SECTION MIR
MIRRORS

CONTENTS

WITH ADP

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000007513747

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much malfunction information (conditions and environment when the malfunction occurred) 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-133, "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?

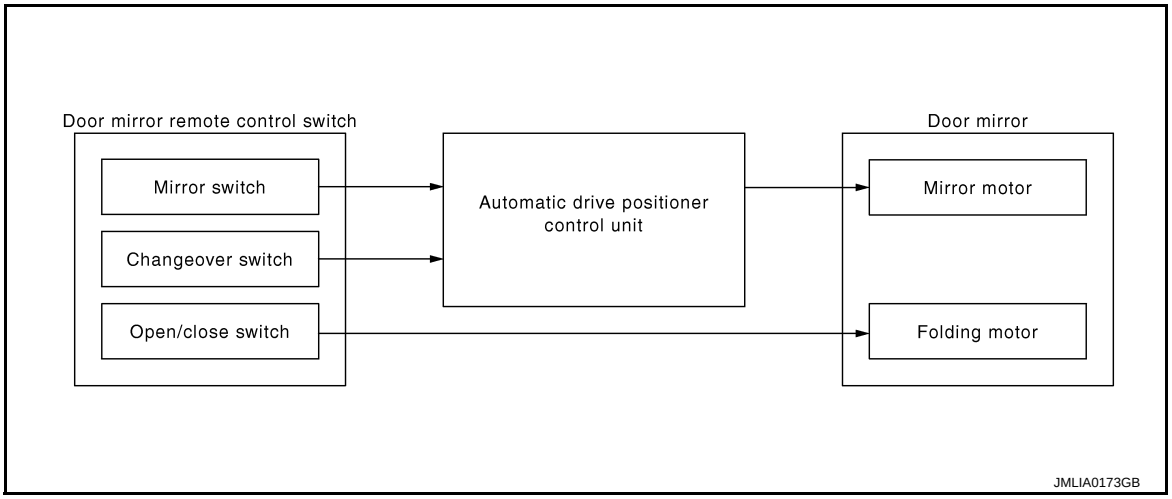
YES >> INSPECTION END
NO >> GO TO 4.

SYSTEM DESCRIPTION

DOOR MIRROR SYSTEM

System Diagram

INFOID:0000000007513748



System Description

INFOID:0000000007513749

MANUAL FUNCTION

Description

- Automatic drive positioner control unit controls door mirror.
- Automatic drive positioner control unit inputs changeover switch signal and performs 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.
- Power is supplied to folding motor when operating the open/close switch.

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 using change over switch, and then set the selected mirror face downward/inward.
- When the ignition switch is in the ON position and A/T shift selector is in the 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 activates 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 drivers seat, door mirror and steering column are not in the memorized position, the door mirror moves to 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 the 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 fully the memory switch 1 or 2 selected in step 3 for at least 1 second.
   The indicator light for the pushed memory switch illuminates, and continue pushing the switch. After the indicator light tams 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.

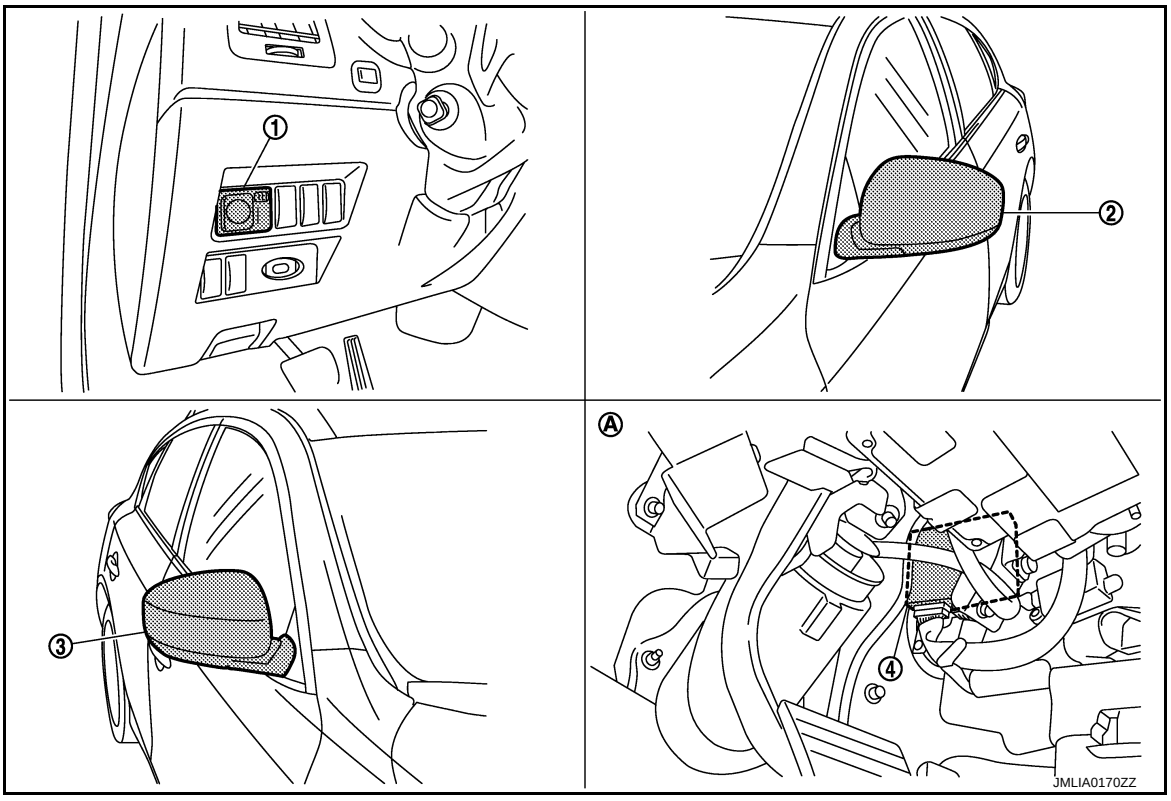
AUTOMATIC DRIVE POSITIONER SYSTEM LINKED OPERATION

Description

Door mirror control is included in automatic drive positioner system. Refer to automatic drive positioner system for more details.
Refer to ADP-14, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Description".

Component Parts Location

INFOID:0000000007513750



1. Door mirror remote control switch D17
2. Door mirror (driver side) D3
3. Door mirror (passenger side) D33
4. Automatic drive positioner control unit M51, M52

A. View with instrument driver lower panel removed

Component Description

INFOID:0000000007513751

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.
	Open/close switch	Power is supplied to folding mirror from door remote control switch when operating switch.
Door mirror	Door mirror motor	It makes mirror face operate from side to side and up and down via integrated motor.
	Folding motor	The door mirror operates because power is received from power supply when pressing door mirror remote control switch.

INSIDE MIRROR SYSTEM

System Description

INFOID:0000000007513752

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:0000000007513753

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 CONTROL UNIT)

CONSULT Function

INFOID:0000000007776921

APPLICATION ITEM

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

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.

SELF-DIAGNOSIS RESULTS

Refer to ADP-133, "DTC Index".

DATA MONITOR

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

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CHNG SW–L	“ON/OFF”	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	“ON/OFF”	×	×	ON/OFF status judged from the tilt switch (up) signal.
TILT SW-DOWN	“ON/OFF”	×	×	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	“ON/OFF”	×	×	ON/OFF status judged from the telescoping switch (forward) signal.
TELESCO SW-RR	“ON/OFF”	×	×	ON/OFF status judged from the telescoping switch (backward) signal.
DETENT SW	“ON/OFF”	×	×	The selector lever position “OFF (P position) / ON (other than P position)” judged from the detention switch signal.
STARTER SW	“ON/OFF”	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.
SLIDE PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	–	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U–D	“V”	–	×	Voltage input from door mirror sensor (passenger side) up/down is displayed.
MIR/SEN RH R–L	“V”	–	×	Voltage input from door mirror sensor (passenger side) left/right is displayed.
MIR/SEN LH U–D	“V”	–	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R–L	“V”	–	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT SEN	“V”	–	×	Voltage input from tilt sensor is displayed.
TELESCO SEN	“V”	–	×	Voltage input from telescopic sensor is displayed.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

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

WORK SUPPORT

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

DTC/CIRCUIT DIAGNOSIS

DOOR MIRROR REMOTE CONTROL SWITCH

MIRROR SWITCH

MIRROR SWITCH : Description

INFOID:0000000007513756

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:0000000007513757

1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Mirror switch function is OK.
NO >> Refer to MIR-11, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000007513758

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		
M26	4	Ground	5
	5		
	6		
	14		

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	
M51	3	M26	6	Existed
	4		5	
	19		14	
	20		4	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M51	3	Ground	Not existed
	4		
	19		
	20		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-188, "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		
M26	13	Ground	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-12, "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-50, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

MIRROR SWITCH : Component Inspection

INFOID:0000000007513759

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				
M26	4	13	Mirror switch	RIGHT	Existed
				Other than the above	Not existed
	5			LEFT	Existed
				Other than the above	Not existed
	6			UP	Existed
				Other than the above	Not existed
	14			DOWN	Existed
				Other than the above	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace door mirror remote control switch. Refer to MIR-50, "Removal and Installation".

CHANGEOVER SWITCH

CHANGEOVER SWITCH : Description

INFOID:0000000007513760

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:0000000007513761

1. CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

YES >> Changeover switch function is OK.
NO >> Refer to MIR-13, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000007513762

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		
M26	2	Ground	5
	3		

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	
M51	2	M26	3	Existed
	18		2	

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

Automatic drive positioner control unit		Ground	Continuity
Connector	Terminal		
M51	2		Not existed
	18		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-188, "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		
M26	13		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-14, "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-50, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

CHANGEOVER SWITCH : Component Inspection

INFOID:0000000007513763

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				
M26	2	13	Changeover switch	LEFT	Existed
				Other than above	Not existed
	3			RIGHT	Existed
				Other than above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

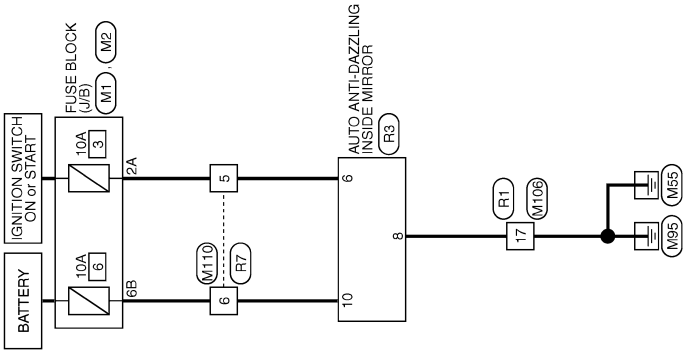
NO >> Replace door mirror remote control switch. Refer to MIR-50, "Removal and Installation".

AUTO ANTI-DAZZLING INSIDE MIRROR SYSTEM

Wiring Diagram - INSIDE MIRROR SYSTEM -

INFOID:0000000007513765

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer toGI-13, "Connector Information".



INSIDE MIRROR

2009/07/29

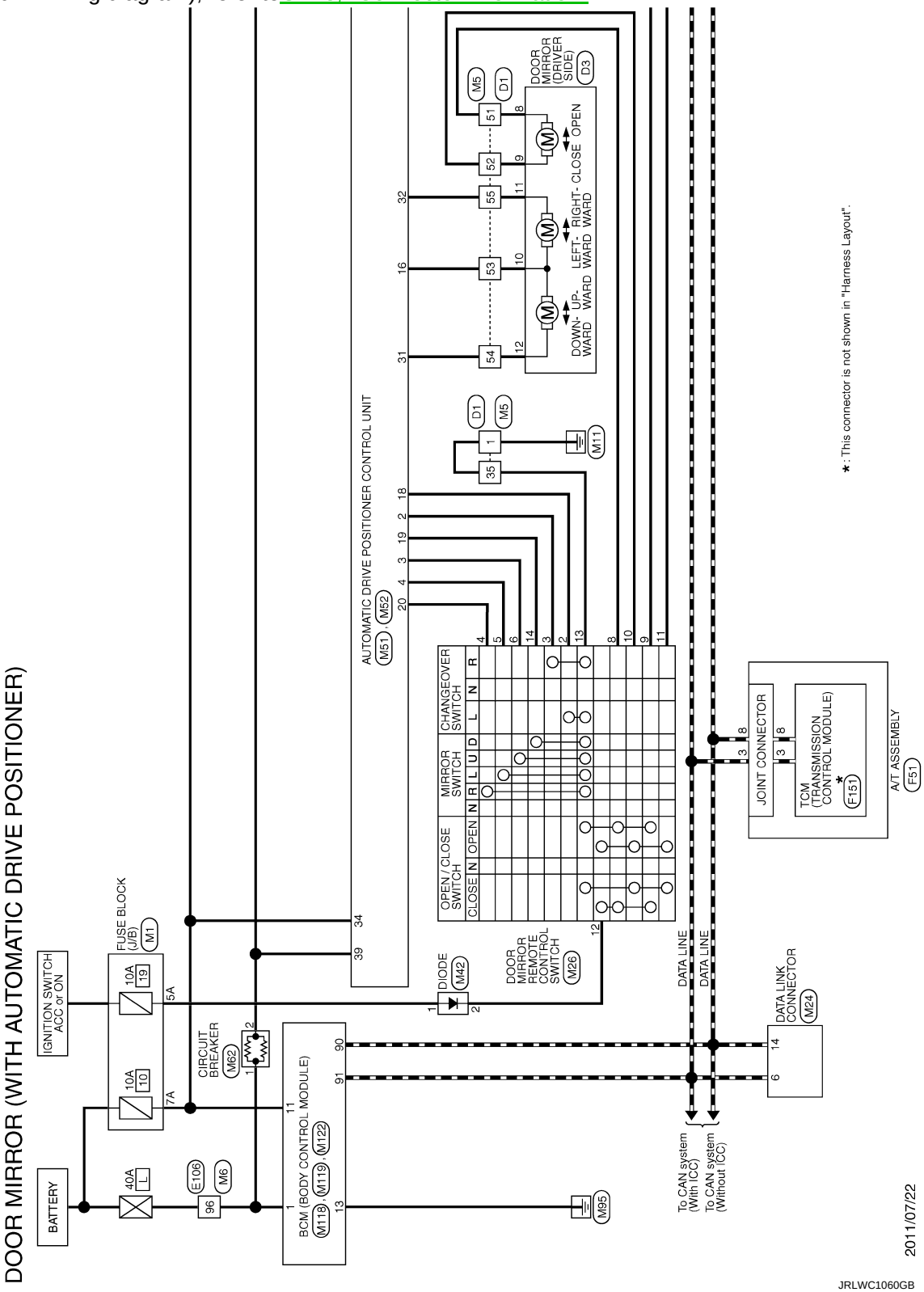
JCLWA3792GB

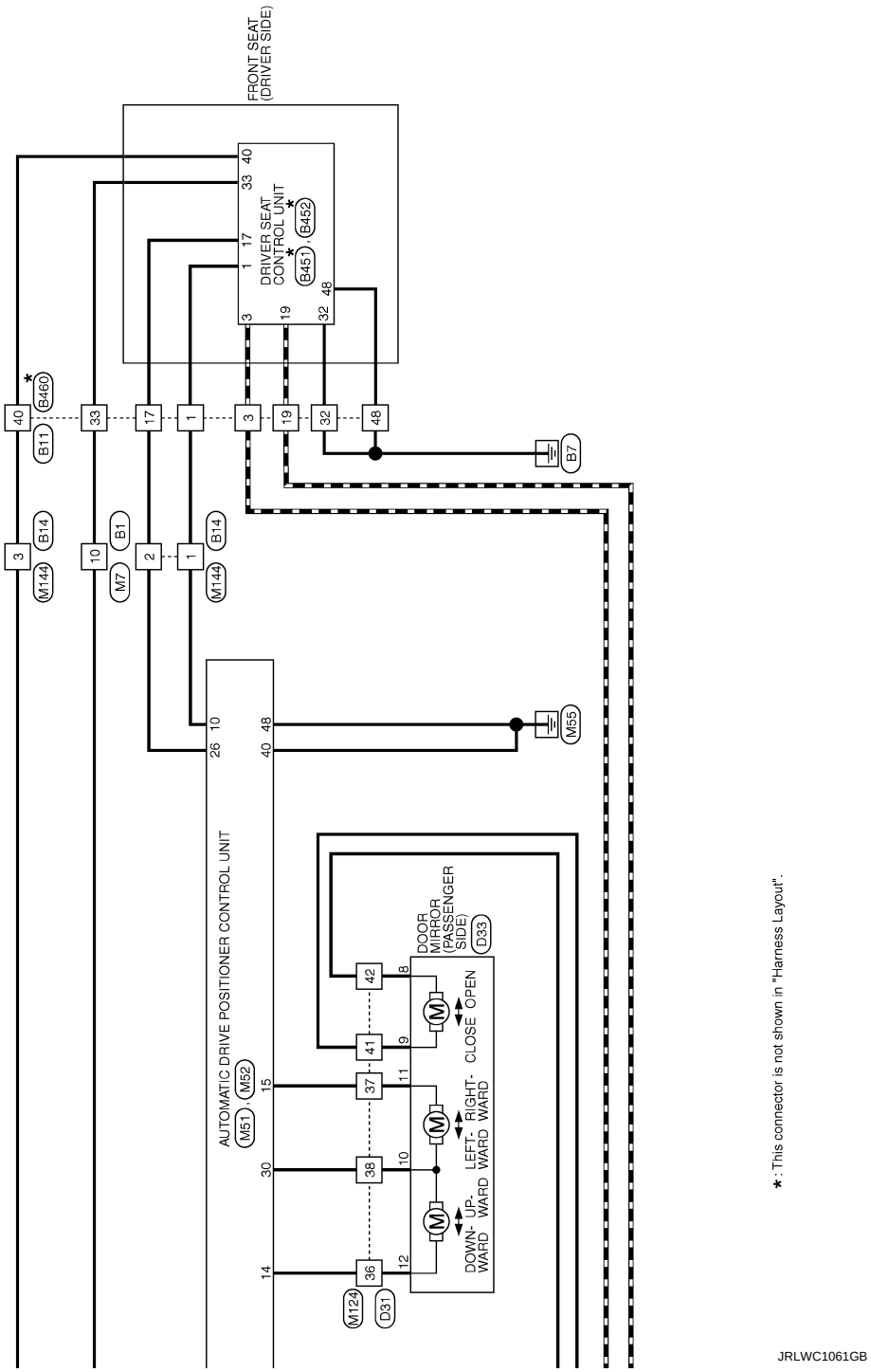
MIRROR SYSTEM

Wiring Diagram - MIRROR SYSTEM -

INFOID:0000000007513767

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-13, "Connector Information".





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

ECU DIAGNOSIS INFORMATION

DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:0000000007776947

VALUES ON THE DIAGNOSIS TOOL

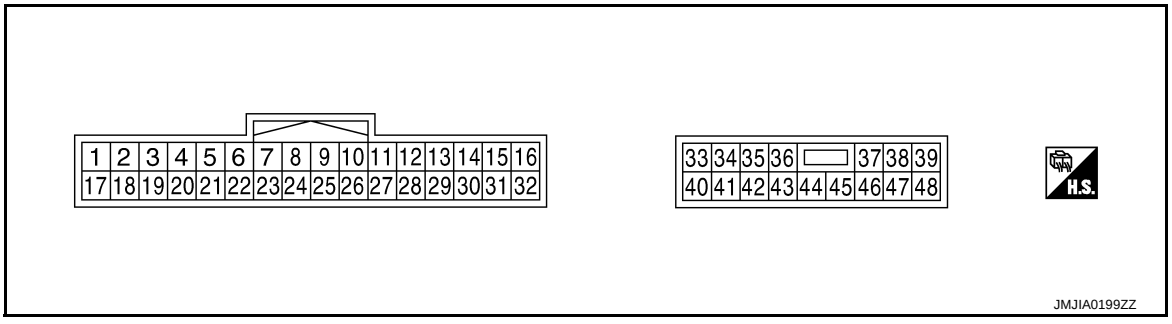
CONSULT MONITOR ITEM

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

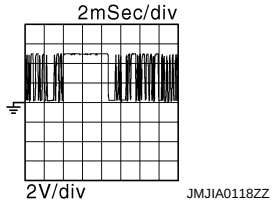
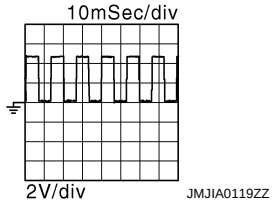
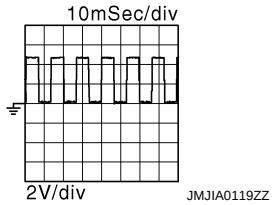
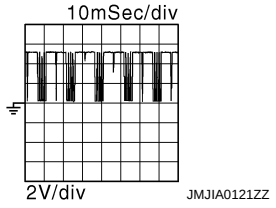
Monitor Item	Condition		Value/Status
TELESCO SW-FR	Telescopic switch	Forward	ON
		Other than above	OFF
TELESCO SW-RR	Tilt switch	Backward	ON
		Other than above	OFF
DETENT SW	AT selector lever	P position	OFF
		Other than above	ON
STARTER SW	Ignition position	Cranking	ON
		Other than above	OFF
SLIDE PULSE	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 FR PULSE	Seat lifter (front)	Up	The numeral value decreases *1
		Down	The numeral value increases *1
		Other than above	No change to numeral value*1
LIFT RR PULSE	Seat lifter (rear)	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 SEN	Tilt position		Change between 1.2 (close to top) 3.4 (close to bottom)
TELESCO SEN	Telescopic position		Change between 3.4 (close to top) 0.8 (close to bottom)

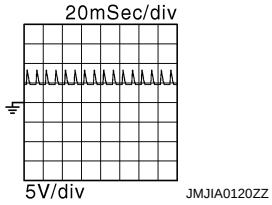
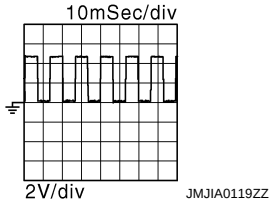
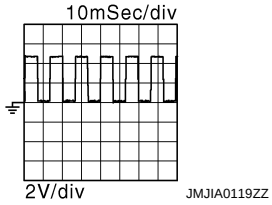
*1: The value at the position attained when the battery is connected is regarded as 32768.

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
1 (L/W)	Ground	UART communication (RX)	Input	Ignition switch ON		
3 (R/Y)	—	CAN-H	—	—		—
9 (W/G)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	
					Stop	0 or 5
10 (P/B)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	
					Stop	0 or 5
11 (B/R)	Ground	Sliding switch backward signal	Input	Sliding switch	Operate (backward)	0
					Release	Battery voltage
12 (SB)	Ground	Reclining switch backward signal	Input	Reclining switch	Operate (backward)	0
					Release	Battery voltage
13 (LG/R)	Ground	Lifting switch (front) down signal	Input	Lifting switch (front)	Operate (down)	0
					Release	Battery voltage
14 (G/B)	Ground	Lifting switch (rear) down signal	Input	Lifting switch (rear)	Operate (down)	0
					Release	Battery voltage
16 (O)	Ground	Sensor power supply	Output	—		5
17 (Y/R)	Ground	UART communication (TX)	Output	Ignition switch ON		

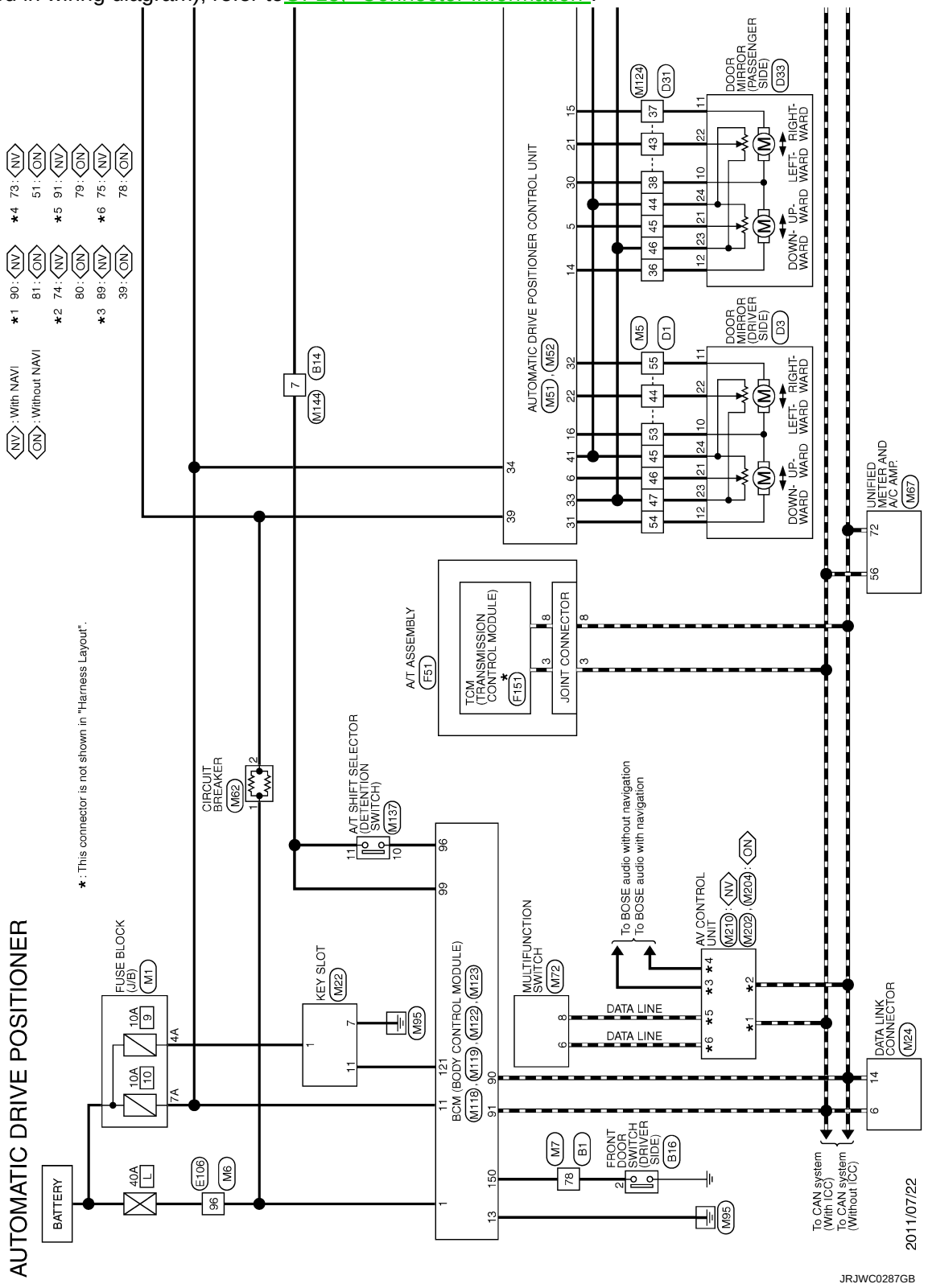
Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
19 (V)	—	CAN-L	—	—		—
21 (L/Y)	Ground	Detention switch	Input	A/T selector lever	P position	0
					Except P position	
24 (R)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	
					Stop	0 or 5
25 (Y/B)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	
					Stop	0 or 5
26 (Y)	Ground	Sliding switch forward signal	Input	Sliding switch	Operate (forward)	0
					Release	Battery voltage
27 (R/G)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
					Release	Battery voltage
28 (W/B)	Ground	Lifting switch (front) up signal	Input	Seat lifting switch (front)	Operate (up)	0
					Release	Battery voltage
29 (P/L)	Ground	Lifting switch (rear) up signal	Input	Seat lifting switch (rear)	Operate (up)	0
					Release	Battery voltage
31 (GR)	Ground	Sensor ground	—	—		0
32 (B/W)	Ground	Ground (signal)	—	—		0
33 (R)	Ground	Power source (C/B)	Input	—		Battery voltage
35 (W/R)	Ground	Sliding motor forward output signal	Output	Seat sliding	Operate (forward)	Battery voltage
					Release	0

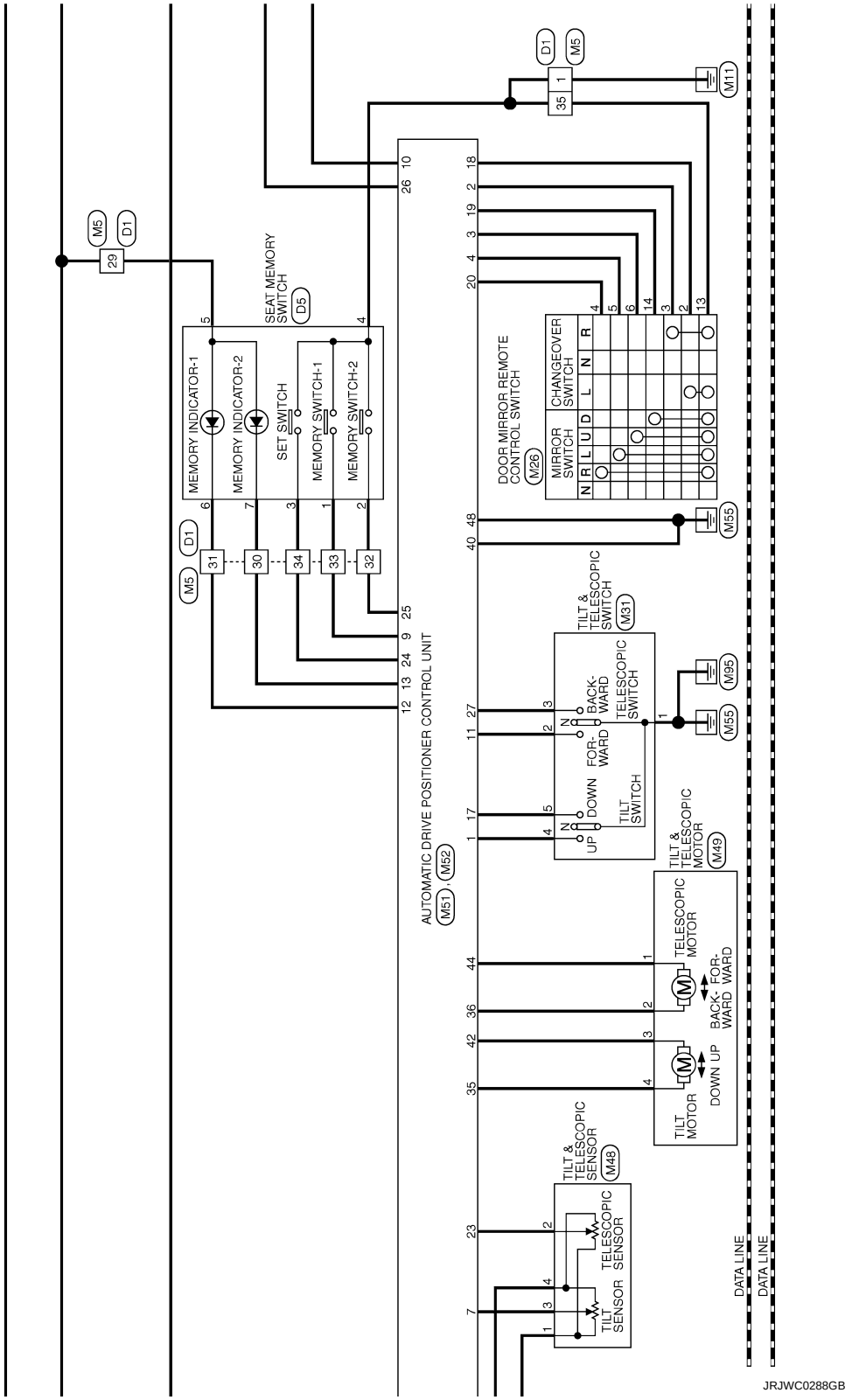
Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx)
+	-	Signal name	Input/ Output			
36 (G/Y)	Ground	Reclining motor forward output signal	Output	Seat reclining	Operate (forward)	Battery voltage
					Release	0
37 (G/W)	Ground	Lifting motor (front) down output signal	Output	Seat lifting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

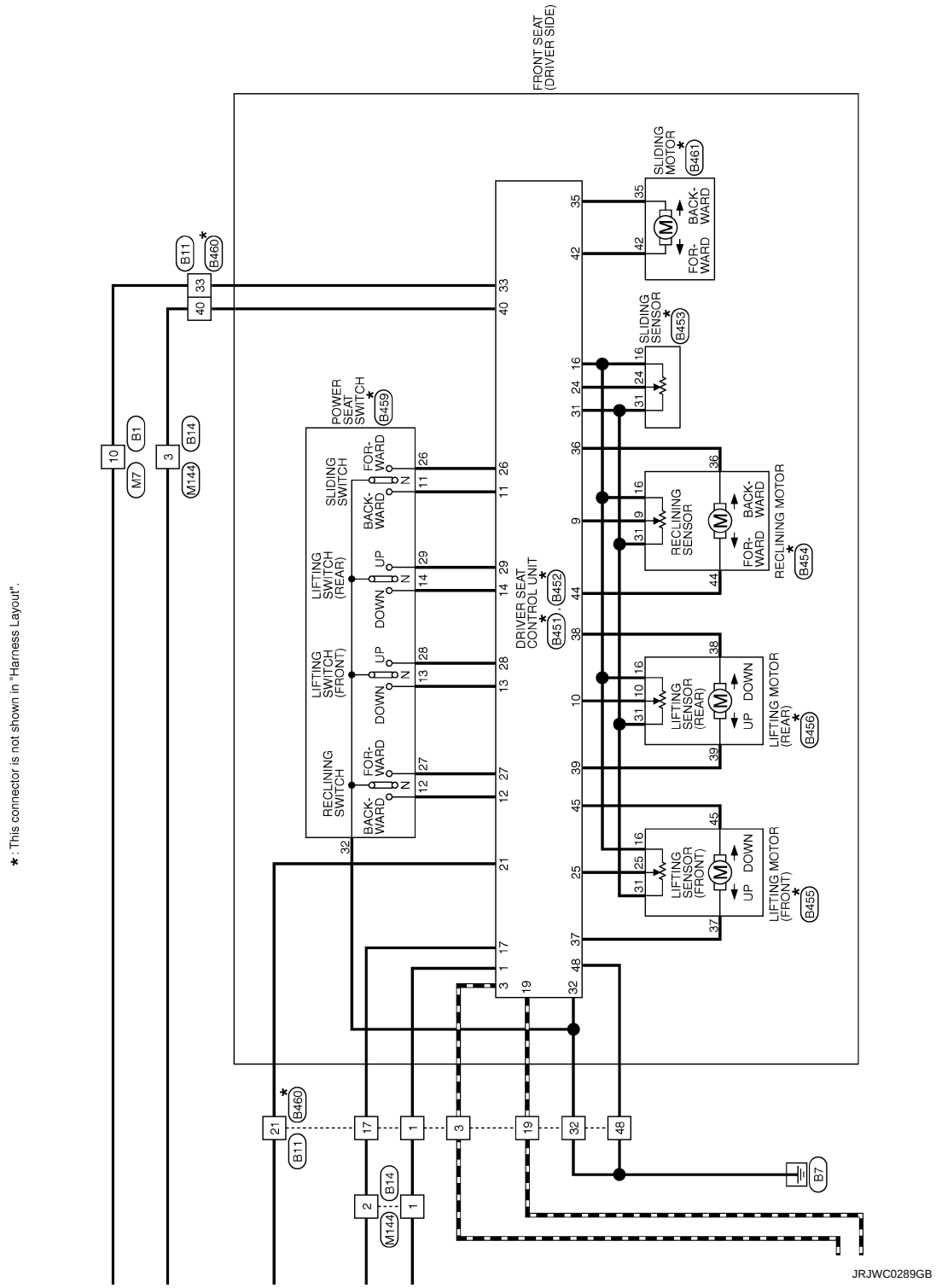
Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

INFOID:0000000007776948

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer toGI-13, "Connector Information".




AUTOMATIC DRIVE POSITIONER CONTROL UNIT
M51, M52
SEAT MEMORY SWITCH
D5
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
DOOR MIRROR REMOTE CONTROL SWITCH
M26
MIRROR SWITCH
CHANGEOVER SWITCH
TILT & TELESCOPIC SWITCH
M31
TELESCOPIC SWITCH
TILT SWITCH
BACK-WARD
FOR-WARD
DOWN
UP
TILT & TELESCOPIC MOTOR
M49
TELESCOPIC MOTOR
TILT MOTOR
BACK-WARD
FOR-WARD
DOWN
UP
TILT & TELESCOPIC SENSOR
M48
TELESCOPIC SENSOR
TILT SENSOR
DATA LINE
DATA LINE
M11
M55
M95
JRJWC0288GB



Fail Safe

INFOID:0000000007776949

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-45
	Tilt sensor	B2118	ADP-50
	Telescopic sensor	B2119	ADP-53
	Detent switch	B2126	ADP-56
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-58
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-46
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-48

DTC Index

INFOID:0000000007776950

CONSULT display	Timing*1		Item	Reference page
	Current malfunction	Previous malfunction		
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-45
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	ADP-46
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-48
TILT SENSOR [B2118]	0	1-39	Tilt sensor input	ADP-50
TELESCO SENSOR [B2119]	0	1-39	Telescopic sensor input	ADP-53
DETENT SW [B2126]	0	1-39	Detention switch condition	ADP-56
UART COMM [B2128]	0	1-39	UART communication	ADP-58

*1:

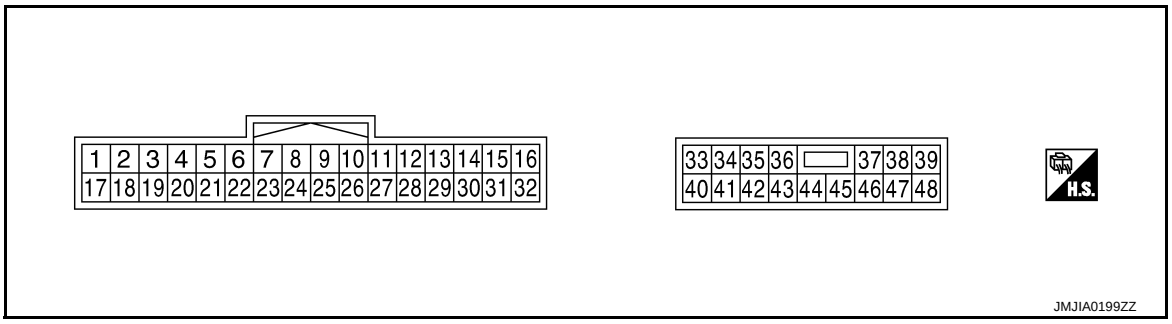
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

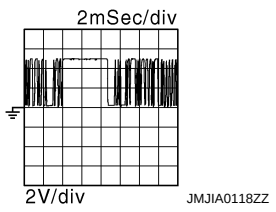
Reference Value

INFOID:0000000007776951

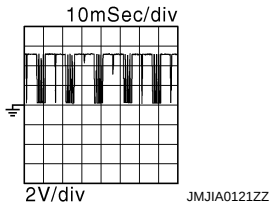
TERMINAL LAYOUT



PHYSICAL VALUES

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

Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx.)
(+)	(-)	Signal name	Input/ Output			
11 (SB)	Ground	Telescopic switch forward signal	Input	Telescopic switch	Operate (forward)	0
					Other than above	5
12 (BG)	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Illuminate	0
					Other than above	Battery voltage
13 (P)	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Illuminate	0
					Other than above	Battery voltage
14 (BG)	Ground	Door mirror motor (RH) up output signal	Output	Door mirror RH	Operate (up)	Battery voltage
					Other than above	0
15 (GR)	Ground	Door mirror motor (RH) left output signal	Output	Door mirror RH	Operate (left)	Battery voltage
					Other than above	0
16 (Y)	Ground	Door mirror motor (LH) down output signal	Output	Door mirror (LH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (LH) right output signal			Operate (right)	Battery voltage
					Other than above	0
17 (W)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
					Other than above	5
18 (P)	Ground	Changeover switch LH signal	Input	Changeover switch position	LH	0
					Neutral or RH	5
19 (SB)	Ground	Mirror switch down signal	Input	Mirror switch	Operate (down)	0
					Other than above	5
20 (BR)	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
					Other than above	5
21 (L)	Ground	Door mirror sensor (RH) left/right signal	Input	Door mirror RH position		Change between 3.4 (close to left edge) 0.6 (close to right edge)
22 (G)	Ground	Door mirror sensor (LH) left/right signal	Input	Door mirror LH position		Change between 0.6 (close to left edge) 3.4 (close to right edge)
23 (P)	Ground	Telescopic sensor signal	Input	Telescopic position		Change between 0.8 (close to top) 3.4 (close to bottom)

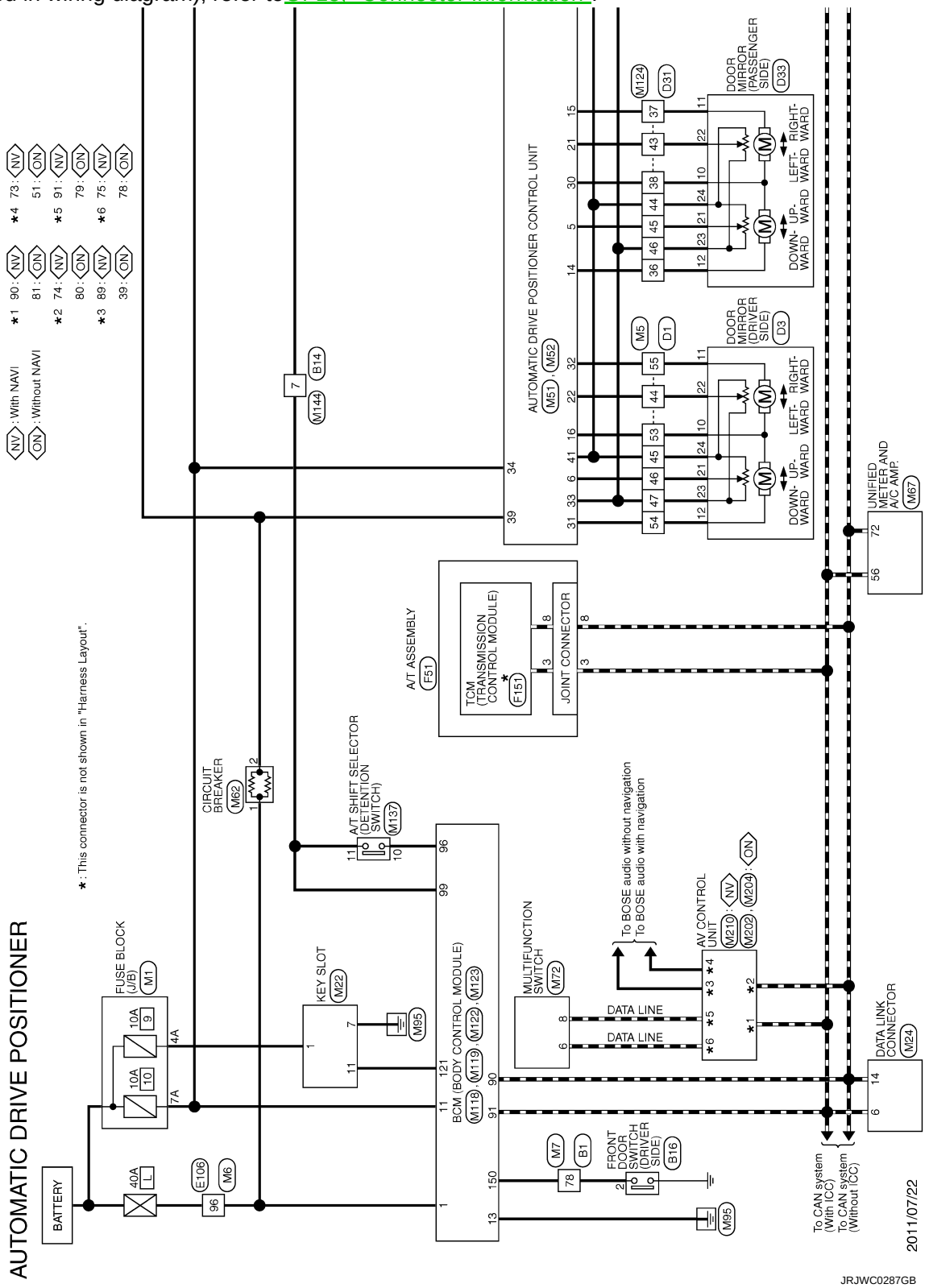
Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx.)
(+)	(-)	Signal name	Input/ Output			
24 (R)	Ground	Set switch signal	Input	Set switch	Push	0
					Other than above	5
25 (SB)	Ground	Memory switch 2 signal	Input	Memory switch 2	Push	0
					Other than above	5
26 (Y)	Ground	UART communication (RX)	Input	Ignition switch ON		
27 (G)	Ground	Telescopic switch backward signal	Input	Telescopic switch	Operate (backward)	0
					Other than above	5
30 (R)	Ground	Door mirror motor (RH) down output signal	Output	Door mirror (RH)	Operate (down)	Battery voltage
					Other than above	0
		Door mirror motor (RH) right output signal			Operate (right)	Battery voltage
					Other than above	0
31 (LG)	Ground	Door mirror motor (LH) up output signal	Output	Door mirror (LH)	Operate (up)	Battery voltage
					Other than above	0
32 (L)	Ground	Door mirror motor (LH) left output signal	Output	Door mirror (LH)	Operate (left)	Battery voltage
					Other than above	0
33 (W)	Ground	Sensor power supply	Input	—		5
34 (R)	Ground	Power source (Fuse)	Input	—		Battery voltage
35 (L)	Ground	Tilt motor up output signal	Output	Steering tilt	Operate (up)	Battery voltage
					Other than above	0
36 (GR)	Ground	Telescopic motor forward output signal	Output	Steering telescopic	Operate (forward)	Battery voltage
					Other than above	0
39 (W)	Ground	Power source (C/B)		—		Battery voltage
40 (B)	Ground	Ground	—	—		0

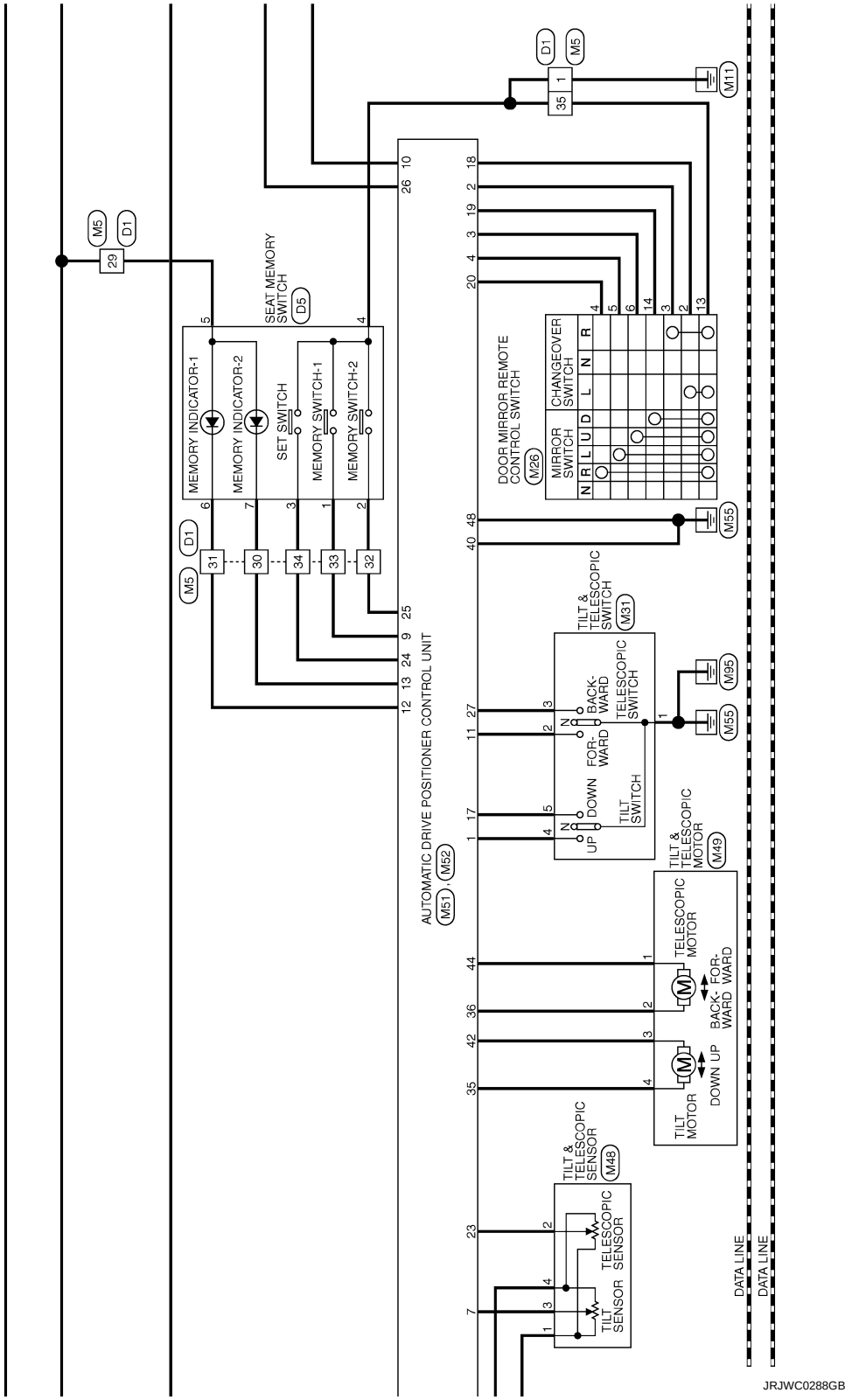
Terminal No. (Wire color)		Description		Condition		Voltage (V) (Approx.)
(+)	(-)	Signal name	Input/ Output			
41 (Y)	Ground	Sensor ground	—	—		0
42 (BG)	Ground	Tilt motor down output signal	Output	Steering tilt	Operate (down)	Battery voltage
					Other than above	0
44 (G)	Ground	Telescopic motor backward output signal	Output	Steering telescopic	Operate (backward)	Battery voltage
					Other than above	0
48 (B)	Ground	Ground	—	—		0

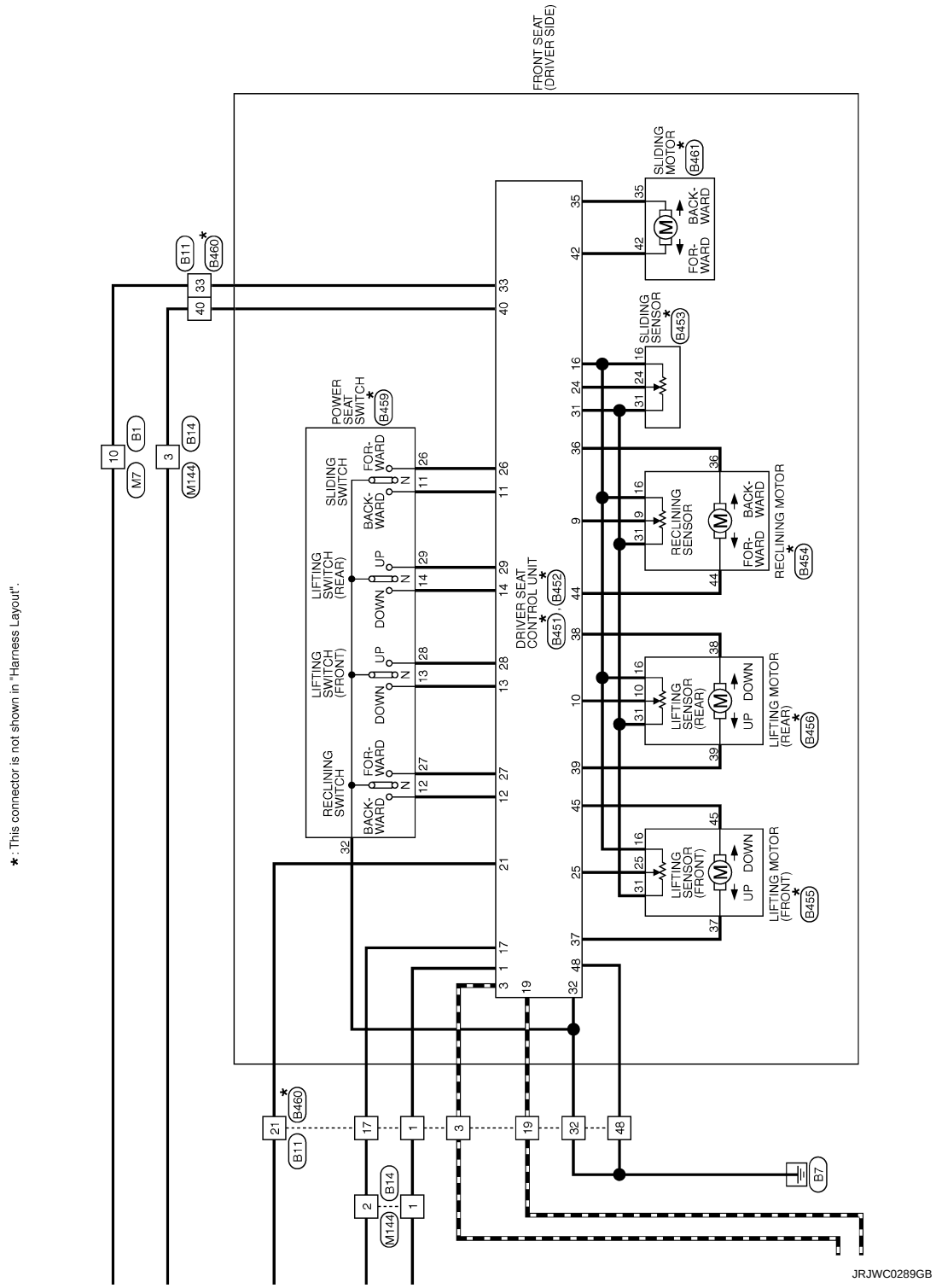
Wiring Diagram - AUTOMATIC DRIVE POSITIONER CONTROL SYSTEM -

INFOID:0000000007815215

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer toGI-13, "Connector Information".




AUTOMATIC DRIVE POSITIONER CONTROL UNIT
M51, M52
SEAT MEMORY SWITCH
D5
MEMORY INDICATOR-1
MEMORY INDICATOR-2
SET SWITCH
MEMORY SWITCH-1
MEMORY SWITCH-2
DOOR MIRROR REMOTE CONTROL SWITCH
M26
MIRROR SWITCH
CHANGEOVER SWITCH
TILT & TELESCOPIC SWITCH
M31
TELESCOPIC SWITCH
TILT SWITCH
BACK-WARD
FOR-WARD
DOWN
UP
TILT & TELESCOPIC MOTOR
M49
TELESCOPIC MOTOR
TILT MOTOR
BACK-WARD
FOR-WARD
DOWN
UP
TILT & TELESCOPIC SENSOR
M48
TELESCOPIC SENSOR
TILT SENSOR
DATA LINE
DATA LINE
M11
M55
M95
JRJWC0288GB



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

SYMPTOM DIAGNOSIS

DOOR MIRROR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007513776

1. CHECK AUTOMATIC DRIVE POSITIONER SYSTEM

Check door mirror operation 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-11, "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-13, "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-45, "Intermittent Incident"
NO >> GO TO 1.

REVERSE INTERLOCK DOOR MIRROR DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000007513777

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-64, "CONSULT Function (TRANSMISSION)"

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

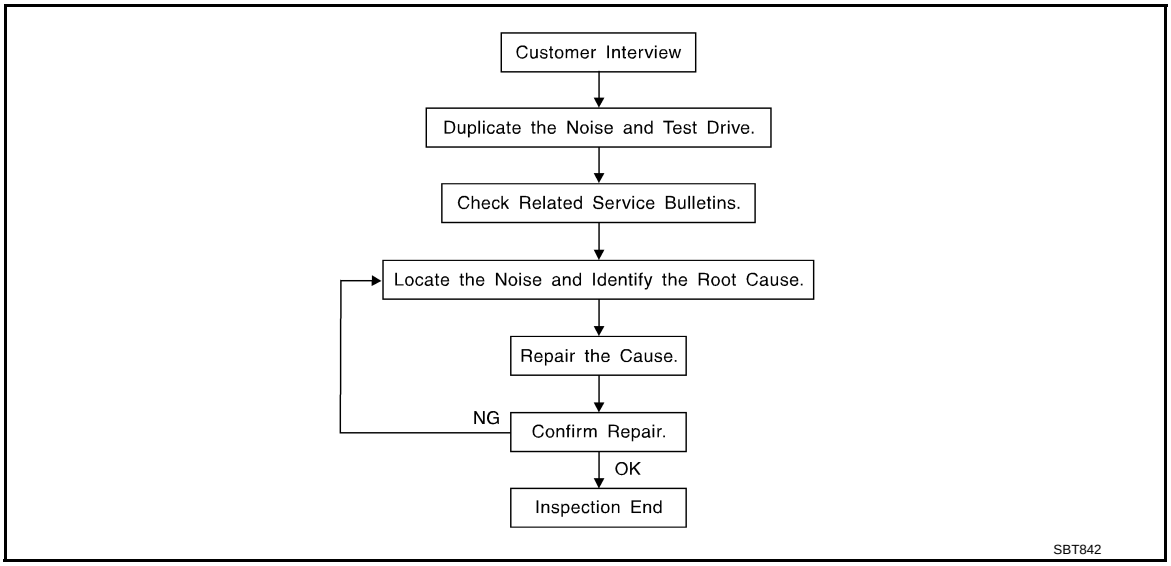
Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident"
NO >> GO TO 1.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000007513778



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-41, "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 a technician 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 the repair is reconfirmed.

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 is are suspected to be the cause of the noise.
  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 is are suspected to be the cause of 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 by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.
  Refer to MIR-39, "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-43980) is available through the authorized Nissan Parts Department.

CAUTION:
Never 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-43980). Each item can 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 is be visible or does not fit. Will only last a few months.
SILICONE SPRAY
Used when grease cannot be applied.
DUCT TAPE
Used 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:0000000007513779

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:
   Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

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 following:

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. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

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

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 seats in and the load placed on the seat when the noise occurs. 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

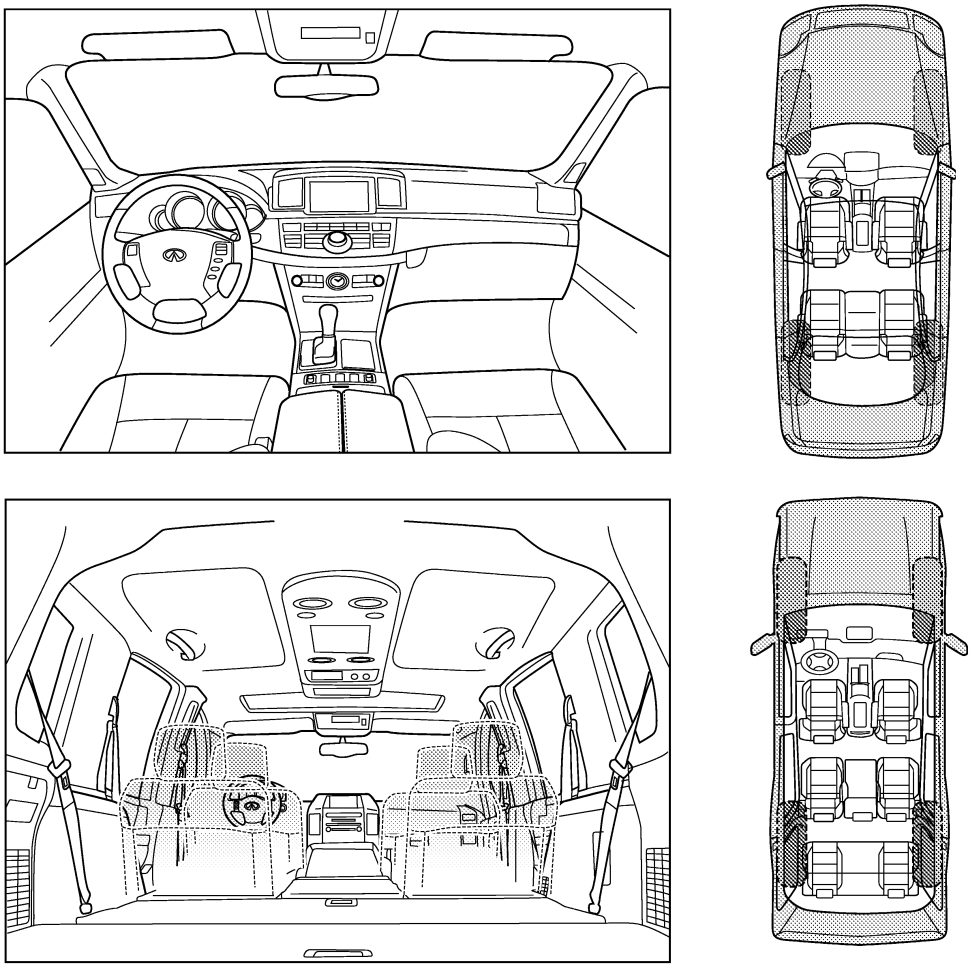
INFOID:0000000007513780

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:0000000007513781

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

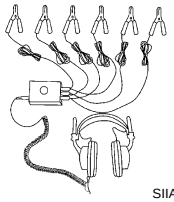
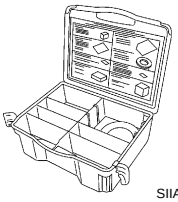
PREPARATION

PREPARATION

Special Service Tools

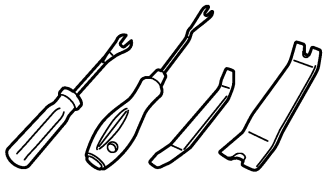
INFOID:0000000007627586

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description
(J-39570) Chassis ear	 SIIA0993E	Locates the noise
(J-43980) NISSAN Squeak and Rattle Kit	 SIIA0994E	Repairs the cause of noise

Commercial Service Tools

INFOID:0000000007627587

Tool name		Description
Remover tool	 JMKIA3050ZZ	Removes clips, pawls and metal clips

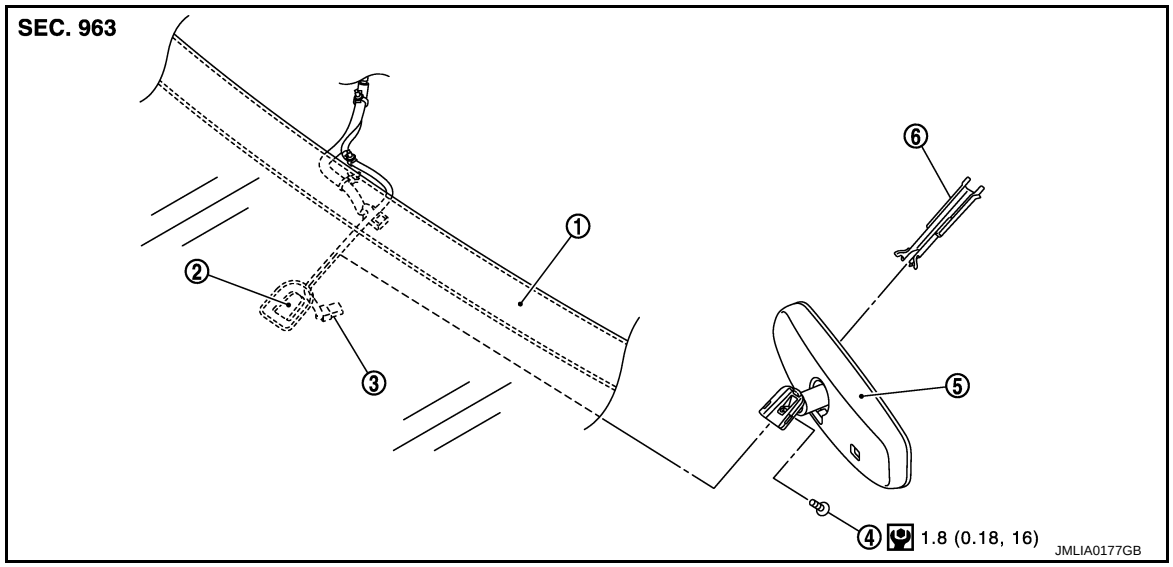
REMOVAL AND INSTALLATION

INSIDE MIRROR

Exploded View

INFOID:0000000007513783

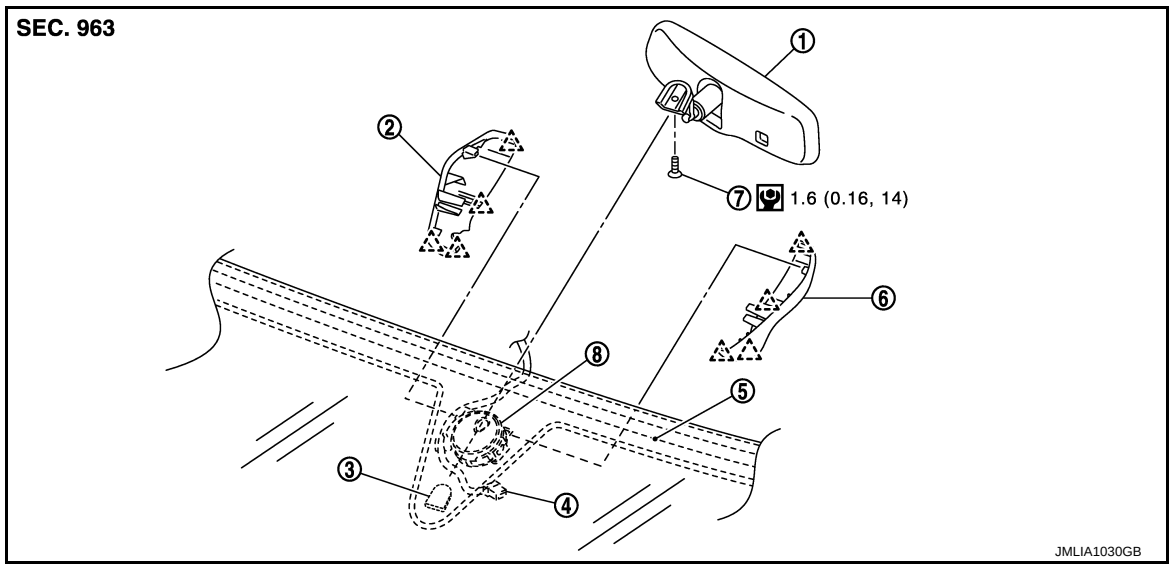
Base model



1. Windshield glass
2. Inside mirror base
3. Harness connector
4. TORX bolt
5. Inside mirror assembly
6. Inside mirror cover

N·m (kg·m, in-lb)

Option model



1. Inside mirror assembly
2. Rain sensor cover RH
3. Inside mirror base
4. Harness connector
5. Windshield glass
6. Rain sensor cover LH
7. TORX bolt
8. Rain sensor

: Pawl

N·m (kg·m, in-lb)

Removal and Installation

INFOID:0000000007513784

REMOVAL

Base model

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

Option model

1. Remove the rain sensor cover (LH and RH).
2. Disconnect harness connector from inside mirror.
3. Remove TORX bolt and slide inside mirror upward to remove.

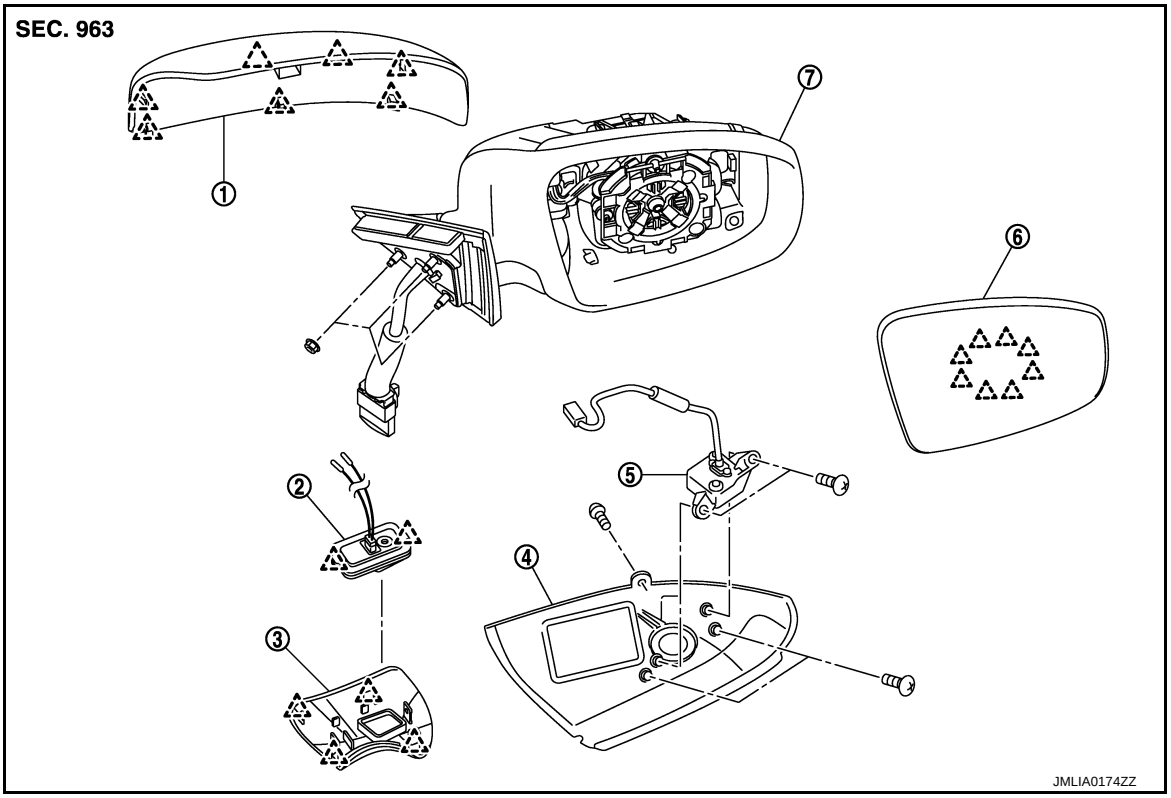
INSTALLATION

Install in the reverse order of removal.

DOOR MIRROR

Exploded View

INFOID:0000000007513785



1. Door mirror cover
2. Puddle lamp
3. Base cover
4. Side camera finisher assembly (with side camera model)
5. Side camera assembly (with side camera model)
6. Glass mirror
7. Mirror assembly

: Pawl

DOOR MIRROR ASSEMBLY

DOOR MIRROR ASSEMBLY : Removal and Installation

INFOID:0000000007513786

REMOVAL

1. Remove front door finisher. Refer to INT-11, "Removal and Installation".
2. Remove front door sash inner cover. Refer to GW-18, "Exploded View".
3. Disconnect door mirror harness connector.
4. Remove door mirror mounting nuts, and remove door mirror assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Perform camera image calibration. Refer to AV-202, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Description".

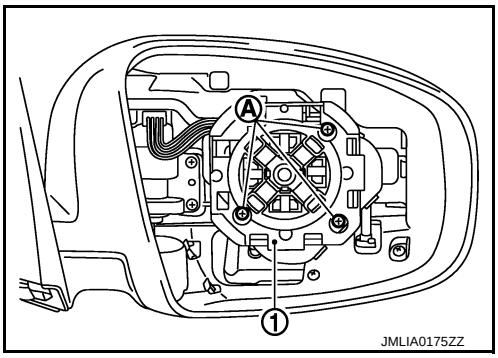
DOOR MIRROR ASSEMBLY : Disassembly and Assembly

INFOID:0000000007513787

DISASSEMBLY

1. Remove door mirror assembly. Refer to MIR-47, "DOOR MIRROR ASSEMBLY : Removal and Installation".

2. Remove glass mirror. Refer to MIR-48, "GLASS MIRROR : Removal and Installation".
3. Remove door mirror cover. Refer to MIR-48, "DOOR MIRROR COVER : Removal and Installation".
4. Remove screws (A) and connector, and then remove actuator (1).



5. Remove side camera.
   - Side camera LH: Refer to AV-309, "Removal and Installation".
   - Side camera RH: Refer to AV-311, "Removal and Installation".
6. Remove base cover and puddle lamp.

ASSEMBLY

Assemble in the reverse order of disassembly.

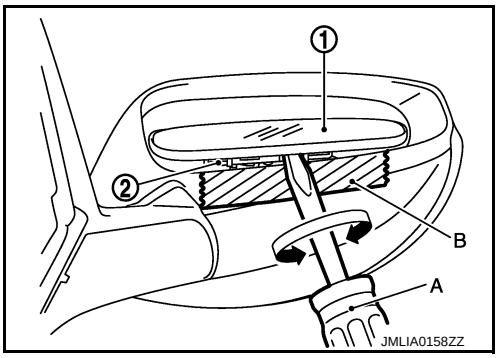
GLASS MIRROR

GLASS MIRROR : Removal and Installation

INFOID:0000000007513789

DISASSEMBLY

1. Place the glass mirror upward.
2. Put a strip of protective tape (B) on housing assembly.
3. As shown in the figure, insert a remover tool (A) between glass mirror (1) and actuator (2). Push up both pawls simultaneously to remove glass mirror lower half side.
   NOTE:
   Insert a remover tool into recesses, and push up while rotating (twisting) to make work easier.



4. Remove two terminals of mirror heater attachment.
5. Lightly lift up lower side of glass mirror, and detach both pawls of upper side as if pulling it out to disassemble glass mirror from actuator.
   NOTE:
   Be careful not to allow grease on sealing agent in center of mirror or back side of glass mirror.

ASSEMBLY

Assemble in the reverse order of disassembly.

CAUTION:

After installation, visually check that pawls are securely engaged.

DOOR MIRROR COVER

DOOR MIRROR COVER : Removal and Installation

INFOID:0000000007513791

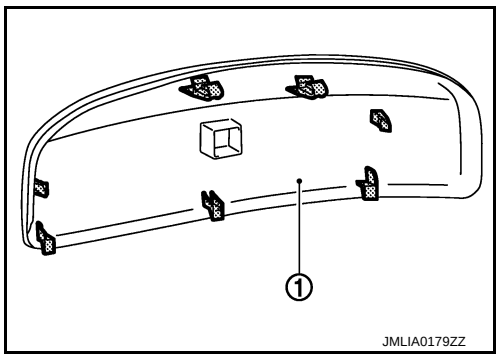
CAUTION:

Never damage the mirror bodies.

DISASSEMBLY

1. Remove the glass mirror. Refer to MIR-48, "GLASS MIRROR : Removal and Installation".

2. Remove the pawls, and disassemble the door mirror cover (1) from the mirror assembly.



ASSEMBLY

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:0000000007513792

Refer to INT-14, "Exploded View"

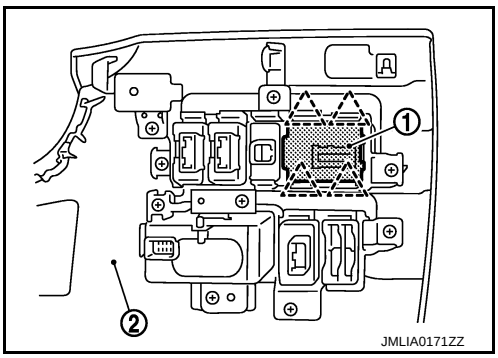
Removal and Installation

INFOID:0000000007513793

REMOVAL

1. Remove the instrument lower panel LH. Refer to INT-11, "Exploded View".
2. Remove door mirror remote control switch (1) from instrument lower panel LH (2) a using remover tool.

: Pawl



INSTALLATION

Install in the reverse order of removal.

SYSTEM DESCRIPTION

DOOR MIRROR SYSTEM

Component Description

INFOID:0000000007513795

Component		Function
Door mirror remote control switch	Mirror switch	It supplies power to mirror motor through mirror switch and changeover switch.
	Changeover switch	It transmits the LH/RH control of door mirror that supplies power.
	Open/close switch	Power is supplied to folding mirror from door remote control switch when operating switch.
Door mirror	Door mirror motor	It makes mirror face operate from side to side and up and down via integrated motor.
	Folding motor	The door mirror operates because power is received from power supply when pressing door mirror remote control switch.

INSIDE MIRROR SYSTEM

System Description

INFOID:0000000007513796

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:0000000007513797

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.

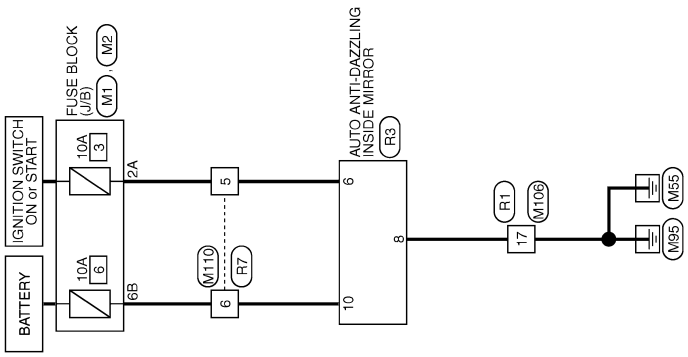
DTC/CIRCUIT DIAGNOSIS

AUTO ANTI-DAZZLING INSIDE MIRROR SYSTEM

Wiring Diagram - INSIDE MIRROR SYSTEM -

INFOID:0000000007815222

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer toGI-13, "Connector Information".



INSIDE MIRROR

2009/07/29

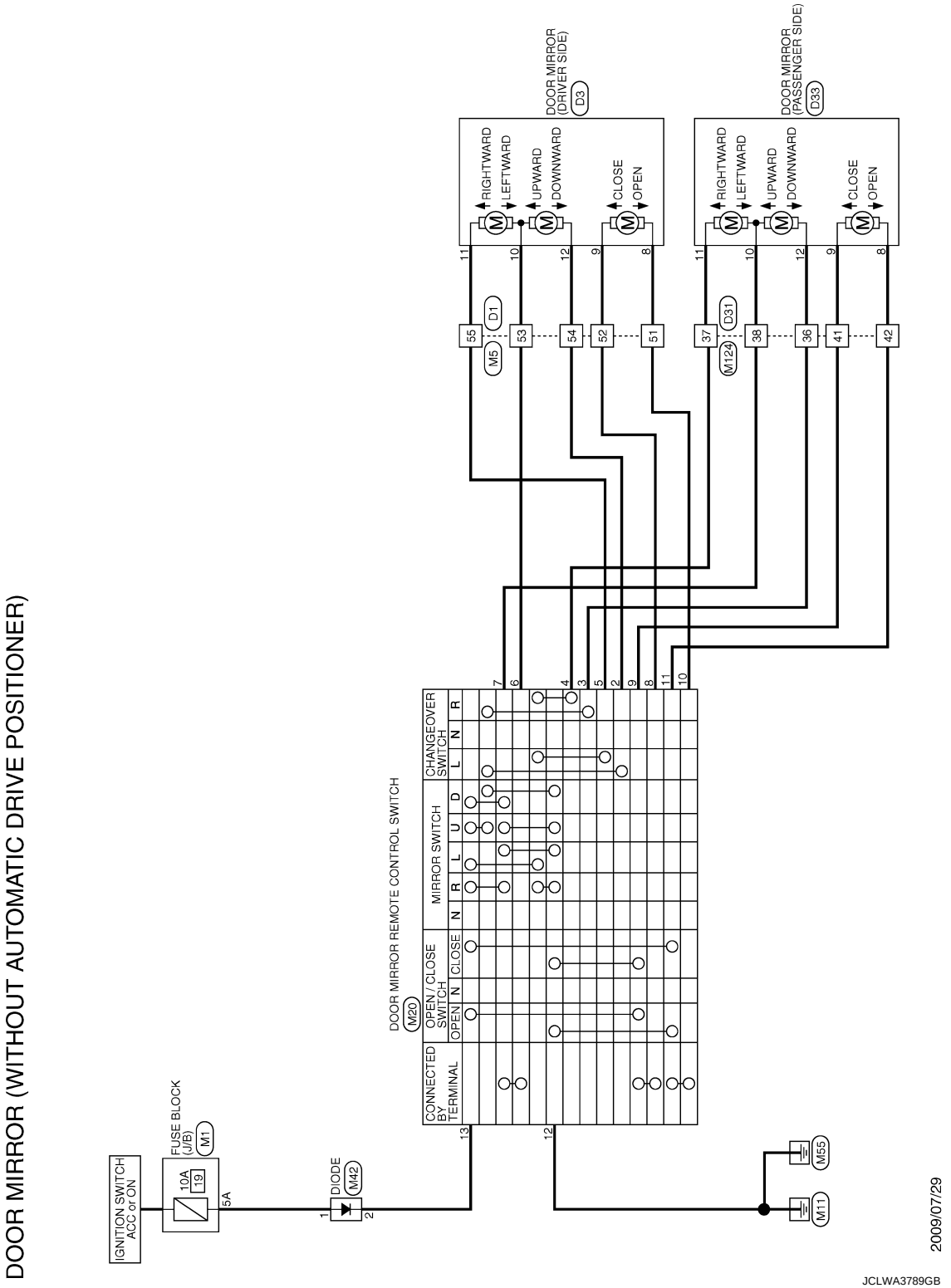
JCLWA3792GB

MIRROR SYSTEM

Wiring Diagram - MIRROR SYSTEM -

INFOID:0000000007513800

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer toGI-13, "Connector Information".

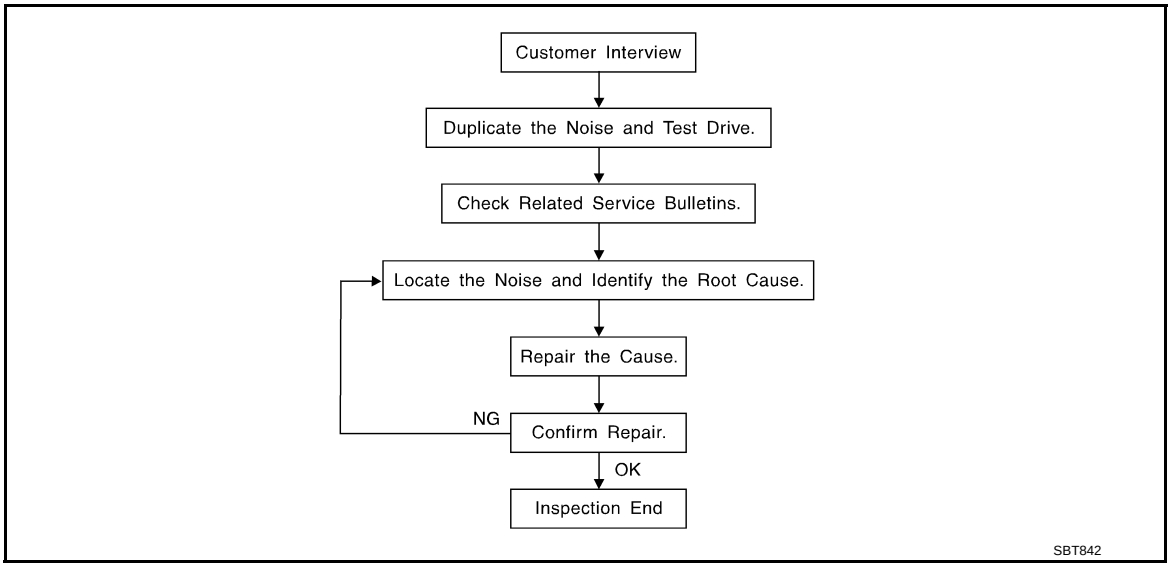


SYMPTOM DIAGNOSIS

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000007513802



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-59, "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 a technician 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 the repair is reconfirmed.
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 is are suspected to be the cause of the noise.
  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 is are suspected to be the cause of 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 by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.
  Refer to MIR-57, "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-43980) is available through the authorized Nissan Parts Department.

CAUTION:
Never 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-43980). Each item can 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 is be visible or does not fit. Will only last a few months.
SILICONE SPRAY
Used when grease cannot be applied.
DUCT TAPE
Used 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:0000000007513803

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:
Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

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 following:

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. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-43980) to repair the noise.

TRUNK

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

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 seats in and the load placed on the seat when the noise occurs. 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

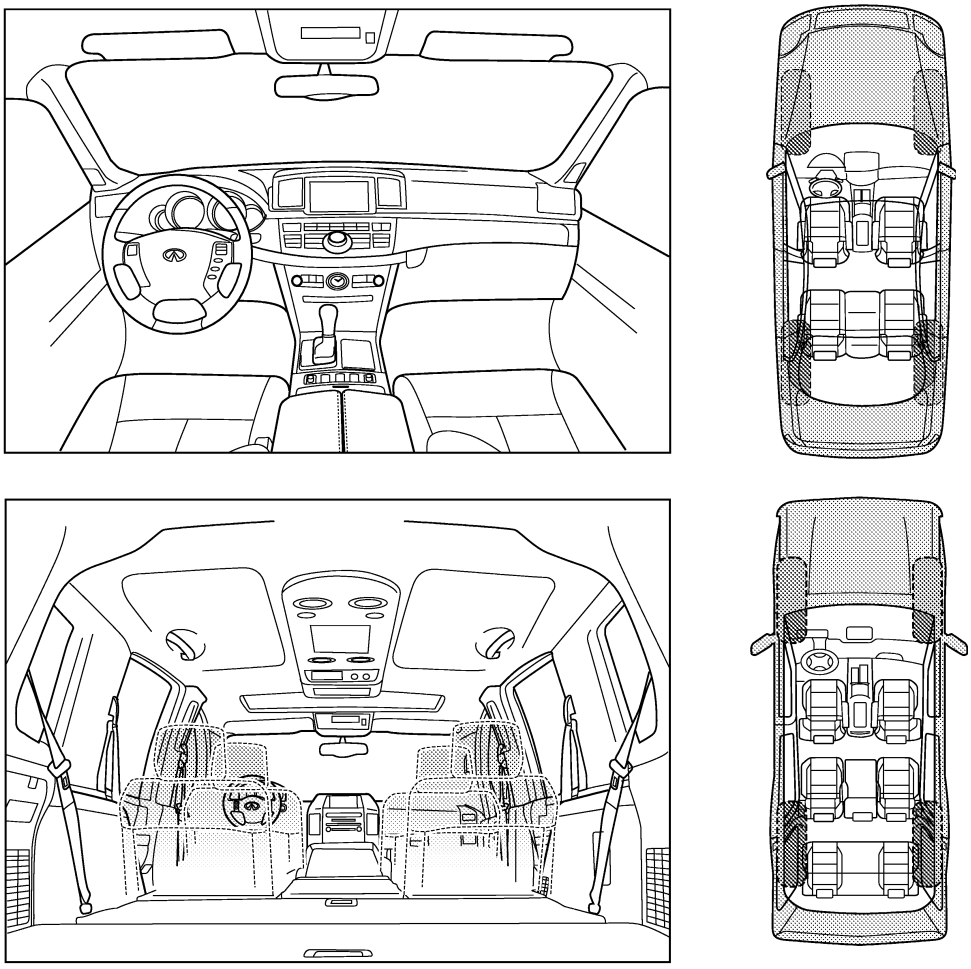
INFOID:0000000007513804

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:0000000007513805

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

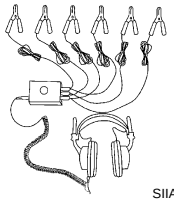
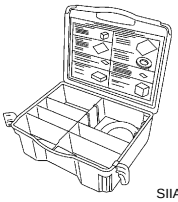
PREPARATION

PREPARATION

Special Service Tools

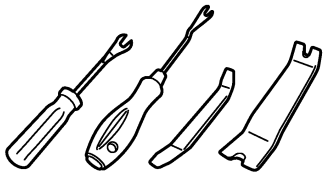
INFOID:0000000007627588

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description
(J-39570) Chassis ear	 SIIA0993E	Locates the noise
(J-43980) NISSAN Squeak and Rattle Kit	 SIIA0994E	Repairs the cause of noise

Commercial Service Tools

INFOID:0000000007627589

Tool name		Description
Remover tool	 JMKIA3050ZZ	Removes clips, pawls and metal clips

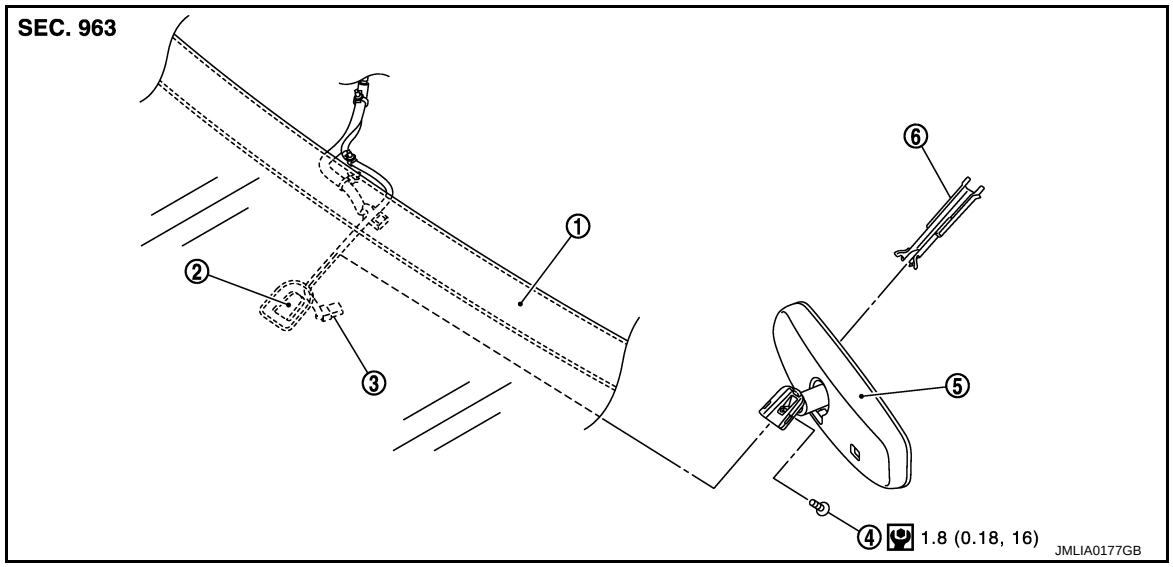
REMOVAL AND INSTALLATION

INSIDE MIRROR

Exploded View

INFOID:0000000007626668

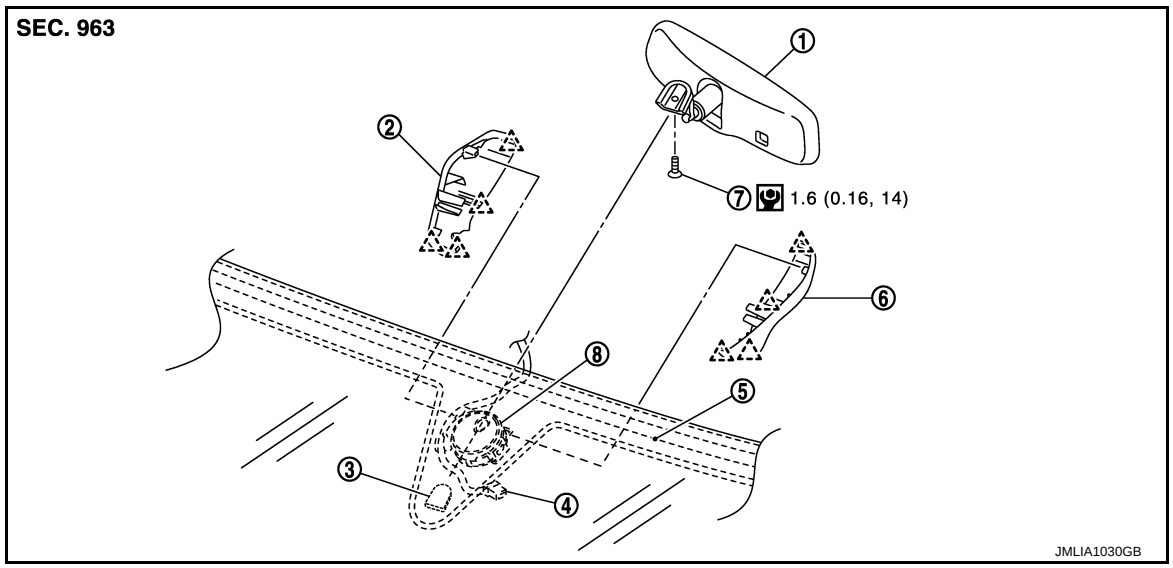
Base model



1. Windshield glass
2. Inside mirror base
3. Harness connector
4. TORX bolt
5. Inside mirror assembly
6. Inside mirror cover

N·m (kg·m, in-lb)

Option model



1. Inside mirror assembly
2. Rain sensor cover RH
3. Inside mirror base
4. Harness connector
5. Windshield glass
6. Rain sensor cover LH
7. TORX bolt
8. Rain sensor

: Pawl

N·m (kg·m, in-lb)

Removal and Installation

INFOID:0000000007626669

REMOVAL

Base model

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

Option model

1. Remove the rain sensor cover (LH and RH).
2. Disconnect harness connector from inside mirror.
3. Remove TORX bolt and slide inside mirror upward to remove.

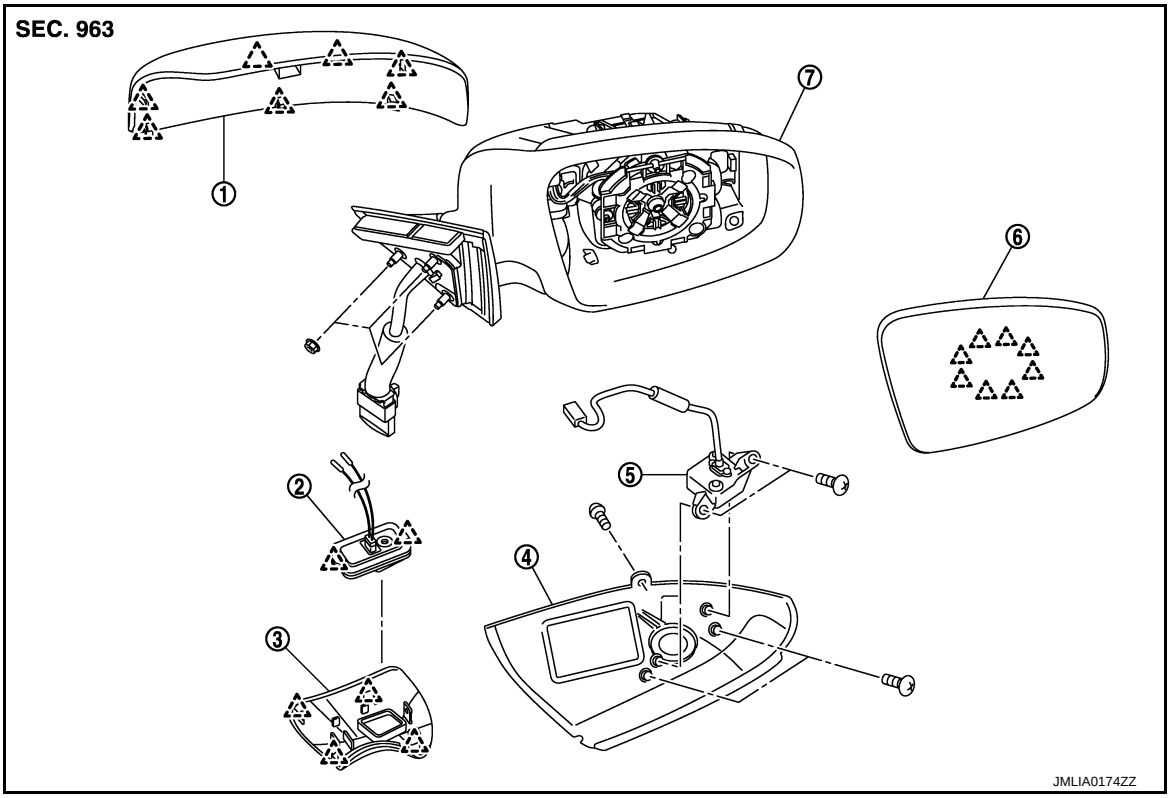
INSTALLATION

Install in the reverse order of removal.

DOOR MIRROR

Exploded View

INFOID:0000000007626670



1. Door mirror cover
2. Puddle lamp
3. Base cover
4. Side camera finisher assembly (with side camera model)
5. Side camera assembly (with side camera model)
6. Glass mirror
7. Mirror assembly

: Pawl

DOOR MIRROR ASSEMBLY

DOOR MIRROR ASSEMBLY : Removal and Installation

INFOID:0000000007626671

REMOVAL

1. Remove front door finisher. Refer to INT-11, "Removal and Installation".
2. Remove front door sash inner cover. Refer to GW-18, "Exploded View".
3. Disconnect door mirror harness connector.
4. Remove door mirror mounting nuts, and remove door mirror assembly.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Perform camera image calibration. Refer to AV-202, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Description".

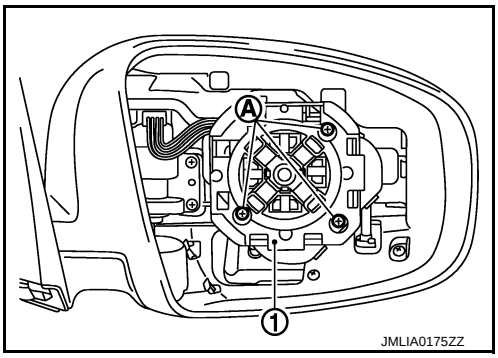
DOOR MIRROR ASSEMBLY : Disassembly and Assembly

INFOID:0000000007626672

DISASSEMBLY

1. Remove door mirror assembly. Refer to MIR-65, "DOOR MIRROR ASSEMBLY : Removal and Installation".

2. Remove glass mirror. Refer to MIR-66, "GLASS MIRROR : Removal and Installation".
3. Remove door mirror cover. Refer to MIR-66, "DOOR MIRROR COVER : Removal and Installation".
4. Remove screws (A) and connector, and then remove actuator (1).



5. Remove side camera.
   - Side camera LH: Refer to AV-309, "Removal and Installation".
   - Side camera RH: Refer to AV-311, "Removal and Installation".
6. Remove base cover and puddle lamp.

ASSEMBLY

Assemble in the reverse order of disassembly.

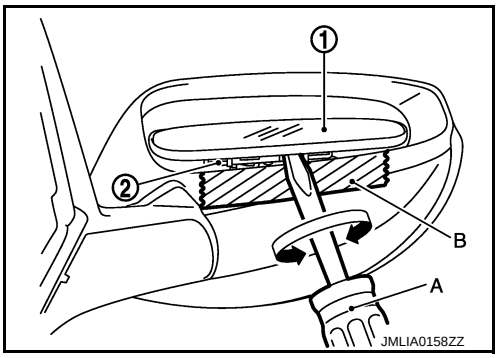
GLASS MIRROR

GLASS MIRROR : Removal and Installation

INFOID:0000000007626674

DISASSEMBLY

1. Place the glass mirror upward.
2. Put a strip of protective tape (B) on housing assembly.
3. As shown in the figure, insert a remover tool (A) between glass mirror (1) and actuator (2). Push up both pawls simultaneously to remove glass mirror lower half side.
   NOTE:
   Insert a remover tool into recesses, and push up while rotating (twisting) to make work easier.



4. Remove two terminals of mirror heater attachment.
5. Lightly lift up lower side of glass mirror, and detach both pawls of upper side as if pulling it out to disassemble glass mirror from actuator.
   NOTE:
   Be careful not to allow grease on sealing agent in center of mirror or back side of glass mirror.

ASSEMBLY

Assemble in the reverse order of disassembly.

CAUTION:

After installation, visually check that pawls are securely engaged.

DOOR MIRROR COVER

DOOR MIRROR COVER : Removal and Installation

INFOID:0000000007626676

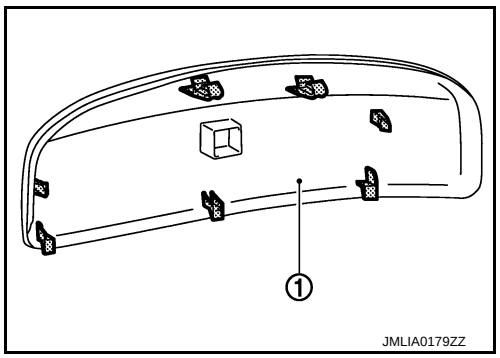
CAUTION:

Never damage the mirror bodies.

DISASSEMBLY

1. Remove the glass mirror. Refer to MIR-66, "GLASS MIRROR : Removal and Installation".

2. Remove the pawls, and disassemble the door mirror cover (1) from the mirror assembly.



ASSEMBLY

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:0000000007513816

Refer to INT-14, "Exploded View"

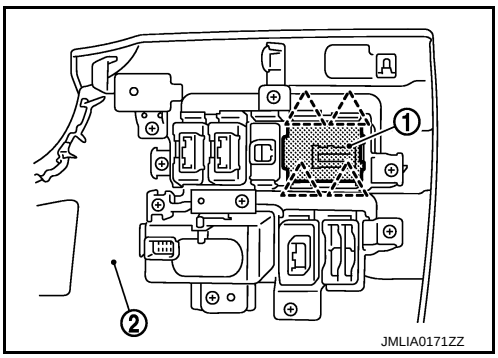
Removal and Installation

INFOID:0000000007513817

REMOVAL

1. Remove the instrument lower panel LH. Refer to INT-11, "Exploded View".
2. Remove door mirror remote control switch (1) from instrument lower panel LH (2) a using remover tool.

: Pawl



INSTALLATION

Install in the reverse order of removal.