SECTION DEFOGGER C

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< PRECAUTION > PRECAUTION PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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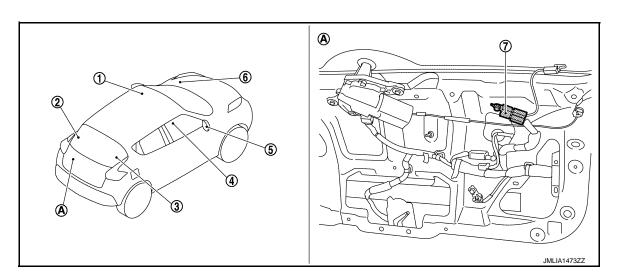
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< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION **COMPONENT PARTS**

Component Parts Location

INFOID:000000008275963



- 1. BCM Refer to BCS-6, "BODY CONTROL SYSTEM : Component Parts Location" (With Intelligent Key system) or BCS-84, "BODY CONTROL SYS-TEM : Component Parts Location" (Without Intelligent Key system).
- 4. Multidisplay unit*1 A/C control*2 (Rear window defogger switch)
- 2. Rear window defogger connector
- Rear window defogger connector

3.

- 5. Door mirror defogger*3
- 6. IPDM E/R Refer to PCS-5, "Component Parts Location" (With Intelligent Key system) or PCS-38, "Component Parts Location" (Without Intelligent Key system).

- Condenser 7.
- *1:With automatic A/C
- *²:With manual A/C
- *³:For models with door mirror defogger

Component Description

INFOID:000000008275964

| BCM | Transmits rear window defogger control signal to IPDM E/R via CAN communication Performs the timer control of rear window defogger |
|--|--|
| IPDM E/R | Rear window defogger relay is installed. Receives rear window defogger control signal from BCM via CAN communication. Controls rear window defogger relay. |
| Multidisplay unit^{*1} A/C control^{*2} | The rear window defogger switch is installed Turns the indicator lamp ON when detecting the operation of rear window defogger |
| Rear window defogger switch | Rear window defogger and door mirror defogger*³ are operated by turning the rear window defogger switch ON. The indicator lamp in the rear window defogger illuminates when the rear window defogger is operating. |

COMPONENT PARTS

< SYSTEM DESCRIPTION >

| Rear window defogger relay | Operates rear window defogger and door mirror defogger* ³ with IPDM E/R control. |
|------------------------------------|--|
| Rear window defogger | Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up. |
| Door mirror defogger* ³ | Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up. |

*1:With automatic A/C

*2:With manual A/C

*³:For models with door mirror defogger

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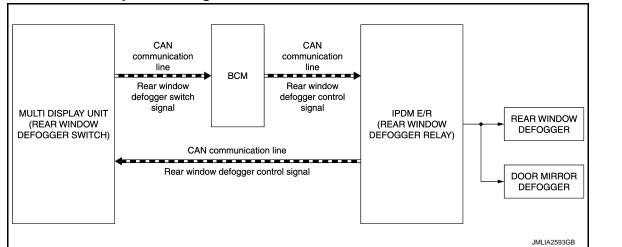
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< SYSTEM DESCRIPTION >

SYSTEM WITH AUTO A/C

WITH AUTO A/C : System Diagram



WITH AUTO A/C : System Description

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OPERATION DESCRIPTION

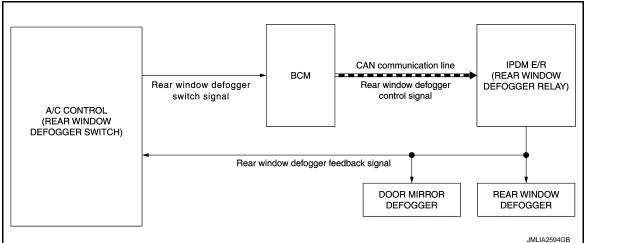
- BCM detects that the rear window defogger switch turns ON while ignition switch is ON, and then transmits the rear window defogger control signal to IPDM E/R via CAN communication for approximately 15 minutes.
- IPDM E/R turns rear window defogger relay ON when it receives rear window defogger control signal.
- The power is supplied to rear window defogger and door mirror defogger* when the rear window defogger relay turns ON.
- When rear window defogger is activated, indicator lamp on rear window defogger switch turns ON.
- *: For models with door mirror defogger.

TIMER FUNCTION

- BCM transmits rear window defogger control signal to IPDM E/R for approximately 15 minutes when rear window defogger switch is turns ON while ignition switch is ON. Then, IPDM E/R activates rear window defogger and door mirror defogger*.
- The timer is cancelled if the rear window defogger switch is pressed again during timer operation. BCM stops the output of rear window defogger control signal. The same action occurs during timer operation if the ignition switch is OFF.

*: For models with door mirror defogger. WITHOUT AUTO A/C

WITHOUT AUTO A/C : System Diagram



SYSTEM

< SYSTEM DESCRIPTION >

WITHOUT AUTO A/C : System Description

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OPERATION DESCRIPTION

- BCM detects that rear window defogger switch turns ON while ignition switch is ON, and then transmits rear window defogger control signal to IPDM E/R via CAN communication for approximately 15 minutes.
- IPDM E/R turns rear window defogger relay ON when it receives rear window defogger control signal.
 The power is supplied to rear window defogger and door mirror defogger* when rear window defogger relay turns ON.
- When rear window defogger is activated, indicator lamp on rear window defogger switch turns ON.
- *: For models with door mirror defogger.

TIMER FUNCTION

- BCM transmits rear window defogger control signal to IPDM E/R for approximately 15 minutes when the rear window defogger switch is turns ON while ignition switch is ON. Then, IPDM E/R activates rear window defogger and door mirror defogger*.
- The timer is cancelled if the rear window defogger switch is pressed again during timer operation. BCM stops the output of rear window defogger control signal. The same action occurs during timer operation if the ignition switch is OFF.
- *: For models with door mirror defogger.

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DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) < SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000008842810

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode | Function Description |
|--------------------------|--|
| Work Support | Changes the setting for each system function. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | Read and save the vehicle specification.Write the vehicle specification when replacing BCM. |

SYSTEM APPLICATION

BCM can perform the following functions for each system. **NOTE:**

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

| System | Cub sustan calestian item | Diagnosis mode | | |
|--|---------------------------|----------------|--------------|-------------|
| System | Sub system selection item | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp timer | INT LAMP | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| Air conditioning system | AIR CONDITONER | | × | ×* |
| Intelligent Key systemEngine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NVIS - NATS | IMMU | × | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door open | TRUNK | | × | |
| Theft warning alarm | THEFT ALM | × | × | × |
| RAP | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | AIR PRESSURE MONITOR | × | × | × |

NOTE:

*: For models with automatic A/C, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

| CONSULT screen item | Indication/Unit | Description | | |
|---------------------|-----------------|--|---|--|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | | |
| Odo/Trip Meter | km | Total mileage (Odomete | r value) of the moment a particular DTC is detected | |
| | SLEEP>LOCK | | While turning BCM status from low power consumption mode to normal mode (Power position is "LOCK"*.) | |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode (Power position is "OFF".) | |
| | LOCK>ACC | | While turning power position from "LOCK"* *to "ACC" | |
| | ACC>ON | | While turning power position from "ACC" to "IGN" | |
| Vehicle Condition | RUN>ACC | Power position status of the moment a particular DTC is detected | While turning power position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) | |
| | CRANK>RUN | | While turning power position from "CRANKING" to "RUN" (From cranking up the engine to run it) | |
| | RUN>URGENT | | While turning power position from "RUN" to "ACC" (Emergency stop operation) | |
| | ACC>OFF | | While turning power position from "ACC" to "OFF" | |
| | OFF>LOCK | | While turning power position from "OFF" to "LOCK"* | |
| | OFF>ACC | | While turning power position from "OFF" to "ACC" | |
| | ON>CRANK | | While turning power position from "IGN" to "CRANKING" | |
| | OFF>SLEEP | | While turning BCM status from normal mode (Power position is "OFF".) to low power consumption mode | |
| | LOCK>SLEEP | | While turning BCM status from normal mode (Power position is "LOCK"*.) to low power consumption mode | |
| | LOCK | | Power position is "LOCK"* | |
| | OFF | | Power position is "OFF" (Ignition switch OFF) | |
| | ACC | | Power position is "ACC" (Ignition switch ACC) | |
| | ON | | Power position is "IGN" (Ignition switch ON with engine stopped) | |
| | ENGINE RUN | | Power position is "RUN" (Ignition switch ON with engine running) | |
| | CRANKING | | Power position is "CRANKING" (At engine cranking) | |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | | |

*: Power position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (A/T models and CVT models), and any of the following conditions are met.

- Closing door
- · Opening door
- · Door is locked using door request switch
- Door is locked using Intelligent Key

The power position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

REAR WINDOW DEFOGGER

REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)

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DATA MONITOR

NOTE:

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

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DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

| Monitor Item | Description |
|--------------|---|
| REAR DEF SW | Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch. |
| PUSH SW | Indicates [ON/OFF] condition of push switch. |

ACTIVE TEST

| Test Item | Description |
|---------------|---|
| REAR DEFOGGER | Rear window defogger operates when "ON" on CONSULT screen is touched. |

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000008842811

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode | Function Description | |
|--------------------------|--|---|
| Work Support | Changes the setting for each system function. | |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. | D |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. | |
| Data Monitor | The BCM input/output signals are displayed. | E |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. | |
| Ecu Identification | The BCM part number is displayed. | |
| Configuration | Read and save the vehicle specification.Write the vehicle specification when replacing BCM. | F |

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

| | | | | ×: Applicable item |
|--------------------------------------|---------------------------|--------------|----------------|--------------------|
| System | Sub system selection item | | Diagnosis mode | |
| System | Sub system selection item | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp control | INT LAMP | × | × | × |
| Remote keyless entry system | MULTI REMOTE ENT | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | × | × | × |
| Turn signal and hazard warning lamps | FLASHER | | × | × |
| Air conditioning system | AIR CONDITONER | | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NATS | IMMU | × | | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door open | TRUNK | | × | |
| Theft warning alarm | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | × |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| Panic alarm | PANIC ALARM | | | × |
| TPMS | AIR PRESSUE MONITOR | × | × | × |

REAR WINDOW DEFOGGER

REAR WINDOW DEFOGGER : CONSULT Function (BCM - REAR DEFOGGER)

INFOID:000000008275972

DATA MONITOR

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

NOTE:

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

| Monitor Item | Description |
|--------------|---|
| REAR DEF SW | Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch. |
| IGN ON SW | Indicates [ON/OFF] condition of ignition switch in ON position. |
| ACC ON SW | Indicates [ON/OFF] condition of ignition switch ACC position. |

ACTIVE TEST

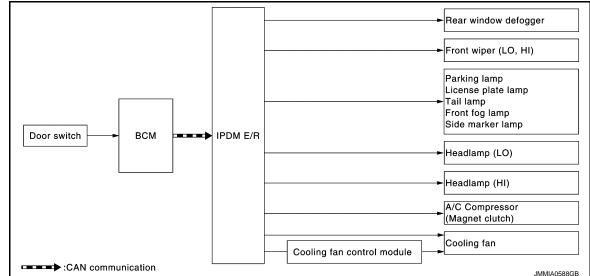
| Test Item | Description |
|---------------|---|
| REAR DEFOGGER | Rear window defogger operates when "ON" on CONSULT screen is touched. |

| < SYSTEM DESCRIPTION > | |
|--|-----|
| DIAGNOSIS SYSTEM (IPDM E/R) | |
| WITH INTELLIGENT KEY | А |
| WITH INTELLIGENT KEY : Diagnosis Description | В |
| AUTO ACTIVE TEST | |
| Description In auto active test mode, the IPDM E/R sends a drive signal to the following systems to check their operation. • Rear window defogger | С |
| Front wiper motor Parking lamp License plate lamp Tail lamp | D |
| Side marker lamp Front fog lamp Headlamp (LO, HI) | Ε |
| A/C compressor (magnet clutch)Cooling fan | F |
| Operation Procedure | |
| CAUTION: Wiper arm interferes with hood when wiper is operated while wiper arm is in the raised position. Always perform auto active test without setting wiper arm in the raised position. Always pour water on front windshield glass in advance to auto active test so that damage on front windshield glass surface is prevented. | G |
| 1. Turn the ignition switch OFF. | |
| Turn the ignition switch ON, and within 20 seconds, press the driver door switch 10 times. Then turn the ignition switch OFF. CAUTION: Close passenger door. | I |
| Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts. CAUTION: | J |
| Engine starts when ignition switch is turned ON while brake pedal is depressed. | K |
| 4. After a series of the following operations is repeated 3 times, auto active test is completed. | 1.4 |
| NOTE: When auto active test mode has to be cancelled halfway through test, turn the ignition switch OFF. When auto active test is not activated, door switch may be the cause. Check door switch. Refer to <u>DLK-71</u>, <u>"Component Function Check"</u>. | DEF |
| Inspection in Auto Active Test Mode When auto active test mode is actuated, the following operation sequence is repeated 3 times. | Μ |
| Operation | |

| Operation sequence | Inspection location | Operation | Ν |
|--------------------|---|---|---|
| 1 | Rear window defogger | 10 seconds | - |
| 2 | Front wiper motor | LO for 5 seconds \rightarrow HI for 5 seconds | 0 |
| 3 | Parking lamp License plate lamp Tail lamp Side marker lamp Front fog lamp | 10 seconds | P |
| 4 | Headlamp | LO for 10 seconds \rightarrow HI ON \Leftrightarrow OFF 5 times | - |
| 5 | A/C compressor (magnet clutch) | $ON \Leftrightarrow OFF 5 times$ | - |
| 6 | Cooling fan | 50% duty for 5 seconds \rightarrow 100% duty for 5 seconds | _ |

< SYSTEM DESCRIPTION >

Concept of auto active test



- IPDM E/R starts the auto active test with the door switch signals transmitted by BCM via CAN communication. Therefore, the CAN communication line between IPDM E/R and BCM is considered normal if the auto active test starts successfully.
- The auto active test facilitates troubleshooting if any systems controlled by IPDM E/R cannot be operated.

Diagnosis chart in auto active test mode

| Symptom | Inspection contents | | Possible cause |
|--|--|-----|---|
| | | YES | BCM signal input circuit |
| Rear window defogger does not operate | Perform auto active test. Does the rear window defog- ger operate? | NO | Rear window defogger Rear window defogger ground circuit Harness or connector between IPDM E/R and rear window defogger IPDM E/R |
| Any of the following components do not | | YES | BCM signal input circuit |
| operate • Parking lamp • License plate lamp • Tail lamp • Side marker lamp • Front fog lamp • Headlamp (HI, LO) • Front wiper motor | Perform auto active test. Does the applicable system operate? | NO | Lamp or motor Lamp or motor ground circuit Harness or connector between IPDM E/R and applicable system IPDM E/R |
| A/C compressor does not operate | Perform auto active test. Does the magnet clutch oper- | YES | A/C amp. signal input circuit CAN communication signal between A/C amp. and ECM CAN communication signal between ECM and IPDM E/R |
| | ate? | NO | Magnet clutch Harness or connector between IPDM E/R and magnet clutch IPDM E/R |

< SYSTEM DESCRIPTION >

| Symptom | Inspection contents | | Possible cause |
|------------------------------|--|-----|---|
| | | YES | ECM signal input circuit CAN communication signal between ECM and IPDM E/R |
| Cooling fan does not operate | Perform auto active test. Does the cooling fan operate? | NO | Harness or connector between IPDM E/R and cooling fan relay Harness or connector between IPDM E/R and cooling fan control module. Harness or connector between cooling fan control module and cooling fan motor Cooling fan motor Cooling fan relay Cooling fan control module IPDM E/R |

WITH INTELLIGENT KEY : CONSULT Function (IPDM E/R)

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with IPDM E/R.

| Diagnosis mode | Description | |
|--------------------------|---|---|
| Ecu Identification | Allows confirmation of IPDM E/R part number. | G |
| Self Diagnostic Result | Displays the diagnosis results judged by IPDM E/R. | |
| Data Monitor | Displays the real-time input/output data from IPDM E/R input/output data. | |
| Active Test | IPDM E/R can provide a drive signal to electronic components to check their operations. | |
| CAN Diag Support Monitor | The results of transmit/receive diagnosis of CAN communication can be read. | |

SELF DIAGNOSTIC RESULT

Refer to PCS-24, "DTC Index".

DATA MONITOR

NOTE:

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

| Monitor Item [Unit] | MAIN SIGNALS | Description | |
|----------------------------------|-----------------|---|----|
| RAD FAN REQ [%] | × | Displays the value of the cooling fan speed request signal received from ECM via CAN communication. | DE |
| AC COMP REQ [Off/On] | × | Displays the status of the A/C compressor request signal received from ECM via CAN communication. | M |
| TAIL&CLR REQ [Off/On] | × | Displays the status of the position light request signal received from BCM via CAN communication. | |
| HL LO REQ [Off/On] | × | Displays the status of the low beam request signal received from BCM via CAN com- munication. | Ν |
| HL HI REQ [Off/On] | × | Displays the status of the high beam request signal received from BCM via CAN com- munication. | 0 |
| FR FOG REQ [Off/On] | × | Displays the status of the front fog light request signal received from BCM via CAN communication. | |
| FR WIP REQ [Stop/1LOW/Low/Hi] | × | Displays the status of the front wiper request signal received from BCM via CAN com- munication. | Ρ |
| WIP AUTO STOP [STOP P/ACT P] | × | Displays the status of the front wiper auto stop signal judged by IPDM E/R. | |
| WIP PROT [Off/BLOCK] | × | Displays the status of the front wiper fail-safe operation judged by IPDM E/R. | |
| IGN RLY1 -REQ [Off/On] | | Displays the status of the ignition switch ON signal received from BCM via CAN com- munication. | |

< SYSTEM DESCRIPTION >

| Monitor Item [Unit] | MAIN SIGNALS | Description |
|---|-----------------|---|
| IGN RLY [Off/On] | × | Displays the status of the ignition relay judged by IPDM E/R. |
| PUSH SW [Off/On] | | Displays the status of the push-button ignition switch judged by IPDM E/R. |
| INTER/NP SW [Off/On] | | Displays the status of the ignition power supply (M/T models) or shift position (CVT models) judged by IPDM E/R. |
| ST RLY CONT [Off/On] | | Displays the status of the starter relay status signal received from BCM via CAN com- munication. |
| IHBT RLY -REQ [Off/On] | | Displays the status of the starter control relay signal received from BCM via CAN com- munication. |
| ST/INHI RLY [Off/ ST ON/INHI ON/UNKWN] | | Displays the status of the starter relay and starter control relay judged by IPDM E/R. |
| DETENT SW [Off/On] | | Displays the status of the CVT shift selector (detention switch) judged by IPDM E/R. |
| S/L RLY -REQ [Off/On] | | NOTE: This item is indicated, but not monitored. |
| S/L STATE [LOCK/UNLK/UNKWN] | | NOTE: This item is indicated, but not monitored. |
| DTRL REQ [Off/On] | | Displays the status of the daytime running light request signal received from BCM via CAN communication. NOTE: This item is monitored only for the except for NISMO models. |
| OIL P SW [Open/Close] | | NOTE: This item is indicated, but not monitored. |
| HOOD SW [Off/On] | | NOTE: This item is indicated, but not monitored. |
| HL WASHER REQ [Off/On] | | NOTE: This item is indicated, but not monitored. |
| THFT HRN REQ [Off/On] | | Displays the status of the theft warning horn request signal received from BCM via CAN communication. |
| HORN CHIRP [Off/On] | | Displays the status of the horn reminder request signal received from BCM via CAN communication. |

ACTIVE TEST

Test item

| Test item | Operation | Description |
|------------------|-----------|--|
| HORN | On | Operates horn relay for 20 ms. |
| REAR DEFOGGER | Off | OFF |
| REAR DEFOGGER | On | Operates the rear window defogger relay. |
| | Off | OFF |
| FRONT WIPER | Lo | Operates the front wiper relay. |
| | Hi | Operates the front wiper relay and front wiper high relay. |
| | 1 | OFF |
| MOTOR FAN | 2 | Transmits 50% pulse duty signal (PWM signal) to the cooling fan control module. |
| MOTOR FAIN | 3 | Transmits 75% pulse duty signal (PWM signal) to the cooling fan control module. |
| | 4 | Transmits 100% pulse duty signal (PWM signal) to the cooling fan control module. |
| HEAD LAMP WASHER | On | NOTE: This item is indicated, but cannot be tested. |

SYSTEM DESCRIPTION -

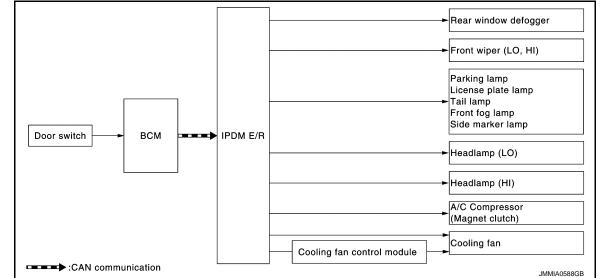
| | Operation | Description |
|---|--|--|
| | Off | OFF |
| | TAIL | Operates the tail lamp relay. |
| EXTERNAL LAMPS | Lo | Operates the headlamp low relay. |
| | Hi | Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals. |
| | Fog | Operates the front fog lamp relay. |
| VITHOUT INTELI | LIGENT K | ΣΕΥ |
| VITHOUT INTELL | .IGENT KE | EY : Diagnosis Description |
| | | 5 |
| UTO ACTIVE TEST | | |
| escription | | /D conde a drive signal to the following eveters to sheek their appretion |
| n auto active test mode Rear window defogge | | /R sends a drive signal to the following systems to check their operation. |
| Front wiper motor | | |
| Parking lamp | | |
| License plate lamp Tail lamp | | |
| Side marker lamp | | |
| Front fog lamp | | |
| Headlamp (LO, HI) A/C compressor (mag | net clutch) | |
| Cooling fan | | |
| | | |
| peration Procedure | | |
| peration Procedure | with bood y | when wines is exceeded while wines even is in the scient position |
| Peration Procedure CAUTION: Viper arm interferes | | when wiper is operated while wiper arm is in the raised position. ithout setting wiper arm in the raised position. Always pour water on |
| Operation Procedure CAUTION: Viper arm interferes Navays perform auto a ront windshield glass | active test wi | when wiper is operated while wiper arm is in the raised position. ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface |
| Operation Procedure CAUTION: Viper arm interferes Nways perform auto a ront windshield glass s prevented. | active test wi in advance | ithout setting wiper arm in the raised position. Always pour water on |
| Operation Procedure CAUTION: Viper arm interferes Always perform auto a ront windshield glass s prevented. | active test wi in advance | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface |
| Deperation Procedure CAUTION: Viper arm interferes Navays perform auto a ront windshield glass s prevented. . Turn the ignition sw | itch OFF. vitch OFF. | ithout setting wiper arm in the raised position. Always pour water on |
| Operation Procedure CAUTION: Viper arm interferes Always perform auto a ront windshield glass s prevented. | itch OFF. vitch OFF. | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface |
| Deperation Procedure CAUTION: Viper arm interferes Navays perform auto a ront windshield glass s prevented. . Turn the ignition sw Caurn the ignition sw ignition switch OFF. CAUTION: Close passenger of | in advance itch OFF. vitch ON, and | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the |
| Deperation Procedure CAUTION: Viper arm interferes Naves perform auto a ront windshield glass s prevented. Turn the ignition sw ignition switch OFF. CAUTION: Close passenger co Turn the ignition sw | in advance itch OFF. vitch ON, and | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the |
| Deperation Procedure CAUTION: Viper arm interferes Nways perform auto a ront windshield glass s prevented. Turn the ignition sw ignition switch OFF. CAUTION: Close passenger c Turn the ignition sw starts. | in advance itch OFF. vitch ON, and | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the |
| Deperation Procedure CAUTION: Viper arm interferes Naves perform auto a ront windshield glass s prevented. . Turn the ignition sw ignition switch OFF. CAUTION: Close passenger of S. Turn the ignition sw starts. CAUTION: | in advance itch OFF. vitch ON, and vitch ON, with | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the |
| Deperation Procedure CAUTION: Viper arm interferes Naves perform auto a ront windshield glass s prevented. . Turn the ignition sw ignition switch OFF. CAUTION: Close passenger of . Turn the ignition sw starts. CAUTION: Engine starts where | in advance itch OFF. vitch ON, and vitch ON, with vitch ON with | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the in 10 seconds. After that the horn sounds once and the auto active test |
| Operation Procedure CAUTION: Viper arm interferes Always perform auto a ront windshield glass s prevented. Turn the ignition switch OFF. CAUTION: Close passenger of Turn the ignition swistarts. CAUTION: Engine starts when After a series of the | in advance itch OFF. vitch ON, and vitch ON with n ignition sv following op | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the in 10 seconds. After that the horn sounds once and the auto active test vitch is turned ON while brake pedal is depressed. erations is repeated 3 times, auto active test is completed. |
| Deperation Procedure CAUTION: Viper arm interferes Naves perform auto a ront windshield glass s prevented. Turn the ignition switch OFF. CAUTION: Close passenger of Turn the ignition switch off. CAUTION: Close passenger of Turn the ignition switch off. CAUTION: Close passenger of After a series of the IOTE: When auto active test | in advance in advance itch OFF. vitch ON, and door. vitch ON with n ignition sw following op mode has to | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the in 10 seconds. After that the horn sounds once and the auto active test vitch is turned ON while brake pedal is depressed. erations is repeated 3 times, auto active test is completed. be cancelled halfway through test, turn the ignition switch OFF. |
| Deperation Procedure CAUTION: Viper arm interferes Always perform auto a ront windshield glass s prevented. . Turn the ignition sw ignition switch OFF. CAUTION: Close passenger of CAUTION: Close passenger of CAUTION: CAUTION: Engine starts when . After a series of the IOTE: When auto active test When auto active test | in advance in advance itch OFF. vitch ON, and door. vitch ON with n ignition sw following op mode has to is not activat | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the in 10 seconds. After that the horn sounds once and the auto active test vitch is turned ON while brake pedal is depressed. erations is repeated 3 times, auto active test is completed. |
| Deperation Procedure CAUTION: Viper arm interferes Naves perform auto a ront windshield glass s prevented. Turn the ignition switch OFF. CAUTION: Close passenger of Turn the ignition switch off. CAUTION: Close passenger of Turn the ignition switch off. CAUTION: Close passenger of After a series of the IOTE: When auto active test | in advance in advance itch OFF. vitch ON, and door. vitch ON with n ignition sw following op mode has to is not activat | ithout setting wiper arm in the raised position. Always pour water on to auto active test so that damage on front windshield glass surface I within 20 seconds, press the driver door switch 10 times. Then turn the in 10 seconds. After that the horn sounds once and the auto active test vitch is turned ON while brake pedal is depressed. erations is repeated 3 times, auto active test is completed. be cancelled halfway through test, turn the ignition switch OFF. |

| Operation sequence | Inspection location | Operation | Ρ |
|--------------------|----------------------|---|---|
| 1 | Rear window defogger | 10 seconds | |
| 2 | Front wiper motor | LO for 5 seconds \rightarrow HI for 5 seconds | |

< SYSTEM DESCRIPTION >

| Operation sequence | Inspection location | Operation |
|--------------------|---|---|
| 3 | Parking lamp License plate lamp Tail lamp Side marker lamp Front fog lamp | 10 seconds |
| 4 | Headlamp | LO for 10 seconds \rightarrow HI ON \Leftrightarrow OFF 5 times |
| 5 | A/C compressor (magnet clutch) | $ON \Leftrightarrow OFF 5 times$ |
| 6 | Cooling fan | 50% duty for 5 seconds \rightarrow 100% duty for 5 seconds |

Concept of auto active test



- IPDM E/R starts the auto active test with the door switch signals transmitted by BCM via CAN communication. Therefore, the CAN communication line between IPDM E/R and BCM is considered normal if the auto active test starts successfully.
- The auto active test facilitates troubleshooting if any systems controlled by IPDM E/R cannot be operated.

Diagnosis chart in auto active test mode

| Symptom | Inspection contents | | Possible cause |
|--|--|-----|---|
| | | YES | BCM signal input circuit |
| Rear window defogger does not operate | Perform auto active test. Does the rear window defog- ger operate? | NO | Rear window defogger Rear window defogger ground circuit Harness or connector between IPDM E/R and rear window defogger IPDM E/R |
| Any of the following components do not | | YES | BCM signal input circuit |
| operate Parking lamp License plate lamp Tail lamp Side marker lamp Front fog lamp Headlamp (HI, LO) Front wiper motor | Perform auto active test. Does the applicable system operate? | NO | Lamp or motor Lamp or motor ground circuit Harness or connector between IPDM E/R and applicable system IPDM E/R |

< SYSTEM DESCRIPTION >

| Symptom | Inspection contents | | Possible cause |
|---------------------------------|--|-----|---|
| A/C compressor does not operate | Perform auto active test. Does the magnet clutch oper- | YES | A/C amp. signal input circuit CAN communication signal between A/C amp. and ECM CAN communication signal between ECM and IPDM E/R |
| | ate? | NO | Magnet clutch Harness or connector between IPDM E/R and magnet clutch IPDM E/R |
| | | YES | ECM signal input circuit CAN communication signal between ECM and IPDM E/R |
| Cooling fan does not operate | Perform auto active test. Does the cooling fan operate? | NO | Harness or connector between IPDM E/R and cooling fan relay Harness or connector between IPDM E/R and cooling fan control module. Harness or connector between cooling fan control module and cooling fan motor Cooling fan motor Cooling fan relay Cooling fan control module IPDM E/R |

WITHOUT INTELLIGENT KEY : CONSULT Function (IPDM E/R)

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with IPDM E/R.

| Diagnosis mode | Description | |
|--------------------------|---|---|
| Ecu Identification | Allows confirmation of IPDM E/R part number. | |
| Self Diagnostic Result | Displays the diagnosis results judged by IPDM E/R. | |
| Data Monitor | Displays the real-time input/output data from IPDM E/R input/output data. | |
| Active Test | IPDM E/R can provide a drive signal to electronic components to check their operations. | L |
| CAN Diag Support Monitor | The results of transmit/receive diagnosis of CAN communication can be read. | ľ |

SELF DIAGNOSTIC RESULT Refer to <u>PCS-54, "DTC Index"</u>.

DATA MONITOR

NOTE:

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

| Monitor Item MAIN SIG- [Unit] NALS | | Description | |
|---------------------------------------|---|---|--|
| RAD FAN REQ [%] | × | Displays the value of the cooling fan speed request signal received from ECM via CAN communication. | |
| AC COMP REQ [Off/On] | × | Displays the status of the A/C compressor request signal received from ECM via CAN communication. | |
| TAIL&CLR REQ [Off/On] | × | Displays the status of the position light request signal received from BCM via CAN communication. | |
| HL LO REQ [Off/On] | × | Displays the status of the low beam request signal received from BCM via CAN communication. | |
| HL HI REQ [Off/On] | × | Displays the status of the high beam request signal received from BCM via CAN communication. | |

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< SYSTEM DESCRIPTION >

| Monitor Item [Unit] | MAIN SIG- NALS | Description |
|----------------------------------|-------------------|--|
| FR FOG REQ [Off/On] | × | Displays the status of the front fog light request signal received from BCM via CAN communication. |
| FR WIP REQ [Stop/1LOW/Low/Hi] | × | Displays the status of the front wiper request signal received from BCM via CAN communication. |
| WIP AUTO STOP [STOP P/ACT P] | × | Displays the status of the front wiper auto stop signal judged by IPDM E/R. |
| WIP PROT [Off/BLOCK] | × | Displays the status of the front wiper fail-safe operation judged by IPDM E/R. |
| IGN RLY [Off/On] | × | Displays the status of the ignition relay judged by IPDM E/R. |
| INTER/NP SW [Off/On] | | Displays the status of the shift position (CVT models) judged by IPDM E/R. |
| ST RLY REQ [Off/On] | | Displays the status of the starter relay status signal received from BCM via CAN communication. |
| DTRL REQ [Off/On] | | Displays the status of the daytime running light request signal received from BCM via CAN communication. |
| OIL P SW [Open/Close] | | NOTE: This item is indicated, but not monitored. |
| HOOD SW [Off/On] | | NOTE: This item is indicated, but not monitored. |
| HL WASHER REQ [Off/On] | | NOTE: This item is indicated, but not monitored. |
| THFT HRN REQ [Off/On] | | Displays the status of the theft warning horn request signal received from BCM via CAN communication. |
| HORN CHIRP [Off/On] | | Displays the status of the horn reminder request signal received from BCM via CAN communication. |

ACTIVE TEST

Test item

| Test item | Operation | Description |
|------------------|-----------|---|
| HORN | On | Operates horn relay for 20 ms. |
| REAR DEFOGGER | Off | OFF |
| REAR DEFOGGER | On | Operates the rear window defogger relay. |
| | Off | OFF |
| FRONT WIPER | Lo | Operates the front wiper relay. |
| | Hi | Operates the front wiper relay and front wiper high relay. |
| | 1 | OFF |
| MOTOR FAN | 2 | Transmits 50% pulse duty signal (PWM signal) to the cooling fan control module. |
| MOTOR FAIN | 3 | Transmits 75% pulse duty signal (PWM signal) to the cooling fan control module. |
| | 4 | Transmits 100% pulse duty signal (PWM signal) to the cooling fan control module. |
| HEAD LAMP WASHER | On | NOTE: This item is indicated, but cannot be tested. |
| | Off | OFF |
| | TAIL | Operates the tail lamp relay. |
| EXTERNAL LAMPS | Lo | Operates the headlamp low relay. |
| | Hi | Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals. |
| | Fog | Operates the front fog lamp relay. |

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION BCM, IPDM E/R

List of ECU Reference

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| | ECU | Reference | |
|----------|----------------------------------|--|--|
| | | BCS-36, "Reference Value" | |
| | | BCS-57, "Fail-safe" | |
| | (With Intelligent Key system) | BCS-58, "DTC Inspection Priority Chart" | |
| PCM | | BCS-59, "DTC Index" | |
| BCM | | BCS-109, "Reference Value" | |
| | (Without Intelligent Key system) | BCS-122, "Fail-safe" | |
| | | BCS-123, "DTC Inspection Priority Chart" | |
| | | BCS-123, "DTC Index" | |
| | | PCS-17, "Reference Value" | |
| | (With Intelligent Key system) | PCS-23, "Fail-safe" | |
| IPDM E/R | | PCS-24, "DTC Index" | |
| | | PCS-48. "Reference Value" | |
| | (Without Intelligent Key system) | PCS-53. "Fail-safe" | |
| | | PCS-54, "DTC Index" | |

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< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

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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 FOR DTC

Perform self diagnosis with CONSULT.

Is any DTC detected?

- YES-1 >> BCM: Refer to <u>BCS-59</u>, "<u>DTC Index</u>" (With Intelligent Key system) or <u>BCS-123</u>, "<u>DTC Index</u>" (Without Intelligent Key system).
- YES-2 >> IPDM E/R: Refer to <u>PCS-24, "DTC Index"</u> (With Intelligent Key system) or <u>PCS-54, "DTC Index"</u> (Without Intelligent Key system).

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.

| F DTC/CIRCUIT DIAGNOSI | | EFOGGER SWITCH | |
|---|--|-----------------------|-----------------------------|
| DTC/CIRCUIT D | | | |
| REAR WINDOW DEI | | ЭН | |
| WITH AUTO A/C | OUGER SWITC | | |
| WITH AUTO A/C : Des | cription | | INFOID:00000008275979 |
| The rear window defogger is The indicator lamp in the reading. | | | |
| WITH AUTO A/C : Com | ponent Function C | heck | INF0ID:00000008275980 |
| 1.CHECK REAR WINDOW [| DEFOGGER SWITCH F | UNCTION | |
| | ••• | ЭK. | dow defogger switch ON. |
| WITH AUTO A/C : Diag | | | INFOID:00000008275981 |
| CHECK MULTI DISPLAY U | | DEFOGGER SWITCH) | |
| Does multi display unit (rear w Refer to <u>DEF-23, "WITH AUT</u> O | indow defogger switch) | | |
| <u>s the inspection result normal</u> YES >> INSPECTION EN NO >> Replace multi dis WITHOUT AUTO A/C | | efogger switch). | |
| WITHOUT AUTO A/C : | Description | | INFOID:00000008275982 |
| The rear window defogger is The indicator lamp in the rea ing. | | | |
| WITHOUT AUTO A/C : | Component Functi | ion Check | INF0ID:00000008275983 |
| CHECK FUNCTION | - | | |
| | M "DATA MONITOR"mo | de using CONSULT when | rear window defogger switch |
| s ON. <u>s the inspection result normal</u> YES >> Rear window defo | <u>?</u> ogger switch function is (| ЭК. | |
| | <u>"WITHOUT AUTO A/C :</u> | • | |
| | - | lie | INFOID:00000008275984 |
| CHECK BCM OUTPUT SI | JNAL | | |
| Turn ignition switch OFF. Disconnect A/C control co Check voltage between A | | ector and ground. | |
| (+) | | | |
| A/C co | ntrol | () | Voltage (V) (Approx.) |
| Connector | Terminal | - | |
| M53 | 3 | Ground | Battery voltage |

Is the inspection result normal?

REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

1. Disconnect BCM connector.

2. Check continuity between BCM harness connector and A/C control harness connector.

| BCM A/C control | | | | | Continuity |
|-----------------------------------|-----|-----------|----------|------------|------------|
| Connector Terminal | | Connector | Terminal | Continuity | |
| With Intelligent Key system | M65 | 15 | M53 | 3 | Existed |
| Without Intelligent Key system | M68 | 10 | 10135 | 5 | Existed |

3. Check continuity between BCM harness connector and ground.

| | BCM | | Continuity | | |
|-----------------------------------|-----|---------------|------------|-------------|--|
| Connector Terminal | | | _ | Continuity | |
| With Intelligent Key system | M65 | M65 15 Ground | | Not existed | |
| Without Intelligent Key system | M68 | 10 | - | NOT EXISTED | |

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-81</u>, "<u>Removal and Installation</u>" (With Intelligent Key system) or <u>BCS-142</u>, "<u>Removal and Installation</u>" (Without Intelligent Key system).

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between A/C control harness connector and ground.

| A/C control | | | Continuity |
|-------------|----------|--------|------------|
| Connector | Terminal | Ground | Continuity |
| M53 | 8 | | Existed |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER SWITCH

Refer to <u>DEF-24</u>, "WITHOUT AUTO A/C : Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace A/C control. Refer to <u>HAC-134</u>, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

WITHOUT AUTO A/C : Component Inspection

1.CHECK REAR WINDOW DEFOGGER SWITCH

1. Turn ignition switch OFF.

2. Disconnect A/C control connector.

3. Check continuity between A/C control terminals.

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REAR WINDOW DEFOGGER SWITCH

< DTC/CIRCUIT DIAGNOSIS >

| | control | Condition | Condition | | |
|--|------------------|--------------------------------|---------------------|------------------------|--|
| Terr | minal | | Durant | Continuity | |
| 3 | 8 | Rear window defogger switch | Pressed Released | Existed Not existed | |
| he increation rea | ult normal? | | Released | not existed | |
| <u>he inspection res</u> ES >> INSPEC | TION END | | | | |
| D >> Replace | A/C control. Ref | er to HAC-134, "Removal and li | nstallation". | | |
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REAR WINDOW DEFOGGER RELAY

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

The rear window defogger is operated by turning the rear window defogger switch ON.

Component Function Check

1.CHECK FUNCTION

1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.

- 2. Touch "ON".
- 3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

- YES >> Rear window defogger relay function is OK.
- NO >> Refer to <u>DEF-26, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check the 15A fuse (No. 41 and 42 located in IPDM E/R).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2. CHECK IPDM E/R OUTPUT SIGNAL

1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.

2. Touch "ON".

3. Check voltage between IPDM E/R harness connector and ground.

| `` | +) /I E/R | (-) CONSULT Active Test condition | | Test condition | Voltage (V) (Approx.) |
|-----------|--------------|-----------------------------------|---------------|----------------|--------------------------|
| Connector | Terminal | | | | () I I - / |
| E11 | 14 | Ground | REAR DEFOGGER | ON | 9 – 16 V |
| EII | 14 | Ground | | OFF | 0 |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace IPDM E/R. Refer to <u>PCS-35, "Removal and Installation"</u> (With Intelligent Key system) or <u>PCS-62, "Removal and Installation"</u> (Without Intelligent Key system).

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INFOID:000000008275988

REAR WINDOW DEFOGGER

| < DTC/CIRCUIT DIAG | | | | | | |
|---|---|-----------------------|-----------------------------|-------------------|------------------|--------------------------|
| Description | | | | | | INFOID:000000008275989 |
| Heats the heating wire from fogging up. | with the | power supply | from the | rear window defog | ger relay to pre | |
| Component Functi | ion Ch | eck | | | | INFOID:00000008275990 |
| 1.CHECK FUNCTION | | | | | | |
| Perform IPDM E/R Touch "ON". Check that the rear Is the inspection result YES >> Rear windo NO >> Refer to DE | window normal? w defog F-26, "I | / heating wire | is getting | , , | LT. | |
| Diagnosis Procedu | lre | | | | | INFOID:000000008275991 |
| 1.CHECK REAR WINI | | | OWER SU | PPLY CIRCUIT | | |
| Turn ignition switch Disconnect rear wir Turn ignition switch Check voltage betw | ndow de i ON. | | | ess connector and | d ground. | |
| (+) | | | | | | |
| Rear window defog | - | (-) | Condition | | | Voltage (V) (Approx.) |
| | minal 1 | Ground | Rear window defogger switch | | ON OFF | Battery voltage |
| Is the inspection resultYES>> GO TO 2.NO>> GO TO 4.2.CHECK REAR WINI1.Turn ignition switch2.Check continuity be | DOW DI | EFOGGER GI | | | and ground. | |
| Real | r window o | defogger | | | - | |
| Connector | | Termina | il | Ground | | Continuity |
| D203 | | 2 | | | | Existed |
| Is the inspection result YES >> GO TO 3. NO >> Repair or re 3. CHECK FILAMENT Refer to <u>DEF-41</u> , "Inspection result Is the inspection result YES >> GO TO 5. NO >> Repair filan | eplace h ection ar normal? nent. | arness. nd Repair" | | | | |
| 4.CHECK REAR WINI 1. Turn ignition switch 2. Disconnect conden | OFF. | | OWER SU | PPLY CIRCUIT 1 | | |

Disconnect condenser connector.
 Check continuity between condenser harness connector and rear window defogger harness connector.

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

| | enser | R | Rear windo | w defogger | | Continuity | |
|---|--|----------------|------------|---------------|---------|-----------------|--|
| Connector | Terminal | Connec | tor | Termina | ıl | Continuity | |
| D201 | 2 | D202 | | 1 | | Existed | |
| 4. Check continuity be | tween condenser co | onnector and g | ground. | | | | |
| | Condonoor | | | | | | |
| Connector | Condenser | | C | Ground | | Continuity | |
| | | | | found | | Not ovisted | |
| D201 | 2 | | | | | Not existed | |
| <u>s the inspection result r</u> YES >> GO TO 5. | <u>iormar?</u> | | | | | | |
| NO >> Repair or re | place harness. | | | | | | |
| 5. CHECK REAR WIND | • | | | CUIT 2 | | | |
| I. Disconnect IPDM E | | | | | | | |
| 2. Check continuity be | | rness connec | tor and c | ondenser ha | rness c | onnector. | |
| | | | 0 | | | | |
| IPDM | | | Conde | | | Continuity | |
| Connector E11 | Terminal 14 | Connect | | Termina | 1 | Eviated | |
| | | D103 | | 1 | | Existed | |
| Check continuity be | aween IPDIVI E/R CO | nnector and g | jrouna. | | | | |
| | IPDM E/R | | | | | Quatinuity | |
| Connector | Termin | al | G | Ground | | Continuity | |
| E11 | 14 | | | | | Not existed | |
| NO >> Repair or re CHECK CONDENSE | R | | | | | | |
| 7.CHECK INTERMITT Refer to GI-43, "Intermit s the inspection result r YES >> INSPECTIO NO >> Repair or result | normal? ndenser. Refer to <u>D</u> ENT INCIDENT tent Incident". normal? DN END eplace harness or co | | val and I | nstallation". | | | |
| s the inspection result r YES >> GO TO 7. NO >> Replace con CHECK INTERMITT Refer to <u>GI-43, "Intermit</u> s the inspection result r YES >> INSPECTIO NO >> Repair or result r | normal? ndenser. Refer to <u>D</u> ENT INCIDENT tent Incident". normal? DN END eplace harness or co | | wal and I | nstallation". | | INFOID:0000000 | |
| s the inspection result r YES >> GO TO 7. NO >> Replace con CHECK INTERMITT Refer to <u>GI-43, "Intermit</u> s the inspection result r YES >> INSPECTIO | normal? ndenser. Refer to <u>D</u> ENT INCIDENT tent Incident". normal? DN END place harness or co | | val and I | nstallation". | | INFC/ID:0000000 | |
| s the inspection result r YES >> GO TO 7. NO >> Replace con CHECK INTERMITT Refer to <u>GI-43, "Intermit</u> s the inspection result r YES >> INSPECTIO NO >> Repair or re Component Inspect | normal? ndenser. Refer to <u>DI</u> ENT INCIDENT <u>tent Incident"</u> . <u>normal?</u> DN END place harness or co ction ER OFF. ser connector. | nnector. | | | user. | INFOID:0000000 | |
| s the inspection result r YES >> GO TO 7. NO >> Replace con CHECK INTERMITT Refer to GI-43, "Intermit s the inspection result r YES >> INSPECTION NO >> Repair or re Component Inspect I.CHECK CONDENSE Turn ignition switch Disconnect condense | normal? ndenser. Refer to <u>DI</u> ENT INCIDENT <u>tent Incident"</u> . <u>normal?</u> DN END place harness or co ction ER OFF. ser connector. | nnector. | | | ıser. | | |
| s the inspection result r YES >> GO TO 7. NO >> Replace con CHECK INTERMITT Refer to GI-43, "Intermit s the inspection result r YES >> INSPECTION NO >> Repair or re Component Inspect I.CHECK CONDENSE I. Turn ignition switch 2. Disconnect condense | normal? ndenser. Refer to DI ENT INCIDENT tent Incident". normal? DN END place harness or co ction ER OFF. ser connector. tween condenser co Condenser | nnector. | ground pa | | Iser. | INFOID:0000000 | |
| s the inspection result r YES >> GO TO 7. NO >> Replace con 7.CHECK INTERMITT Refer to GI-43, "Intermit s the inspection result r YES >> INSPECTION NO >> Repair or re Component Inspect 1.CHECK CONDENSE 1. Turn ignition switch 2. Disconnect condense 3. Check continuity be | normal? ndenser. Refer to DI ENT INCIDENT tent Incident". normal? DN END place harness or co ction ER OFF. ser connector. tween condenser co Condenser | nnector. | ground pa | art of conden | | | |

4. Check continuity between condenser terminals.

REAR WINDOW DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

| | | denser | | Continuity |
|------------------------------|---|--------------------|---------------------|------------|
| Connector | | Connector | Terminal | |
| D103 | 1 | D202 | 2 | Existed |
| <u>ne inspection res</u> | | | | |
| ES >> INSPEC D >> Replace | CTION END e condenser. Refer to <u>DEF</u> | 42 "Romoval and In | stallation" | |
| | e condensel. Relei lo <u>DEF</u> | -43, Kemovai anu m | <u>stallation</u> . | |
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< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Description

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

Component Function Check

1. CHECK DOOR MIRROR DEFOGGER

1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.

- 2. Touch "ON".
- 3. Check that both side door mirror glasses are getting warmer.
- Is the inspection result normal?
- YES >> Door mirror defogger is OK.
- NO >> Refer to <u>DEF-30</u>, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK FUSE

1. Turn ignition switch OFF.

2. Check 10A fuse [No.22, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2. CHECK DOOR MIRROR DEFOGGER CIRCUIT

- 1. Disconnect IPDM E/R connector and door mirror (both sides) connector.
- 2. Check continuity between IPDM E/R harness connector and door mirror (driver side) harness connector.

| IPDI | IPDM E/R | | Door mirror (driver side) | | |
|-----------|----------|-----------|---------------------------|------------|--|
| Connector | Terminal | Connector | Terminal | Continuity | |
| E11 | 14 | D29 | 3 | Existed | |

3. Check continuity between IPDM E/R harness connector and ground.

| IPDM | /IE/R | | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity |
| E11 | 14 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

 ${f 3.}$ CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-43</u>, "Intermittent Incident".

>> INSPECTION END

INFOID:000000008275993

INFOID:00000008275994

INFOID:000000008275995

DRIVER SIDE DOOR MIRROR DEFOGGER

| De Hea fron | RIVER SIDE | DOOR MIR | ROR DEF | OGGER | | |
|-------------------|--|----------------------------|-------------------------|------------------------------|-----------------|-------------------------|
| Hea fron | scription | | | | | |
| fron | | | | | | INFOID:00000008275996 |
| Co | ats the heating wire n fogging up. | e with the power | supply from th | e rear window defogge | er relay to p | prevent the door mirror |
| | mponent Fund | tion Check | | | | INFOID:00000008275997 |
| 1.0 | CHECK DRIVER S | DOOR MIR | ROR DEFOGO | GER | | |
| 1. | | R Active Test ("F | EAR DEFOGG | ER") using CONSULT. | | |
| 2. 3. | Touch "ON". Check that the dr | iver side door mi | rror class is de | tting warmer. | | |
| | he inspection resul | | li el glace le ge | | | |
| | | e door mirror de | | | | |
| N(| | <u>)EF-31, "Diagno</u> | <u>sis Procedure"</u> . | | | |
| | agnosis Proced | | | | | INFOID:00000008275998 |
| 1.0 | CHECK POWER S | SUPPLY CIRCUI | Т | | | |
| 2. 3. 4. | - | ch ON. tween door mirro | | narness connector and | ground. | |
| - | (+) | | | Voltage (| | Voltage (V) |
| - | Door mirror (Connector | Terminal | () | Condition | n | (Approx.) |
| - | | | | Rear window defogger | ON | Battery voltage |
| | D29 | 3 | Ground | switch | OFF | 0 |
| YE | he inspection resul ES >> GO TO 2. D >> Repair or CHECK GROUND Turn ignition swite | replace harness CIRCUIT | | | | |
| 1. 2. | Check continuity | between door m | | e) harness connector a | nd ground. | |
| | Connector | or mirror (driver side |) Terminal | Ground | | Continuity |
| _ | D29 | | 2 | Ground | | Existed |
| ls tł | he inspection resul | t normal? | | | | |
| YE | and Insta | | . , | efer to <u>MIR-14, "DOOF</u> | <u>R MIRROR</u> | ASSEMBLY : Removal |

PASSENGER SIDE DOOR MIRROR DEFOGGER

< DTC/CIRCUIT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

Component Function Check

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Perform IPDM E/R Active Test ("REAR DEFOGGER") using CONSULT.

2. Touch "ON".

3. Check that the passenger side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.

NO >> Refer to <u>DEF-32, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect door mirror (passenger side) connector.

- 3. Turn ignition switch ON.
- 4. Check voltage between door mirror (passenger side) harness connector and ground.

| | +) assenger side) | () | Condition | | Voltage (V) (Approx.) |
|-----------|--|--------|----------------------|----|--------------------------|
| Connector | Terminal | | | | (|
| D8 | 3 Ground Rear window defogge switch | Ground | Rear window defogger | ON | Battery voltage |
| Do | | switch | OFF | 0 | |

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2. CHECK GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Check continuity between door mirror (passenger side) harness connector and ground.

| Door mirror (pa | Door mirror (passenger side) | | Continuity |
|-----------------|------------------------------|--------|------------|
| Connector | Terminal | Ground | Continuity |
| D8 | 2 | | Existed |

Is the inspection result normal?

YES >> Replace door mirror glass (passenger side). Refer to <u>MIR-14, "DOOR MIRROR ASSEMBLY :</u> <u>Removal and Installation"</u>.

NO >> Repair or replace harness.

Revision: 2014 February

INFOID:000000008275999

INFOID:000000008276000

INFOID:000000008276001

REAR WINDOW DEFOGGER FEEDBACK SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER FEEDBACK SIGNAL

Description INFOID:00000008276002 Turns the indicator lamp in the rear window defogger switch ON when operating the rear window defogger. INFOID:0000008276003 Component Function Check INFOID:0000008276003 1.CHECK REAR WINDOW DEFOGGER FEEDBACK SIGNAL INFOID:0000008276003 Check that the indicator lamp of rear window defogger switch is illuminated when turning the rear window defogger switch ON. Is the inspection result normal? OK >> Rear window defogger feedback signal is OK. NG NG >> Refer to DEF-33, "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK REAR WINDOW DEFOGGER FEEDBACK SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between A/C control harness connector and ground.

| A/C control | | | Condition | | Voltage (V) | |
|-------------|----------|--------|-----------------------------|-----|-----------------|--|
| Connector | Terminal | Ground | Condition | | (Approx.) | |
| M53 | 4 | Ground | Rear window defogger switch | ON | Battery voltage | |
| 10155 | 4 | | | OFF | 0 | |

Is the inspection result normal?

YES >> Replace A/C control.

NO >> Repair or replace harness.

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INFOID:00000008276004

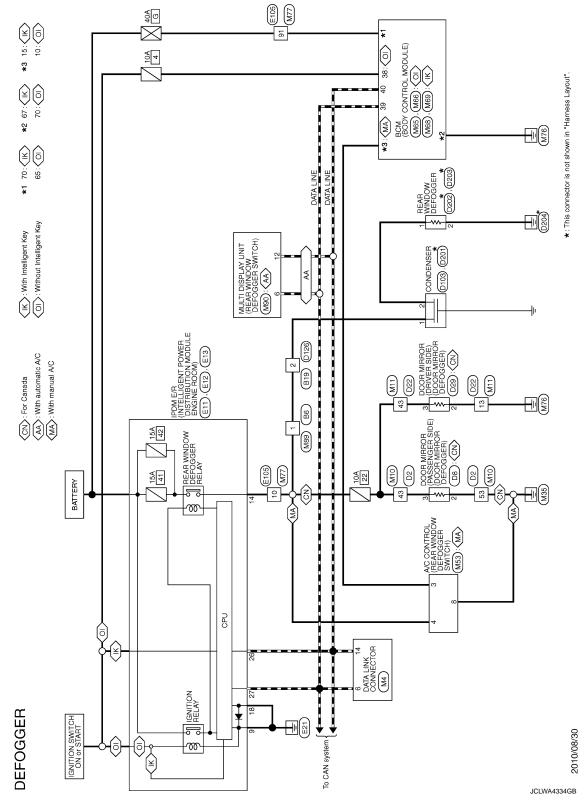
< DTC/CIRCUIT DIAGNOSIS >

REAR WINDOW DEFOGGER SYSTEM

Wiring Diagram - DEFOGGER CONTROL SYSTEM -

INFOID:000000008276005

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.



| ALL DEFOGGER SYSTEMS DO NOT OPERATE | |
|---|-----|
| < SYMPTOM DIAGNOSIS > | |
| SYMPTOM DIAGNOSIS | А |
| ALL DEFOGGER SYSTEMS DO NOT OPERATE | A |
| Description | В |
| Rear window defogger and door mirror defogger do not operate when rear window defogger switch operated. | |
| Diagnosis Procedure | С |
| 1.CHECK REAR WINDOW DEFOGGER SWITCH | |
| Check rear window defogger switch. Refer to <u>DEF-23, "WITH AUTO A/C : Component Function Check"</u> (With Auto A/C) or <u>DEF-23, "WITHOUT</u> <u>AUTO A/C : Component Function Check"</u> (Without Auto A/C). | D |
| Is the inspection result normal? | Е |
| YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. | |
| 2.CHECK REAR WINDOW DEFOGGER RELAY | F |
| Check rear window defogger relay. Refer to <u>DEF-26, "Component Function Check"</u> . | |
| Is the inspection result normal? | G |
| YES >> GO TO 3. | |
| NO >> Repair or replace the malfunctioning parts. | Н |
| 3.CHECK REAR WINDOW DEFOGGER | |
| Check rear window defogger. Refer to <u>DEF-27, "Component Function Check"</u> . | 1 |
| Is the inspection result normal? | 1 |
| YES >> GO TO 4. | |
| NO >> Repair or replace the malfunctioning parts. | J |
| 4.CONFIRM THE OPERATION | |
| Confirm the operation again. | К |
| Is the inspection result normal? | - |
| YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. | DEF |
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REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DEFOGGERS OPERATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DEFOGGERS OPERATE

Diagnosis Procedure

INFOID:000000008276008

1.CHECK REAR WINDOW DEFOGGER

Check rear window defogger. Refer to <u>DEF-27, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43. "Intermittent Incident".

NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE

| <pre></pre> | | |
|--|------------------------|----|
| DOOR MIRROR DEFOGGER DOES NOT OPERATE | | |
| BOTH SIDES | A | A |
| BOTH SIDES : Description | INFOID:000000008276009 | В |
| Both door mirror defoggers do not operate. | _ | |
| BOTH SIDES : Diagnosis Procedure | INFOID:000000008276010 | С |
| 1.CHECK REAR WINDOW DEFOGGER | | |
| Check rear window defogger. Refer to <u>DEF-27, "Component Function Check"</u> . | D | D |
| Is the inspection result normal? | | |
| YES >> GO TO 2. | E | E |
| NO >> Repair or replace the malfunctioning parts. 2.CHECK DOOR MIRROR DEFOGGER | | |
| Check door mirror defogger. | F | F |
| Refer to DEF-30, "Component Function Check". | | |
| Is the inspection result normal? | (| 2 |
| YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. | C | 5 |
| 3. CONFIRM THE OPERATION | | |
| Confirm the operation again. | F | H |
| Is the inspection result normal? | | |
| YES >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> . NO >> GO TO 1. | I | |
| DRIVER SIDE | | |
| DRIVER SIDE : Description | INFOID:000000008276011 | J |
| Driver side door mirror defogger does not operate but passenger side door mirror defogger op | | |
| DRIVER SIDE : Diagnosis Procedure | K | K |
| 1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER | DE | EF |
| Check driver side door mirror defogger. Refer to <u>DEF-30, "Component Function Check"</u> . | | |
| Is the inspection result normal? | \mathbb{N} | VI |
| YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. | | |
| 2. CONFIRM THE OPERATION | Ν | N |
| Confirm the operation again. | | |
| Is the inspection result normal? | C | 0 |
| YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . | |) |
| NO >> GO TO 1. PASSENGER SIDE | | |
| PASSENGER SIDE : Description | INFOID:000000008276013 | Ρ |
| Passenger side door mirror defogger does not operate but driver side door mirror defogger op | | |
| PASSENGER SIDE : Diagnosis Procedure | INFOID:000000008276014 | |
| 1. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER. | | |
| | | |

DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

Check passenger side door mirror defogger. Refer to <u>DEF-30</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

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

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

NO >> GO TO 1.

ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED

< SYMPTOM DIAGNOSIS >

ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED

| Diagnosis Procedure | INFOID:000000008276015 | В |
|--|------------------------|---|
| 1. CHECK MULTI DISPLAY UNIT FUNCTION | | D |
| Check that the multi display unit is operating normally. Refer to <u>HAC-37, "Work Flow"</u> . | | С |
| Is the inspection result normal? | | |
| YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. | | D |
| 2.CONFIRM THE OPERATION | | |
| Confirm the operation again. Is the inspection result normal? | | E |
| YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. | | F |
| | | G |

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REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

Diagnosis Procedure

INFOID:000000008276016

1.CHECK A/C CONTROL (REAR WINDOW DEFOGGER SWITCH)

Check that rear window defogger operates.

Is the inspection result normal?

YES >> Replace A/C contorol (rear window defogger switch).

NO >> Check rear window defogger system. Refer to <u>DEF-22, "Work Flow"</u>.

< REMOVAL AND INSTALLATION > **REMOVAL AND INSTALLATION** FILAMENT

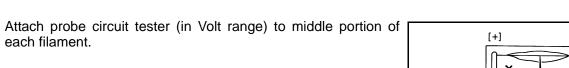
Inspection and Repair

INSPECTION

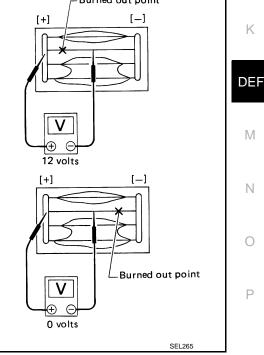
2.

each filament.

1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



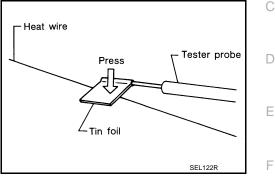
- 3. If a filament is burned out, circuit tester registers 0 or battery voltage.
- 4. To locate burned out point, move probe to left and right along filament. Test needle will swing abruptly when probe passes the point.



REPAIR

REPAIR EQUIPMENT

Conductive silver composition (Dupont No. 4817 or equivalent)



Æ e 6 volts (normal filament) SEL263 -Burned out point

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INFOID:000000008276017

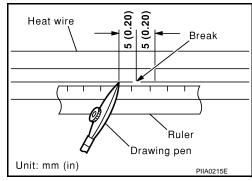
- < REMOVAL AND INSTALLATION >
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

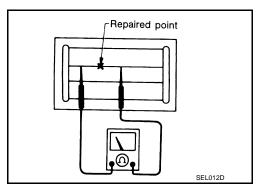
REPAIRING PROCEDURE

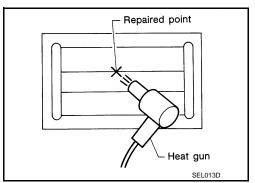
- 1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
- 2. Apply a small amount of conductive silver composition to tip of drawing pen.

Shake silver composition container before use.

 Place ruler on glass along broken line. Deposit conductive silver composition on break with drawing pen. Slightly overlap existing heat wire on both sides [preferably 5 mm (0.20 in)] of the break.







4. After repair has been completed, check repaired wire for continuity. This check should be conducted 10 minutes after silver composition is deposited.

Do not touch repaired area while test is being conducted.

5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet.

If a heat gun is not available, let the repaired area dry for 24 hours.

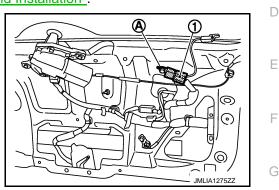
CONDENSER

< REMOVAL AND INSTALLATION >

CONDENSER

Exploded View INFOID:0000008276018 Refer to INFOID:0000008276019 Removal and Installation INFOID:0000008276019 REMOVAL INFOID:0000008276019

- 1. Remove the back door lower finisher. Refer to INT-38, "BACK DOOR LOWER FINISHER : Removal and Installation".
- 2. Remove bolt (A), and then remove condenser (1) from the vehicle body.



INSTALLATION Install in the reverse order of removal.

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