SECTION MIR
MIRRORS

CONTENTS

WITH ADP

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000012173311

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred) as much as possible when the customer brings the vehicle in.

>> GO TO 2.

2.CHECK DTC

Perform self-diagnosis for automatic drive positioner (ADP) with CONSULT.

Is any DTC detected?

YES >> Refer to ADP-142, "DTC Index".
NO >> GO TO 3.

3.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 4.

4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH “SYMPTOM DIAGNOSIS”

Use “Symptom diagnosis” from the symptom inspection result in step 3. Then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 5.

5.IDENTIFY MALFUNCTIONING PARTS WITH “COMPONENT DIAGNOSIS”

Perform the diagnosis with “Component diagnosis” of the applicable system.

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

7.FINAL CHECK

Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 3.

Are all malfunctions corrected?

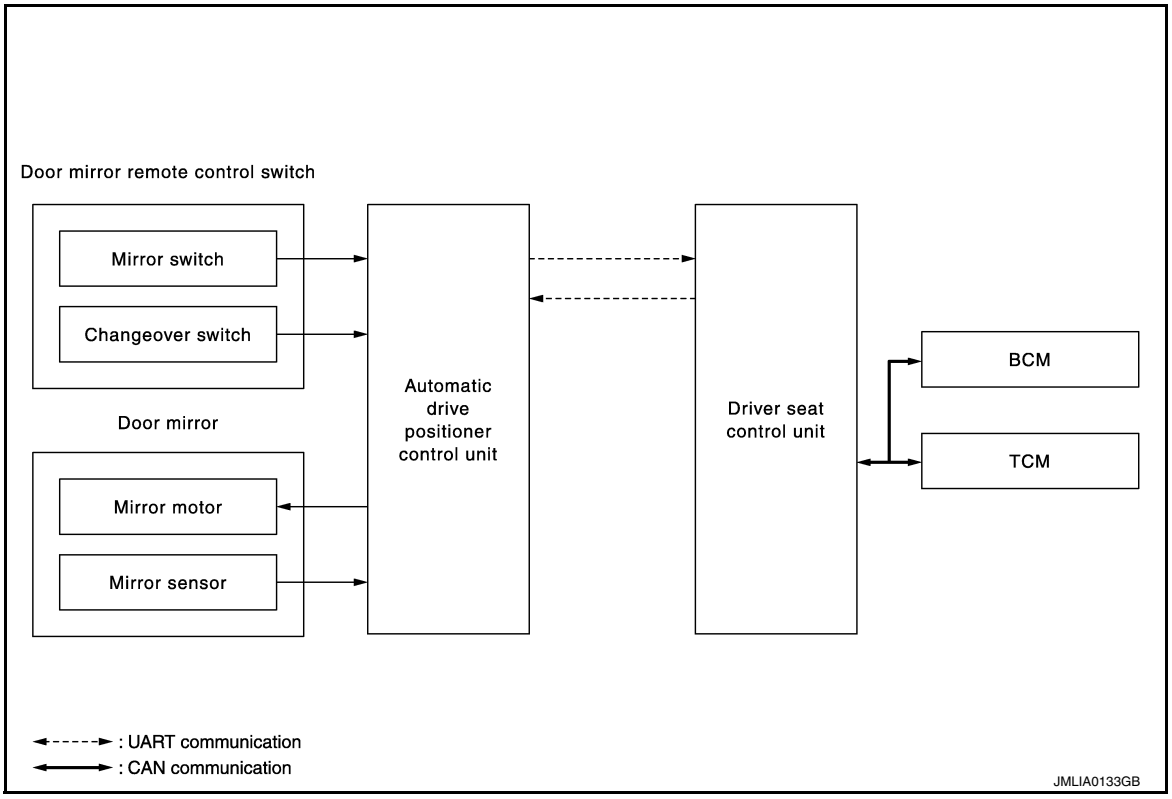
YES >> INSPECTION END
NO >> GO TO 4.

SYSTEM DESCRIPTION

DOOR MIRROR SYSTEM

System Diagram

INFOID:0000000012173312



System Description

INFOID:0000000012173313

MANUAL FUNCTION

Description

- Automatic drive positioner control unit controls door mirror.
- Automatic drive positioner control unit inputs changeover switch signal and perform the LH/RH control of door mirror motor supplying electric power when changeover switch is operated.
- Automatic drive positioner control unit inputs mirror switch signal and supplies electric power to door mirror.
- 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.

Operation Conditions

If the following conditions are not satisfied, operation is not performed.

- Ignition switch: ON or ACC
- Changeover switch: Select either left or right

REVERSE INTERLOCK DOOR MIRROR SYSTEM

Description

- Select one of the door mirror faces by change over switch, and then set the selected mirror face downward/inward.
- When the ignition switch is ON position and A/T shift selector is in R position, the TCM sends the R signal to the driver seat control unit. The R signal is transmitted to the automatic drive positioner control unit from the driver seat control unit via UART communication. When the R signal is detected, the automatic device positioner control unit activated the mirror motor.

Operation Conditions

If the following conditions are not satisfied, operation is not performed.

- Ignition switch: ON
- Changeover switch: Select either left or right
- A/T shift selector: R position

During the reverse interlock door mirror system, if all of the above conditions are not satisfied, mirror face returns to original angle.

Mirror Angle Memory Function

- During the reverse interlock door mirror operation, the mirror angle can be changed. After adjustment, the mirror face positions can be memorized (2 positions). For memory setting.
- Initial setting is downward 7°, inward 1° (both of left and right).
- When the driver's seat, outside mirror and steering column are not in the memorized position, the outside mirror will move with the initial tilt-down angle, if the reverse tilt-down position is stored. Linking Intelligent Key to a stored memory position.

Memory Procedure

1. Apply the parking brake.
2. Push the ignition switch to the ON position. (Do not start the engine.)
3. Push the memory switch 1 or 2 fully for at least 1 second to operate the automatic drive positioner.
4. Turn the door mirror control switch (changeover switch) to L (left).
5. Depress the brake pedal.
6. Move the A/T shift selector to R position (reverse).
7. Adjust the mirror to the desired viewing position for backing up by operating the door mirror control switch (mirror switch).
8. Push the SET switch and, within 5 seconds, push the memory switch 1 or 2 selected in step 3 fully for at least 1 second.
   The indicator light for the pushed memory switch will come on and stay pushing the switch. After the indicator light goes off, the selected mirror position is stored in the selected memory (1 or 2).
9. Turn the door mirror control switch (changeover switch) to R (right).
   Repeat the above procedure to adjust the right mirror position and store in the selected memory.

AUTOMATIC DRIVE POSITIONER SYSTEM LINKED OPERATION

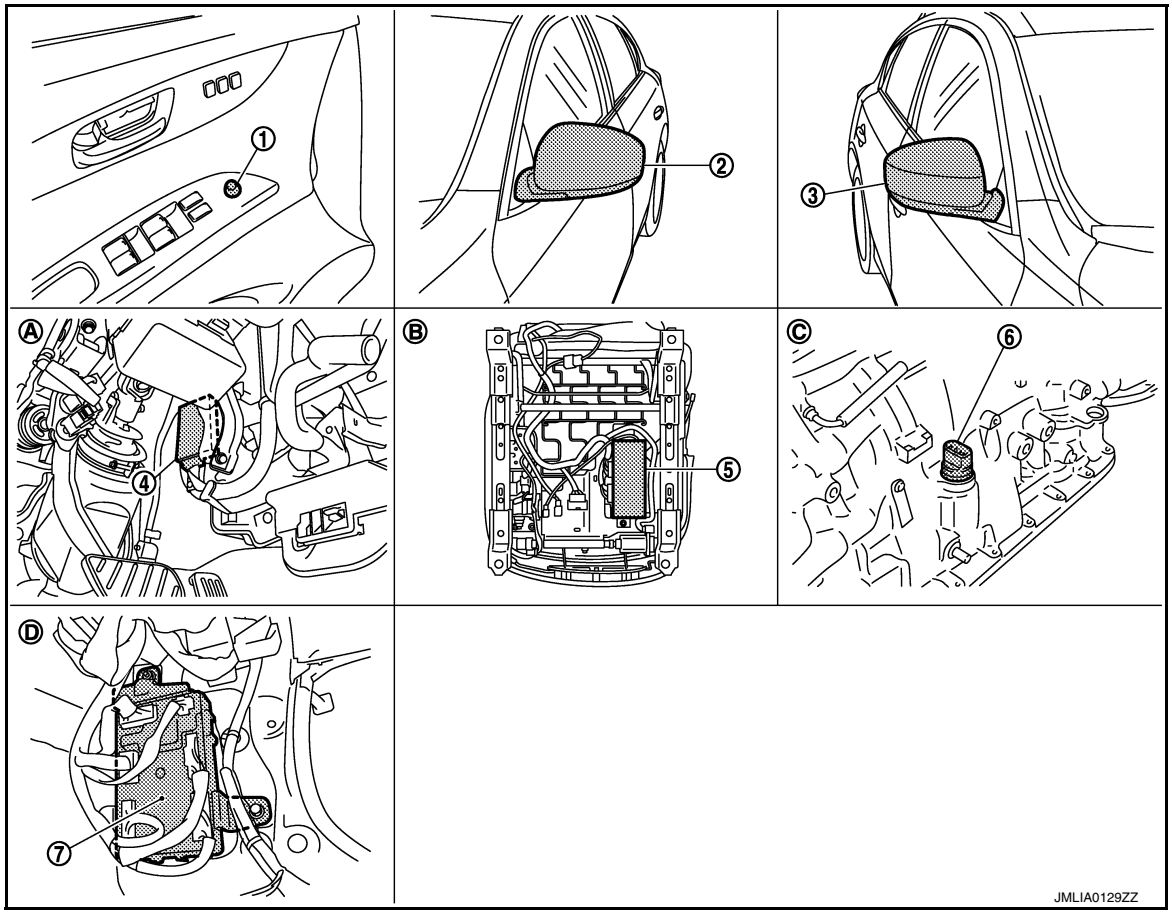
Description

Door mirror control is included in automatic drive positioner system. Refer to automatic drive positioner system for more details.

Refer to ADP-13, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Description".

Component Parts Location

INFOID:0000000012173314



1. Door mirror remote control switch
2. Door mirror (driver side)
3. Door mirror (passenger side)
4. Automatic drive positioner control unit
5. Driver seat control unit
6. AT assembly connector (TCM)
7. BCM
- A. View with instrument driver lower panel removed
- B. Back side of the seat cushion
- C. AT assembly (TCM is built in AT assembly)
- D. Dash side lower (passenger side)

Component Description

INFOID:0000000012173315

Component		Function
Automatic drive positioner control unit		Door mirror is supplied with power after receiving the input of the MIRROR SWITCH and CHANGEOVER SWITCH.
Door mirror remote control switch	Mirror switch	It transmits mirror face adjust operation to AUTOMATIC DRIVE POSITIONER CONTROL UNIT.
	Changeover switch	It transmits the LH/RH control of door mirror that supplies power to AUTOMATIC DRIVE POSITIONER CONTROL UNIT.
Door mirror		It makes mirror face operate from side to side and up and down via integrated motor.
BCM		The ignition switch signal (ACC/ON) is transmitted to driver seat control unit via CAN communication.

Component	Function
Driver seat control unit	The ignition switch signal (ACC/ON) is transmitted to automatic drive positioner control unit via UART communication.
TCM	The A/T shift position signal is transmitted to driver seat control unit via CAN communication.

INSIDE MIRROR SYSTEM

System Description

INFOID:0000000012173316

The sensor built in inside mirror detects the brightness of headlight of the vehicle behind and automatically changes the light transmission to decrease the brightness.

Component Description

INFOID:0000000012173317

Component	Function
Auto anti-dazzling inside mirror	It automatically changes the light transmittance according to the brightness of the light from the headlight of the vehicle behind.

DIAGNOSIS SYSTEM (DRIVER SEAT C/U)

Diagnosis Description

INFOID:0000000012828652

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

DIAGNOSTIC MODE

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

CONSULT Function

INFOID:0000000012828653

SELF-DIAGNOSIS RESULTS

Refer to ADP-142, "DTC Index".

DATA MONITOR

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

Monitor Item	Unit	Contents
STARTER SW	“ON/OFF”	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
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.
R POSITION SW	“ON/OFF”	**NOTE:** This item is display, but cannot be used.
DETENT SW	“ON/OFF”	The selector lever position “OFF (P position) / ON (other than P position)” judged from the detention switch signal.
STEERING STATUS	“LOCK/UNLOCK”	LOCK/UNLOCK status judged from steering lock unit.
PARK BRAKE SW	“ON/OFF”	**NOTE:** This item is display, but cannot be used.
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 SW–UP	“ON/OFF”	ON/OFF status judged from the lifting switch front (up) signal.
LIFT SW–DOWN	“ON/OFF”	ON/OFF status judged from the lifting switch front (down) signal.
TILT SW-UP	“ON/OFF”	ON/OFF status judged from the tilt switch (up) signal.
TILT SW-DOWN	“ON/OFF”	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	“ON/OFF”	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	“ON/OFF”	ON/OFF status judged from the telescoping switch (backward) signal.
MIR CON SW–UP	“ON/OFF”	ON/OFF status judged from the mirror switch (up) signal.

Monitor Item	Unit	Contents
MIR CON SW–DN	“ON/OFF”	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW–RH	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW–LH	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
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 PULSE	—	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TELESCO PULSE	—	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
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.
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 PULSE	—	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
VEHICLE SPEED	—	Display the vehicle speed signal received from combination meter by numerical value [km/h]
P RANG SW CAN	“ON/OFF”	ON/OFF status judged from P range switch signal.
R RANG (CAN)	“ON/OFF”	ON/OFF status judged from R range switch signal.
DOOR SW-FL	“OPEN/CLOSE”	ON/OFF status judged from front door switch LH switch signal.
DOOR SW-FR	“OPEN/CLOSE”	ON/OFF status judged from front door switch RH switch signal.
IGN ON SW	“ON/OFF”	ON/OFF status judged from ignition switch signal.
ACC ON SW	“ON/OFF”	ON/OFF status judged from ACC switch signal.
KYLS DR UNLK	“ON/OFF”	ON/OFF status judged from driver door unlock status.
KEYLESS ID	—	Key ID status judged from key ID signal.
VHCL SPEED (ABS)	“NORCV/RCV”	ON/OFF status judged from vehicle speed signal.
HANDLE	“RHD/LHD”	RHD/LHD status judged from handle position signal.
TRANSMISSION	“[A/T]/[M/T]”	Transmission type judged from TCM.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

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

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

WORK SUPPORT

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

DTC/CIRCUIT DIAGNOSIS

DOOR MIRROR REMOTE CONTROL SWITCH

MIRROR SWITCH

MIRROR SWITCH : Description

INFOID:0000000012173320

It operates angle of the door mirror face.
It transmits mirror face adjust operation to AUTOMATIC DRIVE POSITIONER CONTROL UNIT.

MIRROR SWITCH : Component Function Check

INFOID:0000000012173321

1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Mirror switch function is OK.
NO >> Refer to MIR-12, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000012173322

1.CHECK MIRROR SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Door mirror remote control switch			
Connector	Terminal		
D17	4	Ground	5
	12		
	13		
	15		

Is the inspection result normal?

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

2.CHECK MIRROR SWITCH CIRCUIT

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M78	3	D17	15	Existed
	4		13	
	15		12	
	16		4	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M78	3		Not existed
	4		
	15		
	16		

Is the inspection result normal?

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

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch		Ground	Continuity
Connector	Terminal		
D17	7		Existed

Is the inspection result normal?

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

4.CHECK MIRROR SWITCH

Check door mirror remote control switch (mirror switch).
Refer toMIR-13, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace door mirror remote control switch (mirror switch). Refer to MIR-134, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

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

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:0000000012173323

1.CHECK MIRROR SWITCH

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

Door mirror remote control switch			Condition		Continuity
Connector	Terminal				
D17	4	7	Mirror switch	RIGHT	Existed
				Other than above	Not existed
	13			LEFT	Existed
				Other than above	Not existed
	15			UP	Existed
				Other than above	Not existed
	12			DOWN	Existed
				Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror remote control switch. Refer to MIR-134, "Removal and Installation".

CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:0000000012173324

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

CHANGEOVER SWITCH : Component Function Check

INFOID:0000000012173325

1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.
NO >> Refer to MIR-14, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000012173326

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Door mirror remote control switch			
Connector	Terminal		
D17	10	Ground	5
	11		

Is the inspection result normal?

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

2.CHECK CHANGEOVER SWITCH CIRCUIT

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

Automatic drive positioner control unit		Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	
M78	2	D17	11	Existed
	14		10	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M78	2		Not existed
	14		

Is the inspection result normal?

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

3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

Door mirror remote control switch		Ground	Continuity
Connector	Terminal		
D17	7		Existed

Is the inspection result normal?

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

4.CHECK CHANGEOVER SWITCH

Check door mirror remote control switch (changeover switch).
Refer to MIR-15, "CHANGEOVER SWITCH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace door mirror remote control switch (changeover switch). Refer to MIR-134, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

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

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000012173327

1.CHECK CHANGEOVER SWITCH

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

Door mirror remote control switch			Condition		Continuity
Connector	Terminal				
D17	10	7	Changeover switch	LEFT	Existed
				Other than above	Not existed
	11			RIGHT	Existed
				Other than above	Not existed

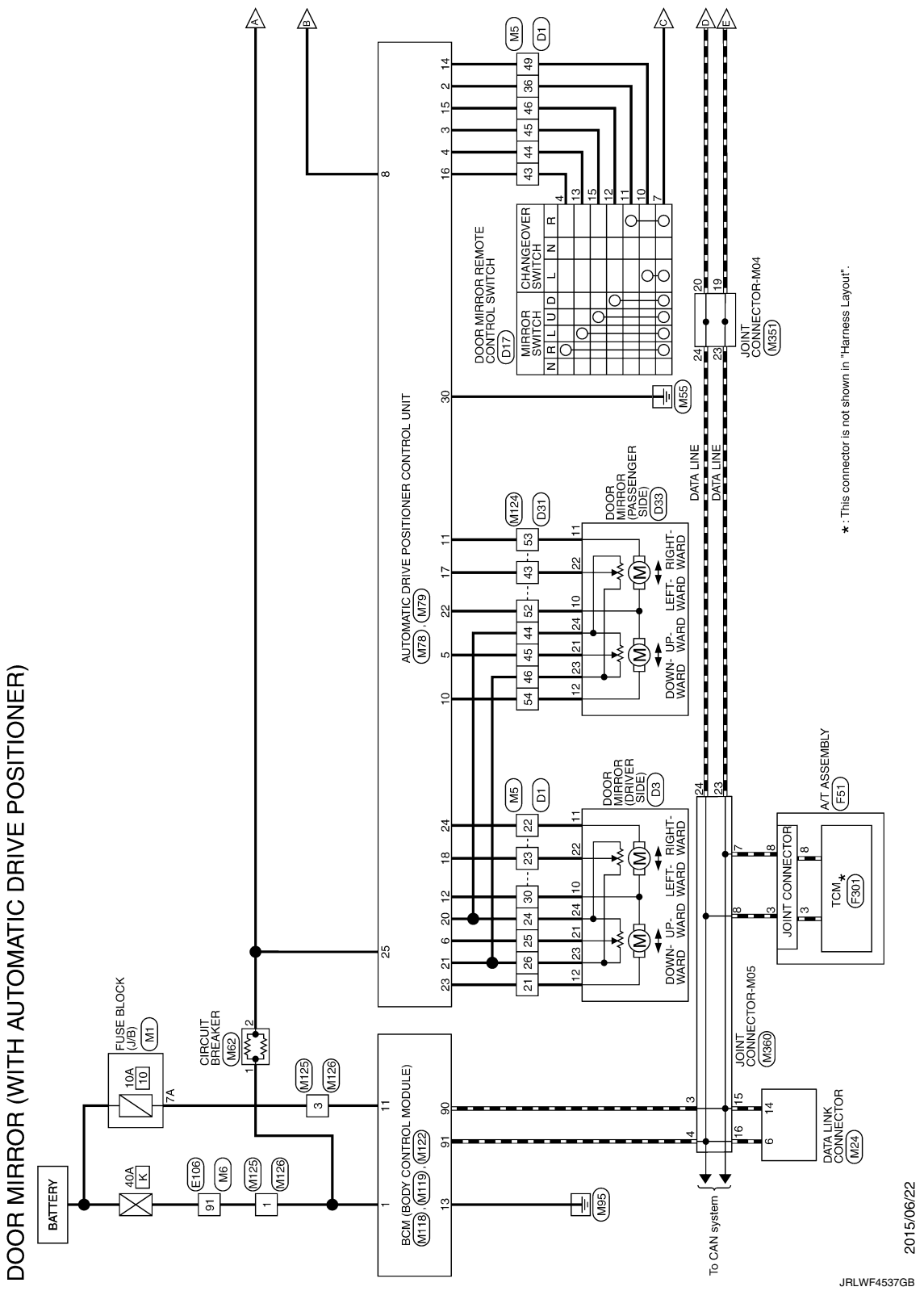
Is the inspection result normal?

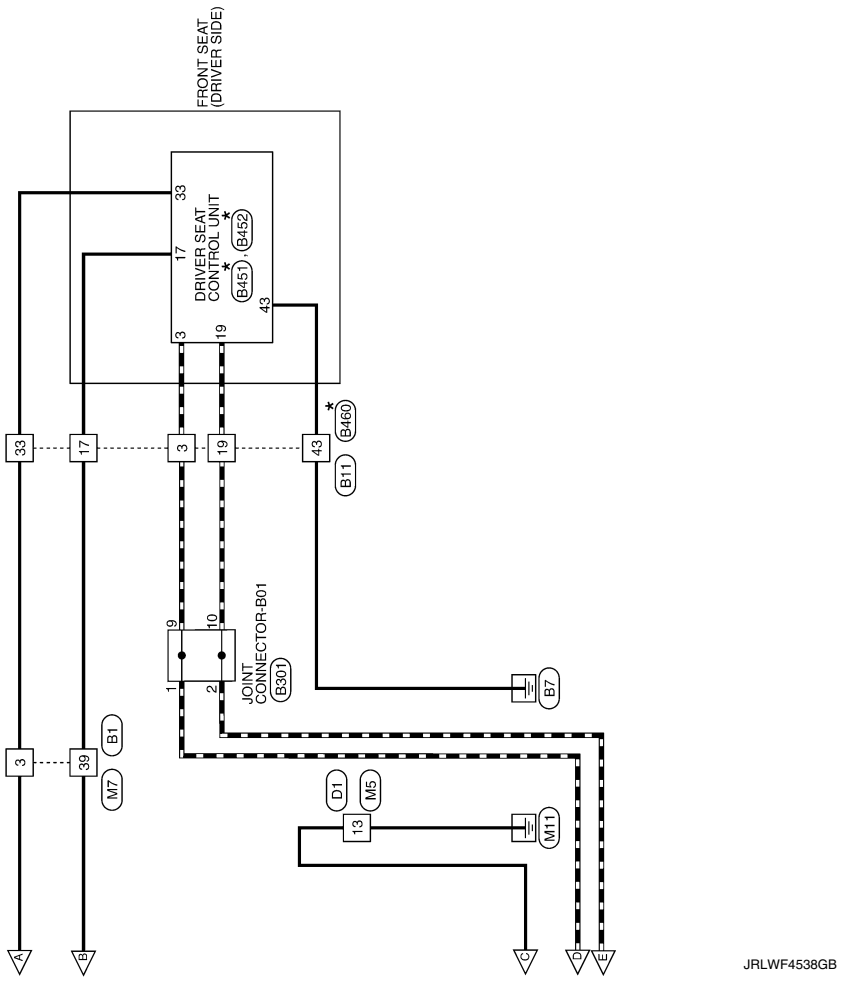
YES >> INSPECTION END
NO >> Replace door mirror remote control switch. Refer to MIR-134, "Removal and Installation".

DOOR MIRROR SYSTEM

Wiring Diagram - DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER) -

INFOID:0000000012173328




FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT
B451
B452
33
17
3
19
43
B460
B11
JOINT CONNECTOR-B01
B301
B7
B1
M7
M5
D1
M11
A
B
C
D
E
JRLWF4538GB

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	–
5	G	–
6	SB	–
7	V	–
8	L	–
11	V	–
12	SB	–
13	LG	–
14	GR	–
15	LG	–
16	R	–
17	W	–
18	SB	–
19	LG	–
20	BR	–
21	SHIELD	–
22	Y	–
24	P	–
25	G	–
26	Y	–
27	B	– [With NAVI]
27	BR	– [Without NAVI]
28	R	– [With NAVI]
28	W	– [Without NAVI]
29	L	– [Without NAVI]
29	W	– [With NAVI]
30	SHIELD	–
31	L	– [With around view monitor]
31	SHIELD	– [Without around view monitor]
32	P	– [With NAVI] [Without Blind Spot Warning]
32	W	– [Without NAVI] [Without Blind Spot Warning]
32	Y	– [With NAVI] [With Blind Spot Warning]
33	SB	–
34	L	–
35	P	–
36	L	–
37	P	–
38	P	–
39	Y	–
40	SB	–
44	Y	–
45	GR	–
46	LG	–
47	SB	–
48	BG	–
49	R	–
50	L	–
60	P	–
61	L	–
62	SHIELD	–
63	R	–
64	G	–
65	SHIELD	–
66	W	–
67	V	–
68	SB	–
69	SHIELD	–
70	W	–
73	SB	–
74	L	–
75	W	–
76	BR	–
77	R	–
78	P	–
79	GR	–
83	BG	–
85	Y	–
86	LG	–
87	Y	–
88	R	–
89	B	–
90	BG	–
91	G	–
92	BR	–
93	G	–
94	SB	–
95	G	–
96	Y	–
98	W	–
99	GR	–

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

28	21	5	17		43	3	19
23	7	33	22	32	6	66	60	67

Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	–
5	R	–
6	SB	–
7	P	–
17	Y	–
19	P	–
21	V	–
22	L	–
23	BG	–
28	R	–
33	R	–
43	B	–
60	G	–
66	GR	–
67	Y	–

Connector No.	E301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J

H.S.

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

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

5	L	–
6	P	–
7	SB	–
8	LG	–
9	L	–
10	P	–
11	SB	–
12	LG	–
16	SB	–
17	R	–
18	Y	–
19	B	–
20	SB	–
21	R	–
22	Y	–
23	B	–
24	SB	–

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32HW

H.S.

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

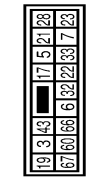
Terminal No.	Color Of Wire	Signal Name [Specification]
1	–	–
2	–	CAN-H
3	–	UART (TX/RX)
4	–	–
5	–	PULSE (RECLINER)
6	–	PULSE(TELESCOPIC)
7	–	ADDRESS 2
8	–	IND 2
9	–	SLIDE SW (BACKWARD)
10	–	RECLINER SW (BACKWARD)
11	–	FRONT LIFTER SW (DOWNWARD)
12	–	REAR LIFTER SW (DOWNWARD)
17	–	POWER SUPPLY (ENCODER)
18	–	CAN-L
19	–	PULSE (SLIDE)
20	–	PULSE (FRONT LIFTER)
–	–	PULSE (REAR LIFTER)

JRLWF4539GB

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

21	–	PULSE(TILT)
22	–	ADDRESS 1
23	–	IND 1
24	–	SLIDE SW (FORWARD)
25	–	RECLINER SW (FORWARD)
26	–	FRONT LIFTER SW (UPWARD)
27	–	REAR LIFTER SW (UPWARD)
28	–	SET SW

Connector No.	B460
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Connector No.	B452
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	NS12HW

Terminal No.	Color Of Wire	Signal Name [Specification]
33	–	BAT (PTC)
34	–	SLIDE MOTOR (BACKWARD)
35	–	RECLINER MOTOR (FORWARD)
36	–	FRONT LIFTER MOTOR (DOWNWARD)
38	–	SLIDE MOTOR (FORWARD)
39	–	RECLINER MOTOR (BACKWARD)
40	–	FRONT LIFTER MOTOR (UPWARD)
41	–	REAR LIFTER MOTOR (UPWARD)
42	–	REAR LIFTER MOTOR (DOWNWARD)
43	–	GND

Terminal No.	Color Of Wire	Signal Name [Specification]
3	R/Y	–
5	–	–
6	–	–
7	–	–
17	Y/R	–
19	V	–
21	L/Y	–
22	–	–
23	–	–
28	–	–
33	R	–
43	–	–
60	Y/R	–
66	B	–
67	L	–

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	V	–
4	W	–
5	L	–
6	O	–
7	GR	–
8	W	–
9	O	–
10	BR	–
11	P	–
12	LG	–
13	B	–
14	Y	–
15	W	–
16	SB	–
17	LG	–
18	SHIELD	–
19	P	–
20	W	–
21	O	–
22	P	–
23	BR	–
24	V	–
25	GR	–
26	Y	–
27	BR	–
28	V	–
29	LG	–
30	G	–
31	W	–
32	G	–
33	L	–
34	SB	–
35	R	–
36	LG	–
37	R	–
38	P	–
39	O	–
40	BR	–
41	L	–
42	GR	– [With automatic drive positioner]
43	BR	– [Without automatic drive positioner]
43	O	– [With automatic drive positioner]
44	GR	– [Without automatic drive positioner]
44	W	– [With automatic drive positioner]
45	G	– [Without automatic drive positioner]
45	Y	– [With automatic drive positioner]
46	G	– [With automatic drive positioner]
46	V	– [Without automatic drive positioner]
47	R	–
48	G	–
49	GR	–
50	SHIELD	–
51	B	–

52	R
53	SB
54	O
55	Y

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	–
2	O	–
3	BR	CONT
5	P	COMP+
6	SB	ON
7	W	–
10	G	–
11	P	–
12	O	–
14	LG	–
17	SHIELD	COMP–
18	LG	GROUND
19	B	–
21	GR	–
22	BR	–
23	Y	–
24	V	–

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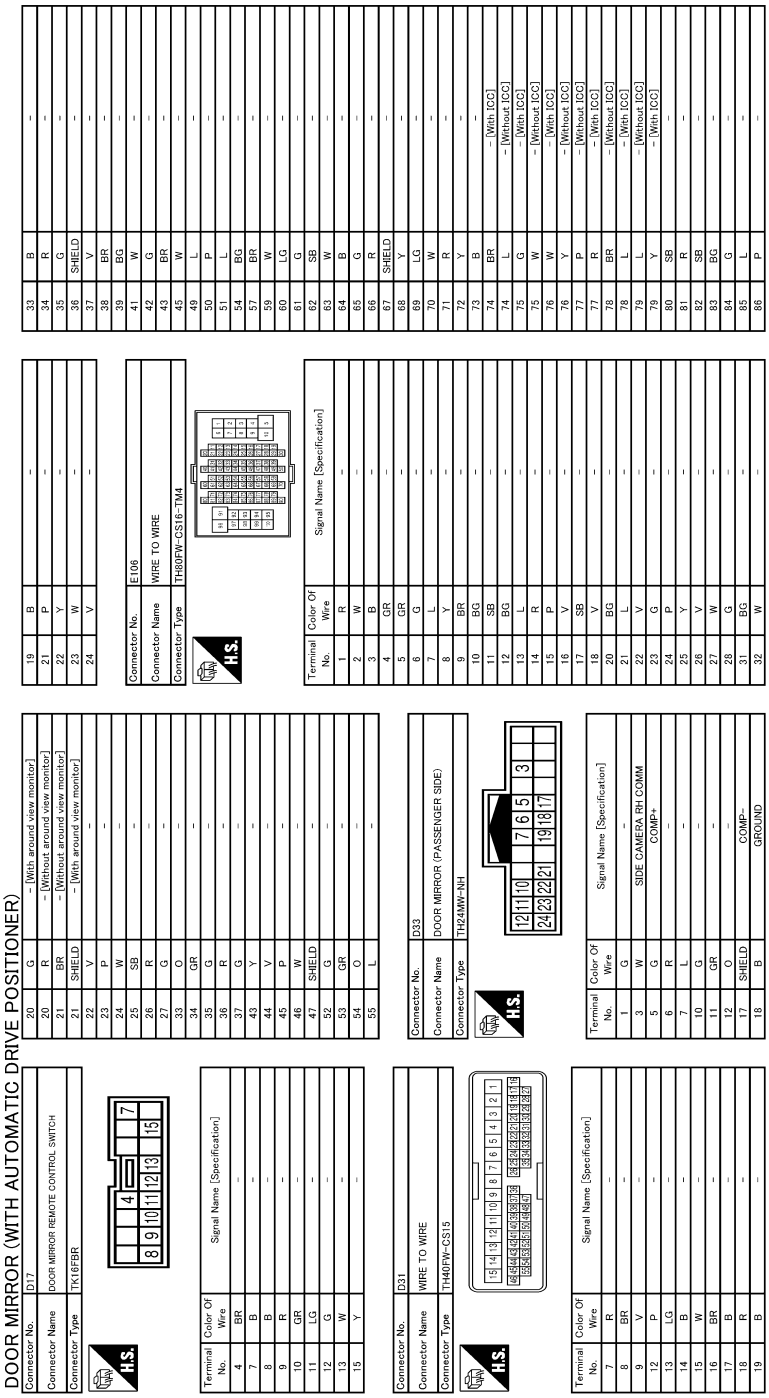

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DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

87	V
89	GR
90	SHIELD
91	W
92	Y
93	V
94	LG
95	BG
96	P
97	R
98	SHIELD
99	L
100	P

H.S.

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

H.S.

Connector No.	F501
Connector Name	TCM
Connector Type	SP10FG

Terminal No.	Color Of Wire	Signal Name [Specification]
1	–	IGNITION POWER SUPPLY
2	–	BATTERY POWER SUPPLY
3	–	CAN-H
4	–	K-LINE
5	–	GROUND
6	–	IGNITION POWER SUPPLY
7	–	BACK-UP LAMP RELAY
8	–	CAN-L
9	–	STARTER RELAY
10	–	GROUND

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	–
2A	G	–
3A	L	–
4A	R	–
5A	V	–
6A	Y	–
7A	R	–
8A	L	–

H.S.

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	BR	–
4	P	–
5	L	–
6	R	–
7	R	–
8	W	–
9	G	–
10	L	–
11	G	–
12	V	–
13	B	–
14	Y	–
15	W	–
16	R	–
17	B	–
18	SHIELD	–
19	G	–
20	L	–
21	LG	–
22	L	–
23	G	–
24	Y	–
25	GR	–
26	R	–
27	W	–
28	V	–
29	Y	–
30	Y	–
31	R	–
32	BR	–
33	SB	–
34	Y	–
35	P	–
36	LG	–
37	BR	–
38	P	–
39	BG	–
40	SB	–
41	L	–
42	R	–
43	BR	–
44	V	–
45	G	–
46	SB	– [With automatic drive positioner]
46	V	– [Without automatic drive positioner]
47	R	–
48	G	–
49	P	–
50	SHIELD	–
51	B	–
52	R	–
53	V	–
54	LG	–
55	SB	–

H.S.

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	– [With NAVI]
1	Y	– [Without NAVI]
2	B	– [Without NAVI]
2	R	– [With NAVI]
3	B	– [With NAVI]
3	G	– [Without NAVI]
4	SHIELD	–
5	G	–
6	R	–
7	W	–
8	Y	–
9	BR	–
10	R	–
11	BR	–

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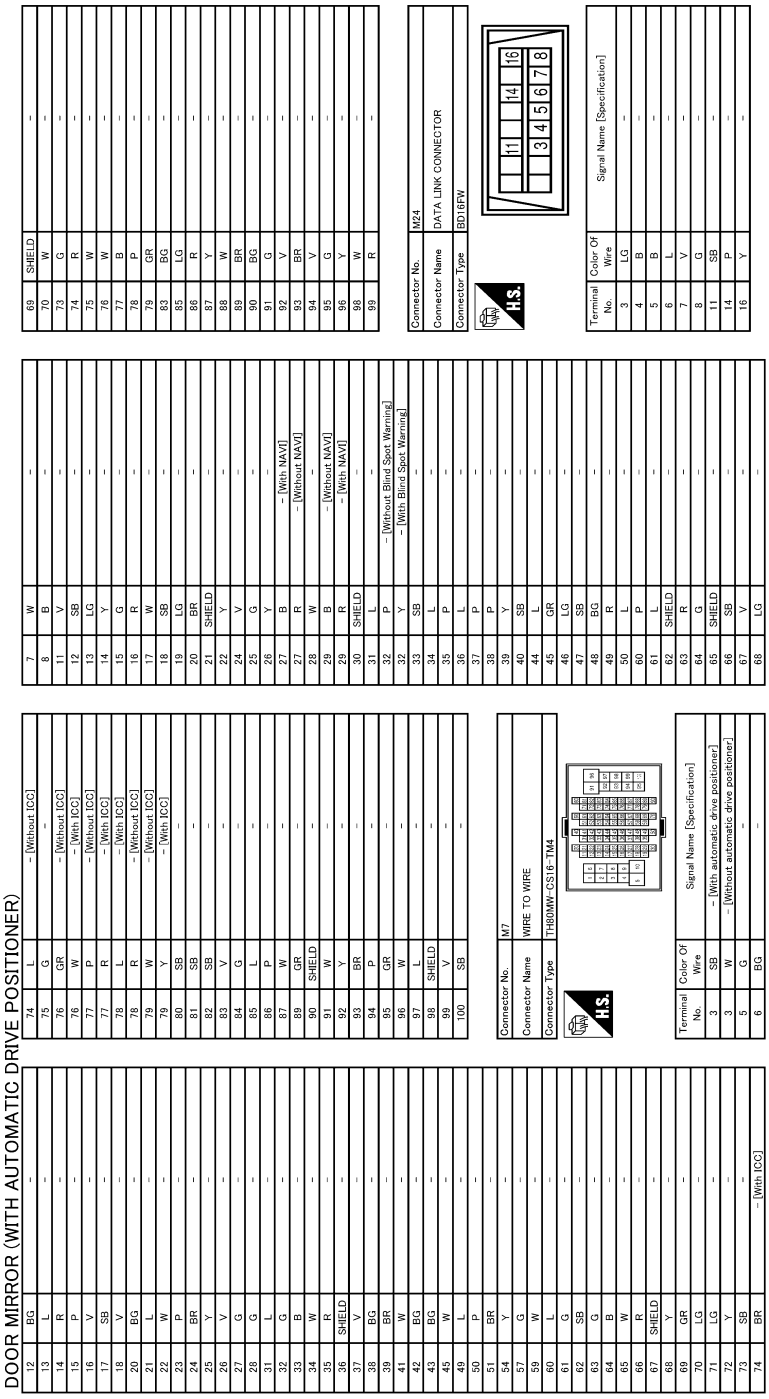

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DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

Connector No.	M62
Connector Name	CIRCUIT BREAKER
Connector Type	M02FW-P-LC

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

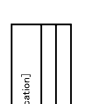
Connector No.	M78
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	TH24FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	UPWARD
2	LG	SELECT RH
3	G	UPWARD
4	V	LEFTWARD
5	R	MIR_SENS_UP_DOWN(RH)
6	GR	MIR_SENS_UP&DOWN(LH)
7	GR	FORWARD
8	Y	RX/TX
9	W	MIR_MTR_UP(RH)
10	G	MIR_MTR_LEFT(RH)
11	Y	MIR_MTR_DOWN_RIGHT(LH)
12	W	DOWNWARD
13	P	SELECT LH
14	SB	DOWNWARD
15	BR	RIGHTWARD
16	L	MIR_SENS_LEFT&RIGHT(RH)
17	G	MIR_SENS_LEFT&RIGHT(LH)
18	G	BACKWARD
19	G	SENS_GND
20	Y	POWER_SUPPLY_(SENSOR)
21	R	MIR_MTR_DOWN_RIGHT(RH)
22	R	MIR_MTR_UP(LH)
23	LG	MIR_MTR_LEFT(LH)
24	L	

Connector No.	M79
Connector Name	AUTOMATIC DRIVE POSITIONER CONTROL UNIT
Connector Type	NS06FW-CS

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

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



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

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

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

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

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 –
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT–
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1–
79	BR	ROOM ANT1+
80	GR	NATS ANT AMP.
81	W	NATS ANT AMP.
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN–L
91	L	CAN–H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT
95	BG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

Terminal No.	Color Of Wire	Signal Name [Specification]
7	Y	–
8	LG	–
9	Y	–
12	L	–
13	V	–
14	B	–
15	W	–
16	BR	–
17	B	–
18	R	–
19	B	–

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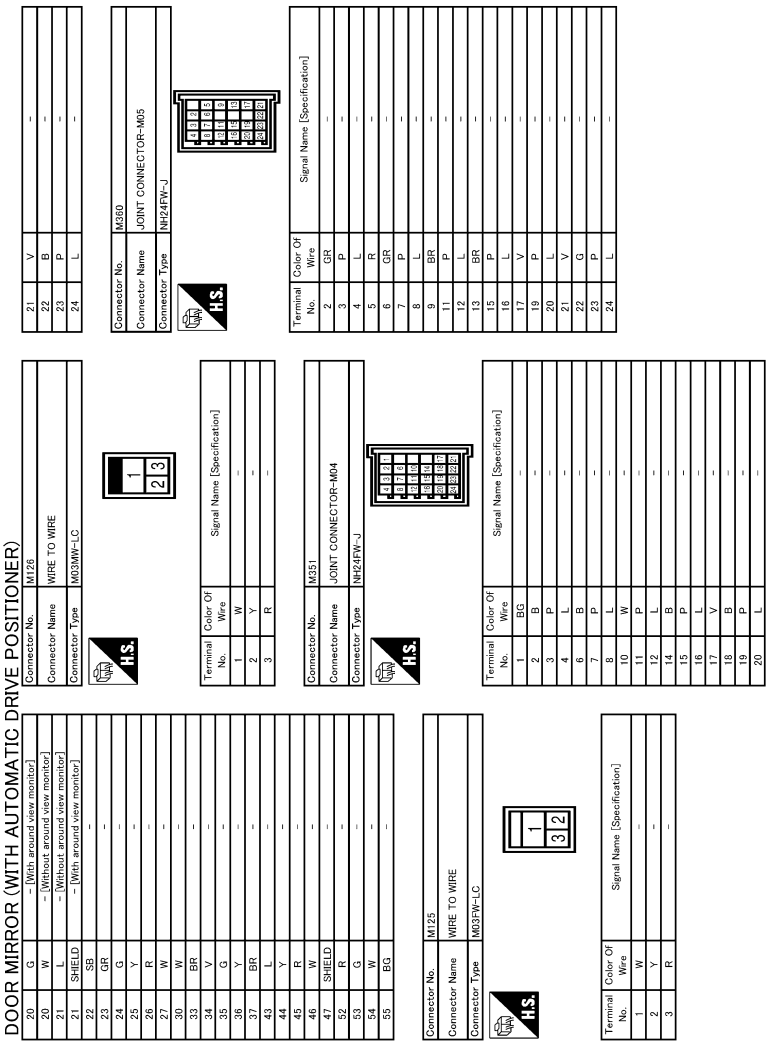
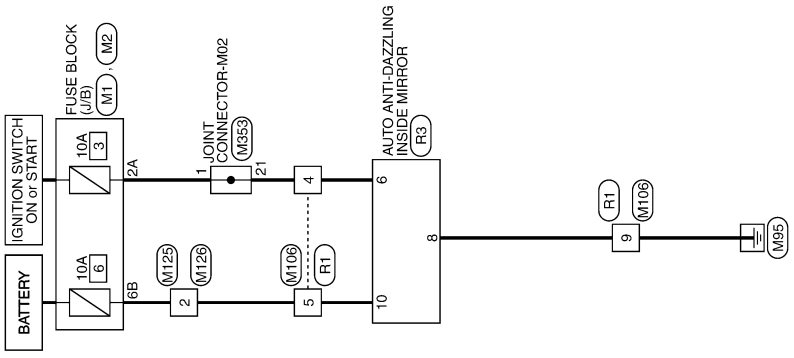


JRLWF4545GB

AUTO ANTI-DAZZLING INSIDE MIRROR SYSTEM

Wiring Diagram - INSIDE MIRROR SYSTEM -

INFOID:0000000012173329



INSIDE MIRROR

2015/06/22

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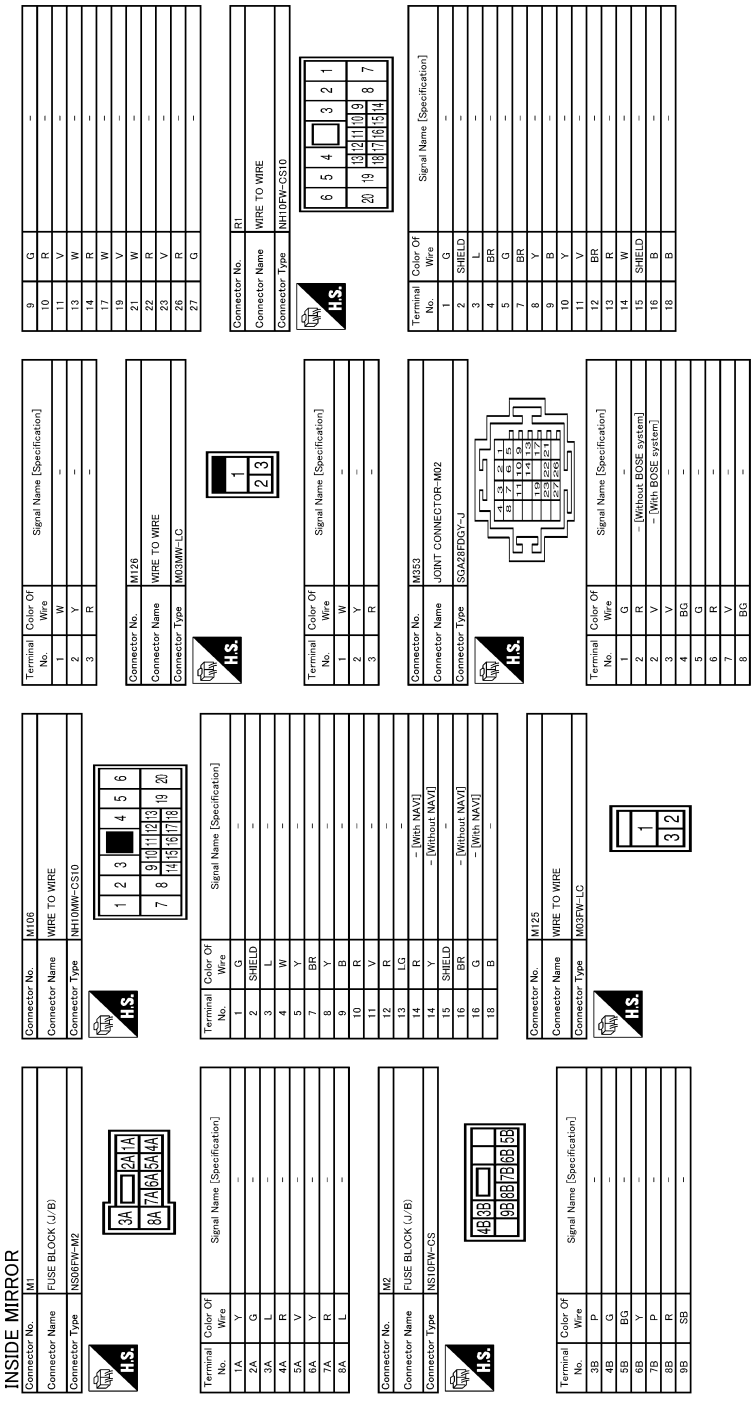

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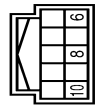
INSIDE MIRROR

Connector No.	R3
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Type	TH10FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
6	BR	IGN
8	B	GROUND
10	G	BAT

JRLWF4552GB

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000012828232

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

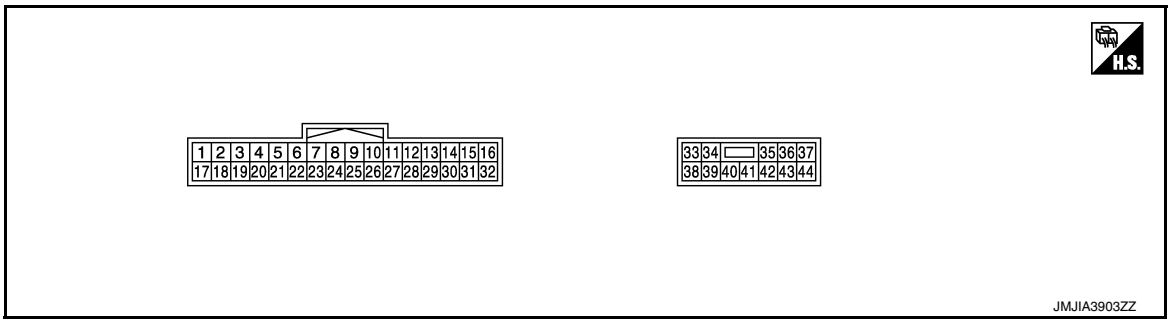
Monitor Item	Condition		Value/Status
SET SW	Set switch	Push	ON
		Release	OFF
MEMORY SW1	Memory switch 1	Push	ON
		Release	OFF
MEMORY SW2	Memory switch 2	Push	ON
		Release	OFF
SLIDE SW–FR	Sliding switch (front)	Operate	ON
		Release	OFF
SLIDE SW–RR	Sliding switch (rear)	Operate	ON
		Release	OFF
RECLN SW–FR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

Monitor Item	Condition		Value/Status
TELESCO SW-FR	Telescopic switch	Forward	ON
		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
SLIDE PULSE	Seat sliding	Forward	The numeral value decreases *1
		Backward	The numeral value increases *1
		Other than above	No change to numeral value*1
RECLN PULSE	Seat reclining	Forward	The numeral value decreases *1
		Backward	The numeral value increases *1
		Other than above	No change to numeral value*1
LIFT PULSE	Seat lifter	Up	The numeral value decreases *1
		Down	The numeral value increases *1
		Other than above	No change to numeral value*1
MIR/SEN RH U–D	Door mirror (passenger side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R–L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U–D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R–L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
TILT PULSE	Tilt position	Upward	The numeral value decreases *1
		Downward	The numeral value increases *1
		Other than above	No change to numeral value*1
TELESCO PULSE	Telescopic position	Forward	The numeral value decreases *1
		Backward	The numeral value increases *1
		Other than above	No change to numeral value*1
STEERING STATUS	Steering lock unit	Lock	LOCK
		Unlock	UNLOCK
VEHICLE SPEED	The condition of vehicle speed is display		km/h
P RANG SW CAN	A/T shift selector	P position	ON
		Other than above	UNLOCK
R RANG (CAN)	A/T shift selector	R position	ON
		Other than above	UNLOCK
DOOR SW-FL	Driver door	Open	OPEN
		Close	CLOSE
DOOR SW-FR	Passenger door	Open	OPEN
		Close	CLOSE

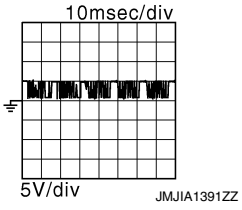
Monitor Item	Condition		Value/Status
IGN ON SW	Ignition switch	ON position	ON
		Other than above	OFF
ACC ON SW	Ignition switch	ACC position	ON
		Other than above	OFF
KEYLESS ID	Intelligent Key button	Pressed	MEMORY1/2/3/4/5
		Other than above	OFF
KYLS DR UNLOCK	Intelligent Key or door request switch	ON	ON
		OFF	OFF
VHCL SPEED (ABS)	Vehicle speed signal (ABS)	Received	RCV
		Not received	NORCV
HANDLE	Vehicle	left handle models	LHD
		Right handle models	RHD
TRANSMISSION	Transmission	M/T	M/T
		A/T	A/T

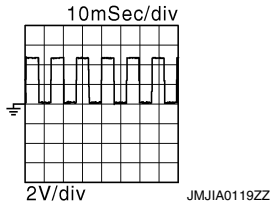
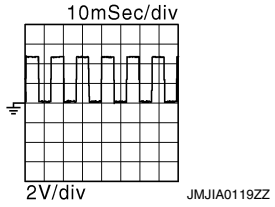
*1: The value at the position attained when the battery is connected is regarded as 32768.

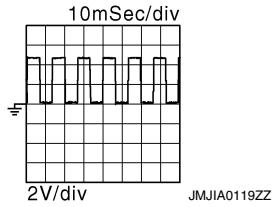
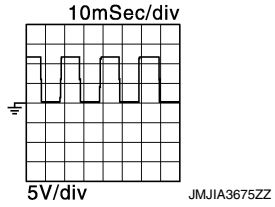
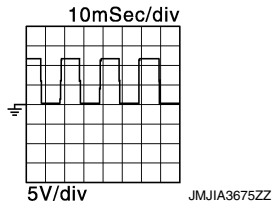
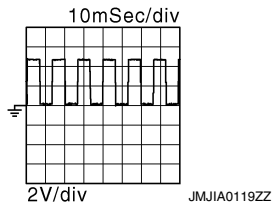
TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Value
+	-	Signal name	Input/ output		
1 (L)	—	CAN-H	—	—	—
2 (BR)	Ground	UART communication (TX/RX)	Input/ output	Ignition switch ON	

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

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

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

Terminal No. (Wire color)		Description		Condition		Value
+	-	Signal name	Input/ output			
42 (R/B)	Ground	Lifting motor (rear) down output signal	Output	Seat lifting (rear)	Operate (down)	9 - 16 V
					Other than the above	0 - 1 V
43 (B)	Ground	Ground	—	—		0 - 1 V

Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

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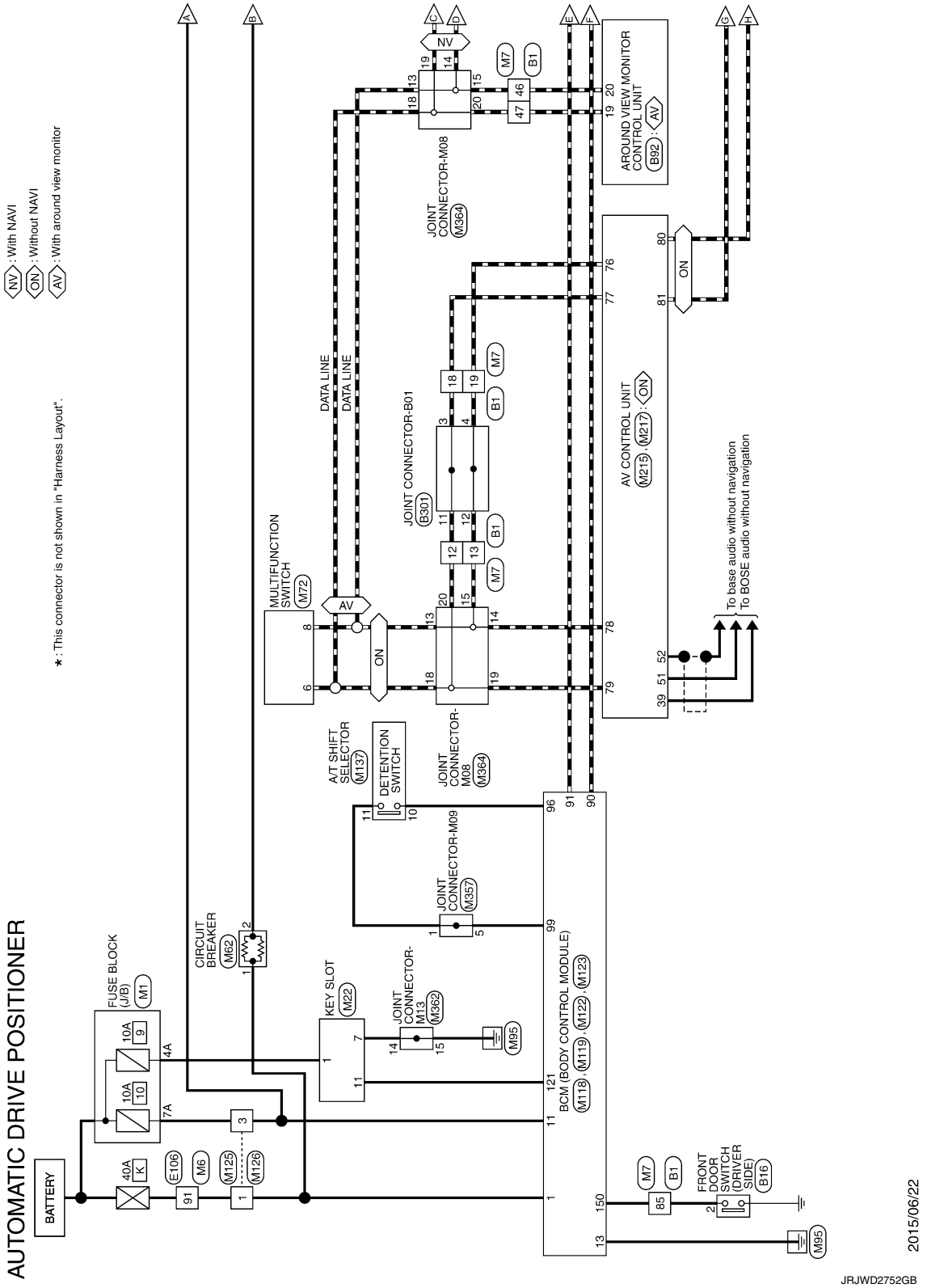
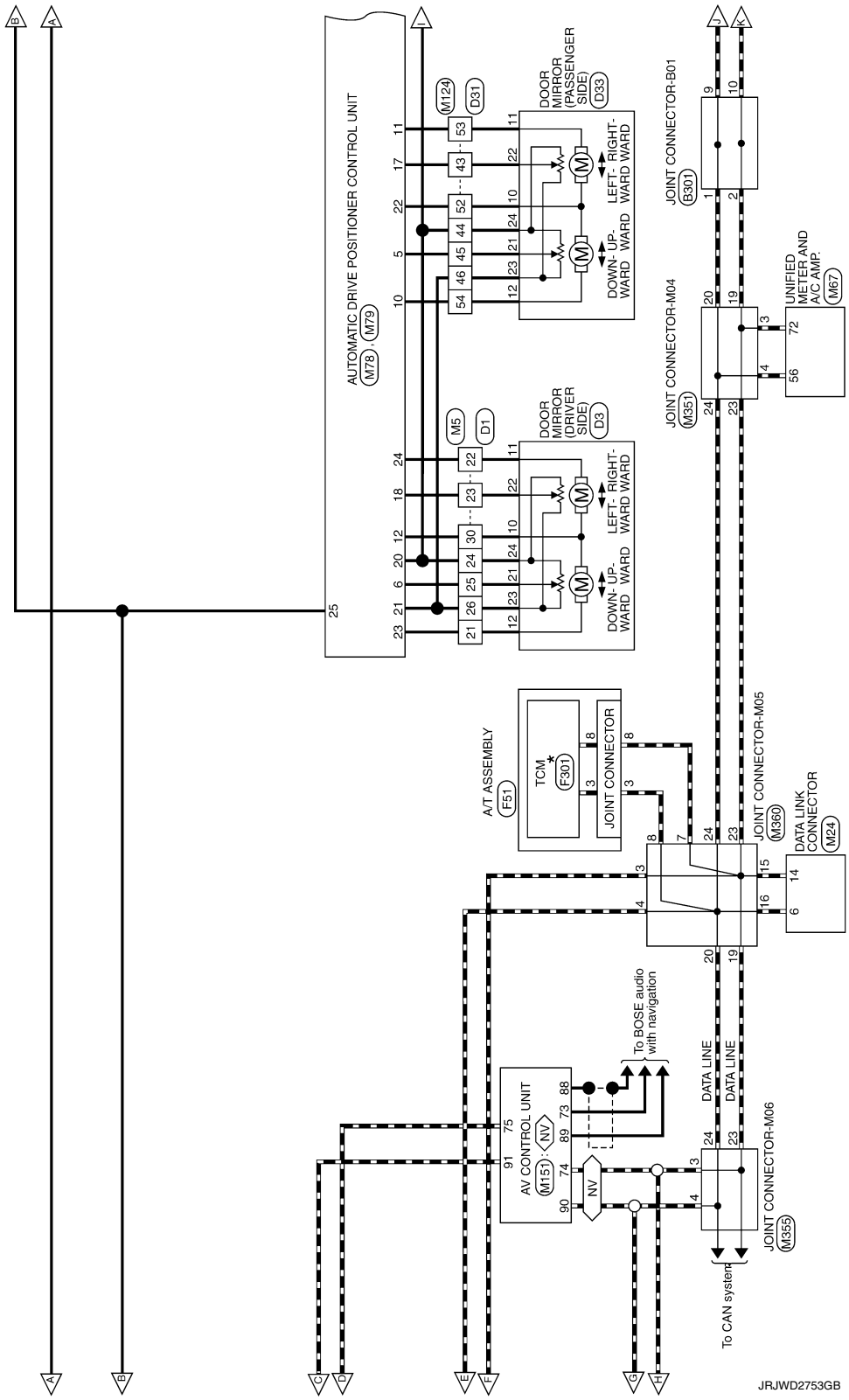
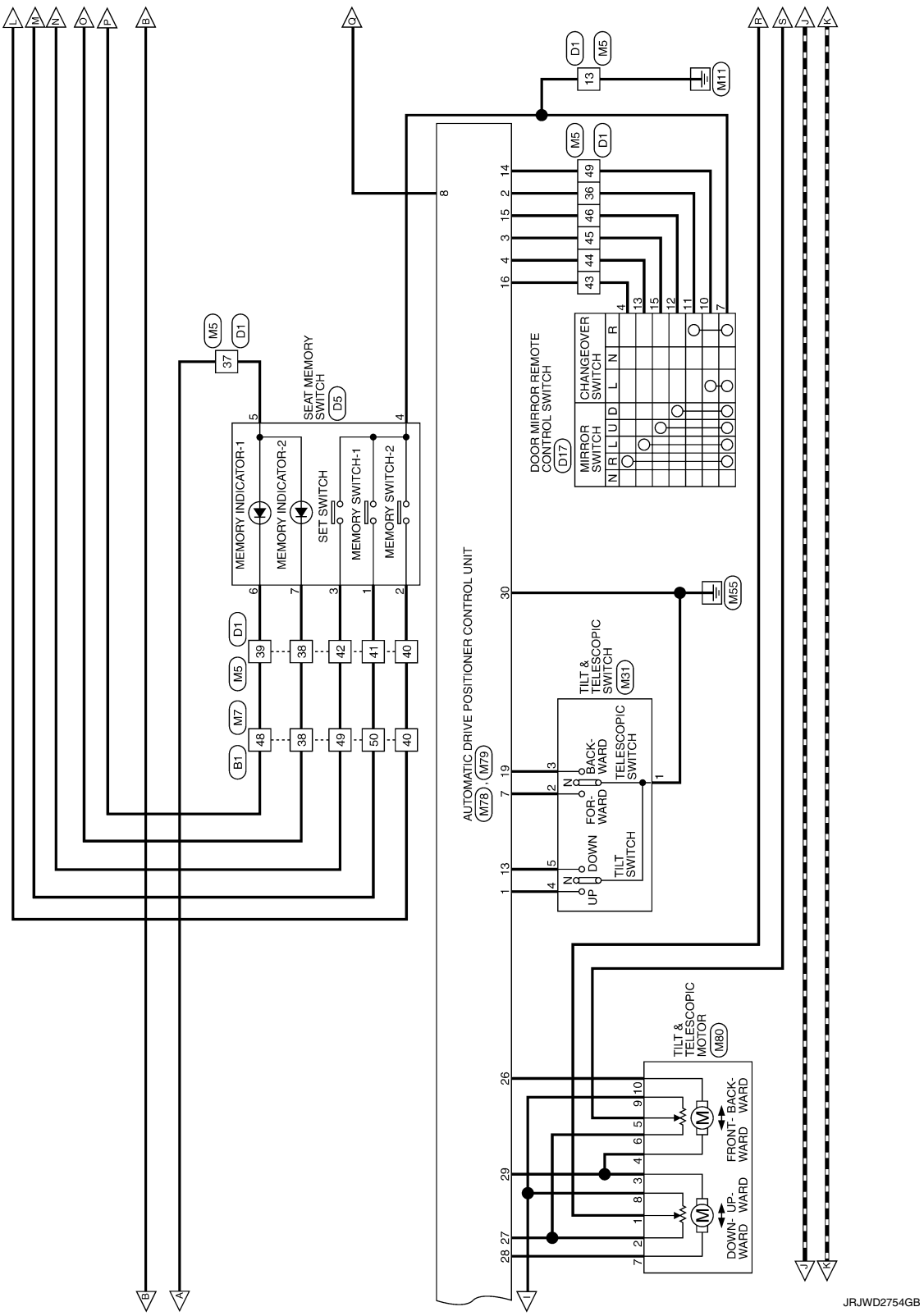
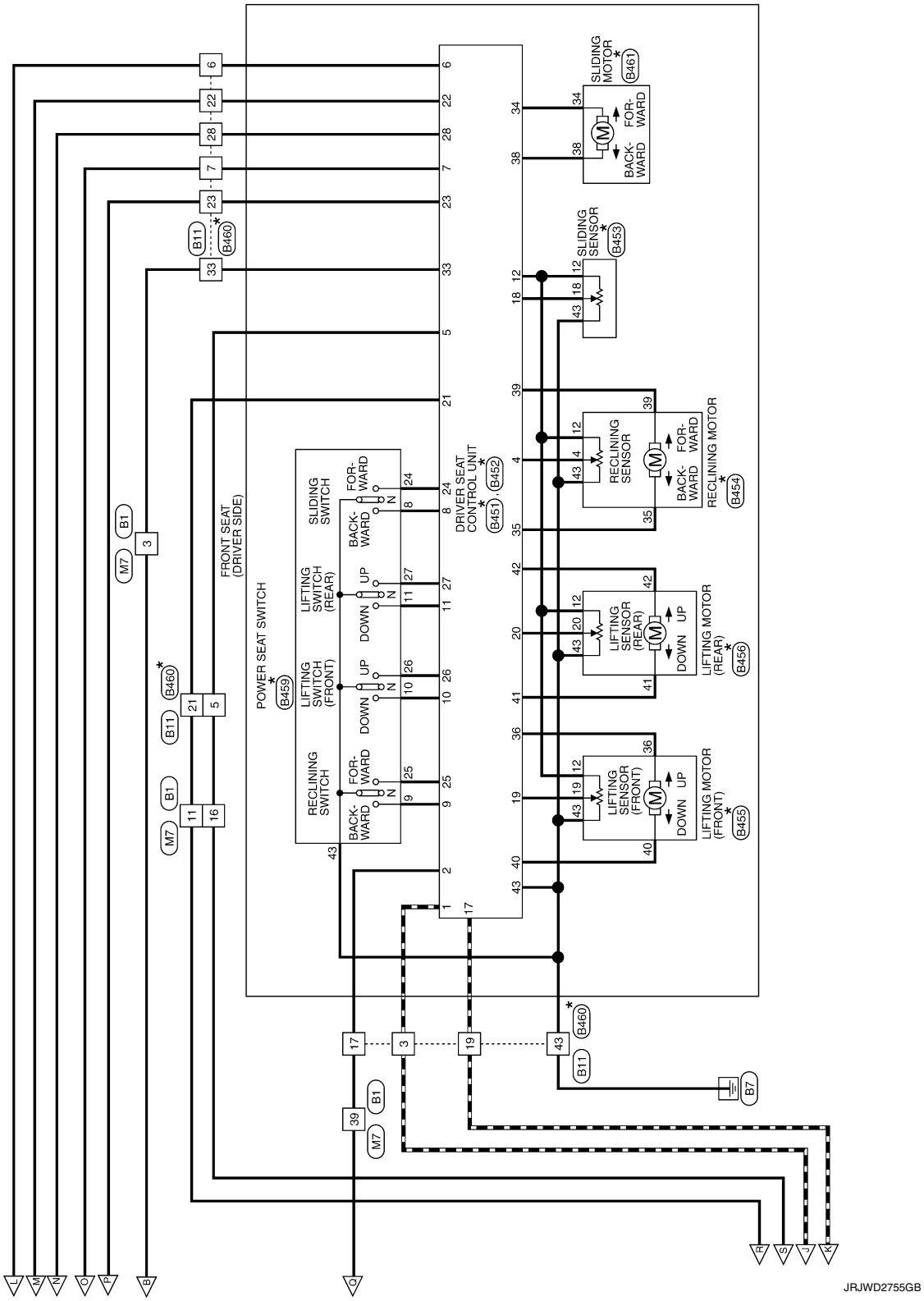



AUTOMATIC DRIVE POSITIONER CONTROL UNIT
M78, M79
M124
D31
DOOR MIRROR (PASSENGER SIDE) D33
LEFT-RIGHT-WARD
DOWN-UP-WARD
M5
D1
DOOR MIRROR (DRIVER SIDE) D3
JOINT CONNECTOR-B01
B301
JOINT CONNECTOR-M04
M351
UNIFIED METER AND A/C AMP.
M67
A/T ASSEMBLY
F51
TCM*
F301
JOINT CONNECTOR
JOINT CONNECTOR-M05
M360
DATA LINK CONNECTOR
M24
AV CONTROL UNIT
M151
NV
To BOSE audio with navigation
DATA LINE
JOINT CONNECTOR-M06
M355
To CAN system
JRJWD2753GB


AUTOMATIC DRIVE POSITIONER CONTROL UNIT
(M78), (M79)
SEAT MEMORY SWITCH
D5
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
DOOR MIRROR REMOTE CONTROL SWITCH
D17
MIRROR SWITCH
CHANGEOVER SWITCH
TILT & TELESCOPIC SWITCH
M31
TELESCOPIC SWITCH
TILT SWITCH
TILT & TELESCOPIC MOTOR
M80
FRONT-WARD
BACK-WARD
UP-WARD
DOWN-WARD
M11
M55
JRJWD2754GB


POWER SEAT SWITCH
B459
LIFTING SWITCH (FRONT)
LIFTING SWITCH (REAR)
SLIDING SWITCH
RECLINING SWITCH
FOR-WARD
BACK-WARD
UP
DOWN
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT
B451
B452
SLIDING MOTOR
B461
SLIDING SENSOR
B453
RECLINING SENSOR
RECLINING MOTOR
B454
LIFTING SENSOR (REAR)
LIFTING MOTOR (REAR)
B456
LIFTING SENSOR (FRONT)
LIFTING MOTOR (FRONT)
B455
B460
B11
B1
M7
B7
JRJWD2755GB

AUTOMATIC DRIVE POSITIONER

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	–
5	G	–
6	SB	–
7	V	–
8	L	–
11	V	–
12	SB	–
13	LG	–
14	GR	–
15	LG	–
16	R	–
17	W	–
18	SB	–
19	LG	–
20	BR	–
21	SHIELD	–
22	Y	–
24	P	–
25	G	–
26	Y	–
27	B	– [With NAVI]
27	BR	– [Without NAVI]
28	R	– [With NAVI]
28	W	– [Without NAVI]
29	L	– [Without NAVI]
29	W	– [With NAVI]
30	SHIELD	–
31	L	– [With around view monitor]
31	SHIELD	– [Without around view monitor]
32	P	– [With NAVI] [Without Blind Spot Warning]
32	W	– [Without NAVI] [Without Blind Spot Warning]
32	Y	– [With NAVI] [With Blind Spot Warning]
33	SB	–
34	L	–
35	P	–
36	L	–
37	P	–
38	P	–
39	Y	–
40	SB	–
44	Y	–
45	GR	–
46	LG	–
47	SB	–
48	BG	–
49	R	–
50	L	–
60	P	–
61	L	–
62	SHIELD	–
63	R	–
64	G	–
65	SHIELD	–
66	W	–
67	V	–
68	SB	–
69	SHIELD	–
70	W	–
73	SB	–
74	L	–
75	W	–
76	BR	–
77	R	–
78	P	–
79	GR	–
83	BG	–
85	Y	–
86	LG	–
87	Y	–
88	R	–
89	B	–
90	BG	–
91	G	–
92	BR	–
93	G	–
94	SB	–
95	G	–
96	Y	–
98	W	–
99	GR	–

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	–
5	R	–
6	SB	–
7	P	–
17	Y	–
19	P	–
21	V	–
22	L	–
23	BG	–
28	R	–
33	R	–
43	B	–
60	G	–
66	GR	–
67	Y	–

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	V	–

Connector No.	B92
Connector Name	AROUND VIEW MONITOR CONTROL UNIT
Connector Type	TH40FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	L	BATTERY [Without Blind Spot Warning]
2	Y	BATTERY [With Blind Spot Warning]
3	P	IGNITION SIGNAL
4	GR	ACC
19	SB	AV COMM (H)
20	LG	AV COMM (L)
25	V	REVERSE SIGNAL
27	L	CAN-H
28	P	CAN-L [Without Blind Spot Warning]
28	Y	CAN-L [With Blind Spot Warning]

Connector No.	B301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	–
2	P	–
3	SB	–
4	LG	–
5	L	–
6	P	–
7	SB	–
8	LG	–

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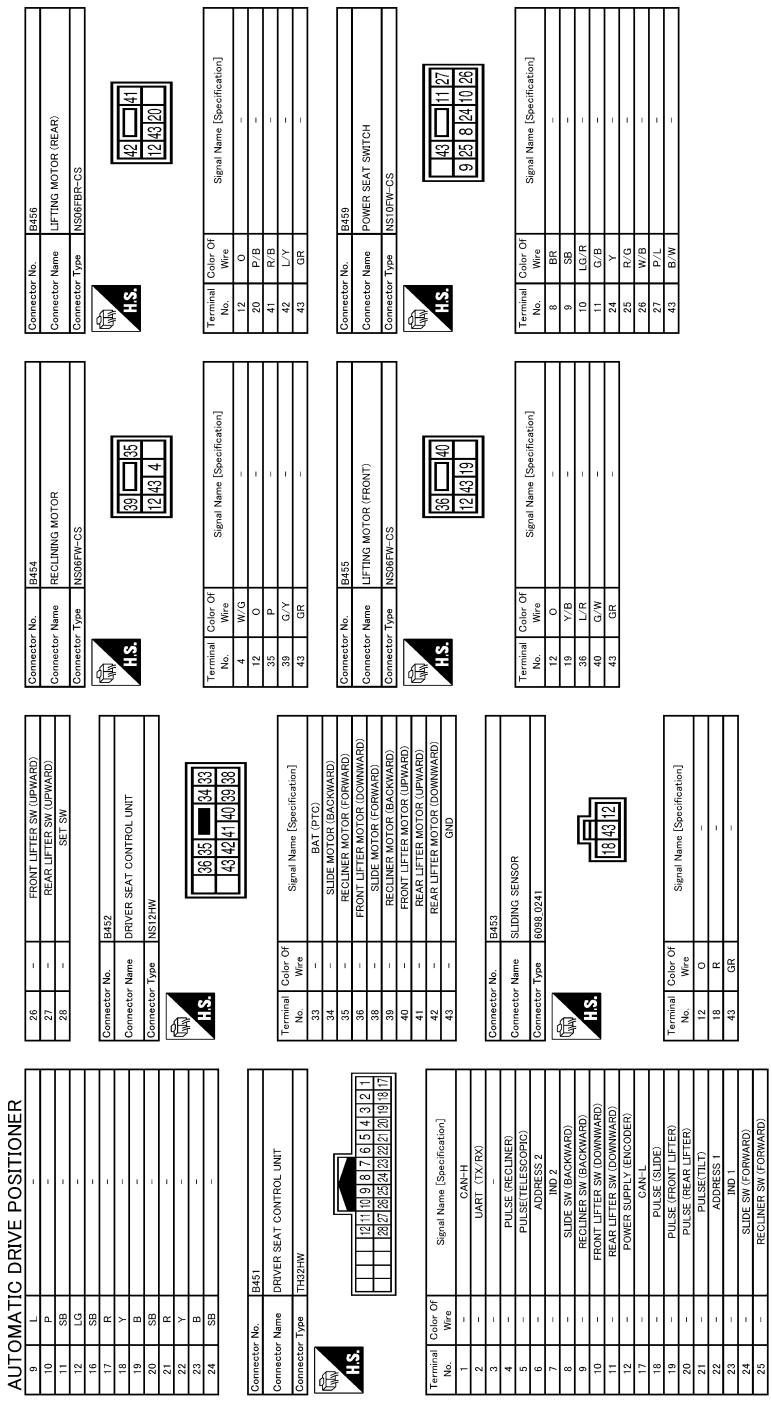

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AUTOMATIC DRIVE POSITIONER

Connector No.	B460
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS

H.S.

19	3	43		17	5	21	28
67	60	66	6	32	22	33	7	23

Terminal No.	Color Of Wire	Signal Name [Specification]
3	R/Y	–
5	–	–
6	–	–
7	–	–
17	Y/R	–
19	V	–
21	L/Y	–
22	–	–
23	–	–
28	–	–
33	R	–
43	–	–
60	Y/R	–
66	B	–
67	L	–

Connector No.	B461
Connector Name	SLIDING MOTOR
Connector Type	6098-0239

H.S.

34	38

Terminal No.	Color Of Wire	Signal Name [Specification]
34	W/R	–
38	W/B	–

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

H.S.

5	14	13	12	11	10	9	8	7	6	5	4	3	2	1
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
55	54	53	52	51	50	49	48	47	46					

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	V	–
4	W	–
5	L	–
6	O	–
7	GR	–
8	W	–
9	O	–
10	BR	–
11	P	–
12	LG	–
13	B	–
14	Y	–
15	W	–
16	SB	–
17	LG	–
18	SHIELD	–
19	P	–
20	W	–
21	O	–
22	P	–
23	BR	–
24	V	–
25	GR	–
26	Y	–
27	BR	–
28	V	–
29	LG	–
30	G	–
31	W	–
32	G	–
33	L	–
34	SB	–
35	R	–
36	LG	–
37	R	–
38	P	–
39	O	–
40	BR	–
41	L	–
42	GR	–
43	BR	– [With automatic drive positioner]
43	O	– [Without automatic drive positioner]
44	GR	– [Without automatic drive positioner]
44	W	– [With automatic drive positioner]
45	G	– [Without automatic drive positioner]
45	Y	– [With automatic drive positioner]
46	G	– [With automatic drive positioner]
46	V	– [Without automatic drive positioner]
47	R	–
48	G	–
49	GR	–
50	SHIELD	–
51	B	–
52	R	–
53	SB	–
54	O	–
55	Y	–

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

H.S.

12	11	10			7	6	5		3	2	1
24	23	22	21		19	18	17			14	

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	–
2	O	–
3	BR	CONT
5	P	COMP+
6	SB	ON
7	W	–
10	G	–
11	P	–
12	O	–
14	LG	–
17	SHIELD	COMP-

18	LG	GROUND
19	B	–
21	GR	–
22	BR	–
23	Y	–
24	V	–

Connector No.	D5
Connector Name	SEAT MEMORY SWITCH
Connector Type	A08FW

H.S.

3	5		6	7	2	1	4

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

Connector No.	D17
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Type	TK16FBR

H.S.

			4			7
8	9	10	11	12	13	15

Terminal No.	Color Of Wire	Signal Name [Specification]
4	BR	–
7	B	–
8	B	–
9	R	–
10	GR	–

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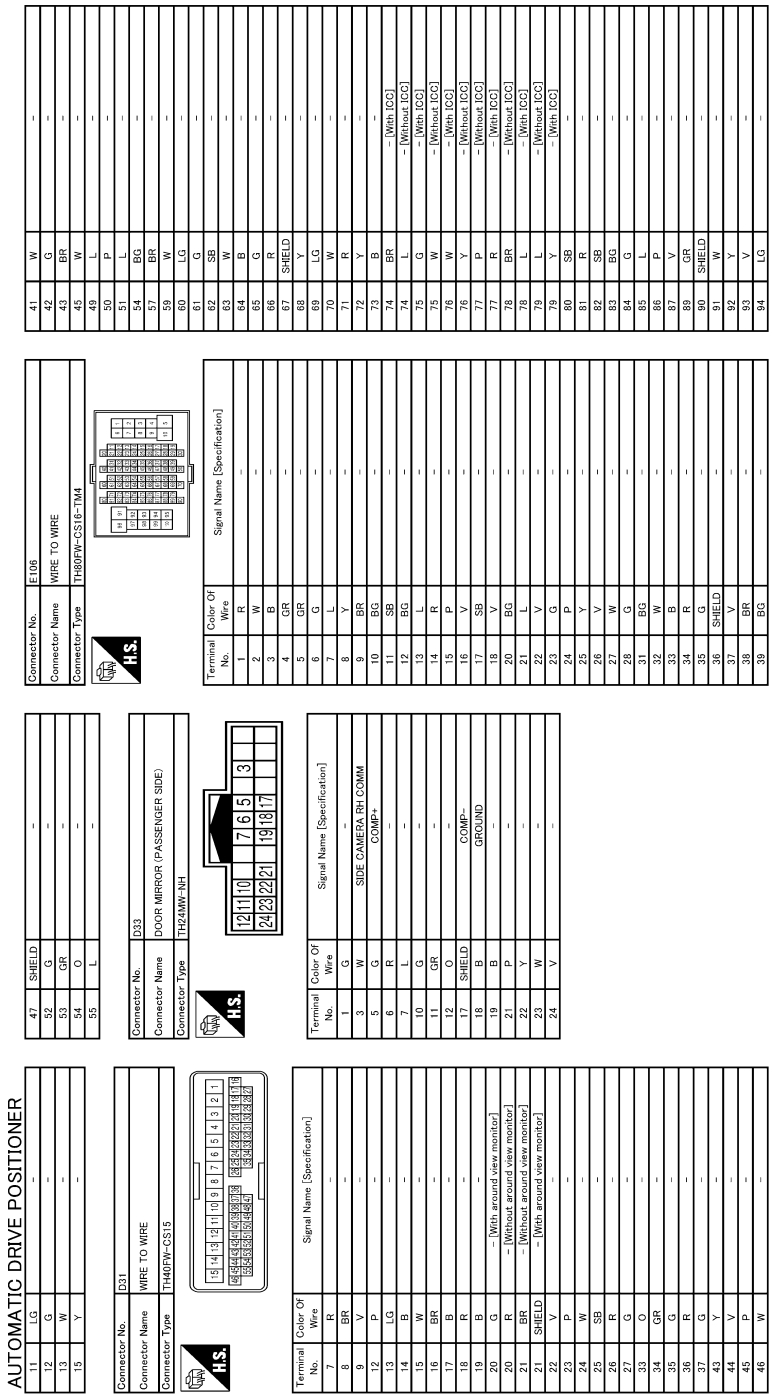

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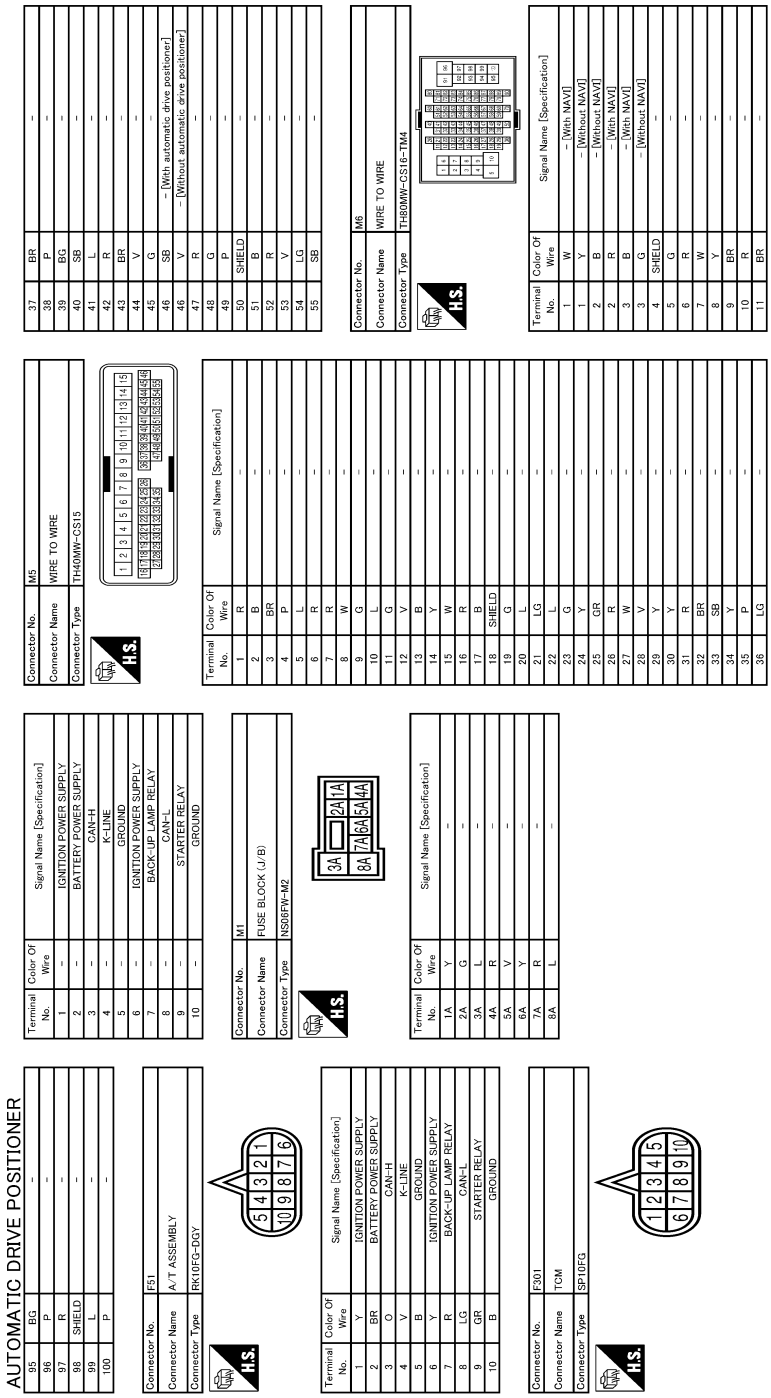

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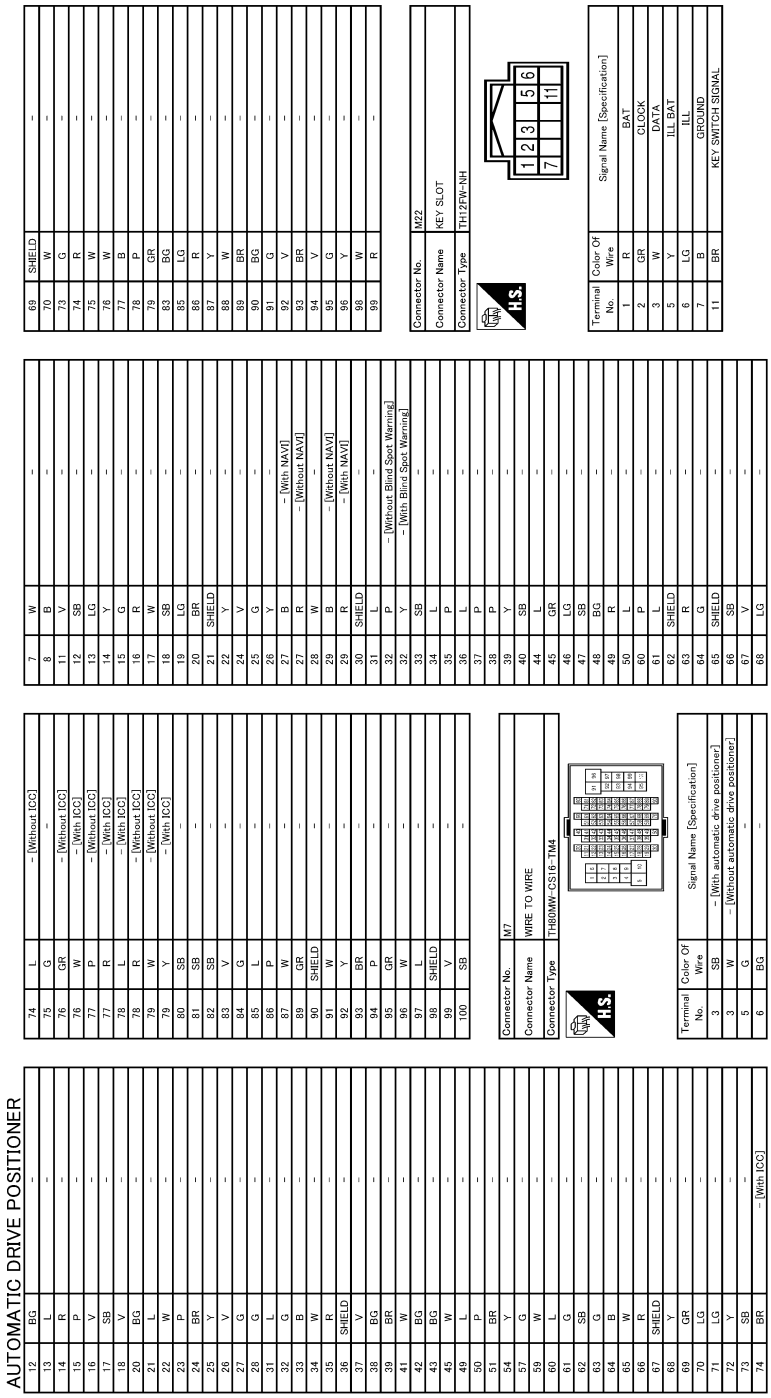

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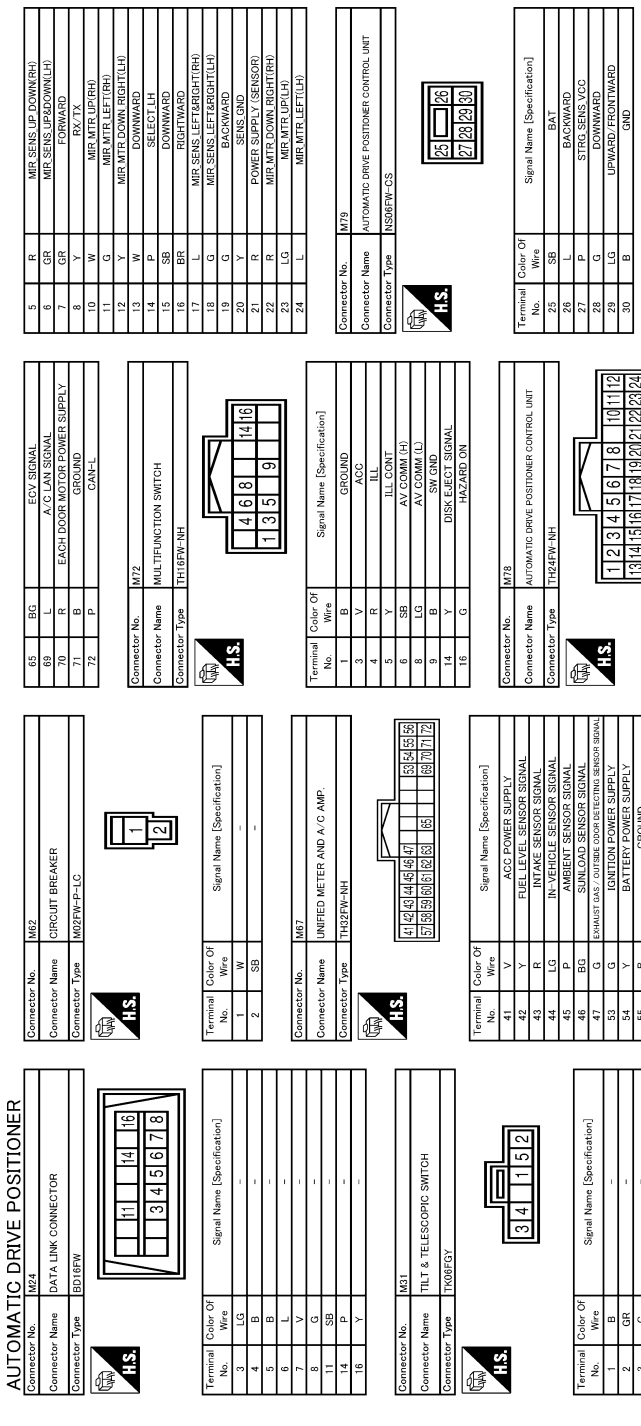

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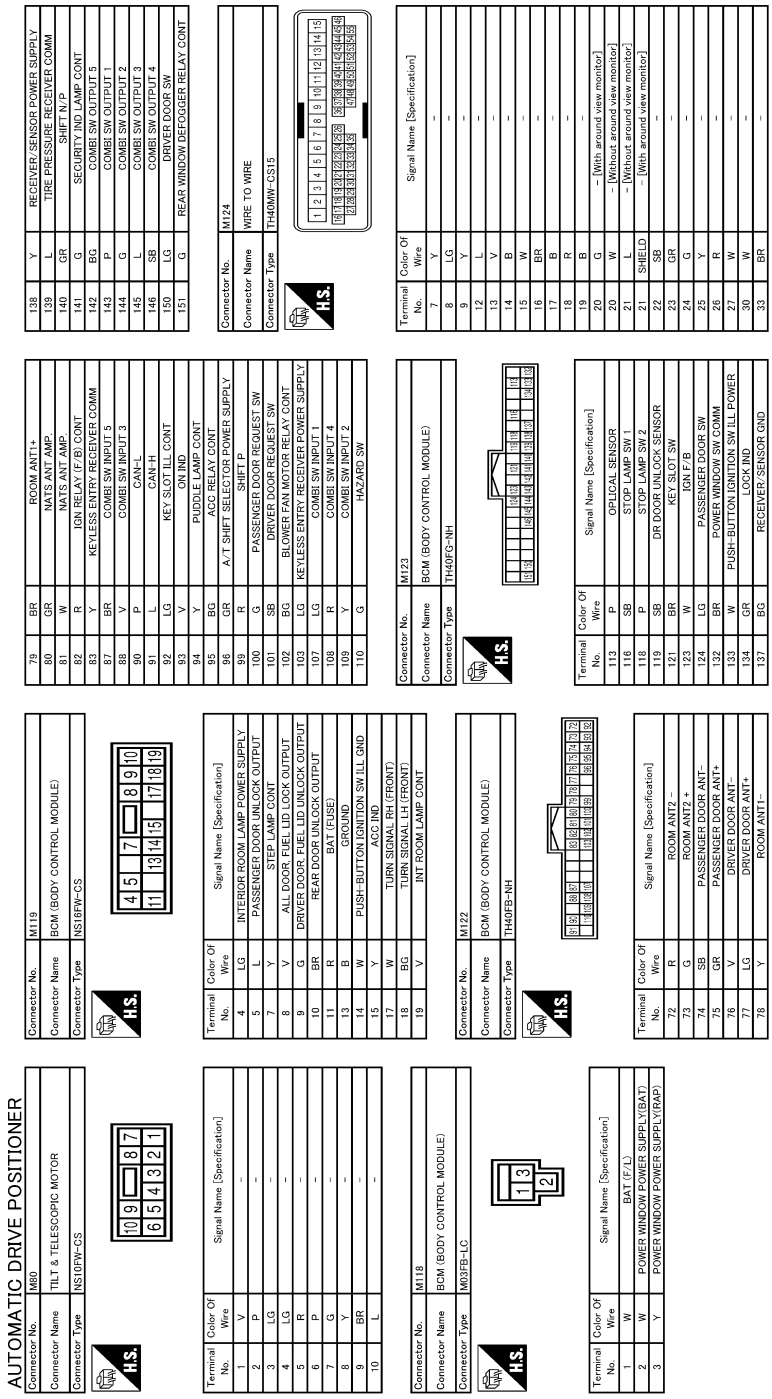

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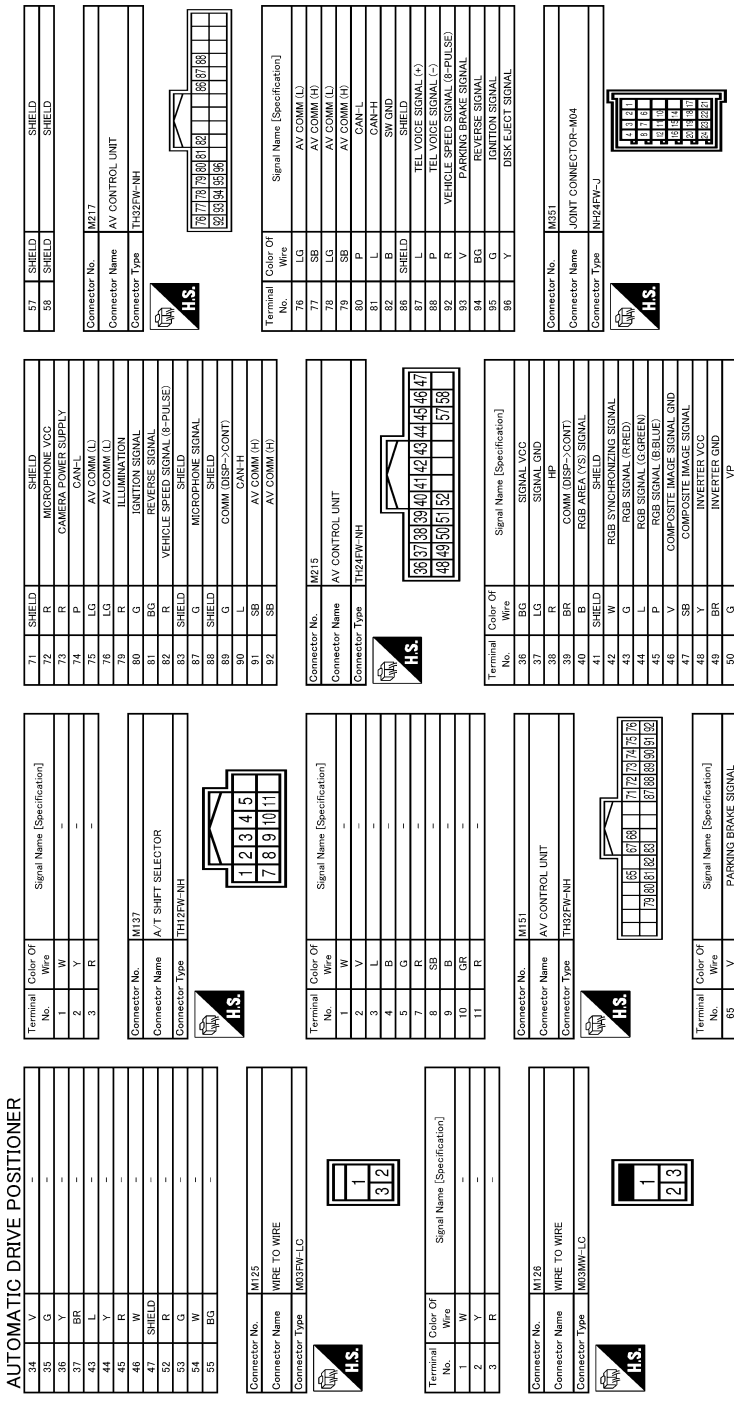

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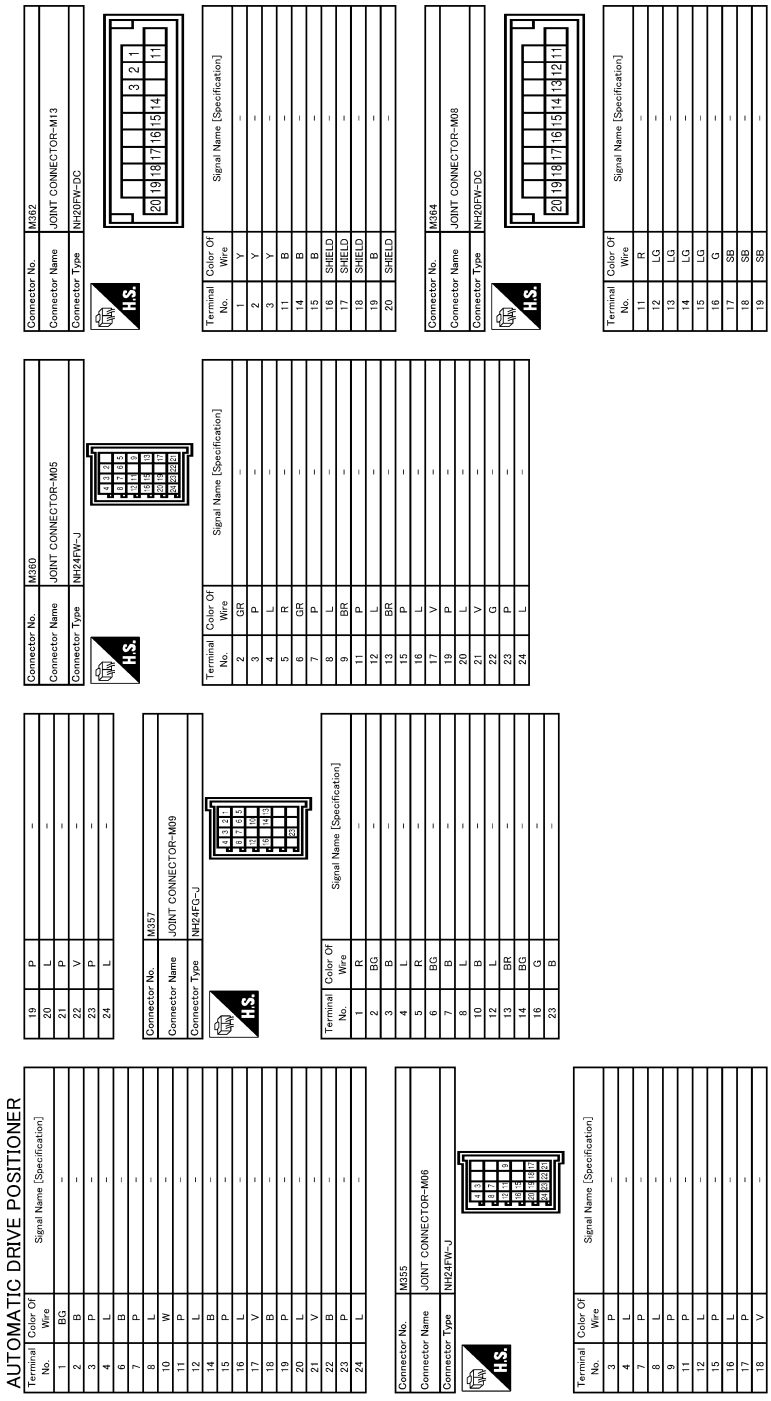

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JRJWD2766GB

Fail Safe

INFOID:0000000012828234

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
Only manual functions operate normally.	CAN communication	U1000	ADP-46
	CONTROL UNIT (CAN)	U1010	ADP-47
	EEPROM	B2130	ADP-55
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-54
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-48
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-50
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-55

DTC Index

INFOID:0000000012828235

CONSULT display	Timing*1		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-46
CONTROL UNIT (CAN) [U1010]	0	1-39	Control unit	ADP-47
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-48
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-50
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-52
UART COMM [B2128]	0	1-39	UART communication	ADP-54
EEPROM [B2130]	0	1-39	EEPROM	ADP-55

*1:

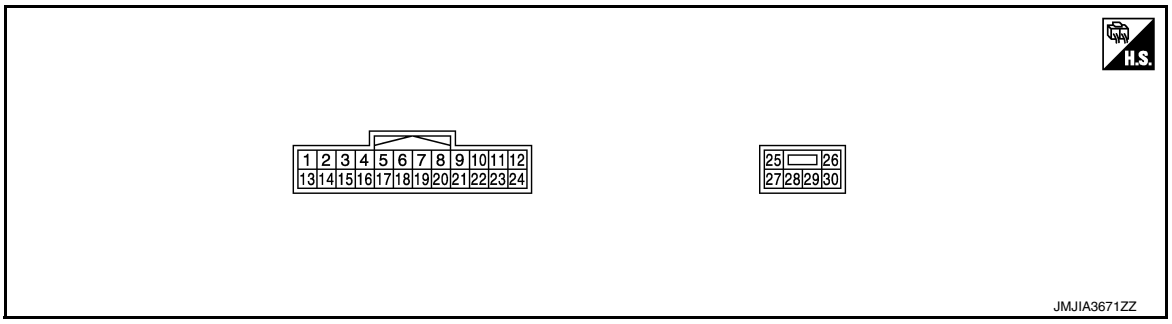
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

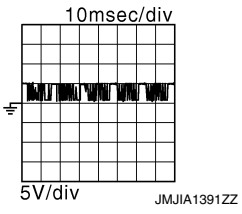
Reference Value

INFOID:0000000012828237

TERMINAL LAYOUT



PHYSICAL VALUES

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

Terminal No. (wire color)		Description		Condition		Voltage
+	-	Signal name	Input/ Output			
10 (W)	Ground	Door mirror motor (passenger side) up/right output signal	Output	Door mirror RH	Operate (up/right)	9 - 16 V
					Other than the above	0 - 1 V
11 (G)	Ground	Door mirror motor (passenger side) down/left output signal	Output	Door mirror RH	Operate (down/left)	9 - 16 V
					Other than the above	0 - 1 V
12 (Y)	Ground	Door mirror motor (driver side) down/right output signal	Output	Door mirror (LH)	Operate (down/right)	9 - 16 V
					Other than the above	0 - 1 V
13 (W)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0 - 1 V
					Other than the above	4 - 6 V
14 (P)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0 - 1 V
					Neutral or RH	4 - 6 V
15 (SB)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0 - 1 V
					Other than the above	4 - 6 V
16 (BR)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0 - 1 V
					Other than the above	4 - 6 V
17 (L)	Ground	Door mirror sensor (passenger side) left/right signal	Input	Door mirror RH position		Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (G)	Ground	Door mirror sensor (driver side) left/right signal	Input	Door mirror LH position		Change between 0.6 (close to left edge) 3.4 (close to right edge)
19 (G)	Ground	Telescopic switch backward signal	Input	Telescopic switch	Operate (backward)	0 - 1 V
					Other than the above	4 - 6 V
20 (Y)	Ground	Ground (sensor)	—	—		0 - 1 V
21 (R)	Ground	Door mirror motor sensor power supply	Output	—		4 - 6 V
22 (R)	Ground	Door mirror motor (passenger side) down/right output signal	Output	Door mirror (RH)	Operate (down/right)	9 - 16 V
					Other than the above	0 - 1 V
23 (LG)	Ground	Door mirror motor (driver side) up/right output signal	Output	Door mirror (LH)	Operate (up/right)	9 - 16 V
					Other than the above	0 - 1 V

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

Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

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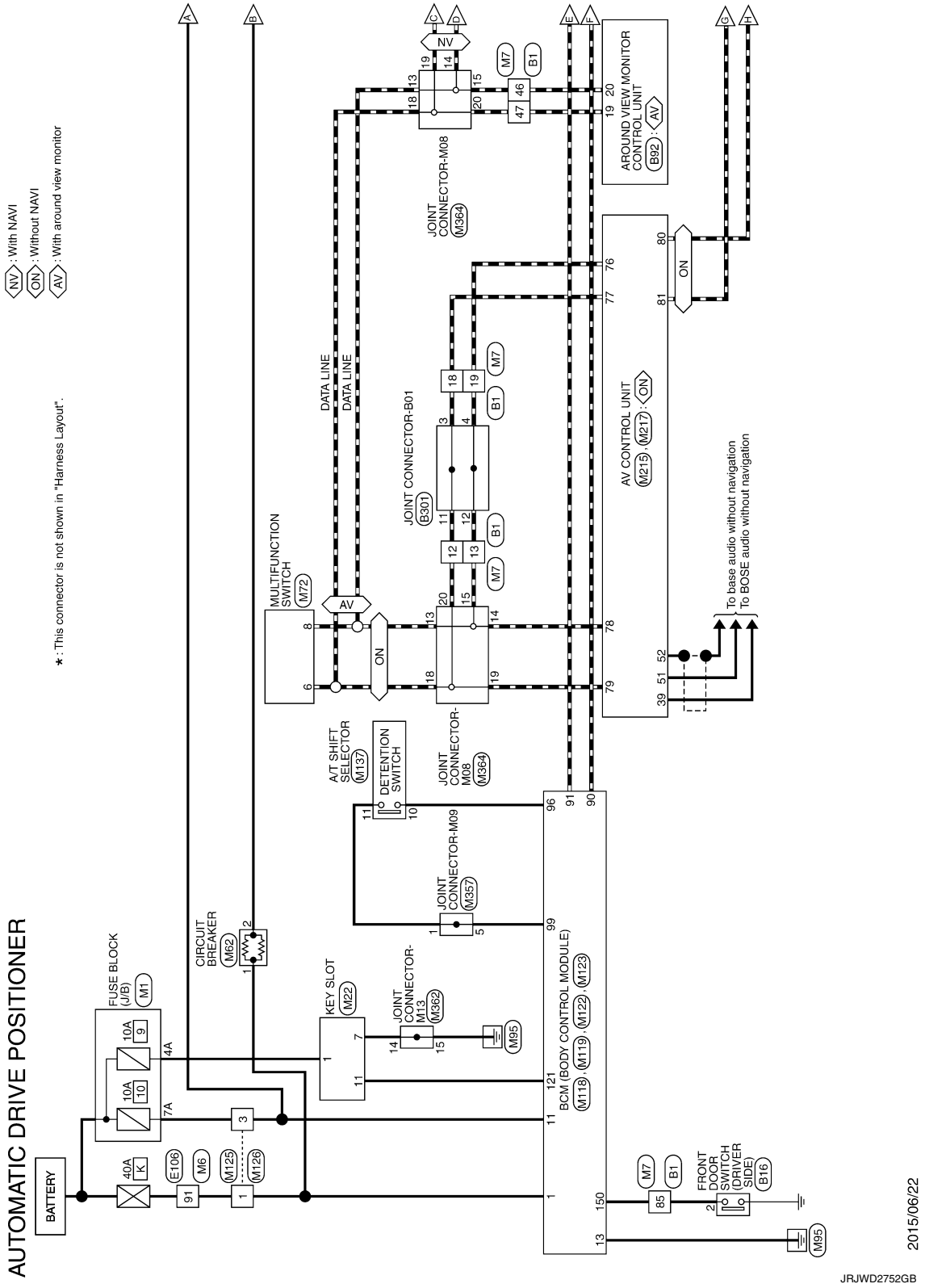
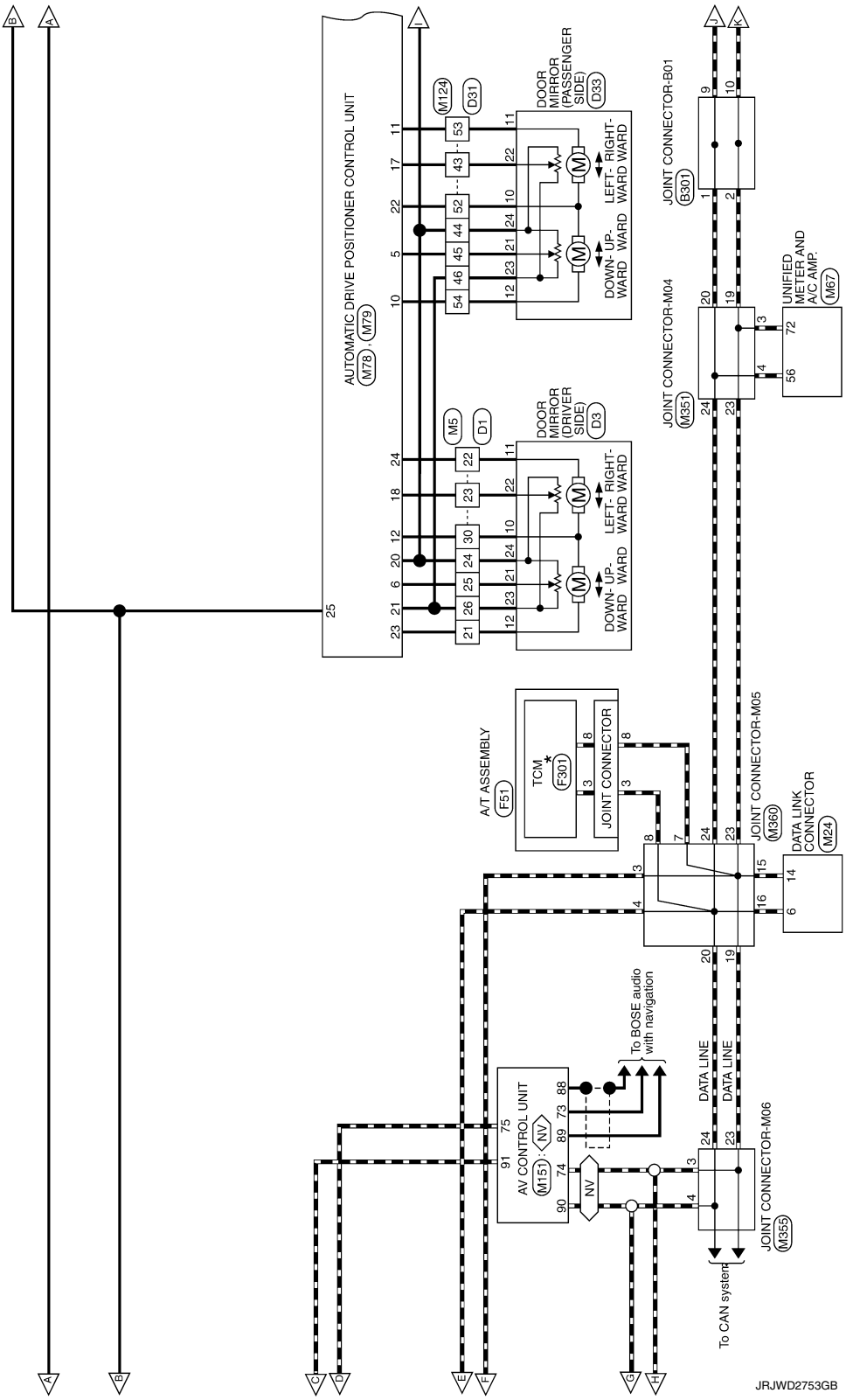
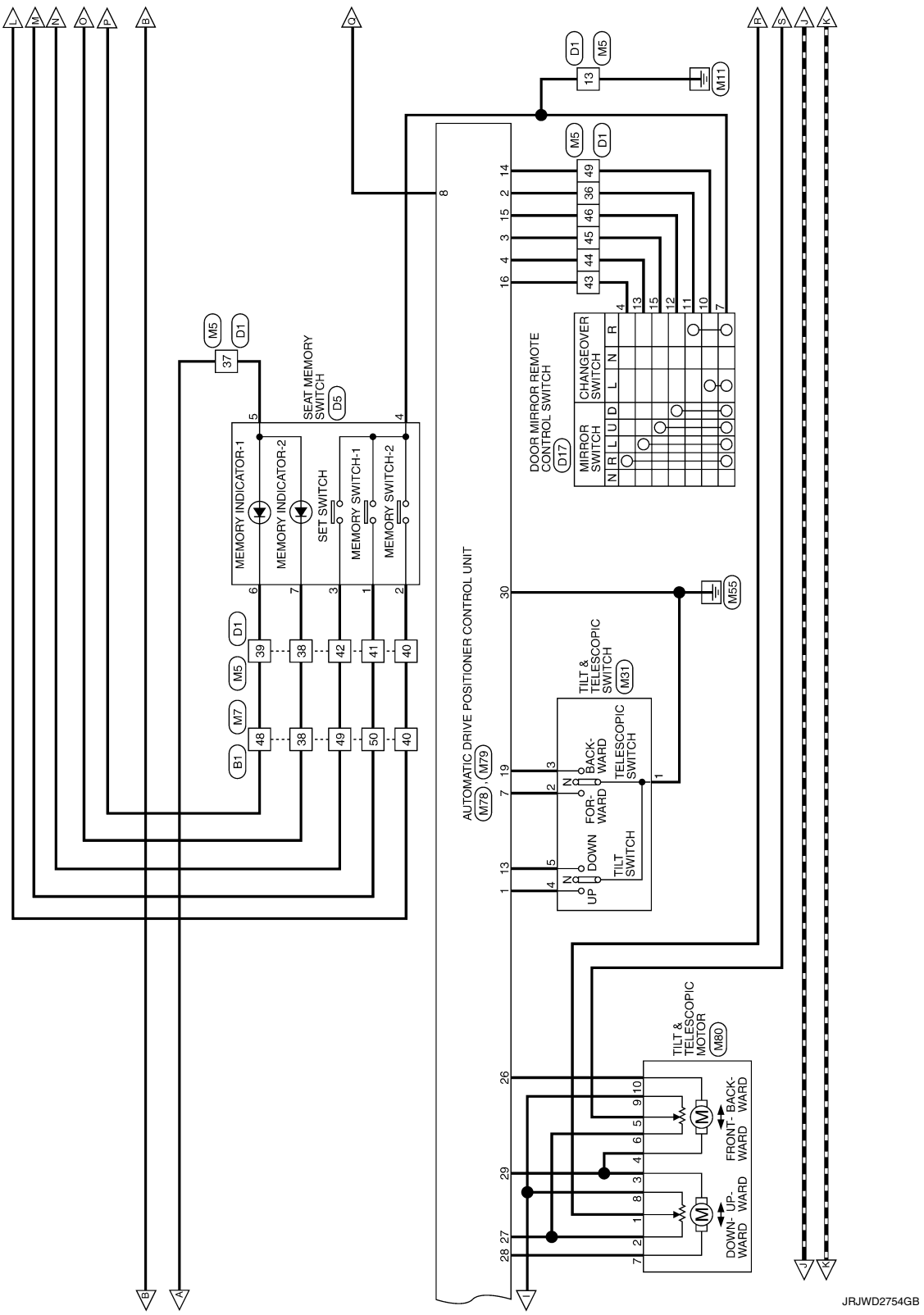



AUTOMATIC DRIVE POSITIONER CONTROL UNIT
M78, M79
DOOR MIRROR (PASSENGER SIDE) D33
DOOR MIRROR (DRIVER SIDE) D3
LEFT-RIGHT-WARD
DOWN-UP-WARD
JOINT CONNECTOR-B01 B301
JOINT CONNECTOR-M04 M351
UNIFIED METER AND A/C AMP. M67
A/T ASSEMBLY F51
TCM F301
JOINT CONNECTOR
JOINT CONNECTOR-M05 M360
DATA LINK CONNECTOR M24
AV CONTROL UNIT M151
To BOSE audio with navigation
DATA LINE
JOINT CONNECTOR-M06 M355
To CAN system
JRJWD2753GB


AUTOMATIC DRIVE POSITIONER CONTROL UNIT
(M78), (M79)
SEAT MEMORY SWITCH
D5
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
DOOR MIRROR REMOTE CONTROL SWITCH
D17
MIRROR SWITCH
CHANGEOVER SWITCH
TILT & TELESCOPIC SWITCH
M31
TELESCOPIC SWITCH
BACK-WARD
FOR-WARD
TILT SWITCH
UP
DOWN
TILT & TELESCOPIC MOTOR
M80
FRONT-BACK-WARD
UP-DOWN-WARD
M11
M55
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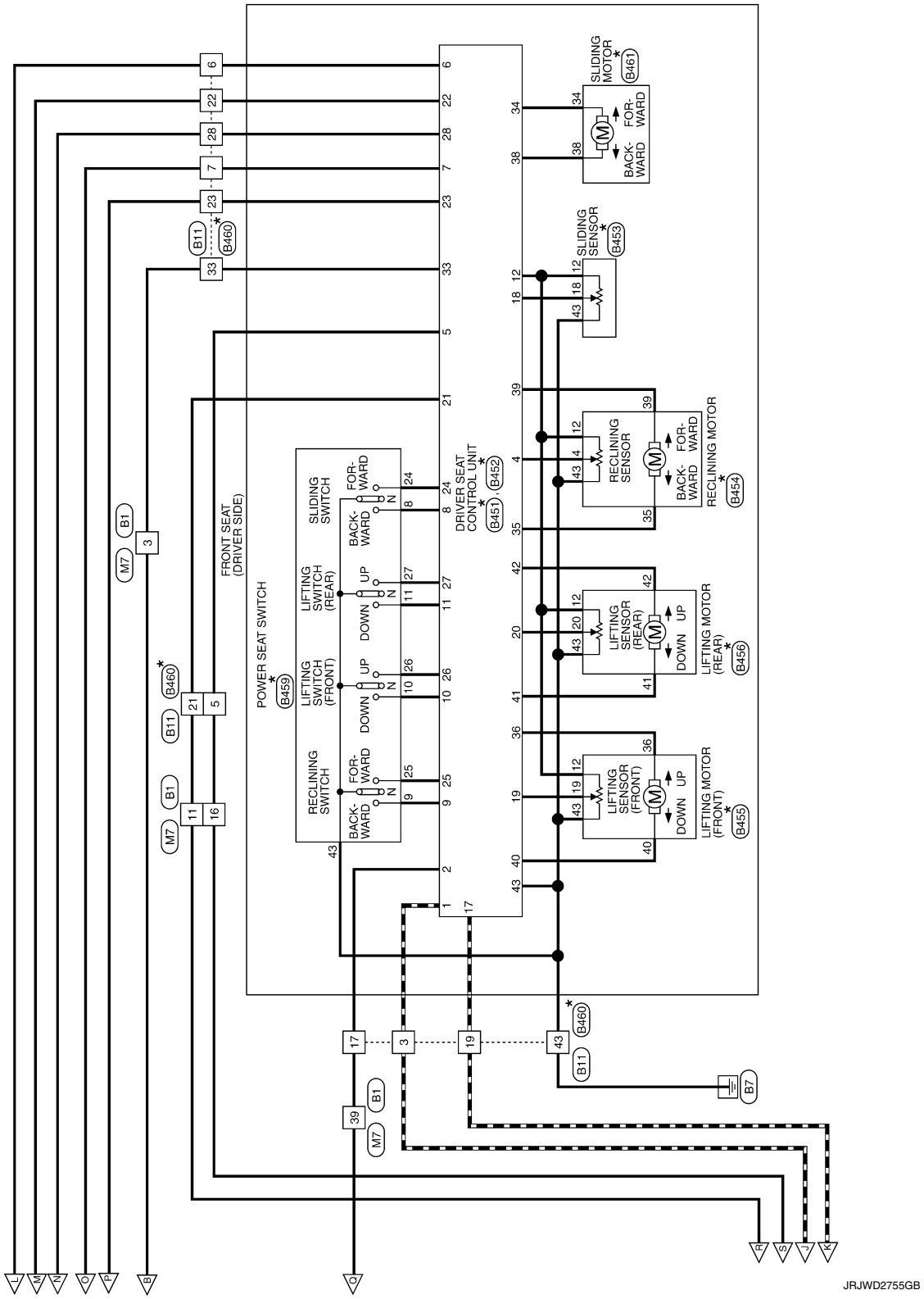
DRIVER SEAT CONTROL UNIT
B451
B452
SLIDING MOTOR
B461
SLIDING SENSOR
B453
RECLINING SENSOR
RECLINING MOTOR
B454
LIFTING SENSOR (REAR)
LIFTING MOTOR (REAR)
B456
LIFTING SENSOR (FRONT)
LIFTING MOTOR (FRONT)
B455
SLIDING SWITCH
RECLINING SWITCH
LIFTING SWITCH (REAR)
LIFTING SWITCH (FRONT)
POWER SEAT SWITCH
B459
FRONT SEAT (DRIVER SIDE)
FOR-WARD
BACK-WARD
UP
DOWN
B460
B11
B1
M7
B7
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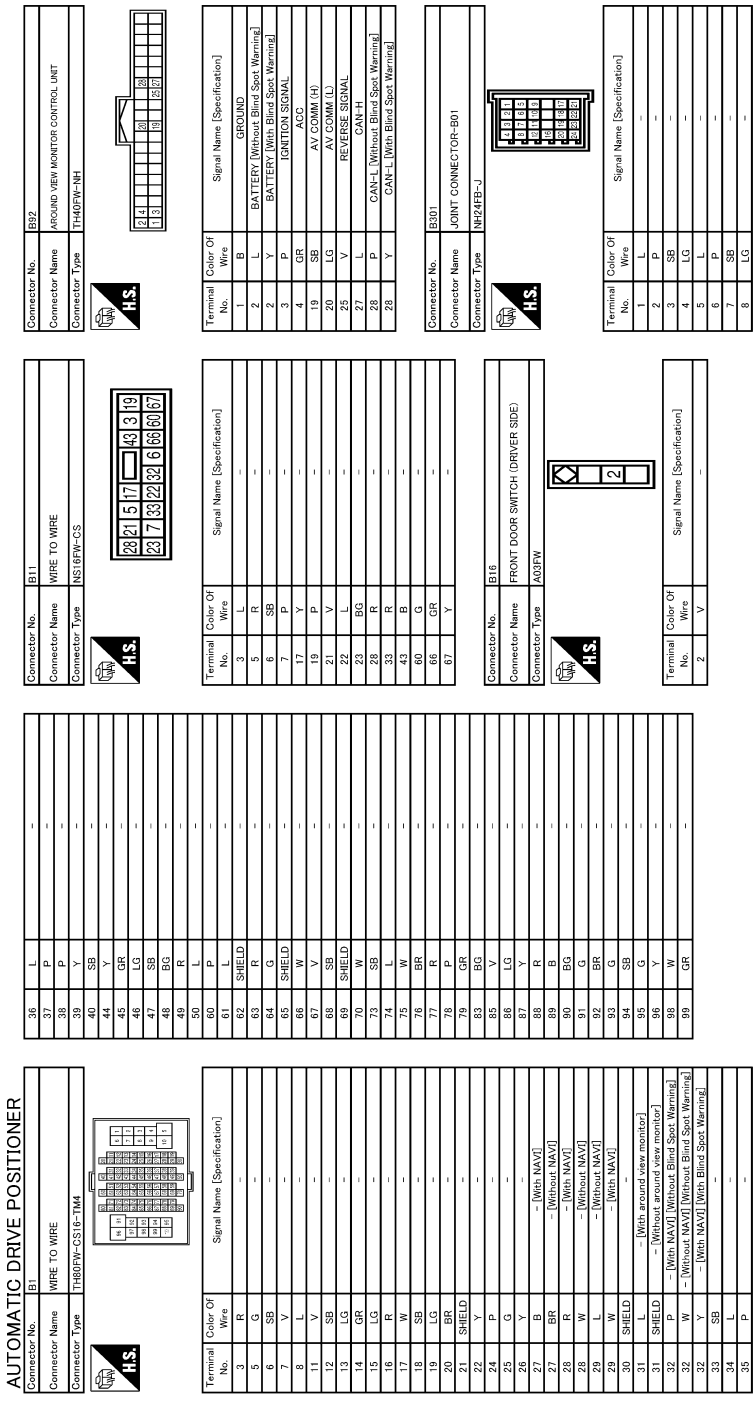

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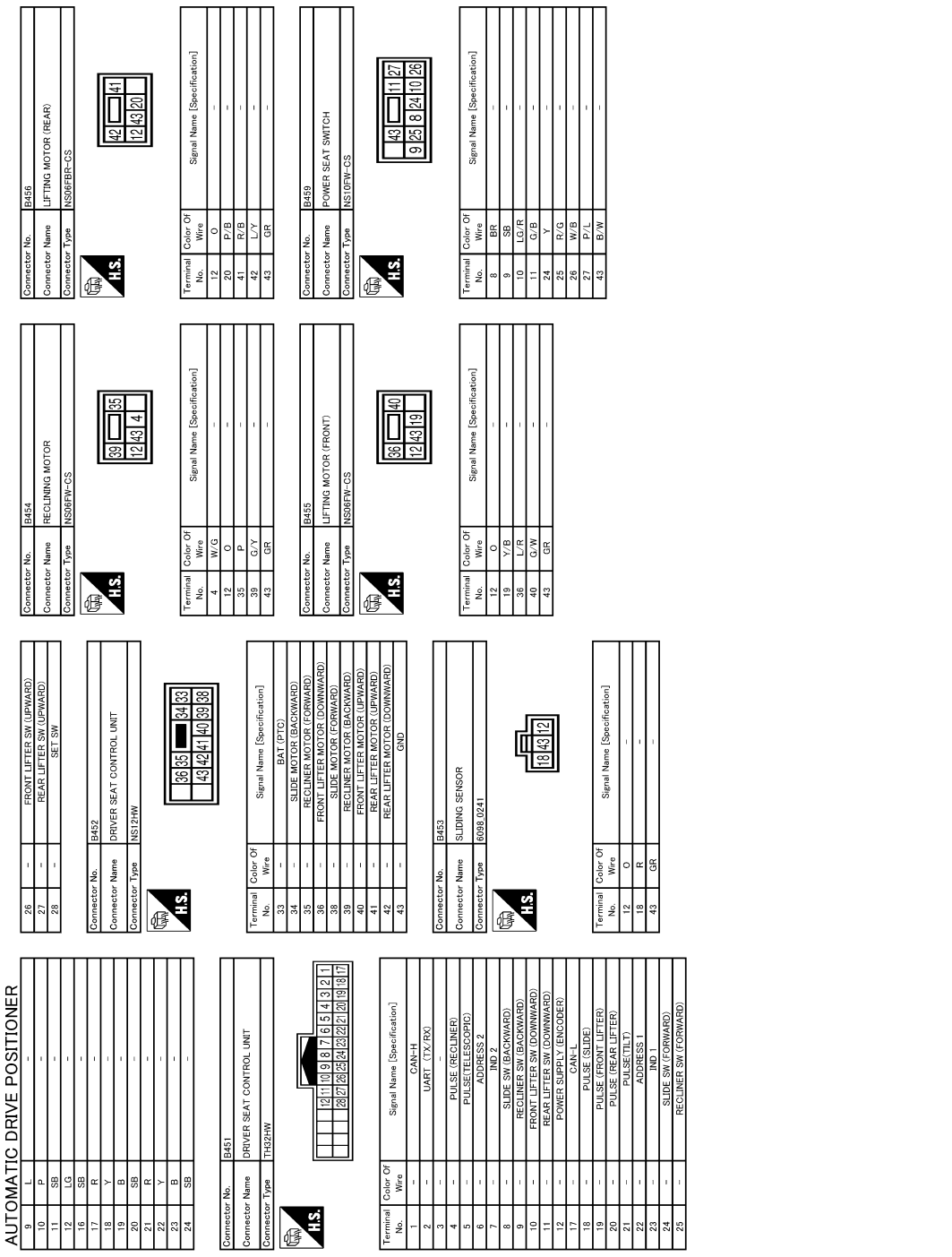

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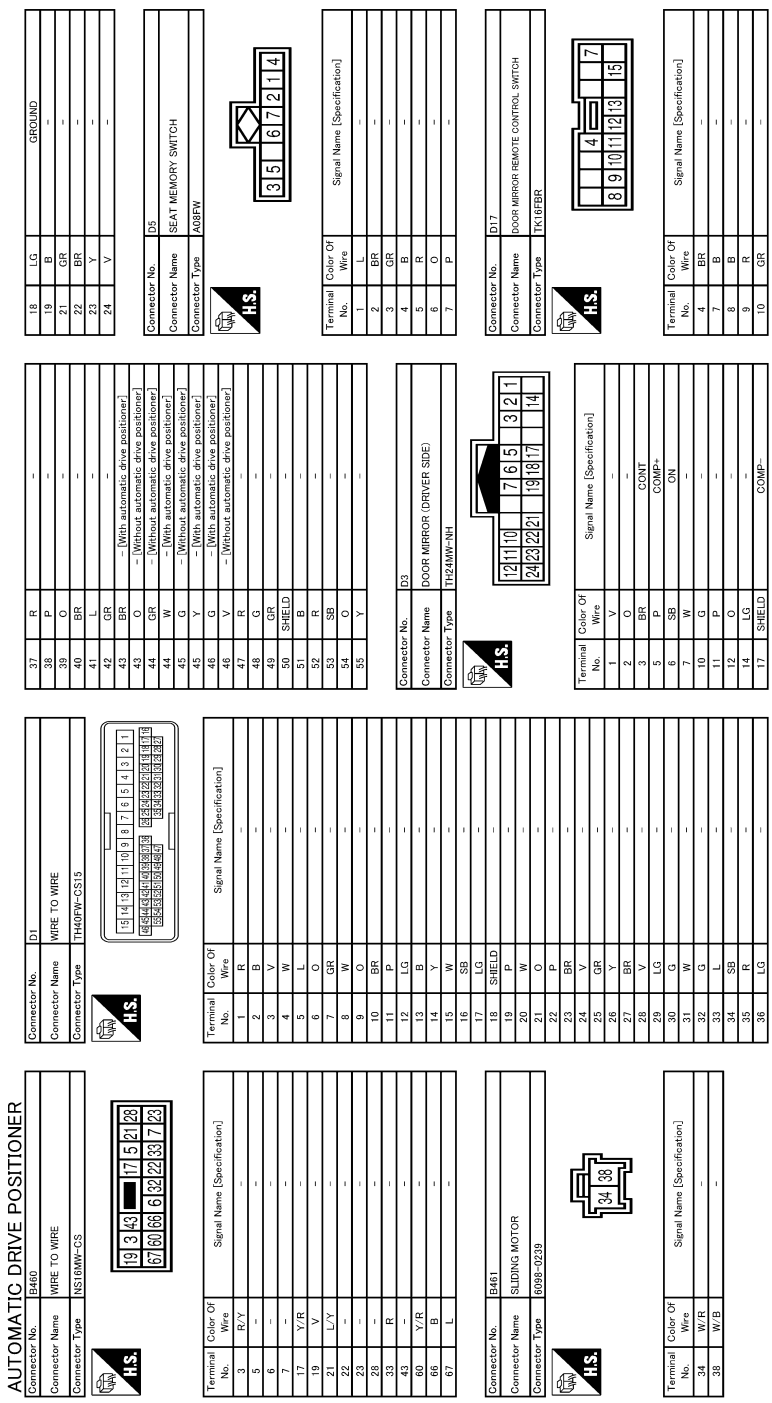

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AUTOMATIC DRIVE POSITIONER

11	LG	–
12	G	–
13	W	–
15	Y	–

47	SHIELD	–
52	G	–
53	GR	–
54	O	–
55	L	–

41	W	–
42	G	–
43	BR	–
45	W	–
49	L	–
50	P	–
51	L	–
54	BG	–
57	BR	–
59	W	–
60	LG	–
61	G	–
62	SB	–
63	W	–
64	B	–
65	G	–
66	R	–
67	SHIELD	–
68	Y	–
69	LG	–
70	W	–
71	R	–
72	Y	–
73	B	–
74	BR	– [With ICC]
74	L	– [Without ICC]
75	G	– [With ICC]
75	W	– [Without ICC]
76	W	– [With ICC]
76	Y	– [Without ICC]
77	P	– [Without ICC]
77	R	– [With ICC]
78	BR	– [Without ICC]
78	L	– [With ICC]
79	L	– [Without ICC]
79	Y	– [With ICC]
80	SB	–
81	R	–
82	SB	–
83	BG	–
84	G	–
85	L	–
86	P	–
87	V	–
89	GR	–
90	SHIELD	–
91	W	–
92	Y	–
93	V	–
94	LG	–

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	–
8	BR	–
9	V	–
12	P	–
13	LG	–
14	B	–
15	W	–
16	BR	–
17	B	–
18	R	–
19	B	–
20	G	– [With around view monitor]
20	R	– [Without around view monitor]
21	BR	– [Without around view monitor]
21	SHIELD	– [With around view monitor]
22	V	–
23	P	–
24	W	–
25	SB	–
26	R	–
27	G	–
33	O	–
34	GR	–
35	G	–
36	R	–
37	G	–
43	Y	–
44	V	–
45	P	–
46	W	–

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	–
3	W	SIDE CAMERA RH COMM
5	G	COMP+
6	R	–
7	L	–
10	G	–
11	GR	–
12	O	–
17	SHIELD	COMP–
18	B	GROUND
19	B	–
21	P	–
22	Y	–
23	W	–
24	V	–

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	W	–
3	B	–
4	GR	–
5	GR	–
6	G	–
7	L	–
8	Y	–
9	BR	–
10	BG	–
11	SB	–
12	BG	–
13	L	–
14	R	–
15	P	–
16	V	–
17	SB	–
18	V	–
20	BG	–
21	L	–
22	V	–
23	G	–
24	P	–
25	Y	–
26	V	–
27	W	–
28	G	–
31	BG	–
32	W	–
33	B	–
34	R	–
35	G	–
36	SHIELD	–
37	V	–
38	BR	–
39	BG	–

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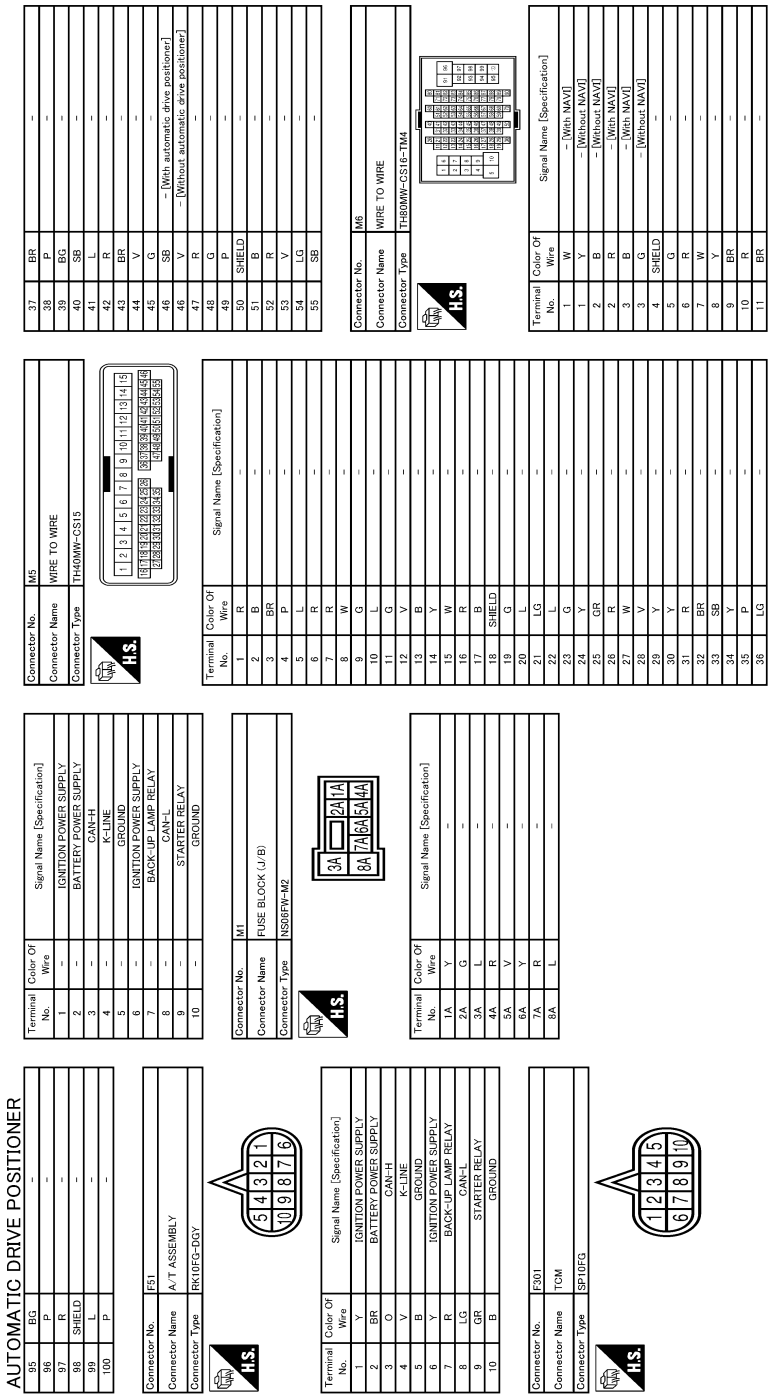

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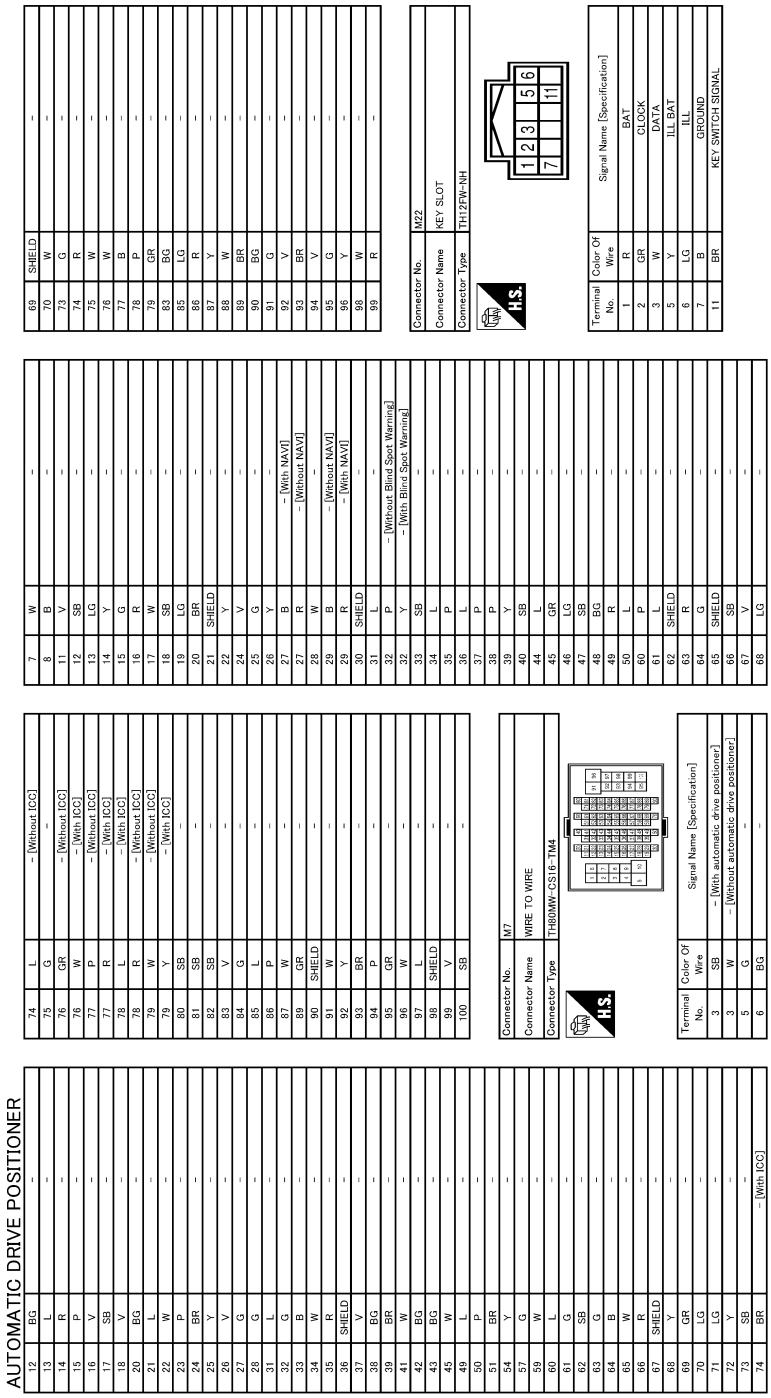

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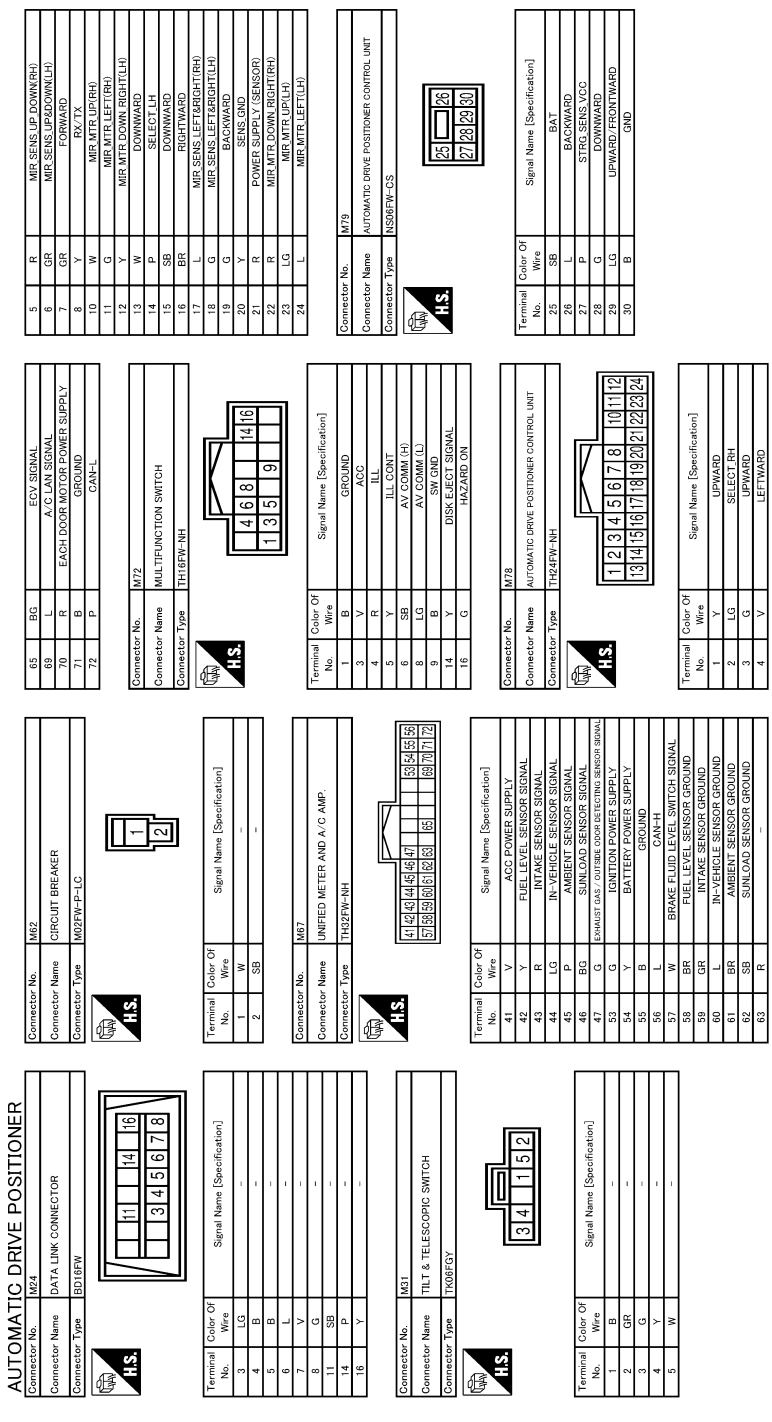

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AUTOMATIC DRIVE POSITIONER

Connector No.	M480
Connector Name	TILT & TELESCOPIC MOTOR
Connector Type	NS10FW-CS

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 –
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT–
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1–
79	BR	ROOM ANT1+
80	GR	NATS ANT AMP.
81	W	NATS ANT AMP.
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN–L
91	L	CAN–H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT
95	BG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER/ SENSOR GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIFT N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
7	Y	–
8	LG	–
9	Y	–
12	L	–
13	V	–
14	B	–
15	W	–
16	BR	–
17	B	–
18	R	–
19	B	–
20	G	– [With around view monitor]
20	W	– [Without around view monitor]
21	L	– [Without around view monitor]
21	SHIELD	– [With around view monitor]
22	SB	–
23	GR	–
24	G	–
25	Y	–
26	R	–
27	W	–
30	W	–
33	BR	–

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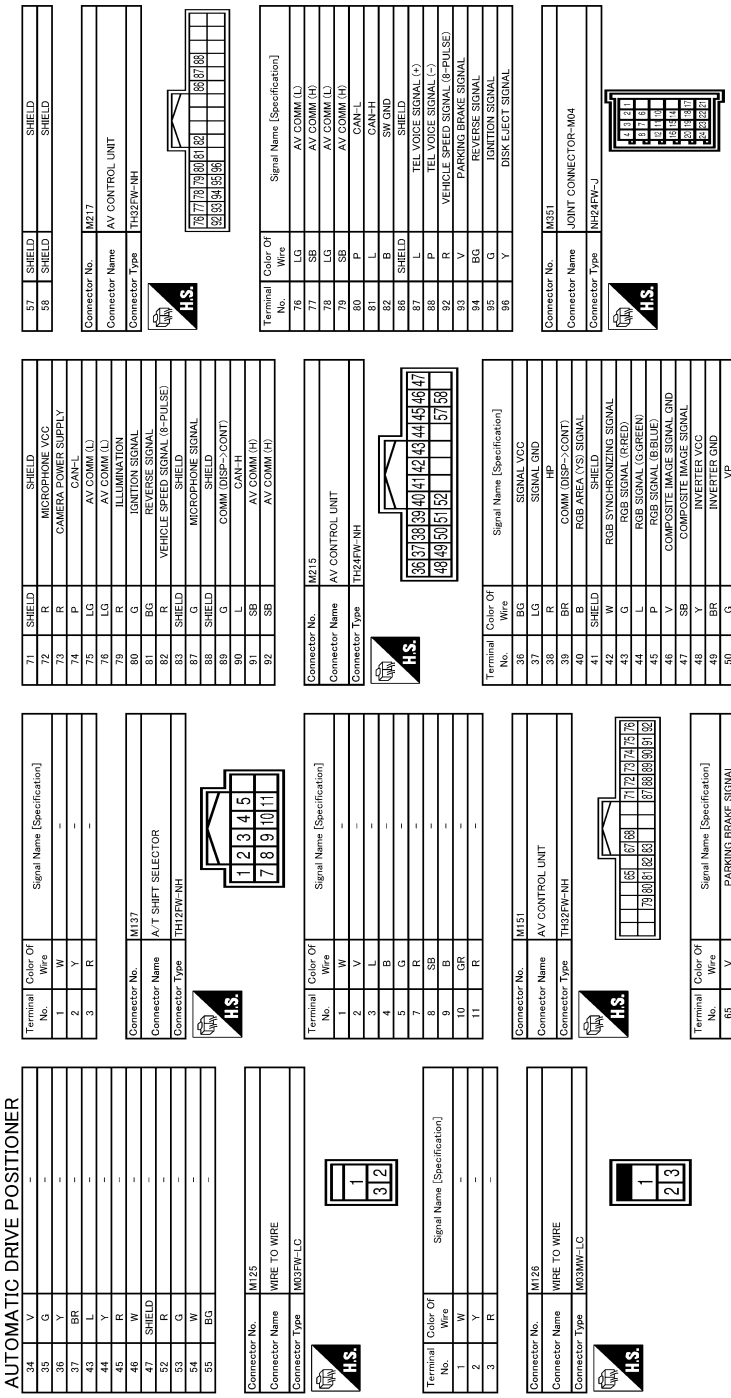

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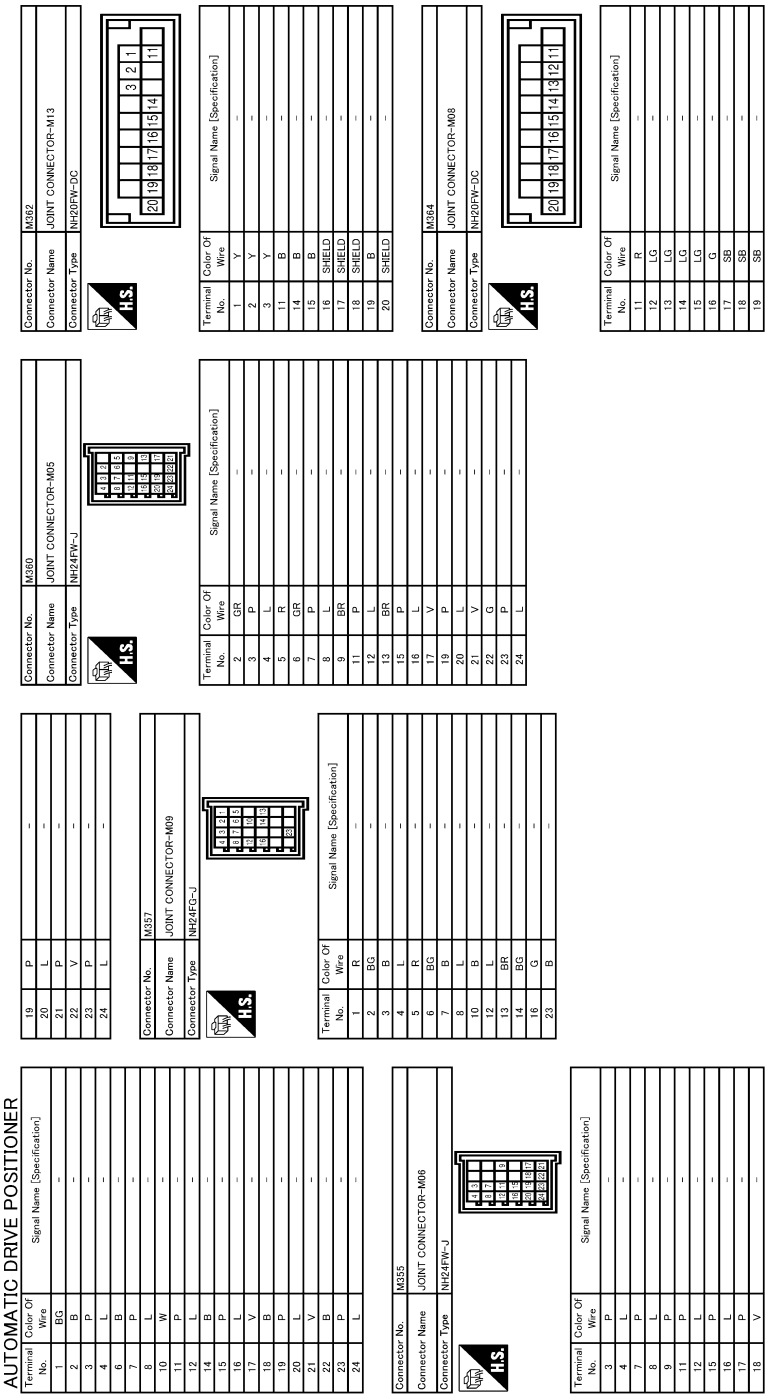

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BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000012828239

VALUES ON THE DIAGNOSIS TOOL

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On

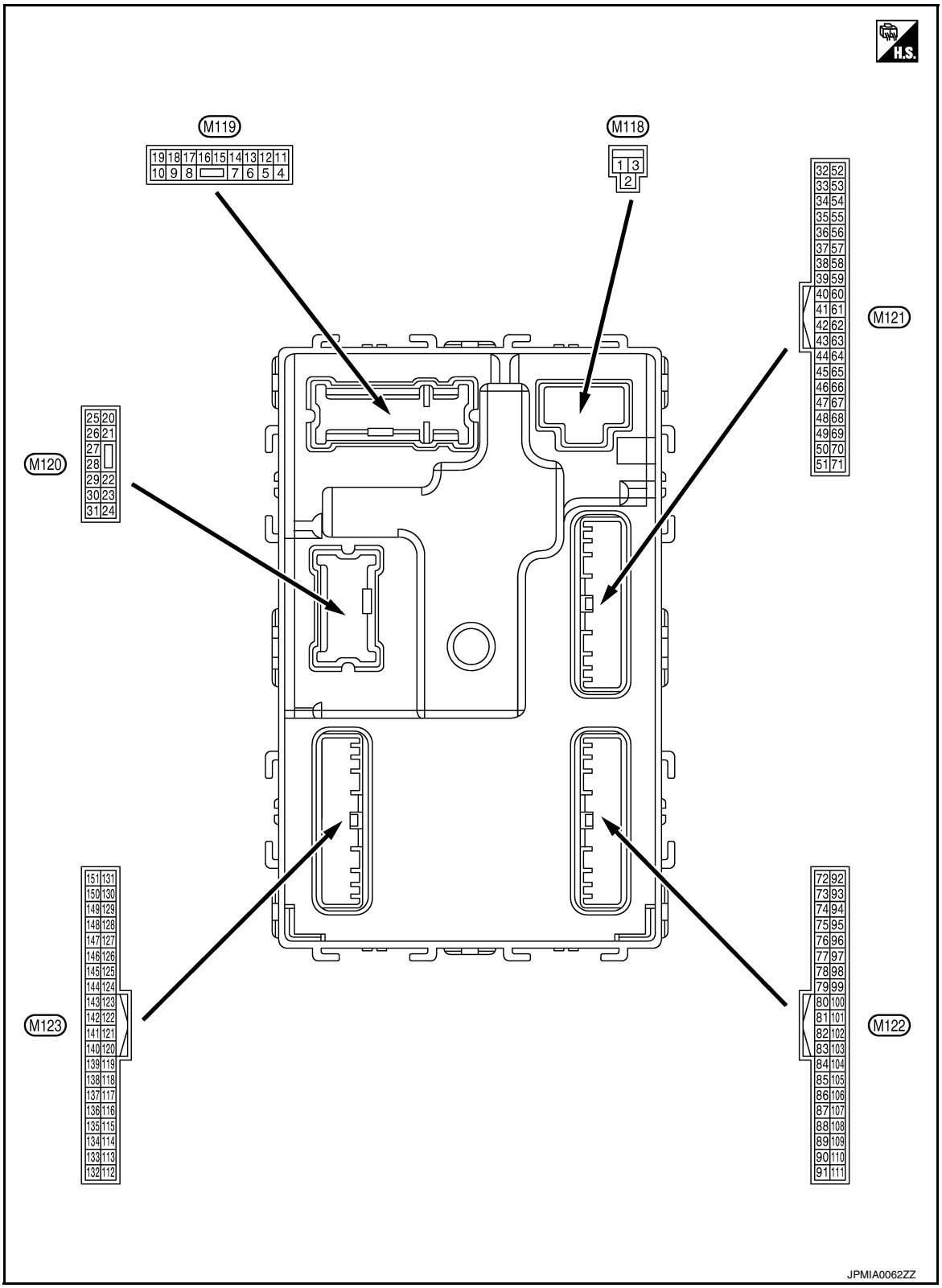
Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	**NOTE:** The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	**NOTE:** The item is indicated, but not monitored.	Off
TR CANCEL SW	**NOTE:** The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	**NOTE:** The item is indicated, but not monitored.	Off
REVERSE SW	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	**NOTE:** The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the key is not pressed	Off
	PANIC button of the key is pressed	On
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed and held	On

Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -RL	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	**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
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	**NOTE:** The item is indicated, but not monitored.	Off
S/L -UNLOCK	**NOTE:** The item is indicated, but not monitored.	Off
S/L RELAY-F/B	**NOTE:** The item is indicated, but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On

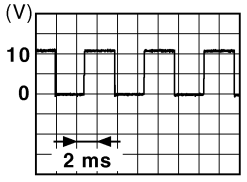
Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	**NOTE:** 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	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	**NOTE:** The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The key is not inserted into key slot	Off
	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.	—
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done

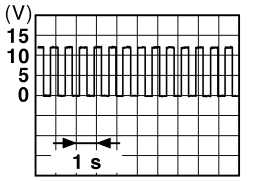
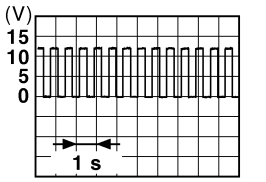
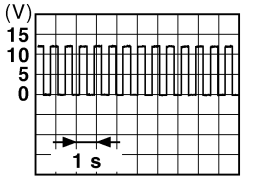
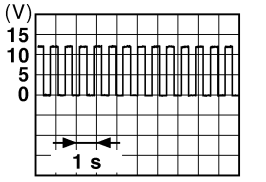
Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives does not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

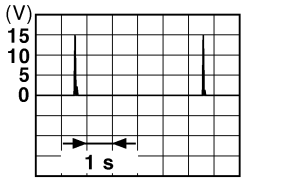
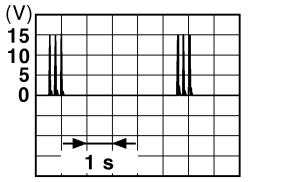
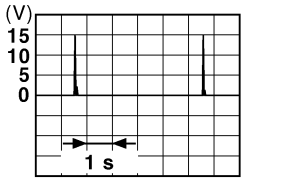
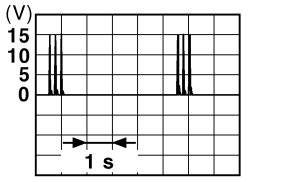
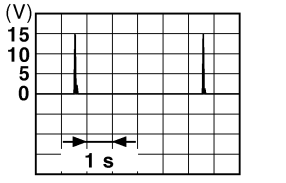
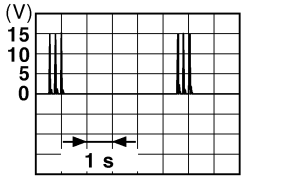
TERMINAL LAYOUT

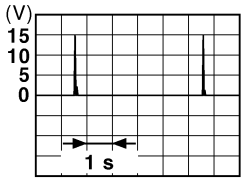
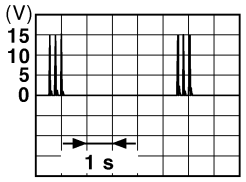
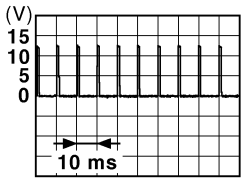
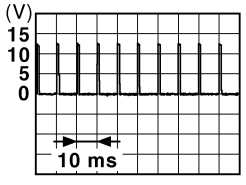


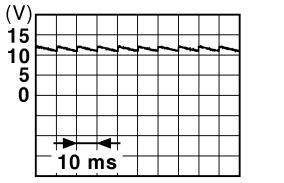
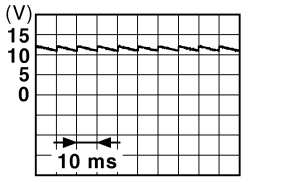
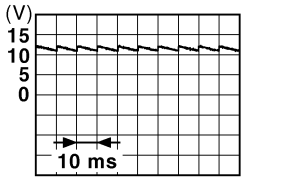
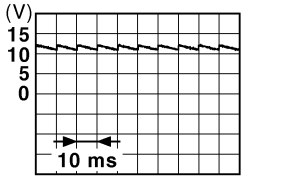
PHYSICAL VALUES

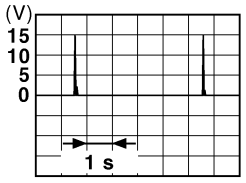
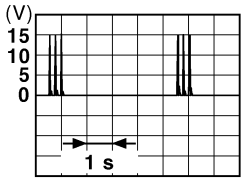
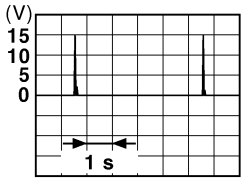
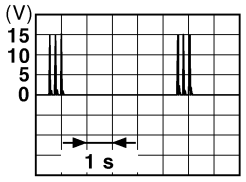
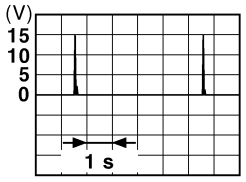
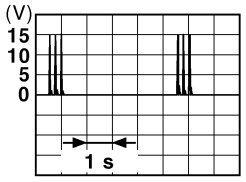
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition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

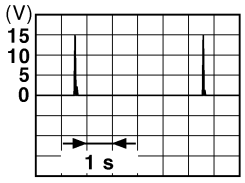
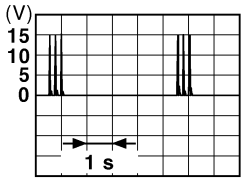
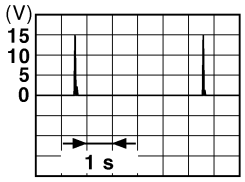
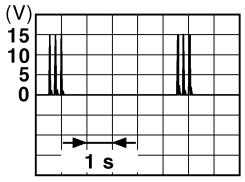
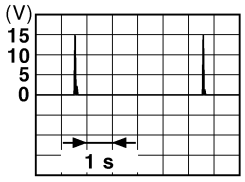
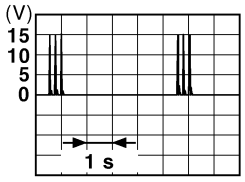
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (BG)	Ground	Turn signal LH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
23 (G)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
					Other than OPEN (Back door opener actuator is not activated)	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage

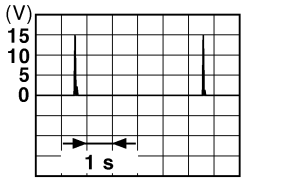
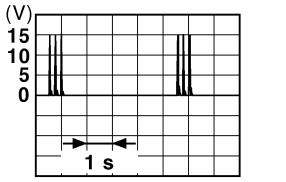
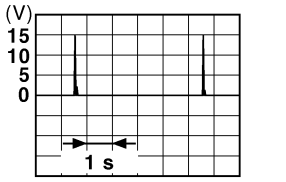
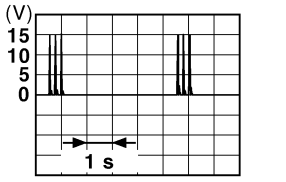
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (SB)	Ground	Luggage room antenna (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (B)	Ground	Back door antenna (–)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

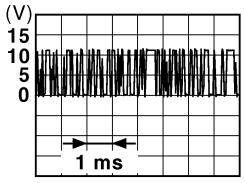
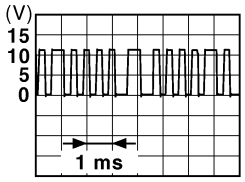
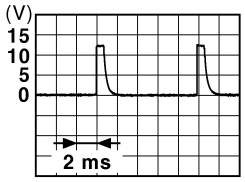
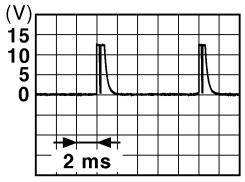
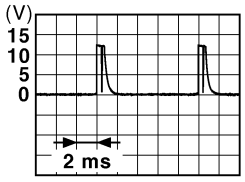
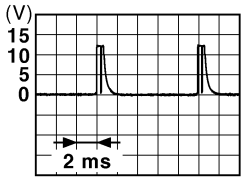
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (W)	Ground	Back door antenna (+)	Output	When the back door opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0 V
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (W)	Ground	Back door opener request switch	Input	Back door opener request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (V)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	Battery voltage
65 (BG)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	 JPMIA0016GB 1.0 V
					Not in stop position	0 V

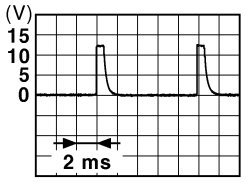
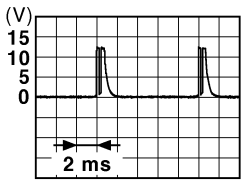
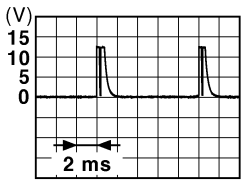
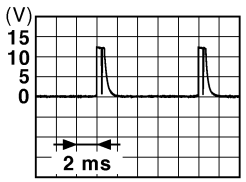
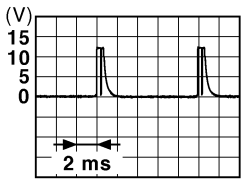
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
				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

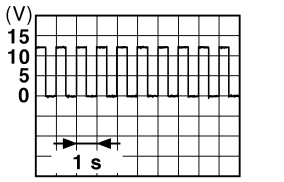
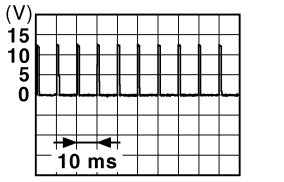
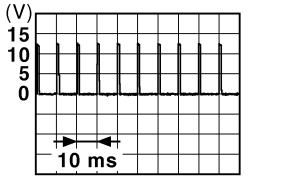
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
72 (R)	Ground	Room antenna 2 (–) (Console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
73 (G)	Ground	Room antenna 2 (+) (Console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
74 (SB)	Ground	Passenger door antenna (–)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

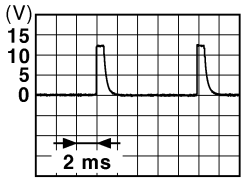
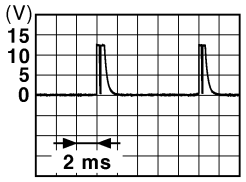
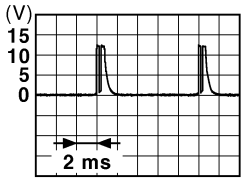
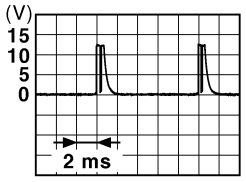
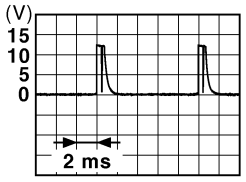
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
75 (GR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (–)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

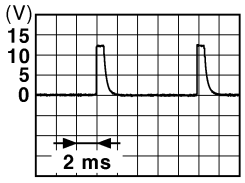
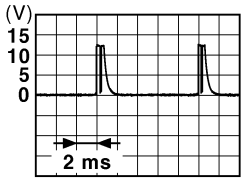
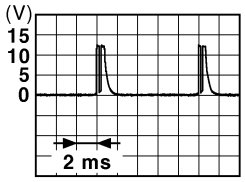
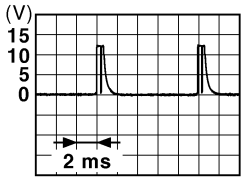
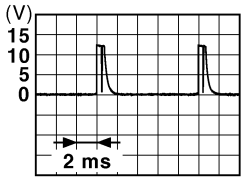
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
78 (Y)	Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
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 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

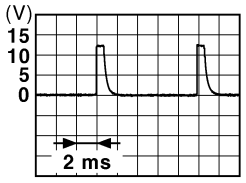
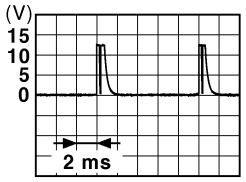
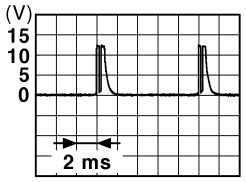
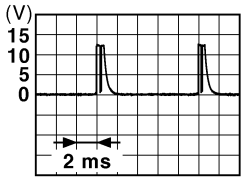
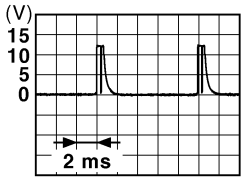
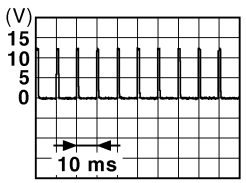
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on the key		 JMKIA0065GB
87 (BR)	Ground	Combination switch INPUT 5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

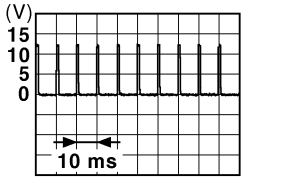
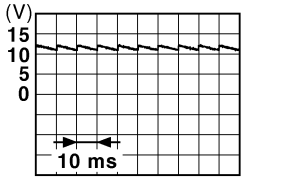
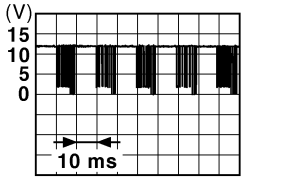
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
90 (P)	Ground	CAN-L	Input/ Output	—		—
91 (L)	Ground	CAN-H	Input/ Output	—		—

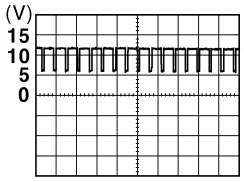
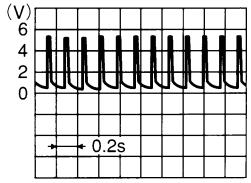
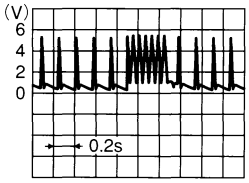
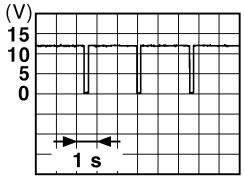
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 JPMIA0015GB 6.5 V
					ON	0 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
94 (Y)	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
					ON	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—		Battery voltage
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

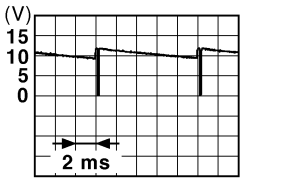
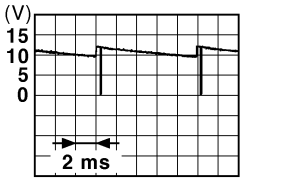
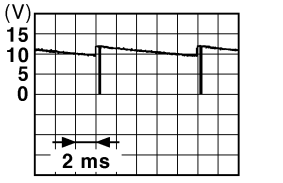
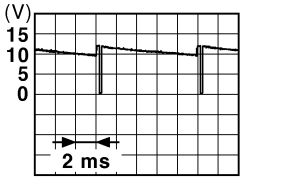
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch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

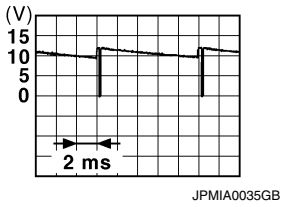
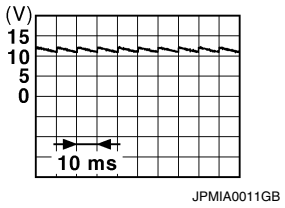
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3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

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

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

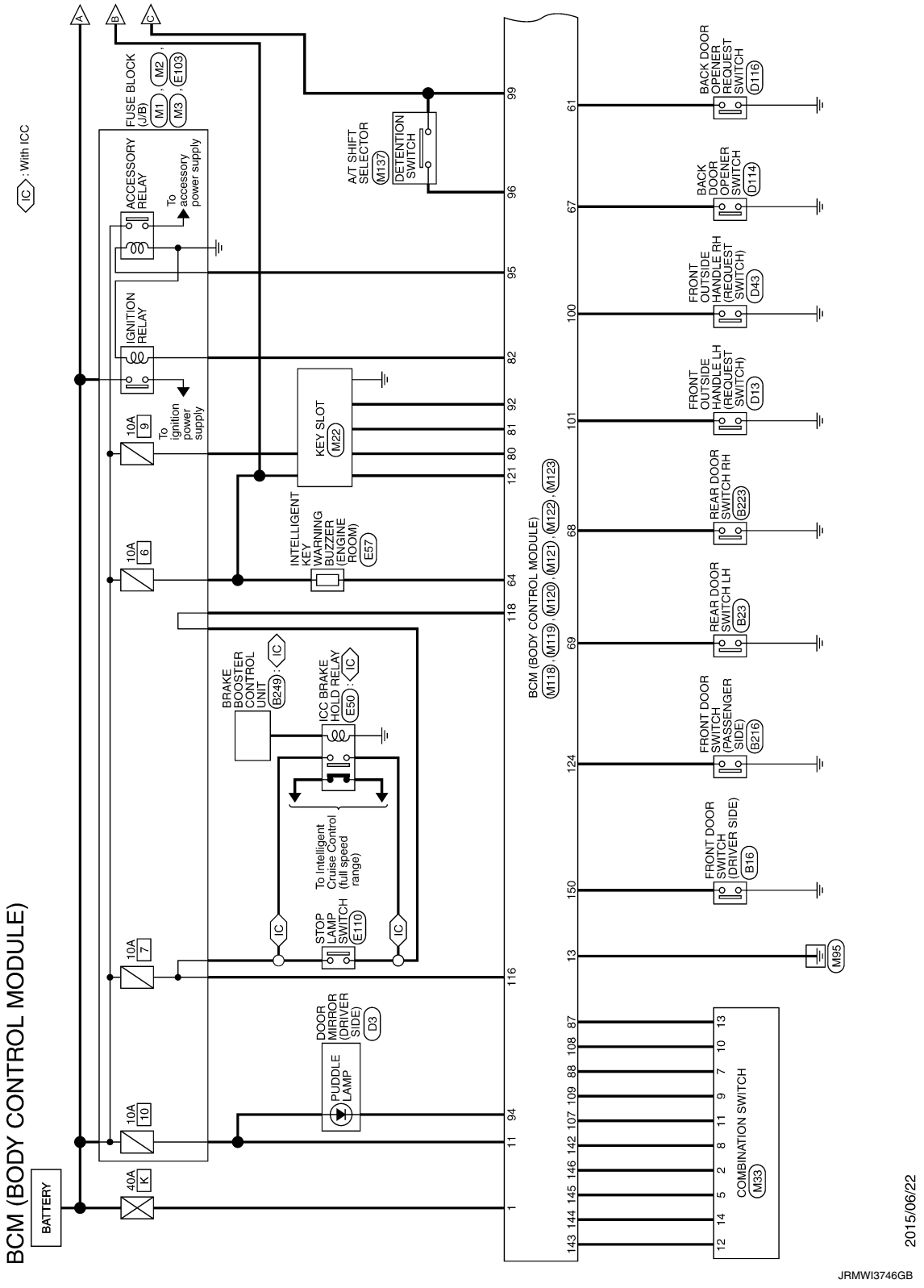
Terminal No. (Wire color) +	Terminal No. (Wire color) –	Description Signal name	Description Input/ Output	Condition		Value (Approx.)
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (Y)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
139 (L)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage

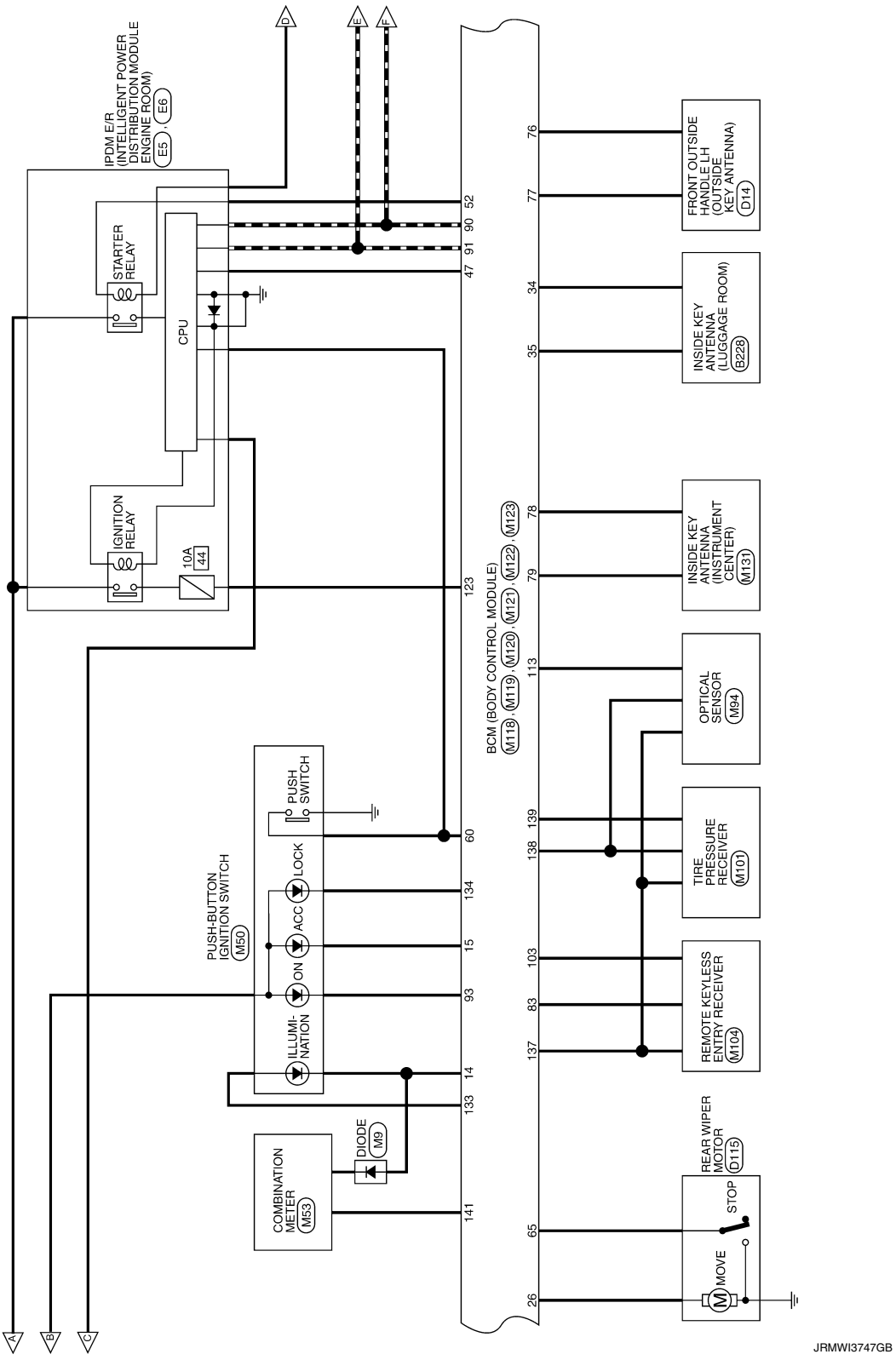
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit-tent dial 4)	All switches OFF	0 V
					Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	 JPMIA0031GB 10.7 V
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0032GB 10.7 V
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4) Rear wiper switch ON (Wiper intermittent dial 4) Rear washer switch ON (Wiper intermittent dial 4) Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 JPMIA0033GB 10.7 V
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit-tent dial 4)	All switches OFF	0 V
					Front wiper switch INT Front wiper switch LO Lighting switch AUTO	 JPMIA0034GB 10.7 V

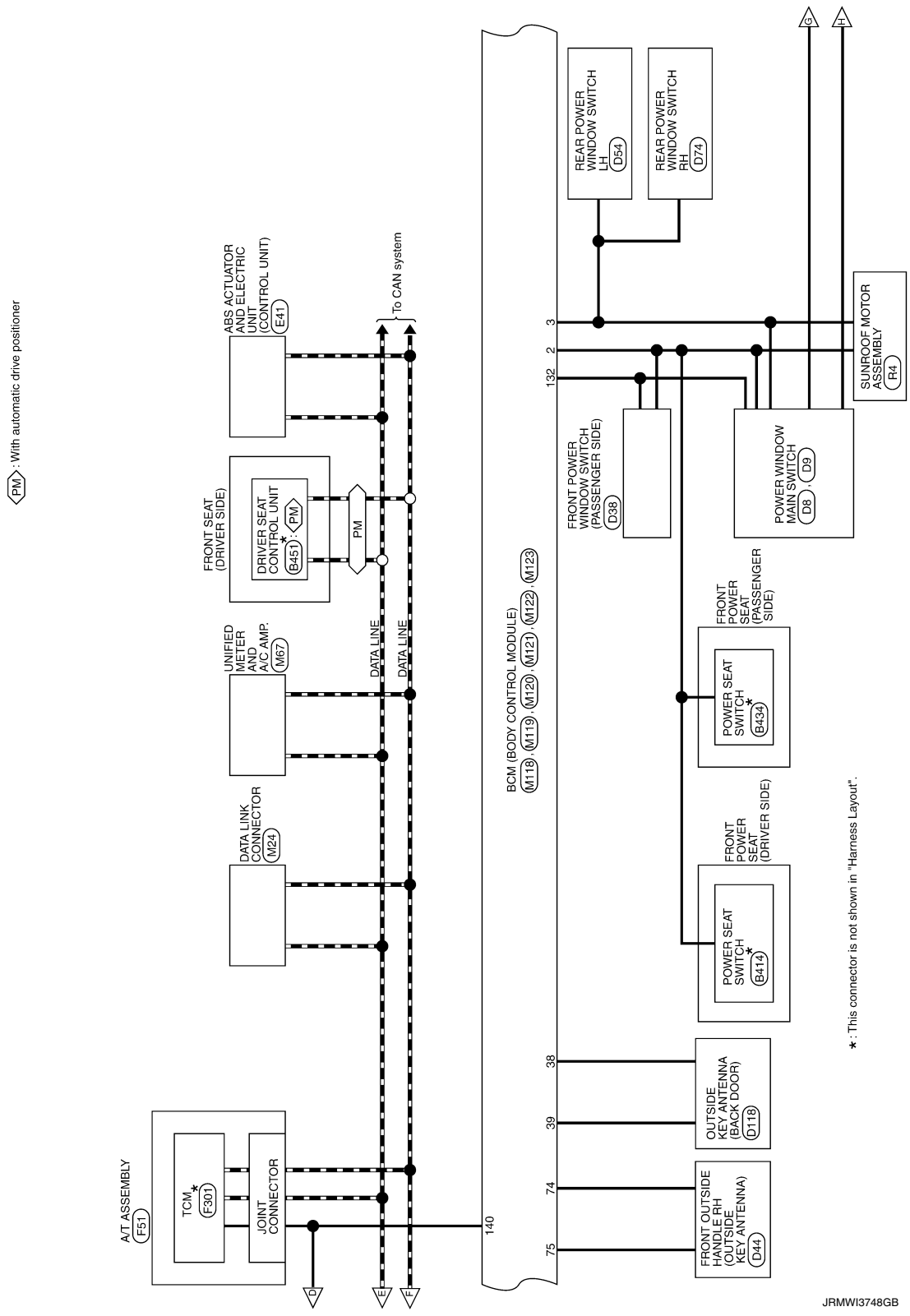
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	 JPMIA0035GB 10.7 V
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

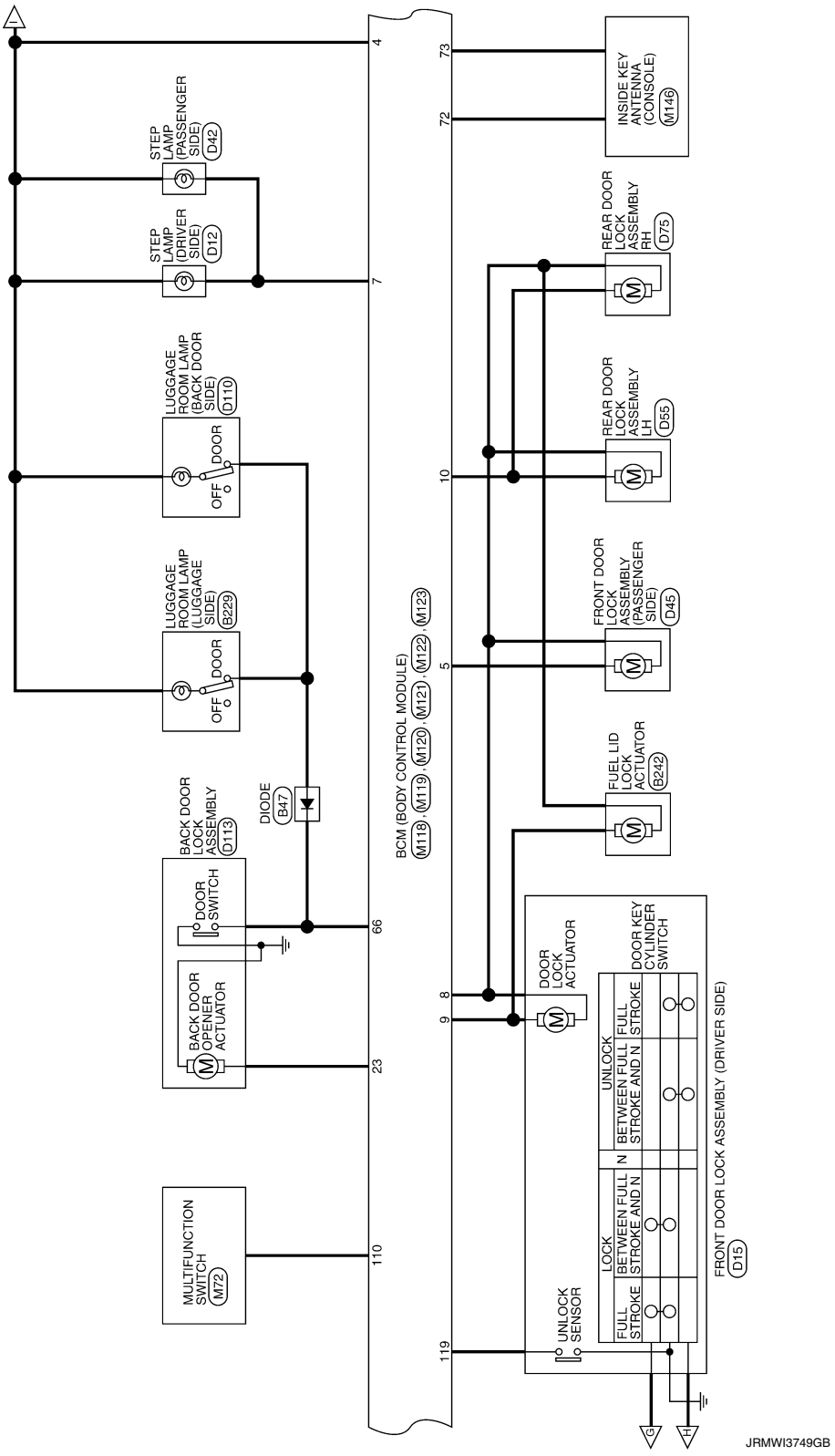
Wiring Diagram - BCM -

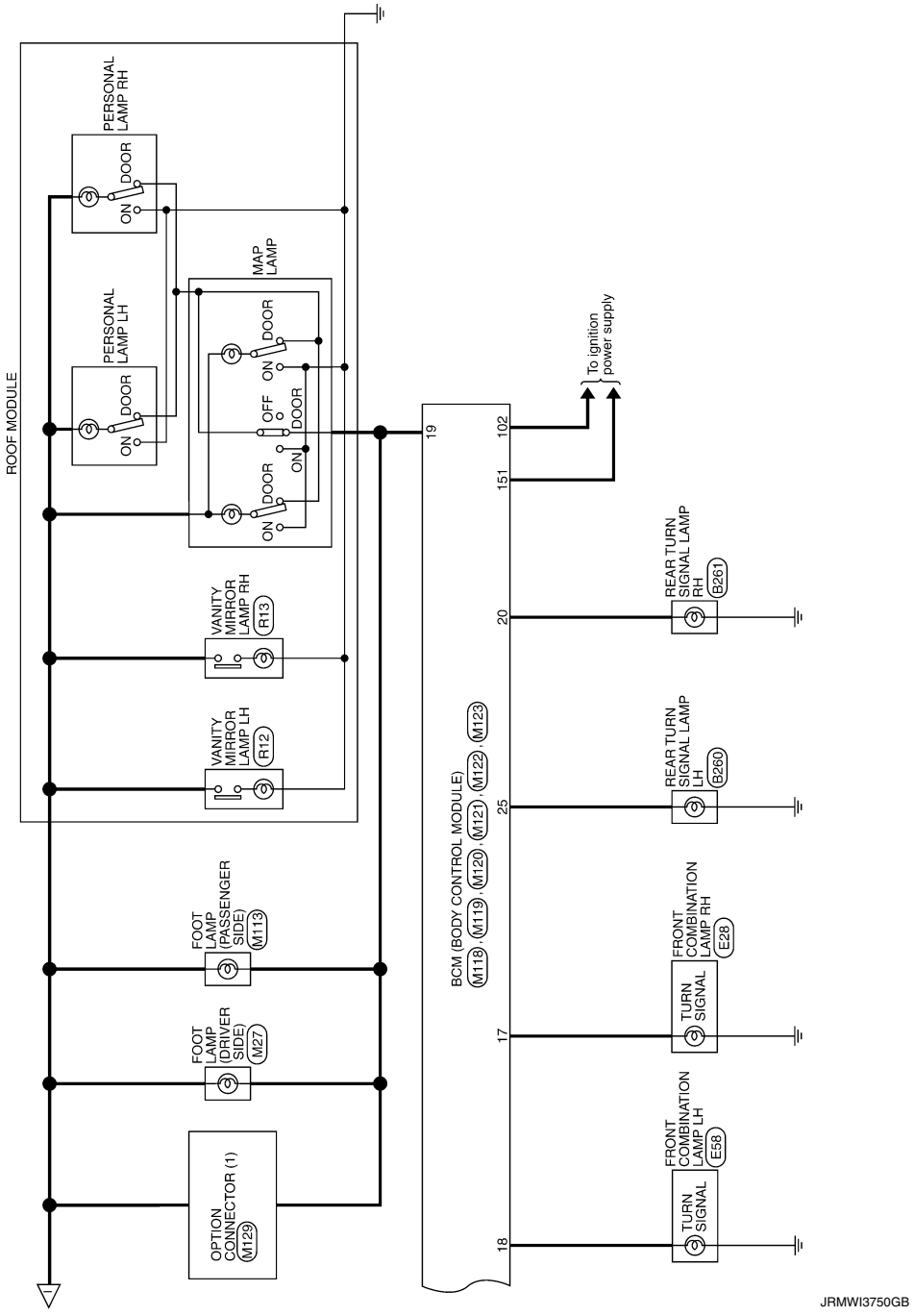
INFOID:0000000012828240

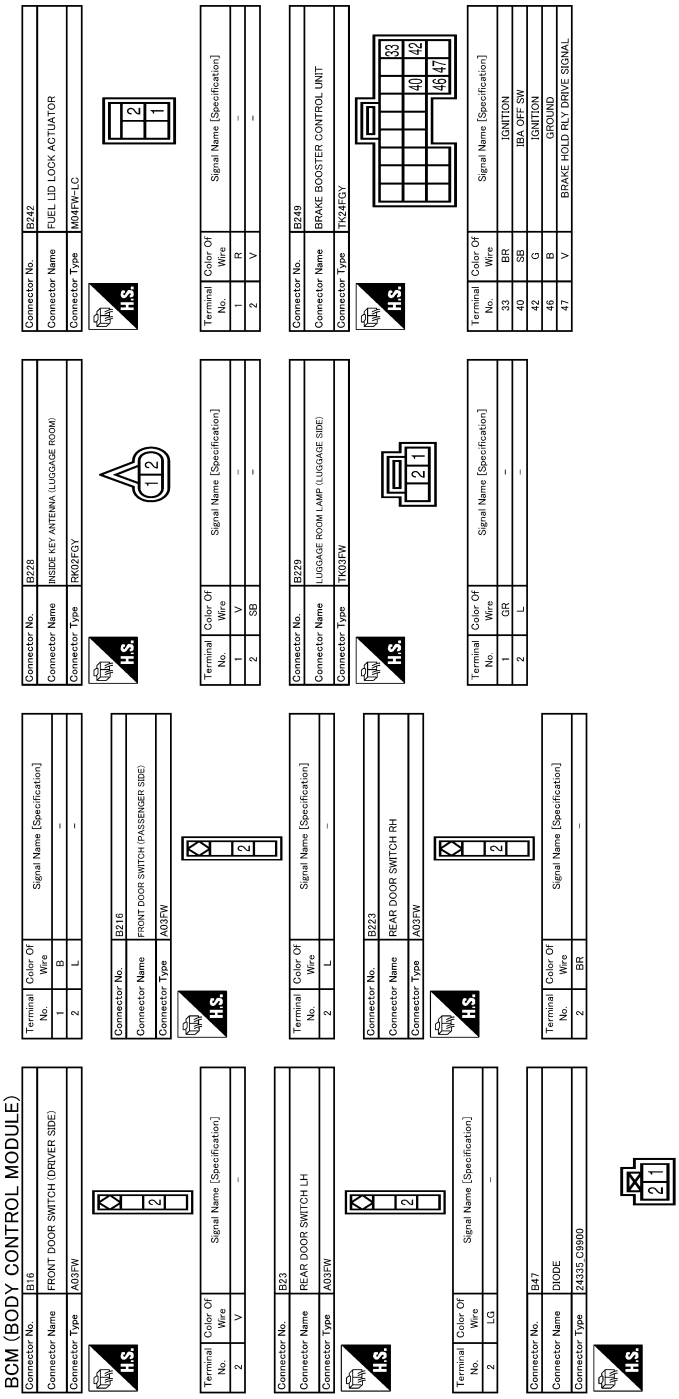



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5, E6
STARTER RELAY
CPU
IGNITION RELAY
10A 44
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
LOCK
ACC
ON
ILLUMI-NATION
COMBINATION METER M53
DIODE M9
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA) D14
INSIDE KEY ANTENNA (LUGGAGE ROOM) B228
INSIDE KEY ANTENNA (INSTRUMENT CENTER) M131
OPTICAL SENSOR M94
TIRE PRESSURE RECEIVER M101
REMOTE KEYLESS ENTRY RECEIVER M104
REAR WIPER MOTOR D115
STOP
MOVE
JRMWI3747GB


PM : With automatic drive positioner
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
To CAN system
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT B451 *
PM
PM
UNIFIED METER AND A/C AMP. M67
DATA LINE
DATA LINE
DATA LINK CONNECTOR M24
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
REAR POWER WINDOW SWITCH LH D54
REAR POWER WINDOW SWITCH RH D74
FRONT POWER WINDOW SWITCH (PASSENGER SIDE) D38
POWER WINDOW MAIN SWITCH D8, D9
SUNROOF MOTOR ASSEMBLY R4
FRONT POWER SEAT (PASSENGER SIDE)
POWER SEAT SWITCH * B434
FRONT POWER SEAT (DRIVER SIDE)
POWER SEAT SWITCH * B414
OUTSIDE KEY ANTENNA (BACK DOOR) D118
FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA) D44
A/T ASSEMBLY F51
TCM * F301
JOINT CONNECTOR
3
2
132
38
39
74
75
140
D
E
F
G
H
* : This connector is not shown in "Harness Layout".
JRMWI3748GB


STEP LAMP (PASSENGER SIDE) D42
STEP LAMP (DRIVER SIDE) D12
LUGGAGE ROOM LAMP (BACK DOOR SIDE) D110
LUGGAGE ROOM LAMP (LUGGAGE SIDE) B229
DOOR
OFF
BACK DOOR LOCK ASSEMBLY D113
DOOR SWITCH
BACK DOOR OPENER ACTUATOR
DIODE B47
MULTIFUNCTION SWITCH M72
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
4
7
10
5
66
23
110
119
73
72
8
9
INSIDE KEY ANTENNA (CONSOLE) M146
REAR DOOR LOCK ASSEMBLY RH D75
REAR DOOR LOCK ASSEMBLY LH D55
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D45
FUEL LID LOCK ACTUATOR B242
DOOR LOCK ACTUATOR
DOOR KEY CYLINDER SWITCH
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
LOCK
UNLOCK SENSOR
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) D15
G
H
JRMWI3749GB


ROOF MODULE
PERSONAL LAMP RH
PERSONAL LAMP LH
MAP LAMP
DOOR
ON
OFF
VANITY MIRROR LAMP RH
R13
VANITY MIRROR LAMP LH
R12
FOOT LAMP (PASSENGER SIDE)
M113
FOOT LAMP (DRIVER SIDE)
M27
OPTION CONNECTOR (1)
M129
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
19
102
151
20
25
17
18
To ignition power supply
REAR TURN SIGNAL LAMP RH
B261
REAR TURN SIGNAL LAMP LH
B260
FRONT COMBINATION LAMP RH
E28
FRONT COMBINATION LAMP LH
E58
TURN SIGNAL
JRMWI3750GB



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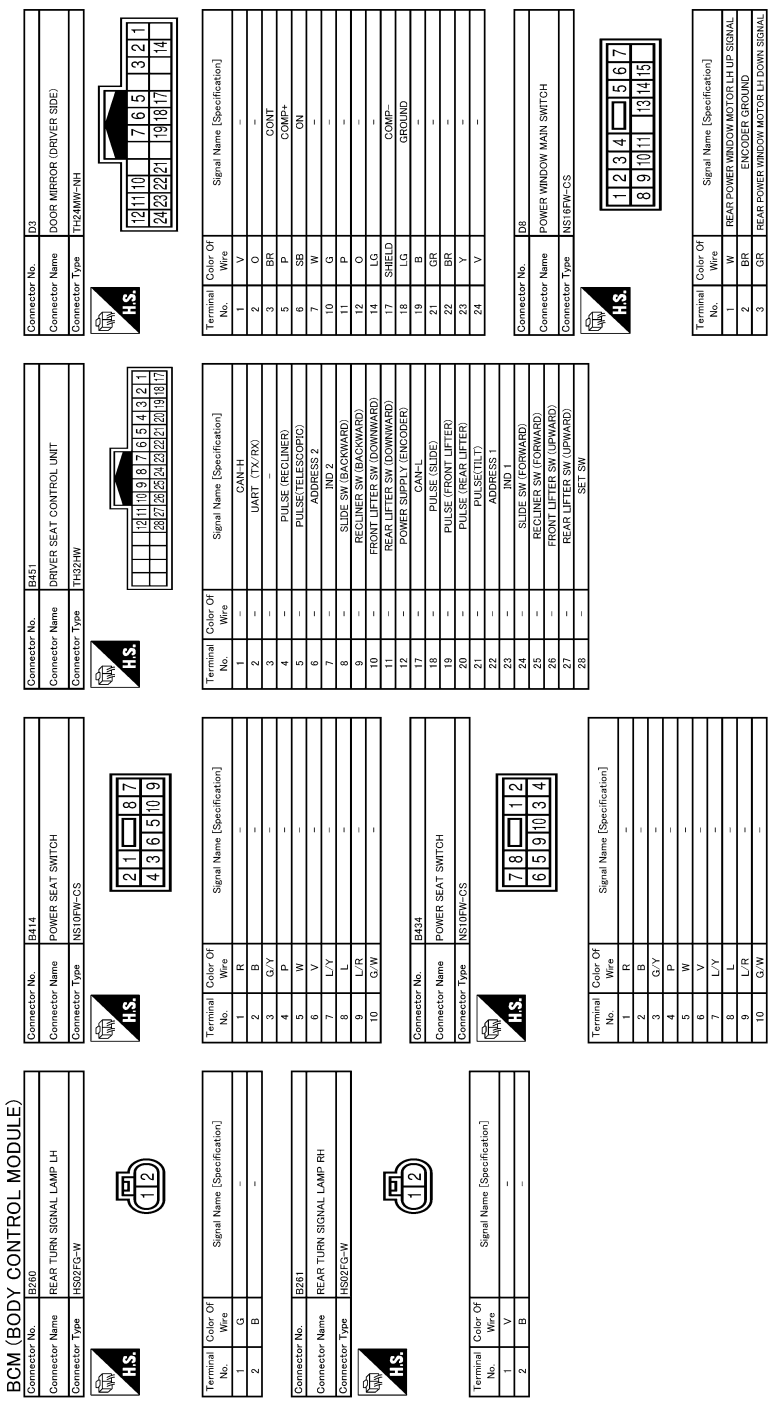

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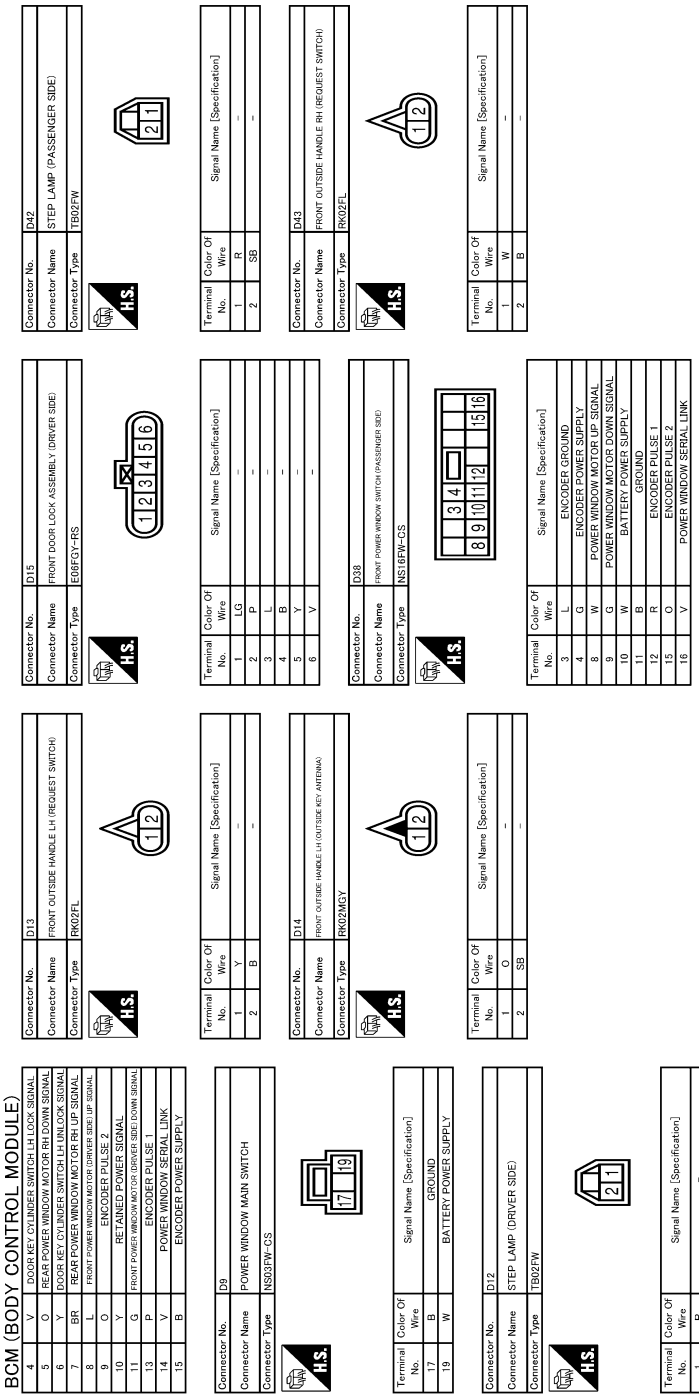

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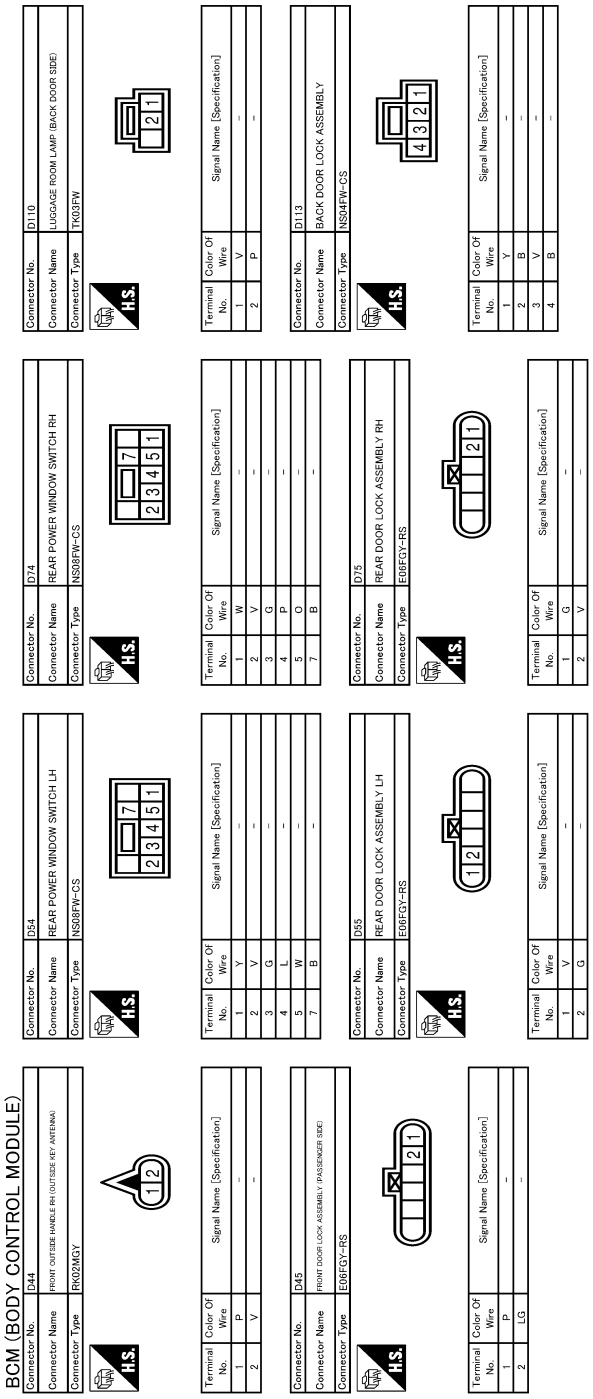

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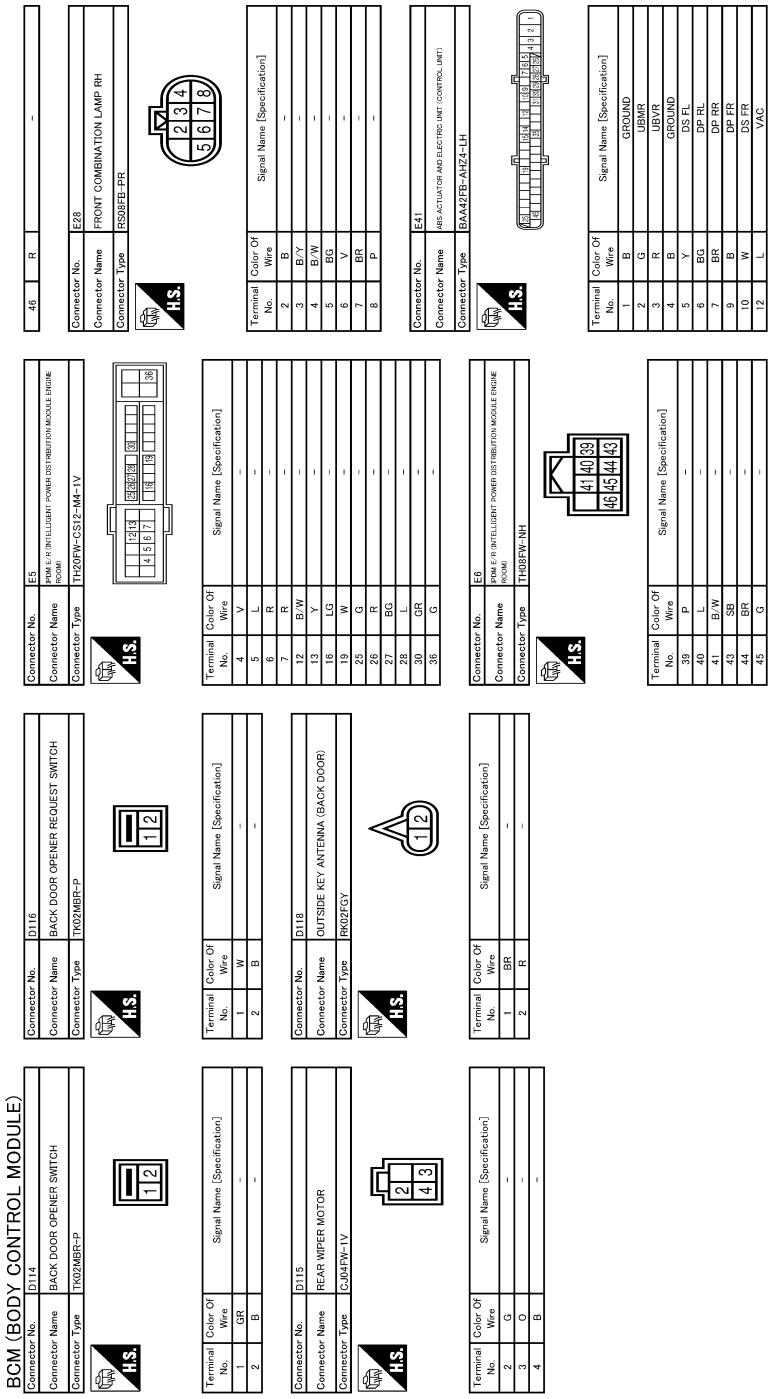

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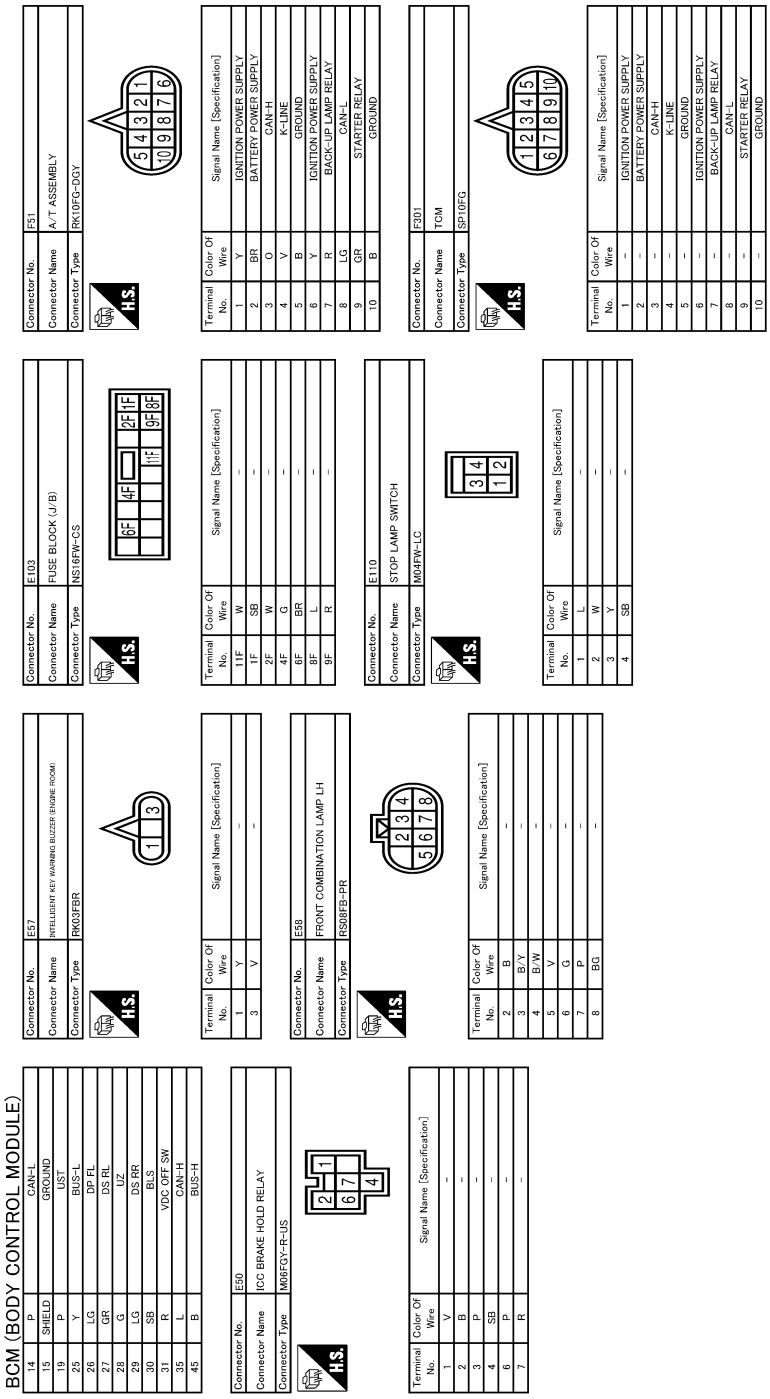

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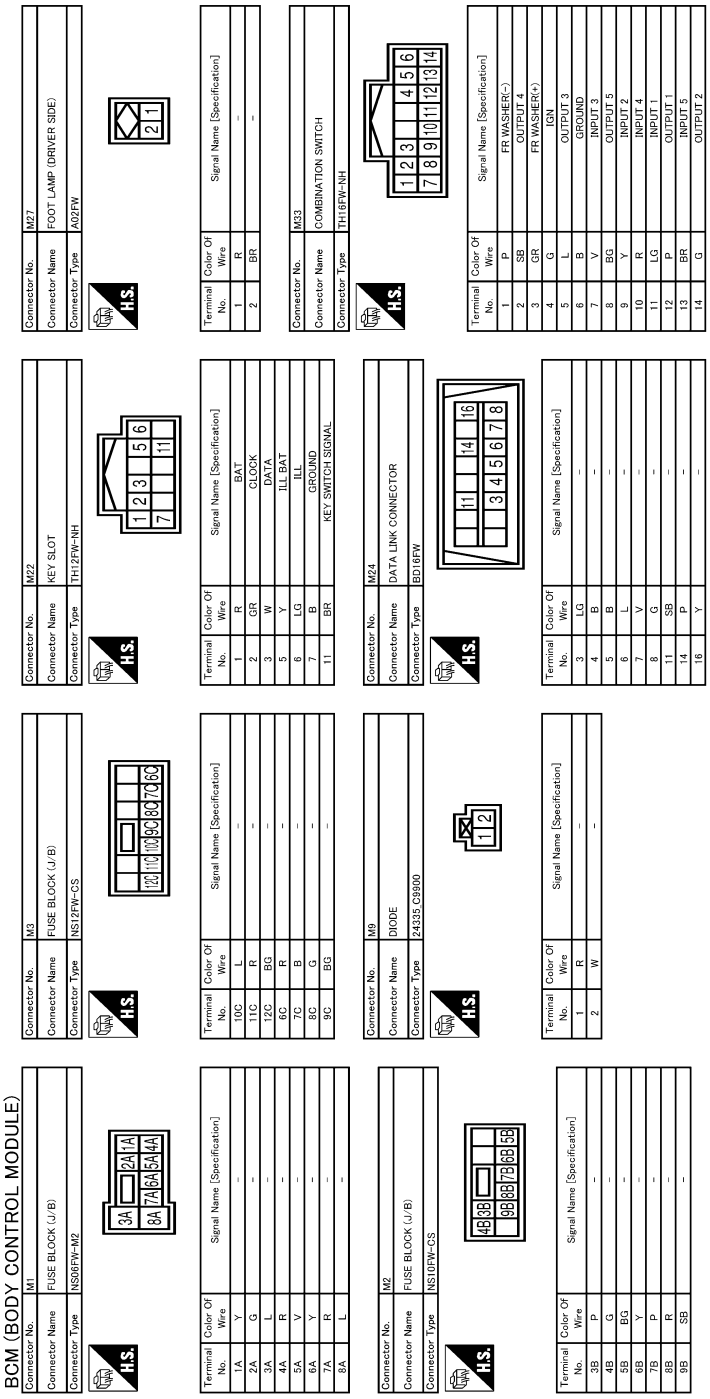

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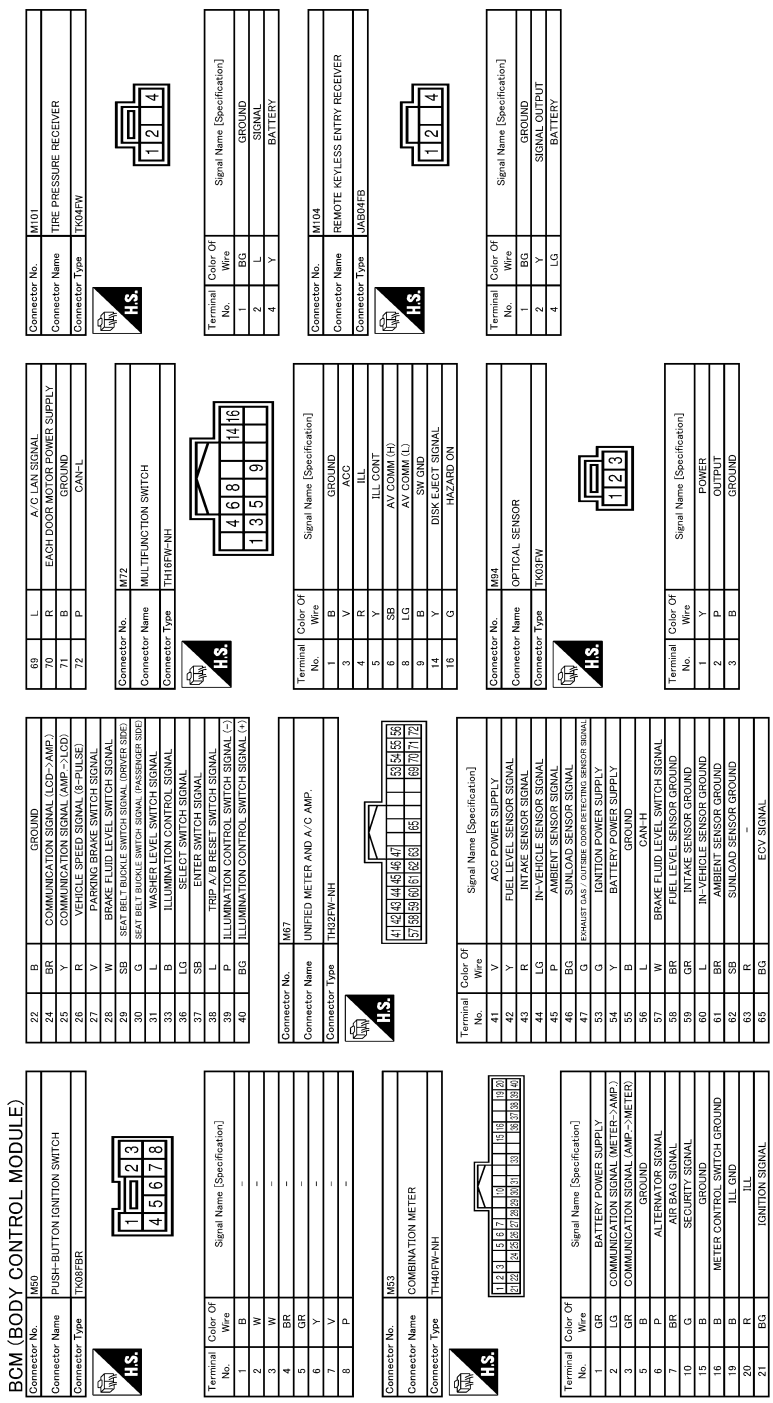


JRMWI3758GB

BCM (BODY CONTROL MODULE)

Connector No.	M113
Connector Name	FOOT LAMP (PASSENGER SIDE)
Connector Type	A02FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	BR	–

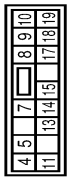
Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

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

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

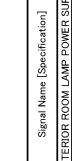
H.S.



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

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

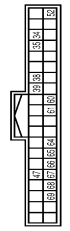
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT–
35	V	LUGGAGE ROOM ANT+
38	B	BACK DOOR ANT–
39	W	BACK DOOR ANT+
47	Y	IGN RELAY (IPDM E/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR OPENER REQUEST SW
64	V	I-KEY WARN BUZZER (ENG ROOM)
65	BG	REAR WIPER STOP POSITION
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW
68	BR	REAR RH DOOR SW
69	R	REAR LH DOOR SW

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

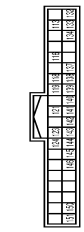
H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 –
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT–
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT+
77	LG	DRIVER DOOR ANT–

78	Y	ROOM ANT1–
79	BR	ROOM ANT1+
80	GR	NATS ANT AMP.
81	W	NATS ANT AMP.
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN–L
91	L	CAN–H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT
95	BG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPLICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND

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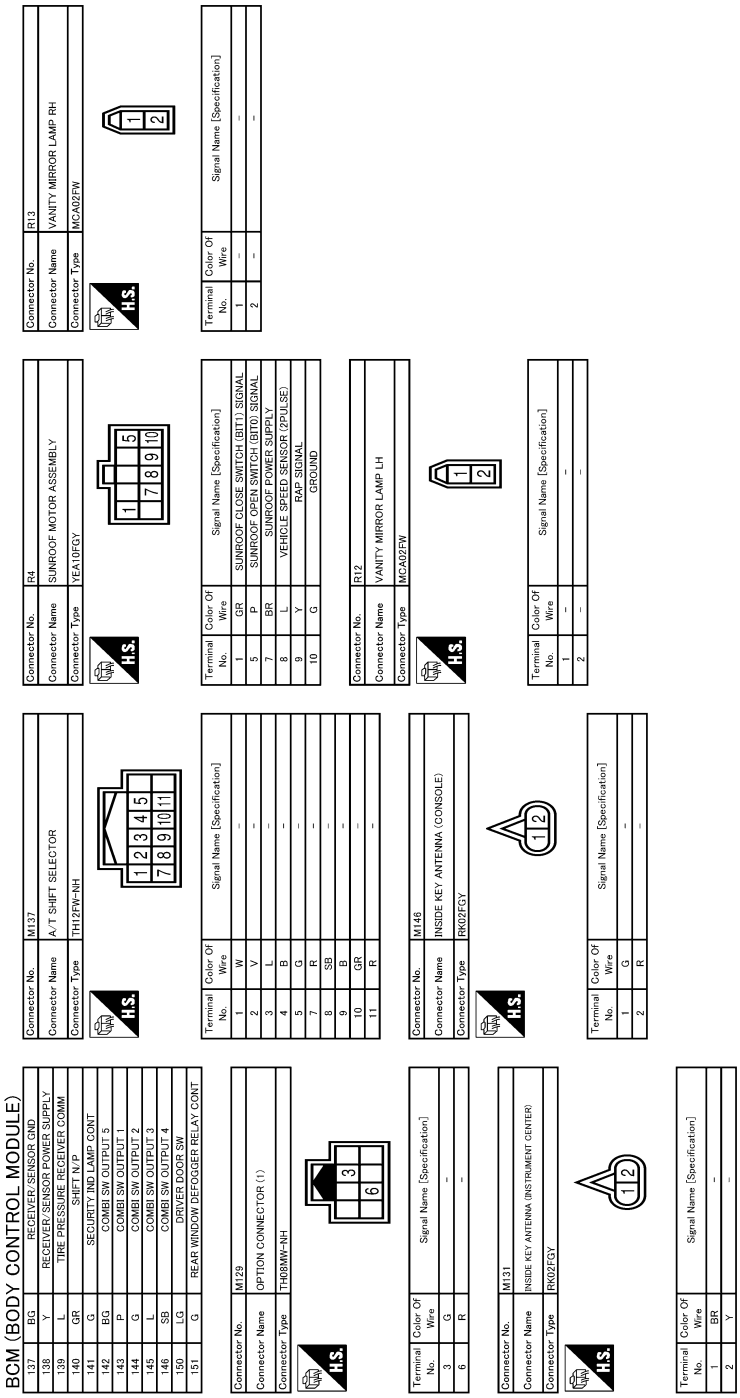


JRMWI3760GB

Fail-safe

INFOID:0000000012828241

FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

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

INFOID:0000000012828242

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM 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

Priority	DTC
4	• B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000012828243

NOTE:
The details of time display are as follows.
• CRNT: A malfunction is detected now.
• PAST: A malfunction was detected in the past.
IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-18, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

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

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-43
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-44
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-45
B2195: ANTI SCANNING	×	—	—	—	SEC-46
B2553: IGNITION RELAY	—	×	—	—	PCS-52
B2555: STOP LAMP	—	×	—	—	SEC-47
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-49
B2557: VEHICLE SPEED	×	×	×	—	SEC-51
B2560: STARTER CONT RELAY	×	×	×	—	SEC-52
B2562: LOW VOLTAGE	—	×	—	—	BCS-44
B2601: SHIFT POSITION	×	×	×	—	SEC-53
B2602: SHIFT POSITION	×	×	×	—	SEC-56
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-59
B2604: PNP SW	×	×	×	—	SEC-62
B2605: PNP SW	×	×	×	—	SEC-64
B2608: STARTER RELAY	×	×	×	—	SEC-66
B260A: IGNITION RELAY	×	×	×	—	PCS-54
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-68
B2614: ACC RELAY CIRC	—	×	×	—	PCS-56
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-59
B2616: IGN RELAY CIRC	—	×	×	—	PCS-62
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-71
B2618: BCM	×	×	×	—	PCS-65
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-73
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-76
B2621: INSIDE ANTENNA	—	×	—	—	DLK-58
B2622: INSIDE ANTENNA	—	×	—	—	DLK-60
B2623: INSIDE ANTENNA	—	×	—	—	DLK-62
B26E1: ENG STATE NO RES	×	×	×	—	SEC-69
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-70
C1704: LOW PRESSURE FL	—	—	—	×	WT-25
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-27
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-30
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-32
C1734: CONTROL UNIT	—	—	—	×	WT-34

SYMPTOM DIAGNOSIS

DOOR MIRROR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012173341

1. CHECK AUTOMATIC DRIVE POSITIONER SYSTEM

Check door mirror operate with automatic drive positioner system.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check automatic drive positioner system operation. Refer to ADP-13, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram".

2. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (MIRROR SWITCH)

Check mirror switch.
Refer to MIR-12, "MIRROR SWITCH : Component Function Check".

Is the inspection result normal?

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

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (CHANGEOVER SWITCH)

Check changeover switch.
Refer to MIR-14, "CHANGEOVER SWITCH : Component Function Check".

Is the inspection result normal?

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

4. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

REVERSE INTERLOCK DOOR MIRROR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000012173342

1.CHECK DOOR MIRROR (MANUAL FUNCTION)

Check door mirror function with door mirror remote control switch.

Is the inspection result normal?

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

2.CHECK DTC

Check DTC for TCM.
Refer to TM-157, "DTC Index".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

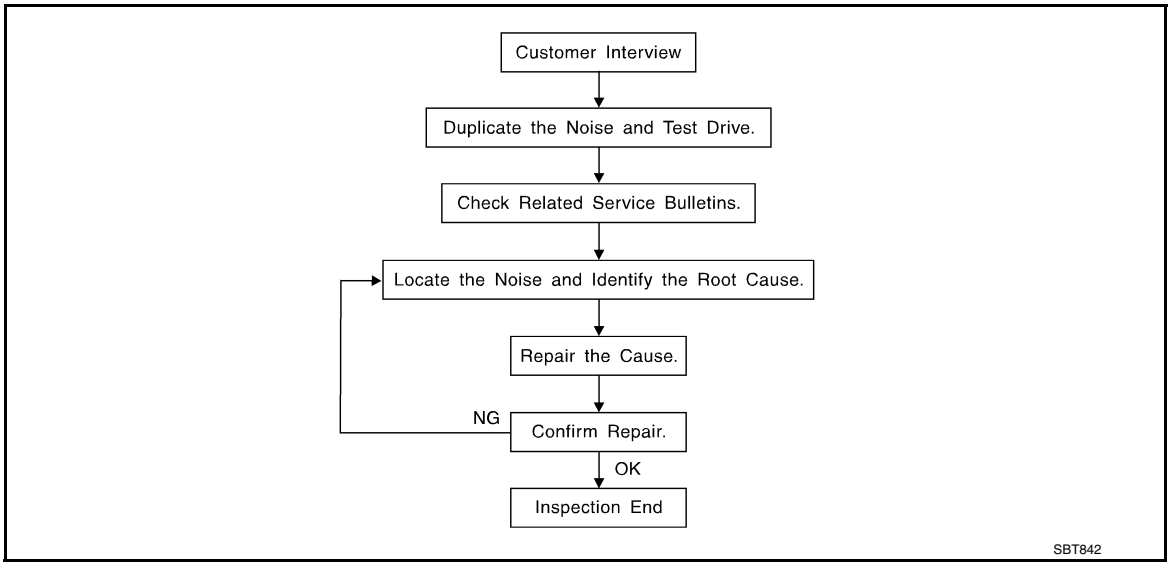
Is the result normal?

YES >> Check intermittent incident. Refer to GI-42, "Intermittent Incident".
NO >> GO TO 1.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000012173343



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to MIR-119, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
  Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces=higher pitch noise/softer surfaces=lower pitch noises/edge to surface=chirping
- Creak—(Like walking on an old wooden floor)
  Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
  Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door)
  Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand)
  Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)
  Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumblebee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that you suspect is causing the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks.
  Refer to MIR-117, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97in)
FELT CLOTHTAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll
The following materials, not found in the kit, can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE

Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE
Used in place of UHMW tape that will be visible or not fit. Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000012173344

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint
   These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.
   CAUTION:
   Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

1. Headrest rods and holder
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

Diagnostic Worksheet

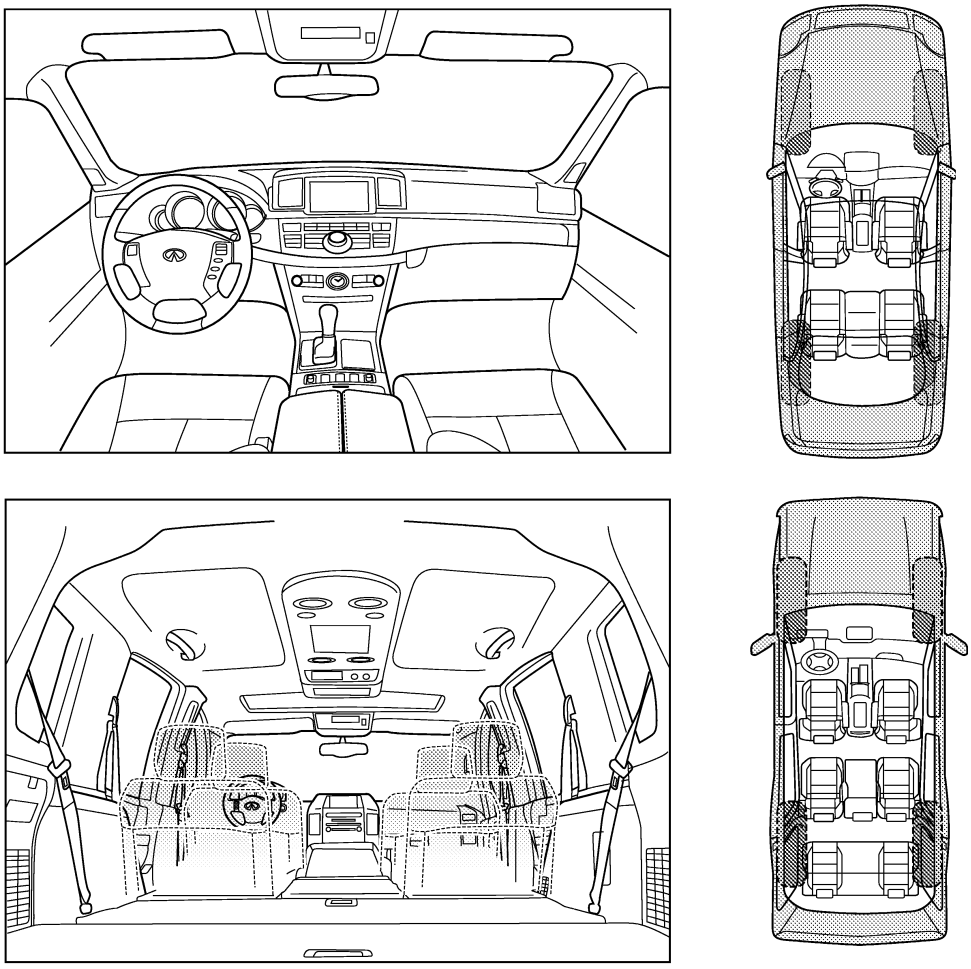
INFOID:0000000012173345

INFINITI

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service consultant or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ anytime
- ☐ 1st time in the morning
- ☐ only when it is cold outside
- ☐ only when it is hot outside
- ☐ after sitting out in the rain
- ☐ when it is raining or wet
- ☐ dry or dusty conditions
- ☐ other:

III. WHEN DRIVING:

- ☐ through driveways
- ☐ over rough roads
- ☐ over speed bumps
- ☐ only about ____ mph
- ☐ on acceleration
- ☐ coming to a stop
- ☐ on turns: left, right or either (circle)
- ☐ with passengers or cargo
- ☐ other: _____
- ☐ after driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ squeak (like tennis shoes on a clean floor)
- ☐ creak (like walking on an old wooden floor)
- ☐ rattle (like shaking a baby rattle)
- ☐ knock (like a knock at the door)
- ☐ tick (like a clock second hand)
- ☐ thump (heavy, muffled knock noise)
- ☐ buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000012173346

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

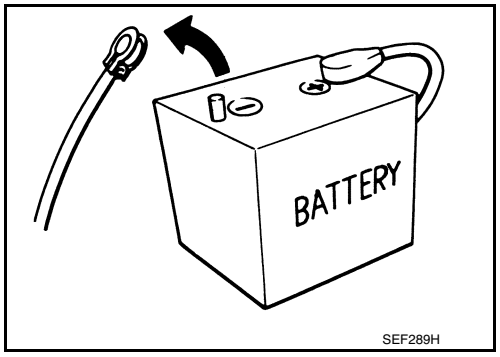
Precautions for Removing Battery Terminal

INFOID:0000000012707681

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

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

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



NOTE:

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

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

NOTE:

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

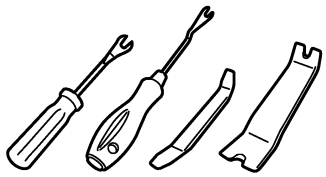
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the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

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000012173349

Tool name	Description
Remover tool  JMKIA3050ZZ	Remove the clip, pawl and metal clip

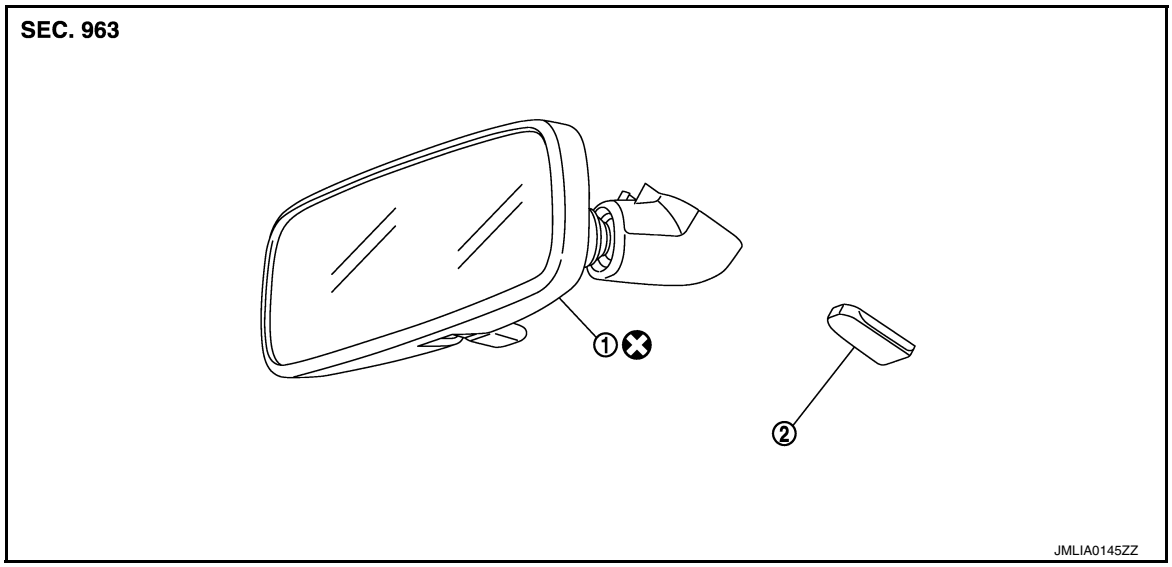
REMOVAL AND INSTALLATION

INSIDE MIRROR

Exploded View

INFOID:0000000012173350

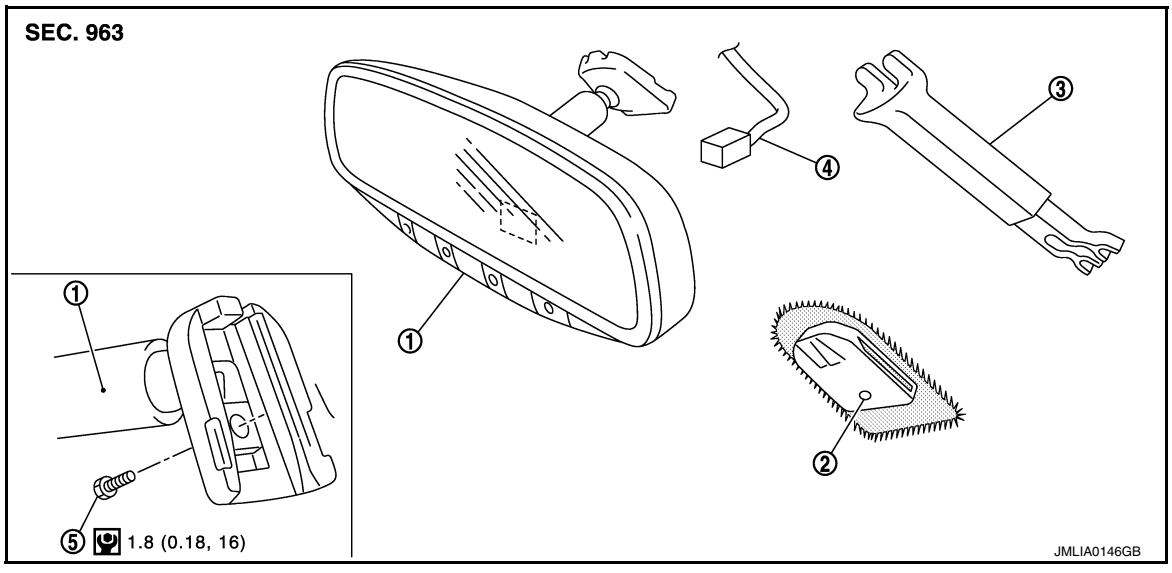
Base



1. Inside mirror
2. Mirror base

: Always replace after every disassembly

Option



1. Inside mirror
2. Mirror base
3. Inside mirror cover
4. Harness connector
5. TORX bolt

: N·m (kg-m, in-lb)

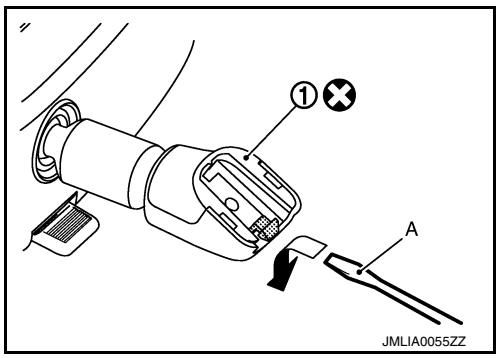
Removal and Installation

INFOID:0000000012173351

REMOVAL

Base model

1. Insert minus driver (A) under the inside mirror (1).
2. Slide the inside mirror to the upper side while pushing the pawl downward.



: Always replace after every disassembly

CAUTION:
Never use excessive force to remove the inside mirror because it is inserted tightly into the mirror base.

Option model

1. Remove the inside mirror cover.
2. Remove TORX bolt.
3. Disconnect harness connector.
4. Slide the inside mirror upward to remove.

INSTALLATION

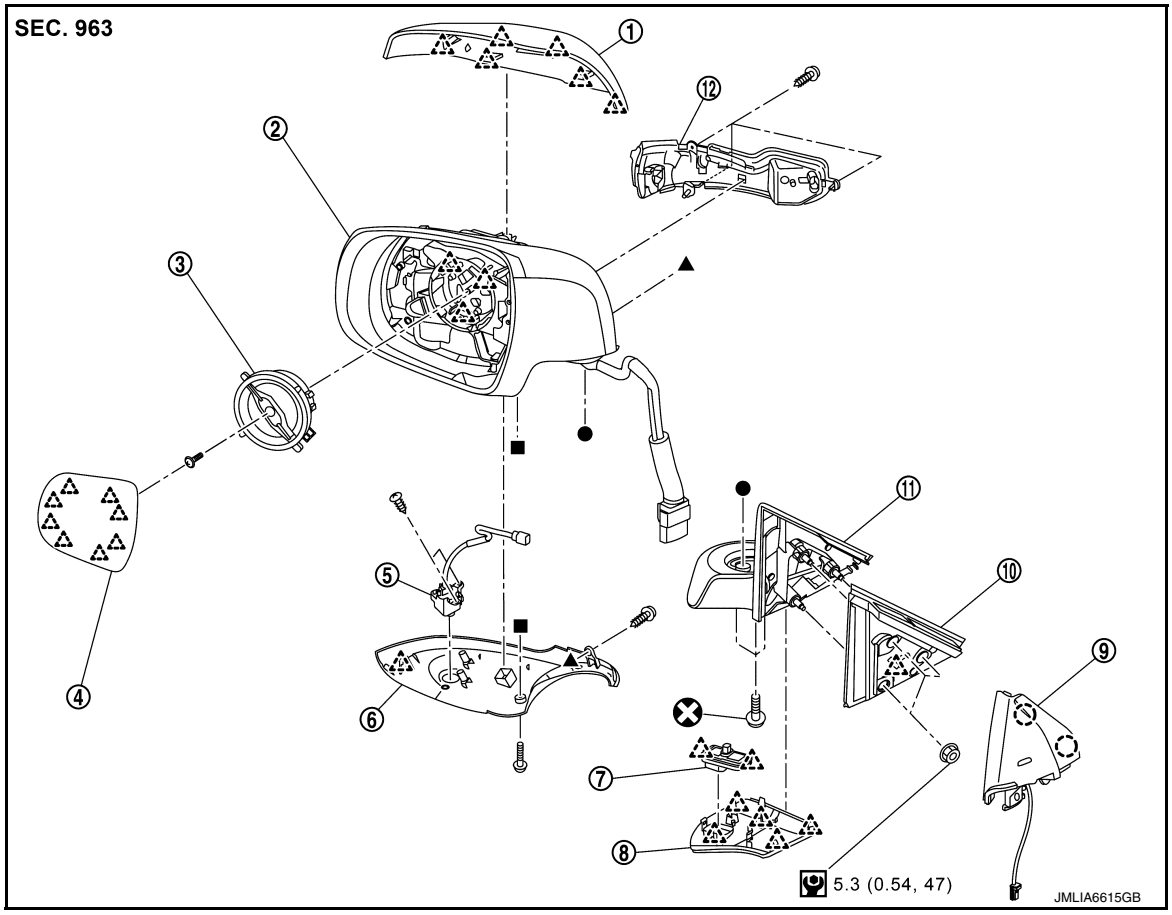
Install in the reverse order of removal.

CAUTION:
When inserting the inside mirror into the mirror base, be sure to push the pawl until it get connected to the mirror base.

OUTSIDE MIRROR

Exploded View

INFOID:0000000012173352



1. Door mirror cover
2. Door mirror housing
3. Door mirror actuator
4. Glass mirror
5. Side camera*
6. Door mirror finisher
7. Puddle lamp
8. Door mirror base cover
9. Corner cover
10. Door mirror gasket
11. Door mirror base
12. Side turn signal lamp

: Clip

: Pawl

: Always replace after every disassembly.

: N·m (kg-m, in-lb)

●, ▲, ■ : Indicates that the part is connected at points with same symbol in actual vehicle.

*:If equipped

DOOR MIRROR ASSEMBLY

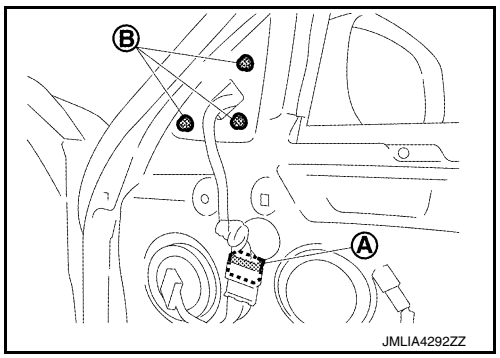
DOOR MIRROR ASSEMBLY : Removal and Installation

INFOID:0000000012173353

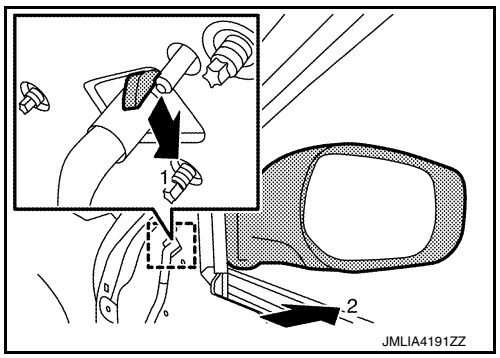
REMOVAL

1. Remove front door finisher.
   - Driver side: Refer to INT-12, "DRIVER SIDE : Removal and Installation".
   - Passenger side: Refer to INT-15, "PASSENGER SIDE : Removal and Installation".
2. Disconnect harness connector (with BSW), and then remove clips and remove corner cover.

3. Disconnect harness connector (A) and remove door mirror assembly mounting nuts (B).



4. Disengage door mirror assembly fixing pawl according to numerical order 1→2 indicated by arrows as shown in the figure, and then remove door mirror assembly.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Perform camera image calibration. (with side camera) Refer to AV-390, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Description".

DOOR MIRROR ASSEMBLY : Disassembly and Assembly

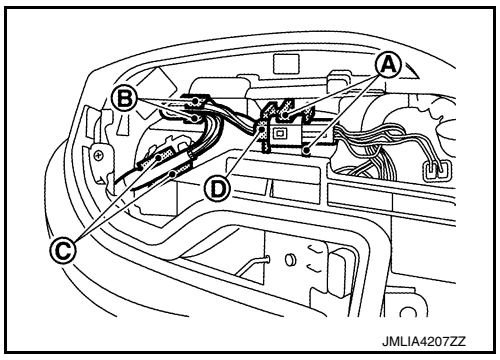
INFOID:0000000012173354

DISASSEMBLY

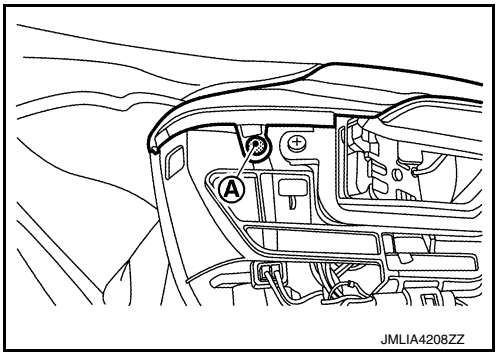
1. Remove door mirror assembly. Refer to MIR-126, "DOOR MIRROR ASSEMBLY : Removal and Installation"
2. Remove glass mirror. Refer to MIR-131, "GLASS MIRROR : Removal and Installation"
3. Remove door mirror cover. Refer to MIR-132, "DOOR MIRROR COVER : Removal and Installation".
4. Remove harness connector and each harness from clamp portion (A), (B) and (C), and then disconnect harness connector (D).

   CAUTION:

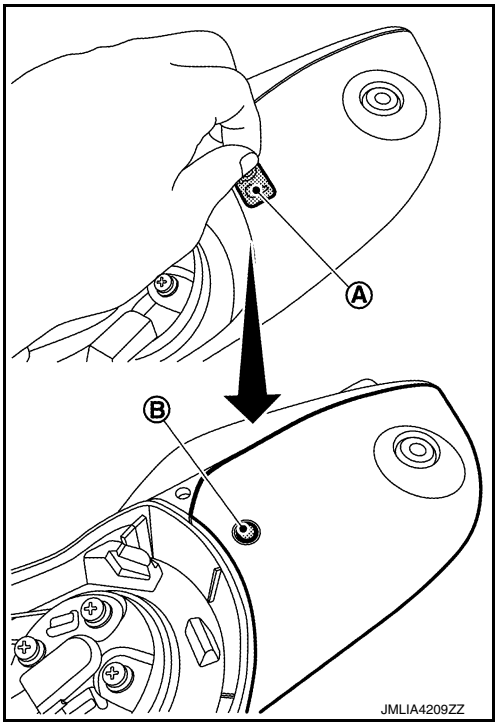
   Make a mark (short note, photo, etc.) of harness layout, before disassembly.



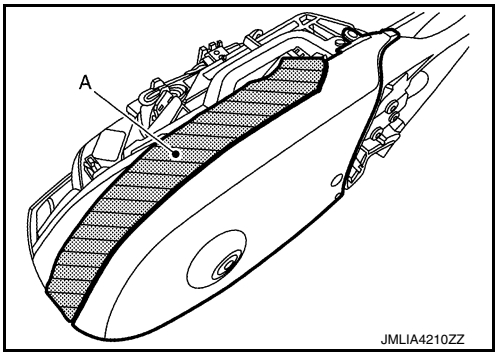
5. Remove door mirror finisher fixing screw (A).



6. Peel off seal (A), and then remove door mirror finisher fixing screw (B).

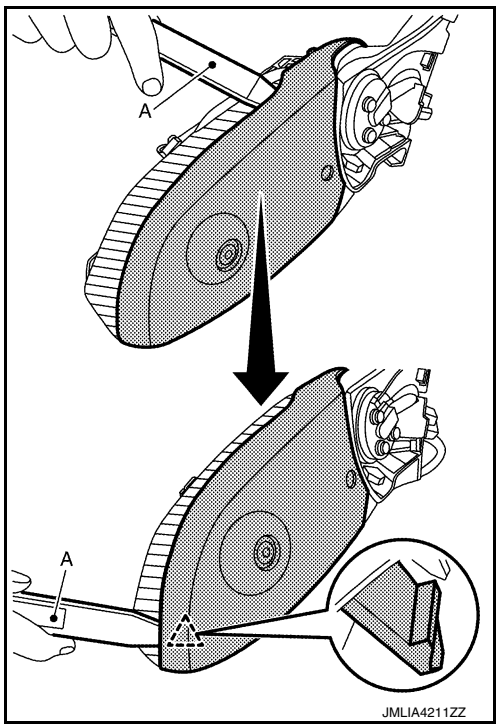


7. Apply protective tape (A) on side turn signal lamp to protect it from damage.

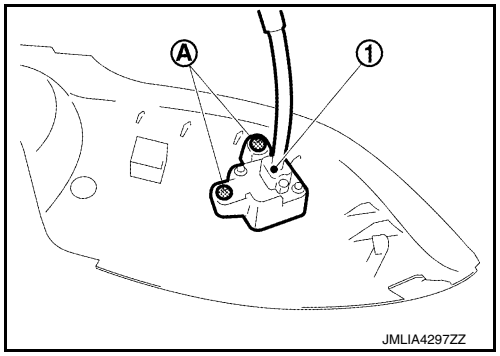


8. Insert a remover tool (A) between side turn signal lamp and door mirror finisher, and then disengage side turn signal lamp, door mirror finisher and pawl while sliding remover tool.
CAUTION:
When removing, always use a remover tool that is made of plastic to prevent damage to the parts.

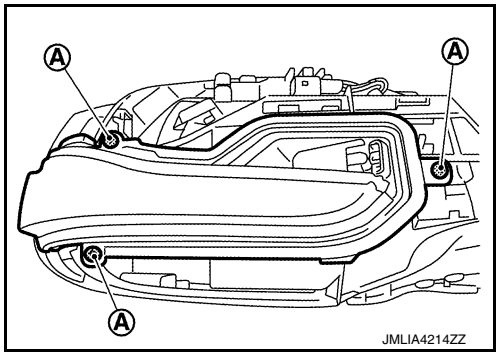
: Pawl



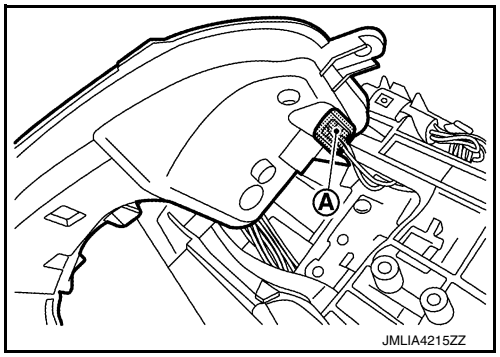
9. Remove door mirror finisher from door mirror housing.
And then, remove side camera assembly (1) fixing screws (A), and then remove side camera assembly. After removing door mirror finisher.(with side camera)



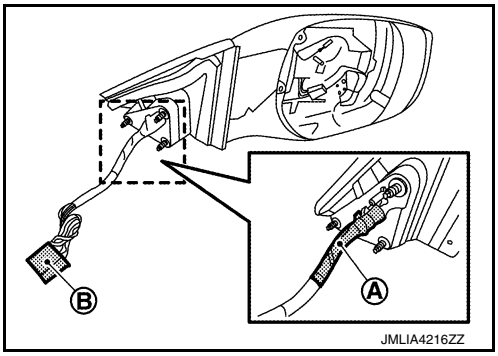
10. Remove side turn signal lamp fixing screws (A).



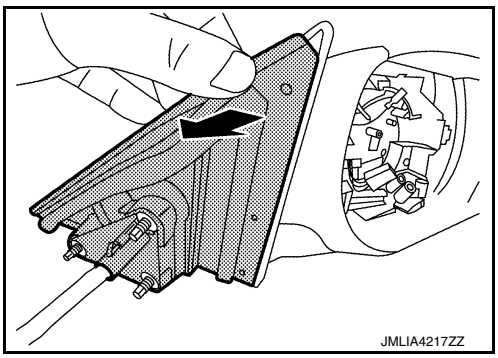
11. Disconnect side turn signal lamp harness connector (A), and then remove side turn signal lamp.



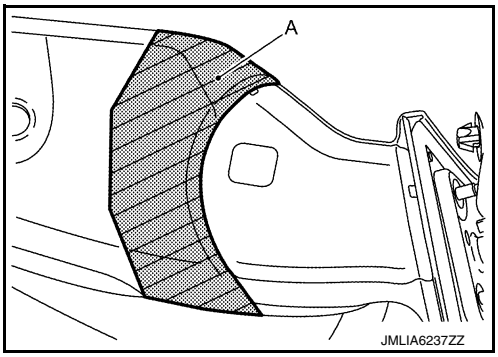
12. Remove vinyl tape (A) of door mirror gasket and door mirror harness, and then disconnect all terminals from harness connector (B).
CAUTION:
Make a mark (short note, photo, etc.) of terminals layout, before disassembly.



13. Remove door mirror gasket.

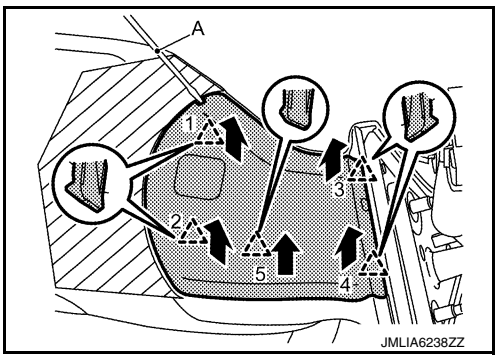


14. Apply protective tape (A) on door mirror housing to protect it from damage.



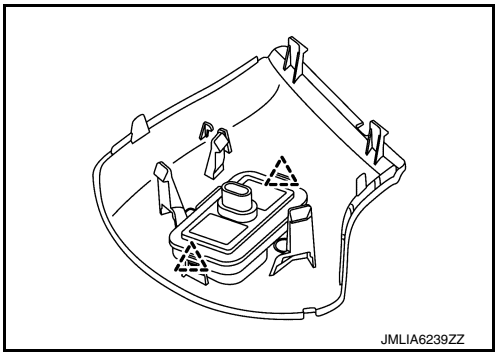
15. Disengage door mirror base cover fixing pawls using a remover tool (A) according to numerical order 1→5 indicated by arrows as shown in the figure, and then remove door mirror base cover.
CAUTION:
Use a remover tool wrapped in tape.

△ : Pawl

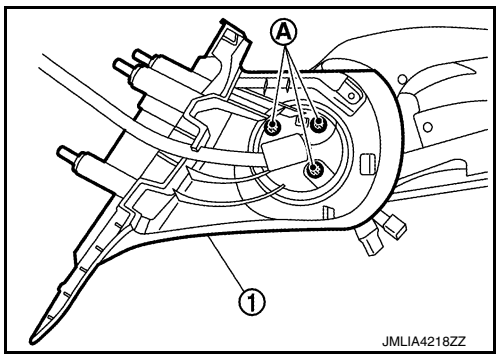


16. Disconnect puddle lamp connector, and then disengage puddle lamp fixing pawls.
After removing puddle lamp from door mirror base cover.

△ : Pawl



17. Remove door mirror base fixing screws (A), and then remove door mirror base (1).



ASSEMBLY

Note the following the items, and then assemble in the reverse order of disassembly.

CAUTION:

- **Never connect terminals and harness connectors incorrect position. A malfunction may occur if connect terminals and harness connectors incorrect position.**
- **Perform camera image calibration. (with side camera) Refer to AV-390, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Description".**

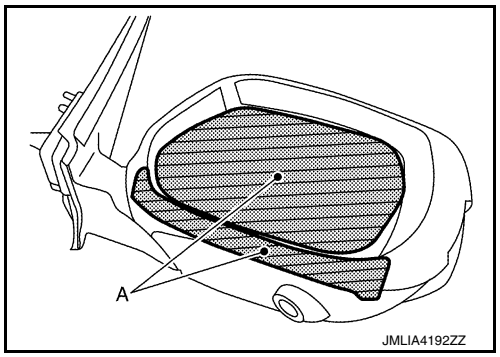
GLASS MIRROR

GLASS MIRROR : Removal and Installation

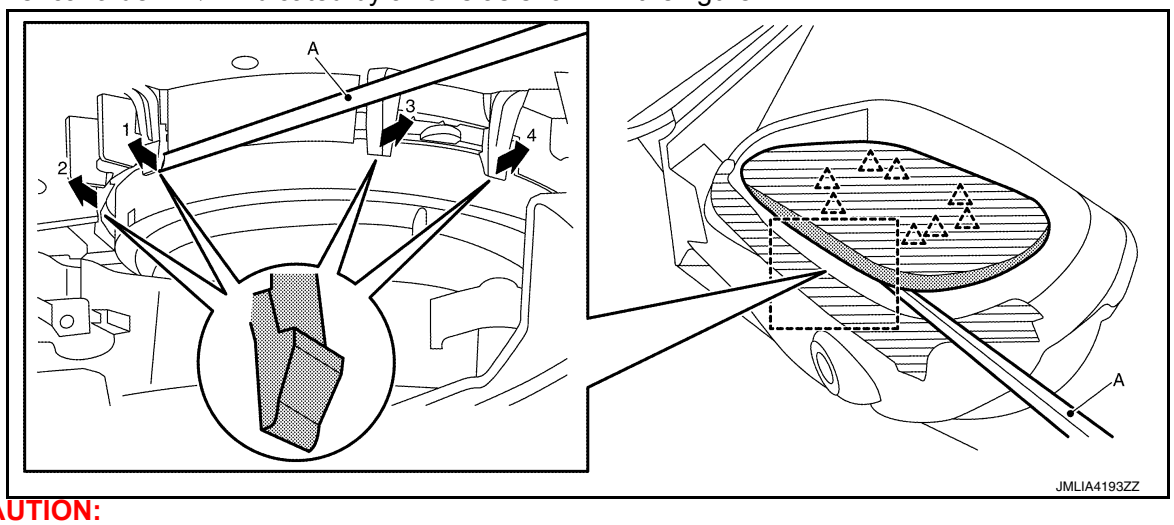
INFOID:0000000012173355

REMOVAL

1. Apply protective tapes (A) on surface of glass mirror and door mirror housing to protect it from damage.



2. Insert remover tool (A) into the recess at lower side between glass mirror and actuator. And then disengage the door mirror fixing pawls by pushing up while rotating (twisting) the remover tool according to numerical order 1→4 indicated by arrows as shown in the figure.

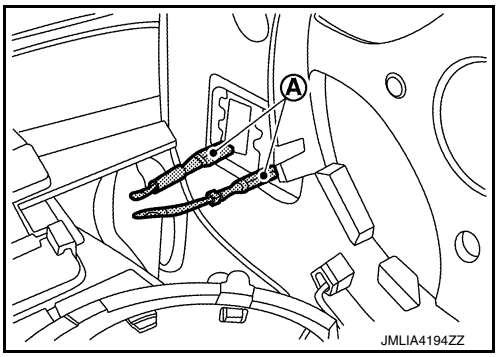


CAUTION:

Use a remover tool wrapped in tape.

: Pawl

3. Disconnect heater mirror terminals (A), and then remove glass mirror.
CAUTION:
Make a mark (short note, photo, etc.) of terminals layout, before disassembly.



INSTALLATION
Note the following item, and then install in the reverse order of removal.
CAUTION:
After installation, visually check that pawls are securely engaged.

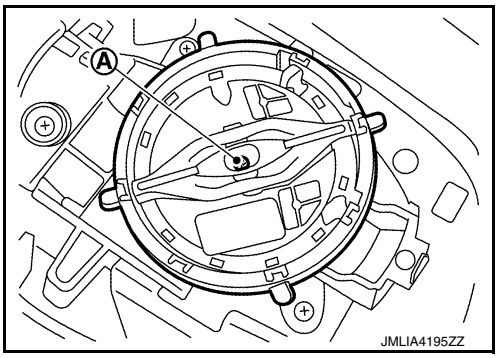
DOOR MIRROR COVER

DOOR MIRROR COVER : Removal and Installation

INFOID:0000000012173356

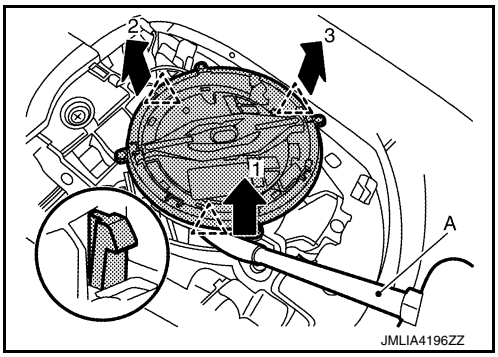
REMOVAL

1. Remove glass mirror. Refer to MIR-131, "GLASS MIRROR : Removal and Installation"
2. Remove door mirror actuator fixing screw (A).

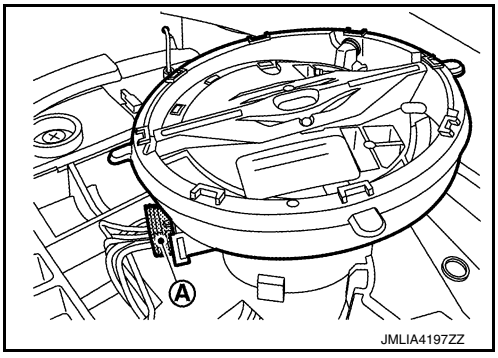


3. Disengage door mirror actuator fixing pawls using a remover tool (A) according to numerical order 1→3 indicated by arrows as shown in the figure.
CAUTION:
Use a remover tool wrapped in tape.

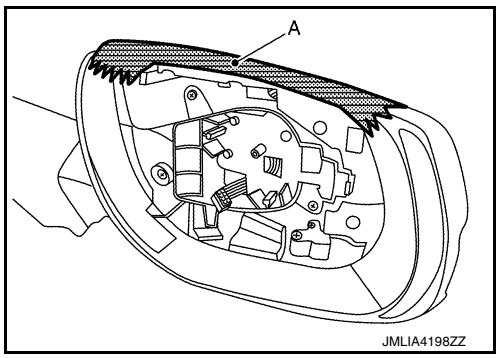
: Pawl



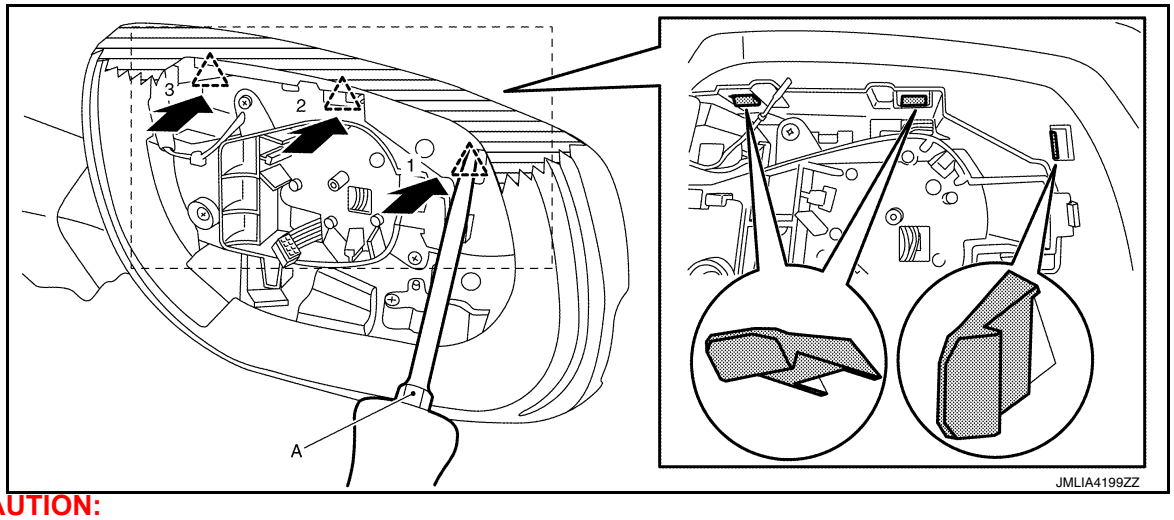
4. Disconnect door mirror actuator harness connector (A), and then remove door mirror actuator.



5. Apply protective tape (A) on door mirror housing to protect it from damage.



6. Disengage door mirror cover fixing pawls using a remover tool (A) according to numerical order 1→3 indicated by arrows as shown in the figure, and then make a space between door mirror housing and door mirror cover.



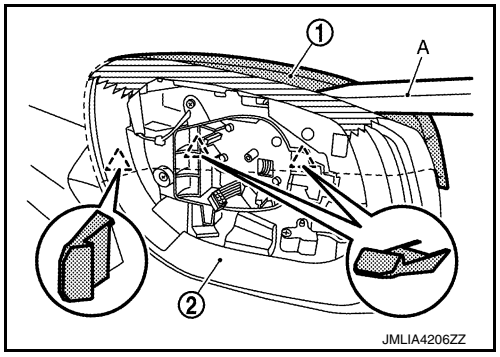
CAUTION:
Use a remover tool wrapped in tape.

△ : Pawl

7. Disengage door mirror cover (1) fixing pawls using a remover tool (A), and then remove door mirror cover from door mirror housing (2).

CAUTION:
When removing door mirror cover, always use a remover tool that is made of plastic to prevent damage to the parts.

△ : Pawl



INSTALLATION

Note the following item, and then assemble in the reverse order of disassembly.

CAUTION:
After installation, visually check that pawls are securely engaged.

DOOR MIRROR REMOTE CONTROL SWITCH

Exploded View

INFOID:0000000012173357

Refer to INT-12, "DRIVER SIDE : Exploded View".

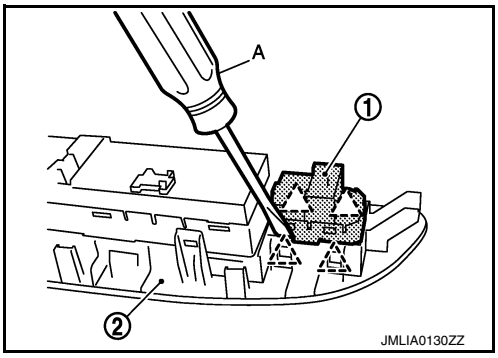
Removal and Installation

INFOID:0000000012173358

REMOVAL

1. Remove the power window main switch finisher. Refer to INT-12, "DRIVER SIDE : Removal and Installation".
2. Remove door mirror remote control switch (1) from power window main switch finisher (2) using remover tool (A).

: Pawl



INSTALLATION

Install in the reverse order of removal.

SYSTEM DESCRIPTION

DOOR MIRROR SYSTEM

Component Description

INFOID:0000000012173359

Component	Function
Door mirror remote control switch	It supplies power to mirror motor through mirror switch and changeover switch.
Door mirror	It makes mirror face operate from side to side and up and down with the mirror control switch operation.

INSIDE MIRROR SYSTEM

System Description

INFOID:0000000012173360

The sensor built in inside mirror detects the brightness of headlight of the vehicle behind and automatically changes the light transmission to decrease the brightness.

Component Description

INFOID:0000000012173361

Component	Function
Auto anti-dazzling inside mirror	It automatically changes the light transmittance according to the brightness of the light from the headlight of the vehicle behind.

DTC/CIRCUIT DIAGNOSIS

DOOR MIRROR REMOTE CONTROL SWITCH (MIRROR SWITCH/ CHANGEOVER SWITCH)

Component Inspection

INFOID:0000000012783919

1. CHECK MIRROR SWITCH & CHANGEOVER SWITCH

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

Door mirror remote control switch			Condition		Continuity
Terminal			Changeover switch	Mirror switch	
Driver side	7	10	LEFT	RIGHT	Existed
	1	14			
	7	14		LEFT	
	1	10			
	7	16		UP	
	1	10			
	7	10		DOWN	
	1	16			
Passenger side	7	12	RIGHT	RIGHT	
	1	13			
	7	13		LEFT	
	1	12			
	7	15		UP	
	1	12			
	7	12		DOWN	
	1	15			

Is the inspection result normal?

YES >> INSPECTION END

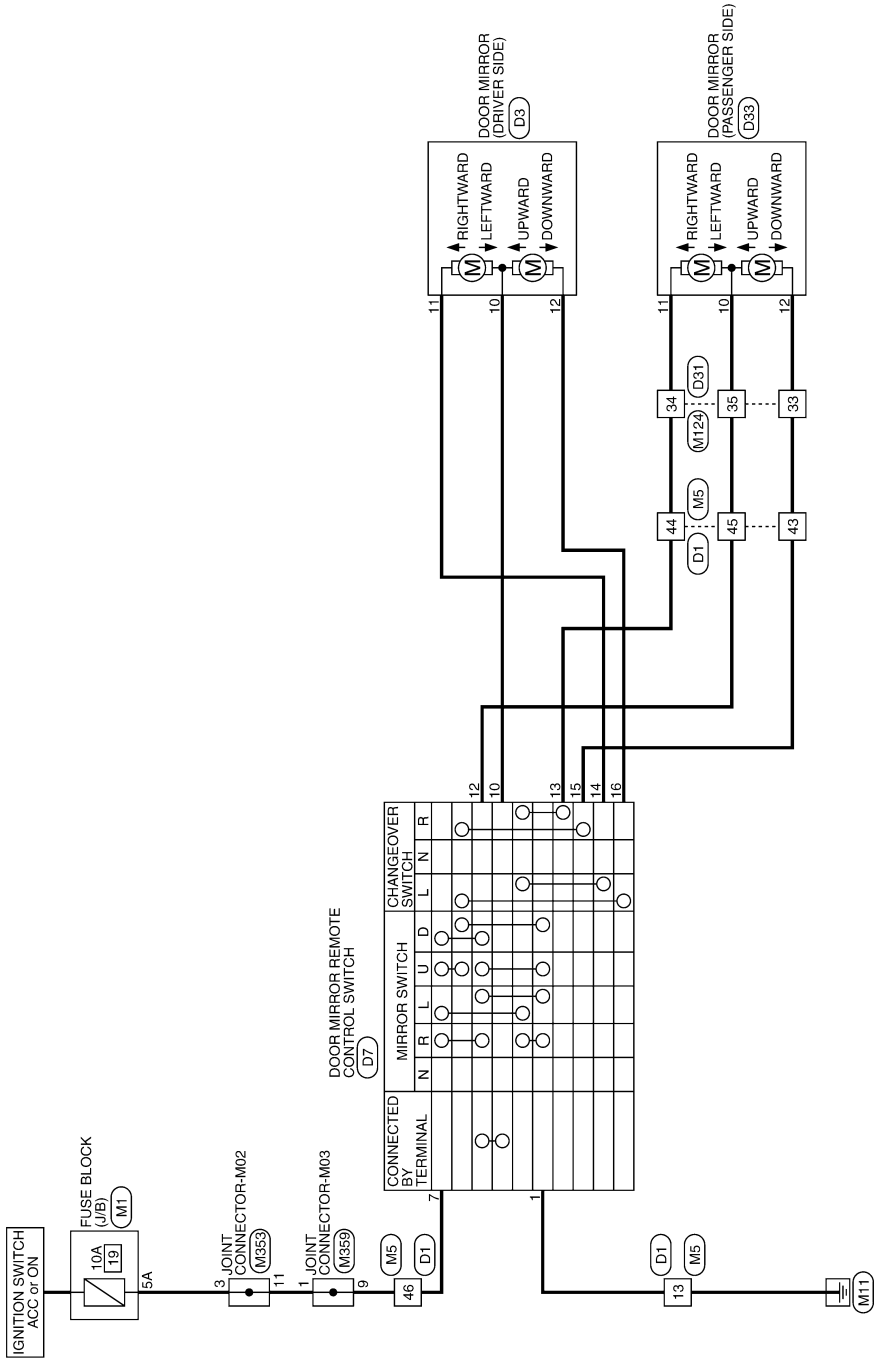
NO >> Replace door mirror remote control switch. Refer to MIR-164, "Removal and Installation".

DOOR MIRROR SYSTEM

Wiring Diagram - DOOR MIRROR (WITHOUT AUTOMATIC DRIVE POSITIONER) -

INFOID:0000000012173362

DOOR MIRROR (WITHOUT AUTOMATIC DRIVE POSITIONER)



DOOR MIRROR (WITHOUT AUTOMATIC DRIVE POSITIONER)

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

H.S.

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
55	54	53	52	51	50	49	48	47	46	45	44	43	42	41

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	V	–
4	W	–
5	L	–
6	O	–
7	GR	–
8	W	–
9	O	–
10	BR	–
11	P	–
12	LG	–
13	B	–
14	Y	–
15	W	–
16	SB	–
17	LG	–
18	SHIELD	–
19	P	–
20	W	–
21	O	–
22	P	–
23	BR	–
24	V	–
25	GR	–
26	Y	–
27	BR	–
28	V	–
29	LG	–
30	G	–
31	W	–
32	G	–
33	L	–
34	SB	–
35	R	–
36	LG	–
37	R	–
38	P	–
39	O	–
40	BR	–
41	L	–
42	GR	–
43	BR	– [With automatic drive positioner]
43	O	– [Without automatic drive positioner]
44	GR	– [Without automatic drive positioner]
44	W	– [With automatic drive positioner]
45	G	– [Without automatic drive positioner]
45	Y	– [With automatic drive positioner]
46	G	– [With automatic drive positioner]
46	V	– [Without automatic drive positioner]
47	R	–
48	G	–
49	GR	–
50	SHIELD	–
51	B	–
52	R	–
53	SB	–
54	O	–
55	Y	–

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

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	–
2	O	–
3	BR	CONT
5	P	COMP+
6	SB	ON
7	W	–
10	G	–
11	P	–
12	O	–
14	LG	–
17	SHIELD	COMP–
18	LG	GROUND
19	B	–
21	GR	–
22	BR	–
23	Y	–
24	V	–

Connector No.	D7
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Type	TK16FW

H.S.

1							7
8	9	10	11	12	13	14	15	16

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	–
7	V	–
8	B	–
9	R	–
10	G	–
12	G	–
13	GR	–
14	P	–
15	O	–
16	O	–

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

H.S.

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
48	47	46	45	44	43	42	41	40	39	38	37	36	35	34
55	54	53	52	51	50	49	48	47	46	45	44	43	42	41

Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	–
8	BR	–
9	V	–
12	P	–
13	LG	–
14	B	–
15	W	–
16	BR	–
17	B	–
18	R	–
19	B	–
20	G	– [With around view monitor]
20	R	– [Without around view monitor]
21	BR	– [Without around view monitor]
21	SHIELD	– [With around view monitor]
22	V	–
23	P	–
24	W	–
25	SB	–
26	R	–
27	G	–
33	O	–
34	GR	–
35	G	–
36	R	–
37	G	–
43	Y	–
44	V	–
45	P	–
46	W	–
47	SHIELD	–
52	G	–
53	GR	–
54	O	–
55	L	–

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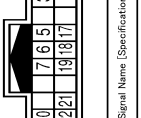
DOOR MIRROR (WITHOUT AUTOMATIC DRIVE POSITIONER)

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	–
3	W	SIDE CAMERA RH COMM
5	G	COMP–
6	R	–
7	L	–
10	G	–
11	GR	–
12	O	–
17	SHIELD	COMP–
18	B	GROUND
19	B	–
21	P	–
22	Y	–
23	W	–
24	V	–

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2

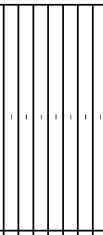


Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	–
2A	G	–
3A	L	–
4A	R	–
5A	V	–
6A	Y	–
7A	R	–
8A	L	–

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

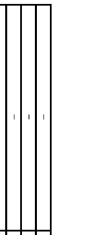
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	B	–
3	BR	–
4	P	–
5	L	–
6	R	–
7	R	–
8	W	–
9	G	–
10	L	–
11	G	–
12	V	–
13	B	–
14	Y	–
15	W	–
16	R	–
17	B	–
18	SHIELD	–
19	G	–
20	L	–
21	LG	–
22	L	–
23	G	–
24	Y	–
25	GR	–
26	R	–
27	W	–
28	V	–
29	Y	–
30	Y	–
31	R	–
32	BR	–
33	SB	–
34	Y	–
35	P	–
36	LG	–
37	BR	–
38	P	–
39	BG	–
40	SB	–
41	L	–
42	R	–
43	BR	–
44	V	–
45	G	–
46	SB	– [With automatic drive positioner]
46	V	– [Without automatic drive positioner]
47	R	–
48	G	–
49	P	–
50	SHIELD	–
51	B	–
52	R	–
53	V	–
54	LG	–
55	SB	–

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
7	Y	–
8	LG	–
9	Y	–
12	L	–
13	V	–
14	B	–
15	W	–
16	BR	–
17	B	–
18	R	–
19	B	–
20	G	– [With around view monitor]
20	W	– [Without around view monitor]
21	L	– [Without around view monitor]
21	SHIELD	– [With around view monitor]
22	SB	–
23	GR	–
24	G	–
25	Y	–
26	R	–
27	W	–
30	W	–
33	BR	–
34	V	–
35	G	–
36	Y	–
37	BR	–
43	L	–
44	Y	–
45	R	–
46	W	–
47	SHIELD	–
52	R	–
53	G	–
54	W	–
55	BG	–

Connector No.	M353
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FDGY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	–
2	R	– [Without BOSE system]
2	V	– [With BOSE system]
3	V	–
4	BG	–
5	G	–
6	R	–

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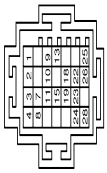
DOOR MIRROR (WITHOUT AUTOMATIC DRIVE POSITIONER)

7	V
8	BG
9	G
10	R
11	V
13	W
14	R
17	W
19	V
21	W
22	R
23	V
26	R
27	G

Connector No.	M339
Connector Name	JOINT CONNECTOR-M03
Connector Type	SGA28FDGY-J



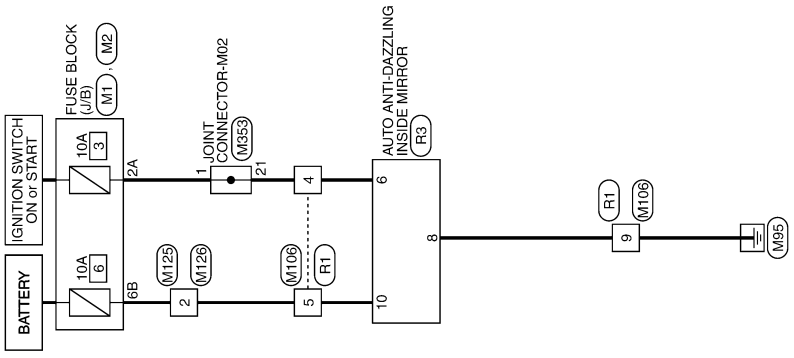
Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
3	SHIELD	-
4	BG	-
7	SHIELD	-
8	BG	-
9	V	-
10	P	-
11	B	-
13	V	-
15	B	-
18	L	-
19	B	-
22	R	-
23	B	-
24	BG	-
25	V	-
26	L	-
28	BR	-

JRLWF4549GB

AUTO ANTI-DAZZLING INSIDE MIRROR SYSTEM

Wiring Diagram - INSIDE MIRROR SYSTEM -

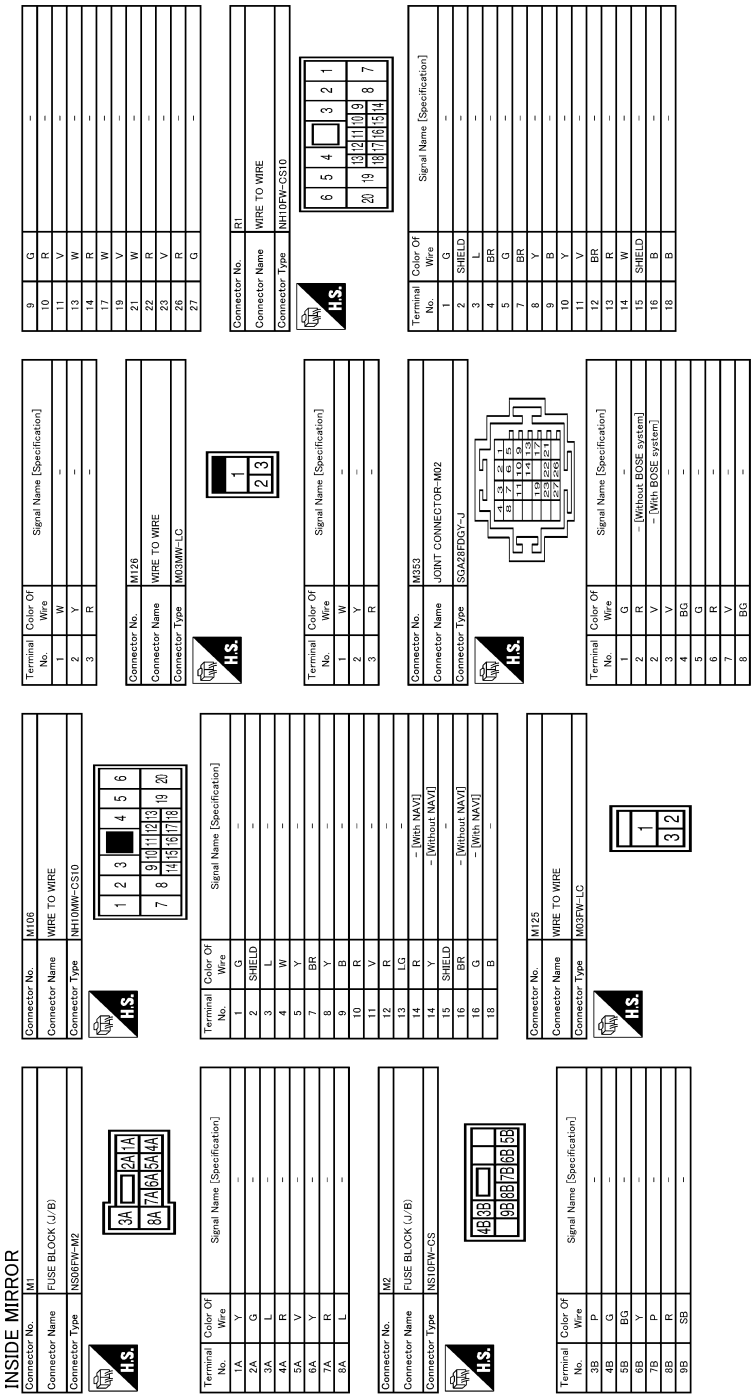
INFOID:0000000012173363



INSIDE MIRROR

2015/06/22

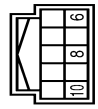
JRLWF4550GB



JRLWF4551GB

INSIDE MIRROR

Connector No.	R3
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Type	TH10FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
6	BR	IGN
8	B	GROUND
10	G	BAT

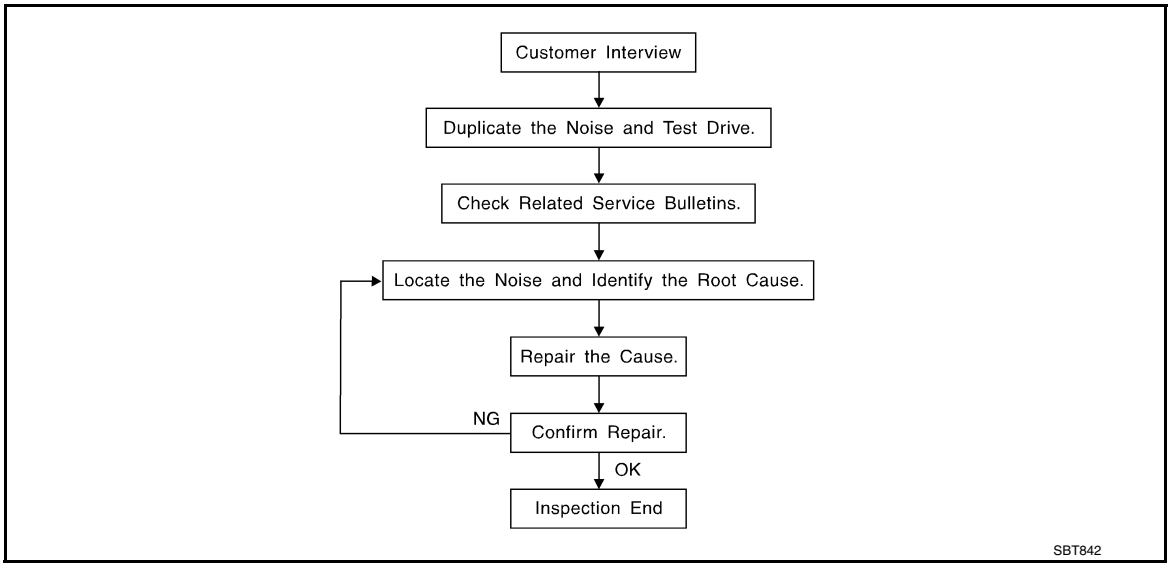
JRLWF4552GB

SYMPTOM DIAGNOSIS

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000012173364



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to MIR-149, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
  Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces=higher pitch noise/softer surfaces=lower pitch noises/edge to surface=chirping
- Creak—(Like walking on an old wooden floor)
  Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
  Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door)
  Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand)
  Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)
  Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumblebee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.
If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:
1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that you suspect is causing the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks.
  Refer to MIR-147, "Inspection Procedure".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:

- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02:15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)
INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97in)
FELT CLOTHTAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll
The following materials, not found in the kit, can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE
Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE
Used in place of UHMW tape that will be visible or not fit. Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Inspection Procedure

INFOID:0000000012173365

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:
Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid dumpers out of adjustment
2. Trunk lid striker out of adjustment

3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sunvisor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.
Cause of seat noise include:

1. Headrest rods and holder
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.
Causes of transmitted underhood noise include:

1. Any component mounted to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator mounting pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

Diagnostic Worksheet

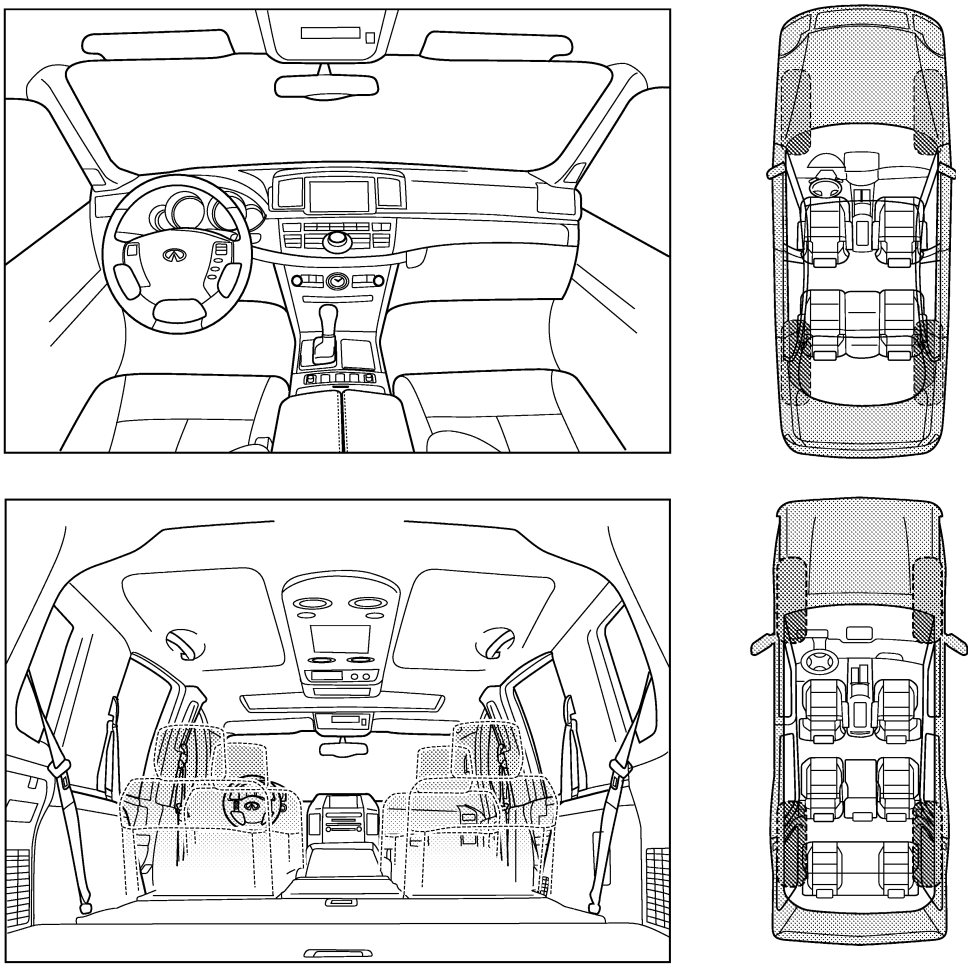
INFOID:0000000012173366

INFINITI

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service consultant or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

PIIB8741E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ anytime
- ☐ 1st time in the morning
- ☐ only when it is cold outside
- ☐ only when it is hot outside
- ☐ after sitting out in the rain
- ☐ when it is raining or wet
- ☐ dry or dusty conditions
- ☐ other:

III. WHEN DRIVING:

- ☐ through driveways
- ☐ over rough roads
- ☐ over speed bumps
- ☐ only about ____ mph
- ☐ on acceleration
- ☐ coming to a stop
- ☐ on turns: left, right or either (circle)
- ☐ with passengers or cargo
- ☐ other: _____
- ☐ after driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ squeak (like tennis shoes on a clean floor)
- ☐ creak (like walking on an old wooden floor)
- ☐ rattle (like shaking a baby rattle)
- ☐ knock (like a knock at the door)
- ☐ tick (like a clock second hand)
- ☐ thump (heavy, muffled knock noise)
- ☐ buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

PRECAUTION

PRECAUTIONS

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

INFOID:0000000012173367

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

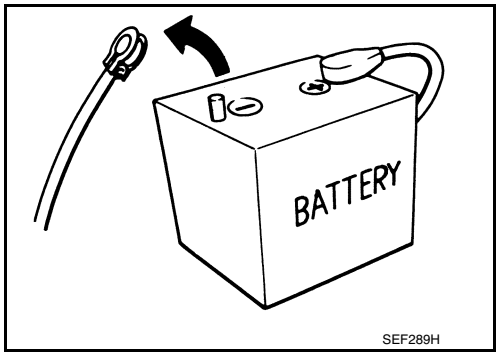
Precautions for Removing Battery Terminal

INFOID:0000000012707682

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

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

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



NOTE:

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

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

NOTE:

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

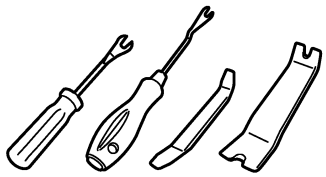
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the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

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:0000000012173370

Tool name	Description
Remover tool  JMKIA3050ZZ	Remove the clip and pawl and metal clip

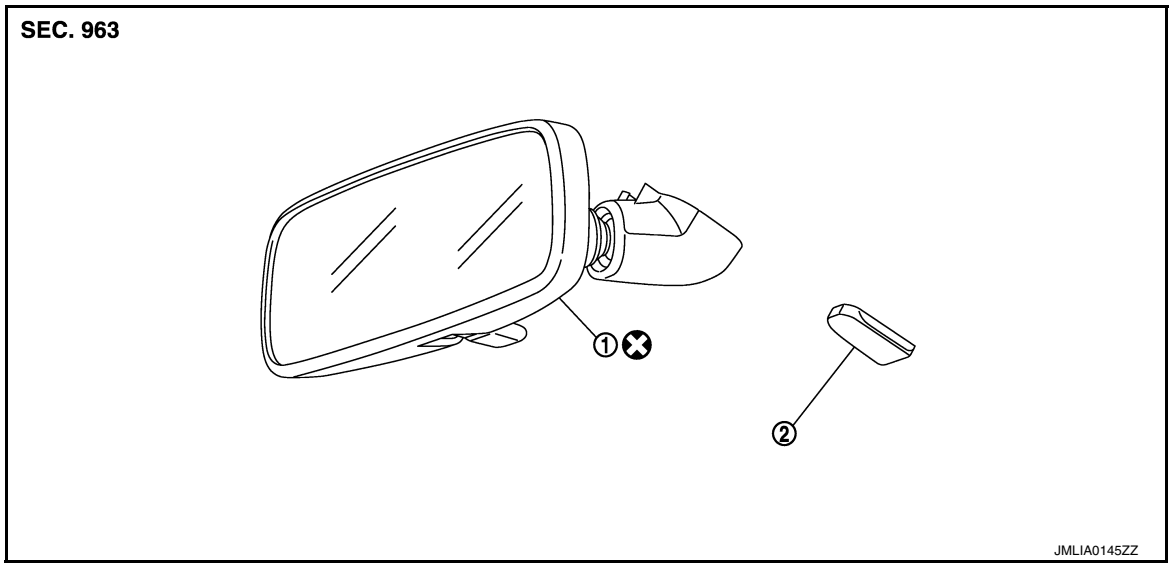
REMOVAL AND INSTALLATION

INSIDE MIRROR

Exploded View

INFOID:0000000012731069

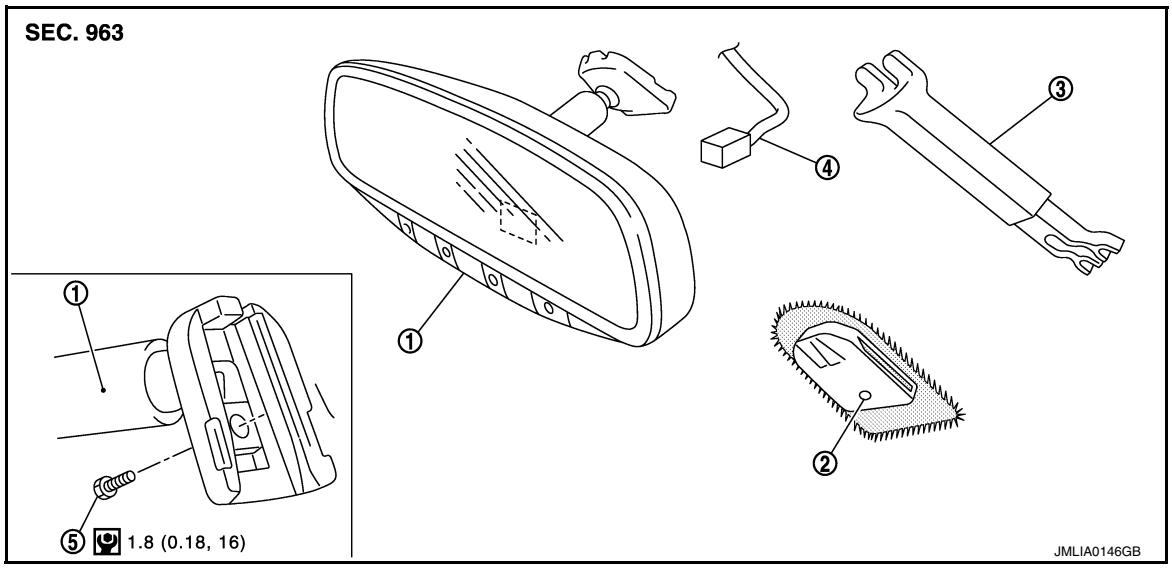
Base



1. Inside mirror
2. Mirror base

: Always replace after every disassembly

Option



1. Inside mirror
2. Mirror base
3. Inside mirror cover
4. Harness connector
5. TORX bolt

: N·m (kg-m, in-lb)

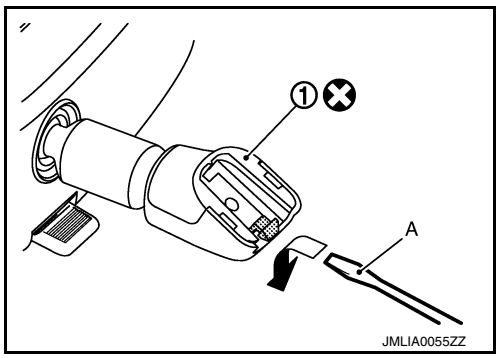
Removal and Installation

INFOID:0000000012731070

REMOVAL

Base model

1. Insert minus driver (A) under the inside mirror (1).
2. Slide the inside mirror to the upper side while pushing the pawl downward.



: Always replace after every disassembly

CAUTION:
Never use excessive force to remove the inside mirror because it is inserted tightly into the mirror base.

Option model

1. Remove the inside mirror cover.
2. Remove TORX bolt.
3. Disconnect harness connector.
4. Slide the inside mirror upward to remove.

INSTALLATION

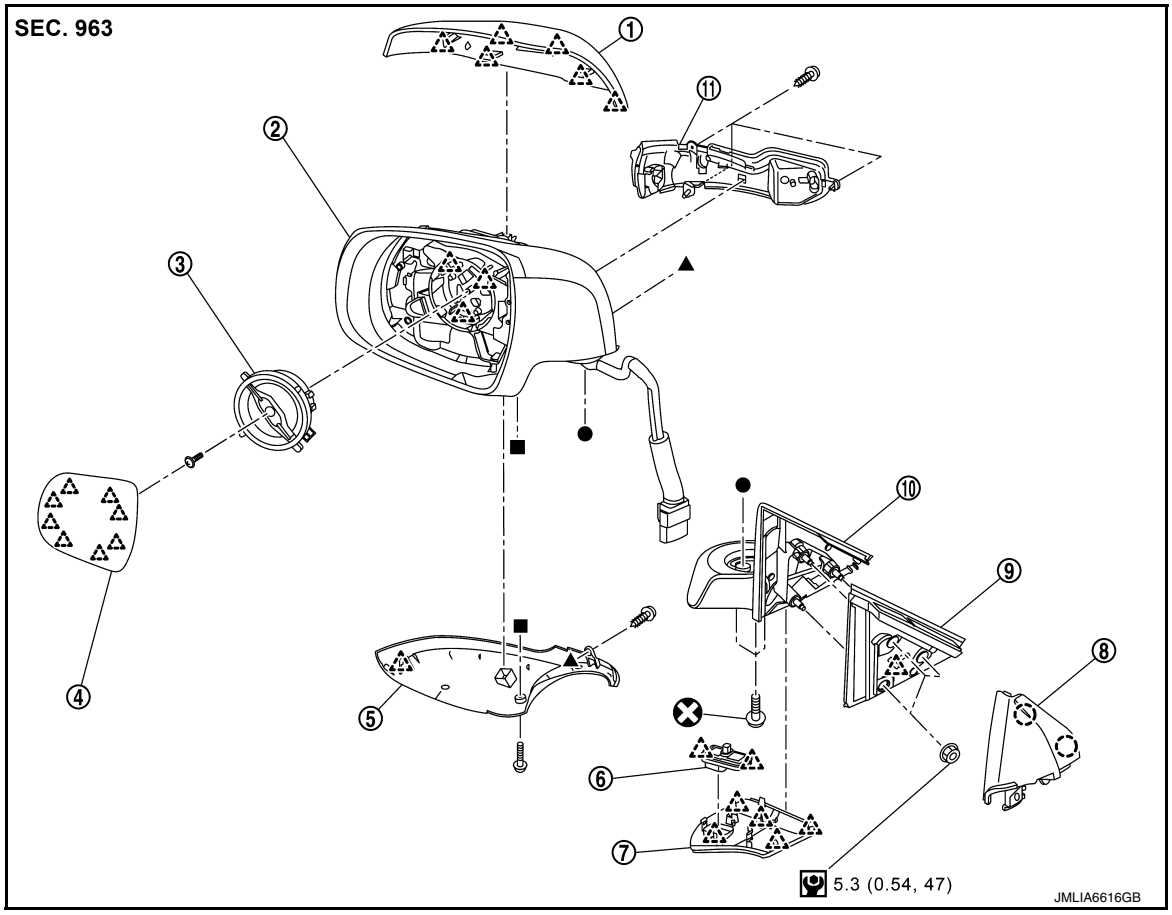
Install in the reverse order of removal.

CAUTION:
When inserting the inside mirror into the mirror base, be sure to push the pawl until it get connected to the mirror base.

OUTSIDE MIRROR

Exploded View

INFOID:0000000012731071



1. Door mirror cover
2. Door mirror housing
3. Door mirror actuator
4. Glass mirror
5. Door mirror finisher
6. Puddle lamp
7. Door mirror base cover
8. Corner cover
9. Door mirror gasket
10. Door mirror base
11. Side turn signal lamp

: Clip

: Pawl

: Always replace after every disassembly.

: N·m (kg-m, in-lb)

●, ▲, ■ : Indicates that the part is connected at points with same symbol in actual vehicle.

DOOR MIRROR ASSEMBLY

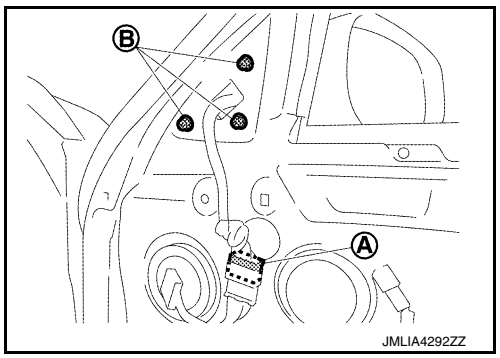
DOOR MIRROR ASSEMBLY : Removal and Installation

INFOID:0000000012731072

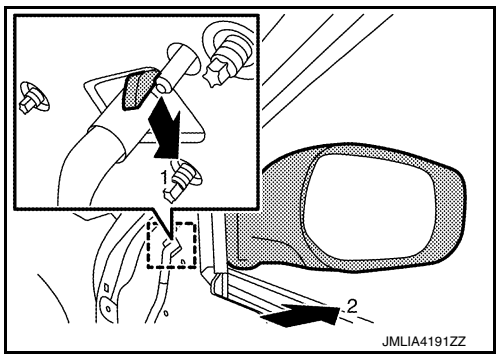
REMOVAL

1. Remove front door finisher.
   - Driver side: Refer to INT-12, "DRIVER SIDE : Removal and Installation".
   - Passenger side: Refer to INT-15, "PASSENGER SIDE : Removal and Installation".
2. Remove clips, and then remove corner cover.

3. Disconnect harness connector (A) and remove door mirror assembly mounting nuts (B).



4. Disengage door mirror assembly fixing pawl according to numerical order 1→2 indicated by arrows as shown in the figure, and then remove door mirror assembly.



INSTALLATION

Install in the reverse order of removal.

DOOR MIRROR ASSEMBLY : Disassembly and Assembly

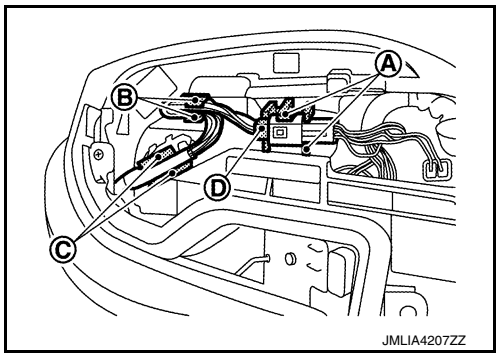
INFOID:0000000012731073

DISASSEMBLY

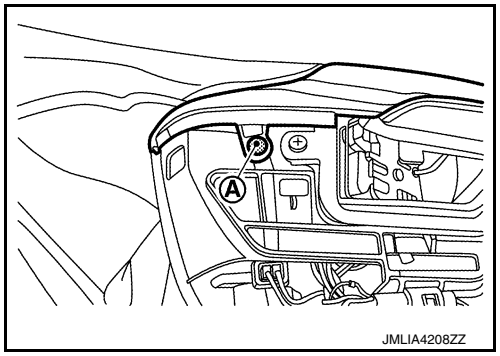
1. Remove door mirror assembly. Refer to MIR-156, "DOOR MIRROR ASSEMBLY : Removal and Installation"
2. Remove glass mirror. Refer to MIR-160, "GLASS MIRROR : Removal and Installation"
3. Remove door mirror cover. Refer to MIR-161, "DOOR MIRROR COVER : Removal and Installation".
4. Remove harness connector and each harness from clamp portion (A), (B) and (C), and then disconnect harness connector (D).

CAUTION:

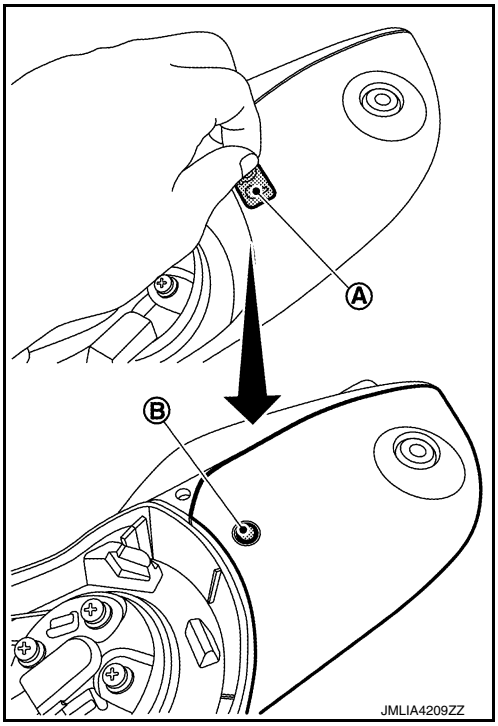
Make a mark (short note, photo, etc.) of harness layout, before disassembly.



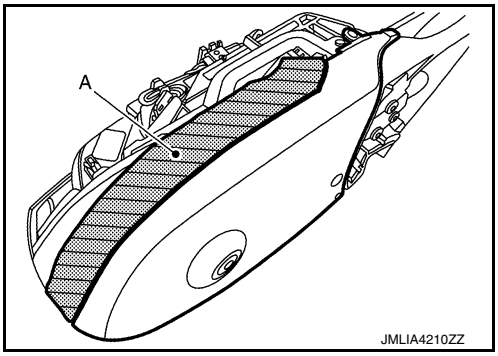
5. Remove door mirror finisher fixing screw (A).



6. Peel off seal (A), and then remove door mirror finisher fixing screw (B).



7. Apply protective tape (A) on side turn signal lamp to protect it from damage.

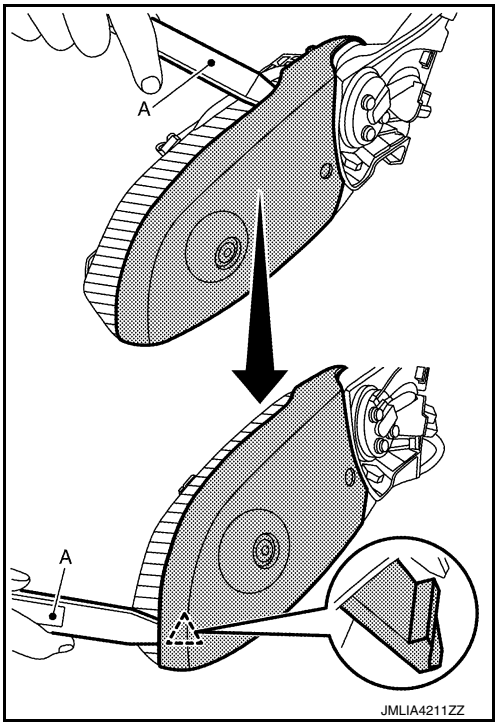


8. Insert a remover tool (A) between side turn signal lamp and door mirror finisher, and then disengage side turn signal lamp, door mirror finisher and pawl while sliding remover tool.

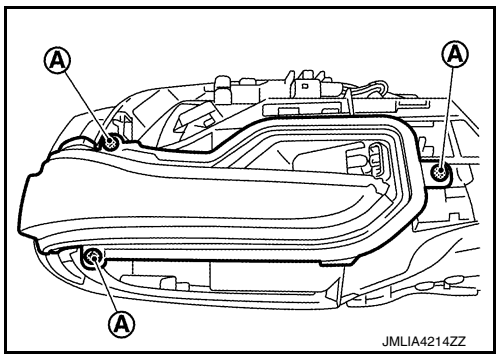
CAUTION:

When removing door mirror finisher, always use a remover tool that is made of plastic to prevent damage to the parts.

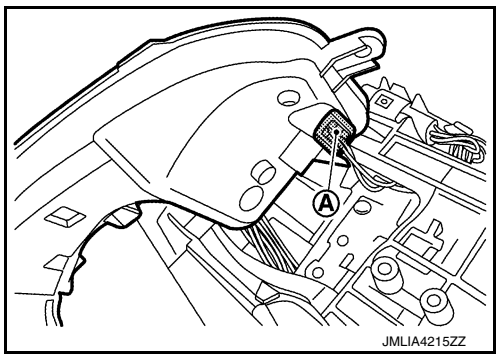
△ : Pawl



9. Remove side turn signal lamp fixing screws (A).



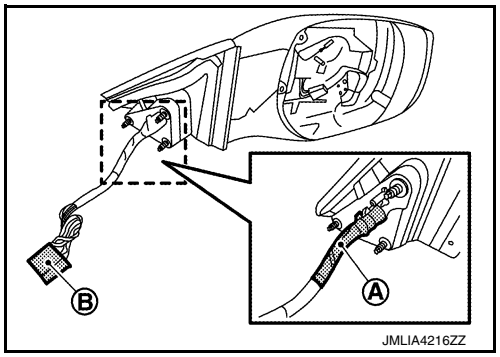
10. Disconnect side turn signal lamp harness connector (A), and then remove side turn signal lamp.



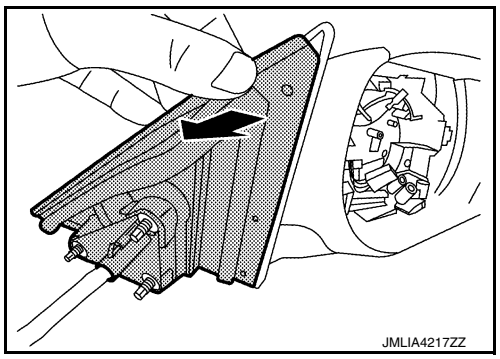
11. Remove vinyl tape (A) of door mirror gasket and door mirror harness, and then disconnect all terminals from harness connector (B).

CAUTION:

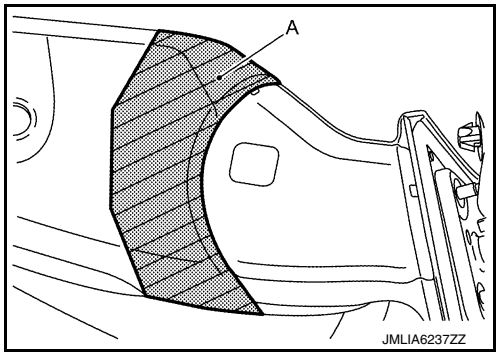
Make a mark (short note, photo, etc.) of terminals layout, before disassembly.



12. Remove door mirror gasket.

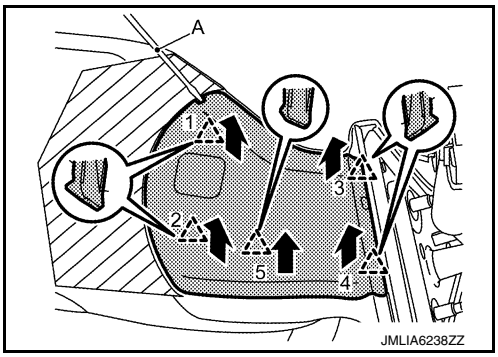


13. Apply protective tape (A) on door mirror housing to protect it from damage.



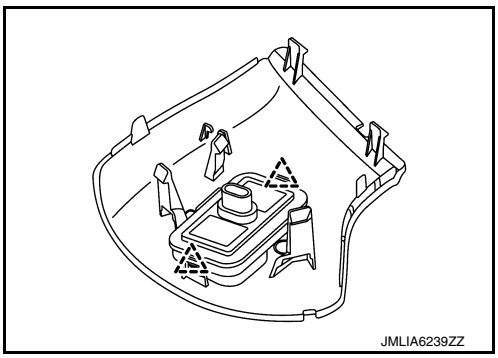
14. Disengage door mirror base cover fixing pawls using a remover tool (A) according to numerical order 1→5 indicated by arrows as shown in the figure, and then remove door mirror base cover.
CAUTION:
Use a remover tool wrapped in tape.

: Pawl

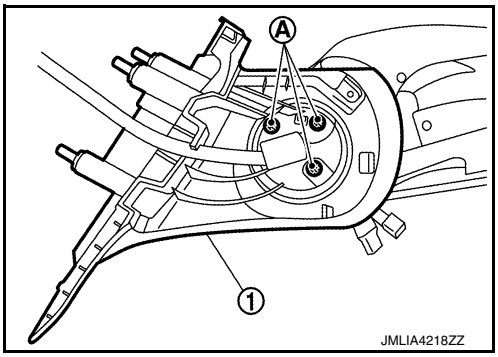


15. Disconnect puddle lamp connector, and then disengage puddle lamp fixing pawls.
After removing puddle lamp from door mirror base cover.

: Pawl



16. Remove door mirror base fixing screws (A), and then remove door mirror base (1).



ASSEMBLY
Note the following the item, and then assemble in the reverse order of disassembly.
CAUTION:
- **Never connect terminals and harness connectors incorrect position. A malfunction may occur if connect terminals and harness connectors incorrect position.**

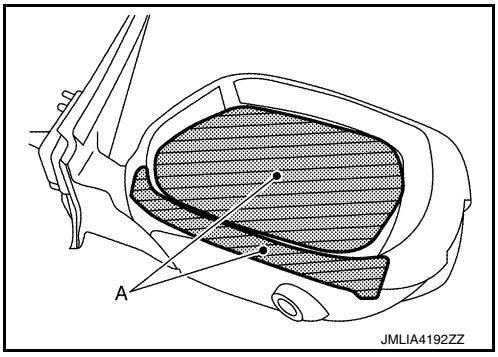
GLASS MIRROR

GLASS MIRROR : Removal and Installation

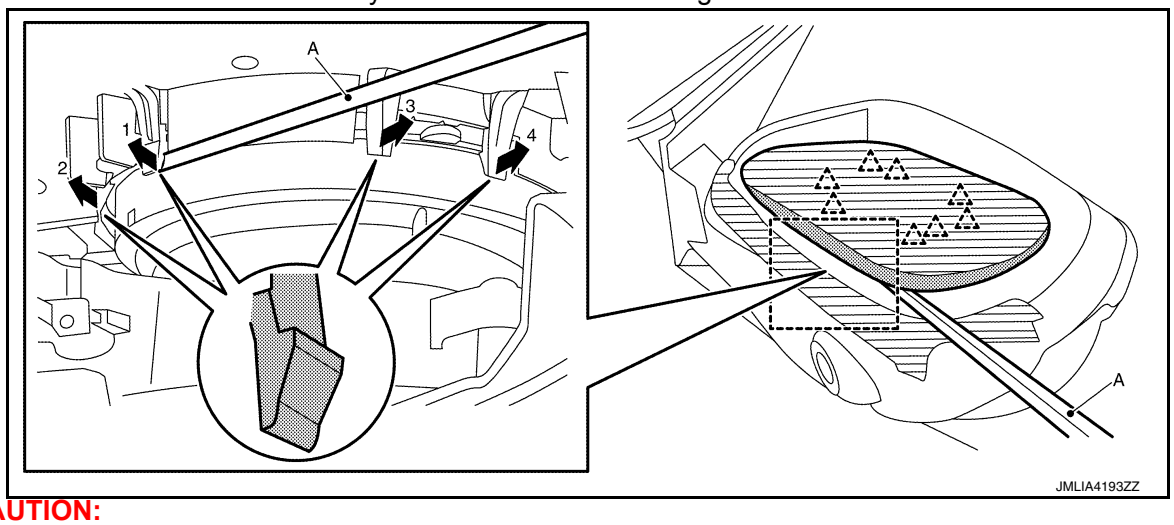
INFOID:0000000012731074

REMOVAL

1. Apply protective tapes (A) on surface of glass mirror and door mirror housing to protect it from damage.



2. Insert remover tool (A) into the recess at lower side between glass mirror and actuator. And then disengage the door mirror fixing pawls by pushing up while rotating (twisting) the remover tool according to numerical order 1→4 indicated by arrows as shown in the figure.

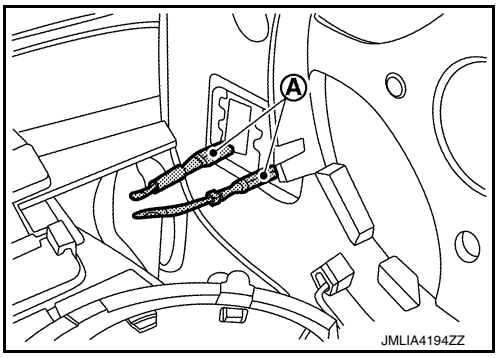


CAUTION:
Use a remover tool wrapped in tape.

: Pawl

3. Disconnect heater mirror terminals (A), and then remove glass mirror.

CAUTION:
Make a mark (short note, photo, etc.) of terminals layout, before disassembly.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:
After installation, visually check that pawls are securely engaged.

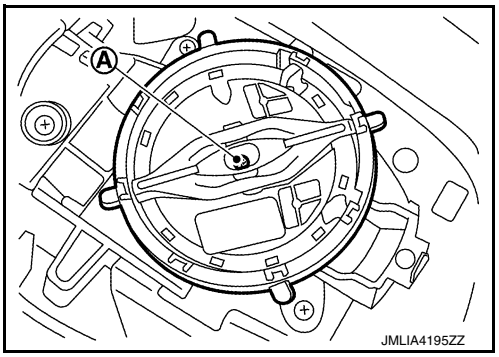
DOOR MIRROR COVER

DOOR MIRROR COVER : Removal and Installation

INFOID:0000000012731075

REMOVAL

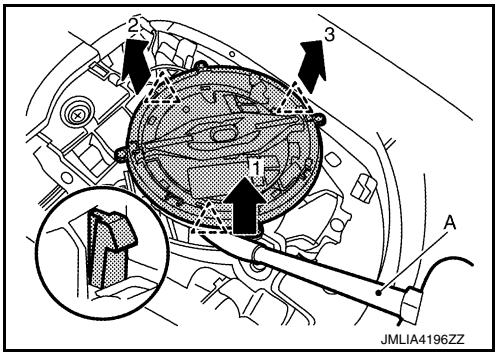
1. Remove glass mirror. Refer to MIR-160, "GLASS MIRROR : Removal and Installation"
2. Remove door mirror actuator fixing screw (A).



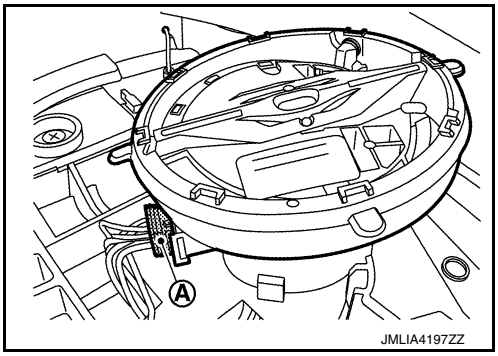
3. Disengage door mirror actuator fixing pawls using a remover tool (A) according to numerical order 1→3 indicated by arrows as shown in the figure.

CAUTION:
Use a remover tool wrapped in tape.

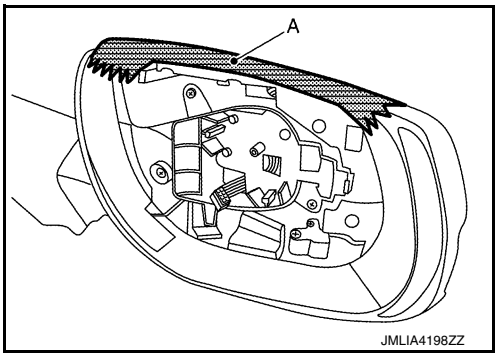
: Pawl



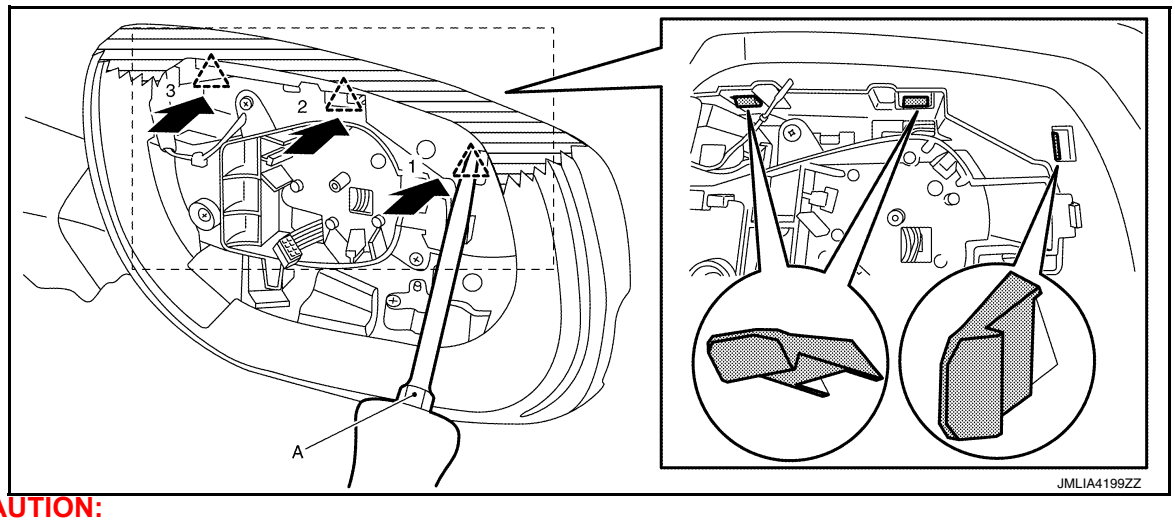
4. Disconnect door mirror actuator harness connector (A), and then remove door mirror actuator.



5. Apply protective tape (A) on door mirror housing to protect it from damage.



6. Disengage door mirror cover fixing pawls using a remover tool (A) according to numerical order 1→3 indicated by arrows as shown in the figure, and then make a space between door mirror housing and door mirror cover.



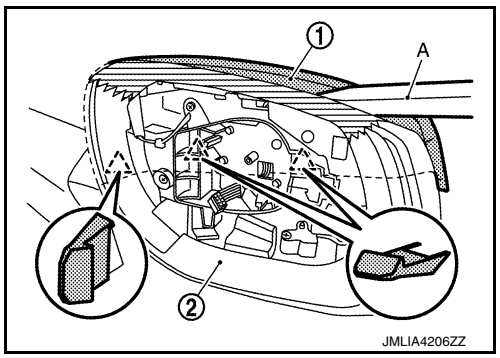
CAUTION:
Use a remover tool wrapped in tape.

: Pawl

7. Disengage door mirror cover (1) fixing pawls using a remover tool (A), and then remove door mirror cover from door mirror housing (2).

CAUTION:
When removing door mirror cover, always use a remover tool that is made of plastic to prevent damage to the parts.

: Pawl



INSTALLATION

Note the following item, and then assemble in the reverse order of disassembly.

CAUTION:
After installation, visually check that pawls are securely engaged.

DOOR MIRROR REMOTE CONTROL SWITCH

Exploded View

INFOID:0000000012731076

Refer to INT-12, "DRIVER SIDE : Exploded View".

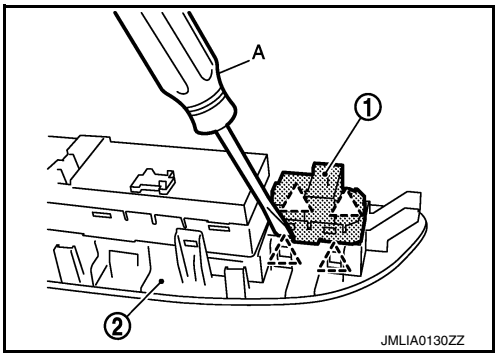
Removal and Installation

INFOID:0000000012731077

REMOVAL

1. Remove the power window main switch finisher. Refer to INT-12, "DRIVER SIDE : Removal and Installation".
2. Remove door mirror remote control switch (1) from power window main switch finisher (2) using remover tool (A).

: Pawl



INSTALLATION

Install in the reverse order of removal.