver seat control unit B451, B452	21.	Lifting motor (front) B455	22.	Lifting motor (rear) B456	
23.	Sliding motor B461		Sliding sensor B453			Н
H.	View with center console assembly removed	I.	View with seat cushion pad and sea back pad removed	t- J.	Backside of the seat cushion	
		~ .				

AUTOMATIC DRIVE POSITIONER SYSTEM : Component Description

CONTROL UNITS

Function Item · Main units of automatic drive positioner system Κ • It is connected to the CAN. Driver seat control unit · It communicates with the automatic drive positioner control via UART communication. L • It communicates with the driver seat control unit via UART communication. · Perform various controls with the instructions of driver seat control unit. Automatic drive positioner control unit · Perform the controls of the tilt & telescopic, door mirror and the seat memory switch. Μ Transmit the following status to the driver seat control unit via CAN communication. Driver door: OPEN/CLOSE Ignition switch position: ACC/ON Ν · Door lock: UNLOCK (with Intelligent Key or driver side door request switch oper-BCM ation) · Key ID Key switch: Insert/Pull out Intelligent Key Starter: CRANKING/OTHER Transmit the vehicle speed signal to the driver seat control unit via CAN communi-Unified meter and A/C amp. cation. Ρ Transmit the shift position signal (P range) to the driver seat control unit via CAN тсм communication.

INPUT PARTS

Switches

INFOID:000000009063424

ADP

< SYSTEM DESCRIPTION >

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.
A/T shift selector (detention switch)	Detect the P range position of A/T selector lever.
Set switch	The registration and system setting can be performed with its operation.
Memory switch 1/2	The registration and operation can be performed with its operation.
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch.
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.

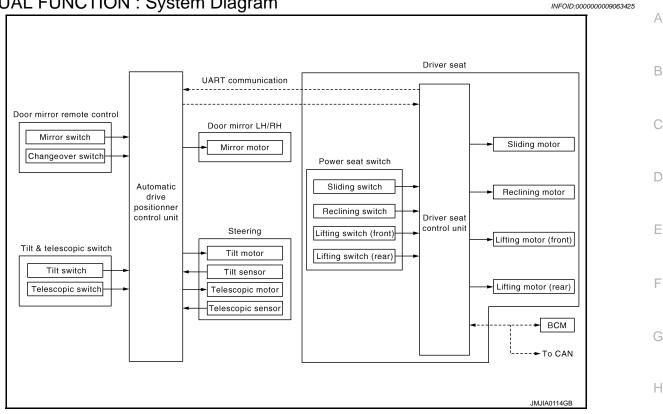
OUTPUT PARTS

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

< SYSTEM DESCRIPTION >

MANUAL FUNCTION : System Diagram



MANUAL FUNCTION : System Description

INFOID:000000009063426

Κ

Ρ

OUTLINE

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

OPERATION PROCEDURE

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

DETAIL FLOW

Seat

Order	Input	Output	Control unit condition	IVI
1	Power seat switch (sliding, lifting, reclin- ing)	_	The power seat switch signal is inputted to the driver seat control unit when the power seat switch is operated.	Ν
2	_	Motors (sliding, lifting, reclin- ing)	The driver seat control unit outputs signals to each motor accord- ing to the power seat switch input signal.	0

Tilt & Telescopic

Order	Input	Output	Control unit condition
1	Tilt & telescopic switch	_	The tilt & telescopic switch signal is inputted to the automatic drive positioner control unit when the tilt & telescopic switch is operated.

< SYSTEM DESCRIPTION >

Order	Input	Output	Control unit condition
2	_	Motors (Tilt, telescopic)	The automatic drive positioner control unit actuates each motor according to the operation of the tilt & telescopic switch.
3	Sensors (Tilt, telescopic)	_	The automatic drive positioner control unit recognizes any oper- ation limit of each actuator via each sensor and will not operate the actuator anymore at that time.*

*: Tilt does not operates upward when tilt sensor volume is less than 1.2 V, tilt does not operate downward when the sensor value is bigger than 3.4 V. Telescopic does not operates backward when telescopic sensor value is less than 0.8 V, telescopic does not operate forward when the sensor value is bigger than 3.4 V.

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 au- tomatic 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.

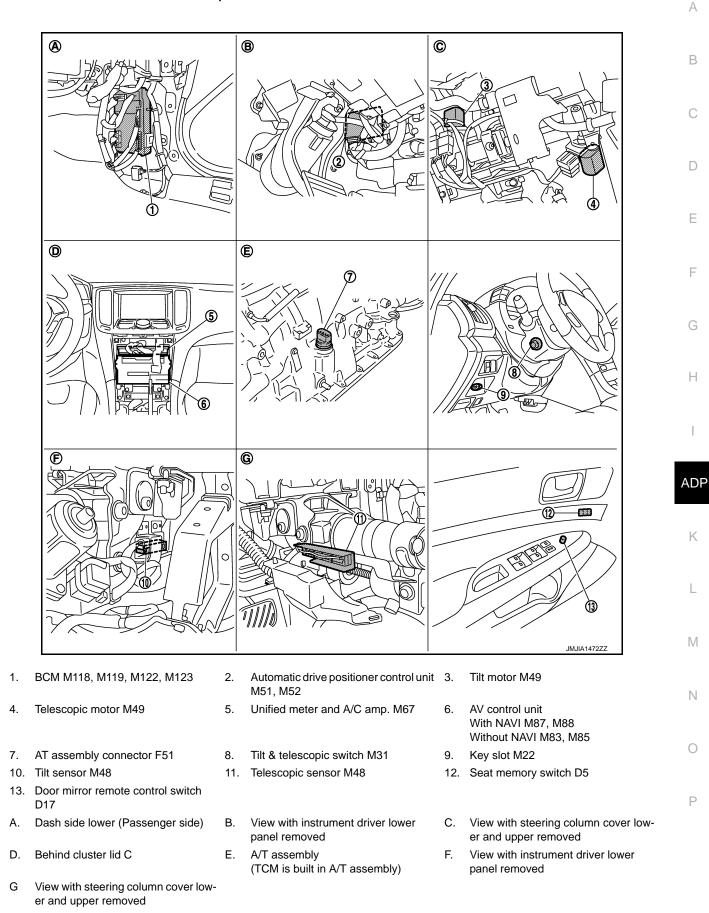
NOTE:

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.

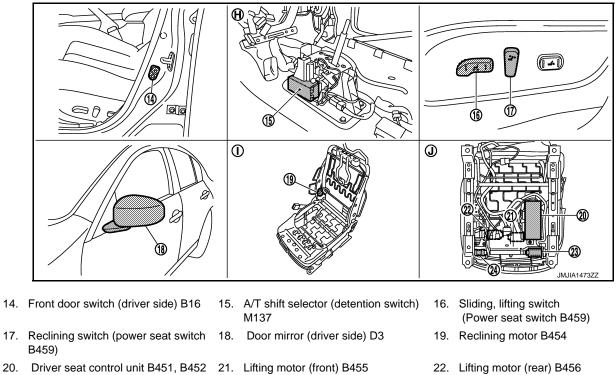
< SYSTEM DESCRIPTION >

MANUAL FUNCTION : Component Parts Location

INFOID:000000009063427



< SYSTEM DESCRIPTION >



- 23. Sliding motor B461
- H. View with center console assembly I. removed
- 24. Sliding sensor B453
 - View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

MANUAL FUNCTION : Component Description

- 22. Lifting motor (rear) B456

INFOID:000000009063428

CONTROL UNITS

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

INPUT PARTS

Switches

Item	Function
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch.

< 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. 	B
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. 	С

Sensors

Item	Function	D
Tilt and telescopic sensor	Detect the up/down and left/right position of steering column.	_

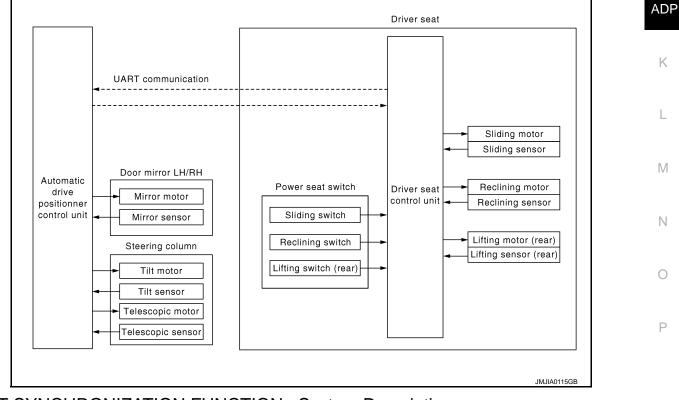
OUTPUT PARTS

Item	Function	
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.	
Tilt & telescopic motor	Move the steering column upward/downward and frontward/rearward.	
Lifting motor (front)	Move the seat lifter (front) upward/downward.	
Lifting motor (rear)	Move the seat lifter (rear) upward/downward.	
Reclining motor	Tilt and raise up the seatback.	
Sliding motor	Slide the seat frontward/rearward.	

SEAT SYNCHRONIZATION FUNCTION

SEAT SYNCHRONIZATION FUNCTION : System Diagram

INFOID:000000009063429



SEAT SYNCHRONIZATION FUNCTION : System Description

INFOID:000000009063430

OUTLINE

Revision: 2013 March

ADP-21

< SYSTEM DESCRIPTION >

The steering column position and door mirror position is adjusted to the position automatically according to the direction and distance of seat movement when performing the manual operation of sliding, reclining or lifting (rear). This function saves adjusting the mirror and steering column when adjusting the seat.

NOTE:

- This function is set to OFF before delivery (initial setting).
- For the system setting procedure. Refer to ADP-10, "SYSTEM SETTING : Description".

OPERATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Adjust seat position [sliding, reclining, lifting (rear)].
- 3. The steering and outside mirror is adjusted automatically.

NOTE:

• The seat synchronization function will not operate if seat adjusting value is more than limit value.

Item	Limit value
Seat sliding	76 [mm]
Seat reclining	9.1 [degrees]
Seat lifter (rear)	20 [mm]

- The seat synchronization function will not operate if the steering column or door mirror moves to the operating end while this function is operating. Perform memory function or drive the vehicle at vehicle speed of 7 km/h or more once to activate this function again.
- If the seat position is uncomfortable after the adjustment, seat position can be adjusted easily by memory operation.

OPERATION CONDITION

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

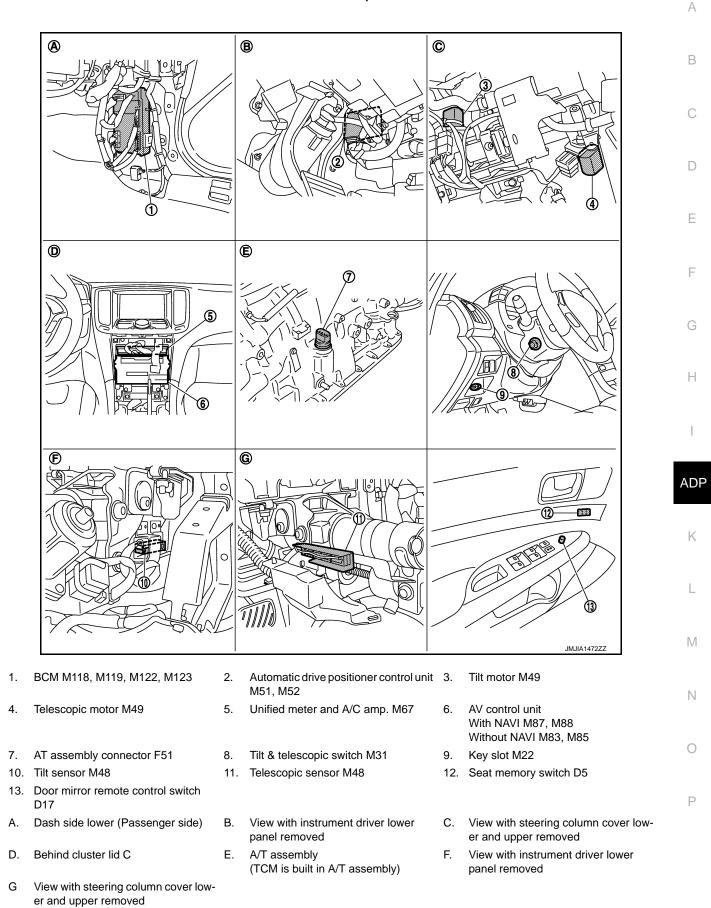
Item	Request status
Ignition position	ON
System setting	ON
Switch inputs Power seat switch Tilt & telescopic switch Door mirror remote control switch Set switch Memory switch 	OFF (Not operated)
A/T selector lever	P position

DETAIL FLOW

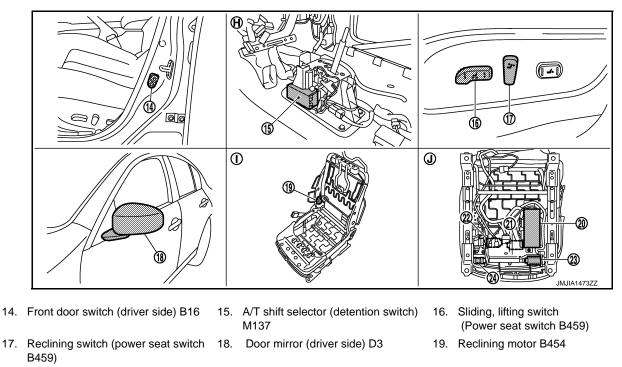
Order	Input	Output	Control unit condition
1	—	—	Perform Manual operation [Sliding, reclining or lifting (rear)].
2	Sensors [Sliding, reclining, lifting (rear)]	_	The driver seat control unit judges the direction and distance of seat movement according to the signal input from each seat sensor during manual operation.
3	_	Motors (Tilt, telescopic, out- side mirror)	Driver seat control unit requests the operation to position accord- ing to the direction and distance of seat movement to the automat- ic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor.
	Sensors (Tilt, telescopic, outside mirror)	_	Driver seat control unit stops the operation of each motor when the value of each sensor that is input to automatic drive positioner control unit via UART communication reaches the target address.

< SYSTEM DESCRIPTION >

SEAT SYNCHRONIZATION FUNCTION : Component Parts Location



< SYSTEM DESCRIPTION >



- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 23. Sliding motor B461
- H. View with center console assembly I. removed
- 24. Sliding sensor B453
 - View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed
- 22. Lifting motor (rear) B456

SEAT SYNCHRONIZATION FUNCTION : Component Description

INFOID:000000009063432

CONTROL UNITS

Item	Function
Driver seat control unit	Operates the specific seat motor with the signal from the power seat switch.
Automatic drive positioner control unit	Operates the steering motor and door mirror with the instructions from the driver seat control unit.

INPUT PARTS

Switches

Item	Function	
Power seat switch	 The following switch is installed. Reclining switch Lifting switch (front) Lifting switch (rear) Sliding switch The specific parts can be operated with the operation of each switch. 	

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 (rear)	Detect the up/down position of seat lifter (rear).	

< SYSTEM DESCRIPTION >

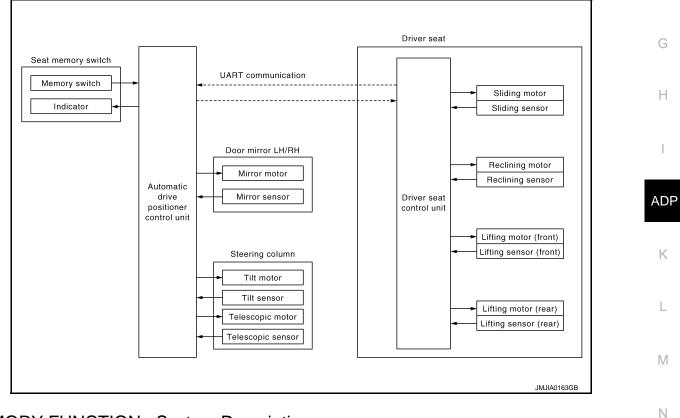
Item	Function	^
Reclining sensor	Detect the tilt of seatback.	A
Sliding sensor	Detect the front/rear position of seat.	

OUTPUT PARTS

Item	Function		
Door mirror motor (driver side/passenger side)	Move the outside mirror face upward/downward and leftward/rightward.		
Tilt & telescopic motor	Move the steering column upward/downward and frontward/rearward.		
Lifting motor (rear)	Move the seat lifter (rear) upward/downward.	Move the seat lifter (rear) upward/downward.	
Reclining motor	Tilt and raise up the seatback.		
Sliding motor	Slide the seat frontward/rearward.		

MEMORY FUNCTION

MEMORY FUNCTION : System Diagram



MEMORY FUNCTION : System Description

INFOID:0000000009063434

Ρ

В

F

INFOID:000000009063433

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 for more than 0.5 second) operation allows changing to the other driving position. **NOTE:**

Further information for the memory storage procedure. Refer to <u>ADP-9. "MEMORY STORING : Description"</u>.

OPERATION PROCEDURE

- 1. Turn ignition switch ON
- 2. Press desired memory switch for more than 0.5 second.
- 3. Driver seat, steering and door mirror will move to the memorized position.

OPERATION CONDITION

Revision: 2013 March

ADP-25

< SYSTEM DESCRIPTION >

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

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

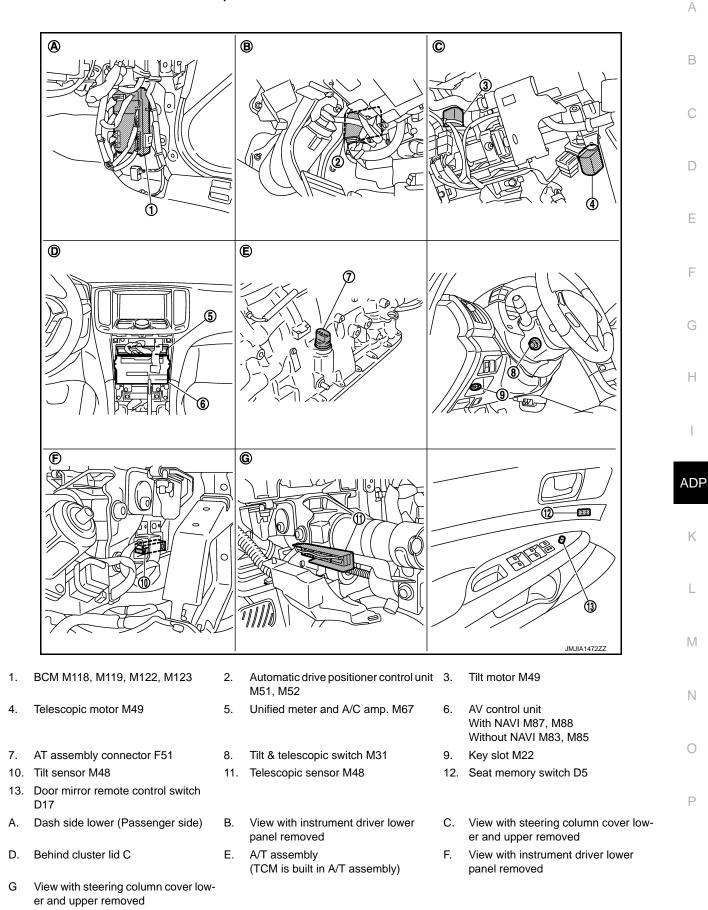
However, the memory operation can be performed for 45 seconds after opening the driver door (driver door switch OFF \rightarrow ON) even if the IGN position is in OFF position.

DETAIL FLOW

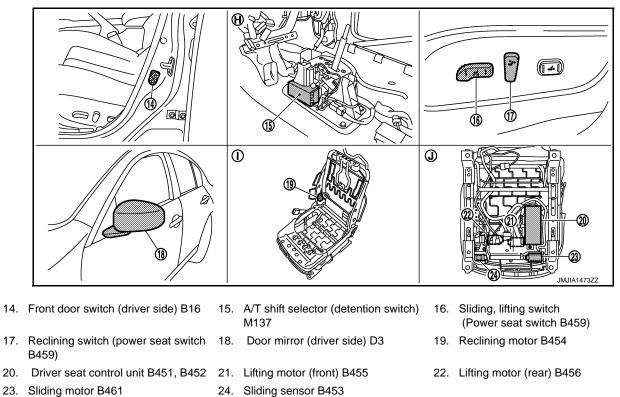
Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the automatic drive positioner control unit when memory switch 1 or 2 is operated. Memory switch signal is input to driver seat control unit via UART communication.
2 —	Motors (Seat, Steering, door mirror)	Driver seat control unit operates each motor of seat when it recogniz- es 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 op- erates each motor.	
	Memory switch Indica- tor	Driver seat control unit requests the flashing of memory indicator to automatic drive positioner control unit via UART communication while either of the motors is operating. The automatic drive positioner con- trol unit illuminates the memory indicator.	
3	Sensors (Seat, steering col- umn, 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 that is input from auto drive positioner control unit via UART communication. Driver seat control unit stops the operation of each motor when each part reach- es the recorded address.
4	_	Memory switch Indica- tor	Driver seat control unit requests the illumination of memory indicator to auto drive positioner control unit via UART communication after all motors stop. The auto driving positioner control unit illuminates the memory indicator for 5 seconds.

< SYSTEM DESCRIPTION >

MEMORY FUNCTION : Component Parts Location



< SYSTEM DESCRIPTION >



- H. View with center console assembly I. View with seat cus
 - View with seat cushion pad and seat- J. back pad removed

MEMORY FUNCTION : Component Description

INFOID:000000009063436

Backside of the seat cushion

CONTROL UNITS

removed

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

INPUT PARTS

Switches

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

Sensors

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

< SYSTEM DESCRIPTION >

OUTPUT PARTS

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

EXIT ASSIST FUNCTION

EXIT ASSIST FUNCTION : System Diagram

F Driver seat UART communication Н Sliding motor Sliding sensor Automatic Driver seat drive control unit positionner Steering control unit ADP Tilt motor To CAN Tilt sensor Κ Telescopic motor CAN communication BCM Telescopic sensor JMJIA0116GB Μ

EXIT ASSIST FUNCTION : System Description

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 and front 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-10, "SYSTEM SETTING : Description".

OPERATION PROCEDURE

- 1. Open the driver door with ignition switch in ON position.
- 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.

ADP-29

INFOID:000000009063438

Ν

Ε

INFOID:000000009063437

< SYSTEM DESCRIPTION >

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

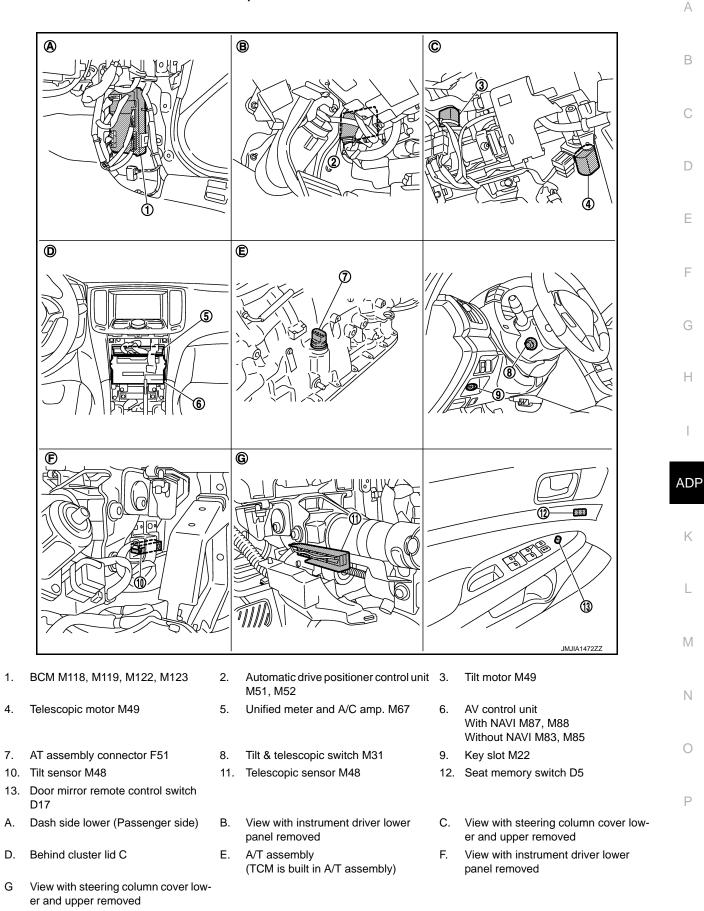
DETAIL FLOW

Order	Input	Output	Control unit condition
1	Door switch (Driver side)	_	Driver seat control unit receives door switch signal (driver side/ open) from BCM via CAN communication.
2	_	Motors (Seat sliding, tilt, telescopic)	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 and telescopic motor to auto drive positioner control unit via UART com- munication. The automatic drive positioner control unit operates each motor for a constant amount.

< SYSTEM DESCRIPTION >

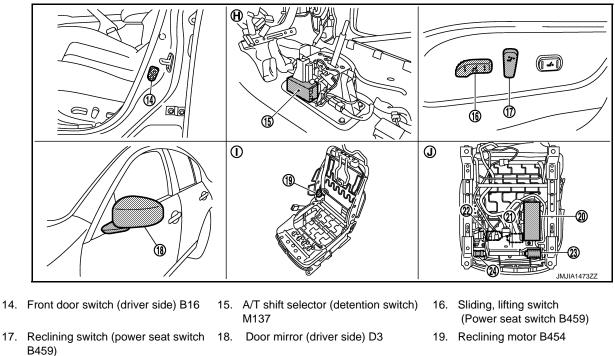
EXIT ASSIST FUNCTION : Component Parts Location





ADP-31

< SYSTEM DESCRIPTION >



- 20. Driver seat control unit B451, B452 21. Lifting motor (front) B455
- 23. Sliding motor B461
- H. View with center console assembly I. removed

- 24. Sliding sensor B453
 - View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed
- 22. Lifting motor (rear) B456

EXIT ASSIST FUNCTION : Component Description

INFOID:000000009063440

CONTROL UNITS

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

INPUT PARTS

Switches

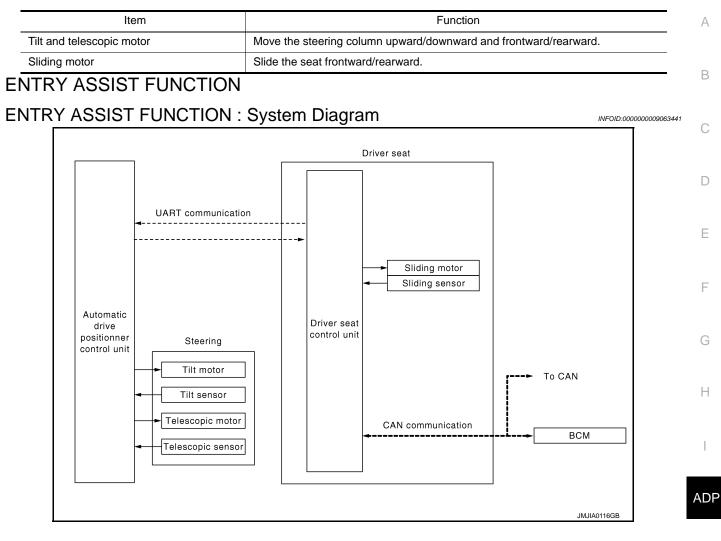
Item	Function
Front door switch (driver side)	Detect front door (driver side) open/close status.

Sensors

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

OUTPUT PARTS

< SYSTEM DESCRIPTION >



ENTRY ASSIST FUNCTION : System Description

OUTLINE

The seat is in the exiting position when either following condition (A or B) is satisfied, the seat returns from \Box exiting position to the previous driving position. **NOTE:**

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to <u>ADP-10, "SYSTEM SETTING : Description"</u>.
 OPERATION PROCEDURE
- 1. A: Turn the ignition switch ON.
- B: Turn the ignition switch from OFF to ACC after closing the driver door.
- 2. Driver seat and steering column will return from the exiting position to entry position.

OPERATION CONDITION

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

Р

Ν

Κ

INFOID:000000009063442

< SYSTEM DESCRIPTION >

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

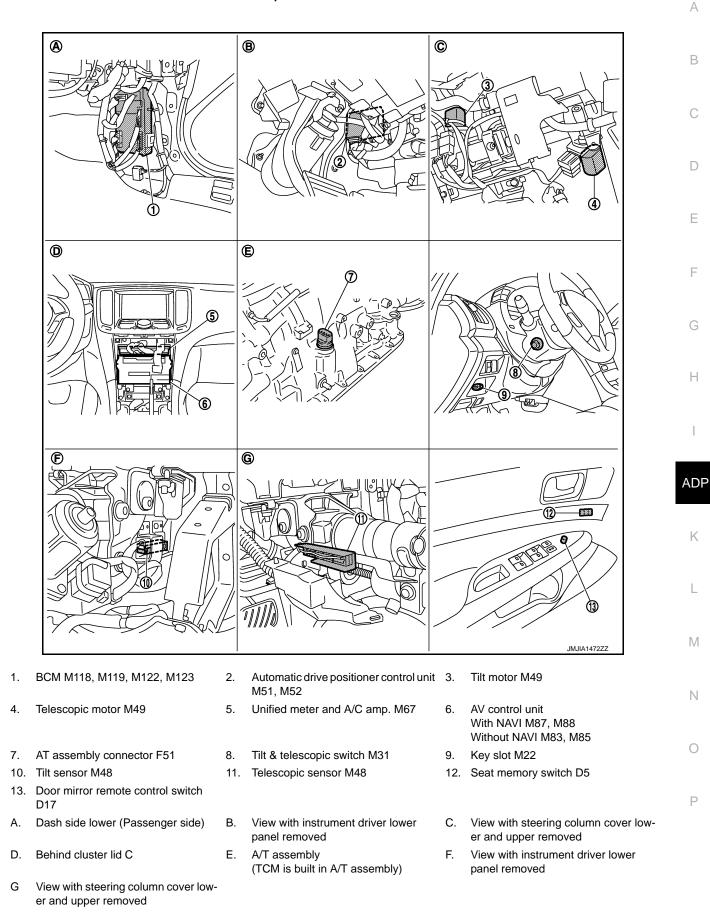
DETAIL FLOW

Order	Input	Output	Control unit condition
1	Door switch/Ignition switch	_	Driver seat control unit receives the signals of [ignition switch signal] and [driver side door switch] from BCM via CAN communication.
•••••	_	Motors (Sliding, tilt, tele- scopic)	Driver side control unit operates the sliding motor when the operating conditions are satisfied and requests the operations of tilt motor and telescopic motor to automatic drive positioner control unit via UART communication. The automatic drive positioner operates each motor.
	Sensors (Sliding, tilt, telescop- ic)	_	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.

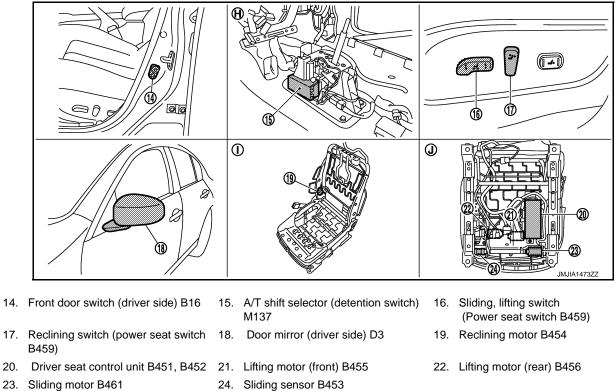
< SYSTEM DESCRIPTION >

ENTRY ASSIST FUNCTION : Component Parts Location

INFOID:000000009063443



< SYSTEM DESCRIPTION >



H. View with center console assembly I. removed

ENTRY ASSIST FUNCTION : Component Description

- 24. Sliding sensor B453I. View with seat cushion pad and seat- J. Backside of the seat cushion
 - back pad removed

INFOID:000000009063444

CONTROL UNITS

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

INPUT PARTS

Switches

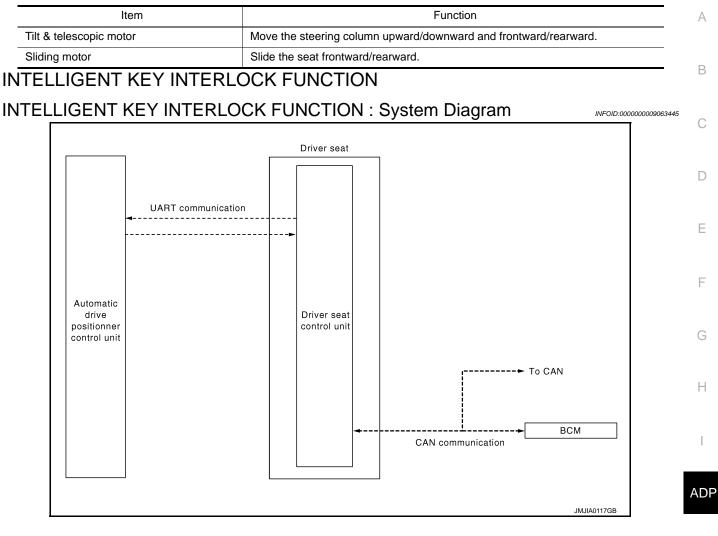
Item	Function
Front door switch (driver side)	Detect front door (driver side) open/close status.

Sensors

Item	Function
Tilt & telescopic sensor	Detect the up/down and left/right position of steering column.
Sliding sensor	Detect the front/rear position of seat.

OUTPUT PARTS

< SYSTEM DESCRIPTION >



INTELLIGENT KEY INTERLOCK FUNCTION : System Description

OUTLINE

When unlocking doors by using Intelligent Key or driver side door request switch, the system performs memory operation, exiting operation then entry operation.

OPERATION PROCEDURE

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

NOTE:

If the seat position is in memorized position before unlocking doors, memory operation does not perform. 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	
ystem setting ON		
Key switch	OFF (Key is removed.)	

Κ

Μ

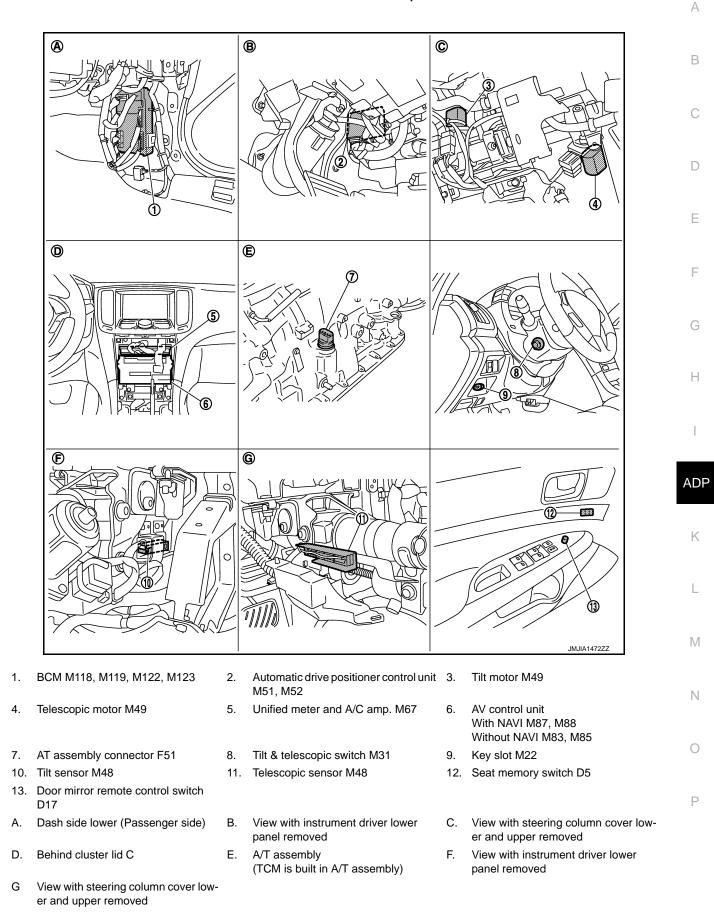
< SYSTEM DESCRIPTION >

Item	Request status
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch 	OFF (Not operated)
AT selector lever	P position

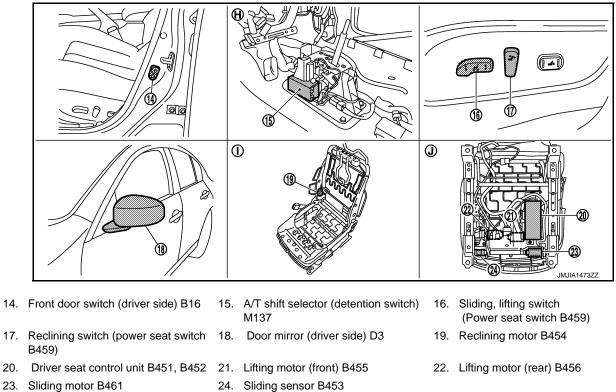
DETAIL FLOW

Order	Input	Output	Control unit condition	
1	 Door unlock signal (CAN) Key ID signal (CAN) 	_	Driver seat control unit receives the door unlock signal and the key ID signal from BCM when unlocking the door with Intelligent Key or driver side door request switch.	
2	—	—	Driver seat control unit performs the memory function.	
3	_	_	Driver seat control unit performs the exit assist function after perform- ing the memory function.	
4	—	_	Driver seat control unit performs the entry assist function.	

< SYSTEM DESCRIPTION >



< SYSTEM DESCRIPTION >



- H. View with center console assembly I. removed
- - View with seat cushion pad and seat- J. Backside of the seat cushion back pad removed

INFOID:000000009063448

INTELLIGENT KEY INTERLOCK FUNCTION : Component Description

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) 	

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

Diagnosis Description

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 con- trol 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 PART NUMBER	Displays part numbers of driver seat control unit parts.

CONSULT Function

SELF-DIAGNOSIS RESULTS Refer to <u>ADP-143, "DTC Index"</u>.

Relei to <u>ADI - 145; DTC IIIC</u>

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.	

Н

А

В

INFOID:000000009063449

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< 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 (for- ward) signal.
TELESCO SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (back-ward) 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) sta- tus 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 SEN	"V"	-	×	Voltage input from tilt sensor is displayed.
TELESCO SEN	"V"	-	×	Voltage input from telescopic sensor is displayed.

ACTIVE TEST CAUTION:

When driving vehicle, do not perform active test.

Test item	Description
SEAT SLIDE	Activates/deactivates the sliding motor.
SEAT RECLINING	Activates/deactivates the reclining motor.
SEAT LIFTER FR	Activates/deactivates the lifting motor (front).
SEAT LIFTER RR	Activates/deactivates the lifting motor (rear).
TILT MOTOR	Activates/deactivates the tilt motor.

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

< SYSTEM DESCRIPTION >

Test item	Description	^
TELESCO MOTOR	Activates/deactivates the telescopic motor.	A
MIRROR MOTOR RH	Activates/deactivates the mirror motor (passenger side).	-
MIRROR MOTOR LH	Activates/deactivates the mirror motor (driver side).	В
MEMORY SW INDCTR	Turns ON/OFF the memory indicator.	

WORK SUPPORT

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

G

С

Н

|

ADP

Κ

L

Μ

Ν

Ο

Ρ

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

INFOID:000000009063451

INFOID:000000009063452

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

DTC DETECTION LOGIC

DTC	Trouble diagnosis name	DTC detecting condition	Possible cause
U1000	CAN COMM CIR- CUIT	 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 <u>ADP-44, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

Diagnosis Procedure

Refer to LAN-16, "Trouble Diagnosis Flow Chart".

Special Repair Requirement

Refer to <u>ADP-9</u>, "SYSTEM INITIALIZATION : Description".

INFOID:000000009063453

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2112 SLIDING MOTOR

Description INFOID:000000009063455 The seat sliding motor is installed to the seat cushion frame. В • The seat sliding motor is installed with the driver seat control unit. Slides the seat frontward/ rearward by changing the rotation direction of sliding motor. DTC Logic INFOID:000000009063456 DTC DETECTION LOGIC D Trouble diagnosis DTC No. DTC detecting condition Possible cause name The driver seat control unit detects the output of slid- Driver seat control unit B2112 SEAT SLIDE Slide motor harness is power ing motor output terminal for 0.1 second or more even if the sliding switch is not input. shorted DTC CONFIRMATION PROCEDURE **1.**RERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Check "Self diagnostic result" with CONSULT. 2. Is the DTC detected? >> Perform diagnosis procedure. Refer to ADP-45, "Diagnosis Procedure". YES Н NO >> INSPECTION END NOTE: First perform diagnosis for B2126 if B2126 is detected. **Diagnosis** Procedure INFOID:000000009063457 **1.**PERFORM DTC CONFIRMATION PROCEDURE ADP 1. Turn ignition switch ON. Check "Self diagnostic result" with CONSULT. 2. 3. Erase the DTC. Perform DTC confirmation procedure. Refer to ADP-45, "DTC Logic". 4. Is the DTC displayed again? YES >> GO TO 2. NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". **2.**CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) M Turn ignition switch OFF. 1. Disconnect sliding motor and driver seat control unit connector. 2. 3. Check voltage between sliding motor harness connector and ground. Ν (+) Voltage (V) Sliding motor (-) (Approx.) Connector Terminals 35 B461 Ground 0 42

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

 ${\it 3.}$ check driver seat control unit output signal

1. Connect driver seat control unit connector.

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

А

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

	(+)	()	Voltage (V) (Approx.)	
Driver sea	t control unit			
Connector	Terminals		(11 -)	
B451	35	Ground	0	
6401	42	Gibuliu	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

Description INFOID:000000009063458 The seat reclining motor is installed to the seatback frame. The seat 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:000000009063459 DTC DETECTION LOGIC Trouble diagnosis DTC No. DTC detecting condition Possible cause name The driver seat control unit detects the output of re-· Driver seat control unit B2113 SEAT RECLINING clining motor output terminal for 0.1 second or more · Reclining motor harness is poweven if the reclining switch is not input. er shorted DTC CONFIRMATION PROCEDURE 1.REFORM DTC CONFIRMATION PROCEDURE 1. Turn ignition switch ON. 2. Check "Self diagnostic result" with CONSULT. Is the DTC detected? >> Perform diagnosis procedure. Refer to ADP-47, "Diagnosis Procedure". YES NO >> INSPECTION END NOTE: First perform diagnosis for B2126 if B2126 is detected. Diagnosis Procedure INFOID:000000009063460 **1.**PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. 1. 2. Check "Self diagnostic result" with CONSULT. 3. Erase the DTC. Perform DTC confirmation procedure. Refer to ADP-47, "DTC Logic". 4. Is the DTC displayed again? YES >> GO TO 2. NO >> Check intermittent incident. Refer to GI-42, "Intermittent Incident". 2. CHECK RECLINING MOTOR CIRCUIT (POWER SHORT) 1. Turn ignition switch OFF. 2. Disconnect reclining motor and driver seat control unit connector. Check voltage between reclining motor harness connector and ground. 3 (+)Voltage (V) Reclining motor (-) (Approx.) Terminals Connector 36

Is the inspection result normal?

B454

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

$\mathbf{3.}$ CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.

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

44

Ground

0

А

В

Н

ADP

M

Ν

P

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

(+) Driver seat control unit				
		(—)	Voltage (V) (Approx.)	
Connector	Terminals			
B451	36	Ground	0	
6431	44	Gibuliu	U	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

B2118 TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

B2118 TILT SENSOR

Description

• The tilt sensor is installed to the steering column assembly.

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

DTC Logic

INFOID:000000009063462

INFOID:000000009063463

INFOID:000000009063461

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B2118	TILT SENSOR	The input voltage of tilt sensor is less then 0.1Vor more than 4.9V.	 Harness and connectors (Tilt sensor circuit is opened/ shorted, tilt sensor power supply circuit is opened/shorted.) Tilt sensor 	

DTC CONFIRMATION PROCEDURE

1.RERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-49, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK TILT SENSOR SIGNAL

- 1. Turn ignition switch ON.
- 2. Select "TILT SEN" in "Data monitor" mode with CONSULT.
- 3. Check tilt sensor signal under the following condition.

Monitor item	Condition	Value	
TILT SEN	Tilt position	Change between 1.2 [V] (close to top) 3.4 [V] (close to bottom)	- L
Is the value normal?			N

YES >> GO TO 6.

NO >> GO TO 2.

2.CHECK TILT SENSOR CIRCUIT

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

Automatic drive po	Automatic drive positioner control unit		Tilt & telescopic sensor		
Connector	Terminal	Connector	Terminal	Continuity	
M51	7	M48	3	Existed	

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

- ADP
- Κ

Ν

C

Н

А

В

D

B2118 TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M51	7		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 & telescopic sensor harness connector and ground.

(+)				
Tilt & telescopic sensor		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
M48	1	Ground	5	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TILT SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive positioner control unit		Tilt & telescopic sensor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	33	M48	1	Existed

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5.check tilt sensor ground circuit

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic sensor harness connector.

Automatic drive po	sitioner control unit	Tilt & teleso	copic sensor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	41	M48	4	Existed

Is the inspection result normal?

YES >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness or connector.

6.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

< DTC/CIRCUIT	DIAGNOSIS >
---------------	-------------

>> INSPECTION END	A	
	В	
	С	
	D	
	E	
	F	
	G	
	Н	
	I	
	ADP	
	K	
	L	
	M	
	Ν	
	0	
	Ρ	

< DTC/CIRCUIT DIAGNOSIS >

B2119 TELESCOPIC SENSOR

Description

INFOID:000000009063464

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

DTC Logic

INFOID:000000009063465

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2119	TELESCOPIC SEN- SOR	The input voltage of telescopic sensor is less than 0.1V or more than 4.9V.	 Harness and connectors (Telescopic sensor circuit is opened/shorted, telescopic sen- sor power supply circuit is opened/shorted.) Telescopic sensor

DTC CONFIRMATION PROCEDURE

1.RERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.

Is the DTC is detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-52, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000009063466

1.CHECK TELESCOPIC SENSOR SIGNAL

- 1. Turn ignition switch ON.
- 2. Select "TELESCO SEN" in "Data monitor" mode with CONSULT.
- 3. Check the tilt sensor signal under the following condition.

Monitor item	Condition	Value
TELESCO SEN	Telescopic position	Change between 0.8 [V] (close to top) 3.4 [V] (close to bottom)

Is the valve normal?

YES >> GO TO 6.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect automatic drive positioner control unit and tilt & telescopic sensor connector.
- 3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic sensor harness connector.

-	Automatic drive po	Automatic drive positioner control unit		Tilt & telescopic sensor	
-	Connector	Terminal	Connector	Terminal	Continuity
-	M51	23	M48	2	Existed

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



B2119 TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic d				Continuity
Connector	rive positioner control unit Termina		Ground	Continuity
M51	23			Not existed
the inspection result i	-			
YES >> GO TO 3.	eplace harness or cor			
.CHECK TELESCOP	IC SENSOR POWEF	R SUPPLY		
Turn ignition switch	drive positioner contr ON. veen tilt & telescopic s		nnector and groun	d.
	(+)			
Tilt &	telescopic sensor		(—)	Voltage (V) (Approx.)
Connector	Termina	al		(Approx.)
M48	1		Ground	5
/ES >> GO TO 5.				
CHECK TELESCOP Turn ignition switch Disconnect automa	OFF. tic drive positioner cc	ontrol unit connect	or.	
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po	OFF. tic drive positioner co etween automatic driv nnector. sitioner control unit	ontrol unit connect ve positioner cont Tilt & te	or. rol unit harness co lescopic sensor	onnector and tilt & telesco
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector	OFF. tic drive positioner co etween automatic driv nector. sitioner control unit Terminal	ontrol unit connect ve positioner cont Tilt & te Connector	or. rol unit harness co lescopic sensor Terminal	Continuity
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52	OFF. tic drive positioner co etween automatic driv nnector. sitioner control unit Terminal 33	ontrol unit connect ve positioner cont Tilt & te Connector M48	or. rol unit harness co lescopic sensor Terminal 1	Continuity Existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52	OFF. tic drive positioner co etween automatic driv nector. sitioner control unit Terminal	ontrol unit connect ve positioner cont Tilt & te Connector M48	or. rol unit harness co lescopic sensor Terminal 1	Continuity Existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be	OFF. tic drive positioner co etween automatic driv nnector. sitioner control unit Terminal 33	ontrol unit connect ve positioner cont Tilt & te Connector M48	or. rol unit harness co lescopic sensor Terminal 1	Continuity Existed nector and ground.
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be	OFF. tic drive positioner co etween automatic driv nector. sitioner control unit Terminal 33 etween automatic driv	ontrol unit connect ve positioner cont Tilt & te Connector M48 ve positioner contr	or. rol unit harness co lescopic sensor Terminal 1	Continuity Existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive	OFF. tic drive positioner co etween automatic driven nector. sitioner control unit Terminal 33 etween automatic driven rive positioner control unit	ontrol unit connect ve positioner cont Tilt & te Connector M48 ve positioner contr	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con	Continuity Existed nector and ground.
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive po Connector M52	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 33	ontrol unit connect ve positioner cont Tilt & te Connector M48 ve positioner contr	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con	Continuity Existed Inector and ground. Continuity
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 the inspection result r YES >> Replace au NO >> Repair or result	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven sitioner control unit Terminal sitioner control unit sitioner control unit Terminal sitioner control unit sitioner control unit siti	ontrol unit connect ve positioner cont Tilt & te Connector M48 re positioner contr al	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con Ground	Continuity Existed Inector and ground. Continuity
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 Check continuity be Automatic drive Connector M52 the inspection result of YES >> Replace au NO >> Repair or re CHECK TELESCOP	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven atomatic drive position eplace harness or cor PIC SENSOR GROUN	ontrol unit connect ve positioner cont Tilt & te Connector M48 re positioner contr al	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con Ground	Continuity Existed anector and ground. Continuity Not existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 Check continuity be Automatic drive Connector M52 the inspection result r YES >> Replace au NO >> Repair or re CHECK TELESCOP Turn ignition switch Disconnect automa	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven positioner control unit Terminal 33 normal? tomatic drive positioner place harness or cor PIC SENSOR GROUN OFF. tic drive positioner co etween automatic driven tomatic drive positioner co	Tilt & te Connector M48 re positioner contr al ner control unit. Re nnector. ID CIRCUIT	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con Ground	Continuity Existed anector and ground. Continuity Not existed
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 the inspection result r YES >> Replace au NO >> Repair or re CCHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven positioner control unit Terminal 33 normal? tomatic drive positioner place harness or cor PIC SENSOR GROUN OFF. tic drive positioner co etween automatic driven tomatic drive positioner co	Tilt & te Connector M48 re positioner contr al her control unit. Re nnector. ID CIRCUIT	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con Ground	Continuity Existed anector and ground. Continuity Not existed Removal and Installation".
CHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 the inspection result r YES >> Replace au NO >> Repair or re CCHECK TELESCOP Turn ignition switch Disconnect automa Check continuity be sensor harness cor	OFF. tic drive positioner co etween automatic driven sitioner control unit Terminal 33 etween automatic driven rive positioner control unit Terminal 33 etween automatic driven itomatic drive positioner eplace harness or cor PIC SENSOR GROUN OFF. tic drive positioner co etween automatic driven tic drive positioner co	Tilt & te Connector M48 re positioner contr al her control unit. Re nnector. ID CIRCUIT	or. rol unit harness co lescopic sensor Terminal 1 ol unit harness con Ground efer to <u>ADP-221, "F</u> or. rol unit harness co	Continuity Existed anector and ground. Continuity Not existed Removal and Installation".

Revision: 2013 March

Refer to GI-42, "Intermittent Incident".

< DTC/CIRCUIT DIAGNOSIS >

>> INSPECTION END

B2126 DETENT SW

< DTC/CIRCUIT DIAGNOSIS >

B2126 DETENT SW

Description

- Detention switch is installed on A/T shift selector. It is turned OFF when the A/T selector lever is in P position.
- The driver seat control unit judges that the A/T selector lever is in P position if continuity does not exist in this circuit.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting	condition	Possible cause
B2126	DETENT SW	Selector lever is in P position of 7±4 km/h is detected.	and the vehicle speed	 Harness and connectors (Detention switch circuit is opened/shorted.) Detention switch Unified meter and A/C amp. (CAN communication)
TC CONFI	IRMATION PROC	EDURE		
.RERFOR	M DTC CONFIRMA	TION PROCEDURE		
2. Check "S <u>Is the DTC de</u> YES >> F			5. "Diagnosis Proce	edure".
Diagnosis	Procedure			INFOID:000000000063
1. снеск d	TC WITH "BCM"			
	0	BCM with CONSULT.		
		B2603, B2604 or B2605 d er to BCS-90, "DTC Index		
NO >> (GO TO 2.		<u> </u>	
	TC WITH "METER/			
Check "Self o s the DTC do	-	METER/M&A with CONS	ULT.	
		er to ADP-143, "DTC Inde	ex".	
NO >> (GO TO 3.		_	
	ETENTION SWITC	H SIGNAL		
2. Select "D		ta Monitor" mode with CO al under the following cond		
ſ	Monitor item	Con	dition	Status
	DETENT SW	selector lever	P position	OFF
			Other than above	ON

<u>Is the status normal?</u> YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK DETENTION SWITCH CIRCUIT

А

В

С

D

INFOID:0000000009063467

B2126 DETENT SW

< DTC/CIRCUIT DIAGNOSIS >

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit and A/T shift selector connector.
- 3. Check continuity between driver seat control unit harness connector and A/T shift selector harness connector.

Driver seat	control unit	A/T shift	selector	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	21	M137	11	Existed

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	21		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

Driver seat control unit performs UART communication with the automatic drive positioner control unit using 2 communication lines, TX and RX line. Driver seat control unit receives the operation signals of tilt & telescopic switch, door mirror remote control switch, set switch and memory switch and the position signals of tilt & telescopic sensor and door mirror sensor from the automatic drive positioner control unit and transmits the operation request signal.

DTC Logic

DTC DETECTION LOGIC

1.RERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Operate tilt & telescopic switch for more than 2 seconds.
- 3. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-57. "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1. 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.

	Continuity	Automatic drive positioner control unit		Driver seat control unit	
M	Continuity	Terminal	Connector	Terminal	Connector
	- Existed	10	M51	1	B451
N	Existed	26		17	6431

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

Driver seat	Driver seat control unit		Continuity	\bigcirc
Connector	Terminal	Ground	Continuity	0
B451	1	Ground	Not existed	
D431	17		NOT EXISTED	Р

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> Repair or replace harness.

А

D

Н

ADP

L

INFOID:000000009063472

INFOID:000000009063470

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT BCM

BCM : Diagnosis Procedure

INFOID:000000009063473

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Signal name	Fuse and fusible link No.	
Pottory power cupply	К	
Battery power supply	10	

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect BCM connectors.
- 3. Check voltage between BCM harness connector and ground.

(·	Voltage		
BC	CM		(Approx.)
Connector	Terminal	- Ground	
M118	1	Giouna	Pottony voltage
M119	11	_	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

B	CM		Continuity
Connector	Terminal	Ground	Continuity
M119	13	1	Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000009063474

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 driver seat control unit harness connector and ground.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit	(-)	Voltage (V) (Approx.)
Connector	Terminal		
B452	33 40	Ground	Battery voltage
e inspection result norma S >> GO TO 2. >> Check the follo • Repair or repla • Circuit breaker CHECK GROUND CIRCL	wing. ce harness between drive	er seat control unit and fuse	e block (J/B).
eck continuity between the	e driver seat control unit h	arness connector and grou	nd.
Driver seat	control unit		
Connector	Terminal	Ground	Continuity
B451	32		Existed
B452	48		
ERFORM ADDITIONAL	SERVICE	· · ·	INFOID:00
PERFORM ADDITIONAL form additional service with >> Refer to <u>ADP-8, : Description".</u> JTOMATIC DRIVE IN JTOMATIC DRIVE P TE: not disconnect the batter	SERVICE nen removing battery neg "ADDITIONAL SERVICE POSITIONER CON OSITIONER CONT	ative terminal.	ERY NEGATIVE TE
<u>: Description"</u> . JTOMATIC DRIVE I JTOMATIC DRIVE P DTE: o not disconnect the batter ned with CONSULT. CHECK POWER SUPPLY Turn ignition switch OFF.	SERVICE nen removing battery neg "ADDITIONAL SERVICE POSITIONER CON OSITIONER CONT by negative terminal and the CIRCUIT	ative terminal. WHEN REMOVING BATTI TROL UNIT ROL UNIT : Diagnosi	ERY NEGATIVE TE
PERFORM ADDITIONAL form additional service with >> Refer to <u>ADP-8</u> , <u>: Description"</u> . ITOMATIC DRIVE IN ITOMATIC DRIVE POWER SUPPLY THECK POWER SUPPLY Turn ignition switch OFF. Check voltage between a	SERVICE nen removing battery neg "ADDITIONAL SERVICE POSITIONER CON OSITIONER CONT by negative terminal and the CIRCUIT	ative terminal. <u>WHEN REMOVING BATTI</u> TROL UNIT ROL UNIT : Diagnosi	ERY NEGATIVE TE
PERFORM ADDITIONAL form additional service with >> Refer to <u>ADP-8</u> , <u>: Description"</u> . TOMATIC DRIVE I TOMATIC DRIVE P TOMATIC DRIVE P	SERVICE nen removing battery neg "ADDITIONAL SERVICE POSITIONER CON OSITIONER CONT by negative terminal and the CIRCUIT	ative terminal. WHEN REMOVING BATTI TROL UNIT ROL UNIT : Diagnosi the driver seat control unit control unit harness conne	ERY NEGATIVE TE
PERFORM ADDITIONAL form additional service with >> Refer to <u>ADP-8</u> , <u>: Description"</u> . TOMATIC DRIVE IN TOMATIC DRIVE P TE: not disconnect the batter led with CONSULT. CHECK POWER SUPPLY Turn ignition switch OFF. Check voltage between a	SERVICE nen removing battery neg "ADDITIONAL SERVICE POSITIONER CON OSITIONER CONT by negative terminal and the CIRCUIT	ative terminal. WHEN REMOVING BATTI TROL UNIT ROL UNIT : Diagnosi	ERY NEGATIVE TE

2. CHECK GROUND CIRCUIT

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity	
Connector	Connector Terminal		Continuity	
M52	40	Ground	Existed	
	48		Existed	

Is the inspection result normal?

YES >> Automatic drive positioner control unit power supply and ground circuit are OK.

NO >> Repair or replace harness between automatic drive positioner control unit and ground.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:000000009063477

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

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

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Description

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

1.CHECK FUNCTION

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

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

- YES >> INSPECTION END
- NO >> Perform diagnosis procedure. Refer to <u>ADP-61. "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK SLIDING SWITCH SIGNAL

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

(+)			Voltage (V/)	
Power seat switch		(—)	Voltage (V) (Approx.)	K
Connector	Terminal			
B459	11	Ground	Pottony voltago	
B439	26	Ground	Battery voltage	L

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.
- Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat	t control unit	Power seat switch		Continuity	•
Connector	Terminal	Connector	Terminal	Continuity	Р
B451	11	B459	11	Existed	-
D431	26	B439	26	Existed	

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

А

D

Н

ADP

Μ

Ν

INFOID:0000000009063478

INFOID:000000009063479

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	11	Giouna	Not existed
6431	26		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3. CHECK SLIDING SWITCH

Refer to ADP-62, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-224</u>, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK SLIDING SWITCH

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Check continuity between power seat switch terminals.

Power seat switch		Condition		Continuity	
 Terr	minal	Condition		Continuity	
	11 Sliding switch (backward	Sliding switch (backward)	Operate	Existed	
32		Silding Switch (Dackward)	Release	Not existed	
52	26	Sliding switch (forward)	Operate	Existed	
	20		Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SWITCH

Description

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

1.CHECK FUNCTION

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

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

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-63, "Diagnosis Procedure"</u>.

Diagnosis Procedure

- 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.

(+)				
Power seat switch		()	Voltage (V) (Approx.)	K
Connector	Terminal		(* 111)	
B459	12	Ground	Battery voltage	
	27	Ground	Dattery Voltage	L

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.
- Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat control unit		Power seat switch		control unit Power		Continuity	
 Connector	Terminal	Connector	Terminal	Continuity	Р		
 B451	12	B459	12	Existed			
B431	27	B439	27	Existed			

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

А

D

INFOID:0000000009063482

INFOID:000000009063483

INFOID:000000009063484

Η

ADP

Μ

Ν

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	12	Ground	Not existed
6431	27		NOT EXISTEN

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3.CHECK RECLINING SWITCH

Refer to ADP-64, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-224</u>, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK RECLINING SWITCH

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Check continuity between power seat switch terminals.

Power seat switch		Condition		Continuity
 Terr	ninal	Condit		Continuity
	12	Reclining switch (backward)	Operate	Existed
32	12		Release	Not existed
52	27	Paolining switch (forward)	Operate	Existed
	21	Reclining switch (forward)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Description

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

1.CHECK FUNCTION

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

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

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-65, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK LIFTING 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.

	(+)			-
Power	seat switch	()	Voltage (V) (Approx.)	K
Connector	Terminal		(********)	
B459	13	Ground	Battery voltage	
6439	28	Giouna	Dattery Voltage	

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.
- Check continuity between driver seat control unit harness connector and power seat switch harness connector.

Driver seat	t control unit	Power seat switch		Continuity	•
 Connector	Terminal	Connector	Terminal	Continuity	Р
 B451	13	B459 13 28	13	- Existed	-
D431	28		28	Existed	

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

А

D

INFOID:0000000009063486

INFOID-000000009063487

INFOID:000000009063488

Н

ADP

Μ

Ν

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	13	Ground	Not existed
	28	-	Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (FRONT)

Refer to ADP-66, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-224. "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK LIFTING SWITCH (FRONT)

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

Power se	Power seat switch		Condition	
Terr	minal	Condi		Continuity
	13	Lifting switch front (down)	Operate	Existed
32		Lining Switch Hone (down)	Release	Not existed
52	28	Lifting switch front (up)	Operate	Existed
			Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Description

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

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 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. 3.

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

ls

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

Diagnosis Procedure

- 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)	
Powers	seat switch	(-)	Voltage (V) (Approx.)	K
Connector	Terminal			
B459	14	Ground	Battony voltago	
	29		Battery voltage	L

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 sear switch		Continuity	
 Connector	Terminal	Connector	Terminal	Continuity	Ρ
 B451	14	B459	14	- Existed	
0401	29	6439	29	LAISIEU	

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

D

Н

ADP

Μ

Ν

INFOID:000000009063490

INFOID-000000009063491

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	14	Ground	Not existed
B451	29	-	NOI EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3.CHECK LIFTING SWITCH (REAR)

Refer to ADP-68. "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK LIFTING SWITCH (REAR)

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

Power s	Power seat switch		Condition	
Ter	minal	Condi		Continuity
	14	Lifting switch rear (up)	Operate	Existed
32	14 L		Release	Not existed
32 —	29	Lifting switch rear (down)	Operate	Existed
	29		Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-224, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS >

TILT SWITCH

Description

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

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- Select "TILT SW-UP", "TILT SW-DN" in "Data monitor" mode with CONSULT. 2.
- Check tilt switch signal under the following conditions. 3.

Monitor item	Cond	lition	Status	E
		Operate	ON	
TILT SW-UP	Tilt switch (up)	Release	OFF	
TILT SW-DN		Operate	ON	F
TILT SW-DN	Tilt switch (down)	Release	OFF	
the indication normal? ES >> INSPECTION EN IO >> Perform diagnosi	ID s procedure. Refer to <u>ADP-69, "E</u>	Diagnosis Procedure".		(
agnosis Procedure			INEC/ID-00000000053406	ł

Diagnosis Procedure

1.CHECK TILT SWITCH SIGNAL

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

	(+)				
Tilt & teles	copic switch	()	Voltage (V) (Approx.)	K	
Connector	Terminal		(, +		
M31	4	Ground	Cround Potton veltage	Battony voltago	1
	5		Battery voltage	L	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK TILT SWITCH CIRCUIT

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

Automatic drive po	ositioner control unit	Tilt & telescopic switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	Р
M51	1	M31	4	Existed	
	17	IVIS I	5	LXISIEU	

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

D

INFOID:000000009063494

INEOID-0000000009063495

ADP

Μ

Ν

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M51	1	Ground	Not existed	
	17		NUL EXISIEU	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3. CHECK TILT SWITCH

Refer to ADP-70, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-225</u>, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK TILT SWITCH

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

Tilt & teles	Tilt & telescopic switch		Condition		
Terminal		Condition		Continuity	
	4 Tilt switch	Tilt owitch (up)	Operate	Existed	
1		The switch (up)	Release	Not existed	
I	5	Tilt owitch (down)	Operate	Existed	
	5	Tilt switch (down)	Release	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-225, "Removal and Installation"</u>.

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Description

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

1.CHECK FUNCTION

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

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

NO >> Perform diagnosis procedure. Refer to <u>ADP-71, "Diagnosis Procedure"</u>.

Diagnosis Procedure

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.)	K
Tilt & telescopic switch				
Connector	Terminal		()	
M31	2	Ground	Battery voltage	1
IVIS I	3	Ground	Dattery voltage	

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.

	Continuity	Tilt & telescopic switch		sitioner control unit	Automatic drive po
P	Continuity	Terminal	Connector	Terminal	Connector
	Existed	2	M31	11	M51
	Existed	3		27	

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

А

D

Н

ADP

Μ

Ν

INFOID:0000000009063498

INEOID-0000000009063499

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Conditionty	
M51	11	Ground	Not existed	
	27	-	NOT EXISTED	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

3.CHECK TELESCOPIC SWITCH

Refer to ADP-72, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-225, "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK TELESCOPIC SWITCH

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

Tilt & telescopic switch		Condition		Continuity
	2	Telescopic switch (forward)	Operate	Existed
1	-		Release	Not existed
•	3 Telescopic switch (backwar	Telescopic switch (backward)	Operate	Existed
	5	Telescopic Switch (Dackwalu)	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-225</u>, "Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Description

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

Component Function Check

1.CHECK FUNCTION

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

				E
Monitor item	Con	dition	Status	_
SET SW	SET SW	Push	ON	
SETSW	SETSW	Release	OFF	F
MEMORY SW 1	Momony quitch 1	Push	ON	
MEMORT SW 1	Memory switch 1	Release	OFF	G
MEMORY SW 2	Momony quitch 2	Push	ON	G
	Memory switch 2	Release	OFF	-

Is the indication normal?

- YES >> INSPECTION END
- NO >> Perform diagnosis procedure. Refer to <u>ADP-73, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009063504

ADP

Κ

Ρ

Н

- 1. Turn ignition switch OFF.
- 2. Disconnect seat memory switch connector.

1.CHECK SEAT MEMORY SWITCH SIGNAL

- 3. Turn ignition switch ON.
- 4. Check voltage between seat memory switch harness connector and ground.

	(+)		Voltage (V) (Approx.)	
Seat memory switch		(-)		
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	3			M
D5	1	Ground	5	
	2			
Is the inspection result norm	al?			Ν
YES >> GO TO 3.				

NO >> GO TO 2.

2.check memory 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 seat memory switch harness connector.

А

C

D

INFOID:000000009063502

INFOID:000000009063503

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	ositioner control unit	Seat men	nory switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	24		3	
M51	9	D5	1	Existed
	25		2	1

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

Automatic drive po	sitioner control unit		Continuity	
Connector	Terminal		Continuity	
	24	Ground		
M51	9		Not existed	
	25			

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>. NO >> Repair or replace harness or connector.

3. CHECK MEMORY SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between seat memory switch harness connector and ground.

Seat men	nory switch		Continuity
Connector	Terminal	Ground	Continuity
D5	4		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK SEAT MEMORY SWITCH

Refer to ADP-74, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat memory switch. Refer to <u>ADP-223, "Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.

2. Disconnect seat memory switch connector.

3. Check continuity between seat memory switch terminals.

INFOID:000000009063505

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Seat memory switch			Condition	
Ter	minal		- Condition	
	3	Set switch	Push	Existed
	5	Set Switch	Release	Not existed
4	1	Momony owitch 1	Push	Existed
4	I	1 Memory switch 1 Release	Release	Not existed
		Mamany awitch 2	Push	Existed
	2	Memory switch 2	Release	Not existed

Is the inspection result normal?

YES >> INSPECTION END

>> Replace seat memory switch. Refer to ADP-223, "Removal and Installation". NO

ADP

Κ

L

Μ

Ν

Ο

Ρ

Н

Е

F

G

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

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

1.CHECK CHANGEOVER SWITCH FUNCTION

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

Refer to ADP-41, "CONSULT Function".

Is the inspection result normal?

YES >> Changeover switch function is OK.

NO >> Refer to <u>ADP-76</u>, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

1.CHECK CHANGEOVER SWITCH SIGNAL

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

(+) Automatic drive positioner control unit		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				(, , , , , , , , , , , , , , , , , , ,
	2	Ground	Change over switch	RIGHT	0
M51	M51			Other than above	5
I CIVI				LEFT	0
	10			Other than above	5

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit and door mirror remote control switch connector.

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

Automatic drive po	Automatic drive positioner control unit Door mirror remote control switch			
Connector	Terminal	Connector	Terminal	Continuity
M51	2	D17	11	Existed
I CIVI	18		10	

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
 M51	2	Ground	Not existed
	18		NOT EXISTED

Is the inspection result normal?

INFOID:0000000009063506

INFOID:000000009063507

INFOID:0000000009063508

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or re 3.CHECK DOOR MIR	eplace harness. ROR REMOTE CON	TROL SWITCH GRO	OUND CIRCUIT	
Check continuity betwe				
Door mirro	or remote control switch			Continuity
Connector	Termin	al	Ground	Continuity
D17	7			Existed
Is the inspection result YES >> GO TO 4. NO >> Repair or re 4.CHECK AUTOMATION	eplace harness.	ER CONTROL UNIT	OUTPUT SIGNAL	
Turn ignition switch	drive positioner cont ON. veen automatic drive		it connector and gro	bund.
	(+)			Voltage (V)
	rive positioner control unit		(-)	(Approx.)
Connector	Termin	al		
M51	2		Ground	5
Check changeover swit Refer to <u>ADP-77, "CHA</u> Is the inspection result	NGEOVER SWITCH	: Component Inspe	ction".	
YES >> Refer to <u>GI</u> NO >> Replace do	-42, "Intermittent Inci		MIR-123, "Removal	and Installation".
6.CHECK INTERMITT	ENT INCIDENT			
Check intermittent incid Refer to <u>GI-42, "Intermi</u> Is the inspection result	ttent Incident".			
YES >> Replace au			r to <u>ADP-222, "Rem</u>	oval and Installation".
CHANGEOVER S	WITCH : Compo	nent Inspection		INFOID:000000009063509
1.CHECK CHANGEO	VER SWITCH			
Check door mirror remo	ote control switch.			
Door mirror remo	ote control switch			
Terr	ninal	Со	ndition	Continuity
			LEFT	Existed
10	7	Change over switch	Other than above	Not existed
11	7	Change over switch	RIGHT	Existed
11			Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace door mirror remote control switch. Refer to <u>MIR-123, "Removal and Installation"</u>. MIRROR SWITCH

MIRROR SWITCH : Description

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

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.

Refer to <u>ADP-41, "CONSULT Function"</u>.

Is the inspection result normal?

YES >> Mirror switch function is OK.

NO >> Refer to <u>ADP-78, "MIRROR SWITCH : Diagnosis Procedure"</u>.

MIRROR SWITCH : Diagnosis Procedure

INFOID:000000009063512

1.CHECK MIRROR SWITCH FUNCTION

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

	(+) Automatic drive positioner control unit		Condition		Voltage (V) (Approx.)
Connector	Terminal				
	2			UP	0
	3	Ground	Mirror switch	Other than above	5
				LEFT	0
NE 1	4			Other than above	5
I CIVI	M51 19			DOWN	0
				Other than above	5
	20	†		RIGHT	0
	20			Other than above	5

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.check harness continuity

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit and door mirror remote control switch connector.

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

Automatic drive po	ositioner control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3		15	
M51	4	D17 –	13	Existed
WIG I	19		12	LXISIEU
	20		4	+

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

INFOID:000000009063510

INFOID:000000009063511

< DTC/CIRCUIT DIAGNOSIS >

	sitioner control unit	4	Continuity	
Connector	Terminal			
	3	Ground		
M51	4		Not existed	
	19			
	20			
the inspection result norm	<u>al?</u>			
'ES >> GO TO 3. IO >> Repair or replace	e harness			
CHECK DOOR MIRROR				
		witch connector and ground		
leck continuity between ac		witch connector and ground		
Door mirror reme	ote control switch		Continuity	
Connector	Terminal	Ground	Continuity	
D17	7		Existed	
the inspection result norm	<u>al?</u>			
'ES >> GO TO 4. IO >> Repair or replace	o hornoco			
		ROL UNIT OUTPUT SIGNA	I	
Connect automatic drive Turn ignition switch ON.	positioner control unit cor	nnector.		
Check voltage between		and the local the stand strength of		
	automatic drive positioner	control unit and dround.		
	automatic drive positioner	control unit and ground.		
(1	+)		Voltage (V/)	
(1		(-)	Voltage (V) (Approx.)	
(1	+)			
(· Automatic drive po	+) sitioner control unit			
(· Automatic drive po	+) sitioner control unit Terminal			
Automatic drive po	+) esitioner control unit Terminal 3	(-)	(Approx.)	
Automatic drive po	+) isitioner control unit Terminal 3 4	(-)	(Approx.)	
Automatic drive po Connector M51 the inspection result norma	+) Institioner control unit Terminal 3 4 19 20	(-)	(Approx.)	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5.	+) ositioner control unit Terminal 3 4 19 20 al?	(-) Ground	(Approx.)	
Automatic drive po Connector M51 <u>the inspection result norma</u> (ES >> GO TO 5. NO >> Replace automa	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control	(-)	(Approx.)	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5. NO >> Replace automa CHECK MIRROR SWITC	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control	(-) Ground	(Approx.)	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5. NO >> Replace automa CHECK MIRROR SWITC neck mirror switch	+) Institioner control unit Terminal 3 4 19 20 al? tic drive positioner control H	Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.)	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5. NO >> Replace automa CHECK MIRROR SWITC neck mirror switch efer to ADP-80, "MIRROR	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Ins	Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.)	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5. NO >> Replace automa CHECK MIRROR SWITC Deck mirror switch efer to <u>ADP-80, "MIRROR</u> the inspection result norma	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Ins al?	Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.)	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5. NO >> Replace automa CHECK MIRROR SWITC Deck mirror switch efer to ADP-80, "MIRROR the inspection result norma (ES >> Refer to GI-42, "	+) Institioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Instal? Intermittent Incident".	Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.) 5	
Automatic drive po Connector M51 the inspection result norma (ES >> GO TO 5. NO >> Replace automa CHECK MIRROR SWITC Deck mirror switch efer to ADP-80, "MIRROR the inspection result norma (ES >> Refer to GI-42, "	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Ins al? Intermittent Incident". irror remote control switch	(-) Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.) 5	
Automatic drive po Connector M51 the inspection result normatic (ES >> GO TO 5. IO >> Replace automatic CHECK MIRROR SWITC heck mirror switch effer to <u>ADP-80</u> , "MIRROR the inspection result normatic (ES >> Refer to <u>GI-42,</u> " IO >> Replace door mit CHECK INTERMITTENT	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Ins al? Intermittent Incident". irror remote control switch	(-) Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.) 5	
Automatic drive po Connector M51 the inspection result normation (ES >> GO TO 5. IO >> Replace automation CHECK MIRROR SWITC Deck mirror switch effer to <u>ADP-80, "MIRROR</u> the inspection result normation (ES >> Refer to <u>GI-42, "</u> IO >> Replace door mit	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Ins al? Intermittent Incident". irror remote control switch INCIDENT	(-) Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.) 5	
Automatic drive po Connector M51 the inspection result normation (ES >> GO TO 5. IO >> Replace automation CHECK MIRROR SWITC Deck mirror switch effer to <u>ADP-80</u> , "MIRROR the inspection result normation (ES >> Refer to <u>GI-42</u> , " IO >> Replace door mit CHECK INTERMITTENT Deck intermittent incident.	+) sitioner control unit Terminal 3 4 19 20 al? tic drive positioner control H SWITCH : Component Ins al? Intermittent Incident". rror remote control switch INCIDENT Incident".	(-) Ground unit. Refer to <u>ADP-222, "Re</u>	(Approx.) 5	

< DTC/CIRCUIT DIAGNOSIS >

MIRROR SWITCH : Component Inspection

INFOID:000000009063513

1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

Door mirror remote control switch		Condition		Continuity
Terr	Terminal		Condition	
4			RIGHT	Existed
4			Other than above	Not existed
40			LEFT	Existed
13	7	Minnen erritele	Other than above	Not existed
45		Mirror switch	UP	Existed
15			Other than above	Not existed
10			DOWN	Existed
12			Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to <u>MIR-123, "Removal and Installation"</u>.

POWER SEAT SWITCH GROUND CIRCUIT

<pre> < DTC/CIRCUIT DIAGNOSI</pre>			11
POWER SEAT SWI		RCUIT	
Diagnosis Procedure			INFOID:000000009063514
1.CHECK POWER SEAT S	WITCH GROUND CIRCU	ΙТ	
 Turn ignition switch OFF. Disconnect power seat s Check continuity between 		ector and ground.	
Power se	at switch	_	Continuity
Connector	Terminal	Ground	
B459	32		Existed
Is the inspection result normalYES>> Check intermitterNO>> Repair or replace	nt incident. Refer to GI-42	e, "Intermittent Incident".	
			_
			Ĥ

N

0

Р

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000009063515

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 & teles	copic switch		Continuity
Connector	Terminal	Ground	Continuity
M31	1		Existed

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
- NO >> Repair or replace harness.

DETENTION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

DETENTION SWITCH

Description

Detention switch is installed on A/T shift selector. It is turned OFF when the Selector lever is in P position. The В driver seat control unit judges that the Selector lever is in P position if continuity does not exist in this circuit.

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- Select "DETENT SW" signal in "Data monitor" mode with CONSULT. 2.
- Check detention switch signal under the following conditions. 3.

Monitor iter	Monitor item			Status	
				P position	OFF
DETENT SW	Selector	lever	Other than above	ON	
the indication normal	?				
YES >> INSPECTION >> Perform dia	•••	efer to <u>ADP-83, "Diagno</u>	sis Procedure".		
Diagnosis Proced	ure			INFOID:000000009063	
Check "Self Diagnostic					
	<u>1, B2602, B2603, B2</u> DTC. Refer to <u>BCS-9</u>	604 or B2605 detected?			
NO $>>$ GO TO 2.	DTC. Relef to <u>BC3-9</u>	<u>io, DTC index</u> .			
2. CHECK DETENTIO	N SWITCH INPUT SI	IGNAL			
2. Disconnect A/T shi	ft selector harness co	onnector.			
 Disconnect A/T shi Turn ignition switch 	ft selector harness co ON. veen A/T shift selecto	onnector. or harness connector and	d ground.		
 Disconnect A/T shi Turn ignition switch Check voltage bety 	ft selector harness co o ON. veen A/T shift selecto (+)	or harness connector and		Voltage (V)	
 Disconnect A/T shi Turn ignition switch Check voltage betw 	ft selector harness co o ON. veen A/T shift selecto (+) /T shift selector	or harness connector and		Voltage (V) (Approx.)	
 Disconnect A/T shi Turn ignition switch Check voltage bety 	ft selector harness co o ON. veen A/T shift selecto (+)	or harness connector and	-)		
2. Disconnect A/T shi 3. Turn ignition switch 4. Check voltage betw A Connector M137 S the inspection result YES >> GO TO 4. NO >> GO TO 3.	ft selector harness co o ON. veen A/T shift selecto (+) /T shift selector Termin 11 normal?	or harness connector and (- al	-)	(Approx.)	
2. Disconnect A/T shi 3. Turn ignition switch 4. Check voltage betw Connector M137 s the inspection result YES >> GO TO 4. NO >> GO TO 3. 3.CHECK DETENTIO	ft selector harness co o ON. veen A/T shift selecto (+) /T shift selector 11 normal? N SWITCH CIRCUIT	or harness connector and (- al	-)	(Approx.)	
 Disconnect A/T shi Turn ignition switch Check voltage betw Connector M137 the inspection result YES >> GO TO 4. NO >> GO TO 3. CHECK DETENTIO Turn ignition switch Disconnect driver set 	ft selector harness co o ON. veen A/T shift selecto (+) /T shift selector 11 normal? N SWITCH CIRCUIT o OFF. seat control unit.	or harness connector and (- al	-) und	(Approx.) Battery voltage	
2. Disconnect A/T shi 3. Turn ignition switch 4. Check voltage betw A Connector M137 S the inspection result YES >> GO TO 4. NO >> GO TO 3. 3. CHECK DETENTIO 1. Turn ignition switch 2. Disconnect driver s 3. Check continuity b nector.	ft selector harness co o ON. veen A/T shift selecto (+) /T shift selector 11 normal? N SWITCH CIRCUIT o OFF. seat control unit.	or harness connector and 	ector and A/T shi	(Approx.) Battery voltage	

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

21

B451

ADP-83

M137

11

Existed

А

INFOID:000000009063516

INFOID:000000009063517

С

D

DETENTION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

-	Driver s	eat control unit				
-	Connector	Termir	nal	Ground	Ground	Continuity
	B451	21		-		Not existed
ls t	ne inspection result nor	mal?				
YE No	O >> Repair or replace	r seat control unit ace harness or co) <u>P-221, "</u> F	Removal and Ins	<u>tallation"</u> .
4.	CHECK DETENTION S	SWITCH				
Ref	er to ADP-84, "Compo	nent Inspection".				
ls t	ne inspection result nor	mal?				
YE Ng	ES >> GO TO 5. D >> Replace A/T s	shift selector. Refe	er to <u>TM-183</u>	, "Remov	al and Installatio	<u>n"</u> .
5.	CHECK INTERMITTEN	NT INCIDENT				
Ref	er to <u>GI-42, "Intermitter</u>	nt Incident".				
	>> INSPECTION	END				
Co	mponent Inspection	on				INFOID:0000000090635
1.	CHECK DETENTION S	SWITCH				
1. 2. 3.	Turn ignition switch O Disconnect A/T shift s Check A/T shift select	elector connector.				
-	A/T shift se	lector				
	Termina	al	-	Con	dition	Continuity
_	10	11	Selector leve	or	P position	Existed
	10	11		- I		

Other than above

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector. Refer to <u>TM-183, "Removal and Installation"</u>.

Not existed

FRONT DOOR SWITCH (DRIVER SIDE)

<pre>< DTC/CIRCUIT DIAGNC FRONT DOOR SW</pre>		/FR SI)E)				
Description))			INFOID:000000009063520	А
	ida) anan/alasa a	ondition				INFOID:00000009063520	
Detects front door (driver s Component Function		onation.					В
	CHECK					INFOID:000000009063521	
1. CHECK FUNCTION							С
 Turn ignition switch ON Select "DOOR SW-DR Check the front door s 	" in "Data monitor				itions.		D
Monitor item			Condition			Status	
DOOR SW-DR	Front door		Open			ON	E
	(driver side))	Close)		OFF	
Is the inspection result nor YES >> INSPECTION NO >> Perform diagn	END	efer to <u>AD</u>	P-85, "Diag	gnosis Proc	edure".		F
Diagnosis Procedure						INFOID:000000009063522	G
1.CHECK FRONT DOOR	SWITCH (DRIVE	R SIDE) S	SIGNAL				
 Turn ignition switch OF Disconnect front door Check signal between 	F. switch (driver side	e) connecto	or.	or and grou	nd with os	scilloscope.	Н
(.)						
(+)						I
Front door swi	ch (driver side)		()			Voltage (V) (Approx.)	
			(–)				ADP
Front door swi	ch (driver side)		(–) Grour	nd			ADP K
Front door swi Connector B16 Is the inspection result nor	ch (driver side) Terminal 2			nd		(Approx.)	
Front door swi Connector B16 Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK FRONT DOOR	ch (driver side) Terminal 2 <u>mal?</u> SWITCH (DRIVE	ER SIDE) C	Grour	nd		(Approx.)	K
Front door swi Connector B16 <u>Is the inspection result nor</u> YES >> GO TO 3. NO >> GO TO 2.	ch (driver side) Terminal 2 <u>nal?</u> SWITCH (DRIVE		Grour			(Approx.)	K L M
Front door swi Connector B16 Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK FRONT DOOR 1. Disconnect BCM conn 2. Check continuity betwo	ch (driver side) Terminal 2 <u>mal?</u> SWITCH (DRIVE ector. een BCM connect	or and fror	Grour CIRCUIT ht door swi	tch (driver sid	side) conn	(Approx.)	K L M
Front door swi Connector B16 Is the inspection result normalized by the inspecting dynamic normalized by the inspection resul	ch (driver side) Terminal 2 <u>mal?</u> SWITCH (DRIVE ector. een BCM connect Terminal	or and fror F Conr	Grour CIRCUIT Int door swi ront door swi	tch (driver s tch (driver sid	side) conn	(Approx.)	K L M
Front door swi Connector B16 Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK FRONT DOOR 1. Disconnect BCM conn 2. Check continuity betwo BCM Connector M123	ch (driver side) Terminal 2 <u>mal?</u> SWITCH (DRIVE ector. een BCM connect Terminal 150	or and fror F Conr B	Grour CIRCUIT Int door swi ront door swi nector 16	tch (driver sid	side) conn	(Approx.)	K L M N
Front door swi Connector B16 Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK FRONT DOOR 1. Disconnect BCM conn 2. Check continuity between BCM Connector M123 3. Check continuity between	ch (driver side) Terminal 2 <u>nal?</u> SWITCH (DRIVE ector. een BCM connect Terminal 150 een BCM connect	or and fror F Conr B	Grour CIRCUIT Int door swi ront door swi nector 16	tch (driver s tch (driver sid	side) conn	(Approx.)	K L M N
Front door swi Connector B16 Is the inspection result norm YES >> GO TO 3. NO >> GO TO 2. 2.CHECK FRONT DOOR 1. Disconnect BCM conn 2. Check continuity between BCM Connector M123 3. Check continuity between	ch (driver side) Terminal 2 <u>mal?</u> SWITCH (DRIVE ector. een BCM connect Terminal 150	or and fror F Conr B or and gro	Grour CIRCUIT Int door swi ront door swi nector 16 und.	tch (driver s tch (driver sid	side) conn	(Approx.)	K L M N

FRONT DOOR SWITCH (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96, "Exploded View"</u>.

NO >> Repair or replace harness or connector.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Refer to ADP-86, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace front door switch (driver side). Refer to <u>DLK-270. "Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:000000009063523

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.

Front door swi	Front door switch (driver side)		Condition		
Ter	minal	Condition		Continuity	
2	Ground part of door	Front door switch	Pushed	Not existed	
Z	switch	(driver side)	Released	Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace front door switch (driver side). Refer to <u>DLK-270, "Removal and Installation"</u>.

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS > SLIDING SENSOR

SLIDING SEN	SUK					А
Description					INFOID:000000009063524	
 The sliding sensor The pulse signal is The driver seat co 	s inputted to t	he driver seat	control unit whe	en sliding is per		В
Component Fu	nction Che	eck			INFOID:000000009063525	С
1.CHECK FUNCTI	ON					
 Turn ignition sw Select "SLIDE F Check sliding set 	PULSE" in "Da					D
Monitor item		Con	dition		Valve	E
		0	perate (forward)		Change (increase) ^{*1}	
SLIDE PULSE	Seat slid	ing O	perate (backward)		Change (decrease) ^{*1}	F
		R	elease		No change ^{*1}	
NO >> Perform Diagnosis Proc 1.CHECK SLIDING 1. Turn ignition sw	mal? CTION END diagnosis pr edure SENSOR S itch ON.	ocedure. Refe	er to <u>ADP-87, "D</u>	iagnosis Proce		G H I ADP
Driver seat co	ntrol unit	(-)	Co	ndition	Voltage (V)	К
Connector	Terminal				(Approx.)	IX.
B451	24	Ground	Seat sliding	Operate	10mSec/div TomSec/div	L M
				Other than above	0 or 5	IN
NO >> GO TO 2.CHECK SLIDING 1. Turn ignition sw 2. Disconnect drive	e driver seat o 2. 3 SENSOR C itch OFF. er seat contro	IRCUIT		ector.	Installation".	O

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Sliding sensor		
Connector	Terminal	Connector	Terminal	Continuity	
B451	24	B453	24	Existed	

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	24		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

${\it 3.}$ Check sliding sensor power supply

- 1. Connect driver seat control unit connector.
- 2. Turn ignition switch ON.

3. Check voltage between sliding sensor harness connector and ground.

(+) Sliding sensor		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
B453	16	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.
- Check continuity between driver seat control unit harness connector and sliding sensor harness connector.

Driver seat	Driver seat control unit		Sliding sensor		
Connector	Terminal	Connector Terminal		Continuity	
B451	16	B453	16	Existed	

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

Driver seat	control unit		Continuity
Connector	Connector Terminal		Continuity
B451	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5. CHECK SLIDING SENSOR GROUND

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

Check continuity between driver seat control unit harness connector and sliding sensor harness connector.

Driver seat	Driver seat control unit		Sliding sensor		
Connector	Terminal	Connector Terminal		Continuity	
B451	31	B453	31	Existed	

SLIDING SENSOR

< DTC/	/CIRCUIT DIAGNOSIS >	
Is the in	inspection result normal?	
YES NO	>> Replace sliding sensor. >> Repair or replace harness or connector.	A
		В
		С
		D
		Е
		F

ADP

Κ

L

M

Ν

0

Ρ

G

Н

I

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Description

• 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

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "RECLN PULSE" in "Data monitor" mode with CONSULT.
- 3. Check reclining sensor signal under the following conditions.

Monitor item	Condition		Value
		Operate (forward)	Change (increase) ^{*1}
RECLN PULSE	Seat reclining	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 <u>ADP-90. "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009063529

1.CHECK RECLINING SENSOR SIGNAL

1. Turn ignition switch ON.

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

(+) Driver seat control unit				dition	Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B451	9	Ground	Seat reclining	Operate Other than above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

2. CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit and reclining motor connector.
- Check continuity between driver seat control unit harness connector and reclining motor harness connector.

INFOID:000000009063527

INEOID:000000009063528

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Connector	Terminal	Connector	Terminal	Continuity
B451	9	B454	9	Existed
Check continuity be	etween driver seat co	ntrol unit harness co	nnector and ground	ł.
Drive	er seat control unit			Continuity
Connector	Termina	al	Ground	Continuity
B451	B451 9 spection result normal?			Not existed
ES >> GO TO 3. D >> Repair or re CHECK RECLINING Connect driver sea Turn ignition switch	eplace harness or co SENSOR POWER S t control unit connect	SUPPLY or.	nd ground.	
	(+)			
	Reclining motor		()	Voltage (V) (Approx.)
Connector	Termina	al	2	
B454 the inspection result i	16		Ground	Battery voltage
Turn ignition switch	OFF.			
Turn ignition switch Disconnect driver s		ector.	nnector and reclinir	ng motor harness o
Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit conne	ector. ntrol unit harness co	nnector and reclinir	
Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit connective etween driver seat co	ector. ntrol unit harness co		ng motor harness c
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat	OFF. eat control unit conne etween driver seat co control unit	ector. ntrol unit harness co Reclini	ng motor	
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451	OFF. eat control unit connective etween driver seat co control unit Terminal	ector. ntrol unit harness co Reclini Connector B454	ng motor Terminal 16	Continuity Existed
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be	OFF. eat control unit connective etween driver seat co control unit Terminal 16	ector. ntrol unit harness co Reclini Connector B454	ng motor Terminal 16	Continuity Existed
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be	OFF. eat control unit connective etween driver seat co control unit Terminal 16 etween driver seat co	ector. ntrol unit harness co Reclini Connector B454 ntrol unit harness co	ng motor Terminal 16	Continuity Existed
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Drive	OFF. eat control unit connective etween driver seat co control unit Terminal 16 etween driver seat co er seat control unit	ector. ntrol unit harness co Reclini Connector B454 ntrol unit harness co	ng motor Terminal 16 nnector and ground	Continuity Existed
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Connector B451 the inspection result in ES >> Replace dri O >> Repair or result of the continuity be	OFF. eat control unit connective etween driver seat control unit Terminal 16 etween driver seat control unit rermina 16 etween driver seat control unit. 16 iver seat control unit. eplace harness or control unit.	ector. ntrol unit harness co Reclini Connector B454 ntrol unit harness co al Refer to <u>ADP-221, "</u> nnector.	ng motor Terminal 16 nnector and ground Ground	Continuity Existed I. Continuity Not existed
Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Connector B451 the inspection result of CS >> Replace dri IO >> Repair or re CHECK RECLINING Turn ignition switch Disconnect driver s	OFF. eat control unit connective etween driver seat control unit Terminal 16 etween driver seat control unit rermina 16 etween driver seat control unit. etween control unit. splace harness or control unit.	ector. ntrol unit harness co Reclini Connector B454 ntrol unit harness co al Refer to <u>ADP-221, "</u> nnector.	ng motor Terminal 16 nnector and ground Ground Removal and Instal	Continuity Existed Continuity Not existed Iation".
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Connector B451 the inspection result n (ES >> Replace dri IO >> Repair or re CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit connective etween driver seat control unit Terminal 16 etween driver seat control unit remina 16 etween driver seat control unit 16 etween driver seat control unit. eplace harness or control SENSOR GROUND OFF. eat control unit connective	ector. ntrol unit harness co Reclini Connector B454 ntrol unit harness co al Refer to <u>ADP-221, "</u> nnector. b ector. ntrol unit harness co	ng motor Terminal 16 nnector and ground Ground Removal and Instal	Continuity Existed Continuity Continuity Not existed lation".
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B451 Check continuity be Connector B451 the inspection result n (ES >> Replace dri IO >> Repair or re CHECK RECLINING Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit connective etween driver seat control unit Terminal 16 etween driver seat control unit rermina 16 etween driver seat control unit 16 etween driver seat control unit. eplace harness or control unit. of SENSOR GROUND OFF. eat control unit connective seat control unit seat control unit con	ector. ntrol unit harness co Reclini Connector B454 ntrol unit harness co al Refer to <u>ADP-221, "</u> nnector. b ector. ntrol unit harness co	ng motor Terminal 16 nnector and ground Removal and Instal nnector and reclinir	Continuity Existed Continuity Not existed Iation".

B451

31

B454

31

Existed

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (FRONT)

А Description INFOID:000000009063530 The lifting sensor (front) is installed to the seat slide cushion frame. В 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:000000009063531 **1.**CHECK FUNCTION 1. Turn ignition switch ON. D Select "LIFT FR PULSE" in "Data monitor" mode with CONSULT. 2. Check the lifting sensor (front) signal under the following conditions. 3. Condition Value Monitor item Operate (Up) Change (increase)*1 F LIFT FR PULSE Seat lifting (front) 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 Н >> Perform diagnosis procedure. Refer to ADP-93, "Diagnosis Procedure". NO Diagnosis Procedure INFOID:000000009063532 1.CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+) Driver seat control unit			(–) Condition		
		()			Voltage (V) (Approx.)
Connector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B451	25	Ground	Seat Lifting (front)	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

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.

 Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

ADP

P

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	Driver seat control unit		Lifting motor (front)		
Connector	Terminal	Connector Terminal		Continuity	
B451	25	B455	25	Existed	

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

Driver seat	control unit		Continuity
Connector	Connector Terminal		Continuity
B451	25		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.

(+) Lifting motor (front)		(-)	Voltage (V) (Approx.)	
Connector	Connector Terminal			
B455 16		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		Continuity	
B451	16	B455	16	Existed	

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	16		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

5. CHECK LIFTING SENSOR (FRONT) GROUND

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

Driver seat	t control unit	Lifting motor (front)		Continuity
Connector	Terminal	Connector Terminal		Continuity
B451	31	B455	31	Existed

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >	
Is the inspection result normal?	
YES >> Replace lifting motor (front). NO >> Repair or replace harness.	A
	В
	С
	D
	E
	F
	G
	Н
	I
	ADP
	К

L

Ν

0

Р

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Description

- The lifting sensor (rear) is installed to the seat slide 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

1.CHECK FUNCTION

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

Monitor item	Condition		Value
		Operate (Up)	Change (increase) ^{*1}
LIFT RR PULSE	Seat lifting (rear)	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 <u>ADP-96, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009063535

1.CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.

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

(+)		(-) Condition				
Driver seat	control unit	(-)			Condition Voltage		Voltage (V) (Approx.)
Connector	Terminal				(/ ())		
B451	10	Ground	Seat Lifting (rear)	Operate	10mSec/div		
				Other than above	0 or 5		

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

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.

INFOID:000000009063533

INEOID-000000009063534

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit	Lifting m	Lifting motor (rear)	
Connector	Terminal	Connector	Terminal	Continuity
B451	10	B456	10	Existed
Check the continuit	ty between driver sea	t control unit harnes	s connector and gr	ound.
Drive	er seat control unit			Continuity
Connector	Termina	al	Ground	
B451	10			Not Existed
CHECK LIFTING SE Connect driver sea Turn ignition switch	eplace harness or con ENSOR (REAR) POW t control unit connect o ON. between lifting motor	VER SUPPLY or.	ector and ground.	
	(+)			
	notor (rear)	(-)		Voltage (V) (Approx.)
Connector	Terminal			(, , , , , , , , , , , , , , , , , , ,
B456	16	Grour	nd	Battery voltage
D >> GO TO 4. CHECK LIFTING SE	ENSOR (REAR) POW	/ER SUPPLY CIRCU	TIL	
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s		ector.		ifting motor (rear) ha
D >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector.	OFF.	ector. at control unit harne		
D >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector.	o OFF. seat control unit conne ty between driver sea	ector. at control unit harne	ss connector and I	ifting motor (rear) ha
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector. Driver seat	OFF. seat control unit connective ty between driver sea	ector. at control unit harne Lifting m	ss connector and I	
D >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector. Driver seat Connector B451	OFF. seat control unit connective ty between driver sea control unit Terminal	ector. at control unit harne Lifting m Connector B456	ss connector and I notor (rear) Terminal 16	Continuity Existed
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector. Driver seat Connector B451 Check the continuit	o OFF. seat control unit connecty ty between driver sea control unit Terminal 16	ector. at control unit harne Lifting m Connector B456	ss connector and I notor (rear) Terminal 16	Continuity Existed ound.
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector. Driver seat Connector B451 Check the continuit	a OFF. Seat control unit connecty ty between driver sea control unit Terminal 16 ty between driver sea	ector. at control unit harne Lifting m Connector B456 t control unit harnes	ss connector and I notor (rear) Terminal 16	Continuity Existed
D >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector. Driver seat Connector B451 Check the continuit	a OFF. seat control unit connective ty between driver sea control unit Terminal 16 ty between driver sea er seat control unit	ector. at control unit harne Lifting m Connector B456 t control unit harnes	ss connector and I notor (rear) Terminal 16 s connector and gr	Continuity Existed ound.
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver s Check the continui connector. Driver seat Connector B451 Check the continuit Driver Connector B451 he inspection result ES >> Replace dr O >> Repair or re CHECK LIFTING SE Turn ignition switch Disconnect driver s	a OFF. seat control unit connective ty between driver seat control unit Terminal 16 ty between driver seat er seat control unit 16 normal? iver seat control unit. eplace harness or control ENSOR (REAR) GRC	ector. at control unit harne: Lifting m Connector B456 It control unit harnes al Refer to <u>ADP-221, "</u> nnector. DUND ector.	ss connector and I	Continuity Existed ound. Continuity Not existed Illation".
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver so Check the continuit connector. Driver seat Connector B451 Check the continuit Driver Connector B451 he inspection result ES >> Replace dr O >> Repair or re CHECK LIFTING SE Turn ignition switch Disconnect driver so Check the continuit connector.	OFF. seat control unit connective between driver seat control unit Terminal 16 ty between driver seat er seat control unit Termina 16 ty between driver seat control unit Termina 16 ty between driver seat control unit Termina 16 ty between driver seat control unit Termina 16 Termina Termina 16 Termina 16 Termina Termi	ector. at control unit harne Lifting m Connector B456 It control unit harnes al Refer to <u>ADP-221, "</u> nnector. DUND ector. at control unit harnes	ss connector and I	Continuity Existed ound. Continuity Not existed Illation".
O >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver so Check the continuit connector. Driver seat Connector B451 Check the continuit Driver Connector B451 he inspection result ES >> Replace dr O >> Repair or re CHECK LIFTING SE Turn ignition switch Disconnect driver so Check the continuit connector.	OFF. seat control unit connective between driver seat control unit Terminal 16 ty between driver seat er seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit Terminal 16 ty between driver seat control unit control unit	ector. at control unit harne Lifting m Connector B456 It control unit harnes al Refer to <u>ADP-221, "</u> nnector. DUND ector. at control unit harnes	ss connector and I	Continuity Existed ound. Continuity Not existed Illation".

B451

31

B456

31

Existed

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TILT SENSOR

Deseria							
Descrip	tion						INFOID:000000009063536
The residenceThe terr	istance of tilt minal voltage	of automatic	nged ac drive po	cording to	the up/dow ontrol unit v	vn position of ste will be changed ates the tilt posi	eering column. according to a change of tilt tion from the voltage.
Compoi	nent Fund	ction Check	ζ.				INFOID:000000009063537
1. CHEC	K FUNCTION	N					
2. Selec		h ON. ' in "Data moni sor signal unde					
	Monitor it	em		Condition	1		Value
TILT SE	EN		Tilt posi	tion		1.2	hange between [V] (Close to top) /] (Close to bottom)
Diagnos 1.CHEC	SIS Proced K TILT SENS	dure SOR SIGNAL				gnosis Procedu	INFOID:000000009063538
		-					<u> </u>
	(+)					λ
	omatic drive pos	sitioner control un	t	(-)		Condition	Voltage (V) (Approx.)
		•	it	(-) Ground	Tilt	Condition	
Ca	omatic drive pos	sitioner control un Terminal 7	t		Tilt		(Approx.) Change between 1.2 [V] (Close to top)
Is the insp YES > NO >	omatic drive pos onnector M51 Dection result >> Replace a >> GO TO 2.	sitioner control un Terminal 7 t normal? uutomatic drive		Ground		position	(Approx.) Change between 1.2 [V] (Close to top)
S the insp YES > NO > 2.CHEC 1. Turn i 2. Disco 3. Chec	omatic drive pos onnector M51 Dection result >> Replace a >> GO TO 2. K TILT SENS ignition switc onnect autom	sitioner control un Terminal 7 <u>t normal?</u> utomatic drive SOR CIRCUIT h OFF. atic drive positionetween auton	position	Ground	unit. Refer	position r to <u>ADP-222, "R</u> elescopic sensor	(Approx.) Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom) emoval and Installation".
s the insp YES > NO > 2.CHEC 1. Turn i 2. Disco 3. Chec senso	omatic drive pos onnector M51 >> Replace a >> GO TO 2. K TILT SENS ignition switc onnect autom k continuity b or harness co	sitioner control un Terminal 7 <u>t normal?</u> utomatic drive SOR CIRCUIT h OFF. atic drive positionetween auton	position	Ground	unit. Refer and tilt & te her control	position r to <u>ADP-222, "R</u> elescopic sensor	(Approx.) Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom) emoval and Installation". connector. onnector and tilt & telescopic
s the insp YES > NO > 2.CHECI 1. Turn i 2. Disco 3. Chec senso A	omatic drive pos onnector M51 >> Replace a >> GO TO 2. K TILT SENS ignition switc onnect autom k continuity b or harness co	sitioner control un Terminal 7 t normal? automatic drive SOR CIRCUIT ch OFF. atic drive position between auton onnector.	position ioner co natic dri	Ground ner control ontrol unit a ve position	unit. Refer and tilt & te her control	position r to <u>ADP-222, "R</u> elescopic sensor unit harness co	(Approx.) Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom) emoval and Installation".
s the insp YES > NO > 2.CHECI 1. Turn i 2. Disco 3. Chec senso A C	omatic drive pos onnector M51 >> Replace a >> GO TO 2. K TILT SENS ignition switc onnect autom k continuity b or harness co utomatic drive p Connector M51	sitioner control un Terminal 7 t normal? tutomatic drive SOR CIRCUIT th OFF. batic drive positioner control un positioner control un Termina 7	position ioner co natic dri	Ground ner control ontrol unit a ve position Conn M	unit. Refer and tilt & te her control Tilt & teleso hector 48	position r to <u>ADP-222, "R</u> elescopic sensor unit harness co	(Approx.) Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom) emoval and Installation". connector. onnector and tilt & telescopic Continuity Existed
s the insp YES > NO > 2.CHECI 2. Disco 3. Chec senso A C	omatic drive pos onnector M51 >> Replace a >> GO TO 2. K TILT SENS ignition switc onnect autom k continuity b or harness co utomatic drive p Connector M51	sitioner control un Terminal 7 t normal? tutomatic drive SOR CIRCUIT th OFF. batic drive positioner control un positioner control un Termina 7	position ioner co natic dri	Ground ner control ontrol unit a ve position Conn M	unit. Refer and tilt & te her control Tilt & teleso hector 48	position r to <u>ADP-222, "R</u> elescopic sensor unit harness co	(Approx.) Change between 1.2 [V] (Close to top) 3.4 [V] (Close to bottom) emoval and Installation". emoval and Installation".

M51 Is the inspection result normal? 7

Not existed

TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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 & telescopic sensor harness connector and ground.

	+) copic sensor	()	Voltage (V) (Approx.)
Connector	Terminal		
M48	M48 1		5

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TILT SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect automatic drive positioner control unit connector.
- 3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic sensor harness connector.

Automatic drive po	ositioner control unit	Tilt & telescopic sensor		Continuity
Connector	Terminal	Connector Terminal		Continuity
M52	33	M48	1	Existed

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "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.

 Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic sensor harness connector.

Automatic drive po	ositioner control unit	Tilt & telescopic sensor		Continuity
Connector	Terminal	Connector Terminal		Continuity
M52	41	M48	4	Existed

Is the inspection result normal?

YES >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness or connector.

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SENSOR

Description

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

Component Function Check

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "TELESCO SEN" in "Data monitor" mode with CONSULT.
- 3. Check the tilt sensor signal under the following conditions.

1	Monitor item	Condition	Value	F
	TELESCO SEN	Telescopic position	Change between 0.8 [V] (close to top) 3.4 [V] (close to bottom)	G

Is the indication normal?

YES >> INSPECTION END.

NO >> Perform diagnosis procedure. Refer to <u>ADP-101, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK TELESCOPIC SENSOR SIGNAL

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

	(+) Automatic drive positioner control unit		Condition	Voltage (V) (Approx.)	k
Connector	Terminal			(, , , , , , , , , , , , , , , , , , ,	
M51	23	Ground	Telescopic position	Change between 0.8 [V] (close to top) 3.4 [V] (close to bottom)	L

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>. MO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

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

	Automatic drive positioner control unit		Tilt & teles	copic sensor	Continuity	
-	Connector	Terminal	Connector	Terminal	Continuity	Ρ
_	M51	23	M48	2	Existed	

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

А

D

Е

Н

ADP

Ν

INFOID:000000009063539

INFOID:000000009063540

INFOID:000000009063541

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M51	23		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 automatic drive positioner control unit connector.

2. Turn ignition switch ON.

3. Check voltage between tilt & telescopic sensor harness connector and ground.

	(+) Tilt & telescopic sensor Connector Terminal		Voltage (V) (Approx.)	
M48	2	Ground	5	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

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

Automatic drive po	Automatic drive positioner control unit		Tilt & telescopic sensor	
Connector	Terminal	Connector	Terminal	Continuity
M52	33	M48	1	Existed

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>.
- NO >> Repair or replace harness or connector.

5.CHECK TELESCOPIC SENSOR GROUND CIRCUIT

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

Automatic drive positioner control unit		Tilt & teleso	Tilt & telescopic sensor	
Connector	Terminal	Connector	Terminal	Continuity
M52	41	M48	4	Existed

Is the inspection result normal?

YES >> Replace tilt & telescopic sensor.

NO >> Repair or replace harness.

< DTC/CIRCUIT DIAGNOSIS > MIRROR SENSOR

DRIVER SIDE

DRIVER SIDE : Description

- 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:000000009063542

А

В

Ε

ADP

Κ

D INFOID:000000009063543

INFOID:000000009063544

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 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. 3.

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)	G
MIR/SEN LH R-L	Door mirror (driver side)	Change between 0.6 [V] (close to left edge) 3.4 [V] (close to right edge)	Н

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-103, "DRIVER SIDE : Diagnosis Procedure"</u>.

DRIVER SIDE : Diagnosis Procedure

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

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

	(- Door mirror	⊦) (driver side)	(-)	Voltage (V)	
	Connector	Terminal	_	(Approx.)	M
	D3	23	Ground	5	
<u>Is the</u> YES		al?	· · · · ·		N

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

1. Turn ignition switch OFF.

Disconnect automatic drive positioner control unit connector. 2.

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

Automatic drive positioner control unit connector	Terminal	Door mirror (driver side) connector	Terminal	Continuity
M52	33	D3	23	Existed

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

ADP-103

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M52	33		Not existed

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>. NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit connector.
- 3. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive po	sitioner control unit	Door mirror (driver side)		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M52	41	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 po	Automatic drive positioner control unit		Door mirror (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M51	6	D3	21	Existed
NO I	22	50	22	LAISIEU

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

Automatic drive po	sitioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M51	6	Ground	Not existed	
M51	22	_	NOT EXISTED	

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:000000009063545

INFOID:000000009063546

- 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

1.CHECK FUNCTION

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

ADP-104

< DTC/CIRCUIT DIAGNOSIS >

	m	Condition		Value
MIR/SEN RH U-D	Door m	nirror (passenger side	3.4 0.6	Change between [V] (close to peak) [V] (close to valley)
MIR/SEN RH R-L			3.4 [Change between V] (close to left edge) /] (close to right edge)
the indication normal				
'ES >> INSPECTIO		Refer to ADP-105	. "PASSENGER SI	DE : Diagnosis Procedure"
ASSENGER SID			· · · · · · · · · · · · · · · · · · ·	INFOID:0000000090
	-			## 012.000000000
		SSENGER SIDE)	POWER SUPPLY	
Turn ignition switch Disconnect door mi	OFF.	e) connector.		
Turn ignition switch	ON.	,		
Check voltage betw	veen door mirror (pa	ssenger side) hai	rness connector and	d ground.
	(+)			
Door mi	rror (passenger side)		()	Voltage (V) (Approx.)
Connector		Terminal		
D33 the inspection result (23		Ground	5
CHECK DOOR MIR	ROR (PASSENGER	SIDE) SENSOR	POWER SUPPLY	CIRCUIT
	OFF. tic drive positioner c etween automatic dr	control unit conne	ctor.	
Turn ignition switch Disconnect automa Check continuity be senger side) harnes	OFF. tic drive positioner c etween automatic dr ss connector.	control unit conne ive positioner cor	ctor. htrol unit harness co	
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po	OFF. tic drive positioner c etween automatic dr ss connector. sitioner control unit	control unit conne ive positioner cor	ctor.	nnector and door mirror (pa
Turn ignition switch Disconnect automa Check continuity be senger side) harnes	OFF. tic drive positioner c etween automatic dr ss connector. sitioner control unit	control unit conne ive positioner cor Door mi	ctor. htrol unit harness co rror (passenger side)	nnector and door mirror (p
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52	OFF. tic drive positioner c etween automatic dr ss connector. sitioner control unit Terminal 33	control unit conne ive positioner cor Door mi Connector D33	ctor. htrol unit harness co rror (passenger side) Terminal 23	nnector and door mirror (pa Continuity
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52 Check continuity be	OFF. tic drive positioner of etween automatic dr ss connector. sitioner control unit Terminal 33 etween automatic dr	control unit conne ive positioner cor Door mi Connector D33 ive positioner cor	ctor. htrol unit harness co rror (passenger side) Terminal 23	nnector and door mirror (p
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52 Check continuity be	OFF. tic drive positioner c etween automatic dr ss connector. sitioner control unit Terminal 33	control unit conne ive positioner cor Door mi Connector D33 ive positioner cor	ctor. htrol unit harness co rror (passenger side) Terminal 23 htrol unit harness co	nnector and door mirror (p
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52 Check continuity be Automatic drive	OFF. tic drive positioner c etween automatic dr ss connector. sitioner control unit Terminal 33 etween automatic dr rive positioner control un	control unit conne ive positioner cor Door mi Connector D33 ive positioner cor	ctor. htrol unit harness co rror (passenger side) Terminal 23	nnector and door mirror (pa Continuity Existed nnector and ground.
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52 Check continuity be Automatic drive Connector	OFF. tic drive positioner c etween automatic dr ss connector. sitioner control unit Terminal 33 etween automatic dr rive positioner control un Termin 33	control unit conne ive positioner cor Door mi Connector D33 ive positioner cor	ctor. htrol unit harness co rror (passenger side) Terminal 23 htrol unit harness co	nnector and door mirror (pa Continuity Existed nnector and ground. Continuity
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 the inspection result of CES >> Replace au IO >> Repair or result of the content Content of the content CES >> Replace au	OFF. tic drive positioner of the tween automatic dr ss connector. sitioner control unit Terminal 33 etween automatic driver positioner control un Termin 33 normal? tomatic driver positioner control the splace harness or control the tomatic driver positioner control the splace harness or control the tomatic driver positioner control the splace harness or control the the the the the the the the the the the	control unit conne ive positioner cor Door mi Connector D33 ive positioner cor it nal oner control unit.	ctor. ntrol unit harness co rror (passenger side) Terminal 23 ntrol unit harness co Ground Refer to <u>ADP-222</u> ,	nnector and door mirror (p Continuity Existed nnector and ground. Continuity Not existed
Turn ignition switch Disconnect automa Check continuity be senger side) harnes Automatic drive po Connector M52 Check continuity be Automatic drive Connector M52 the inspection result of CS >> Replace automatics	OFF. tic drive positioner of the tween automatic dr ss connector. sitioner control unit Terminal 33 etween automatic driver positioner control un Termin 133 normal? tomatic driver positi eplace harness or co ROR (PASSENGER	control unit conne ive positioner cor Door mi Connector D33 ive positioner cor it nal oner control unit.	ctor. ntrol unit harness co rror (passenger side) Terminal 23 ntrol unit harness co Ground Refer to <u>ADP-222</u> ,	nnector and door mirror (p Continuity Existed nnector and ground. Continuity

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	ositioner control unit	Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	41	D33	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. Check continuity between automatic drive positioner control unit harness connector and door mirror (passenger side) harness connector.

Automatic drive po	Automatic drive positioner control unit		Door mirror (passenger side)	
Connector	Terminal	Connector Terminal		Continuity
M51	5	D33	21	Existed
IVIST	21	033	22	Existed

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

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M51	5	Ground	Not existed	
	21		NUL EXISIEU	

Is the inspection result normal?

YES >> Replace door mirror sensor. (Built in passenger side door mirror).

NO >> Repair or replace harness or connector.

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

SLIDING MOTOR

omponent Fui	otor is installed wintward/rearward benchark	th the driver s		n of sliding motor.	INFOID:000000000906354		
The seat sliding m The seat is slid fro omponent Fui .CHECK FUNCTIO	otor is installed wintward/rearward benchark	th the driver s	eat control unit.	n of sliding motor.			
CHECK FUNCTI							
		Component Function Check					
Turne in it	NC						
	itch ON. _IDE" in "Active te g motor operation		CONSULT.				
	Test item			Description			
	OFF			Stop			
SEAT SLIDE	FR	Sea	at sliding	Forward			
	RR			Backward			
Turn the ignition Perform "Active	ng motor connecto switch ON. test" ("SEAT SLIE	E") with CON	SULT. onnector and grou	nd.			
(+					Voltage (V)		
		(-)	C	ondition	(Approx.)		
Connector	Terminal			OFF	0		
	35			FR (forward)	Battery voltage		
				RR (backward)	0		
	61 Ground SEAT SLIDE OFF				0		
B461							
B461	42			FR (forward)	0		
Perform "Active Check voltage b	test" ("SEAT SLIE etween sliding mo		onnector and grou	ondition	(Арр		

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.

Ρ

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	at control unit	Sliding motor		ntrol unit Sliding motor		Continuity
Connector	Terminal	Connector Terminal		Continuity		
B452	35	B461 35	35	Existed		
D402	42	0401	42	LXISIEU		

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

Driver seat	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	35		Not existed	
D432	42		NOT EXISTED	

Is the inspection result normal?

YES >> Replace driver control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

	IOTOR				
Description					INFOID:000000009063551
The seat reclining The seat reclining The seatback is re	motor is activat	ed with the drive		lirection of reclini	ng motor.
Component Fui	nction Chec	k			INFOID:000000009063552
	ON				
. Turn ignition sw 2. Select "SEAT R 3. Check the reclin	ECLINING" in "	Active test" mode ation.	with CONSULT.		
	Test item			Description	
	OFF			Stop	
SEAT RECLINING	FR		Seat reclining	Forward	
	RR			Backward	
NO >> Perform	•	edure. Refer to <u>A</u>	DP-109, "Diagnosis	<u>Procedure"</u> .	
NO >> Perform Piagnosis Proc CHECK RECLINE Turn ignition sw Disconnect recli Turn the ignition Perform "Active	i diagnosis proc edure ING MOTOR Pe itch OFF. ining motor con a switch ON. test" ("SEAT R	OWER SUPPLY nector. ECLINING") with			INFOID:00000000000063553
NO >> Perform Diagnosis Proc CHECK RECLINI . Turn ignition sw . Disconnect recli . Turn the ignition . Perform "Active	a diagnosis proc edure ING MOTOR Pe itch OFF. ining motor con a switch ON. test" ("SEAT Ri petween reclinin	OWER SUPPLY nector. ECLINING") with	CONSULT		
NO >> Perform Diagnosis Proc .CHECK RECLINI . Turn ignition sw Disconnect recli . Turn the ignition . Perform "Active . Check voltage b	a diagnosis proc edure ING MOTOR Pa itch OFF. ining motor con a switch ON. test" ("SEAT Ri between reclinin +)	OWER SUPPLY nector. ECLINING") with	CONSULT connector and grou		INFOID:000000000000000000000000000000000000
NO >> Perform Piagnosis Proc CHECK RECLINE Disconnect recli Turn the ignition Perform "Active Check voltage b	diagnosis proc edure ING MOTOR Pa itch OFF. ining motor con a switch ON. test" ("SEAT R between reclinin	DWER SUPPLY nector. ECLINING") with g motor harness	CONSULT connector and grou	nd. dition	Voltage (V) (Approx.)
NO >> Perform iagnosis Proc .CHECK RECLINI Turn ignition sw Disconnect recli Turn the ignition Perform "Active Check voltage b	a diagnosis proc edure ING MOTOR Pa itch OFF. ining motor con a switch ON. test" ("SEAT Ri between reclinin +) ng motor Terminal	DWER SUPPLY nector. ECLINING") with g motor harness	CONSULT connector and grou	nd. dition OFF	Voltage (V) (Approx.) 0
NO >> Perform iagnosis Proc CHECK RECLINI Turn ignition sw Disconnect recli Turn the ignition Perform "Active Check voltage b	a diagnosis proc edure ING MOTOR Pa itch OFF. ining motor con a switch ON. test" ("SEAT Ri between reclinin +)	DWER SUPPLY nector. ECLINING") with g motor harness	CONSULT connector and grou	nd. dition OFF FR (forward)	Voltage (V) (Approx.) 0 Battery voltage
NO >> Perform iagnosis Proc CHECK RECLINI Turn ignition sw Disconnect recli Turn the ignition Perform "Active Check voltage b	a diagnosis proc edure ING MOTOR Pa itch OFF. ining motor con a switch ON. test" ("SEAT Ri between reclinin +) ng motor Terminal	DWER SUPPLY nector. ECLINING") with g motor harness	CONSULT connector and grou	nd. dition OFF FR (forward) RR (backward)	Voltage (V) (Approx.) 0 Battery voltage 0
NO >> Perform Diagnosis Proc .CHECK RECLINI . Turn ignition sw . Disconnect recli . Turn the ignition . Perform "Active . Check voltage b ((+ Reclinin Connector	a diagnosis proc edure ING MOTOR Pa itch OFF. ining motor con a switch ON. test" ("SEAT Ri between reclinin +) ng motor Terminal	DWER SUPPLY nector. ECLINING") with g motor harness	CONSULT connector and grou Con	nd. dition OFF FR (forward)	Voltage (V) (Approx.) 0 Battery voltage

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.

Ο

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	at control unit	Reclining motor		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B452	36	B454	36	Existed	
D452	44	D434	44	Existed	

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

Driver sea	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	36	Ground	Not existed
D432	44		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

LIFTING MOTOR (FRONT)

< D	TC/CIRCUIT DI	AGNOSIS >		•		
LIF	FTING MOT	OR (FRON	T)			А
De	escription					INFOID:000000009063554
• T	he lifting motor (f	ront) is activated	I with the driver	le cushion frame. r seat control unit. hanging the rotation o	direction of lifti	Bng motor (front).
Со	mponent Fu	nction Checl	<			INFOID:000000009063555 C
1.	CHECK FUNCTI	ON				
1. 2. 3.				e with CONSULT.		D
_		Test item			Description	L
		-	OFF			Stop
	SEAT LIFTER FR	-	UP	Seat lifting (front)		Upward F
_	he operation of re		DWN			Downward
N Dia	O >> Perform agnosis Proc CHECK LIFTING Turn ignition sw Disconnect liftin Turn the ignitior Perform "Active	MOTOR (FROM Titch OFF. Ing motor (front) c In switch ON. test" ("SEAT LIF	NT) POWER SI onnector. TER FR") with			INFOID:000000000000000000000000000000000000
U. _	Check voltage i				ground.	
_		+) otor (front) Terminal	(-)	Con	dition	Voltage (V) (Approx.)
_					OFF	0
		37			UP	0
	B455		Ground	SEAT LIFTER FR	DWN (down)	Battery voltage
	D433		Ground		OFF	0
		45			UP	Battery voltage
_					DWN (down)	0 N
YI N		e lifting motor (fro 2.	,	eat slide cushion fram	ne.)	0

- 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 sea	at control unit	Lifting mo	Lifting motor (front)	
Connector	Terminal	Connector	Terminal	Continuity
B452	37	B455	37	Existed
D432	45	B400	45	Existed

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

Driver seat	control unit	Continuity	
 Connector	Terminal	Ground	Continuity
 B452	37	Ground	Not existed
D432	45		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

LIFTING MOTOR (REAR)

: D	TING MOT)			
)			
e	scription					INFOID:00000000906355
T T		ear) is activated r) is moved upw	with the driver s ard/downward b	eat control unit.	tion direction o	f lifting motor (rear).
0	mponent Fur	nction Checl	K			INFOID:00000000906355
		NC				
	Turn ignition swi Select "SEAT LI Check the lifting	FTER RR" in "A		with CONSULT.		
-		Test item			Description	
			OFF			Stop
	SEAT LIFTER RR		UP	Seat lifting (rear)		Upward
_			DWN			Downward
YE	ne operation of re ES >> INSPEC D >> Perform agnosis Proce	TION END diagnosis proce		.DP-113, "Diagnosis	<u>Procedure"</u> .	INF0ID:00000000906355
	ES >> INSPEC D >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF	edure. Refer to <u>A</u> R) POWER SUP onnector.	PLY		INFOID:00000000906355
	ES >> INSPEC D >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF etween lifting m	edure. Refer to <u>A</u> R) POWER SUP onnector.	PLY		
	S >> INSPEC >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF between lifting m	edure. Refer to <u>A</u> R) POWER SUP onnector.	PLY CONSULT ss connector and g		Voltage (V)
YE NO ia	ES >> INSPEC D >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF between lifting m	edure. Refer to <u>A</u> R) POWER SUP onnector. TER RR") with (otor (rear) harne	PLY CONSULT ss connector and g	round.	
/E N(ia	S >> INSPEC >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b (+ Lifting mo	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF etween lifting m -) tor (rear) Terminal	edure. Refer to <u>A</u> R) POWER SUP onnector. TER RR") with (otor (rear) harne	PLY CONSULT ss connector and g	round. dition OFF	Voltage (V) (Approx.) 0
/E N(ia	S >> INSPEC >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b (+ Lifting mo	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF etween lifting m	edure. Refer to <u>A</u> R) POWER SUP onnector. TER RR") with (otor (rear) harne	PLY CONSULT ss connector and g	round. dition OFF UP	Voltage (V) (Approx.) 0 Battery voltage
/E N(ia	S >> INSPEC >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b (+ Lifting mo	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF etween lifting m -) tor (rear) Terminal	edure. Refer to <u>A</u> R) POWER SUP onnector. TER RR") with (otor (rear) harne	PLY CONSULT ss connector and g	round. dition OFF UP DWN (DOWN)	Voltage (V) (Approx.) 0 Battery voltage 0
	ES >> INSPEC D >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b (+ Lifting mo Connector	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF between lifting m -) tor (rear) Terminal	edure. Refer to <u>A</u> R) POWER SUP onnector. TER RR") with (otor (rear) harne	PLY CONSULT iss connector and g	round. dition OFF UP DWN (DOWN) OFF	Voltage (V) (Approx.) 0 Battery voltage 0 0
YE N¢ Dia	ES >> INSPEC D >> Perform agnosis Proce CHECK LIFTING Turn ignition swi Disconnect lifting Turn the ignition Perform "Active Check voltage b (+ Lifting mo Connector	TION END diagnosis proce edure MOTOR (REAF itch OFF. g motor (rear) co switch ON. test" ("SEAT LIF etween lifting m -) tor (rear) Terminal	edure. Refer to <u>A</u> R) POWER SUP onnector. TER RR") with (otor (rear) harne	PLY CONSULT iss connector and g	round. dition OFF UP DWN (DOWN)	Voltage (V) (Approx.) 0 Battery voltage 0

NO >> GO TO 2.

2. CHECK LIFTING MOTOR (REAR) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector and lifting motor (rear) connector.

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

Ο

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	at control unit	Lifting m	Lifting motor (rear)	
Connector	Terminal	Connector	Terminal	Continuity
B452	38	B456	38	Existed
0402	39	5430	39	

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

Driver seat	control unit		Continuity
 Connector	Terminal	Ground	Continuity
 B452	38	Ground	Not existed
D452	39		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

TILT	MOTOR
------	-------

escription					INFOID-00000000000
					INFOID:00000000906356
The tilt motor is in: The tilt motor is ac The steering colur	tivated with the a	automatic drive	sembly. positioner control changing the rota	unit. tion direction of til	t motor.
omponent Fu	nction Check	<u> </u>			INFOID:00000000906356
CHECK FUNCTI	ON				
Turn ignition sw Select "TILT MC Check the tilt m	DTOR" in "Active	test" mode with	CONSULT.		
	Test item			Description	
		OFF			Stop
TILT MOTOR	-	UP	Steering tilt		Upward
	-	DWN			Downward
IO >> Perform agnosis Proc CHECK TILT MC	CTION END diagnosis proce edure DTOR POWER S		ADP-115, "Diagnos	<u>sis Procedure"</u> .	INFOID:000000000906356
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active	CTION END diagnosis proce edure TOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT	JPPLY r connector. 'OR") with CON			INFOID:00000000000906356
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage b	CTION END diagnosis proce edure TOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT	JPPLY r connector. 'OR") with CON	ISULT.		
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage b	CTION END diagnosis proce edure TOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT petween tilt & tele	JPPLY r connector. 'OR") with CON	ISULT. arness connector		Voltage (V) (Approx.)
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage b	CTION END diagnosis proce edure PTOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT between tilt & tele	JPPLY r connector. OR") with CON scopic motor h	ISULT. arness connector	and ground.	Voltage (V) (Approx.)
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage t (Tilt & teleso	CTION END diagnosis proce edure DTOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT between tilt & tele +) copic motor Terminal	JPPLY r connector. OR") with CON scopic motor h	ISULT. arness connector	and ground.	Voltage (V) (Approx.) 0
ES >> INSPEC O >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage t (Tilt & teleso	CTION END diagnosis proce edure TOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT between tilt & tele +)	JPPLY r connector. OR") with CON scopic motor h	ISULT. arness connector	and ground. ondition OFF UP	Voltage (V) (Approx.) 0 0
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage t (Tilt & teleso	CTION END diagnosis proce edure DTOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT between tilt & tele +) copic motor Terminal	JPPLY r connector. OR") with CON scopic motor h	ISULT. arness connector	and ground. ondition OFF UP DWN (down)	Voltage (V) (Approx.) 0 0 Battery voltage
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage b (Tilt & teless Connector	CTION END diagnosis proce edure PTOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT between tilt & tele +) copic motor Terminal	JPPLY r connector. OR") with CON escopic motor h	ISULT. arness connector C	and ground. ondition OFF UP DWN (down) OFF	Voltage (V) (Approx.) 0 Battery voltage 0
ES >> INSPEC IO >> Perform agnosis Proc CHECK TILT MC Turn ignition sw Disconnect tilt & Turn the ignitior Perform "Active Check voltage b (Tilt & teless Connector	CTION END diagnosis proce edure DTOR POWER S itch OFF. telescopic moto switch ON. test" ("TILT MOT between tilt & tele +) copic motor Terminal	JPPLY r connector. OR") with CON escopic motor h	ISULT. arness connector C	and ground. ondition OFF UP DWN (down)	Voltage (V) (Approx.) 0 0 Battery voltage

2. CHECK TILT MOTOR CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit and tilt & telescopic motor connector.

3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	oositioner control unit	Tilt & teles	Tilt & telescopic motor	
Connector	Terminal	Connector	Terminal	Continuity
M52	35	M49	4	Existed
IVIJZ	42	10149	3	Existed

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

Automatic drive po	Automatic drive positioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M52	35	Ground	Not existed	
IWIJZ	42		NUL EXISIED	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS > **TELESCOPIC MOTOR** Description 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**

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- Select "TELESCO MOTOR" in "Active test" mode with CONSULT. 2.
- Check the telescopic motor operation. 3.

Test item		Description	Description	
	OFF		Stop	
TELESCO MOTOR	FR	Steering telescopic	Forward	
	RR	-	Backward	
s the operation of relevant parts	normal?			
YES >> INSPECTION END NO >> Perform diagnosis p	rocedure. Refer to <u>A</u>	DP-117, "Diagnosis Procedure".		
Diagnosis Procedure			INFOID:000000009063565	
.CHECK TELESCOPIC MOTO	DR POWER SUPPL	Y		
. Turn ignition switch OFF. 2. Disconnect tilt & telescopic r	notor connector.			

- Turn the ignition switch ON. 3.
- Perform "Active test" ("TELESCO MOTOR") with CONSULT 4.
- Check voltage between tilt & telescopic motor harness connector and ground. 5.

(+) Tilt & telescopic motor		(-) Conditi		dition	Voltage (V) (Approx.)	K		
Connector	Terminal							
				OFF	0	L		
	1	- Ground	Orecursd	TELESCOPIC MO		FR (forward)	0	
M40					Cround	TELESCOPIC MO-	RR (backward)	Battery voltage
10149	M49		TOR	OFF	0	N		
	2			FR (forward)	Battery voltage			
				RR (backward)	0	Ν		

Is the inspection result normal?

YES >> Replace telescopic motor. (Built in steering column assembly.) 2.

2. CHECK TELESCOPIC MOTOR CIRCUIT

1. Turn ignition switch OFF.

- Disconnect automatic drive positioner control unit and tilt & telescopic motor connector.
- 3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic motor harness connector.

А

В

D

ADP

Ρ

INFOID:000000009063563

INFOID:000000009063564

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit	Tilt & telescopic motor		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M52	36	M49	2	Existed
	44	10149	1	

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M52	36	Ground	Not existed
W02	44		NOI EXISIED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-222, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

DOOR MIRROR MOTOR

~ [OTC/CIRCUIT DI		DOOR MIR				
-	OOR MIRRO						
De	escription					INFOID:000000009063566	А
	•	e operate from si	de to side and	up and down with	the electric powe	er that AUTOMATIC	
		R CONTROL UN					В
С	omponent Fur	nction Check				INFOID:000000009063567	0
1.	CHECK DOOR N		FUNCTION				С
CC Re	ONSULT	ONSULT Functio		nd "MIRROR MOT	OR LH" in "ACTIV		D
		CTION END ADP-119, "Diagr	osis Procedure	, n			Е
	agnosis Proce			<u>_</u> .		INECID-000000000000000000000000000000000000	
	•					INFOID:000000009063568	F
			INPUT SIGNAI	_			
1. 2.	Turn ignition sw Check voltage t	oetween door mirr	or connector ar	nd ground.			G
•	(•	+)					Н
		mirror	()	Co	ndition	Voltage (V) (Approx.)	
-	Connector	Terminal			UP	Pottory voltage	I
		12			OP Other than above	Battery voltage	1
	D3 (Driver side)			Door mirror remote		Battery voltage	
	D33 (Passenger side)	11	Ground	control switch	Other than above	0 A	١DF
	0.00)	10			DOWN / RIGHT	Battery voltage	
		10			Other than above	0	K
Y N		3. 2. SS CONTINUITY itch OFF. omatic drive positi y between automa			nnector and door r	mirror connector.	M
•	-	e positioner control ur	nit	Door mirror (driver	side)	Continuity	Ν
-	Connector	Terminal	Co	onnector	Terminal	Continuity	
		16			10		0
	M51	31		D3	12	Existed	
		32			11		Ρ
•	[Door mirror passeng Automatic driv	ger side] e positioner control ur	hit	Door mirror (passeng	er side)		
-	Connector	Terminal		onnector	Terminal	Continuity	
-		14			12		
	M51	15		D33	11	Existed	

10

30

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

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

[Door mirror driver side]				
Automatic drive p	ositioner control unit		Continuity	
Connector	Terminal		Continuity	
	16	Ground		
M51	31		Not existed	
	32			
[Door mirror passenger side]				
Automatic drive p	ositioner control unit		Continuity	
Connector	Terminal		Continuity	
M51	14	Ground		
	15		Not existed	
	30			

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-222, "Removal and Installation".

NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor. Refer to <u>ADP-120, "Component Inspection"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace door mirror. Refer to <u>MIR-121, "DOOR MIRROR ASSEMBLY : Removal and Installation"</u>.

4.CHECK INTERMITTENT INCIDENT

Refer to GI-42, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-121</u>, "Exploded View".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror. Refer to <u>MIR-121, "DOOR MIRROR ASSEMBLY : Removal and Installation"</u>.

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.

Connector	Terminal		Operational direction
Connector	(+)	(-)	
	10	11	RIGHT
D3 (Driver side)	11	10	LEFT
D33 (Passenger side)	12	10	UP
	10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END

INFOID:000000009063569

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace door mirror. Refer to <u>MIR-121, "DOOR MIRROR ASSEMBLY : Removal and Installation"</u>.

В

С

D

Е

F

G

Н

ADP

Κ

L

Μ

Ν

Ο

Ρ

А

< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY INDICATOR

Description

INFOID:000000009063570

INFOID:000000009063571

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

1.CHECK FUNCTION

- 1. Turn ignition switch ON.
- 2. Select "MEMORY SW INDCTR" in "Active test" mode with CONSULT.
- 3. Check the memory indicator operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-122, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000009063572

1.CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+) Seat memory switch		()	Voltage (V) (Approx.)	
Connector	Terminal		(
D5	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2. NO >> Check th

>> Check the following.

- 10A fuse [No.10 located in fuse block (J/B)].
- Harness for open or short between memory indicator and fuse.

2. CHECK MEMORY INDICATOR CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit and seat memory switch connector.

3. Check continuity between automatic drive positioner control unit harness connector and seat memory switch harness connector.

Automatic drive po	ositioner control unit	Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	12	D5	6	Existed
	13	05	7	Existed

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

•	Automatic drive po	ositioner control unit		Continuity	
-	Connector	Terminal	Ground	Continuity	
-	M51	12	Ground	Not existed	
	10131	13		Not existed	

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >			
Is the inspection result normal?			
YES >> GO TO 3.			А
NO >> Repair or replace harne	ess or connector.		
3 .check memory indicator			D
Refer to ADP-123, "Component Ins	pection".		В
Is the inspection result normal?			
YES >> GO TO 4.			С
NO >> Replace seat memory	switch. Refer to <u>ADP-223, "Remov</u>	al and Installation".	0
4.CHECK INTERMITTENT INCID	ENT		
Refer to GI-42, "Intermittent Incider	<u>nt"</u> .		D
>> INSPECTION END			E
Component Inspection		INFOID:000000009063573	
1.CHECK SEAT MEMORY INDIC	ATOR		F
1. Turn ignition switch OFF.			
2. Disconnect seat memory switc			
3. Check continuity between seat	memory switch terminals.		G
Seat m	emory switch		
Т	erminal	Continuity	Н
(+)	(-)		
5	6	Existed	
5	7	Existed	
Is the inspection result normal?	- ·		
YES >> INSPECTION END			AD
	switch. Refer to <u>ADP-223, "Remov</u>	al and Installation".	AD
· · · ·			
			K
			1 \

L

M

Ν

Ο

ECU DIAGNOSIS INFORMATION DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:000000009063574

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	Condit	ion	Value/Status
SET SW	Sot owitch	Push	ON
SET SW	Set switch	Release	OFF
	Manager av itali 4	Push	ON
MEMORY SW1	Memory switch 1	Release	OFF
	Momony quitab 2	Push	ON
MEMORY SW2	Memory switch 2	Release	OFF
	Cliding owitch (front)	Operate	ON
SLIDE SW-FR	Sliding switch (front)	Release	OFF
SLIDE SW-RR	Cliding owitch (rear)	Operate	ON
SLIDE SW-RR	Sliding switch (rear)	Release	OFF
	Paolining switch (front)	Operate	ON
RECLN SW-FR	Reclining switch (front)	Release	OFF
	Declining quitch (rear)	Operate	ON
RECLN SW-RR	Reclining switch (rear)	Release	OFF
	Lifting quitch front (up)	Operate	ON
LIFT FR SW-UP	Lifting switch front (up)	Release	OFF
	Lifting quitch front (down)	Operate	ON
LIFT FR SW-DN	Lifting switch front (down)	Release	OFF
	Lifting quitch roor (up)	Operate	ON
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF
LIFT RR SW-DN		Operate	ON
LIFT KK SW-DN	Lifting switch rear (down)	Release	OFF
MIR CON SW-UP	Mirror switch	Up	ON
WIR CON SW-OP	WIITOF SWITCH	Other than above	OFF
MIR CON SW-DN	Mirror switch	Down	ON
WIR CON SW-DN		Other than above	OFF
	Mirror switch	Right	ON
MIR CON SW-RH		Other than above	OFF
MIR CON SW-LH	Mirror switch	Left	ON
		Other than above	OFF
	Changeover switch	Right	ON
MIR CHNG SW-R	Changeover switch	Other than above	OFF
	Changeover switch	Left	ON
MIR CHNG SW-L	Changeover switch	Other than above	OFF

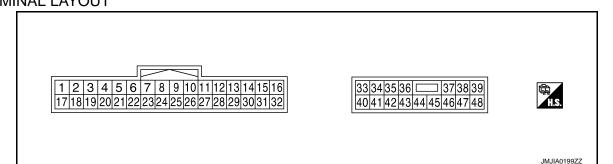
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Co	ndition	Value/Status
	Tilt owitch	Up	ON
ILT SW-UP	Tilt switch	Other than above	OFF
ILT SW-DOWN	Tilt switch	Down	ON
	The Switch	Other than above	OFF
ELESCO SW-FR	Telescopic switch	Forward	ON
	Telescopic switch	Other than above	OFF
TELESCO SW-RR	Tilt switch	Backward	ON
		Other than above	OFF
DETENT SW	AT selector lever	P position	OFF
		Other than above	ON
STARTER SW	Ignition position	Cranking	ON
		Other than above	OFF
		Forward	The numeral value decreases *1
LIDE PULSE	Seat sliding	Backward	The numeral value increases *1
		Other than above	No change to numeral value ^{*1}
		Forward	The numeral value decreases *1
ECLN PULSE	Seat reclining	Backward	The numeral value increases *1
		Other than above	No change to numeral value ^{*1}
		Up	The numeral value decreases *1
FT FR PULSE	Seat lifter (front)	Down	The numeral value increases *1
	PULSE Seat lifter (front)	Other than above	No change to numeral value ^{*1}
		Up	The numeral value decreases *1
FT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *1
		Other than above	No change to numeral value ^{*1}
IIR/SEN RH U-D	Door mirror (passenger	side)	Change between 3.4 (close to peak) 0.6 (close to valley)
IIR/SEN RH R-L	Door mirror (passenger	side)	Change between 3.4 (close to left edge) 0.6 (close to right edge)
IIR/SEN LH U-D	Door mirror (driver side))	Change between 3.4 (close to peak) 0.6 (close to valley)
IIR/SEN LH R-L	Door mirror (driver side))	Change between 0.6 (close to left edge) 3.4 (close to right edge)
ILT SEN	Tilt position		Change between 1.2 (close to top) 3.4 (close to bottom)
ELESCO SEN	Telescopic position		Change between 3.4 (close to top) 0.8 (close to bottom)

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

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

Tern	ninal No.	\\/ire	Description				
+	-	Wire color	Signal name	Input/ Output	Condition	1	Voltage (V) (Approx)
1	Ground	L/W	UART communication (RX)	Input	Ignition switch ON		2mSec/div
3		R/Y	CAN-H		—		—
9	Ground	W/G	Reclining sensor sig- nal	Input	Seat reclining	Operate	10mSec/div
						Stop	0 or 5
10	Ground	P/B	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div
						Stop	0 or 5
11	Ground	BR	Sliding switch back- ward signal	Input	Sliding switch	Operate (back- ward)	0
						Release	Battery voltage
12	Ground	SB	Reclining switch back- ward signal	Input	Reclining switch	Operate (back- ward)	0
						Release	Battery voltage
13	Ground	LG/R	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0
					(,	Release	Battery voltage

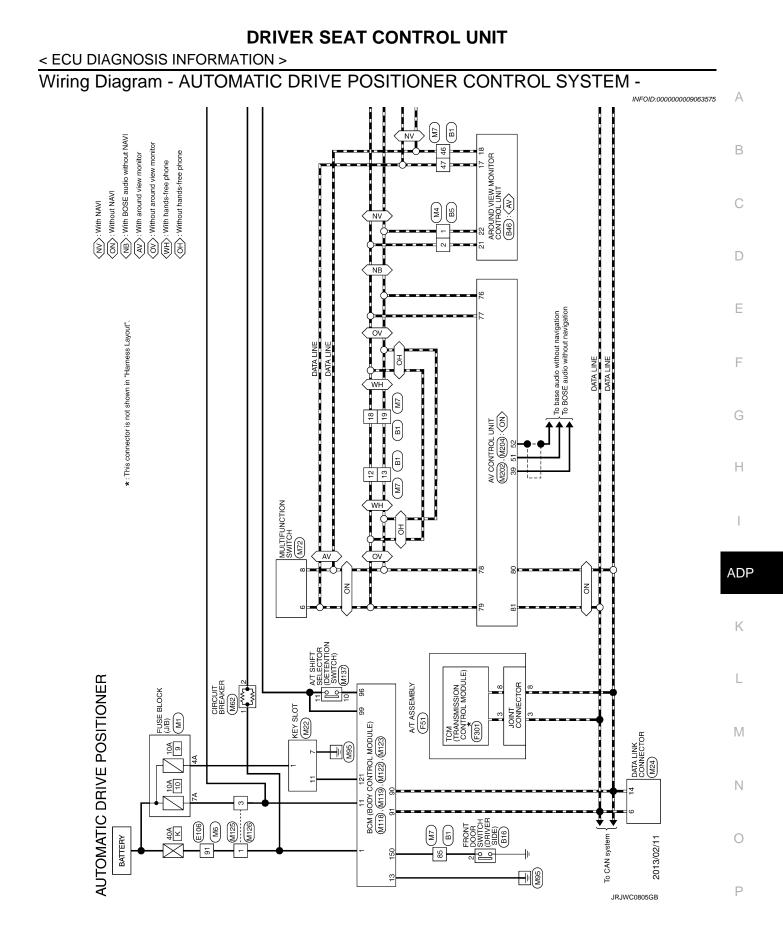
< ECU DIAGNOSIS INFORMATION >

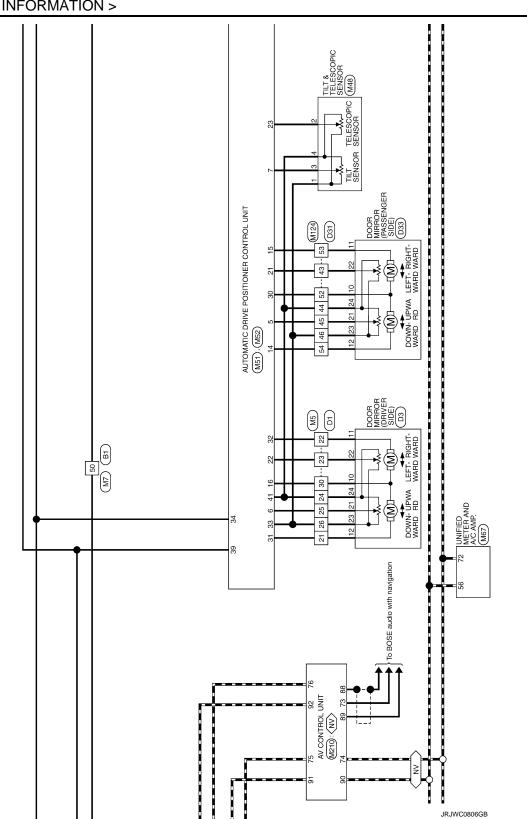
Terr	ninal No.	147	Description				
+	-	Wire color	Signal name	Input/ Output	Conditior	١	Voltage (V) (Approx)
14	Ground	G/B	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down) Release	0 Battery voltage
16	Ground	0	Sensor power supply	Output	_		5
17	Ground	Y/R	UART communication (TX)	Output	Ignition switch ON		10mSec/div
19	—	V	CAN-L	—			—
						P position	0
21	Ground	LY	Detention switch	Input	A/T selector lever	Except P position	20mSec/div
24	Ground	R	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5
						Stop	0 0 5
25	Ground	Y/B	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ
						Stop	0 or 5
26	Ground	Y	Sliding switch forward	Input	Sliding switch	Operate (forward)	0
			signal			Release	Battery voltage
27	Ground	R/G	Reclining switch for- ward signal	Input	Reclining switch	Operate (forward)	0
						Release	Battery voltage
28	Ground	W/B	Lifting switch (front) up signal	Input	Seat lifting switch (front)	Operate (up)	0
					x = 7	Release	Battery voltage
29	Ground	P/L	Lifting switch (rear) up signal	Input	Seat lifting switch (rear)	Operate (up)	0
			3			Release	Battery voltage

Revision: 2013 March

< ECU DIAGNOSIS INFORMATION >

Term	ninal No.	14/110	Description				
+	-	Wire color	Signal name	Input/ Output	Condition	٦	Voltage (V) (Approx)
31	Ground	GR	Sensor ground	—	_		0
32	Ground	B/W	Ground (signal)	_	_		0
33	Ground	R	Power source (C/B)	Input	—		Battery voltage
35	Ground	W/R	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage
			output signal			Release	0
36	Ground	G/Y	Reclining motor for- ward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
			ward output signal			Release	0
37	Ground	G/W	Lifting motor (front) down output signal	Output	Seat lifting (front)	Operate (down)	Battery voltage
			down output signal			Stop	0
38	Ground	L/Y	Lifting motor (rear) up output signal	Output	Seat lifting (rear)	Operate (up)	Battery voltage
			output signal			Stop	0
39	Ground	R/B	Lifting motor (rear) down output signal	Output	Seat lifting (rear)	Operate (down)	Battery voltage
			uown output signal			Stop	0
40	Ground	R/W	Power source (Fuse)	Input	_		Battery voltage
42	Ground	W/B	Sliding motor back- ward output signal	Output	Seat sliding	Operate (back- ward)	Battery voltage
						Stop	0
44	Ground	Ρ	Reclining motor back- ward output signal	Output	Seat reclining	Operate (back- ward)	Battery voltage
						Stop	0
45	Ground	L/R	Lifting motor (front) up output signal	Output	Seat lifting (front)	Operate (up)	Battery voltage
						Stop	0
48	Ground	В	Ground (power)	_			0

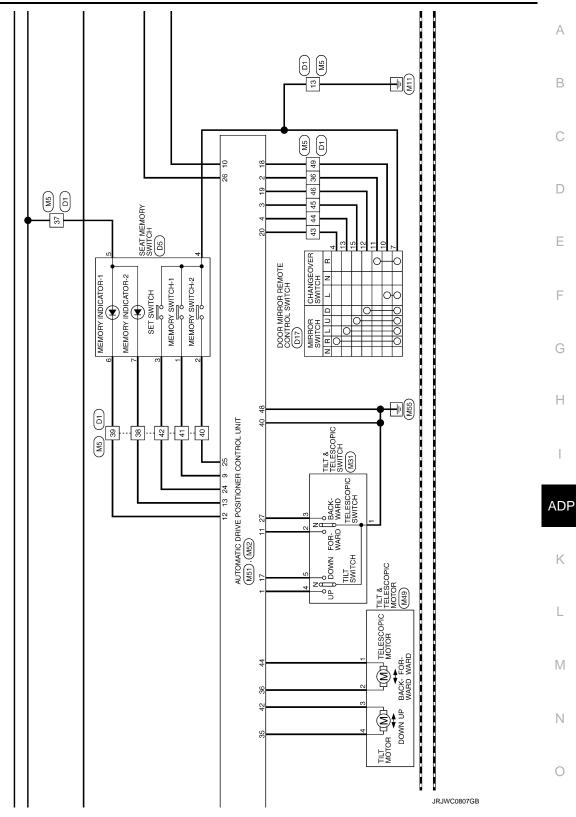




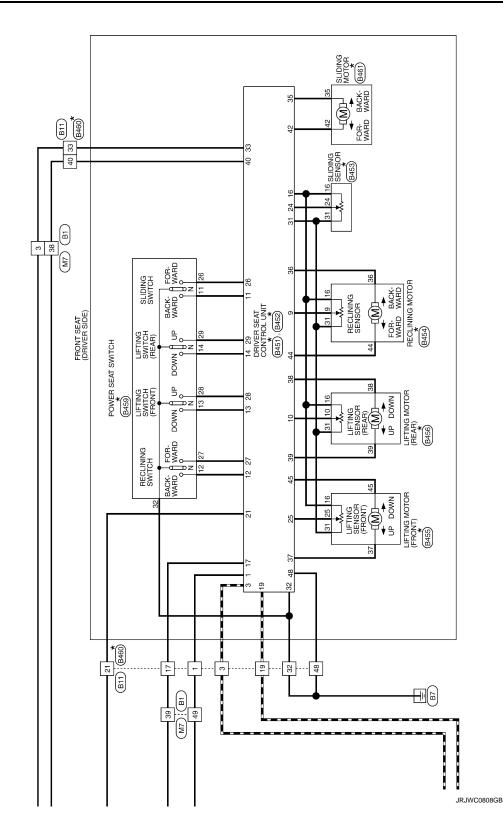
< ECU DIAGNOSIS INFORMATION >

Revision: 2013 March

< ECU DIAGNOSIS INFORMATION >



< ECU DIAGNOSIS INFORMATION >



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

< ECU DIAGNOSIS INFORMATION >

	A
28ecification)	В
Onmediar Nu. B11 Connector Num WIRE TO WIRE Connector Num Bin Terminal Color OI Signal Name [Specification] Num Bin Terminal Color OI Signal Name [Specification] Terminal Color OI Signal Name [Specification] Ontenetor Num Bin FRONT DOOR SWITCH (DRIVER SIDE) Connector Num FRONT DOOR SWITCH (DRIVER SIDE) Connector Num Terminal Color OI Signal Name [Specification] Terminal Color OI Connector Num FRONT DOOR SWITCH (DRIVER SIDE) Terminal Color OI Terminal Color OI Signal Name [Specification] Terminal Color OI Signal Name [Specification] Signal Name [Specification] Terminal Color OI	С
Connector No. B11 Connector No. B11 Connector Name WRE TO WIE Connector No. WRE TO WIE Terminal Color Oli 3 L 43 B 43 B 43 B 57 V 43 B 66 G 67 V 7 V 7 V 19 P 221 B 43 B 67 V 7 V 7 V 19 V 10 P 11 P 12 V 13 L	D
응 12 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E
	F
Connector No. B5 Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Name WIRE TO WIRE Connector Type The Cunnector Name Terminal Connector Name No. Wire No. Wire 1 LG 2 SB 23 SB 23 SB 23 SB 23 SB 31 Y	G
	Н
	I
	ADP
69 61 61 61 61 61 61 61 61 61 61	K
	L
	Μ
AUTOMATIC DRIVE POSITIO	Ν

JRJWC0913GB

Ρ

Ο

< ECU DIAGNOSIS INFORMATION >

AUTOMA connector No. Connector Name Connector Type	AUTOMAT connector No. Connector Name Connector Type	AUTOMATIC DRIVE POSITIONER Commedia No. B46 Commedia Name Argundo VEW MONITOR CONTROL UNIT Commedia Type TH40FW-NH	Connector No. Connector Name Connector Type	Connector No. Connector Name Connector Type	8451 DRIVER SEAT CONTROL UN T TH92FW	Connector No. Connector Name Connector Type		8452 DRIVER SEAT CONTROL UNIT NS16FW-CS	Corrrector No. B454 Connector Name RECLINING Connector Type NS06FW-CS	B454 RECLINING MOTOR NS06FW-CS	
	H.S.		H	Y.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E	H.S.	33 33 36 37 38 33 40 42 44 45 48 48	H.S.	36 - 44 16 31 9	
Terminal No.	Terminal Color Of No. Wire	Signal Name [Specification]	Terminal No.	Ferminal Color Of No. Wire	Signal Name [Specification]	Terminal Color Of No. Wire	Color Of Wire	Signal Name [Specification]	Terminal Color Of No. Wire	Signal Name [Specification]	
÷ - ر	œ >	GROUND	c	N/J	RX	33	с q	BAT (C/B)	H		
N M	۵ م	IGNITION SIGNAL	n თ	7 8/9	CAN-H PULSE (RECLINING)	69 98 98	¥/M	SEIUING MOTOR (FORWARD) RECLINING MOTOR (FORWARD)	31 GR		
4	GR	ACC	10	P/B	PULSE (RR LIFTING)	37	-	FRONT LIFTING MOTOR (DOWNWARD)	+		
ŝ	ß	ILLLUMINATION SIGNAL	1	ЯЯ	SLIDING SW (BACKWARD)	88	+	REAR LIFTING MOTOR (UPWARD)	44 P		_
0	<u>n</u> >	VERICLE SPEED SIGNAL (8-PULSE) REVERSE SIGNAL	Z 6	98 16/R	FRONT LIFTING SW (DOWNWARD)	40	RW	REAK LIFTING MUTOK (BAUKWARU) BAT (FUSE)			
. 6	· >	CONTROL SIGNAL	2 4	G/B	REAR LIFTING SW (DOWNWARD)	42	W/B	SLIDING MOTOR (BACKWARD)	Connector No.	B455	_
13	œ	CONTROL SIGNAL	16	0	VCC	44	٩.	RECLINING MOTOR (BACKWARD)	Connector Name	LETING MOTOR (EBONE)	
17	ß	AV COMM (H)	17	Y/R	TX	45	L/R	FRONT LIFTING MOTOR (UPWARD)			
18	ГG	AV COMM (L)	19	>	CAN-L	48	в	GND (POWER)	Connector Type 1	NS06FW-CS	_
21	89	AV COMM (H)	21	ŝ					_		
77	2	AV CUMM (L)	24	צ ל				0460			
24	2 0		29 26	۹, >	SI IDING SW (FORWARD)	Connector No.	n N	403			
27	>	CAMERA IMAGE SIGNAL	27	R/G	RECLINING SW (FORWARD)	Connector Name	r Name S.	SLIDING SENSOR		45 37	
28	SHIELD	CAMERA IMAGE SIGNAL GND	28	W/B	FRONT LIFTING SW (UPWARD)	Connector Type	I 1	6098_0241	Ś.	16 31 25	
29	≻		29	P/L	REAR LIFTING SW (UPWARD)						
30	υ	SIDE CAMERA	31	GR	SENSOR GND						_
31	SHIELD	SHIELD	32	B/W	GND (SIGNAL)				Terminal Color Of	Signal Name [Specification]	
32	n 3							24 24	╈		
50 25	s 0	SIDE CAMERA RH COMM SIDE CAMERA PH DOMER SI IDDI V					Ņ	24 31 10	ы 25 С		
5	-								+		
66 98	- 8	REAR CAMERA COMIN REAR CAMERA POWER SLIPPI Y							31 GK		
37	SHELD					Terminal Color O	Color Of		+		
38	R	REAR CAL				No.	Wire	Signal Name [Specification]	-		_
39	≻	REAR CAMERA IMAGE SIGNAL				16	0				
40	w	REAR CAMERA IMAGE GND				24	Я				
						31	GR				

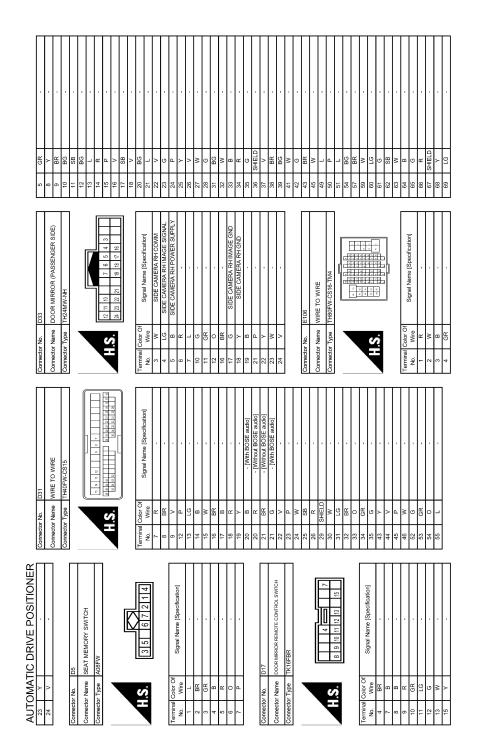
JRJWC0914GB

DRIVER SEAT CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

	А
	В
Comparison of the second	С
37 R 38 P 38 P 38 P 38 P 38 P 38 P 41 L 43 P 43 P 44 Connector Name 45 P 46 V 45 P 46 V 46 V 46 V 47 Connector Name 53 SB 54 V 55 S 54 V 55 S 56 V 57 V 58 V 57 V 53 S 54 V 57 V 58 V 59 V 51 F 53 F 54 V <td>D</td>	D
	Е
D1 WIKE TO WIKE THORPWCS16 Separate Harris Expected and the first	F
Connector Name D1 Connector Name Will Name Name	G
	Н
To Wirke MW-CS Signal Name (Spectrum) Signal Name (Spectrum) Signal Name (Spectrum) Signal Name (Spectrum)	ADP
Connector No. B460 Connector Name Mill Connector Name Mill Connector Name Mill Connector Name Mill Name Mill Name Mill Size Size	К
	L
ILFTINGs MOTOR (FEAR) NS00FER-CS 	Μ
AUTOMATIC DRIVE POSITIONER Commenter Nime IFTINS MOTOR (REAR) Commenter Nime Signal Name (Specification) Immediate Commenter Nime Immediate Commenter Nime (Specification) Immediate Commenter Nime Signal Name (Specification)	Ν
	0

JRJWC0915GB

< ECU DIAGNOSIS INFORMATION >

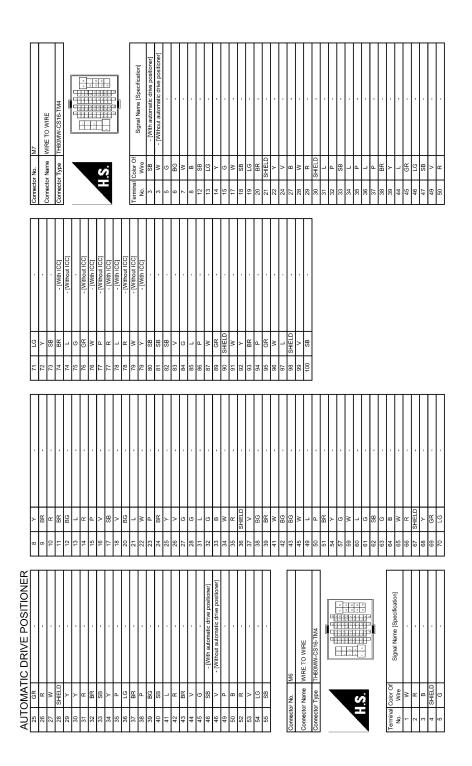


JRJWC0916GB

	A
	В
MM MM Signal Kame Eo wire 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	С
22 8 23 SHELD 23 SHELD 23 SHELD 23 SHELD 31 Y 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F	D
Befferation1 Befferation1 Befferation1	E
M1 FLSE BLOOK (J/B) Nesservice Name Nam Nam	F
Connector Name M1 Connector Name FUSE BLOC Connector Name FUSE BLOC Connector Name FUSE BLOC Connector Name FUSE BLOC Connector Name Name SA L A K A K A K SA K K	G
ASSEMBLY ASS	ADP
Connector Nume Connector Nume Connector Nume Connector Type RAT Connector Nume Connector	K
	L
AUTOMATIC DRIVE POSITIONER 70 W 4	Μ
AUTOMATIC 70 PW 71 PW 72 PW 73 PW 73 PW 74 PW 75 PW 77 PW 77 PW 77 PW 78 PW	Ν
	0

JRJWC0917GB

< ECU DIAGNOSIS INFORMATION >



JRJWC0918GB

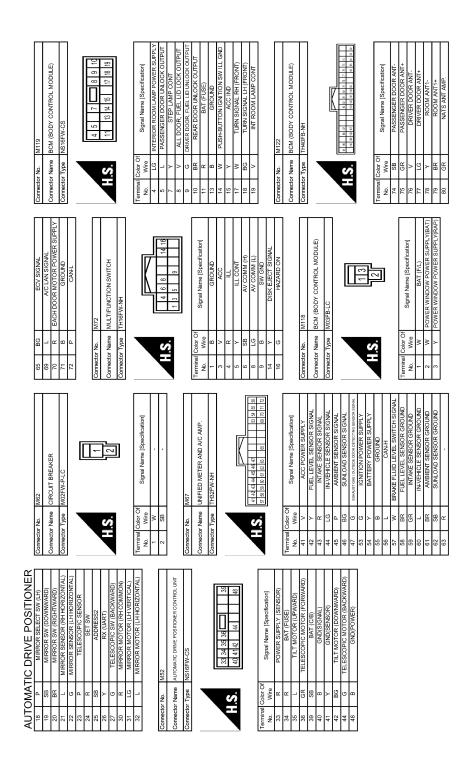
DRIVER SEAT CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

А AUTOMATIC DRIVE POSITIONER CONTROL UNIT В Signal Name [Specification] Signal Name [Specification] MIRROR SELECT SW (RI MIRROR SW (UPWARD TILT & TELESCOPIC MOTOR 1 2 3 4 5 8 7 9 10 11 m 4 10 20 20 24 25 26 27 **AIRROR SENSOR (RH** MIRROR MOTOR (RH TILT SENS 32 DR SENSOR TELESCOPIC SW g С Connector No. M49 M51 hinal Color Of bo. Wire 2 GR 3 BG 4 L Connector Name Connector Type Color Of Wire _ > ^B^G^A < [−] Connector No. Connector Name BG GR < G LG ≥ H.S. H.S. D Connector Type erminal No. 13 15 16 17 nina. No. 9 2 2 2 Ε Signal Name [Specification] Signal Name [Specification] TILT & TELESCOPIC SENSOR TILT & TELESCOPIC SWITCH 4321 5 F 8 TKO6FGY TK04FW G Color Of Wire B GR GR Connector Type Connector Type Connector Name Connector Name H.S. Connector No. H.S. Connector No. Terminal (No. 4 0 Н Signal Name [Specification] Signal Name [Specification] 16 80
 11
 14
 1

 3
 4
 5
 6
 7
 8
 ILL GROUND DATA LINK CONNECTOR BAT CLOCK DATA ILL BAT ADP BD16FW Connector No. M24 Connector Type Connector Name ට ස සි Vire LG B ດ <mark>ສ</mark> ศ ≻ ଞ ≥ ≻ H.S.H Wire erminal No. 8 11 14 Κ AUTOMATIC DRIVE POSITIONER L Μ KEY SLOT TH12FW_NF M22 G SHIELD SB LG \$ ≃ Connector Name σ <u>R</u> <u>B</u> <u>R</u> ≻ ≥ <u>R</u> <u>B</u> <u>B</u> ⊃ > Connector No. Connector Type ≥m ≥ ບ ≃ 띪> H.S. Ν 2 ² 86 66 85 88 68 66 16 65 86 8 8 8 8 Ο

JRJWC0919GB

< ECU DIAGNOSIS INFORMATION >



JRJWC0920GB

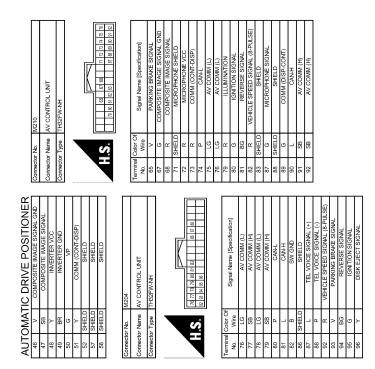
	А
eefication SiGNAL SIGNAL SIGNAL SIGNAL	В
M137 AT SHIT SELECTOR AT SHIT SELECTOR HH3FWAH Signal Mane [Specification] Signal Ware [Specification]	С
Corrector Num M Corrector Name 2 Corrector Name 2 Terminal Color Of 1 No. Wree 1 2 1 W 1 W 1 W 1 No. 1 R <td>D</td>	D
	E
Signal Neme (Speedication)	F
Color Of Wire Color Of Wire M126 Color Of Wire M126	G
35 34 35 35 35 35 36 45 45 55 55 55 56 55 57 3 1 1 1 1 1 1 1 2 2 3 3 3	Н
SHET NP SECURITS WOUTPUT 5 COMBI SW OUTPUT 5 COMBI SW OUTPUT 5 COMBI SW OUTPUT 1 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COMBI SW OUTPUT 4 COMBI SW OUTPUT 4 COMBI SW OUTPUT 4 COMBI SW OUTPUT 4 COMBI SW OUTPUT 3 COMBI SW OUTPUT 4 COMBI SW OUTPUT 4 COMBI SW OUTPUT 3 COMBI SW OUTPUT 4 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COM	I
	ADP
140 GR 141 G 143 P 144 B 145 C 144 C 145 C 146 C 147 C 148 C 151 G 148 C 151 C 161 B 17 V 18 No 19 B 11 B 12 C 23 GR 33 L 33 B 33 B	K
POSITIONER Ant Amp VEEBU COM WIT VEEBU COM SWINEUT 3 SWINEUT 3 SWINEUT 3 SWINEUT 3 SWINEUT 3 SWINEUT 3 SWINEUT 4 SWINEUT 4 SWI	L
	Μ
AUTOMATIC I 81 W 83 R KE 84 K KE 85 B K KE 94 B K KE 95 B K KE 95 B K KE 95 B K KE 95 B K KE 103 LG RE KE 113 B K KE 113 B K MGM 113 B K MGM 113 B K MGM 133 K K MGM 133 K <th< td=""><td>Ν</td></th<>	Ν

JRJWC0921GB

Ρ

Ο

< ECU DIAGNOSIS INFORMATION >



Fail Safe

JRJWC0922GB

INFOID:000000009063576

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

< ECU DIAGNOSIS INFORMATION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis	/
	CAN communication	U1000	ADP-44	
Only manual functions operate normally. Only manual functions, except door mirror, operate normally. Only manual functions, except seat sliding, operate normally.	Tilt sensor	B2118	ADP-49	I
	Telescopic sensor	B2119	<u>ADP-52</u>	
	Detention switch	B2126	ADP-55	
	UART communication	B2128	<u>ADP-57</u>	(
	Seat sliding output	B2112	ADP-45	
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-47	ſ

DTC Index

INFOID:000000009063577

Ε

F

Н

ADP

Κ

CONSULT	Timing ^{*1}				
display	Current mal- function	Previous mal- function	Item	Reference page	
CAN COMM CIRCUIT [U1000]	() 1-39		CAN communication	<u>ADP-44</u>	
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	<u>ADP-45</u>	
SEAT RECLINING [B2113]	CLINING 0 1-39		Seat reclining motor output	<u>ADP-47</u>	
TILT SENSOR [B2118]	0	1-39	Tilt sensor input	<u>ADP-49</u>	
TELESCO SENSOR [B2119]	0	1-39	Telescopic sensor input	<u>ADP-52</u>	
DETENT SW [B2126]	0	1-39	Detention switch condition	ADP-55	
UART COMM [B2128]	0 1-39		UART communication	ADP-57	

*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.

M

L

Ν

0

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

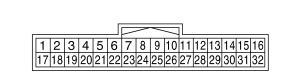
< ECU DIAGNOSIS INFORMATION >

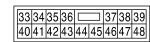
AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000009063578

TERMINAL LAYOUT







JMJIA0199ZZ

PHYSICAL VALUES

Terminal No.		Description					
+	-	Wire color	Signal name	Input/ Out- put	Condition		Voltage (V) (Approx.)
1 Gro	Ground	Y	Tilt switch up signal	Input	Tilt switch	Operate (up)	0
	Ciouna	I				Other than above	5
		LG	Changeover switch RH signal	Input	Changeover switch position	RH	0
2	2 Ground					Neutral or LH	5
3	Ground	d G	Mirror switch up signal	Input	Mirror switch	Operated (up)	0
3 GIO	Ground	9				Other than above	5
	Ground	V	Mirror switch left signal	Input	Mirror switch	Operated (left)	0
4	Ground					Other than above	5
5	Ground	R	Door mirror sensor (RH) up/down signal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)
6	Ground	GR	Door mirror sensor (LH) up/down signal	Input	Door mirror LH position		Change between 3.4 (close to peak) 0.6 (close to valley)
7	Ground	BG	Tilt sensor signal	Input	Tilt position		Change between 1.2 (close to top) 3.4 (close to bottom)
		L	Memory switch 1 signal	Input	Memory switch 1	Push	0
9	Ground					Other than above	5
10	Ground	V	UART communication (TX)	Out- put	Ignition switch ON		2mSec/div 2mSec/div 2v/div JMJIA0118ZZ

Ter	minal No.		Description															
+	-	Wire color	Signal name	Input/ Out- put	Conditi	on	Voltage (V) (Approx.)											
11	Ground	GR	Telescopic switch for-	Input	Telescopic	Operate (forward)	0											
	Ground	GI	ward signal	mput	switch	Other than above	5											
				Out-	Memory indictor	Illuminate	0											
12	Ground	BG	Memory indictor 1 signal	put	1	Other than above	Battery voltage											
				Out-	Memory indictor	Illuminate	0											
13	Ground	Р	Memory indictor 2 signal	put	2	Other than above	Battery voltage											
14	Ground	W	Door mirror motor (RH)	Out-	Door mirror RH	Operate (up)	Battery voltage											
14	Ground	vv	up output signal	put		Other than above	0											
15	5 Ground G	G	G	G	Door mirror motor (RH)	Out-	Door mirror DH	Operate (left)	Battery voltage									
15					9	9	G	9	9	9	G	G	G	G	G	G	G	left output signal
			Door mirror motor (LH)	Out-	Door mirror (LH)	Operate (down)	Battery voltage											
4.0		d Y	down output signal			Other than above	0											
16	Ground		Door mirror motor (LH) right output signal	put		Operate (right)	Battery voltage											
				right output signal			Other than above	0										
17	Ground	W	Tilt switch down signal	lagut	Tilt switch	Operate (down)	0											
17	Ground	vv	The switch down signal	Input	The Switch	Other than above	5											
			Changeover switch LH		Changeover	LH	0											
18	Ground	Ρ	signal	Input	switch position	Neutral or RH	5											
10	Crownel	00	Mirror switch down sig-	100.04	Mirror outitab	Operate (down)	0											
19	Ground	SB	nal	Input	Mirror switch	Other than above	5											
00					Minner	Operate (right)	0											
20	Ground	BR	Mirror switch right signal	Input	Mirror switch	Other than above	5											
21	Ground	L	Door mirror sensor (RH) left/right signal	Input	Door mirror RH p	osition	Change between 3.4 (close to left edge) 0.6 (close to right edge)											
22	Ground	G	Door mirror sensor (LH) left/right signal	Input	Door mirror LH po	osition	Change between 0.6 (close to left edge) 3.4 (close to right edge)											
23	Ground	Ρ	Telescopic sensor signal	Input	Telescopic positio	n	Change between 0.8 (close to top) 3.4 (close to bottom)											

Terr	Terminal No.		Description					
+	-	Wire color	Signal name	Input/ Out- put	Conditio	on	Voltage (V) (Approx.)	
24	Ground	R	Set switch signal	Input	Set switch	Push Other than above	0 5	
25	Ground	SB	Memory switch 2 signal	Input	Memory switch 2	Push Other than above	0 5	
26	Ground	Y	UART communication (RX)	Input	Ignition switch ON	I	10mSec/div	
27	Ground	G	Telescopic switch back- ward signal	Input	Telescopic switch	Operate (back- ward)	0	
					Other than above	5		
		round R	Door mirror motor (RH)			Operate (down)	Battery voltage	
30	Ground		down output signal	Out-	Door mirror (RH)	Other than above	0	
30	Ground		Door mirror motor (RH)	put		Operate (right)	Battery voltage	
			right output signal			Other than above	0	
31	Ground	LG	Door mirror motor (LH)	Out-	Door mirror (LH)	Operate (up)	Battery voltage	
31	Ground	LG	up output signal	put		Other than above	0	
32	Cround	L	Door mirror motor (LH)	Out-	Door mirror (LH)	Operate (left)	Battery voltage	
32	Ground	L	left output signal	put		Other than above	0	
33	Ground	R	Sensor power supply	Input	—		5	
34	Ground	R	Power source (Fuse)	Input			Battery voltage	
35	Ground		Tilt motor up output sig-	Out-	Stooring tilt	Operate (up)	Battery voltage	
33	Ground	d L	nal	put	Steering tilt	Other than above	0	
	Crows d		Telescopic motor for-	Out-	Steering tele-	Operate (forward)	Battery voltage	
36	Ground	GR	-		ward output signal put scopic		Other than above	0
39	Ground	SB	Power source (C/B)		—		Battery voltage	
40	Ground	В	Ground	_	—		0	
41	Ground	Y	Sensor ground	_			0	

< ECU DIAGNOSIS INFORMATION >

Terr	minal No.		Description					,
+	-	Wire color	input		Condition		Voltage (V) (Approx.)	ŀ
42	Ground	BG	Tilt motor down output	Out-	Stooring tilt	Operate (down)	Battery voltage	E
42	Ground	BG	signal	put	Steering tilt	Other than above	0	С
44	Ground	G	Telescopic motor back- ward output signal	Out-	Steering tele-	Operate (back- ward)	Battery voltage	C
			put	scopic	Other than above	0		
48	Ground	В	Ground	—	—	_1	0	E

Н

F

G

ADP

Κ

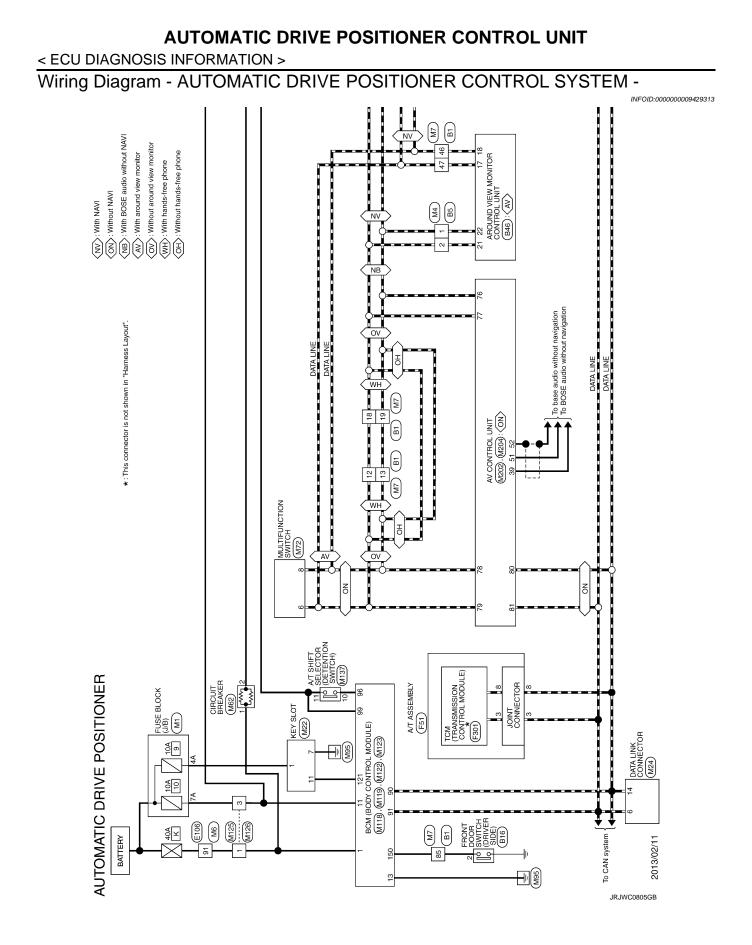
L

 \mathbb{M}

Ν

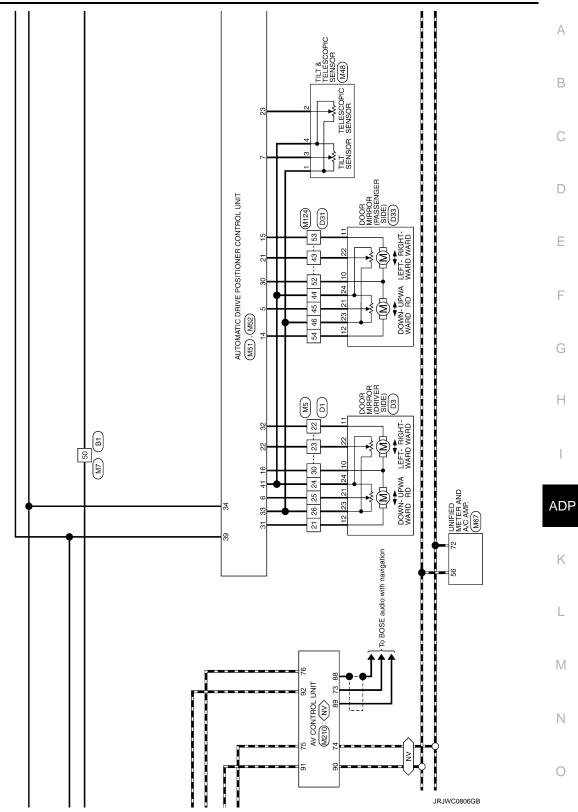
0

Р

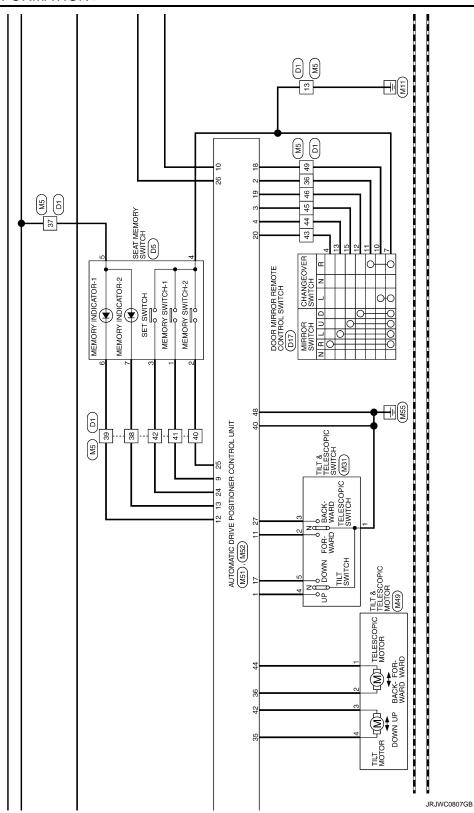


Revision: 2013 March

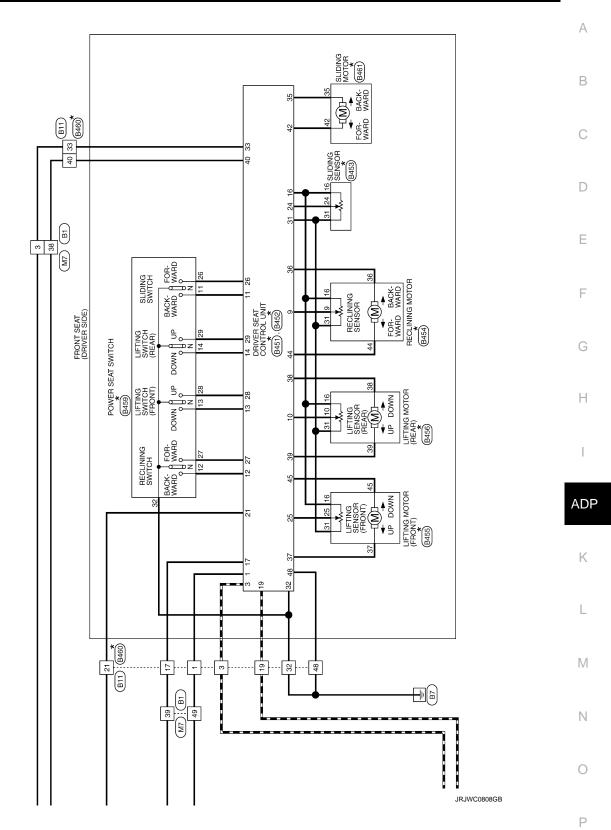
< ECU DIAGNOSIS INFORMATION >



Ρ

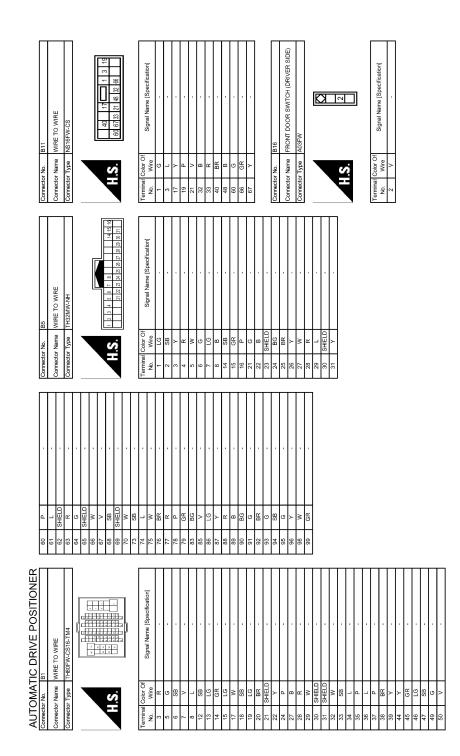


< ECU DIAGNOSIS INFORMATION >



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

< ECU DIAGNOSIS INFORMATION >



JRJWC0913GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

А В Signal Name [Specification] Signal Name [Specification] 45 37 16 31 25 36 44 16 31 9 LIFTING MOTOR (FRONT) RECLINING MOTOR С NS06FW-CS Connector Name F Connector Type N
 #minal
 Color
 Of

 No.
 Wire
 Wire

 16
 O
 25
 Y/B

 31
 GR
 45
 L/R
 Color Of Wire Wire G/Y G/Y Connector Name Connector Type H.S. Connector No. H.S. D Connector No. 36 44 erminal No. ġ Е \$ BAT (C/B) SLIDING MOTOR (FORWARD Signal Name [Specification] Signal Name [Specification] 37 38 3 ALLIDING MOTOR (BACKWP SLIDING MOTOR (BACKWP SCLINING MOTOR (BACK DRIVER SEAT CONTROL UNIT
 33
 35
 36
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3
 3 24 31 16 REAR LIFTING MOTOR F SLIDING SENSOR NS16FW-CS B453 Connector Name Connector Type Color Of Wire Color Of Wire N/B W/B Connector Name Connector Type KB B/B H.S. R N GV GV ၀ ဗ ဗီ H.S. Connector No. Connector Ferminal (No. Terminal (No. 16 24 31 45 45 48 48 35 33 88 88 Н Inthe SW (DON REAR LIFTING SW (DON VCC TX CAN PLASE (SLIDING) PLASE SW (PORWARD) STAR LIFTING
 1
 3
 9
 10
 11
 12
 13
 14
 16

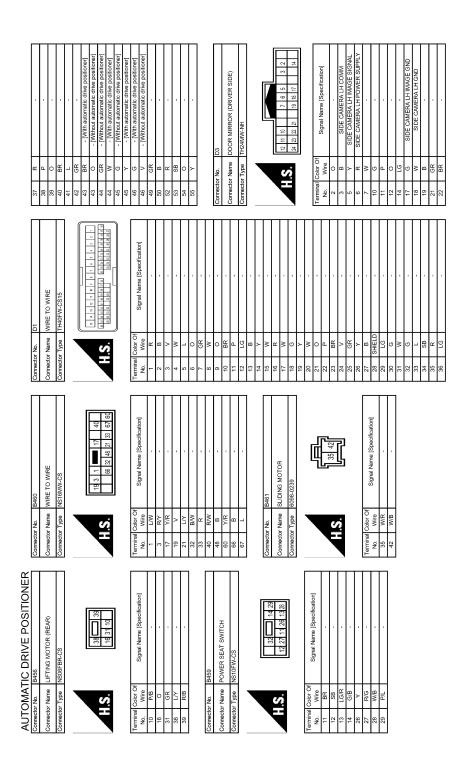
 17
 19
 21
 24
 25
 26
 27
 29
 31
 32
 Signal Name [Specification] SLIDING SW (BACKWAR RECLINING SW (BACKWA DRIVER SEAT CONTROL UNIT I RX CAN-H PULSE (RECI PULSE (RR L ADP TH32FW B451 Connector Type Connector Name nnector No. H.S. erminal No. 13 12 14 19 25 25 25 Κ : 16 5 33 34 28 AUTOMATIC DRIVE POSITIONER IDE CAMERA RH IMAGE SIGN SIDE CAMERA RH IMAGE GND L Signal Name [Specification] AROUND VIEW MONITOR CONTROL UNIT SIDE CAMERA RH COM SIDE CAMERA RH POWER SI AMFRA IMAGE SIGNA REAR CAMERA POWER SU ILLUMINATION SIGNA VEHICLE SPEED SIGNAL (8-REVERSE SIGNAL CONTROL SIGNAL CONTROL SIGNAL AV COMM (H) AV COMM (H) AV COMM (L) AV COMM (H) GROUND BATTERY GNITION SIG ACC SHIELD EAR CAMER REAR 2 4 6 1 Μ TH40FW-NH Color Of Wire Connector Type SHIELD Connector Name H.S.H R 8 8 LC SB LC ۳ Ν erminal No. 40 40

JRJWC0914GB

Ρ

Ο

< ECU DIAGNOSIS INFORMATION >



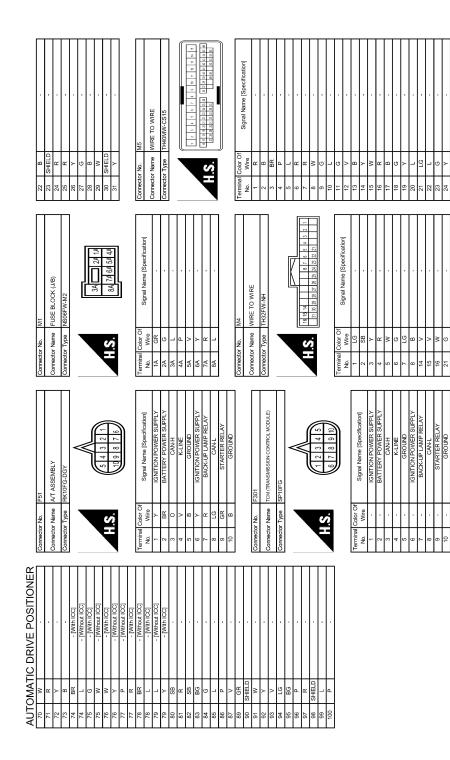
JRJWC0915GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

	A
	В
	С
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	D
	Е
DOOR MIRCOR (PASSENGER SIDE) DOOR MIRCOR (PASSENGER SIDE) TH240MV-MI TH240MV-MI Signal Name (Specification) SIDE CAMERA RH INAGE SIGNU SIDE CAMERA RH INAGE SIGNU	F
	G
	Η
201 MRE TO WRE HADFW.CSW.FE HADFW.CSW.FE MRE TO WRE MRE	
	ADP
Connector No. Connector No. Connector Name Connector Name Name View 13 L 14 B 15 N 20 R 21 B 23 SHELL 33 CR 33 CR 33 CR 33 CR 54 V 55 C 56 C	Κ
	L
TIC DRIVE POSITION SEAT MEMORY SWITCH ADDEFW Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	Μ
AUTOMATIC 24 V 24 V 24 V 24 V 24 V 25 V Connector Name 25 B 40 20 20 20 20 20 20 20 20 20 2	Ν
	0

JRJWC0916GB

Ρ



JRJWC0917GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

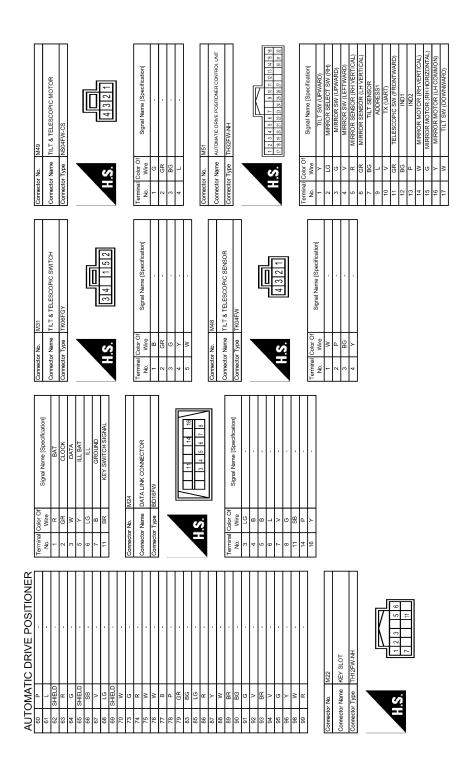
	В
MP WIRE TO WIRE THEORY AND	С
	D
	E
	F
	G
7 7 7 7	Н
	I
	DP
	K
	N
RIVE POSITIONER Non- Solar Anno (Specification)	L
	Μ
AUTOMAT 25 R 27 8 27 8 27 8 27 8 28 8 29 8 30 7 31 7 32 8 33 8 34 7 35 8 36 8 37 8 38 8 39 8 36 8 37 8 38 8 39 8 31 8 44 8 5 8 5 8 6 8 6 8 7 8 8 8 8 8 9 8 7 8 8 8 7 8 8 <td< td=""><td>Ν</td></td<>	Ν

JRJWC0918GB

Ρ

Ο

< ECU DIAGNOSIS INFORMATION >



JRJWC0919GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

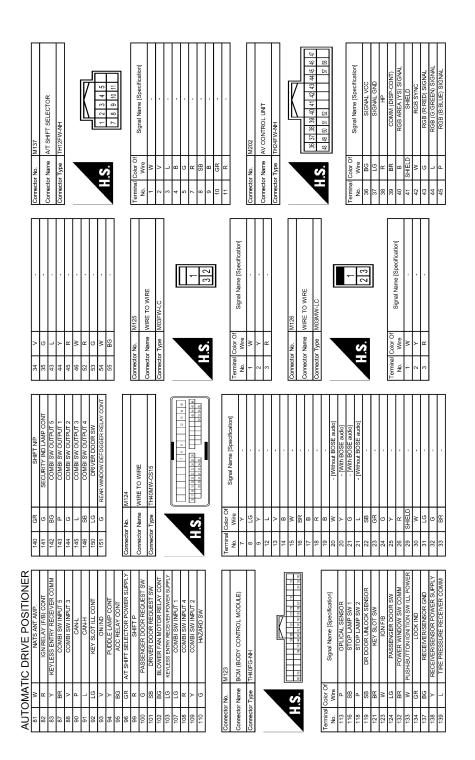
А GROUND GROUND PUSH-BUTTON IGNITION SW ILL GND В BCM (BODY CONTROL MODULE) BCM (BODY CONTROL MODULE) PASSENGER DOOR ANT-PASSENGER DOOR ANT-DRIVER DOOR ANT-DRIVER DOOR ANT-ROOM ANT1-Signal Name [Specification] Signal Name [Specification] œ INTERIOR ROOM LAMP POWER PASSENGER DOOR UNLOCK (17 ROOM ANT1+ IVER DOOR, FUEL LID UN REAR DOOR I INI OCK 13 14 15 E H ACC I TURN SIGNAL I TURN SIGNAL С 45 TH40FB-NH NS16FW M122 Color Of Wire minal Color Of No. Write 74 SB 75 GR 76 V 77 T 78 Y 78 Y 79 BR 80 GR Connector Type Connector Name Connector Type Connector Name n BR ∝ ∞ ≥ ≥ 8 > H.S. r C H.S.H D Connector No. nnector No. - | 1 9 18 Е SUPPLY(BAT) BCM (BODY CONTROL MODULE) Signal Name [Specification] Signal Name [Specification] POWER WINDOW POWER S MULTIFUNCTION SWITCH GROUND CAN-L ILL CONT AV COMM (I AV COMM (BAT (F/L) AN SIG SW GNE DISK EJECT S **1**3 F 4 M03FB-L M118 M72 Wire V Connector No. Connector Name Connector No. Connector Name Connector Type Connector Type ß H.S.H Wire 0 C SB H.S. erminal No. Terminal No. 14 65 69 71 72 Н 38 BRAKE FLUID LEVEL SWITCH SIGNAL FUEL LEVEL SENSOR GROUND INTAKE SENSOR GROUND IN-VEHICLE SENSOR GROUND AMBIENT SENSOR GROUND 41 42 44 45 46 47 53 54 55< ACC POWER SUPPLY FUEL LEVEL SENSOR SIGNAL INTAKE SENSOR SIGNAL IN-VEHICLE SENSOR SIGNAL AMBIENT SENSOR SIGNAL Signal Name [Specification] Signal Name [Specification] AUST GAS / OUTSIDE COOR DETECTING SENSO IGNITION POWER SUPPLY BATTERY POWER SUPPL) SUNLOAD SENSOR SIGNA UNIFIED METER AND A/C AMP. 17 CIRCUIT BREAKER SUNLOAD ADP M67 Color Of Wire SB color Of Wire V Connector Name Connector Name Connector Type Connector No. Connector Type H.S. ЪЧ တ္လီ ဂ ဂ က ≥ R R ¬ R H.S. 88 84 nnector No. Terminal 0 No. Terminal No. 41 42 42 43 45 45 53 53 54 54 - ~ Κ 28 22 28 88 AUTOMATIC DRIVE POSITIONER AUTOMATIC DRIVE POSITIONER CONTROL UNIT TILT MOTOR (UPWARD) TELESCOPIC MOTOR (FORWARD) BAT (C/B) MIRROR MOTOR (LH HORIZONTAL GND(SENSOR D) GND(SENSOR D) TILT MOTOR (DOWNWARD) ELESCOPIC MOTOR (BACKWAR GND(POWER) L Signal Name [Specification] MIRROR SW (DOWNWARD MIRROR SW (RIGHTWARD MIRROR SENSOR (RH HORIZO) MIRROR SENSOR (LH HORIZO) MIRROR MOTOR (RH CON MIRROR MOTOR (LH VER ADDRESS2 ADDRESS2 RX (UART) TELESCOPIC SW (BACH BAT (FUS WER SUPPLY TELESCOF Μ NS16FW-CS 8 9 **C**5M ж ე . 28 0 m color Of Wire B B Connector Type Connector Name Connector No. ß H.S. Ν 3 30 srminal No. 8 8 8 48 6

JRJWC0920GB

Ρ

Ο

< ECU DIAGNOSIS INFORMATION >



JRJWC0921GB

AUTOMATIC DRIVE POSITIONER CONTROL UNIT < ECU DIAGNOSIS INFORMATION >

А В С D Е F G Н Signal Name [Specification] ILLUMINATION IGNITION SIGNAL REVERSE SIGNAL VEHICLE SPEED SIGNAL (I PARKING BRAKE S SHIELD AICROPHONE S SHIELD AV CONTROL UNIT 79 81 81 82 83 TH32FW-NH ADP nnector Type Color Of Wire nector Name 88 H.S. ი წ ო tor No. Κ 91 97 97 8 2 AUTOMATIC DRIVE POSITIONER L Signal Name [Specification] INVERTER INVERTER VP AM (CONT-C 76 77 78 79 80 81 82 88 AV COMM (L /EHICLE SPEED SIGNA PARKING BRAKE S COMM (SHIELD TEL VOICE SIG CAN-L IGNITION S DISK EJECT AV CONTROL UNIT TH32FW-NH Μ M204 onnector Type color Of Wire LG SB SHIELD Connector Name SHIEL SHIEL Connector No. H.S. 3 8 Ν No. Ο

JRJWC0922GB

Ρ

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000009364763

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
FR WASHER SW	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
FR WIPER STOP	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
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
IURN SIGNAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
TAIL LAIVIP SVV	Lighting switch 1ST or 2ND	On
	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
DASSING SW	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On

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
500K 3W-A3	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
JOOR SW-RL	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
JOOR SW-BK	Back door opened	On
	Other than power door lock switch LOCK	Off
CDL LOCK SW	Power door lock switch LOCK	On
	Other than power door lock switch UNLOCK	Off
CDL UNLOCK SW	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
KEY CYL LK-SW	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
	Hazard switch is OFF	Off
HAZARD SW	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
	Back door opener switch OFF	Off
TR/BD OPEN SW	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
	LOCK button of the key is not pressed	Off
RKE-LOCK	LOCK button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-UNLOCK	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
	PANIC button of the key is not pressed	Off
RKE-PANIC	PANIC button of the key is pressed	On
	UNLOCK button of the key is not pressed	Off
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneous- ly	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
	Bright outside of the vehicle	Close to 5 V
OF HOAL SENSOR	Dark outside of the vehicle	Close to 0 V
	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REO 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 -RL	NOTE: The item is indicated, but not monitored.	Off
EQ SW -RL EQ SW -BD/TR JSH SW SN RLY2 -F/B CC RLY -F/B LUCH SW RAKE SW 1 RAKE SW 1 ETE/CANCL SW FT PN/N SW 'L -LOCK 'L -UNLOCK	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
KE-MODE CHG PTICAL SENSOR EQ SW -DR EQ SW -AS EQ SW -AS EQ SW -RL EQ SW -BD/TR JSH SW N RLY2 -F/B CC RLY -F/B LUCH SW RAKE SW 1 RAKE SW 1 RAKE SW 2 ETE/CANCL SW ET PN/N SW L -LOCK L -UNLOCK	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
	The brake pedal is not depressed	Off
DRARE SW 2	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCE SW	Selector lever in any position other than P	On
CC RLY -F/B ELUCH SW RAKE SW 1 RAKE SW 2 PETE/CANCL SW FT PN/N SW /L -LOCK /L -UNLOCK	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
	Driver door is unlocked	Off
	Driver door is locked	On
	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
GN RI Y1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
	Selector lever in any position other than P	Off
	Selector lever in P position	On
	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On

Revision: 2013 March

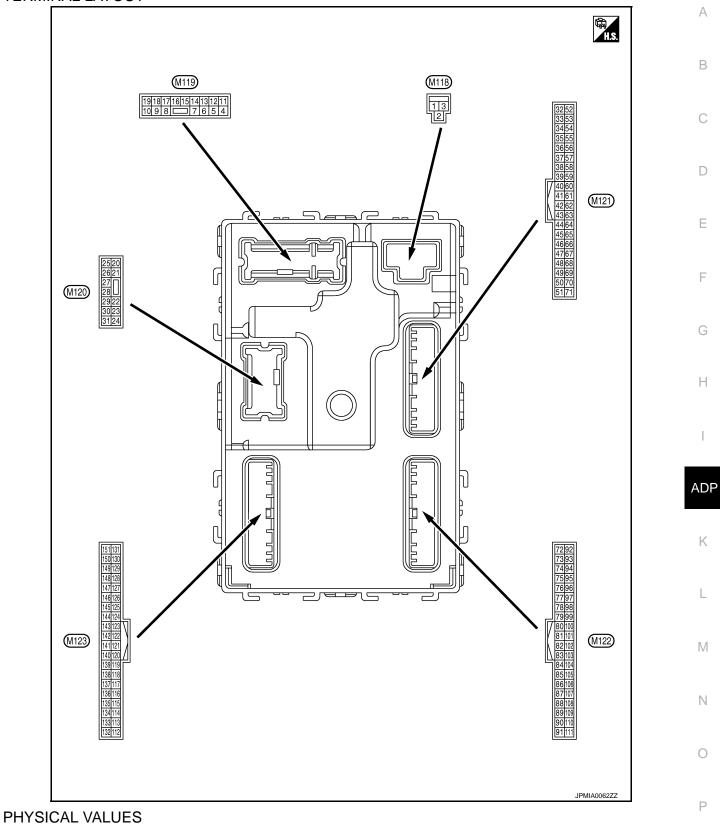
ADP-164

Monitor Item	Condition	Value/Status			
SFT P -MET	Selector lever in any position other than P	Off			
	Selector lever in P position	On			
SFT N -MET	Selector lever in any position other than N	OffOnOffOnOffOnStopStallCrankRunOffOffOffOffCrankCrankRunOffOffStallOffOffStallOffOffStallOffOffCrankOffOffStallOffStallUNLOCKLOCKStallUNLOCKLOCKStallSetSetSetSetSetOffOnOperation frequency of the keyScord with any key IDYetSord with the fourth keyYetSetSord with the fourth keyYet			
	Selector lever in N position	On			
	Engine stopped				
ENGINE STATE	While the engine stalls	Stall			
ENGINE STATE	At engine cranking	Crank			
	Engine running	Run			
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off			
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off			
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off			
VEH SPEED 1	While driving				
VEH SPEED 2	While driving				
	Driver door is locked	LOCK			
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY			
	Driver door is unlocked	UNLOCK			
	Passenger door is locked	LOCK			
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY			
	Passenger door is unlocked	UNLOCK			
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset			
	Ignition switch ON	Set			
	The engine start is prohibited	Reset			
PRIMI ENG STRT	The engine start is permitted	Set			
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset			
L UNLK-IPDM L RELAY-REQ EH SPEED 1 EH SPEED 2 DOR STAT-DR DOR STAT-AS OK FLAG RMT ENG STRT RMT RKE STRT EY SW -SLOT KE OPE COUN1	The key is not inserted into key slot	Off			
NET OW -OLUT	The key is inserted into key slot	On			
RKE OPE COUN1	During the operation of the key	Operation frequency of the key			
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—			
	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet			
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done			
	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet			
	The key ID that the key slot receives accords with the fourth key ID reg- istered to BCM.	Done			
	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet			
CONFIRM ID3	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done			

Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the second key ID reg- istered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet
CONFIRMIDI	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done
TP 4	The ID of fourth key is not registered to BCM	Yet
124	The ID of fourth key is registered to BCM	Done
TP 3	The ID of third key is not registered to BCM	Yet
1 - 5	The ID of third key is registered to BCM	Done
TD 0	The ID of second key is not registered to BCM	Yet
TP 2	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
IPT	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGST FLT	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
ID REGGI FRI	ID of front RH tire transmitter is not registered	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
	Tire pressure warning alarm is not sounding	Off
BUZZER	Tire pressure warning alarm is sounding	On

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



	inal No. e color)	Description			0	Value
+		Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
					battery saver is activated. oom lamp power supply)	0 V
4 (LG)	Ground	Interior room lamp power supply	Output	ed.	battery saver is not activat- or room lamp power supply)	Battery voltage
5	Cround	Passenger door UN-	Quitout	UNLOCK (Actuator is activated)		Battery voltage
(L)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(Y)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage
8	Ground	All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
(V) G	Ground				Other than LOCK (Actuator is not activated)	0 V
9	Crownd	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground				Other than UNLOCK (Actuator is not activated)	0 V
10		Rear RH door and	0	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(BR)	Ground	rear LH door UN- LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON		0 V
					OFF	0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brighten- ing/dimming level is in the neutral position (V) 10 0 0 2 ms JSNIA0010GB
15	Ground	ACC indicator lama	Output	Ignition owitch	OFF or ON	Battery voltage
(Y)	Ground	ACC indicator lamp	Output	Ignition switch	ACC	0 V

	inal No.	Description				Value	٥
(Wire +	e color) _	Signal name	Input/ Output		Condition	(Approx.)	А
			Output		Turn signal switch OFF	0 V	_
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch RH	(V) 15 10 50 1 s 1 s PKID0926E 6.5 V	B C D
					Turn signal switch OFF	0 V	Е
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 0 	F
		De en le ren timer		late day and an	OFF	6.5 V Battery voltage	
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	ON	0 V	Н
					Turn signal switch OFF	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch RH		AD K
					OPEN	6.5 V	
23					(Back door opener actuator is activated)	Battery voltage	L
(G)	Ground	Back door open	Output	Back door	Other than OPEN (Back door opener actuator is not activated)	0 V	M
					Turn signal switch OFF	0 V	
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V	N O P
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V	
(G)	Ground				ON (Operated)	Battery voltage	

	ninal No.	Description		0		Value	
+	e color)	Signal name	Input/ Output		Condition	(Approx.)	
34	Ground	Luggage room anten- na (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(SB)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	
35	Ground	Luggage room anten-	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(V)		na (+)			When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 1 1 1 1 1 1 1 1 1 1 1 1 1	
38	Ground	Ground Back door antenna (– Output		When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 0 15 0 15 15 15 15 15 15 15 15 15 15	
(B)	Ground		quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB		

	inal No.	Description				Value	0
	e color)	Signal name	Input/		Condition	Value (Approx.)	A
+	-		Output				
39	Ground	Back door antenna	Output	When the back door opener re-	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 5 0 1 5 1	B C D
(W)	Ground	(+)	Output	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	E
47		Ignition relay (IPDM			OFF or ACC	Battery voltage	G
47 (Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V	
52		Starter relay control	0.1.1	Ignition switch	When selector lever is in P or N position	Battery voltage	Н
(SB)	Ground	Statter relay control	Output	ŎN	When selector lever is not in P or N position	0 V	
60		Push-button ignition	1	Push-button igni-	Pressed	0 V	I
(BR)	Ground	switch (Push switch)	Input	tion switch (push switch)	Not pressed	Battery voltage	
					ON (Pressed)	0 V	ADF
61 (W)	Ground	Back door opener re- quest switch	Input	Back door opener request switch	OFF (Not pressed)	(V) 15 0 10 10 10 10 10 10 10 10 10	K
64		Intelligent Key warn-		Intelligent Key	Sounding	0 V	Μ
(V)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	Battery voltage	ь і
65 (BG)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	(V) 15 10 5 10 10 ms JPMIA0016GB	N O P
					Not in stop position	1.0 V 0 V	

	inal No. e color)	Description		0		Value
+	-	Signal name	Input/ Output	Condition		(Approx.)
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
					Pressed	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (Door open)	0 V

	inal No.	Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	A
74	Ground	Passenger door an-	Output	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 1 1 1 1 1 1 1 1 1 1 1 1	B C D
(SB)	(SB)	tenna (-)		quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	E
75	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	(V) 15 10 5 0 1 s JMKIA0062GB	G H I
(GR)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s 1 JMKIA0063GB	ADP K L
76	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	M
(V)	Ground	(-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 15 10 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	P

	inal No.	Description				Value
(VVire +	e color) _	Signal name	Input/ Output		Condition	(Approx.)
77	Ground	Driver door antenna	Output	When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 0 1 1 1 1 1 1 1 JMKIA0062GB
(LG)		(+)		switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
78	Ground	Room antenna 1 (−) (Instrument panel)	Output	lgnition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB
(Y)	Ground				When Intelligent Key is not in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0063GB
79	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)					When Intelligent Key is not in the passenger compart- ment	(V) 15 0 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	
82	Ground	Ignition relay [Fuse	Output	Ignition switch	OFF or ACC	0 V	
(R)	Clound	block (J/B)] control	Output	ON		Battery voltage	
83	83 Ground Remote keyless entry receiver communica-	emote keyless entry eceiver communica- Output			(V) 15 0 0 1 1 1 ms J J J MKIA0064GB		
(Y)		tion		When operating either button on the key		(V) 15 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	

Κ

L

Μ

Ν

Ο

Ρ

	inal No. e color)	Description	I		Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V
87	Ground	Combination switch	Input	Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0037GB 1.3 V
(BR)		INPUT 5		switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms 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	(V) 15 0 2 ms JPMIA0040GB 1.3 V

	inal No.	Description				Value	
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMA0041GB 1.4 V	B C D
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V	E
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	G H
					Rear washer switch ON (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0039GB 1.3 V	ADF K
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 0 2 ms JPMIA0040GB 1.3 V	M
90 (P)	Ground	CAN-L	Input/ Output				0
91 (L)	Ground	CAN-H	Input/ Output	_		_	Ρ

	inal No.	Description				Value
(Wire +	e color) _	Signal name	Input/ Output		Condition	(Approx.)
					OFF	Battery voltage
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 0 15 15 10 15 15 10 15 15 10 15 15 10 15 10 15 10 10 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10
					ON	0 V
93	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
(V)				·g·····	ON	0 V
94	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
(Y)	Croana		Output		ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(BG)	Ground	Acc relay control	Output	Ignition switch	ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (De- tention switch) power supply	Output	_		Battery voltage
99	Oneveral	Selector lever P posi-			P position	0 V
(R)	Ground	tion switch	Input	Selector lever	Any position other than P	Battery voltage
					ON (Pressed)	0 V
100 (G)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms 10 ms JPMIA0016GB 1.0 V
					ON (Pressed)	0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 0 10 ms JPMIA0016GB
·			OFF or ACC	1.0 V 0 V		
102 (BG)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF of ACC ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage

< ECU DIAGNOSIS INFORMATION >

	inal No.	Description				Value	
(Wir +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
					All switches OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 2 ms 1.3 V	G H I
					Front wiper switch LO	(V) 15 10 2 ms JPMIA0038GB 1.3 V	AD K
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB	M
						1.3 V	0

Ρ

	inal No.	Description		- Value		
+	e color) –	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3 V
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0040GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 0 2 ms JPMIA0039GB 1.3 V

	inal No.	Description													
(Wire +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)	А								
					All switches OFF	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B C D								
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	E								
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 1.3 V (V) 15 0 2.ms 									
													Front wiper switch INT	(V) 15 0 2 ms JPMIA0038GB 1.3 V	ADP K
					Front wiper switch HI	(V) 10 0 <td>M</td>	M								
					ON	0 V	0								
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB 1.1 V	Ρ								

Terminal No.		Description				Value		
(Wir) +	e color) –	Signal name	Input/ Output	Condition		(Approx.)		
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V		
(P)	Ground	Optical sensor	input	ON	When dark outside of the vehicle	Close to 0 V		
116 (SB)	Ground	Stop lamp switch 1	Input	_		Battery voltage		
		Stop lamp switch 2		Stop lamp switch	OFF (Brake pedal is not depressed)	0 V		
118	Ground	(Without ICC)	Input		ON (Brake pedal is de- pressed)	Battery voltage		
(P)	Cround	Stop lamp switch 2	mput	Stop lamp switch (pressed) and ICC	OFF (Brake pedal is not de- brake hold relay OFF	0 V		
		(With ICC)			ON (Brake pedal is de- rake hold relay ON	Battery voltage		
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	sembly driver side	sembly driver side	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 0 10 10 ms JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V		
121	Ground	Key slot switch	Input		serted into key slot	Battery voltage		
(BR)		,		When the key is no	ot inserted into key slot	0 V		
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC ON	0 V Battery voltage		
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch OFF (Door close)		(V) 15 0 10 ms JPMIA0011GB 11.8 V 0 V		
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 10 ms JPMIA0013GB 10.2 V Battery voltage		

Terminal No.		Description				N/ L	
(Wire	e color) _	Signal name Input/ Output		Condition		Value (Approx.)	
					ON (Tail lamps OFF)	9.5 V	
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level. (V) 15 10 5 0	
						JPMIA0159GB	
					OFF	0 V	
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage	
137		Receiver and sensor		-			
(BG)	Ground	ground	Input	Ignition switch ON	F	0 V	
138	Ground	Receiver and sensor	Output	Ignition switch	OFF	0 V	
(Y)		power supply		-	ACC or ON	5.0 V	
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 4 2 0 ••• 0.2s OCC3881D	
(L)		er communication	Output ON	- stpat	ON	When receiving the signal from the transmitter	(V) 6 2 0 0 0 0 0 0 0 0 0 0 0 0 0
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage	
(GR)		position			Except P and N positions	0 V	
					ON	0 V	
141 (G)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 0 5 0 1 5 0 5 0 5 0 5 0 5 0 5 5 0 5 5 0 5 5 5 5	
						11.3 V	

	inal No.	Description				Value
(vvire +	e color) -	Signal name	Input/ Output	Condition		(Approx.)
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V
					All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4)	0 V
143	Ground	Combination switch	Output	Combination	(Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10
(P)	Ground	OUTPUT 1	Culput	switch	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	5 0 2 ms 10.7 V
					All switches OFF (Wiper intermittent dial 4) Front washer switch ON	0 V
					(Wiper intermittent dial 4) Rear wiper switch ON	(0.0)
144	Ground	Combination switch OUTPUT 2	Output	Combination switch	(Wiper intermittent dial 4) Rear washer switch ON	
(G)				SWIICH	(Wiper intermittent dial 4)	
					 Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6 	
					All switches OFF	0 V
					Front wiper switch INT	(V)
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	Front wiper switch LO	15 10 5 0 2 ms JPMIA0034GB
						10.7 V

< ECU DIAGNOSIS INFORMATION >

Terminal No.		Description				Value	
(Wire +	e color) –	Signal name	Input/ Output	Condition		(Approx.)	
					All switches OFF	0 V	
					Front fog lamp switch ON		
				Combination	Lighting switch 2ND		
146	Ground	Combination switch	Output	switch	Lighting switch PASS		
(SB)	Giodina	OUTPUT 4	Output	(Wiper intermit- tent dial 4)	Turn signal switch LH	0 ↓ 2 ms JPMIA0035GB 10.7 V	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms 11.8 V	
					ON (Door open)	0 V	
151	0	Rear window defog-	Outro 1	Rear window de-	Active	0 V	
(G)	Ground	d ger relay control Outpu		fogger	Not activated	Battery voltage	

Κ

L

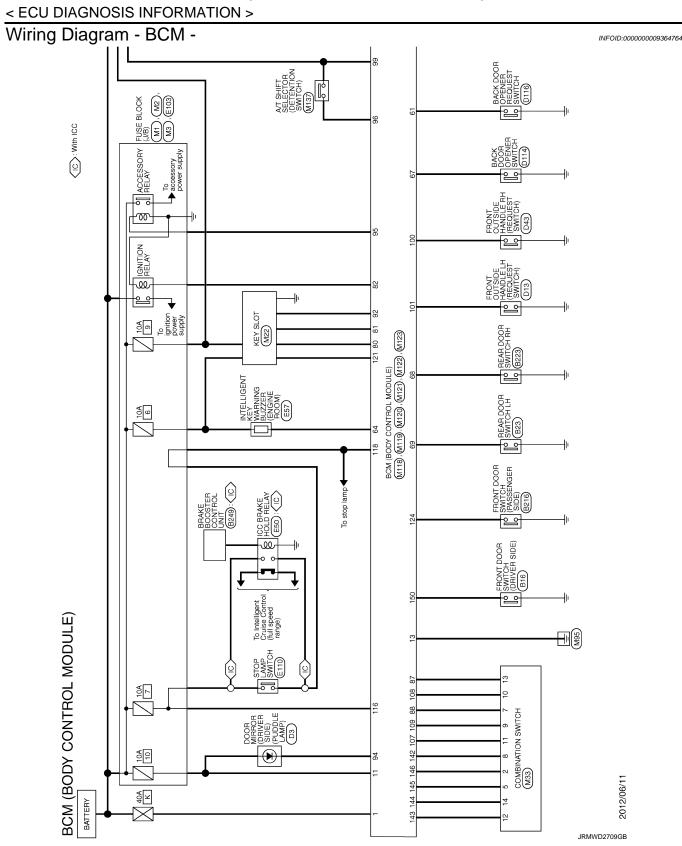
Μ

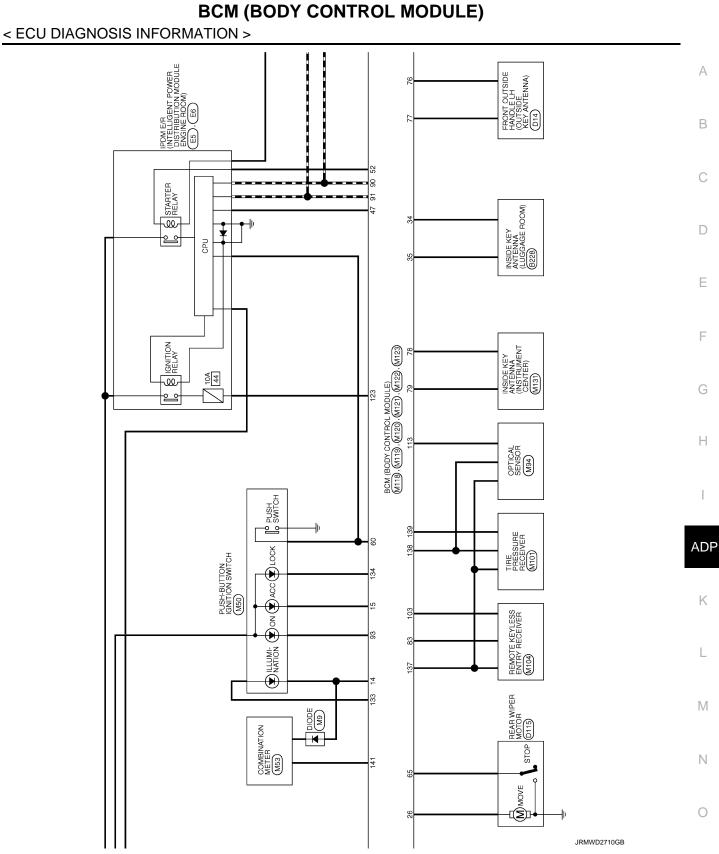
Ν

Ο

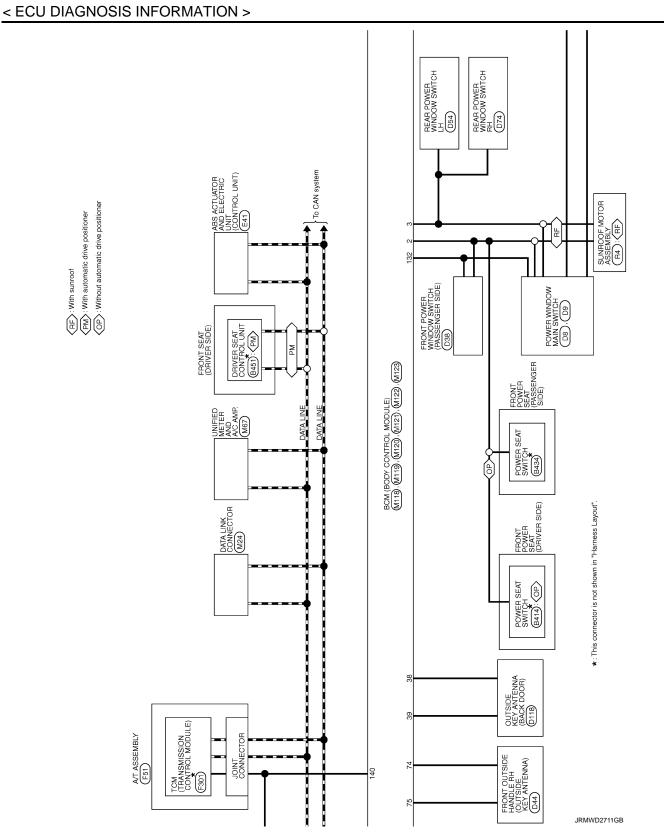
Ρ

ADP



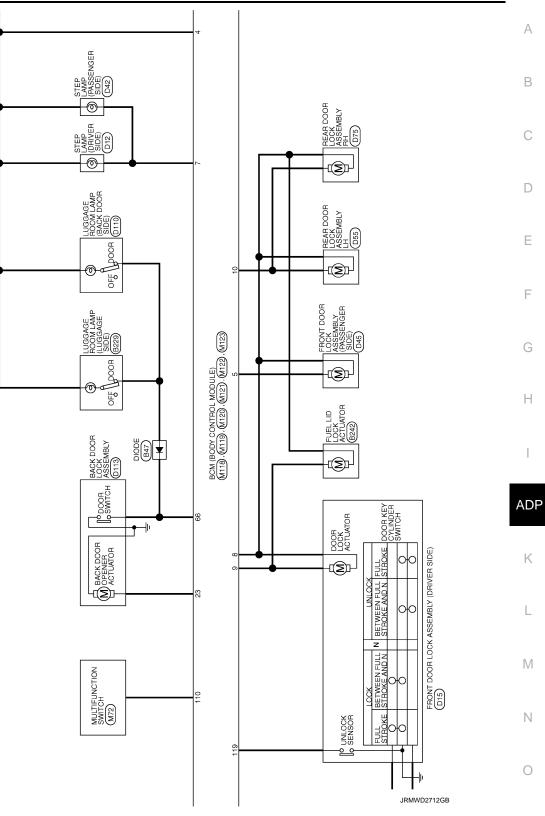


Ρ

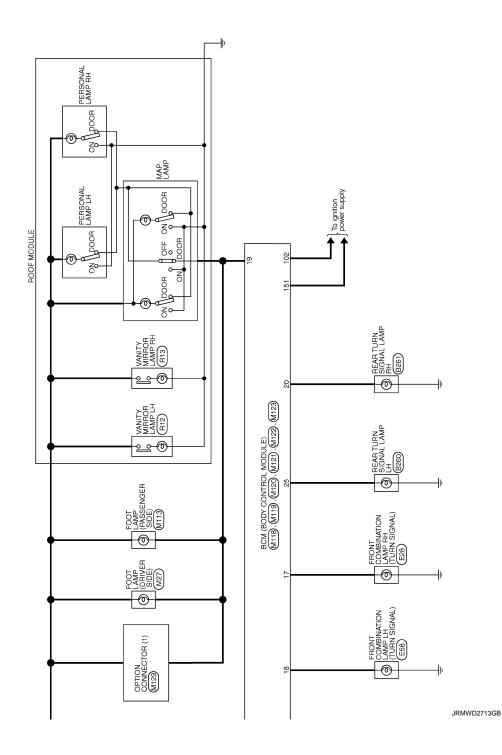


Revision: 2013 March

< ECU DIAGNOSIS INFORMATION >



Ρ



		А
	ATOR ATOR Decification DRIVE SIGNAL	В
	B242 FueL ub Lock Actuatore ModFWLC ModFWLC B249 B240	С
	Connector Vana EULL Connector Vana FULL Connector Vana FULL Connector Vana FULL	D
	GE ROOM	Е
	B228 Neste KEY ANTENNA (Lucace Eroon) PROCPGY BY007PGY BY011 Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	F
	Connector Name Connector Name NSDE K Connector Name	G
	fication) GER 8.0E	H
	Signal Name (Specification) 8216 FEAM DOOR SWITCH (PLASENCER BDE) 6600 N SWITCH (PLASENCER BDE) 860 N SWITCH (PLASENCER BDE) 960 N SWITCH (PLASENCER BD	ADF
	Terminal Calor Of 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	K
MODULE)	DRIVER SIDE	L
CONTROL	B16 FFRONT DOOR SWITCH (CRIVER S) A03FW	M
BCM (BODY CONTROL MODULE)	Connector Name FIG Connector Name FRONT DOOR SWITCH (DRIVER SUE) Connector Name FRONT DOOR SWITCH (DRIVER SUE) Timminal Color Name Color	Ν
		0

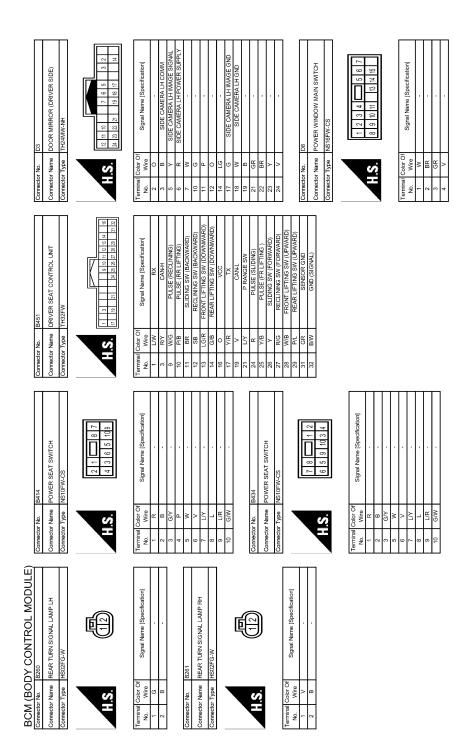
JRMWD8153GB

Ρ

Ο

BCM (BODY CONTROL MODULE)

ECU DIAGNOSIS INFORMATION >



JRMWD8154GB

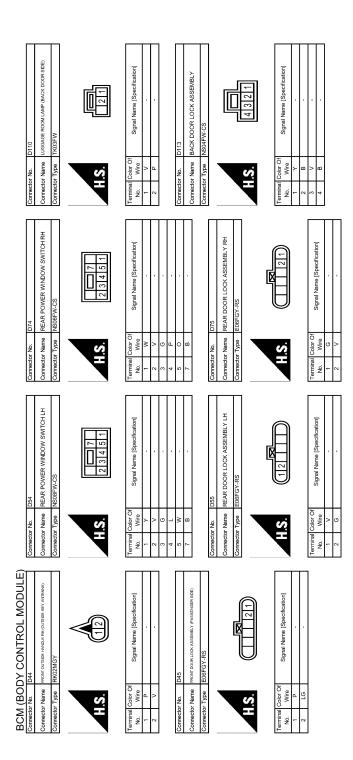
	A
ER SIDE)	В
D42 Strep LuAlly (PASSENCER SIDE) TBODFW Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	С
Corrector No. 042 Connector Name STEL Connector Name FIED Connector Name FIED Connector Name FIED	D
	E
015 FRANT DOORLOCK ASSEMALY (DRIVER SDE) FRANT DOORLOCK ASSEMALY (DRIVER SDE) EGBEGV-ASS EGBEGV-ASS Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] Signal Name [Specification]	F
	G
	Н
D13 FROM CUTS DE HANDLE LIN PEQUEST SWITCH RADOFL R	Ι
bit bit	ADP
Connector Connector A Connector Connector Connector Connector Connector	K
	L
OY CONTROL MOD OY CONTROL MOD OY CONTROL MOD Image: state sta	Μ
BCM (BODY CONTROL MODULE) Em ·	Ν
	0

JRMWD8155GB

Ρ

BCM (BODY CONTROL MODULE) < ECU DIAGNOSIS INFORMATION >

< ECU DIAGNOSIS INFORMATION >



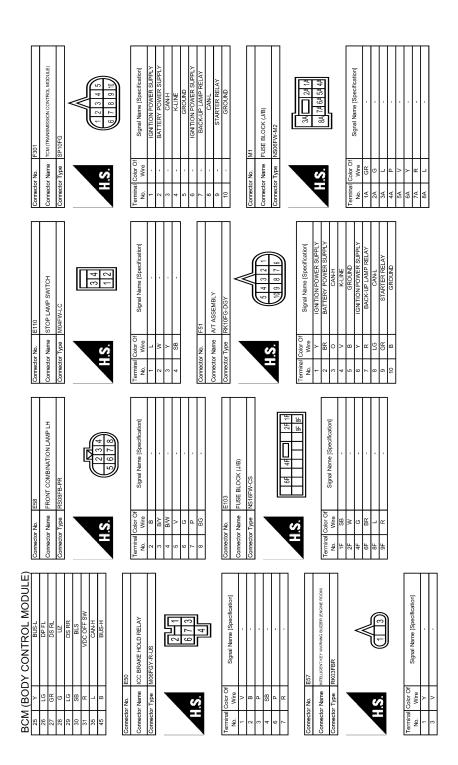
JRMWD8156GB

ECU DIAGNOSIS INFORMATION >

А В ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) FRONT COMBINATION LAMP RH Signal Name [Specification] Signal Name [Specification] GROUND UBMR UBVR GROUND DS FL DP RR DP FR DP FR VAC VAC CAN-L RA42FR-AH74-I H С Color Of Wire Color Of Wire Connector Name Connector Name Connector Type P BR < BG n () m m ⊢ ≤ B BR BG ≺ Connector Type H.S. H.S. B B∖B D Connector No. 12 12 15 19 Ś Ε 8 Signal Name [Specification] Signal Name [Specification] JGENT POWER DISTRIBUTION 41 40 39 46 45 44 43 F TH20FW-CS12-M4-1V PDM EJR (INTELLIGENT P ENGINE POOM) THO8FW-NH G Color Of Wire V Connector Type Connector Type Connector Name GR ⊢BR G ≷ LG ≺ BN Connector Name Wire P R G BR SB H.S. H.S. Connector No. Connector No. Terminal (No. No. 39 . 113 25 25 25 25 25 25 36 36 45 46 44 14 14 Н OUTSIDE KEY ANTENNA (BACK DOOR) Signal Name [Specification] Signal Name [Specification] BACK DOOR OPENER REQUEST SWITCH I 12 ₹<mark>7</mark> ADP D118 D116 Color Of Wire W B Color Of Wire BR Connector Type Connector Name Connector No. Connector Name onnector No. Type H.S. H.S. Terminal 0 No. Connector No. No. - ^ Κ BCM (BODY CONTROL MODULE) [commedian No. 10114 L Signal Name [Specification] Signal Name [Specification] BACK DOOR OPENER SWITCH 12 4<u>-</u> REAR WIPER MOTOR Μ TK02MBR-P D115 Terminal Color Of No. Wire 1 GR 2 B Solar Of G G B Connector Name Connector Type Connector Name Connector No. onnector Type H.S. H.S. Ν erminal No. Ο

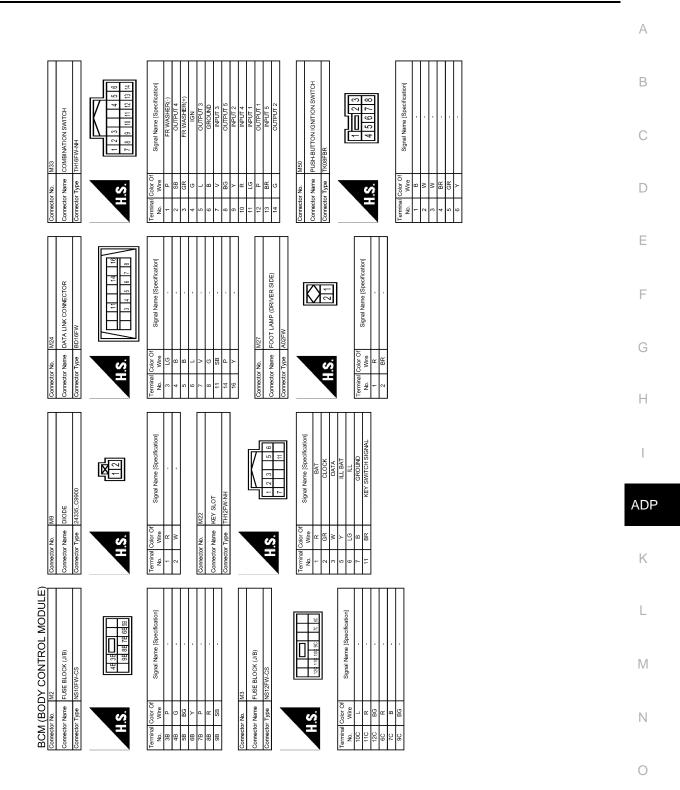
JRMWD8157GB

Р



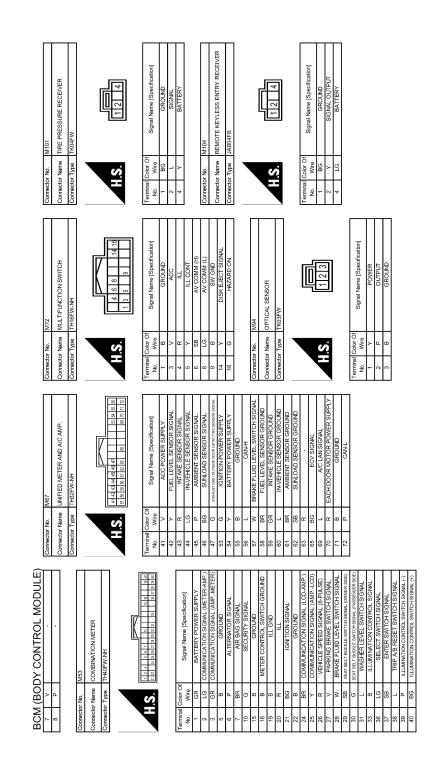
JRMWD8158GB

< ECU DIAGNOSIS INFORMATION >



JRMWD8159GB

Ρ



JRMWD8160GB

80 GR NATS ANT AMP. 81 W MITS ANT AMP. 82 R Not Set Mit AMP. 83 Y IGN RELAY (FB) CONT 87 IGN RELAY (FB) CONT 87 COMB LSWI NPUT 3 87 V COMB LSWI NPUT 3 87 V COMB LSWI NPUT 3 90 P CANL	L L L L L L L L L L L L L L L L L L L	108 R COMBI SWINPT 2 119 Y COMBI SWINPT 2 110 G HAZARD SW Connector No. M123 Connector Name BCM (BDD' CONTROL MODULE) Connector Type TH4DF5-NH	H.S.	al Color Of Wire SB P	19 38 DR DOR UNDCK SENSOR 121 BR KF SLOT SW 123 W TGN F/B 124 LG PASSERF DOR SW 122 BR POWER WINDOW WO OMM 132 BR FOWER WINDOW WO OMM 133 W PUSHeUTTON INDIVINGING WILL POWER 137 GR RECELVERSENSOR GND 138 Y RECELVERSENSOR GND	
Corrector No. M121 Corrector Name BCM (BODY CONTROL MODULE) Corrector Type TH40FGY-NH		52 38 STARTER RELAY CONT 60 BR FLGHSLAY CONT 61 W BACK DOOR OPENER REQUEST SW 63 V HCH WARN BUZZER (EVA ROOM) 64 V HCK WARN BUZZER (EVA ROOM) 65 BG REAR WINGH BUZZER (EVA ROOM) 66 R BACK DOOR OPENER STOP POSITION 67 GR BACK DOOR OPENER SW 68 BR REAR RHOOOR SW 69 R REAR RHOOOR SW	Conrector No. M122 Cornector Name BCM (BODY CONTROL MODULE) Cornector Type T1440FB-NH	HS	Terminal Num Color Of Nine Signal Name [Specification] Na Wire Signal Name [Specification] 74 SB PASSENEER DOR ANT- 75 75 GR PASSENEER DOR ANT- 77 76 V DRIVER DOOR ANT- 77 78 V ROUR DOOR ANT- 77 79 BR ROOM ANT- 70	
Corrector No. M119 Corrector Name BCM (BODY CONTROL MODULE) Corrector Type NST6FW-CS	A Supervised and the second se	10 BR REAR DOOR UNDERT 11 R BA BAT (FUSE) 13 B GROUND 14 W PUSHBUTONIGNINOS (ILLOND) 15 Y TURNISION SWILLOND 16 Y TURNISION LIH (FRONT) 17 W TURNISIONLUL (FRONT) 18 BG TURNISIONLUL (FRONT) 19 V TURNISIONLUL (FRONT)	Corrector No. M120 Corrrector Name BCM (BODY CONTROL MODULE) Connector Type NS12FW-CS	H.S.	Terminal Color Of No. Signal Name (Specification) No. Wre TURN SIGNUL RH (REAR) 20 V TURN SIGNUL RH (REAR) 23 G BARNUL RH (SEAR) 26 G TURN SIGNUL HI (REAR) 26 G REAR WIPER OUTPUT	
BCM (BODY CONTROL MODULE) Connector Non. M113 Connector hype FOOT LAMP (PASSENGER SIDE) Connector Type A02FW	Terminal Color Of Signal Name [Specification] No. Wree Signal Name [Specification] 2 BR	Connector Name BCM (BODY CONTROL MODULE) Connector Type MOFB-LC	Terminal Color Of Signal Name [Specification] No. Wree BATT [FIL] 1 W BATT [FIL] 2 W POWER WINDOW POWER SUPPLY[RAT] 3 Y POWER WINDOW POWER SUPPLY[RAP]			

JRMWD8161GB

Р

Ο

А

В

С

D

Е

F

G

Н

ADP

Κ

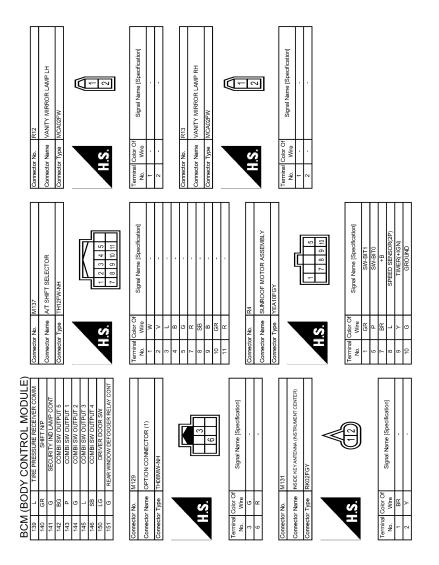
L

Μ

Ν

BCM (BODY CONTROL MODULE) < ECU DIAGNOSIS INFORMATION >

< ECU DIAGNOSIS INFORMATION >



JRMWD8162GB

INFOID:000000009364765

FAIL-SAFE CONTROL BY DTC

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

Fail-safe

< 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 $ON \rightarrow OFF$
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistentStarter control relay signalStarter 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 fulfilledPower position changes to ACCReceives 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 be- comes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal. When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

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

DTC Inspection Priority Chart

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

Priority	DTC	
1	B2562: LOW VOLTAGE	
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)	
3	 B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING 	

Κ

L

INFOID:000000009364766

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
4	 B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2600: STARTER CONT RELAY B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2605: PNP SW B2606: IGNITION RELAY B2607: IGNITION RELAY B2608: STARTER RELAY B2604: IGNITION RELAY B2604: IGNITION RELAY B2605: PNP SW B2604: IGNITION RELAY B2605: PNP SW B2606: IGN STATE SIG LOST B2614: ACC RELAY CIRC B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2616: IGN RELAY CIRC B2616: STARTER RELAY CIRC B2618: BCM B2614: PUSH-BTN IGN SW B2614: PUSH-BTN IGN SW B2614: VEHICLE TYPE B2614: VEHICLE TYPE B2614: VEHICLE 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] 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	B2621: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

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 <u>BCS-18</u>, <u>"COM-MON ITEM : CONSULT Function (BCM - COMMON ITEM)"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM CIRCUIT	_		_		BCS-41
U1010: CONTROL UNIT (CAN)	—	—	_	—	BCS-42
U0415: VEHICLE SPEED SIG		—	_	_	<u>BCS-43</u>
B2190: NATS ANTENNA AMP	×	—	—	—	<u>SEC-40</u>

INFOID:000000009364767

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	A
B2191: DIFFERENCE OF KEY	×	_	_	_	<u>SEC-43</u>	
B2192: ID DISCORD BCM-ECM	×			_	<u>SEC-44</u>	C
B2193: CHAIN OF BCM-ECM	×		_	_	<u>SEC-45</u>	С
B2195: ANTI SCANNING	×			_	<u>SEC-46</u>	
B2553: IGNITION RELAY	_	×	_	_	PCS-48	D
B2555: STOP LAMP	_	×	_	_	<u>SEC-47</u>	
B2556: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-49</u>	_
B2557: VEHICLE SPEED	×	×	×		<u>SEC-51</u>	E
B2560: STARTER CONT RELAY	×	×	×	_	<u>SEC-52</u>	
B2562: LOW VOLTAGE	_	×		_	BCS-44	F
B2601: SHIFT POSITION	×	×	×	_	<u>SEC-53</u>	
B2602: SHIFT POSITION	×	×	×	_	<u>SEC-56</u>	
B2603: SHIFT POSI STATUS	×	×	×	_	<u>SEC-59</u>	G
B2604: PNP SW	×	×	×	_	<u>SEC-62</u>	
B2605: PNP SW	×	×	×		<u>SEC-64</u>	Н
B2608: STARTER RELAY	×	×	×	_	<u>SEC-66</u>	
B260A: IGNITION RELAY	×	×	×	_	PCS-50	
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-68</u>	
B2614: ACC RELAY CIRC	_	×	×	_	PCS-52	
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-55	AD
B2616: IGN RELAY CIRC	_	×	×	_	PCS-58	
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-71</u>	
B2618: BCM	×	×	×	_	PCS-61	Κ
B261A: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-73</u>	
B261E: VEHICLE TYPE	×	×	imes (Turn ON for 15 seconds)	_	<u>SEC-76</u>	L
B2621: INSIDE ANTENNA	—	×	—	—	DLK-58	
B2623: INSIDE ANTENNA	—	×	—	—	DLK-60	M
B26E1: ENG STATE NO RES	×	×	×	—	<u>SEC-69</u>	1 1 1
B26EA: KEY REGISTRATION	_	×	\times (Turn ON for 15 seconds)	_	<u>SEC-70</u>	Ν
C1704: LOW PRESSURE FL	—	—	—	×		
C1705: LOW PRESSURE FR	—	—	—	×		
C1706: LOW PRESSURE RR	—	—	—	×	<u>WT-23</u>	0
C1707: LOW PRESSURE RL	—	—	—	×		
C1708: [NO DATA] FL	—	—	—	×		Р
C1709: [NO DATA] FR	—	—	—	×		
C1710: [NO DATA] RR	—	—	—	×	<u>WT-25</u>	
C1711: [NO DATA] RL	_	_	_	×	1	

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1716: [PRESSDATA ERR] FL	—	_	_	×	
C1717: [PRESSDATA ERR] FR	—	—	—	×	WT-28
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u>VV1-20</u>
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-30</u>
C1734: CONTROL UNIT	—	—	_	×	<u>WT-32</u>

MANUAL FUNCTION DOES NOT OPERATE
SYMPTOM DIAGNOSIS
MANUAL FUNCTION DOES NOT OPERATE
ALL COMPONENT
ALL COMPONENT : Diagnosis Procedure
1.CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT
Check driver seat control unit power supply and ground circuit. Refer to <u>ADP-58</u> , "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure".
Is the inspection result normal?
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.
2. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT
Check automatic drive positioner control unit power supply and ground circuit. Refer to ADP-59, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure".
Is the inspection result normal?
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.
3. CONFIRM THE OPERATION
Confirm the operation again.
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident</u> ".
NO >> GO TO 1. POWER SEAT
POWER SEAT : Diagnosis Procedure
ADP 1.CHECK POWER SEAT SWITCH GROUND CIRCUIT
Check power seat switch ground circuit. Refer to <u>ADP-81, "Diagnosis Procedure"</u> .
Is the inspection result normal?
YES >> GO TO 2. NO >> Repair or replace harness or connector.
2.CONFIRM THE OPERATION
Confirm the operation again.
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident</u> ".
NO >> GO TO 1.
STEERING POSITION FUNCTION DOES NOT OPERATE
STEERING POSITION FUNCTION DOES NOT OPERATE : Diagnosis Procedure
1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT
Check tilt & telescopic switch ground circuit. Refer to <u>ADP-82, "Diagnosis Procedure"</u> .
Is the inspection result normal?
YES >> GO TO 2. NO >> Repair or replace harness or connector.
2.CONFIRM THE OPERATION

< SYMPTOM DIAGNOSIS >

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

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-61, "Component Function Check".

Is the inspection result normal?

YFS >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 ${
m 3.}$ CHECK SLIDING MOTOR

Check sliding motor. Refer to ADP-107, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

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-63, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor.

INFOID:000000009063589

INFOID:000000009063588

< SYMPTOM DIAGNOSIS >	
Refer to ADP-109, "Component Function Check".	
Is the inspection result normal?	А
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	
4. CONFIRM THE OPERATION	В
Check the operation again.	
Is the result normal?	С
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .	C
SEAT LIFTING (FRONT)	D
SEAT LIFTING (FRONT) : Diagnosis Procedure	
1.CHECK LIFTING (FRONT) MECHANISM	Е
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	F
Is the inspection result normal?	
YES >> GO TO 2.	G
NO >> Repair or replace the malfunction parts.	
2.CHECK LIFTING SWITCH (FRONT)	
Check lifting switch (front). Refer to <u>ADP-65, "Component Function Check"</u> .	Η
Is the inspection result normal?	
YES >> GO TO 3.	I
NO >> Repair or replace the malfunction parts. 3.CHECK LIFTING MOTOR (FRONT)	
	ADF
Check lifting motor (front). Refer to ADP-111, "Component Function Check".	
Is the inspection result normal?	K
YES >> GO TO 4.	Γ\
NO >> Repair or replace the malfunction parts.	
4.CONFIRM THE OPERATION	L
Check the operation again.	
<u>Is the result normal?</u>	M
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	
SEAT LIFTING (REAR)	
SEAT LIFTING (REAR) : Diagnosis Procedure	Ν
1.CHECK LIFTING (REAR) MECHANISM	0
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	Ρ
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	
NO >> Repair or replace the malfunction parts. 2.CHECK LIFTING SWITCH (REAR)	
Check lifting switch (rear). Refer to <u>ADP-67, "Component Function Check"</u> .	

< SYMPTOM DIAGNOSIS >

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-113, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".

NO >> GO TO 1.

STEERING TILT

STEERING TILT : Diagnosis Procedure

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-69, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK TILT MOTOR

Check tilt motor.

Refer to ADP-115, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

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?

ADP-208

INFOID:000000009063593

INFOID:0000000009063592

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 2.	_
NO >> Repair or replace the malfunction parts. 2.CHECK TELESCOPIC SWITCH	A
Check telescopic switch. Refer to <u>ADP-71, "Component Function Check"</u> .	В
Is the inspection result normal?	
YES >> GO TO 3.	С
NO >> Repair or replace the malfunction parts.	C
3. CHECK TELESCOPIC MOTOR	
Check telescopic motor.	D
Refer to <u>ADP-117, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 4.	E
NO >> Repair or replace the malfunction parts.	
4.CONFIRM THE OPERATION	
Check the operation again.	— F
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .	G
NO >> GO TO 1. DOOR MIRROR	
	Н
DOOR MIRROR : Diagnosis Procedure	
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?	ADP
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	К
2.CHECK MIRROR SWITCH	IX.
Check mirror switch. Refer to ADP-78, "MIRROR SWITCH : Component Function Check".	_
Is the inspection result normal?	L
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	M
3. CHECK MIRROR MOTOR	
Check mirror motor.	N
Refer to <u>ADP-119</u> , "Component Function Check".	14
<u>Is the inspection result normal?</u> YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	0
4. CONFIRM THE OPERATION	
Check the operation again.	Р
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	

< SYMPTOM DIAGNOSIS >

MEMORY FUNCTION DOES NOT OPERATE
ALL COMPONENT
ALL COMPONENT : Diagnosis Procedure
1.CHECK MANUAL OPERATION
Check manual operation.
Is the inspection result normal?
YES >> GO TO 2.
NO >> Repair or replace the malfunction parts.
2.PERFORM INITIALIZATION AND MEMORY STORING PROCEDURE
 Perform initialization procedure. Refer to <u>ADP-9, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>.
2. Perform memory storing procedure. Refer to ADP-9, "MEMORY STORING : Special Repair Requirement".
 Check memory function. Refer to <u>ADP-25</u>, "<u>MEMORY FUNCTION</u>: System Description".
Is the inspection result normal?
YES >> Memory function is normal.
NO >> GO TO 3.
3. CHECK SEAT MEMORY SWITCH
Check seat memory switch. Refer to <u>ADP-73, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 4.
NO >> Replace seat memory switch.
4.CHECK DETENTION SWITCH
Check detention switch. Refer to ADP-83, "Component Function Check".
Is the inspection result normal?
YES >> GO TO 5.
NO >> Repair or replace the malfunction parts.
5. CONFIRM THE OPERATION
Confirm the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .
NO >> GO TO 1. SEAT SLIDING
SEAT SEIDING
SEAT SLIDING : Diagnosis Procedure
1.CHECK MANUAL OPERATION
Check manual operation.
Is the inspection result normal?
YES >> GO TO 2. NO >> Refer to <u>ADP-206, "SEAT SLIDING : Diagnosis Procedure"</u>
2. CHECK SLIDING SENSOR
Check sliding sensor. Refer to ADP-87, "Component Function Check".

Revision: 2013 March

Is the inspection result normal?

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	А
3. CONFIRM THE OPERATION	
Check the operation again.	В
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	0
SEAT RECLINING	C
SEAT RECLINING : Diagnosis Procedure	D
1.CHECK MANUAL OPERATION	
Check manual operation.	Е
<u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Refer to <u>ADP-206, "SEAT RECLINING : Diagnosis Procedure"</u>	F
2. CHECK RECLINING SENSOR	Г
Check reclining sensor. Refer to <u>ADP-90, "Component Function Check"</u> .	G
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	Н
3. CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal?	I
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .	
NO >> GO TO 1. SEAT LIFTING (FRONT)	ADP
SEAT LIFTING (FRONT) : Diagnosis Procedure	K
1.CHECK MANUAL OPERATION	
Check manual operation.	L
<u>Is the inspection result normal?</u> YES >> GO TO 2.	
NO >> Refer to <u>ADP-207, "SEAT LIFTING (FRONT) : Diagnosis Procedure"</u>	Μ
2. CHECK LIFTING SENSOR (FRONT)	
Check lifting sensor (front). Refer to <u>ADP-93, "Component Function Check"</u> .	Ν
Is the inspection result normal?	
YES >> GO TO 3.	0
NO >> Repair or replace the malfunction parts.	0
3.CONFIRM THE OPERATION	E.
Check the operation again. <u>Is the result normal?</u>	Ρ
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .	
NO $>>$ GO TO 1.	
SEAT LIFTING (REAR)	

< SYMPTOM DIAGNOSIS >	
SEAT LIFTING (REAR) : Diagnosis Procedure	INFOID:000000009063599
1.CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>ADP-207, "SEAT LIFTING (REAR) : Diagnosis Procedure"</u>	
2. CHECK LIFTING SENSOR (REAR)	
Check lifting sensor (rear). Refer to <u>ADP-96, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	
3.CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> . NO >> GO TO 1.	
STEERING TELESCOPIC	
STEERING TELESCOPIC : Diagnosis Procedure	INFOID:000000009063600
1. CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>ADP-208, "STEERING TELESCOPIC : Diagnosis Procedure"</u>	
2.CHECK TELESCOPIC SENSOR	
Check steering telescopic sensor.	
Refer to ADP-101, "Component Function Check".	
<u>Is the inspection result normal?</u> YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	
3. CONFIRM THE OPERATION	
Check the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-42. "Intermittent Incident"</u> .	
NO >> GO TO 1. STEERING TILT	
STEERING TILT : Diagnosis Procedure	INFOID:000000009063601
1.CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>ADP-208, "STEERING TILT : Diagnosis Procedure"</u>	
2. CHECK TILT SENSOR	

Check steering tilt sensor. Refer to <u>ADP-99, "Component Function Check"</u>.

< SYMPTOM DIAGNOSIS >	
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3. CONFIRM THE OPERATION	A
Check the operation again.	В
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42. "Intermittent Incident"</u> . NO >> GO TO 1. DOOR MIRROR	С
DOOR MIRROR : Diagnosis Procedure	D
1.CHECK MANUAL OPERATION	_
Check manual operation.	E
Is the inspection result normal? YES >> GO TO 2. NO >> Refer to <u>ADP-209, "DOOR MIRROR : Diagnosis Procedure"</u>	F
2.CHECK MIRROR SENSOR	
Check mirror sensor. Refer to <u>ADP-103, "DRIVER SIDE : Component Function Check"</u> . (Driver side) Refer to <u>ADP-104, "PASSENGER SIDE : Component Function Check"</u> . (Passenger side)	G
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	H
3.CONFIRM THE OPERATION	I
Check the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u> .	ADP
NO >> GO TO 1.	Κ
	L
	Μ
	Ν

0

Ρ

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009063603

1.CHECK MEMORY INDICATOR

Check memory indicator. Refer to <u>ADP-122, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

 $2. {\sf CONFIRM} \text{ THE OPERATION}$

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>.

NO >> GO TO 1.

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SEAT SYNCHRONIZATION FUNCTION DOES NOT OPERATE

		Λ
Diagnosis Procedure	INFOID:000000009063604	~
1.CHECK SYSTEM SETTING		В
Check system setting. Refer to <u>ADP-11, "SYSTEM SETTING : Special Repair Requirement"</u> .		
Is the inspection result normal?		С
YES >> Synchronization function is normal. NO >> GO TO 2.		
2. CONFIRM THE OPERATION		D
Check the operation again.		
Is the result normal?		Е
 YES >> Check intermittent incident. Refer to <u>GI-42, "Intermittent Incident"</u>. NO >> GO TO 1. 		
		F

I

Н

G

ADP

К

L

Μ

Ν

Ο

Ρ

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000009063605

```
1.CHECK SYSTEM SETTING
```

- 1. Check system setting. Refer to <u>ADP-11, "SYSTEM SETTING : Special Repair Requirement"</u>.
- 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 <u>ADP-9, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>.
- 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 <u>ADP-85, "Component Function Check"</u>.

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 <u>GI-42, "Intermittent Incident"</u>.
- NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

	- —	Λ
Diagnosis Procedure	INFOID:0000000009063606	A
1. CHECK DOOR LOCK FUNCTION		В
Check door lock function. Refer to <u>DLK-7, "Work Flow"</u> .		
Is the inspection result normal?		С
YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 2.PERFORM MEMORY STORING PROCEDURE		D
 Perform memory storing procedure. Refer to <u>ADP-9, "MEMORY STORING : Special Repair Requirement"</u>. Check Intelligent Key interlock function. Refer to <u>ADP-37, "INTELLIGENT KEY INTERLOCK FUNCTION : System Description"</u>. 		E
Is the inspection result normal? YES >> Intelligent Key inter lock function is normal. NO >> Replace driver seat control unit. Refer to <u>ADP-221, "Removal and Installation"</u> .		F
		G

Н

ADP

К

L

Μ

Ν

Ο

Ρ

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000009063607

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

Symptom	Cause	Action to take	Reference page
	No initialization has been performed.	Perform initialization.	<u>ADP-25</u>
Entry/exit assist function does not operate.	Entry/exit assist function is disabled. NOTE: The entry/exit assist function are enabled before delivery (initial setting).	Change the settings.	<u>ADP-11</u>
Entry assist function does not op- erate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the memory function.	<u>ADP-25</u>
	Seat synchronization function is dis- abled. NOTE: The entry/exit assist function are dis- abled before delivery (initial setting).	Change the settings.	<u>ADP-11</u>
Seat synchronization function does not operate.	The synchronization function will not op- erate if the steering (tilt, telescopic) or the door mirror moves to the operating end while the seat synchronization function is operating.	Perform the memory function or drive the vehicle at more than 7 km/h (4 MPH).	<u>ADP-25</u>
	Seat adjustment load has exceed any of the volumes below. • Seat sliding: 76 mm • Seat reclining: 9.1 degrees • Seat lifting (rear): 20 mm		_
Lumbar support does not per- form memory operation.	The lumbar support system are con- trolled independently with no link to the automatic drive positioner system.	_	Lumbar support system: <u>SE-10</u>
			Memory function: <u>ADP-25</u>
Memory function, entry/exit as- sist function, seat synchroniza- tion function, or Intelligent Key interlock function does not oper- ate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Exit assist function: <u>ADP-29</u>
			Entry assist function: <u>ADP-33</u>
			Seat synchronization function: <u>ADP-21</u>
			Intelligent Key interlock function: <u>ADP-37</u>

< PRECAUTION > PRECAUTION PRECAUTIONS

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

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.

Service

- When removing or installing various parts, place a cloth or padding onto the vehicle body to prevent scratches.
- Handle trim, molding, instruments, grille, etc. carefully during removing or installing. Be careful not to oil or damage them.
- Apply sealing compound where necessary when installing parts.
- When applying sealing compound, be careful that the sealing compound does not protrude from parts.
- When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust prevention measures.

Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
- Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.

ADP-219

А

В

Е

F

Н

ADP

Κ

Μ

Ν

Ρ

INFOID:000000009063609

INFOID:000000009063610

PRECAUTIONS

< PRECAUTION >

Then rub with a soft and dry cloth.

- Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the fouled area.

Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.

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

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

Exploded View

Refer to SE-129, "Exploded View".

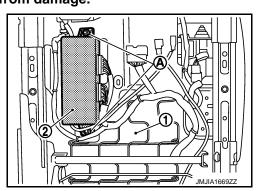
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the driver seat (1). Refer to <u>SE-132</u>, "Removal and <u>Installation</u>".
- 2. Remove the mounting bolts (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 <u>ADP-8</u>, "<u>ADDI-</u><u>TIONAL SERVICE WHEN REPLACING CONTROL UNIT</u> : <u>Description</u>".

K

L

Μ

Ν

Ρ

ADP

А

В

С

D

Ε

F

Н

INFOID:000000009063611

INFOID:000000009063612

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Exploded View

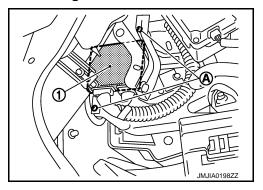
Refer to IP-12, "Exploded View".

Removal and Installation

REMOVAL

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

- 1. Remove the instrument driver lower panel. Refer to <u>IP-13</u>, <u>"Removal and Installation"</u>.
- 2. Remove the screws (A).
- 3. Remove automatic drive positioner control unit (1).



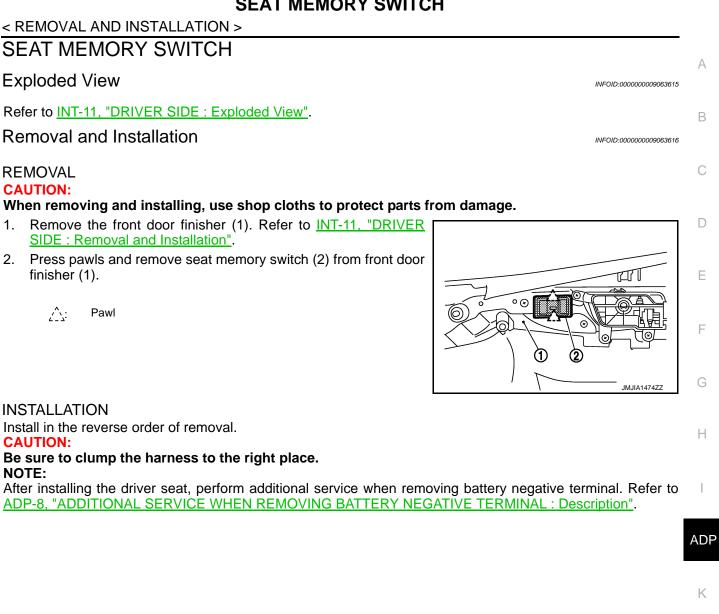
INSTALLATION Install in the reverse order of removal. CAUTION: Be sure to clump the harness to the right place. NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to <u>ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.

INFOID:000000009063613

INFOID:000000009063614

SEAT	MEMORY	SWITCH
-	-	



L

Μ

Ν

Ρ

< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

Exploded View

Refer to SE-129, "Exploded View".

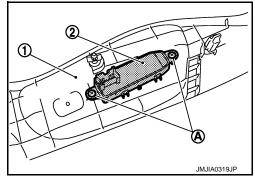
Removal and Installation

REMOVAL

CAUTION:

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

- 1. Remove the seat cushion outer finisher (1). Refer to <u>SE-133</u>, "Disassembly and Assembly".
- 2. Remove the screws (A).
- 3. Remove the power seat switch (2) from the seat cushion outer finisher (1).



INSTALLATION Install in the reverse order of removal. **CAUTION:** Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to ADP-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description".

INFOID:000000009063617

INFOID:000000009063618

TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

Exploded View

Refer to IP-12, "Exploded View".

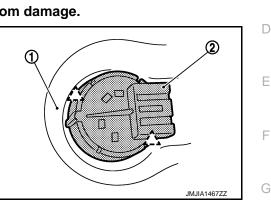
Removal and Installation

REMOVAL CAUTION:

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

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





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".

ADP

Н

А

В

INFOID:000000009063619

INFOID:000000009063620

Κ

L

Μ

Ν

Ρ

Revision: 2013 March