# SECTION MIR
## MIRRORS



## CONTENTS

### WITH ADP

# BASIC INSPECTION

## DIAGNOSIS AND REPAIR WORKFLOW

### Work Flow

INFOID:0000000003136520

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-III.

Is any DTC detected?

YES >> Refer to ADP-140, "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?

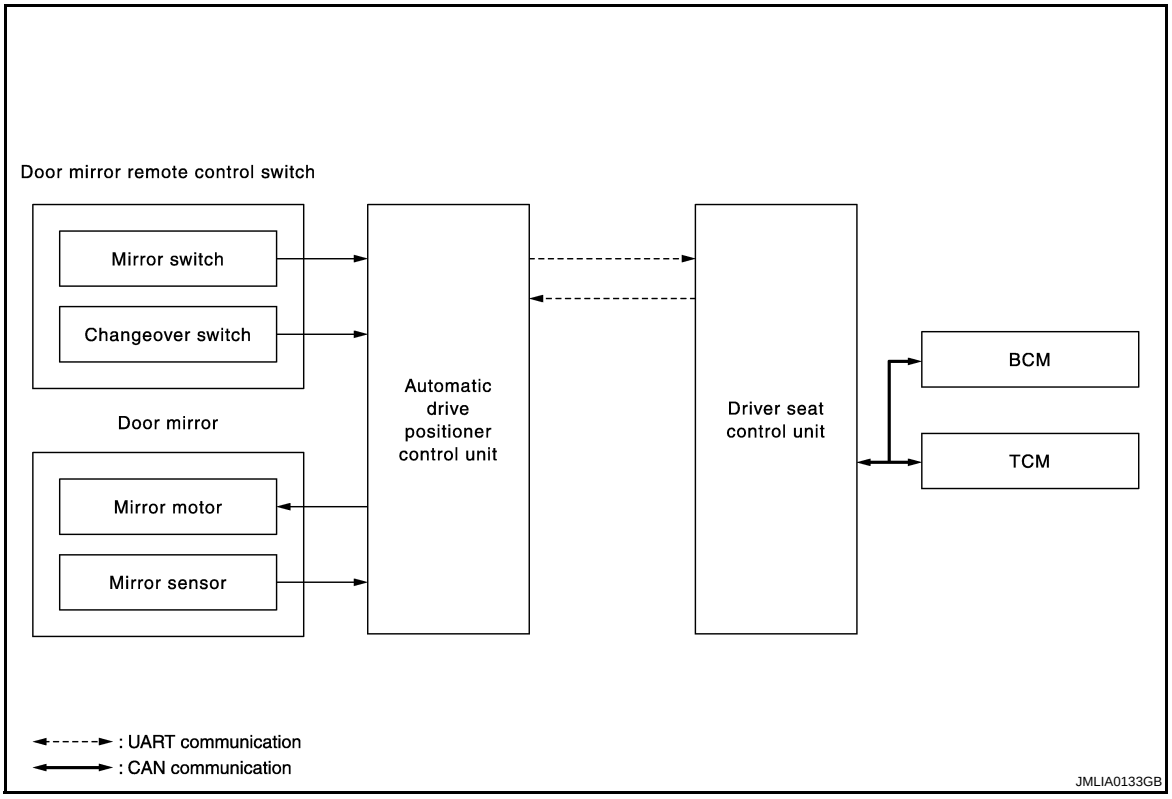
YES >> INSPECTION END
NO >> GO TO 4.

# FUNCTION DIAGNOSIS

## DOOR MIRROR SYSTEM

### System Diagram

INFOID:0000000003136521




### System Description

INFOID:0000000003136522

#### 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 control device 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 control device: 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 control device 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

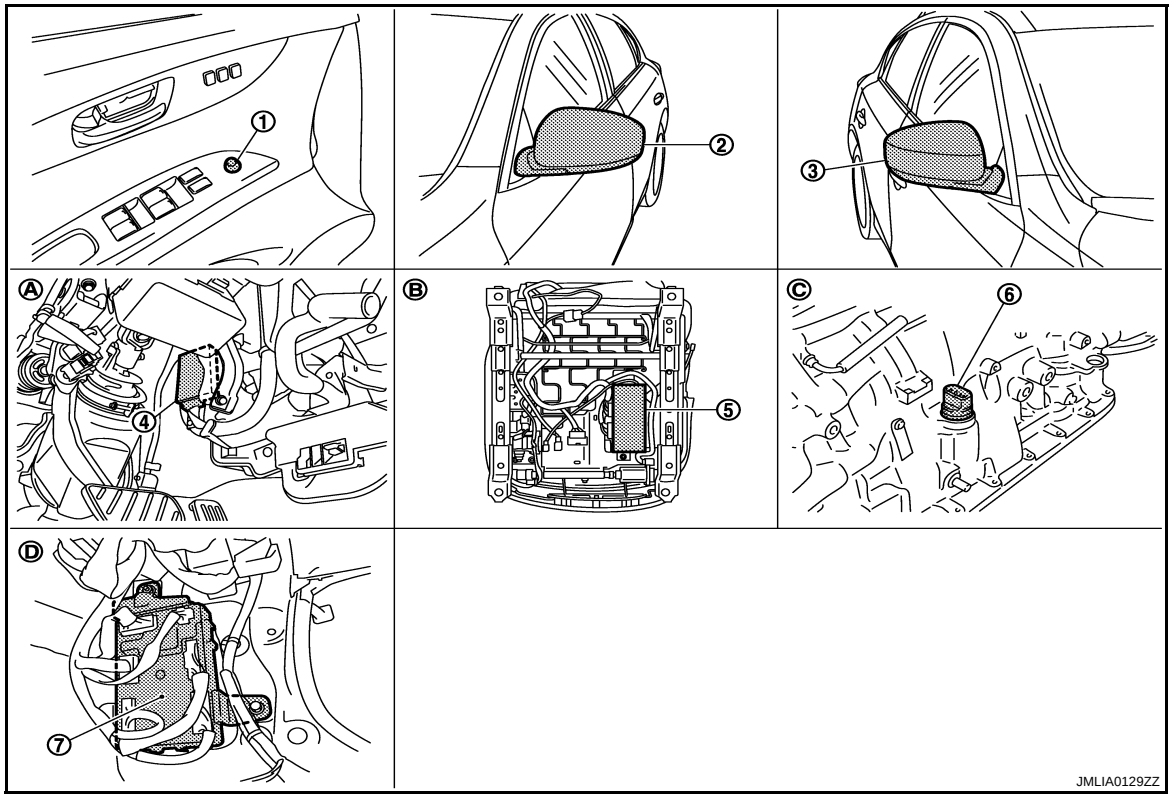
Description

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

Refer to ADP-14, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Description".

## Component Parts Location

INFOID:0000000003136523




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
5. Driver seat control unit B451, B452
6. AT assembly connector (TCM) F51
7. BCM M118, M119, M122
- 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:0000000003136524

| 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. |
| 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:0000000003136525

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:0000000003136526

| 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)

## Diagnosis Description

INFOID:0000000003698500

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

DIAGNOSTIC MODE

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

## CONSULT-III Function

INFOID:0000000003698501

SELF-DIAGNOSIS RESULTS

Refer to ADP-140, "DTC Index".

DATA MONITOR

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

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

| Test item | Description |
|---|---|
| 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:<br>ON (operated) – OFF (not operated) | ON |
| | | OFF |
| EXIT SEAT SLIDE SETTING | Entry/exit assist (seat) can be selected:<br>ON (operated) – OFF (not operated) | ON |
| | | OFF |

# COMPONENT DIAGNOSIS

## DOOR MIRROR REMOTE CONTROL SWITCH

## MIRROR SWITCH

### MIRROR SWITCH : Description

INFOID:0000000003136529

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:0000000003136530

#### 1.CHECK MIRROR SWITCH FUNCTION

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

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

Is the inspection result normal?

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

### MIRROR SWITCH : Diagnosis Procedure

INFOID:0000000003136531

#### 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 | |
| M51 | 3 | D17 | 15 | Existed |
| | 4 | | 13 | |
| | 19 | | 12 | |
| | 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-210, "Removal and Installation".
NO >> Repair or replace harness.

## 3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

| Door mirror remote control switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| D17 | 7 | 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-56, "Removal and Installation".

## 5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

# MIRROR SWITCH : Component Inspection

INFOID:0000000003136532

## 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-56, "Removal and Installation".

# CHANGEOVER SWITCH

## CHANGEOVER SWITCH : Description

INFOID:0000000003136533

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:0000000003136534

### 1.CHECK CHANGEOVER SWITCH FUNCTION

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

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

Is the inspection result normal?

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

## CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:0000000003136535

### 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 | |
| M51 | 2 | D17 | 11 | Existed |
| | 18 | | 10 | |

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-210, "Removal and Installation".
NO >> Repair or replace harness.

## 3.CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

| Door mirror remote control switch | | Ground | Continuity |
|---|---|---|---|
| Connector | Terminal | | |
| 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-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-56, "Removal and Installation".

## 5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-38, "Intermittent Incident".

>> INSPECTION END

# CHANGEOVER SWITCH : Component Inspection

INFOID:0000000003136536

## 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?

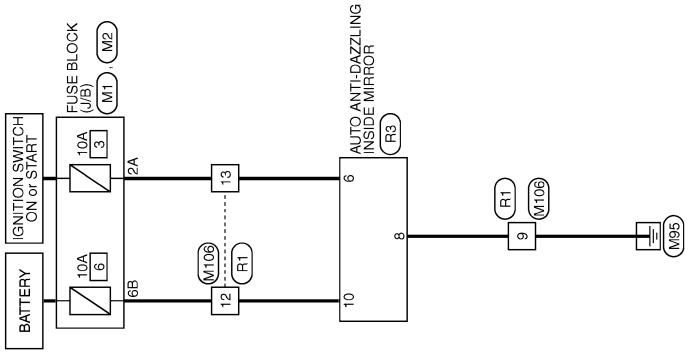
YES >> INSPECTION END

NO >> Replace door mirror remote control switch. Refer to MIR-56, "Removal and Installation".

# AUTO ANTI-DAZZLING INSIDE MIRROR SYSTEM

## Wiring Diagram - INSIDE MIRROR SYSTEM -

INFOID:0000000003136537




INSIDE MIRROR

2007/10/26

JCLWM1230GE

INSIDE MIRROR

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

H.S.


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2A | G | – |

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

H.S.


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6B | Y | – |

| Connector No. | M106 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK10MW-NS8 |

H.S.


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 9 | B | – |
| 12 | Y | – |
| 13 | BR | – |

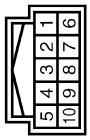
| Connector No. | R1 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK10FW-NS8 |

H.S.


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 9 | B | – |
| 12 | G | – |
| 13 | BR | – |

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

H.S.




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | BR | IGN |
| 8 | B | GND |
| 10 | G | BAT |

JCLWM1231GE

# ECU DIAGNOSIS

## DRIVER SEAT CONTROL UNIT

### Reference Value

INFOID:0000000003698493

#### VALUES ON THE DIAGNOSIS TOOL

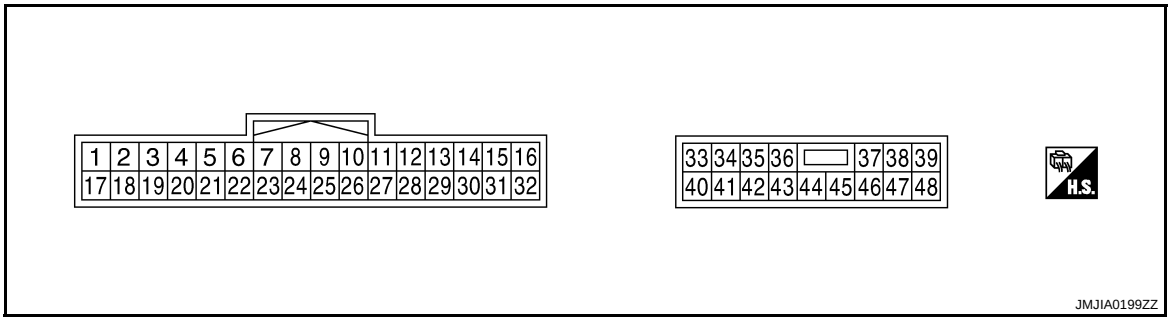
CONSULT-III MONITOR ITEM

| Monitor Item | Condition | | Value/Status |
|---|---|---|---|
| SET SW | Set switch | Push | ON |
| | | Release | OFF |
| MEMORY SW1 | Memory switch 1 | Push | ON |
| | | Release | OFF |
| MEMORY SW2 | Memory switch 2 | Push | ON |
| | | Release | OFF |
| SLIDE SW–FR | Sliding switch (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 |

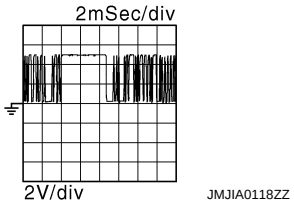
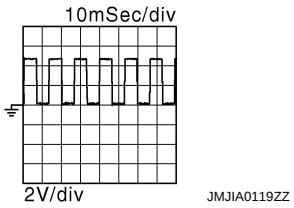
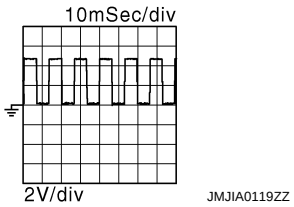
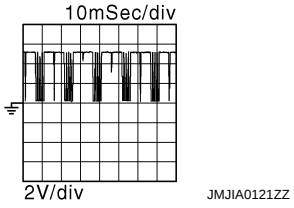
| Monitor Item | Condition | | Value/Status |
|---|---|---|---|
| TELESCO SW-FR | Telescopic switch | Forward | ON |
| | | Other than above | OFF |
| TELESCO SW-RR | Tilt switch | Backward | ON |
| | | Other than above | OFF |
| DETENT SW | AT selector lever | P position | OFF |
| | | Other than above | 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)<br>0.6 (close to valley) |
| MIR/SEN RH R–L | Door mirror (passenger side) | | Change between 3.4 (close to left edge)<br>0.6 (close to right edge) |
| MIR/SEN LH U–D | Door mirror (driver side) | | Change between 3.4 (close to peak)<br>0.6 (close to valley) |
| MIR/SEN LH R–L | Door mirror (driver side) | | Change between 0.6 (close to left edge)<br>3.4 (close to right edge) |
| TILT SEN | Tilt position | | Change between 1.2 (close to top)<br>3.4 (close to bottom) |
| TELESCO SEN | Telescopic position | | Change between 3.4 (close to top)<br>0.8 (close to bottom) |

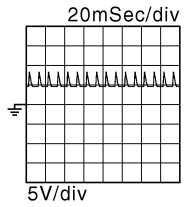
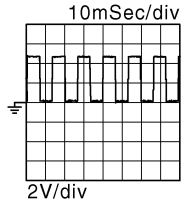
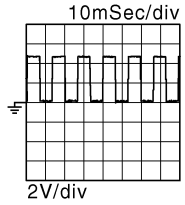
*1: The value at the position attained when the battery is connected is regarded as 32768.

## TERMINAL LAYOUT




## PHYSICAL VALUES

| Terminal No. | | Wire color | Description | | Condition | | Voltage (V) (Approx) |
|---|---|---|---|---|---|---|---|
| + | - | | Signal name | Input/ Output | | | |
| 1 | Ground | L/W | UART communication (RX) | Input | Ignition switch ON | |  |
| 3 | — | R/Y | CAN-H | — | — | | — |
| 9 | Ground | W/G | Reclining sensor signal | Input | Seat reclining | Operate |  |
| | | | | | | Stop | 0 or 5 |
| 10 | Ground | P/B | Lifting sensor (rear) signal | Input | Seat lifting (rear) | Operate |  |
| | | | | | | Stop | 0 or 5 |
| 11 | Ground | BR | Sliding switch backward signal | Input | Sliding switch | Operate (backward) | 0 |
| | | | | | | Release | Battery voltage |
| 12 | Ground | SB | Reclining switch backward signal | Input | Reclining switch | Operate (backward) | 0 |
| | | | | | | Release | Battery voltage |
| 13 | Ground | LG/R | Lifting switch (front) down signal | Input | Lifting switch (front) | Operate (down) | 0 |
| | | | | | | Release | Battery voltage |
| 14 | Ground | G/B | Lifting switch (rear) down signal | Input | Lifting switch (rear) | Operate (down) | 0 |
| | | | | | | Release | Battery voltage |
| 16 | Ground | O | Sensor power supply | Output | — | | 5 |
| 17 | Ground | Y/R | UART communication (TX) | Output | Ignition switch ON | |  |
| 19 | — | V | CAN-L | — | — | | — |

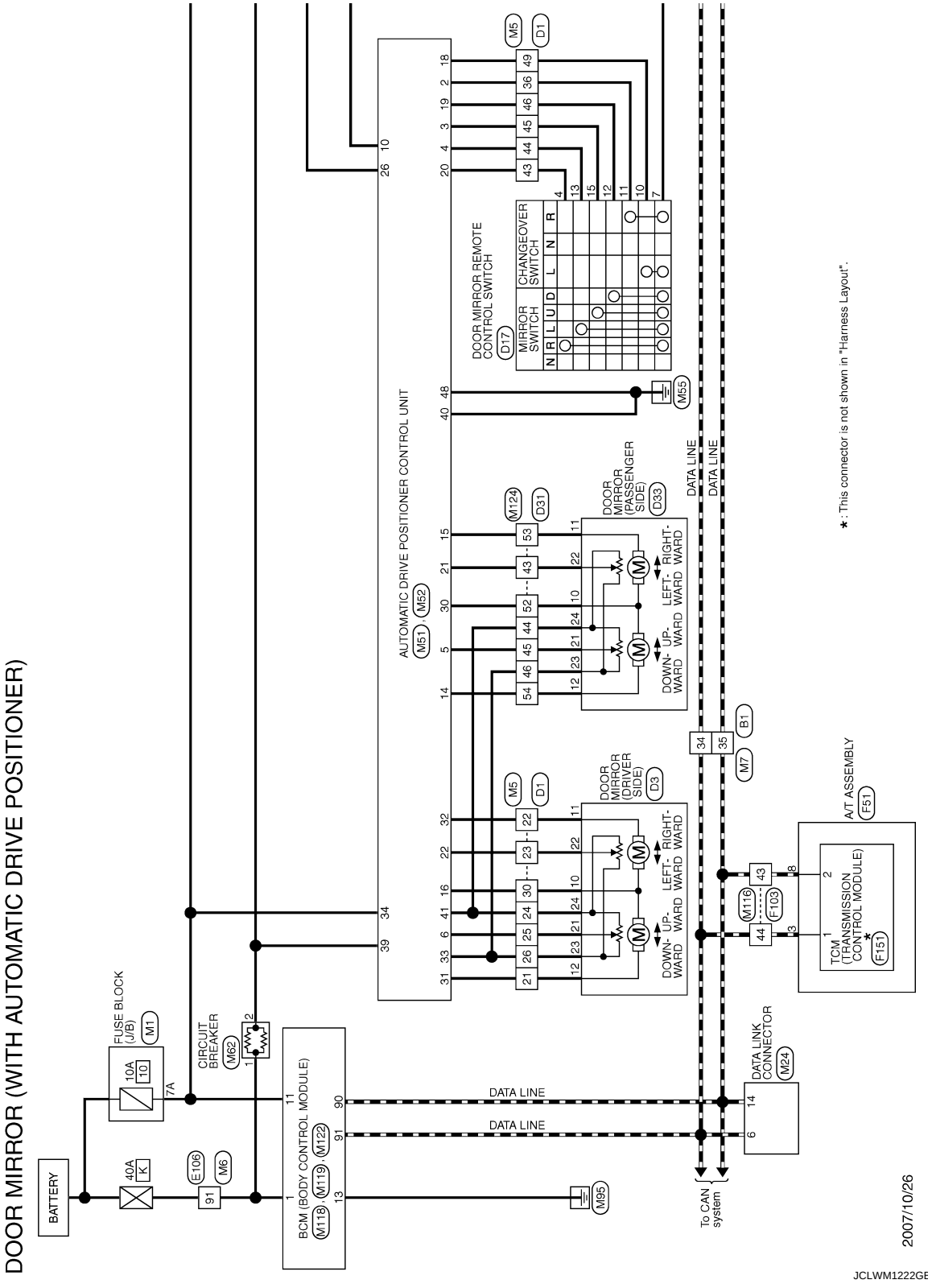
| Terminal No. + | Terminal No. - | Wire color | Description: Signal name | Description: Input/ Output | Condition | | Voltage (V) (Approx) |
|---|---|---|---|---|---|---|---|
| 21 | Ground | L/Y | Detention switch | Input | A/T selector lever | P position | 0 |
| | | | | | | Except P position |  |
| 24 | Ground | R | Sliding sensor signal | Input | Seat sliding | Operate |  |
| | | | | | | Stop | 0 or 5 |
| 25 | Ground | Y/B | Lifting sensor (front) signal | Input | Seat lifting (front) | Operate |  |
| | | | | | | Stop | 0 or 5 |
| 26 | Ground | Y | Sliding switch forward signal | Input | Sliding switch | Operate (forward) | 0 |
| | | | | | | Release | Battery voltage |
| 27 | Ground | R/G | Reclining switch forward signal | Input | Reclining switch | Operate (forward) | 0 |
| | | | | | | Release | Battery voltage |
| 28 | Ground | W/B | Lifting switch (front) up signal | Input | Seat lifting switch (front) | Operate (up) | 0 |
| | | | | | | Release | Battery voltage |
| 29 | Ground | P/L | Lifting switch (rear) up signal | Input | Seat lifting switch (rear) | Operate (up) | 0 |
| | | | | | | Release | Battery voltage |
| 31 | Ground | GR | Sensor ground | — | — | | 0 |
| 32 | Ground | B/W | Ground (signal) | — | — | | 0 |
| 33 | Ground | R | Power source (C/B) | Input | — | | Battery voltage |
| 35 | Ground | W/R | Sliding motor forward output signal | Output | Seat sliding | Operate (forward) | Battery voltage |
| | | | | | | Release | 0 |
| 36 | Ground | G/Y | Reclining motor forward output signal | Output | Seat reclining | Operate (forward) | Battery voltage |
| | | | | | | Release | 0 |

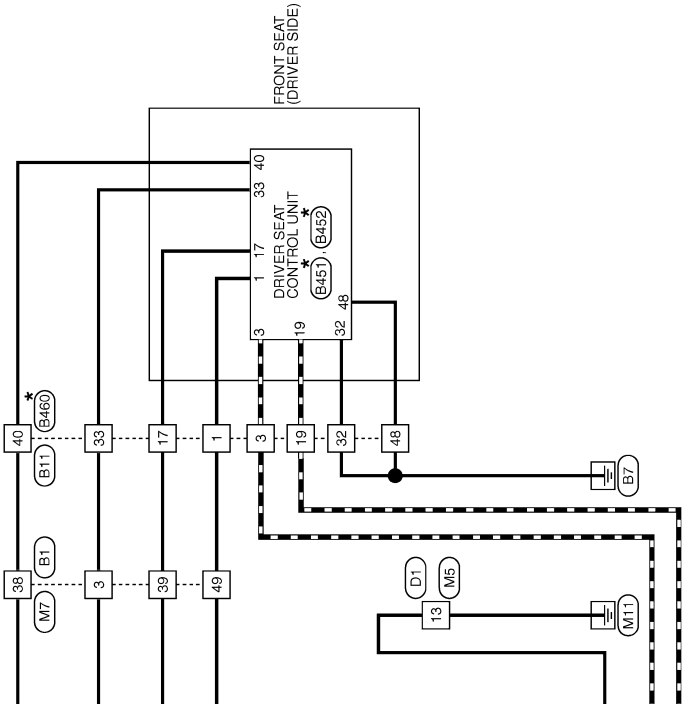
| Terminal No. | | Wire color | Description | | Condition | | Voltage (V) (Approx) |
|---|---|---|---|---|---|---|---|
| + | - | | Signal name | Input/ Output | | | |
| 37 | Ground | G/W | Lifting motor (front) down output signal | Output | Seat lifting (front) | Operate (down) | Battery voltage |
|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

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

INFOID:0000000003136539

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)






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

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SB | – |
| 34 | L | – |
| 35 | P | – |
| 38 | BR | – |
| 39 | LG | – |
| 49 | G | – |

| Connector No. | B11 |
|---|---|
| Connector Name | WIRE TO WIRE (WITH AUTOMATIC DRIVE POSITIONER) |
| Connector Type | NS16FW-CS |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | – |
| 3 | L | – |
| 17 | LG | – |
| 19 | P | – |
| 32 | B | – |
| 33 | SB | – |
| 40 | BR | – |
| 48 | B | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L/W | – |
| 3 | R/Y | – |
| 17 | Y/R | – |
| 19 | V | – |
| 32 | B/W | – |
| 33 | R | – |
| 40 | R/W | – |
| 48 | B | – |

| Connector No. | B451 |
|---|---|
| Connector Name | DRIVER SEAT CONTROL UNIT |
| Connector Type | TH32FW |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L/W | RX |
| 3 | R/Y | CAN-H |
| 17 | Y/R | TX |
| 19 | V | CAN-L |
| 32 | B/W | GND(SIGNAL) |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | B | – |
| 21 | O | – |
| 22 | P | – |
| 23 | BR | – |
| 24 | V | – |
| 25 | GR | – |
| 26 | Y | – |
| 30 | G | – |
| 36 | L | – |
| 43 | BR | – [With automatic drive positioner] |
| 44 | W | – [With automatic drive positioner] |

| Connector No. | B452 |
|---|---|
| Connector Name | DRIVER SEAT CONTROL UNIT |
| Connector Type | NS16FW-CS |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 33 | R | BAT(C/B) |
| 40 | R/W | BAT(FUSE) |
| 48 | B | GND(POWER) |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | G | – [With automatic drive positioner] |
| 11 | P | – |
| 12 | O | – [With automatic drive positioner] |
| 21 | GR | – |
| 22 | BR | – |
| 23 | Y | – |
| 24 | V | – |

| Connector No. | D2 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH40FW-CS15 |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 45 | Y | – [With automatic drive positioner] |
| 46 | P | – [With automatic drive positioner] |
| 49 | GR | – |

JCLWM1224GE

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

| Connector No. | D17 |
|---|---|
| Connector Name | DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER) |
| Connector Type | TK16FBR |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | BR | – |
| 7 | B | – |
| 10 | GR | – |
| 11 | L | – |
| 12 | P | – |
| 13 | W | – |
| 15 | Y | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 43 | Y | – |
| 44 | V | – |
| 45 | P | – |
| 46 | W | – |
| 52 | Y | – |
| 53 | G | – |
| 54 | W | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | Y | – [With automatic drive positioner] |
| 11 | G | – [With automatic drive positioner] |
| 12 | W | – [With automatic drive positioner] |
| 21 | P | – |
| 22 | Y | – |
| 23 | W | – |
| 24 | V | – |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 91 | W | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | L | – |
| 8 | P | – |

| Connector No. | F103 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK36FW-NS10 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 43 | P | – |
| 44 | L | – |

| Connector No. | F151 |
|---|---|
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) |
| Connector Type | SP10FBGY |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | CAN-H |
| 2 | L/Y | CAN-L |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 7A | R | – |

JCLWM1225GE

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | B | – |
| 21 | LG | – |
| 22 | L | – |
| 23 | G | – |
| 24 | Y | – |
| 25 | GR | – |
| 26 | W | – |
| 30 | Y | – |
| 36 | LG | – |
| 43 | BR | – |
| 44 | V | – |
| 45 | G | – |
| 46 | SB | – [With automatic drive positioner] |
| 49 | P | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 91 | W | – |

| Connector No. | M7 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SB | – [With automatic drive positioner] |
| 34 | L | – |
| 35 | P | – |
| 38 | BR | – |
| 39 | Y | – |
| 49 | V | – |

| Connector No. | M24 |
|---|---|
| Connector Name | DATA LINK CONNECTOR |
| Connector Type | BD16FW |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | L | – |
| 14 | P | – |

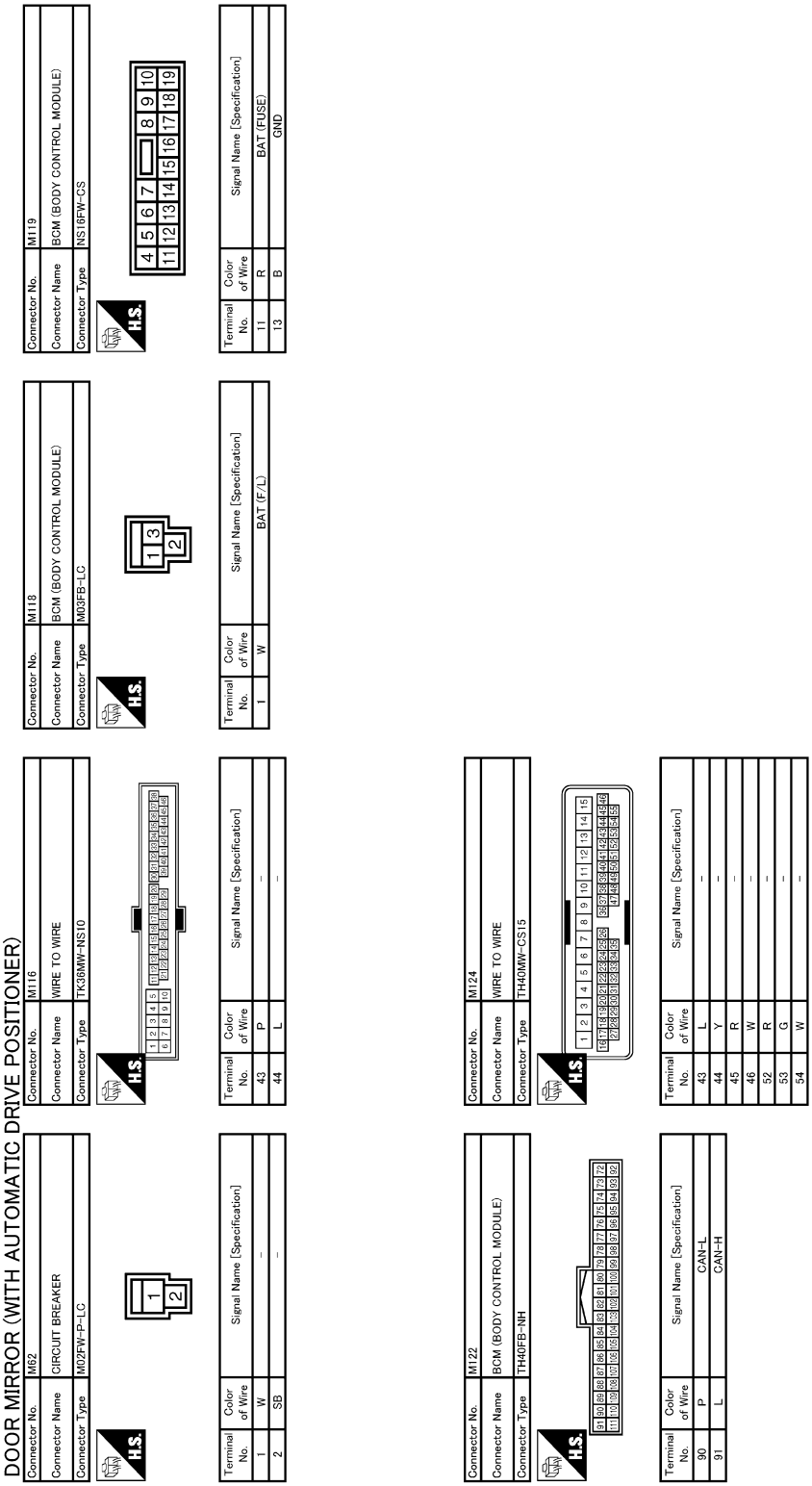
| Connector No. | M51 |
|---|---|
| Connector Name | AUTOMATIC DRIVE POSITIONER CONTROL UNIT |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | LG | MIRROR SELECT SW (RH) |
| 3 | G | MIRROR SW (UPWARD) |
| 4 | V | MIRROR SW (LEFTWARD) |
| 5 | R | MIRROR SENSOR (RH VERTICAL) |
| 6 | GR | MIRROR SENSOR (LH VERTICAL) |
| 10 | V | TX (UART) |
| 14 | W | MIRROR MOTOR (RH VERTICAL) |
| 15 | G | MIRROR MOTOR (RH HORIZONTAL) |
| 16 | Y | MIRROR MOTOR (LH COMMON) |
| 18 | P | MIRROR SELECT SW (LH) |
| 19 | SB | MIRROR SW (DOWNWARD) |
| 20 | BR | MIRROR SW (RIGHTWARD) |
| 21 | L | MIRROR SENSOR (RH HORIZONTAL) |
| 22 | G | MIRROR SENSOR (LH HORIZONTAL) |
| 26 | Y | RX (UART) |
| 30 | R | MIRROR MOTOR (RH COMMON) |
| 31 | LG | MIRROR MOTOR (LH VERTICAL) |
| 32 | L | MIRROR MOTOR (LH HORIZONTAL) |

| Connector No. | M52 |
|---|---|
| Connector Name | AUTOMATIC DRIVE POSITIONER CONTROL UNIT |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 33 | W | POWER SUPPLY (SENSOR) |
| 34 | R | BAT (FUSE) |
| 39 | SB | BAT (C/B) |
| 40 | B | GND(SIGNAL) |
| 41 | Y | GND(SENSOR) |
| 48 | B | GND(POWER) |

JCLWM1226GE




JCLWM1227GE

## Fail Safe

INFOID:0000000003698495

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:0000000003698496

| CONSULT-III 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:

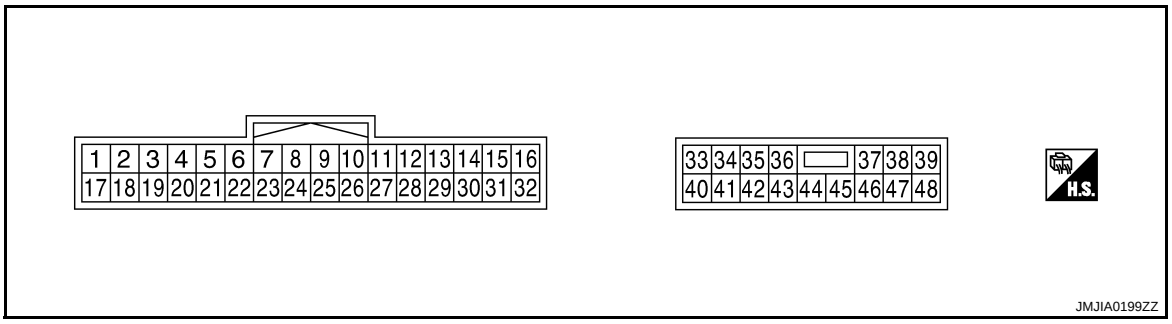
- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset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

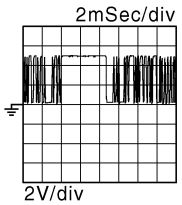
## Reference Value

INFOID:0000000003698499

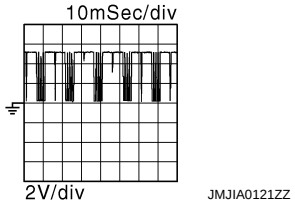
### TERMINAL LAYOUT




### PHYSICAL VALUES

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

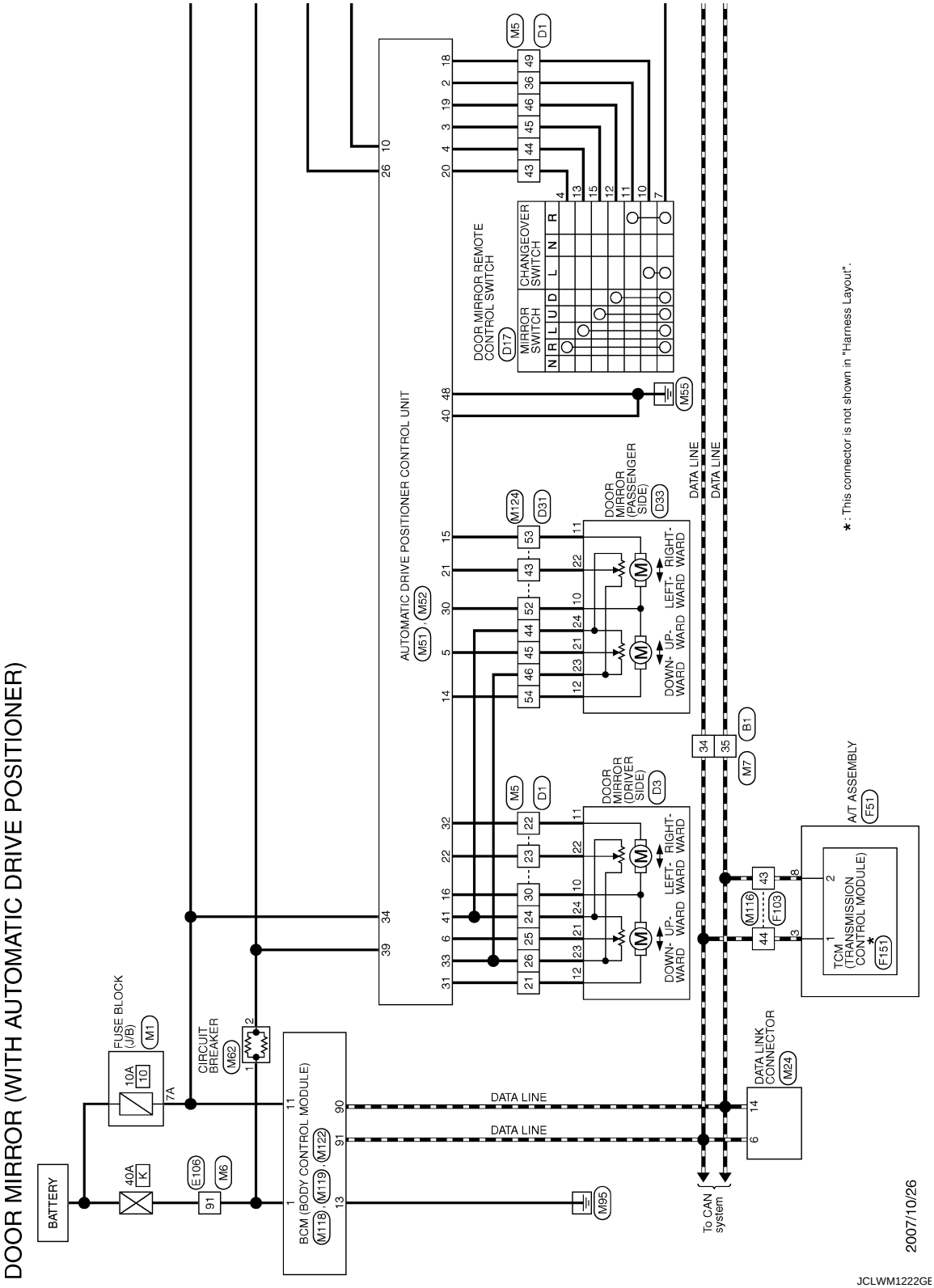
| Terminal No. | | Wire color | Description | | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|---|---|
| + | - | | Signal name | Input/ Output | | | |
| 11 | Ground | GR | Telescopic switch forward signal | Input | Telescopic switch | Operate (forward) | 0 |
| | | | | | | Other than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

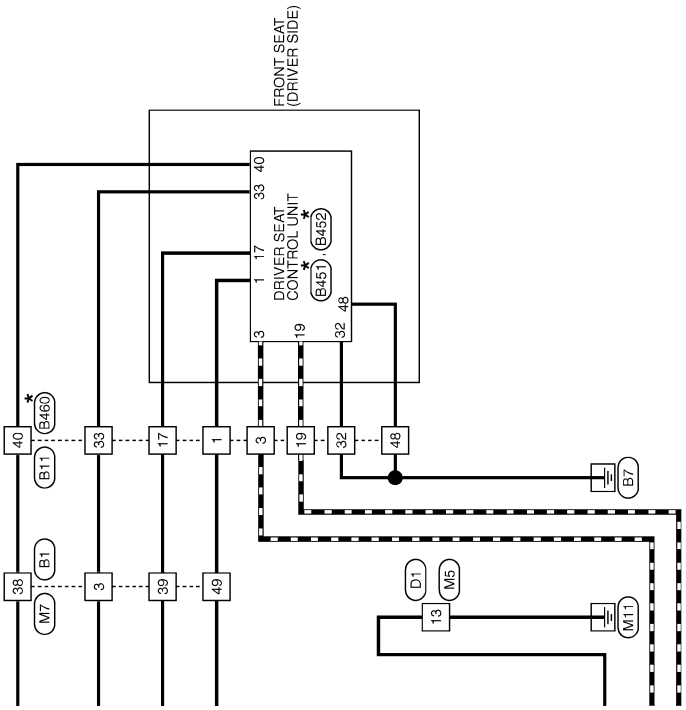
| Terminal No. | | Wire color | Description | | Condition | | Voltage (V) (Approx.) |
|---|---|---|---|---|---|---|---|
| + | - | | Signal name | Input/ Output | | | |
| 24 | Ground | R | Set switch signal | Input | Set switch | Push | 0 |
| | | | | | | Other than above | 5 |
| 25 | Ground | SB | Memory switch 2 signal | Input | Memory switch 2 | Push | 0 |
| | | | | | | Other than above | 5 |
| 26 | Ground | Y | UART communication (RX) | Input | Ignition switch ON | |  |
| 27 | Ground | G | Telescopic switch backward signal | Input | Telescopic switch | Operate (backward) | 0 |
| | | | | | | Other than above | 5 |
| 30 | Ground | R | 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 | Ground | LG | Door mirror motor (LH) up output signal | Output | Door mirror (LH) | Operate (up) | Battery voltage |
| | | | | | | Other than above | 0 |
| 32 | Ground | L | Door mirror motor (LH) left output signal | Output | Door mirror (LH) | Operate (left) | Battery voltage |
| | | | | | | Other than above | 0 |
| 33 | Ground | W | Sensor power supply | Input | — | | 5 |
| 34 | Ground | R | Power source (Fuse) | Input | — | | Battery voltage |
| 35 | Ground | L | Tilt motor up output signal | Output | Steering tilt | Operate (up) | Battery voltage |
| | | | | | | Other than above | 0 |
| 36 | Ground | GR | Telescopic motor forward output signal | Output | Steering telescopic | Operate (forward) | Battery voltage |
| | | | | | | Other than above | 0 |
| 39 | Ground | SB | Power source (C/B) | | — | | Battery voltage |
| 40 | Ground | B | Ground | — | — | | 0 |
| 41 | Ground | Y | Sensor ground | — | — | | 0 |

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

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

INFOID:0000000003702870






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

DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SB | – |
| 34 | L | – |
| 35 | P | – |
| 38 | BR | – |
| 39 | LG | – |
| 49 | G | – |

| Connector No. | B11 |
|---|---|
| Connector Name | WIRE TO WIRE (WITH AUTOMATIC DRIVE POSITIONER) |
| Connector Type | NS16FW-CS |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | G | – |
| 3 | L | – |
| 17 | LG | – |
| 19 | P | – |
| 32 | B | – |
| 33 | SB | – |
| 40 | BR | – |
| 48 | B | – |

| Connector No. | B451 |
|---|---|
| Connector Name | DRIVER SEAT CONTROL UNIT |
| Connector Type | TH32FW |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L/W | RX |
| 3 | R/Y | CAN-H |
| 17 | Y/R | TX |
| 19 | V | CAN-L |
| 32 | B/W | GND(SIGNAL) |

| Connector No. | B452 |
|---|---|
| Connector Name | DRIVER SEAT CONTROL UNIT |
| Connector Type | NS16FW-CS |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 33 | R | BAT(C/B) |
| 40 | R/W | BAT(FUSE) |
| 48 | B | GND(POWER) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | L/W | – |
| 3 | R/Y | – |
| 17 | Y/R | – |
| 19 | V | – |
| 32 | B/W | – |
| 33 | R | – |
| 40 | R/W | – |
| 48 | B | – |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | B | – |
| 21 | O | – |
| 22 | P | – |
| 23 | BR | – |
| 24 | V | – |
| 25 | GR | – |
| 26 | Y | – |
| 30 | G | – |
| 36 | L | – |
| 43 | BR | – [With automatic drive positioner] |
| 44 | W | – [With automatic drive positioner] |
| 45 | Y | – [With automatic drive positioner] |
| 46 | P | – [With automatic drive positioner] |
| 49 | GR | – |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | G | – [With automatic drive positioner] |
| 11 | P | – |
| 12 | O | – [With automatic drive positioner] |
| 21 | GR | – |
| 22 | BR | – |
| 23 | Y | – |
| 24 | V | – |

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DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

| Connector No. | D17 |
|---|---|
| Connector Name | DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER) |
| Connector Type | TK16FBR |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 4 | BR | – |
| 7 | B | – |
| 10 | GR | – |
| 11 | L | – |
| 12 | P | – |
| 13 | W | – |
| 15 | Y | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 43 | Y | – |
| 44 | V | – |
| 45 | P | – |
| 46 | W | – |
| 52 | Y | – |
| 53 | G | – |
| 54 | W | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | Y | – [With automatic drive positioner] |
| 11 | G | – [With automatic drive positioner] |
| 12 | W | – [With automatic drive positioner] |
| 21 | P | – |
| 22 | Y | – |
| 23 | W | – |
| 24 | V | – |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 91 | W | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | L | – |
| 8 | P | – |

| Connector No. | F103 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK36FW-NS10 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 43 | P | – |
| 44 | L | – |

| Connector No. | F151 |
|---|---|
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) |
| Connector Type | SP10FBGY |




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | BR | CAN-H |
| 2 | L/Y | CAN-L |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 7A | R | – |

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DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | B | – |
| 21 | LG | – |
| 22 | L | – |
| 23 | G | – |
| 24 | Y | – |
| 25 | GR | – |
| 26 | W | – |
| 30 | Y | – |
| 36 | LG | – |
| 43 | BR | – |
| 44 | V | – |
| 45 | G | – |
| 46 | SB | – [With automatic drive positioner] |
| 49 | P | – |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 91 | W | – |

| Connector No. | M7 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TH80MW-CS16-TM4 |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 3 | SB | – [With automatic drive positioner] |
| 34 | L | – |
| 35 | P | – |
| 38 | BR | – |
| 39 | Y | – |
| 49 | V | – |

| Connector No. | M24 |
|---|---|
| Connector Name | DATA LINK CONNECTOR |
| Connector Type | BD16FW |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6 | L | – |
| 14 | P | – |

| Connector No. | M51 |
|---|---|
| Connector Name | AUTOMATIC DRIVE POSITIONER CONTROL UNIT |
| Connector Type | TH32FW-NH |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2 | LG | MIRROR SELECT SW (RH) |
| 3 | G | MIRROR SW (UPWARD) |
| 4 | V | MIRROR SW (LEFTWARD) |
| 5 | R | MIRROR SENSOR (RH VERTICAL) |
| 6 | GR | MIRROR SENSOR (LH VERTICAL) |
| 10 | V | TX (UART) |
| 14 | W | MIRROR MOTOR (RH VERTICAL) |
| 15 | G | MIRROR MOTOR (RH HORIZONTAL) |
| 16 | Y | MIRROR MOTOR (LH COMMON) |
| 18 | P | MIRROR SELECT SW (LH) |
| 19 | SB | MIRROR SW (DOWNWARD) |
| 20 | BR | MIRROR SW (RIGHTWARD) |
| 21 | L | MIRROR SENSOR (RH HORIZONTAL) |
| 22 | G | MIRROR SENSOR (LH HORIZONTAL) |
| 26 | Y | RX (UART) |
| 30 | R | MIRROR MOTOR (RH COMMON) |
| 31 | LG | MIRROR MOTOR (LH VERTICAL) |
| 32 | L | MIRROR MOTOR (LH HORIZONTAL) |

| Connector No. | M52 |
|---|---|
| Connector Name | AUTOMATIC DRIVE POSITIONER CONTROL UNIT |
| Connector Type | NS16FW-CS |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 33 | W | POWER SUPPLY (SENSOR) |
| 34 | R | BAT (FUSE) |
| 39 | SB | BAT (C/B) |
| 40 | B | GND(SIGNAL) |
| 41 | Y | GND(SENSOR) |
| 48 | B | GND(POWER) |

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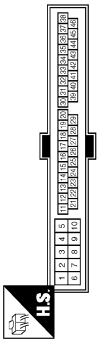
DOOR MIRROR (WITH AUTOMATIC DRIVE POSITIONER)

| 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. | M116 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK36MW-NS10 |

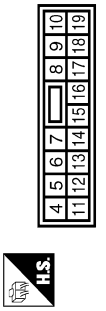


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 43 | P | – |
| 44 | L | – |

| 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) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 11 | R | BAT (FUSE) |
| 13 | B | GND |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 90 | P | CAN-L |
| 91 | L | CAN-H |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 43 | L | – |
| 44 | Y | – |
| 45 | R | – |
| 46 | W | – |
| 52 | R | – |
| 53 | G | – |
| 54 | W | – |

JCLWM1227GE

# SYMPTOM DIAGNOSIS

## DOOR MIRROR DOES NOT OPERATE

### Diagnosis Procedure

INFOID:0000000003136544

#### 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-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-38, "Intermittent Incident"
NO >> GO TO 1.

# REVERSE INTERLOCK DOOR MIRROR DOES NOT OPERATE

## Diagnosis Procedure

INFOID:0000000003574051

### 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-39, "Diagnosis Description"

Is the inspection result normal?

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

### 3.CONFIRM THE OPERATION

Confirm the operation again.

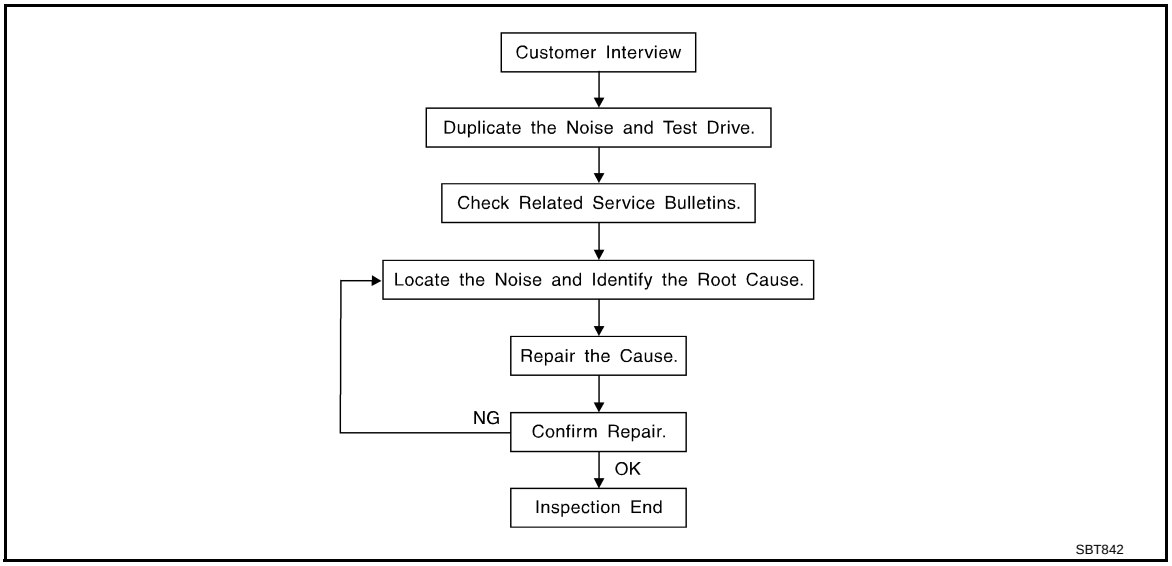
Is the result normal?

YES >> Check intermittent incident. Refer to GI-38, "Intermittent Incident"
NO >> GO TO 1.

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## Work Flow

INFOID:0000000003136545




### 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-46, "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-44, "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 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-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 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:0000000003136546

Refer to Table of Contents for specific component removal and installationinformation.

### 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 saturatethe 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 thecenter 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 startsand 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-43980) to repair the noise.

### TRUNK

Trunk noises are often caused by a loose jack or loose items put intothe 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 insulatingthe 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 knockingnoise
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 duplicatingthe conditions can isolate most of these incidents. Repairs usually consistof insulating with felt cloth tape.

## SEATS

When isolating seat noise it's important to note the position the seatis in and the load placed on the seat when the noise is present. These conditionsshould 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 suspectedcomponents while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component orapplying urethane tape to the contact area.

## UNDERHOOD

Some interior noise may be caused by components under the hood or onthe 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

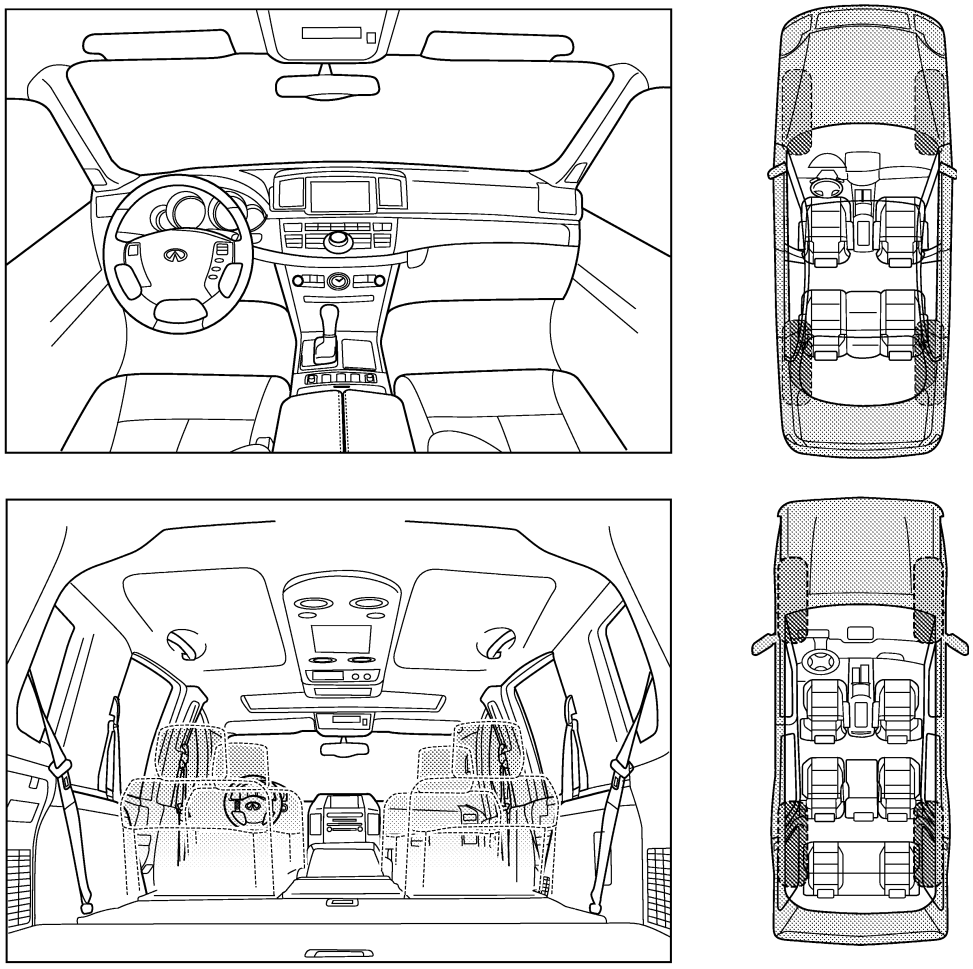
INFOID:0000000003136547

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:0000000003136548

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 AIRBAG” and “SEAT BELT” of this Service Manual.

**WARNING:**

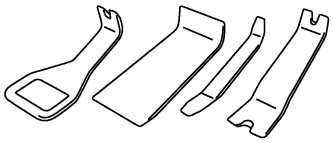
- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the “SRS AIRBAG”.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

# PREPARATION

## PREPARATION

### Commercial Service Tools

INFOID:0000000003136549

| Tool name | Description |
|---|---|
| Remover tool  PIIB7923J | Remove the clip and pawl and metal clip |

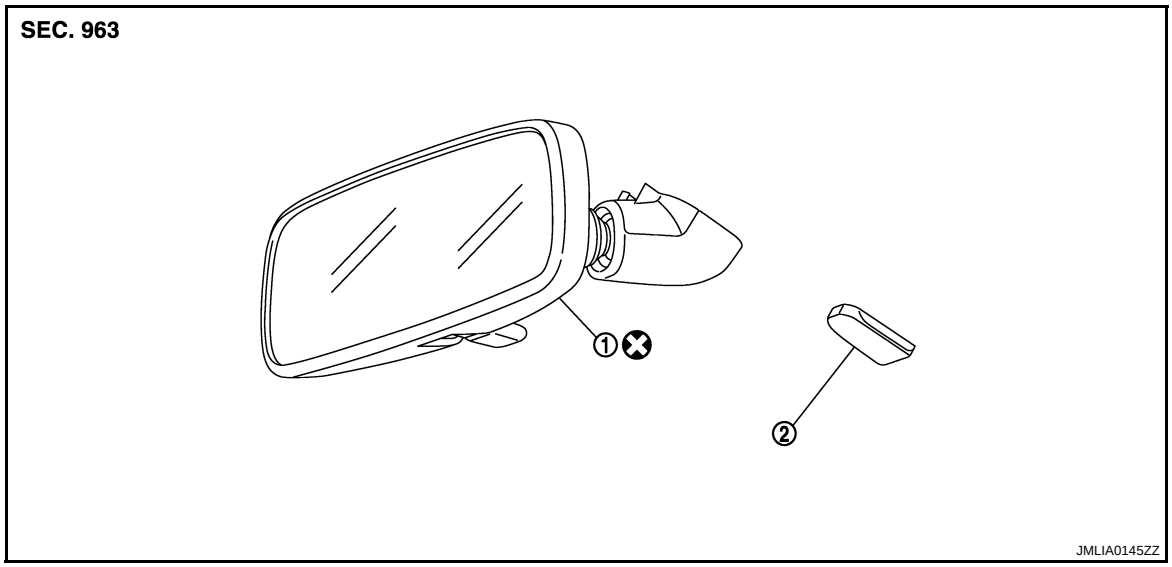
# ON-VEHICLE REPAIR

## INSIDE MIRROR

### Exploded View

INFOID:0000000003691815

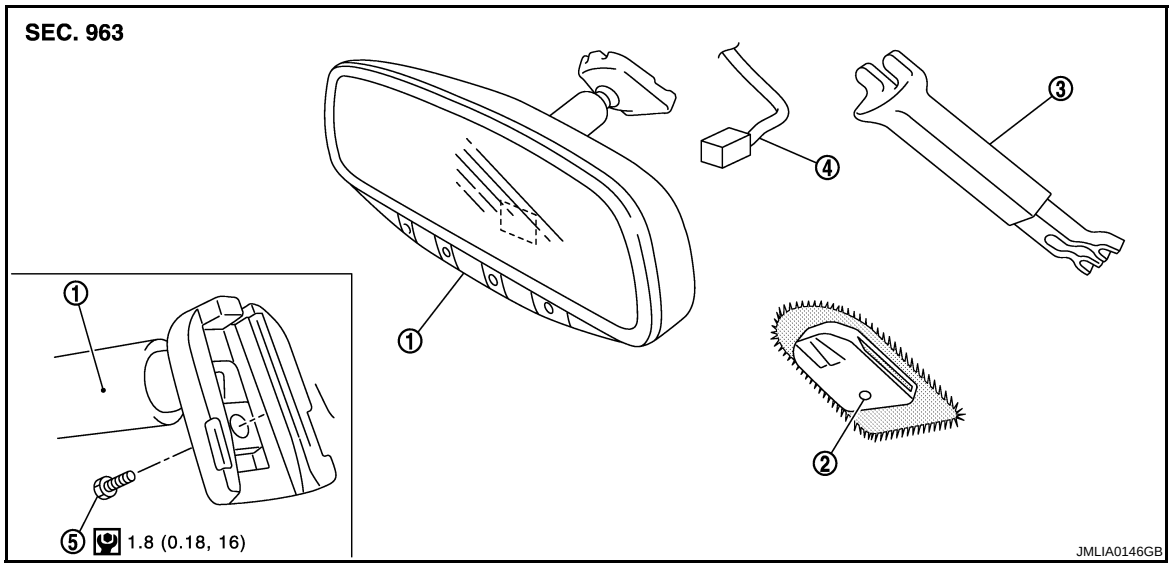
#### Base




1. Inside mirror
2. Mirror base

Refer to GI-4, "Components" for symbols in the figure.

#### Option




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

Refer to GI-4, "Components" for symbols in the figure.

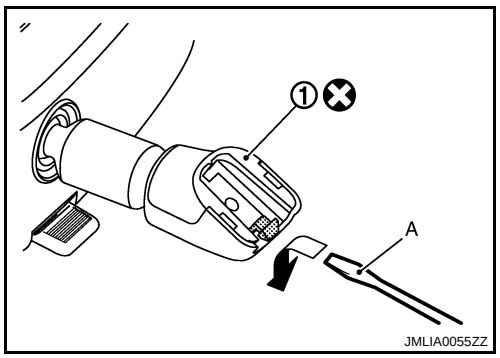
### Removal and Installation

INFOID:0000000003691816

#### 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 pqwl downward.




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

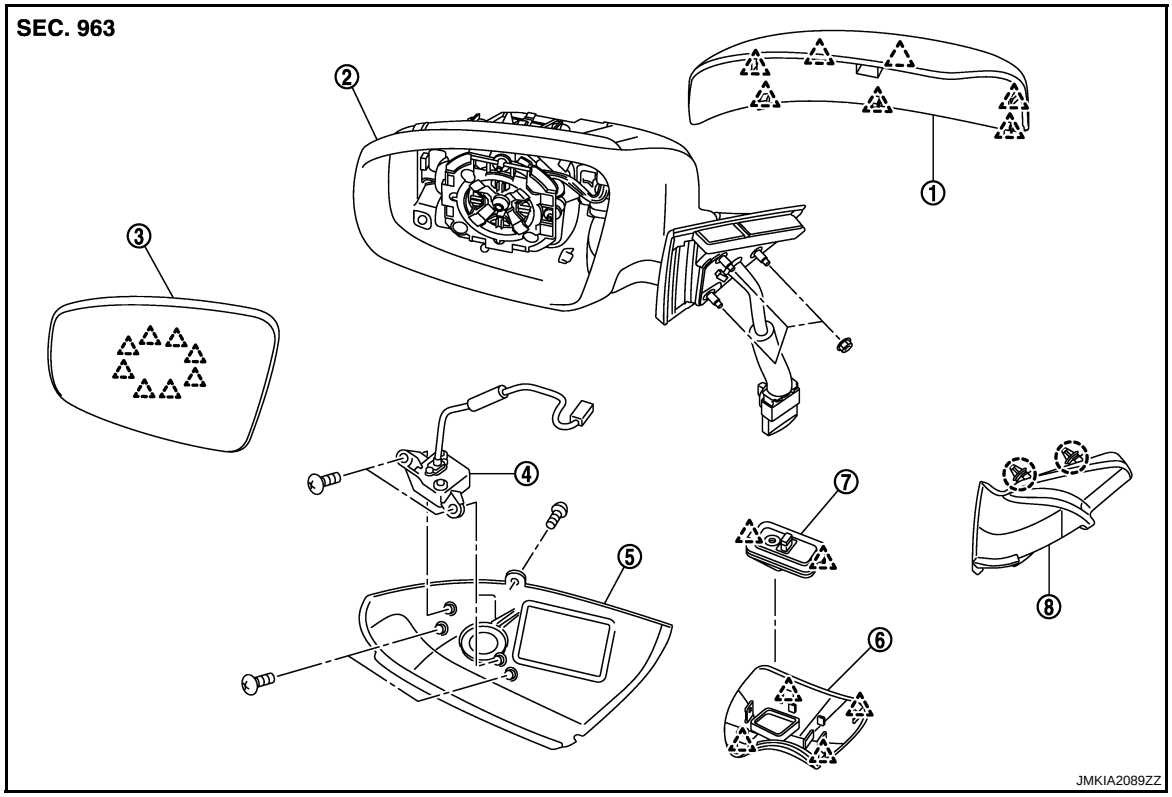
**CAUTION:**
**When inserting the inside mirror into the mirror base, be sure to push the pawl until it get connected to the mirror base.**

# OUTSIDE MIRROR

## DOOR MIRROR ASSEMBLY

### DOOR MIRROR ASSEMBLY : Exploded View

INFOID:0000000003136552




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

: Clip

: Pawl

### DOOR MIRROR ASSEMBLY : Removal and Installation

INFOID:0000000003136553

REMOVAL

1. Remove front door finisher. Refer to INT-11, "DRIVER SIDE : Removal and Installation" (driver side) or INT-14, "PASSENGER SIDE : Removal and Installation" (passenger side).
2. Remove clips and remove corner cover.
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-438, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Special Repair Requirement".**

### DOOR MIRROR ASSEMBLY : Disassembly and Assembly

INFOID:0000000003774530

DISASSEMBLY

1. Remove door mirror cover. Refer to MIR-55, "DOOR MIRROR COVER : Disassembly and Assembly"
2. Remove side camera after removing door mirror assembly (BOSE audio with navigation model). Refer to AV-928, "Removal and Installation"(RH) or AV-927, "Removal and Installation"(LH)
3. Remove base cover and puddle lamp.

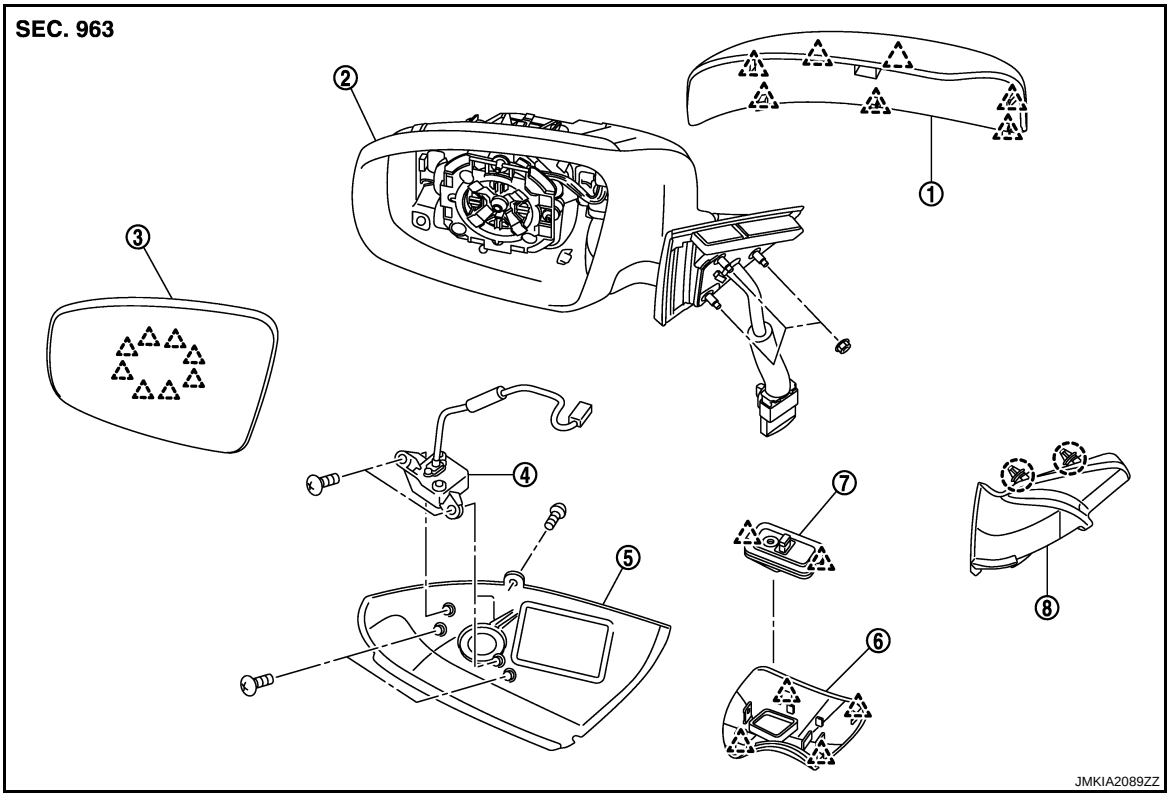
ASSEMBLY

Assemble in the reverse order of disassemble.

## GLASS MIRROR

### GLASS MIRROR : Exploded View

INFOID:0000000003691831




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

: Clip

: Pawl

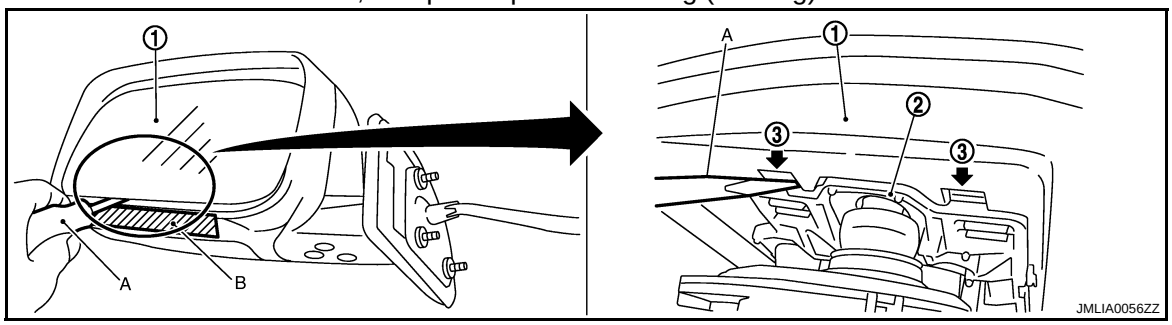
### GLASS MIRROR : Disassembly and Assembly

INFOID:0000000003136555

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 small slotted screwdriver (A) into the recess between glass mirror (1) and actuator (2). Push up both pawls (3) simultaneously to remove glass mirror lower half side.
   **NOTE:**

Insert screwdriver 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. Disassemble glass mirror from actuator.
   **NOTE:**
   Be certain not to allow grease on sealing agent in center of mirror or back side of glass mirror.

ASSEMBLY

Assemble in the reverse order of disassemble.

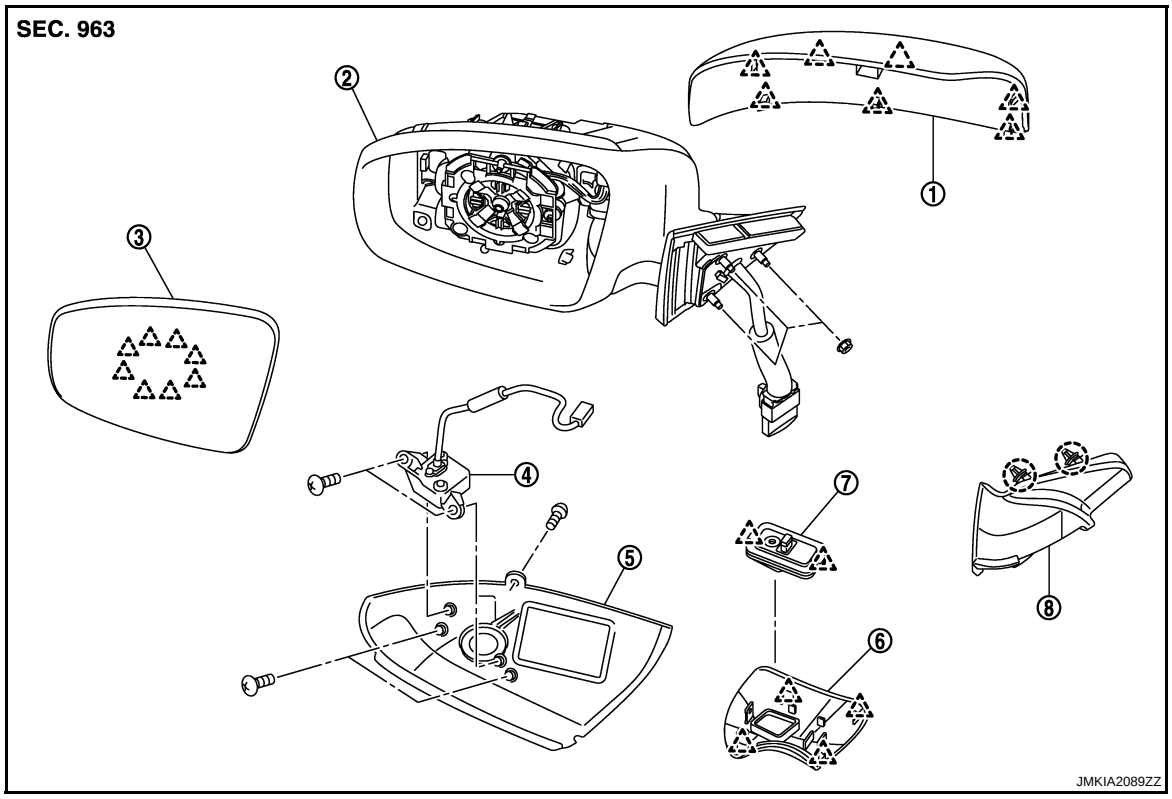
**CAUTION:**

**After installation, visually check that pawls are securely engaged.**

## DOOR MIRROR COVER

### DOOR MIRROR COVER : Exploded View

INFOID:0000000003691832




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

: Clip

: Pawl

## DOOR MIRROR COVER : Disassembly and Assembly

INFOID:0000000003136557

**CAUTION:**
**Do not damage the mirror bodies.**

### DISASSEMBLY

1. Remove the glass mirror. Refer to MIR-53, "GLASS MIRROR : Disassembly and Assembly".
2. Remove the pawls, and disassemble the door mirror cover from the mirror assembly.

### ASSEMBLY

Assemble in the reverse order of disassemble.

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

# DOOR MIRROR REMOTE CONTROL SWITCH

## Exploded View

INFOID:0000000003136558

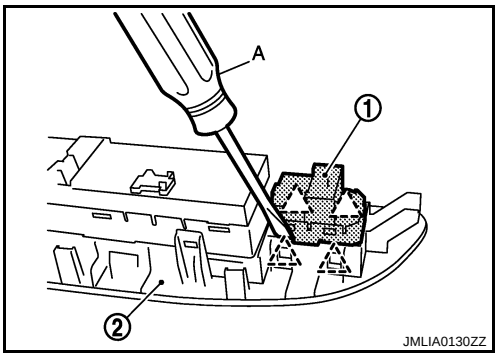
Refer to INT-17, "Exploded View"

## Removal and Installation

INFOID:0000000003136559

### REMOVAL

1. Remove the power window main switch finisher (2). Refer to INT-11, "DRIVER SIDE : Exploded View"
2. Remove door mirror remote control switch (1) from power window main switch finisher (2) using screwdriver (A).




△ : **Pawl**

### INSTALLATION

Install in the reverse order of removal.

# FUNCTION DIAGNOSIS

## DOOR MIRROR SYSTEM

### Component Description

INFOID:0000000003136560

| 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:0000000003738696

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:0000000003738697

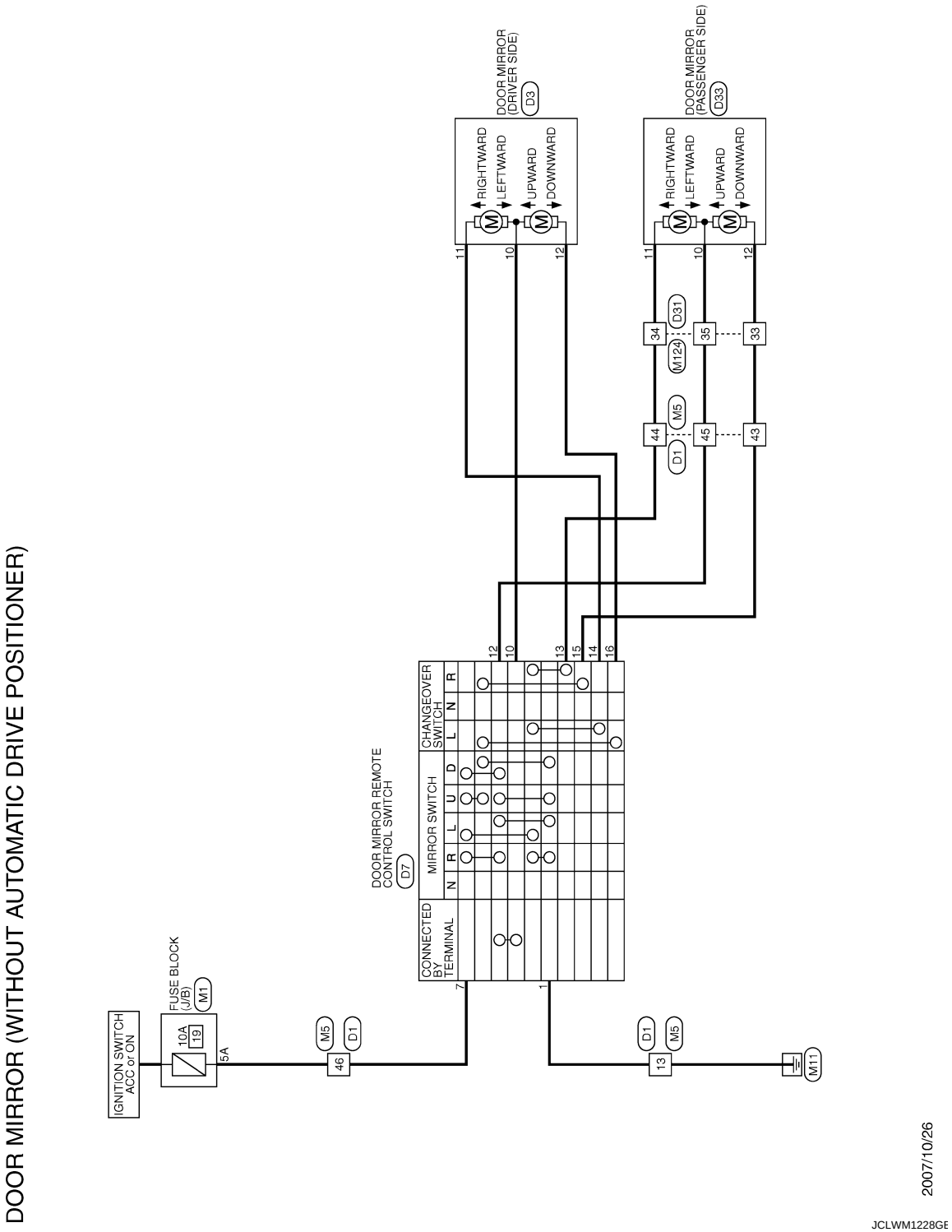
| Component | Function |
|---|---|
| Auto anti-dazzling inside mirror | It automatically changes the light transmittance according to the brightness of the light from the headlight of the vehicle behind. |

# COMPONENT DIAGNOSIS

## DOOR MIRROR

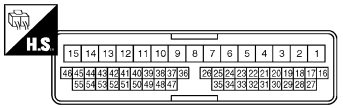
### Wiring Diagram - DOOR MIRROR SYSTEM -

INFOID:0000000003136563



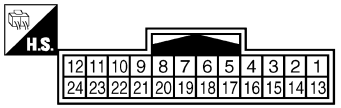
## DOOR MIRROR (WITHOUT AUTOMATIC DRIVE POSITIONER)

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



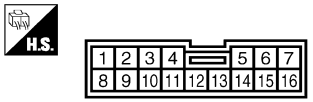

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | B | – |
| 43 | O | – [Without automatic drive positioner] |
| 44 | GR | – [Without automatic drive positioner] |
| 45 | G | – [Without automatic drive positioner] |
| 46 | V | – [Without automatic drive positioner] |

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



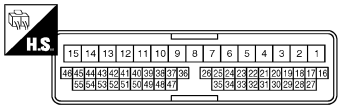

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | Y | – [Without automatic drive positioner] |
| 11 | P | – |
| 12 | L | – [Without automatic drive positioner] |

| Connector No. | D7 |
|---|---|
| Connector Name | DOOR MIRROR REMOTE CONTROL SWITCH (WITHOUT AUTOMATIC DRIVE POSITIONER) |
| Connector Type | TK16FW |



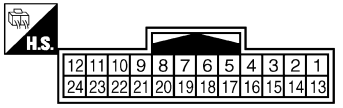

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 1 | B | – |
| 7 | V | – |
| 10 | Y | – |
| 12 | G | – |
| 13 | GR | – |
| 14 | P | – |
| 15 | O | – |
| 16 | L | – |

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



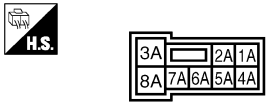

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 33 | O | – |
| 34 | GR | – |
| 35 | G | – |

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



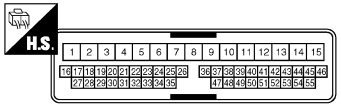

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 10 | G | – [Without automatic drive positioner] |
| 11 | GR | – [Without automatic drive positioner] |
| 12 | O | – [Without automatic drive positioner] |

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



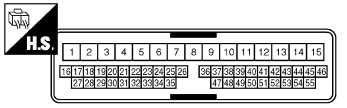

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 5A | V | – |

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




| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 13 | B | – |
| 43 | BR | – |
| 44 | V | – |
| 45 | G | – |
| 46 | V | – [Without automatic drive positioner] |

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



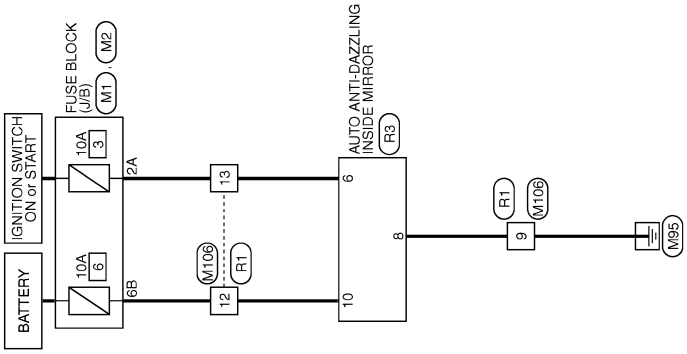

| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 33 | BR | – |
| 34 | V | – |
| 35 | G | – |

JCLWM1229GE

# AUTO ANTI-DAZZLING INSIDE MIRROR SYSTEM

## Wiring Diagram - INSIDE MIRROR SYSTEM -

INFOID:0000000003702898




INSIDE MIRROR

2007/10/26

JCLWM1230GE

INSIDE MIRROR

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


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 2A | G | – |

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


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 6B | Y | – |

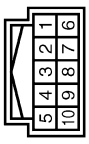
| Connector No. | M106 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK10MW-NS8 |


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 9 | B | – |
| 12 | Y | – |
| 13 | BR | – |

| Connector No. | R1 |
|---|---|
| Connector Name | WIRE TO WIRE |
| Connector Type | TK10FW-NS8 |


| Terminal No. | Color of Wire | Signal Name [Specification] |
|---|---|---|
| 9 | B | – |
| 12 | G | – |
| 13 | BR | – |

| 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 | GND |
| 10 | G | BAT |

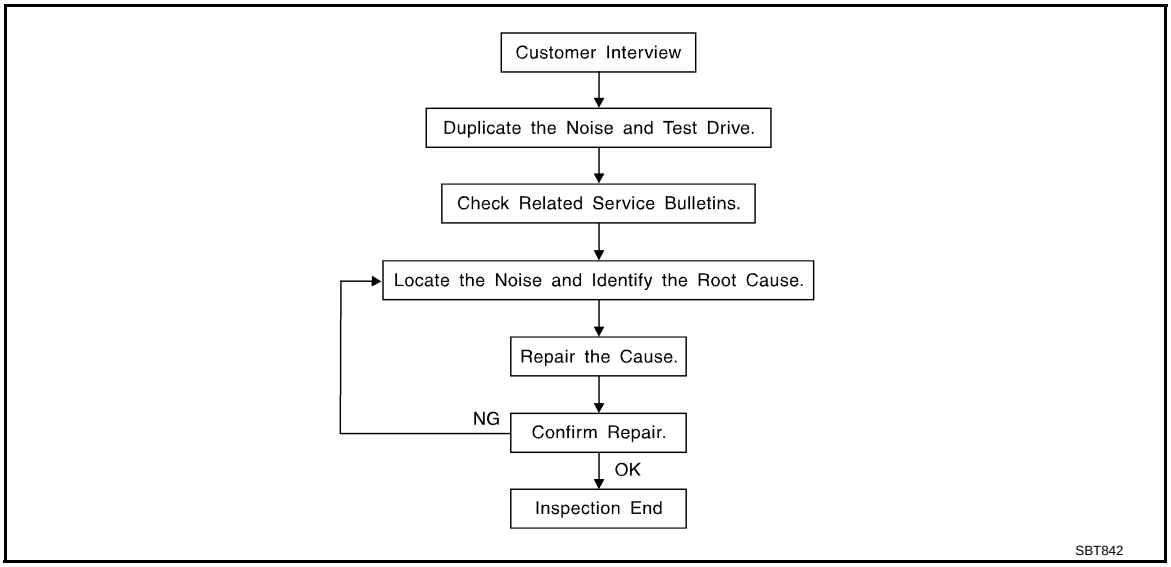
JCLWM1231GE

# SYMPTOM DIAGNOSIS

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

### Work Flow

INFOID:0000000003136565




### 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-46, "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-44, "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 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-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 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:0000000003136566

Refer to Table of Contents for specific component removal and installationinformation.

### 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 saturatethe 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 thecenter 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 startsand 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-43980) to repair the noise.

### TRUNK

Trunk noises are often caused by a loose jack or loose items put intothe 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 insulatingthe 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 knockingnoise
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 duplicatingthe conditions can isolate most of these incidents. Repairs usually consistof insulating with felt cloth tape.

### SEATS

When isolating seat noise it's important to note the position the seatis in and the load placed on the seat when the noise is present. These conditionsshould 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 suspectedcomponents while duplicating the conditions under which the noise occurs.Most of these incidents can be repaired by repositioning the component orapplying urethane tape to the contact area.

### UNDERHOOD

Some interior noise may be caused by components under the hood or onthe 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

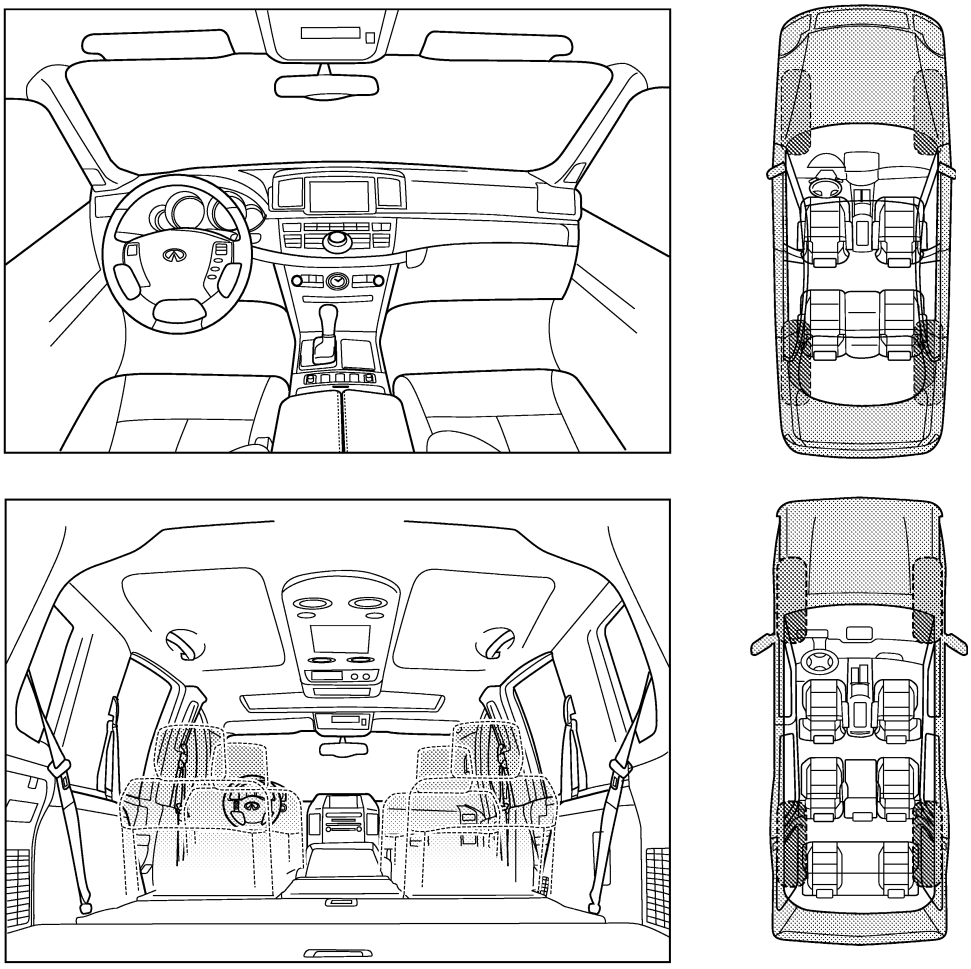
INFOID:0000000003136567

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:0000000003136568

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 AIRBAG” and “SEAT BELT” of this Service Manual.

**WARNING:**

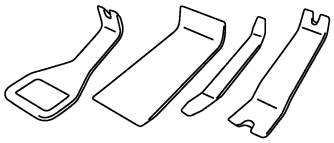
- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the “SRS AIRBAG”.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

# PREPARATION

## PREPARATION

### Commercial Service Tools

INFOID:0000000003136569

| Tool name | Description |
|---|---|
| Remover tool  PIIB7923J | Remove the clip and pawl and metal clip |

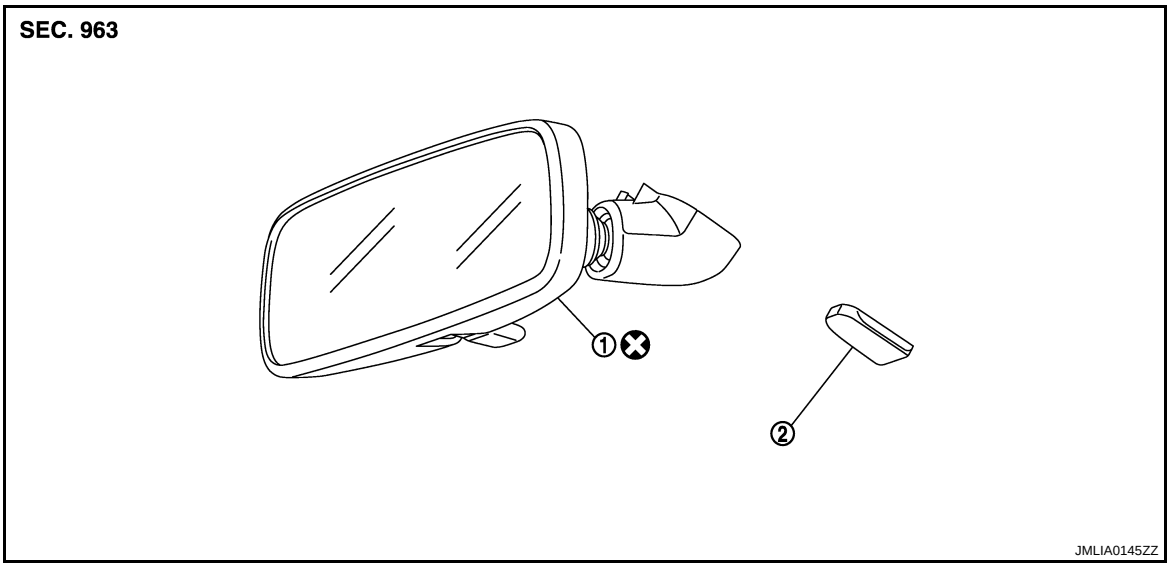
# ON-VEHICLE REPAIR

## INSIDE MIRROR

### Exploded View

INFOID:0000000003777987

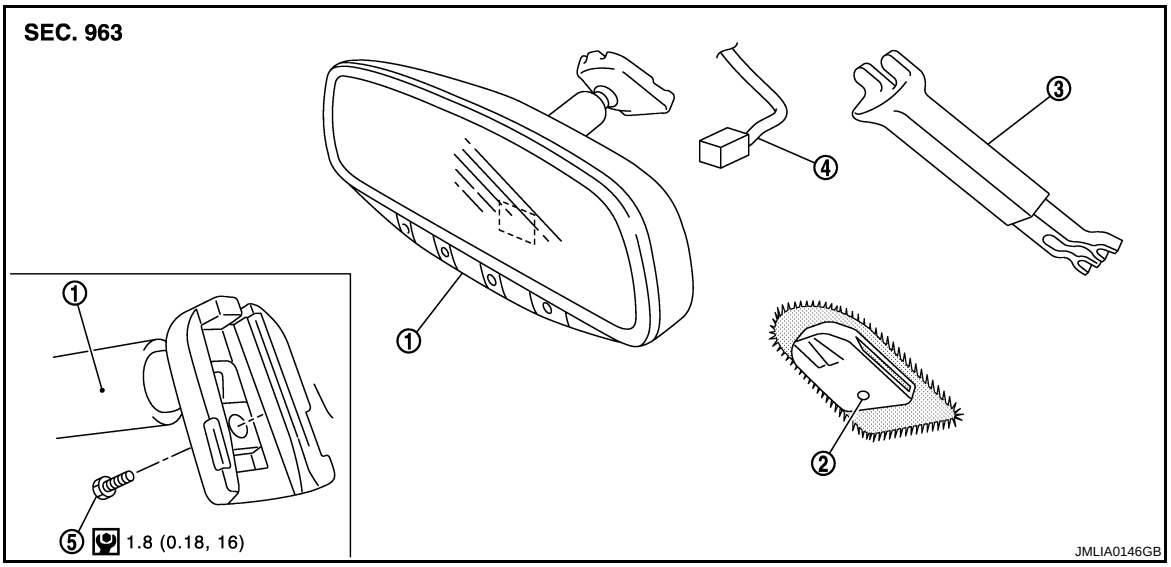
#### Base




1. Inside mirror
2. Mirror base

Refer to GI-4, "Components" for symbols in the figure.

#### Option




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

Refer to GI-4, "Components" for symbols in the figure.

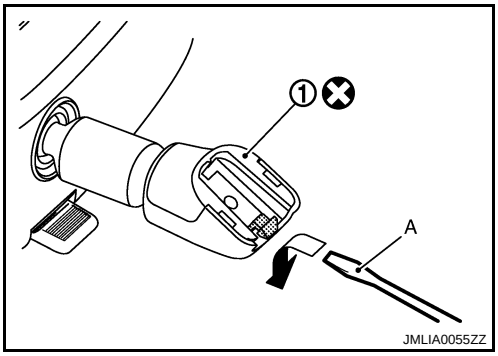
### Removal and Installation

INFOID:0000000003777988

#### 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 pqwl downward.




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

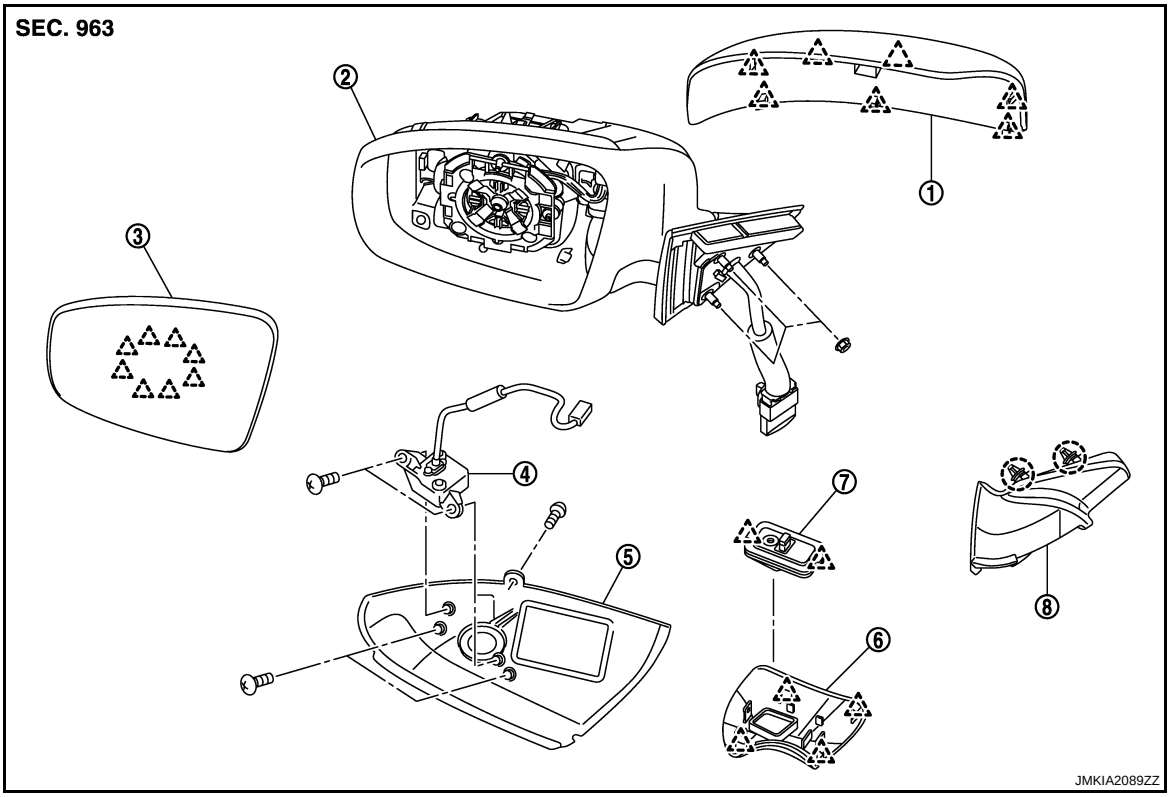
**CAUTION:**
**When inserting the inside mirror into the mirror base, be sure to push the pawl until it get connected to the mirror base.**

# OUTSIDE MIRROR

## DOOR MIRROR ASSEMBLY

### DOOR MIRROR ASSEMBLY : Exploded View

INFOID:0000000003777989




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

: Clip

: Pawl

### DOOR MIRROR ASSEMBLY : Removal and Installation

INFOID:0000000003777990

REMOVAL

1. Remove front door finisher. Refer to INT-11, "DRIVER SIDE : Removal and Installation" (driver side) or INT-14, "PASSENGER SIDE : Removal and Installation" (passenger side).
2. Remove clips and remove corner cover.
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-438, "CALIBRATING CAMERA IMAGE (AROUND VIEW MONITOR) : Special Repair Requirement".**

### DOOR MIRROR ASSEMBLY : Disassembly and Assembly

INFOID:0000000003777991

DISASSEMBLY

1. Remove door mirror cover. Refer to MIR-76, "DOOR MIRROR COVER : Disassembly and Assembly"
2. Remove side camera after removing door mirror assembly (BOSE audio with navigation model). Refer to AV-928, "Removal and Installation"(RH) or AV-927, "Removal and Installation"(LH)
3. Remove base cover and puddle lamp.

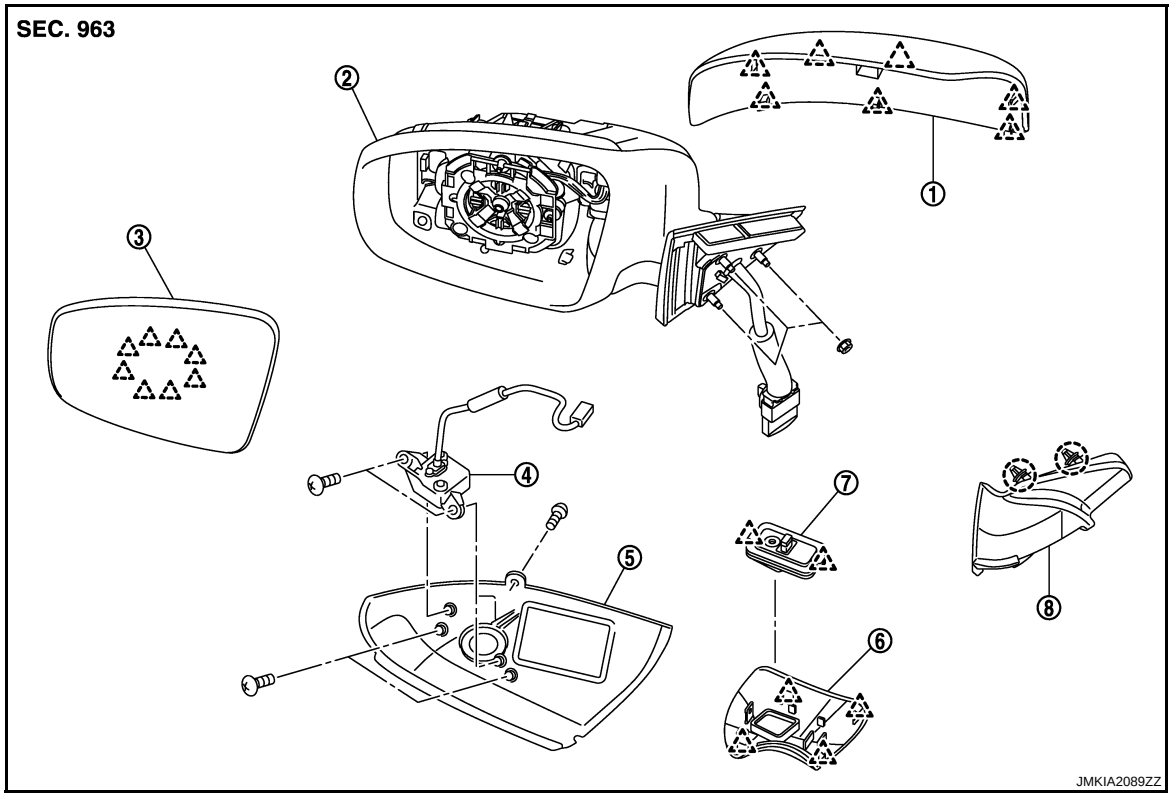
ASSEMBLY

Assemble in the reverse order of disassemble.

## GLASS MIRROR

### GLASS MIRROR : Exploded View

INFOID:0000000003777992




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

: Clip

: Pawl

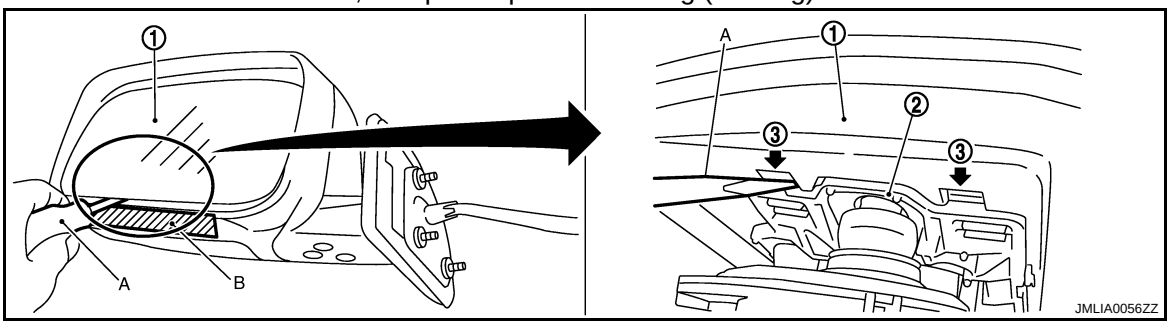
### GLASS MIRROR : Disassembly and Assembly

INFOID:0000000003777993

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 small slotted screwdriver (A) into the recess between glass mirror (1) and actuator (2). Push up both pawls (3) simultaneously to remove glass mirror lower half side.
   **NOTE:**

Insert screwdriver 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. Disassemble glass mirror from actuator.
   **NOTE:**
   Be certain not to allow grease on sealing agent in center of mirror or back side of glass mirror.

## ASSEMBLY

Assemble in the reverse order of disassemble.

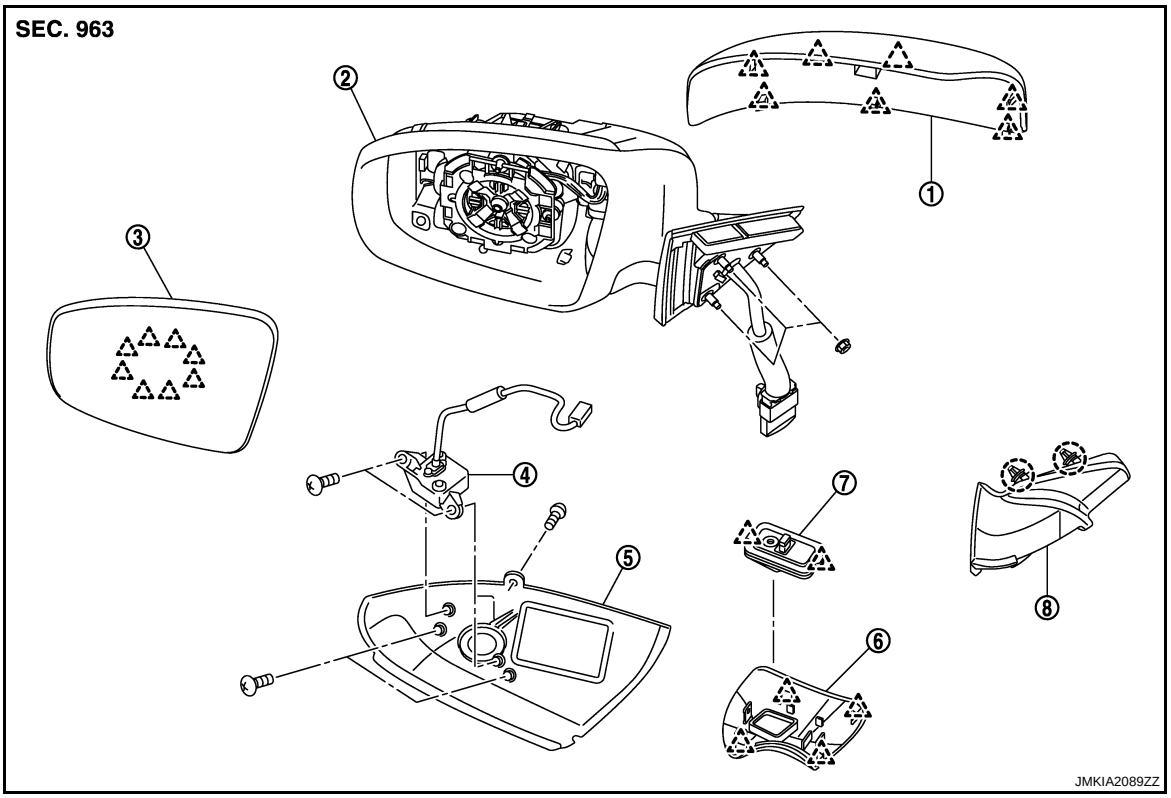
**CAUTION:**

**After installation, visually check that pawls are securely engaged.**

# DOOR MIRROR COVER

## DOOR MIRROR COVER : Exploded View

INFOID:0000000003777994




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

: Clip

: Pawl

## DOOR MIRROR COVER : Disassembly and Assembly

INFOID:0000000003777995

**CAUTION:**
**Do not damage the mirror bodies.**

### DISASSEMBLY

1. Remove the glass mirror. Refer to MIR-74, "GLASS MIRROR : Disassembly and Assembly".
2. Remove the pawls, and disassemble the door mirror cover from the mirror assembly.

### ASSEMBLY

Assemble in the reverse order of disassemble.

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

# DOOR MIRROR REMOTE CONTROL SWITCH

## Exploded View

INFOID:0000000003136578

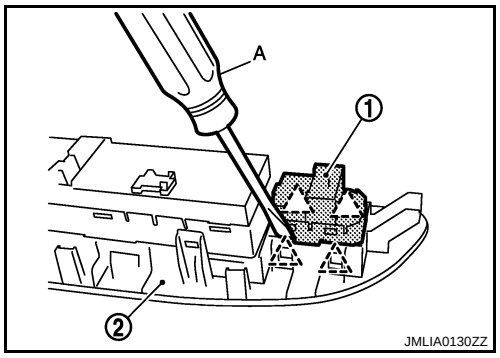
Refer to INT-17, "Exploded View"

## Removal and Installation

INFOID:0000000003136579

### REMOVAL

1. Remove the power window main switch finisher (2). Refer to INT-11, "DRIVER SIDE : Exploded View".
2. Remove door mirror remote control switch (1) from power window main switch finisher (2) using screwdriver (A).




: **Pawl**

### INSTALLATION

Install in the reverse order of removal.