SECTION DEF
DEFOGGER

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PRECAUTION

PRECAUTIONS

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

INFOID:0000000013695930

Risk of injury

There is a risk of injury caused by parts becoming projectiles if uncontrolled deployment of air bag or seat belt pre-tensioner occurs, or by storing air bag with the deployment side facing downwards. When scrapping air bag or seat belt pre-tensioner by means of controlled deployment, there is also a danger present if a sufficiently safe distance is not maintained, or if opening using cutting torches or other cutting tools, or due to smelting or if parts that are not yet triggered are exposed to a blaze or a smoldering fire at landfills.

Safety instructions/precautions

- Removed air bag must always be stored with deployment side facing up.
- Acquisition, transportation, storage, testing and assembly work should only be performed or supervised by properly trained personnel.
- Install air bag or seat belt pre-tensioner immediately following retrieval from storage.
- Air bag and seat belt pre-tensioner must be protected from flying sparks, open fires and temperature exceeding 100°C (212°F).
- Never transport air bag and seat belt pre-tensioner in the passenger compartment. Store them securely in the luggage room of the vehicle in their original replacement part packaging and secure them so that they cannot slip around.
- Never allow air bag and seat belt pre-tensioner to come into contact with grease, oil, or cleaning agents.
- Perform system tests using approved testing equipment only, and only when the units are properly installed and the vehicle is unoccupied.
- Before the initial hookup of the battery or an external power supply, the ignition must be switched on and the vehicle unoccupied.
- Air bag and seat belt pre-tensioner that fall from a height of more than 0.5 m must be replaced.
- When scrapping by means of controlled deployment of air bag and seat belt pre-tensioner, a safe distance of at least 10 m must be maintained.
- Before starting work on air bag and seat belt pre-tensioner and work on components that are connected to air bag and seat belt pre-tensioner or require and intervention in their electric circuit (e.g. when removing the steering wheel):

- Disconnect any external power sources (e.g. charger).
- Disconnect and insulate ground line of battery

- Before starting bodywork in combination with welding or retrofitting, during which work is performed on uninsulated, current-carrying lines or require an intervention in their electric circuit (e.g. when removing the steering wheel):

- Disconnect any external power sources (e.g. charger).
- Disconnect and insulate ground line of battery.
- During welding, disconnect plug connection and from control unit of air bag.

- When the air bag deploys, the pyrofuse activates and the power source from the battery is disconnected. This prevents possible fires caused by electric leakage after an accident occurs.

Precautions for Removing Battery Terminal

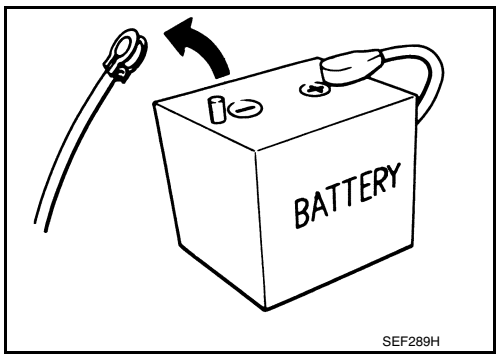
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When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

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



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

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

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

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:
If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

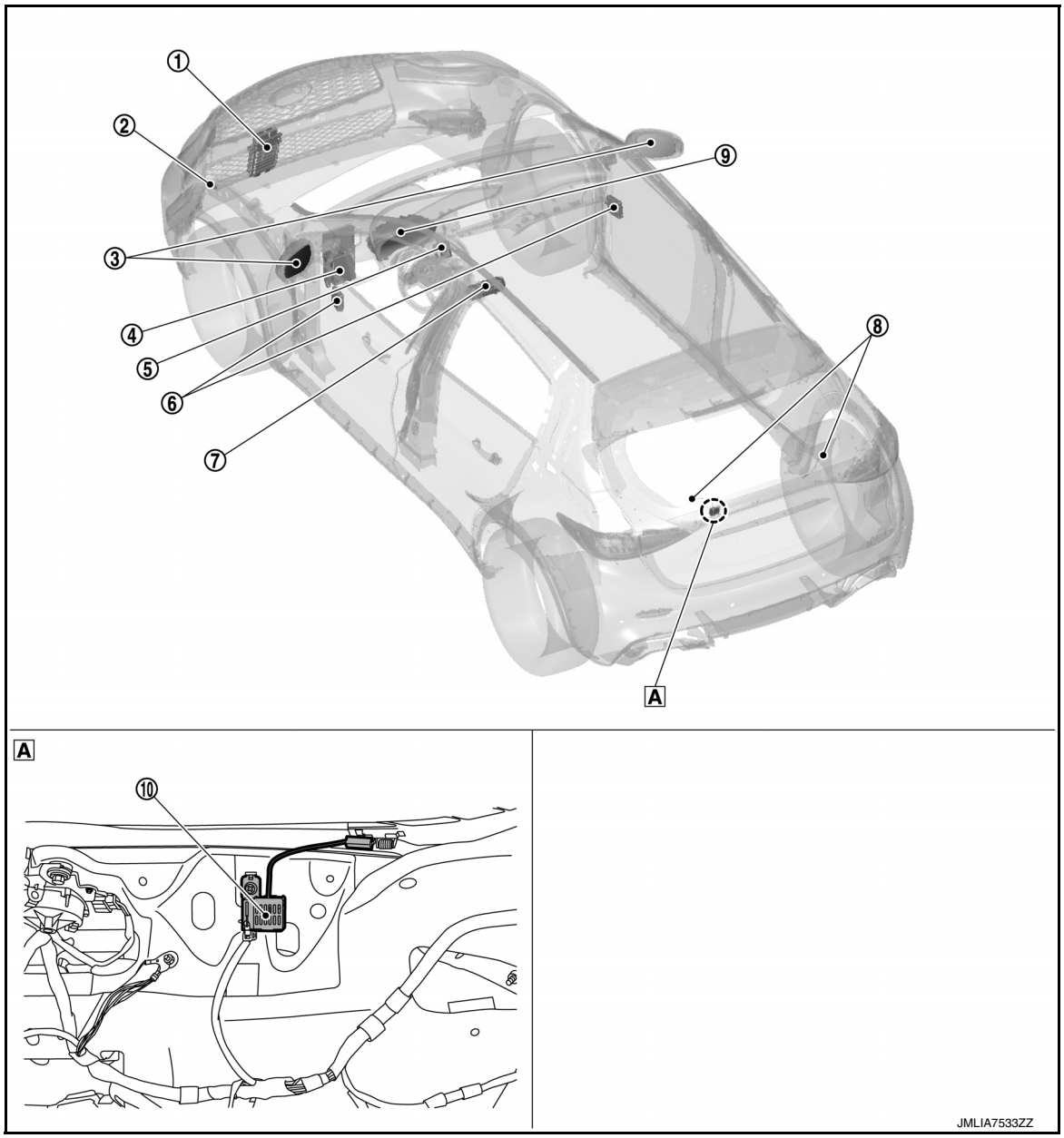
NOTE:
The removal of 12V battery may cause a DTC detection error.

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000013695932



A Back door inner finisher inside

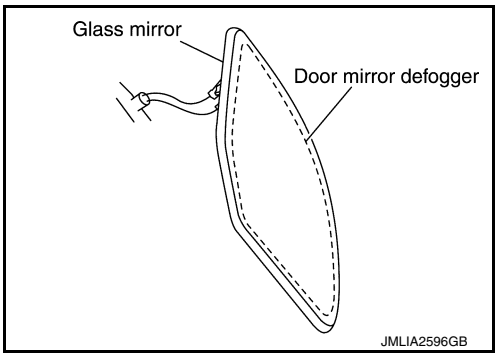
No.	Component	Function
①	ECM	• Transmits mainly the following signals to A/C auto amp. via CAN communication. - Switch on additional current consumers request signal • Transmits mainly the following signals to front door control unit via CAN communication. - Engine running signal - Powertrain operational signal Refer to EC-27, "Component Parts Location" for detailed installation location.
②	Ambient sensor	Ambient sensor detects ambient air temperature, then the BCM inputs the signals.

No.	Component	Function
③	Door mirror defogger	Refer to DEF-6, "Door Mirror Defogger".
④	BCM	• BCM inputs the ambient temperature sensor signal. • Transmits mainly the following signals to combination meter via CAN communication. - Outside temperature signal • Transmits mainly the following signals to A/C auto amp. via CAN communication. - Consumer shutoff request signal Refer to BCS-8, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
⑤	Electronic ignition switch control unit	• Transmits mainly the following signals to A/C auto amp. via CAN communication. - Ignition switch status signal • Transmits mainly the following signals to front door control unit via CAN communication. - Ignition switch status signal • Electronic ignition switch control unit has a gateway function for CAN communication.
⑥	Front door control unit	• Receives mainly the following signal from electronic ignition switch control unit via CAN communication. - Ignition switch status signal - Engine running signal - Powertrain operation signal - Displayed outside temperature signal • Receives mainly the following signal from A/C auto amp. via CAN communication. - Rear window defogger status signal • Supplies voltage to the door mirror defogger. Refer to DLK-10, "DOOR LOCK SYSTEM : Component Parts Location" for detailed installation location.
⑦	A/C control (A/C auto amp.)	• Receives mainly the following signal from electronic ignition switch control unit via CAN communication. - Ignition switch status signal • Receives mainly the following signal from ECM via CAN communication. - Switch on additional current consumers request signal • Receives mainly the following signal from combination meter via CAN communication. - Displayed outside temperature signal - Vehicle speed signal • Receives mainly the following signal from BCM via CAN communication. - Consumer shutoff request signal • Transmits mainly the following signals to front door control unit via CAN communication. - Rear window defogger status signal • Rear window defogger switch and A/C auto amp. are installed to A/C control. • Controls the rear window defogger relay.
⑧	Rear window defogger	Refer to DEF-6, "Rear Window Defogger".
⑨	Combination meter	• Receives mainly the following signal from BCM via CAN communication. - Outside temperature signal • Transmits mainly the following signals to A/C auto amp. via CAN communication. - Displayed outside temperature signal - Vehicle speed signal • Transmits mainly the following signals to front door control unit via CAN communication. - Displayed outside temperature signal
⑩	Condenser	Reduce the noise of rear window defogger operation.

Door Mirror Defogger

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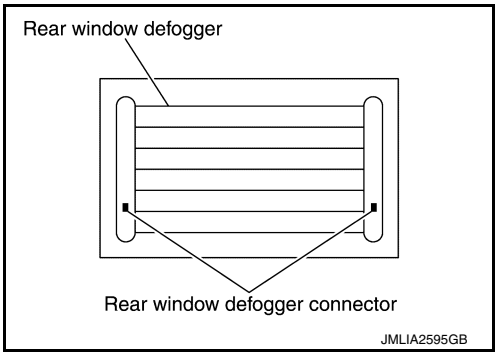
Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.



Rear Window Defogger

INFOID:0000000013695934

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

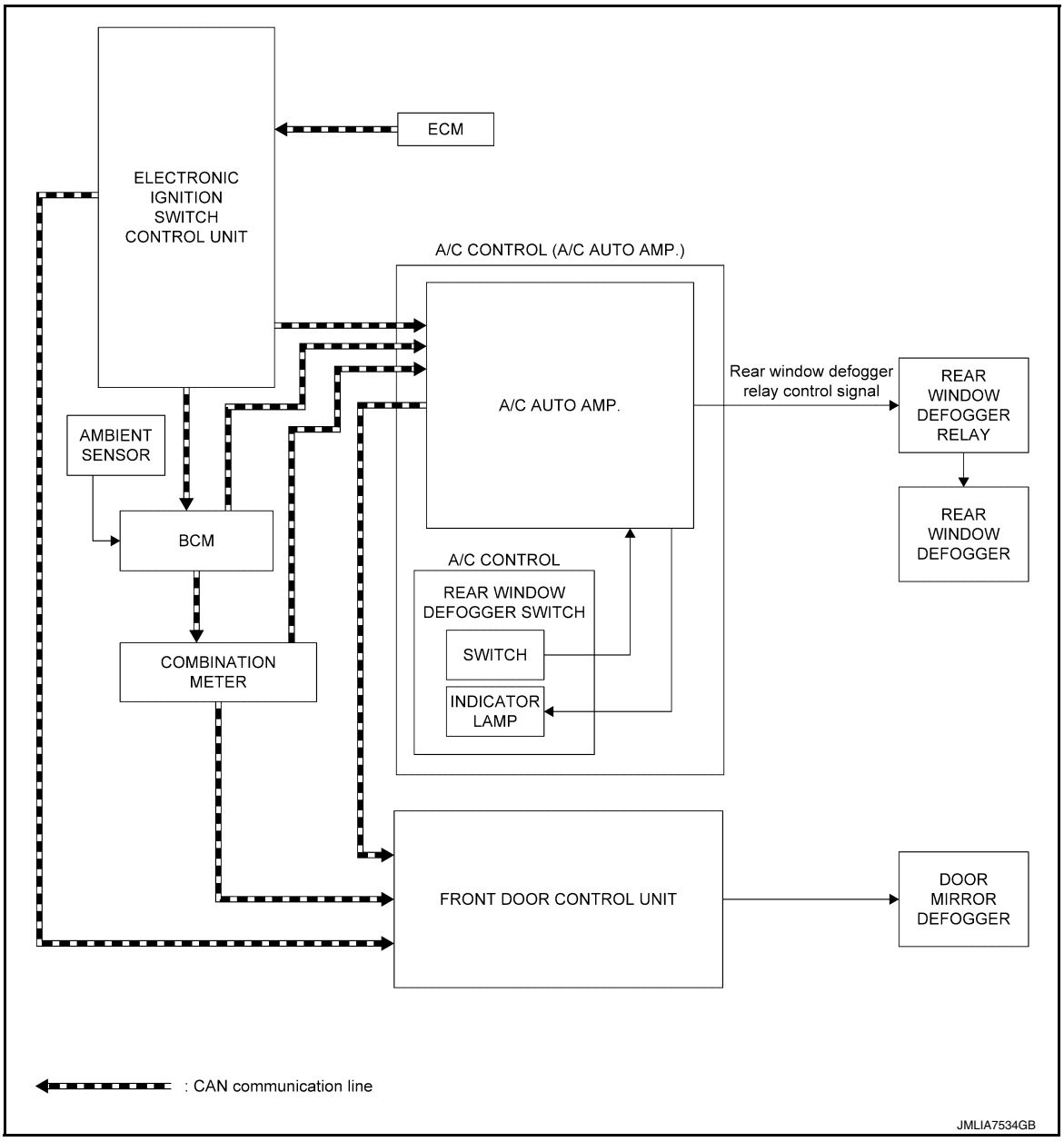


SYSTEM

System Description

INFOID:0000000013695935

SYSTEM DIAGRAM



REAR WINDOW DEFOGGER

Function Requirements, General

- Ignition switch ON
- No undervoltage or overvoltage
- Consumer shutoff not active

NOTE:

The electronic ignition switch control unit transmits the status of ignition switch status signal to the A/C auto amp. via body CAN communication 1.

Rear Window Defogger, General

If the rear window defogger is active, the door mirror defogger is always active as well.

The rear window defogger function comprises the following partial functions:

- Manual on/off function
- Automatic switch-on function

- Determining switch-on duration function
- Stop light shutoff function
- Consumer shutoff function

Manual On/off Function

The rear window defogger is switched on and off with the rear window defogger switch in the A/C control. The A/C auto amp. directly reads in the status of the rear window defogger switch and actuates the rear window defogger directly via rear window defogger relay.
The A/C auto amp. directly actuates the indicator lamp in the rear window defogger switch.
The rear window defogger function is terminated when the rear window defogger switch is pressed again. The indicator lamp goes out simultaneously.
When adjustments affecting the setting temperature, air distribution and air flow are made on the A/C control with the rear window defogger switched on, the symbol for the rear window defogger and the corresponding settings appear momentarily on the Audio/Navigation display.

Automatic Switch-on Function

To reach the engine operating state more quickly, the ECM transmits switch on additional current consumers request signal via chassis CAN communication, electronic ignition switch control unit and body CAN communication 1 to the A/C auto amp.
The A/C auto amp. then switches on the rear window defogger to increase the engine load for max. 15 minutes. In this case the indicator lamp in the rear window defogger switch does not confirm by flashing.

Determining Switch-on Duration Function

The information whether and how long the rear window defogger is switched on, is stored in the A/C auto amp. The timer control (2 minutes to 26 minutes) depends on the outside temperature and the vehicle speed. The outside temperature is recorded by the ambient sensor. The BCM directly reads in the sensor signals, calculates the outside temperature and transmits it to the combination meter over the body CAN communication 1. The combination meter transmits the displayed outside temperature signal and vehicle speed signal via body CAN communication 1 to the A/C auto amp.
The duty cycle is as follows:

- The normal duty cycle is 15 minutes.
- At outside temperatures of less than 5°C (41°F), the duty cycle is extended by 30 seconds per 1°C (34°F) drop in temperature, up to a maximum of 6 minutes [This corresponds to an outside temperature of −7°C (19°F)].
- At outside temperatures of less than 0°C (32°F), a speed-dependent time factor is also taken into consideration.

If, during the heating phase, the vehicle is driven faster than:

- 60 km/h (37 MPH) or more, 1 minute is added to the switch-on time.
- 70 km/h (43 MPH) or more, 2 minutes is added to the switch-on time.
- 80 km/h (50 MPH) or more, 3 minutes is added to the switch-on time.
- 100 km/h (62 MPH) or more, 5 minutes is added to the switch-on time (maximum value).

NOTE:
At outside temperatures of 50°C (122°F) or more, the switch-on time of the rear window defogger is limited to 2 minutes to protect the rear window.

Stop Light Shutoff Function

If the engine is switched off when the rear window defogger is activated (e.g. traffic light stop, function requirement ignition switch ON), the rear window defogger is also switched off. The switch on time is not decreased. If, within 5 minutes, ignition switch is not switched back on, the rear window defogger is reactivated.
After expiration of the traffic light stop time without switching on ignition switch ON, the rear window is switched off completely.
NOTE:
During engine start, the rear window defogger is switched off momentarily. The rear window defogger is switched back on 10 seconds after the engine is started. The traffic stop light time can be parameterized with the CONSULT in the A/C control (A/C auto amp.) with range 0 minute to 10 minutes.

Consumer Shutoff Function

To prevent battery discharge in all driving cycle phases, the state of charge is continuously evaluated by the BCM. Heavy power consumers such as the rear window defogger are switched off as required in a defined order until the specified minimum on-board electrical system voltage is reached again.
If the BCM detects for 1 second an undervoltage of 10 V or less or for 1 second an overvoltage of 18 V or more, switch on additional current consumers request signal is transmitted via body CAN communication 1 to

the A/C auto amp. which then switches off the rear window defogger. The duty cycle does not continue to elapse during the shutoff period.
If the A/C auto amp. switches off the rear window defogger, the indicator lamp in the rear window defogger switch remains on for the time being. If the on-board electrical system reaches its normal voltage within the next 5 minutes, the A/C auto amp. starts the rear window defogger function.
However, if the consumer shutoff lasts longer than 5 minutes, the indicator lamp of the rear window defogger switch is also switched off.
If switch-off continues and the function is requested again with the rear window defogger switch, the indicator lamp comes on for 1.5 seconds and then goes out.
The rear window defogger function can only be requested, when the energy management has canceled the switch-off.

DOOR MIRROR DEFOGGER

Function Requirements, General

- No overvoltage or undervoltage
- On-board electrical system consumer shutoff not active
- Particular (local) front power window not active

Door Mirror Defogger, General

The door mirror defogger in the left door mirror and the door mirror defogger in the right door mirror is activated depending on the in combination with the rear window defogger. The left front door control unit directly actuates the door mirror defogger in the left door mirror. The right front door control unit directly actuates the door mirror defogger in the right door mirror.
The door mirror defogger function comprises the following partial functions:

- Control when rear window defogger is switched on function

Additional Function Requirement For Control With Heated Rear Window Function Switched On

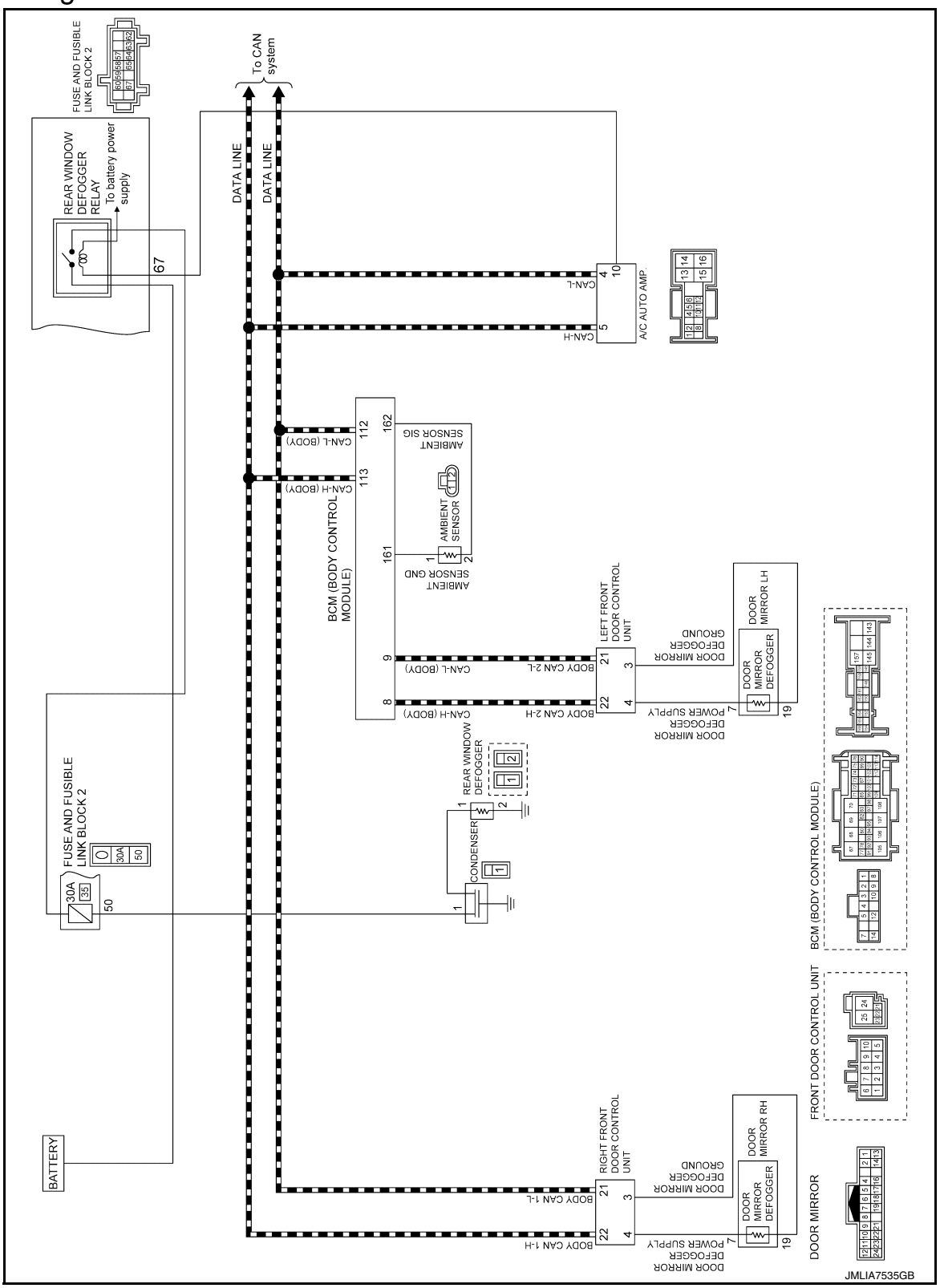
Ignition switch ON

Control When Rear Window Defogger Is Switched On Function

With the rear window defogger function active, the A/C auto amp. transmits the rear window defogger ON status signal via body CAN communication 1 to the front door control units.
The left front door control unit actuates the door mirror defogger in the left door mirror and the right front door control unit actuates the door mirror defogger in the right door mirror.
When the rear window defogger function is switched off, the door mirror defoggers are also switched off.
NOTE:
When adjustments affecting the setting temperature, air distribution and air flow are made on the A/C auto amp. with the rear window defogger switched on, the symbol for the rear window defogger and the corresponding settings appear momentarily on the Audio/Navigation display.

Circuit Diagram

INFOID:0000000013695936



DIAGNOSIS SYSTEM (A/C AUTO AMP.)

CONSULT Function

INFOID:0000000013702803

APPLICATION ITEMS

Diagnosis mode	Description
Self Diagnostic Result	Displays the diagnosis results judged by A/C auto amp.
Data Monitor	Displays the input/output signal of A/C auto amp.
Work support	This mode enables a technician to adjust some devices faster and more accurately by following the indications on the CONSULT unit.
Active Test	Transmits a drive signal to the load to check their operation.
ECU Identification	Displays the software part number of A/C auto amp.
Configuration	Writes the vehicle specification when replacing A/C auto amp.

SELF DIAGNOSTIC RESULT

Self Diagnostic Item

Self diagnostic result that is judged by A/C auto amp. can be checked. Refer to HAC-36, "DTC Index".

- When “CRNT” is displayed on self diagnostic result, the system is presently malfunctioning.
- When “PAST” is displayed on self diagnostic result, system malfunction in the past is detected, but the system is presently normal.

FFD (Freeze Frame Data)

The A/C auto amp. control unit records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

MONITOR ITEM	UNIT	Description
Original Odometer Value	km	Odometer value stored when the respective DTC is detected for the first time.
Most Recent Odometer Value	km	Odometer value stored or updated when the DTC was detected the last time.
Frequency Counter	—	The frequency counter is defined as the total number of times the DTC status has transitioned from “stored - not active” to “active”.
Ignition cycle counter	—	Indicates the number of consecutive operation cycles recorded since a DTC first became stored - not active and is no longer an active DTC. This information is needed for Self-healing functionality.

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	Description
ENG SPD LO OR NO SIG BAT	No/YES	—
ENG IDLE SPD IS UNSTABLE	No/YES	—
CIRC 15 OFF OR START ACTU	No/YES	—
BLOWER POWER TOO SMALL	No/YES	—
BLOW REG OR BLOW MOTOR	No/YES	—
EVAPORATOR TEMP SEN	No/YES	—
EVAP TEMP TOO SMALL	No/YES	—

MONITOR ITEM	UNIT	Description
OUTSIDE TEMP IS TOO LOW	No/YES	—
COD REF CMP DIS SET YES	No/YES	—
REF COMP MECHANICAL DEF	No/YES	—
REF CIRC UNDERFILL	No/YES	—
BREAK REF CMP NO SUCCES	No/YES	—
ROTA SPD INLET EXC OR INC	No/YES	—
BREAK REF CMP NO PER-FOR	No/YES	—
LIMIT REF CMP HI CLNT TEMP	No/YES	—
FAN MOTOR	No/YES	—
REFRIGERANT PRESS LOW	No/YES	—
REFRIGERANT PRESS HIGH	No/YES	—
A/C BUTTON NOT PRESSED	No/YES	—
SHUTOFF REF COMP ENG CU	No/YES	—
TORQUE RED REF CMP ENG	No/YES	—
SWITCHED OFF BY DIAG	No/YES	—
SPECIFIED EVAP TEMP	No/YES	—
EVAPORATOR DRYING	No/YES	—
FAULT ON MAGNET CLUTCH	No/YES	—
EVAP SHUT AND BAT SHUT	No/YES	—
WAIT TIME AFTER OPEN VAL	No/YES	—
CRASH EVENT	No/YES	—
NO ENABL ENRGY MNGE SYS	No/YES	—
EL REFRIGERANT COMP	No/YES	—
Low pressure detected (Electronic Coolant Com-pressor)	No/YES	—
EVAP TEMPERATURE SEN	°C	—
REFRIGERANT PRESS SEN	bar	—
ENGINE SPEED	U/min	—
OUTSIDE TEMP SENSOR	°C	—
Outside temperature	°C	—
COOLANT TEMPERA-TURE	°C	—

MONITOR ITEM	UNIT	Description
POWER SUPPLY VOLTAGE	V	—
COMPRESSOR COUPLING	OFF/On	—
REFRIGERANT COMPRESSOR	%	—
REFRIGERANT COMPRESSOR	A	—
REAR WINDSHIELD HEATER	OFF/On	—
OVERTEMPERATURE	No/YES	—
CUTOFF OVRVOLT TRMNL 30	No/YES	—
SHUTOFF UNDERVOLTAGE	No/YES	—
Pow consumption blower rgltr	A	—
Voltage at blower motor	V	—
Current temp blower regulator	A	—
Supply volt of blower regulator	V	—
Pow request to PTC heater bstr	Overflow	**NOTE:** This item cannot be monitored.
CURRENT OUTPUT	Overflow	—
POWER CONSUMPTION	A	—
BATTERY VOLTAGE	V	—
OPERATING CONDITION	ACTIVE/ NOT ACT	—
The power consumption of component 'R22/3 (PTC heater booster)' is too high.	No/YES	**NOTE:** This item cannot be monitored.
Over temperature	No/YES	—
Undervoltage	No/YES	—
Overvoltage	No/YES	—
COMPRESSOR INLET FINISH	No/YES	—
INTERIOR TEMP SENSOR	°C	—
Light intensity of R dual sun sen	W/m^2	—
Light intensity of L dual sun sen	W/m^2	—
INT TEMP SEN INTEGRAT FAN	°C	—
Ambient temperature	°C	—
TEMP OF WINDSHIELD	°C	—
RELATIVE AIR HUMIDITY	%	—
DEW POINT	°C	—
FUNCTION DEFROST ACTIVE	NOT ACT/ ACTIVE	—

MONITOR ITEM	UNIT	Description
PTC HEATER BOOSTER	NOT ACT/ ACTIVE	**NOTE:** This item cannot be monitored.
COOLING VEHICLE INTERIOR	NOT ACT/ ACTIVE	—
OUTSIDE TEMP HIGH	NOT ACT/ ACTIVE	—
START/STOP FUNC DEACTIV	NOT ACT/ ACTIVE	—
RISK FOG WIND AND WINDOW	NOT ACT/ ACTIVE	—
NOT INITIALIZED	NOT ACT/ ACTIVE	—
DATA TRANSFER ERROR	NOT ACT/ ACTIVE	—
AUTO AIR CNT AND OPR UNIT	NOT ACT/ ACTIVE	—
TEMP MEASURED EVAP HIGH	NOT ACT/ ACTIVE	—
COOLANT CRCLTN PUMP	OFF/On	—
AIR QUALITY	—	—

WORK SUPPORT

Test Item	Description
Teach in of actuator motors	Use after a replace of door motor
Normalization of actuator motors	Use after a replace of door motor
Breaking in of refrigerant compressor	Use after a replace of compressor
Re learning	—

ACTIVE TEST

Test Item	Description
Refrigerant compressor magnetic clutch	Compressor (magnet clutch) can be operated. • Close: Magnet clutch turns ON. • Open: Magnet clutch turns OFF.
LED of automatic air conditioning cont operating unit	A/C control (Indicator lamp) can be operated. • On: All indicator lamp turns ON. • Off: All indicator lamp turns OFF.
Refrigerant compressor	Compressor (ECV duty ratio) can be operated. • Up: ECV duty ratio increases at a rate of 1% per adjustment. • Down: ECV duty ratio decreases at a rate of 1% per adjustment. • Qu: ECV duty ratio increases at a rate of 10% per adjustment. • Qd: ECV duty ratio decreases at a rate of 10% per adjustment.
Coolant circulation pump	Coolant circulation pump can be operated. • On: Coolant circulation pump turns ON. • Off: Coolant circulation pump tuns OFF.
Blower regulator	Blower motor (blower motor duty ratio) can be operated. • Up: Blower motor duty ratio increases at a rate of 1% per adjustment. • Down: Blower motor duty ratio decreases at a rate of 1% per adjustment. • Qu: Blower motor duty ratio increases at a rate of 10% per adjustment. • Qd: Blower motor duty ratio decreases at a rate of 10% per adjustment.
Central air distribution actuator motor	—
Fresh air recirculated air flap actuator motor	—
Left blend air flap actuator motor	—

Test Item	Description
FAN MOTOR	—
PTC heater booster	**NOTE:** This item cannot be tested.
Rear windshield heater	—
SW and cont illumi of auto air cond cont and operat unit	—
Right blend air flap actuator motor	—
M2 4 central air distribution actuator motor actual value	—
M2 5 fresh air recirculated air flap actuator motor act val	—
M2 6 left blend air flap actuator motor actual valuel	—
M2 7 right blend air flap actuator motor actual value	—

ECU IDENTIFICATION

Software part number of A/C auto amp. can be checked.

CONFIGURATION

The vehicle specification can be written when A/C auto amp. control unit is replaced. Refer to HAC-49, "Description".

DIAGNOSIS SYSTEM (LEFT FRONT DOOR CONTROL UNIT)

CONSULT Function (Left Front Door Control Unit)

INFOID:0000000013702804

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with left front door control unit.

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by left front door control unit
Data Monitor	The left front door control unit input/output signals are displayed
Ecu Identification	The left front door control unit part number is displayed
Work Support	Changes the setting for system function
Active Test	The signals used to activate each device are forcibly supplied from left front door control unit
Configuration	Writes the vehicle specification when replacing left front door control unit

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	Description
OPEN CENTRAL LOCKING	–
CLOSE CENTRAL LOCKING	–
RR LID REMOTE RELEASE-SW	–
RR LID REMOTE CLOSE-SW	–
MAN-NOTCH (DR OPEN)	–
MICROSWITCH (PRELATCH)	–
EXIT AND WARNING LAMP	–
MIRROR INDICATOR ACTIVE	–
DOOR INSIDE HANDLE ACTIVE	–
ENTRANCE LAMP ACTIVE	–
LIGHT BAR 1	–
I/L (BLIND SPOT ASSIST)	Display the status of BSW indicator
W/L (BLIND SPOT ASSIST)	Display the status of BSW indicator
LIGHT BAR 2	–
SWITCH ILLUMINATION	Display the status of switch illumination
CHILD SAFETY LOCK	Display the status of power window lock
LH OUTSIDE MIRROR ADJUST	Display the status of outside mirror LH adjustment operation
RH OUTSIDE MIRROR ADJUST	Display the status of outside mirror RH adjustment operation
BRIGHT VALUE OF SW ILLUMI	Display the status of switch illumination
LH FRONT POWER WINDOW	Display the status of left front power window operation
RH FRONT POWER WINDOW	Display the status of right front power window operation
LH REAR POWER WINDOW	Display the status of left rear power window operation
RH REAR POWER WINDOW	Display the status of right rear power window operation
CHILD SECURITY LOCK	Display the status of power window lock
VENT WINDOWS	–
POS OF POWER WINDOW	Display the status of power window position
POWER WINDOW	–

Monitor Item	Description
POWER WINDOW BLOCKAGE	–
PW RLY (TOWARD RAISING)	–
PW RLY (TOWARD LOWERING)	–
PW RLY (SWITCHES)	–
POWER WINDOW MOTOR	Display the status of right rear power window motor
OUTSIDE MIRROR ADJUST	Display the status of outside mirror adjustment operation
LEFT MIRROR SELECTION	Display the status of outside mirror LH operation
RIGHT MIRROR SELECTION	Display the status of outside mirror RH operation
FOLD IN/OUT OUTSIDE MIR	Display the status of outside mirror folding operation
MIRROR GLASS UP	Display the status of outside mirror glass operation
MIRROR GLASS DOWN	Display the status of outside mirror glass operation
MIRROR GLASS TO RIGHT	Display the status of outside mirror glass operation
MIRROR GLASS TO LEFT	Display the status of outside mirror glass operation
FOLDING-IN OUTSIDE MIR	Display the status of outside mirror folding operation
FOLDING-OUT OUTSIDE MIR	Display the status of outside mirror folding operation
MOVING DEFAULT POSITION	–
SPEC PTMR HRZTL INC ADJ	–
SPEC PTMR VRTCL INC ADJ	–
ACTL PTMR HRZTL INC ADJ	–
ACTL PTMR VRTCL INC ADJ	–
MIRROR HEATER ACTIVE	Display the status of door mirror defogger operation
SPEC HZL INC ADJ PARK POS	–
SPEC VTL INC ADJ PARK POS	–
SPEC HZL INC ADJ DFLT POS	–
SPEC VTL INC ADJ DFLT POS	–
MOVE TO PARKING POSITION	–
PARKING START POSITION	–
SEAT FORE/AFT ADJUSTMENT	–
SEAT HEIGHT ADJUSTMENT	–
SEAT INCLINATION ADJUSTMENT	–
BACKREST ADJUSTMENT	–
HEAD RESTRAINT SETTING	–
SWITCH 1 FOR MEMORY FUNCTION	Display the status of seat memory switch operation
SWITCH 2 FOR MEMORY FUNCTION	Display the status of seat memory switch operation
SWITCH 3 FOR MEMORY FUNCTION	Display the status of seat memory switch operation
SWITCH M FOR MEMORY FUNCTION	Display the status of seat memory switch operation
INFRARED SIG VALID KEY	–
INFRARED SIG INVALID KEY	–
DISRUPT OF INFRARED SIG	–
INFRARED SIG CNVN FTURE	–
CONVENIENCE FEATURE	–
DR DOR INRED RMT CNT RCV	–

Monitor Item	Description
UNLOCK CENTRAL LOCKING	Display the status of door unlock operation
LOCK CENTRAL LOCKING	Display the status of door lock operation
ACTIVATE ADD DR LOCK	**NOTE:** This item is displayed, but cannot be monitored.
DEACTIVATE ADD DR LOCK	**NOTE:** This item is displayed, but cannot be monitored.
LIN COMPONENT	–
WINDOW LOWERING	–
WINDOW RAISING	–
INCORRECT VIN	–
HALL SEN OR SIGNAL FAULTY	–
RLY STICK IN SWITCH STATE	–
CHECKSUM ERROR	–
DENML POW WND VIA DIG CM	–
UNDRVLT ACT OF POW WND	–
WCDG RST ACT OF POW WND	–
WIND RAIS FROM UPP STOP	–
INITITATE CNTR IN LOW BLCK	–
REVERSAL OF POW WINDOW	–
CRNT LMT VLE IN RNG 1	–
CRNT LMT VLE IN RNG 3	–
CRNT LMT VLE IN RNG 2	–
CRNT LMT VLE IN RNG 1 POS	–
CRNT LMT VLE IN RNG 3 POS	–
CRNT LMT VLE IN RNG 2 POS	–
STRE LMT VLE IN RNG 1	–
STRE LMT VLE IN RNG 3	–
STRE LMT VLE IN RNG 2	–
STRE LMT VLE IN RNG 1 POS	–
STRE LMT VLE IN RNG 3 POS	–
STRE LMT VLE IN RNG 2 POS	–
SEAT CUSHION LENGTH	–
FR PASSENGER SEAT ADJUST-MENT	–
ACT MTR POW CLS DRT CLS	–
STATUS LED SWITCH TRAILER HITCH	–
STATUS SWITCH TRAILER HITCH	–
ACTUAL VALUE STATUS	–

WORK SUPPORT

Monitor Item	Description
Power window initialization	This function able to perform the power window system initialization

ACTIVE TEST

Monitor Item	Description
Front door lock actuator left	This function able to check front door lock actuator LH operation
Front door switch illumination left	This function able to check switch illumination operation
Front super lock actuator left	This function able to check front door super lock actuator LH operation
Front door handle illumination left	This function able to check ambient lamp (front inside handle) LH operation
Front door exit and warning lamp left	This function able to check front door step lamp LH operation
Front door ambience illumination left	This function able to check ambient lamp (front door grip) LH operation
Side turn signal lamp left	This function able to check side turn signal lamp operation
Front power window motor left	This function able to check front power window motor LH operation
Outside mirror ambient lamp left	This function able to check ambient lamp (outside mirror) LH operation
Left blind spot assist warning	This function able to check BSW indicator operation
Auto anti-dazzling mirror	This function able to check auto anti-dazzling mirror operation
Power folding unit	–
Door mirror defogger	This function able to outside mirror defogger operation
Adjustment actuator motor via actuation	This function able to check outside mirror adjustment operation
Vertical and horizontal inclination adjustment	This function able to check outside mirror adjustment operation
Left memory function	This function able to check left seat memory operation
Denormalization of left front power window	–
Left outside mirror adjust	This function able to check left outside mirror adjustment operation
LEDs	This function able to check mirror and power window lock switch illumination operation
Control unit reset	–

SELF DIAGNOSTIC RESULT

Refer to DLK-60, "DTC Index".

DIAGNOSIS SYSTEM (RIGHT FRONT DOOR CONTROL UNIT)

CONSULT Function (Right Front Door Control Unit)

INFOID:0000000013702805

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with right front door control unit.

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by right front door control unit
Data Monitor	The right front door control unit input/output signals are displayed
Ecu Identification	The right front door control unit part number is displayed
Work Support	Changes the setting for system function
Active Test	The signals used to activate each device are forcibly supplied from right front door control unit
Configuration	Writes the vehicle specification when replacing right front door control unit

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	Description
OPEN CENTRAL LOCKING	Display the status of left front door open
CLOSE CENTRAL LOCKING	Display the status of left front door close
RR LID REMOTE RELEASE-SW	–
RR LID REMOTE CLOSE-SW	–
MAN-NOTCH (DR OPEN)	–
MICROSWITCH (PRELATCH)	–
EXIT AND WARNING LAMP	–
MIRROR INDICATOR ACTIVE	–
DOOR INSIDE HANDLE ACTIVE	–
ENTRANCE LAMP ACTIVE	–
LIGHT BAR 1	–
I/L (BLIND SPOT ASSIST)	Display the status of BSW indicator
W/L (BLIND SPOT ASSIST)	Display the status of BSW indicator
LIGHT BAR 2	–
SWITCH ILLUMINATION	Display the status of switch illumination
CHILD SAFETY LOCK	Display the status of power window lock
LH OUTSIDE MIRROR ADJUST	Display the status of outside mirror LH adjustment operation
RH OUTSIDE MIRROR ADJUST	Display the status of outside mirror RH adjustment operation
BRIGHT VALUE OF SW ILLUMI	Display the status of switch illumination
LH FRONT POWER WINDOW	Display the status of left front power window operation
RH FRONT POWER WINDOW	Display the status of right front power window operation
LH REAR POWER WINDOW	Display the status of left rear power window operation
RH REAR POWER WINDOW	Display the status of right rear power window operation
CHILD SECURITY LOCK	Display the status of power window lock
VENT WINDOWS	–
POS OF POWER WINDOW	Display the status of power window position
POWER WINDOW	–

Monitor Item	Description
POWER WINDOW BLOCKAGE	–
PW RLY (TOWARD RAISING)	–
PW RLY (TOWARD LOWERING)	–
PW RLY (SWITCHES)	–
POWER WINDOW MOTOR	Display the status of right rear power window motor
OUTSIDE MIRROR ADJUST	Display the status of outside mirror adjustment operation
LEFT MIRROR SELECTION	Display the status of outside mirror LH operation
RIGHT MIRROR SELECTION	Display the status of outside mirror RH operation
FOLD IN/OUT OUTSIDE MIR	Display the status of outside mirror folding operation
MIRROR GLASS UP	Display the status of outside mirror glass operation
MIRROR GLASS DOWN	Display the status of outside mirror glass operation
MIRROR GLASS TO RIGHT	Display the status of outside mirror glass operation
MIRROR GLASS TO LEFT	Display the status of outside mirror glass operation
FOLDING-IN OUTSIDE MIR	Display the status of outside mirror folding operation
FOLDING-OUT OUTSIDE MIR	Display the status of outside mirror folding operation
MOVING DEFAULT POSITION	–
SPEC PTMR HRZTL INC ADJ	–
SPEC PTMR VRTCL INC ADJ	–
ACTL PTMR HRZTL INC ADJ	–
ACTL PTMR VRTCL INC ADJ	–
MIRROR HEATER ACTIVE	Display the status of door mirror defogger operation
SPEC HZL INC ADJ PARK POS	–
SPEC VTL INC ADJ PARK POS	–
SPEC HZL INC ADJ DFLT POS	–
SPEC VTL INC ADJ DFLT POS	–
MOVE TO PARKING POSITION	–
PARKING START POSITION	–
SEAT FORE/AFT ADJUSTMENT	–
SEAT HEIGHT ADJUSTMENT	–
SEAT INCLINATION ADJUSTMENT	–
BACKREST ADJUSTMENT	–
HEAD RESTRAINT SETTING	–
SWITCH 1 FOR MEMORY FUNCTION	Display the status of seat memory switch operation
SWITCH 2 FOR MEMORY FUNCTION	Display the status of seat memory switch operation
SWITCH 3 FOR MEMORY FUNCTION	Display the status of seat memory switch operation
SWITCH M FOR MEMORY FUNCTION	Display the status of seat memory switch operation
INFRARED SIG VALID KEY	–
INFRARED SIG INVALID KEY	–
DISRUPT OF INFRARED SIG	–
INFRARED SIG CNVN FTURE	–
CONVENIENCE FEATURE	–
DR DOR INRED RMT CNT RCV	–

Monitor Item	Description
UNLOCK CENTRAL LOCKING	Display the status of door unlock operation
LOCK CENTRAL LOCKING	Display the status of door lock operation
ACTIVATE ADD DR LOCK	**NOTE:** This item is displayed, but cannot be monitored.
DEACTIVATE ADD DR LOCK	**NOTE:** This item is displayed, but cannot be monitored.
LIN COMPONENT	–
WINDOW LOWERING	–
WINDOW RAISING	–
INCORRECT VIN	–
HALL SEN OR SIGNAL FAULTY	–
RLY STICK IN SWITCH STATE	–
CHECKSUM ERROR	–
DENML POW WND VIA DIG CM	–
UNDRVLT ACT OF POW WND	–
WCDG RST ACT OF POW WND	–
WIND RAIS FROM UPP STOP	–
INITITATE CNTR IN LOW BLCK	–
REVERSAL OF POW WINDOW	–
CRNT LMT VLE IN RNG 1	–
CRNT LMT VLE IN RNG 3	–
CRNT LMT VLE IN RNG 2	–
CRNT LMT VLE IN RNG 1 POS	–
CRNT LMT VLE IN RNG 3 POS	–
CRNT LMT VLE IN RNG 2 POS	–
STRE LMT VLE IN RNG 1	–
STRE LMT VLE IN RNG 3	–
STRE LMT VLE IN RNG 2	–
STRE LMT VLE IN RNG 1 POS	–
STRE LMT VLE IN RNG 3 POS	–
STRE LMT VLE IN RNG 2 POS	–
RIGHT SEAT CUSHION LENGTH SW	–
FR PASSENGER SEAT ADJUST-MENT	–
ACT MTR POW CLS DRT CLS	–
STATUS LED SWITCH TRAILER HITCH	–
STATUS SWITCH TRAILER HITCH	–
ACTUAL VALUE STATUS	–

WORK SUPPORT

Monitor Item	Description
Power window initialization	This function able to perform the power window system initialization

ACTIVE TEST

Monitor Item	Description
Front door exit and warning lamp right	This function able to check front door step lamp RH operation
Adjustment actuator motor via actuation	This function able to check outside mirror adjustment operation
Front door lock actuator right	This function able to check front door lock actuator RH operation
Front door switch illumination right	This function able to check switch illumination operation
Front super lock actuator right	This function able to check front door super lock actuator RH operation
Front door handle illumination right	This function able to check ambient lamp (front inside handle) RH operation
Front door ambience illumination right	This function able to check ambient lamp (front door grip) RH operation
Side turn signal lamp right	This function able to check side turn signal lamp operation
Front power window motor right	This function able to check front power window motor RH operation
Outside mirror ambient lamp right	This function able to check ambient lamp (outside mirror) RH operation
Right blind spot assist warning	This function able to check BSW indicator operation
Auto anti-dazzling mirror	This function able to check auto anti-dazzling mirror operation
Power folding unit	–
Door mirror defogger	This function able to outside mirror defogger operation
Vertical and horizontal inclination adjustment	This function able to check outside mirror adjustment operation
Right memory function	This function able to check right seat memory operation
Right outside mirror adjust	This function able to check right outside mirror adjustment operation
Denormalization of right rear power window	–
LEDs	This function able to check mirror and power window lock switch illumination operation
Control unit reset	–

SELF DIAGNOSTIC RESULT

Refer to DLK-70, "DTC Index".

ECU DIAGNOSIS INFORMATION

A/C AUTO AMP., LEFT FRONT DOOR CONTROL UNIT, RIGHT FRONT DOOR CONTROL UNIT

List of ECU Reference

INFOID:0000000013695941

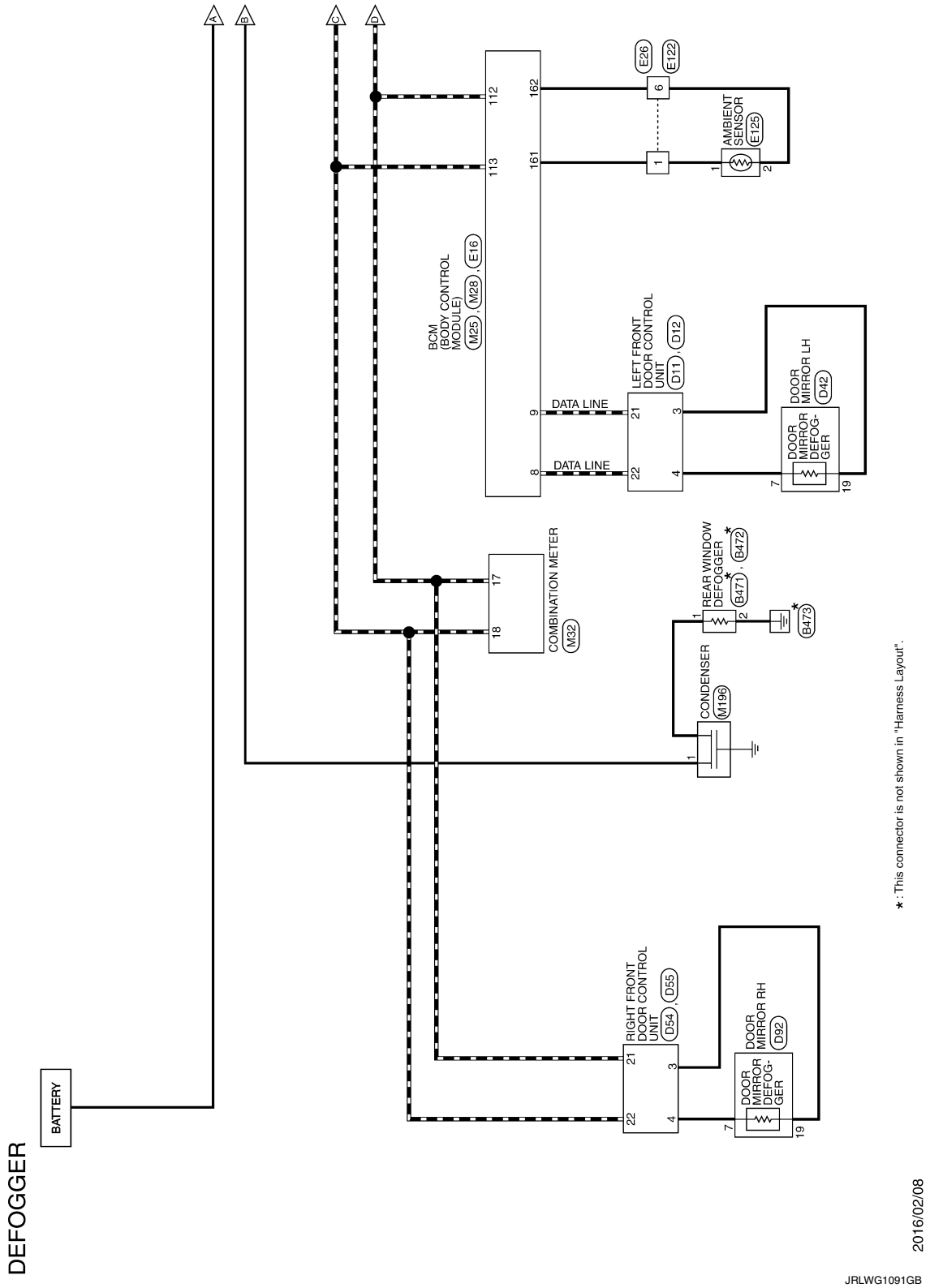
ECU	Reference
A/C auto amp.	HAC-30, "Reference Value"
	HAC-34, "Fail-safe"
	HAC-36, "DTC Index"
Left front door control unit	DLK-50, "Reference Value"
	DLK-57, "Fail-safe"
	DLK-58, "DTC Inspection Priority Chart"
	DLK-60, "DTC Index"
Right front door control unit	DLK-62, "Reference Value"
	DLK-68, "Fail-safe"
	DLK-69, "DTC Inspection Priority Chart"
	DLK-70, "DTC Index"

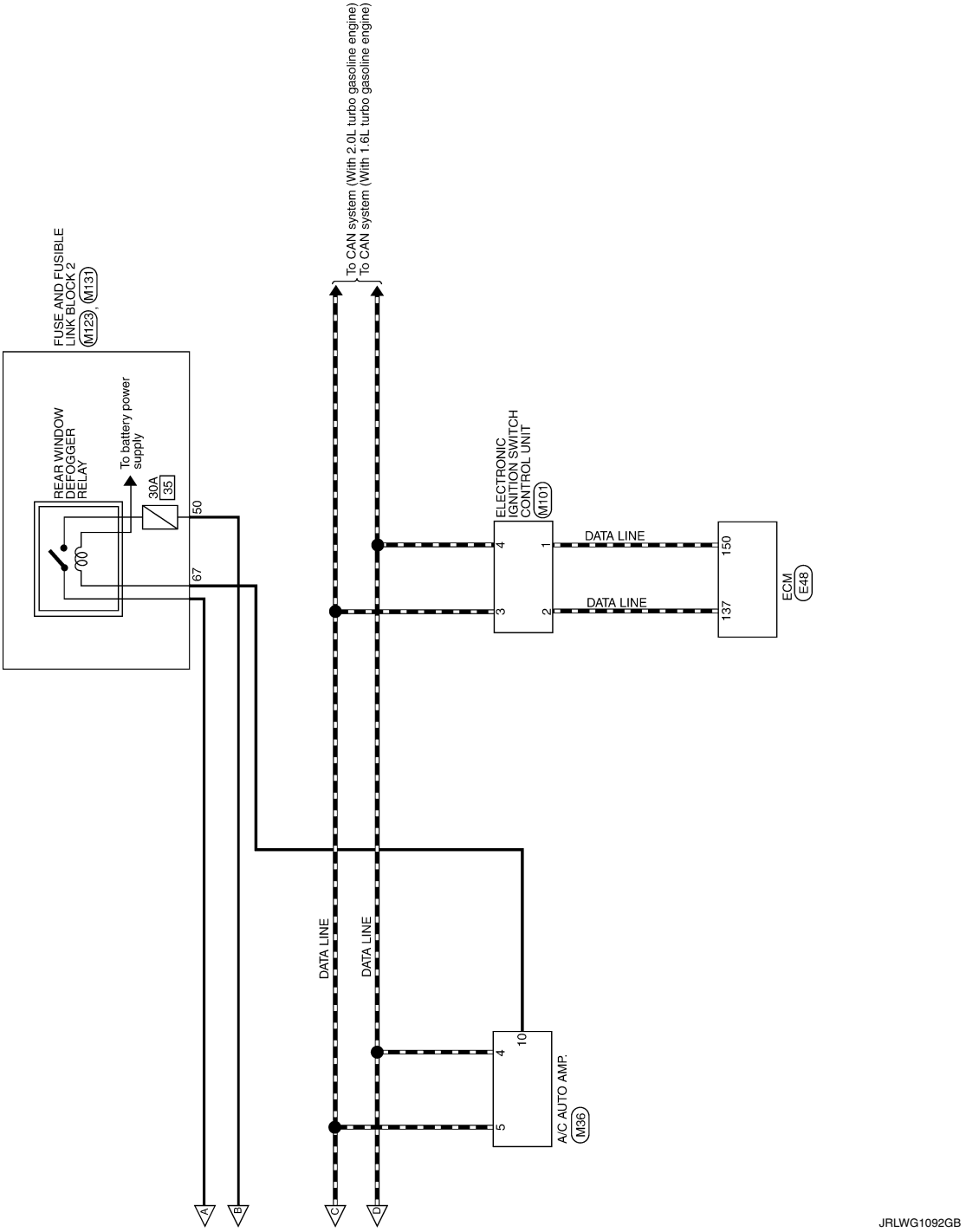
WIRING DIAGRAM

DEFOGGER

Wiring Diagram

INFOID:0000000013695942




To CAN system (With 2.0L turbo gasoline engine)
To CAN system (With 1.6L turbo gasoline engine)
FUSE AND FUSIBLE LINK BLOCK 2
(M123), (M131)
REAR WINDOW DEFOGGER RELAY
To battery power supply
30A
35
50
67
ELECTRONIC IGNITION SWITCH CONTROL UNIT
(M101)
DATA LINE
DATA LINE
ECM
(E48)
150
137
DATA LINE
DATA LINE
A/C AUTO AMP.
(M36)
10
A
B
C
D
JRLWG1092GB

DEFOGGER

Connector No.	B471
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-

Connector No.	B472
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A

H.S.

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

Connector No.	D11
Connector Name	LEFT FRONT DOOR CONTROL UNIT
Connector Type	MB_A0025405981

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	AUOTMATIC DIMMING MIRROR PWR
2	W	GND
3	B	DOOR MIRROR DEFOGGER GROUND
4	L	DOOR MIRROR DEFOGGER POWER SUPPLY
5	BR	BSW INDICATOR GND
6	P	ADJUSTMENTMOTOR POWER
7	L	VERTICAL INCLINATION CONT
8	Y	HORIZONTAL INCLINATION CONT
9	G	TURN SIG LAMP POWER
10	V	TURN SIG LAMP GND

Connector No.	D12
Connector Name	LEFT FRONT DOOR CONTROL UNIT
Connector Type	MB_A0025406281

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
21	BR	BODY CAN 2-L
22	R	BODY CAN 2-H
23	L	ROTARY CATCH SIGNAL
24	BR	GROUND
25	R	BATTERY POWER SUPPLY

Connector No.	D42
Connector Name	DOOR MIRROR LH
Connector Type	TH24MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	G	-
4	BR	-
5	B	-
6	L	-
7	L	-
8	O	-
9	O	-
10	L	-
11	Y	-
12	P	-
13	W	-
14	V	-
16	V	-
17	SHIELD	-
18	W	-
19	B	-
21	G	-
22	GR	-
23	B	-
24	BR	-

Connector No.	D54
Connector Name	RIGHT FRONT DOOR CONTROL UNIT
Connector Type	MB_A0025405981

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	AUOTMATIC DIMMING MIRROR PWR
2	Y	GND
3	G	DOOR MIRROR DEFOGGER GROUND
4	L	DOOR MIRROR DEFOGGER POWER SUPPLY
5	BR	BSW INDICATOR GND
6	V	ADJUSTMENTMOTOR POWER
7	P	VERTICAL INCLINATION CONT
8	W	HORIZONTAL INCLINATION CONT
9	GR	TURN SIG LAMP POWER
10	O	TURN SIG LAMP GND

Connector No.	D55
Connector Name	RIGHT FRONT DOOR CONTROL UNIT
Connector Type	MB_A0025406281

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
21	BR	BODY CAN 1-L
22	R	BODY CAN 1-H
24	BR	GROUND
25	R	BATTERY POWER SUPPLY

JRLWG1093GB

DEFOGGER

Connector No.	D92
Connector Name	DOOR MIRROR RH
Connector Type	TH24MW-NH

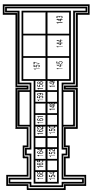
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
4	L	-
5	B	-
6	L	-
7	L	-
8	B	-
9	B	-
10	P	-
11	W	-
12	V	-
13	Y	-
14	O	-
16	P	-
17	SHIELD	-
18	W	-
19	G	-
21	BR	-
22	O	-
23	Y	-
24	O	-

Connector No.	E16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400181

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
143	Y	FRONT FOG LAMP RH
144	W	HIGH BEAM RH
145	GR	LOW BEAM LH
146	P	FRONT TURN SIGNAL RH
148	V	FR BRAKE WEAR SENSOR RH
150	GR	PARKING LAMP RH
152	L	LIN (BAT SENSOR)
154	Y	HEADLAMP AIMING RH
157	O	SSK STAT
158	R	COOLANT LEVEL SW SIG
159	BR	COOLANT LEVEL SW GND
161	P	AMBIENT SENSOR GND
162	G	AMBIENT SENSOR SIG
164	O	BRAKE FLUID LEVEL SW GND
165	V	HEADLAMP AIMING LH
166	R	DECOUPLING RELAY CONT

Connector No.	E26
Connector Name	WIRE TO WIRE
Connector Type	RH10MB

H.S.

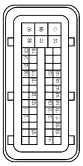


Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	R	-
3	B	-
6	G	-

7	W	-
8	V	-

Connector No.	E48
Connector Name	ECM
Connector Type	MB_A0075406981

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	POWER SUPPLY (ECM)
98	BR	ECM GROUND
99	V	POWER SUPPLY (ECM)
100	BR	ECM GROUND
101	R	POWER SUPPLY (ECM)
102	B	ECM GROUND
103	L	COOLING FAN CONTROL SIGNAL
104	R	SENSOR POWER SUPPLY (ACCELERATOR PEDAL POSITION SENSOR 3)
105	G	SENSOR POWER SUPPLY (ACCELERATOR PEDAL POSITION SENSOR 2)
106	BR	SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR)
111	B	IGNITION SIGNAL
112	Y	POWER SUPPLY (BATTERY)
116	W	STARTER RELAY-L
119	GR	SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR 2)
120	O	SENSOR GROUND
122	R	HOT START SIGNAL
123	GR	MOTOR RELAY CONTROL SIGNAL
127	O	FUEL PUMP ON SIGNAL
132	G	ACCELERATOR PEDAL POSITION SENSOR 1
136	Y	POWERTRAIN SENSOR CAN-H
137	W	CAN-H
138	GR	POWERTRAIN CAN-H
141	B	WATER PUMP RELAY CONTROL SIGNAL
145	W	ACCELERATOR PEDAL POSITION SENSOR 2
146	G	FUEL TANK PRESSURE SENSOR
147	L	CRASH SIGNAL
148	W	STARTER RELAY-H
149	B	POWERTRAIN SENSOR CAN-L
150	G	CAN-L
151	L	POWERTRAIN CAN-L
152	V	EVAP CANISTER VENT CONTROL VALVE
153	BR	EVAP PURGE CONTROL VALVE

Connector No.	E122
Connector Name	WIRE TO WIRE
Connector Type	RH10FB

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	R	-
3	B	-
6	G	-
7	W	-
8	V	-

Connector No.	E125
Connector Name	AMBIENT SENSOR
Connector Type	MB_A2105402081

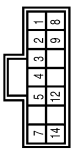
H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	G	-

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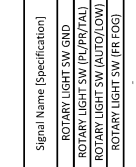
DEFOGGER

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A0075405081



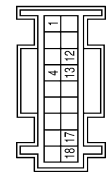
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	ROTARY LIGHT SW GND
2	O	ROTARY LIGHT SW (PU/PR/TAL)
3	R	ROTARY LIGHT SW (AUTO/LOW)
4	G	ROTARY LIGHT SW (FR FOG)
5	Y	-
7	GR	SWITCH INDICATOR
8	R	CAN-H (BODY 2)
9	BR	CAN-L (BODY 2)
12	O	LIN (IBS)
14	G	FOOT LAMP

Connector No.	M28
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MB_A1665400481



Terminal No.	Color Of Wire	Signal Name [Specification]
67	V	BACK DOOR UNLOCK
69	GR	STOP LAMP (BODY RH)
70	B	REAR TURN SIGNAL LH
71	GR	BACK-UP LAMP RH
72	Y	LICENSE PLATE LAMP RH
73	L	RR POWER WINDOW SW RH UP
74	B	RR POWER WINDOW SW RH DOWN
75	L	RR POWER WINDOW SW RH GND
76	GR	HALL SENSOR RH POWER SUPPLY
77	R	SUB BAT-
78	B	TERMINAL RELAY 15R1 CONT
80	B	REAR WIPER RELAY CONT
82	GR	TAIL LAMP (BODY LH)
83	P	TERMINAL RELAY 15R2 CONT
85	B	TAIL LAMP (BK LH)
87	R	BAT (VIA LATCHING TERMINAL RELAY 30G)
89	O	HALL SENSOR RH GND
90	V	HALL SENSOR RH SIGNAL
91	P	FUEL LEVEL SENSOR GND
92	L	FUEL LEVEL SENSOR
93	GR	FUEL LEVEL SENSOR
94	Y	FUEL FILLER LID STATUS
97	G	LATCHING TERMINAL RELAY 30G CONT 1
98	B	LATCHING TERMINAL RELAY 30G GND 1
99	W	LATCHING TERMINAL RELAY 30G GND 2
100	V	LATCHING TERMINAL RELAY 30G CONT 2
101	Y	REAR DOOR INSIDE HANDLE LAMP CONT
102	GR	AMBIENT LAMP CONT
103	V	SUB BAT RELAY CONT
105	G	RR DOOR LH UNLOCK
106	W	FUEL FILLER LID UNLOCK
107	L	RR DOOR LH LOCK
108	R	SUB BAT+
109	O	LIN (ROOF)
112	BR	CAN-L (BODY 1)
113	R	CAN-H (BODY 1)
114	B	INJECTION RELAY CONT

Connector No.	M32
Connector Name	COMBINATION METER
Connector Type	MB_A0525452726



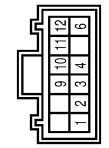
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	GROUND
4	R	BATTERY POWER SUPPLY
12	GR	CAN-L
13	W	CAN-H
17	BR	CAN-L
18	R	CAN-H

Connector No.	M36
Connector Name	A/C AUTO AMP.
Connector Type	MB_A0025405581



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	REFRIGERANT PRESSURE SENSOR GROUND
2	B	REFRIGERANT PRESSURE SENSOR SIGNAL
4	BR	CAN-L
5	R	CAN-H
6	V	COMPRESSOR (ECV) CONTROL SIGNAL
8	L	REFRIGERANT PRESSURE SENSOR POWER SUPPLY
10	Y	REAR WINDOW DEFOGGER RELAY CONTROL SIGNAL
11	V	LIN (BLOWER MOTOR)
12	G	COMPRESSOR (ECV) GROUND
13	P	COMPRESSOR (MAGNET CLUTCH) CONTROL SIGNAL
14	R	COOLANT CIRCULATION PUMP CONTROL SIGNAL
15	BR	GROUND
16	O	BATTERY POWER SUPPLY

Connector No.	M1101
Connector Name	ELECTRONIC IGNITION SWITCH CONTROL UNIT
Connector Type	MB_A0265458426



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	CHASSIS CAN-L
2	W	CHASSIS CAN-H
3	R	BODY CAN 1-H
4	BR	BODY CAN 1-L
6	W	STEERING LOCK OPERATION
9	GR	REMOTE KEYLESS
10	W	POWER SUPPLY
11	BR	DIAGNOSTIC CAN-L
12	L	DIAGNOSTIC CAN-H

Connector No.	M123
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A0065452801

Terminal No.	Color Of Wire	Signal Name [Specification]
50	Y	-

Connector No.	M131
Connector Name	FUSE AND FUSIBLE LINK BLOCK 2
Connector Type	MB_A2205459928

Terminal No.	Color Of Wire	Signal Name [Specification]
57	R	-
58	P	-
59	O	-
60	R	-
62	W	-
63	V	-
64	G	-
65	B	-
67	Y	-

JRLWG1095GB

DEFOGGER

Connector No.	M196
Connector Name	CONDENSER
Connector Type	M01FW-LC

H.S.

1

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-

JRLWG1096GB

DTC/CIRCUIT DIAGNOSIS

B106A REAR WINDOW DEFOGGER RELAY

DTC Description

INFOID:0000000013695943

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detecting condition	
B106A	11	Rear window defogger relay (Rear window defogger relay)	[CIRC SHORT TO GRND]	Diagnosis condition	Ignition switch ON at least 10 seconds or engine running for at least 10 seconds.
				Signal (Terminal)	Rear window defogger relay control signal
				Threshold	Circuit short to ground
				Diagnosis delay time	Less than 1 second
	12		[CIRC SHORT TO BATTERY]	Diagnosis condition	Ignition switch ON at least 10 seconds or engine running for at least 10 seconds.
				Signal (Terminal)	Rear window defogger relay control signal
				Threshold	Circuit short to battery
				Diagnosis delay time	Less than 1 second
	13		[CIRC OPEN]	Diagnosis condition	Ignition switch ON at least 10 seconds or engine running for at least 10 seconds.
				Signal (Terminal)	Circuit short to battery
				Threshold	Circuit open
				Diagnosis delay time	Less than 1 second

POSSIBLE CAUSE (B106A-11)

- Rear window defogger relay control signal circuit short to ground
- Rear window defogger relay
- Fuse and fusible link block 2
- A/C auto amp.

POSSIBLE CAUSE (B106A-12)

- Rear window defogger relay control signal circuit short to battery
- Rear window defogger relay
- Fuse and fusible link block 2
- A/C auto amp.

POSSIBLE CAUSE (B106A-13)

- Rear window defogger relay control signal circuit open
- Rear window defogger relay
- Fuse and fusible link block 2
- A/C auto amp.

FAIL-SAFE

Inhibit rear window defogger function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT

1. Turn ignition switch ON and wait at least 11 seconds.
2. Press rear window defogger switch.
3. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.

Is DTC detected?

YES >> Refer to DEF-32, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013695944

B106A-11

1.CHECK REAR WINDOW DEFOGGER RELAY CONTROL SIGNAL (SHORT TO GROUND)

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector and fuse and fusible link block 2 connector.
3. Check continuity between A/C auto amp. harness connector and ground.

A/C auto amp.		—	Continuity
Connector	Terminal		
M36	10	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair harness or connector.

2.ERASE DTC

With CONSULT

1. Connect A/C auto amp. connector and fuse and fusible link block 2 connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-11" detected?

YES >> GO TO 3.
NO >> INSPECTION END

3.REPLACE REAR WINDOW DEFOGGER RELAY AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace rear window defogger relay.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-11" detected?

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

4.REPLACE FUSE AND FUSIBLE LINK 2 AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace fuse and fusible link 1.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-11" detected?

YES >> Replace A/C control (A/C auto amp.). Refer to HAC-121, "Removal and Installation".
NO >> INSPECTION END

B106A-12

1.CHECK REAR WINDOW DEFOGGER RELAY CONTROL SIGNAL (SHORT TO BATTERY)

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector and fuse and fusible link block 2 connector.
3. Check voltage between A/C auto amp. harness connector and ground.

+		-	Voltage (Approx.)
A/C auto amp.			
Connector	Terminal		
M36	10	Ground	0 V

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair harness or connector.

2.ERASE DTC

With CONSULT

1. Connect A/C auto amp. connector and fuse and fusible link block 2 connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-12" detected?

YES >> GO TO 3.
NO >> INSPECTION END

3.REPLACE REAR WINDOW DEFOGGER RELAY AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace rear window defogger relay.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-12" detected?

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

4.REPLACE FUSE AND FUSIBLE LINK 2 AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace fuse and fusible link 1.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-12" detected?

YES >> Replace A/C control (A/C auto amp.). Refer to HAC-121, "Removal and Installation".
NO >> INSPECTION END

B106A-13

1.CHECK REAR WINDOW DEFOGGER RELAY CONTROL SIGNAL (OPEN)

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector and fuse and fusible link block 2 connector.
3. Check continuity between A/C auto amp. harness connector and fuse and fusible link block 2 harness connector.

A/C auto amp.		Fuse and fusible link block 2		Continuity
Connector	Terminal	Connector	Terminal	
M36	10	M131	67	Existed

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair harness or connector.

2.ERASE DTC

With CONSULT

1. Connect A/C auto amp. connector and fuse and fusible link block 2 connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-13" detected?

YES >> GO TO 3.
NO >> INSPECTION END

3. REPLACE REAR WINDOW DEFOGGER RELAY AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace rear window defogger relay.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-13" detected?

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

4. REPLACE FUSE AND FUSIBLE LINK 2 AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace fuse and fusible link 1.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “HVAC” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-31, "DTC Description".

Is DTC "B106A-13" detected?

YES >> Replace A/C control (A/C auto amp.). Refer to HAC-121, "Removal and Installation".
NO >> INSPECTION END

B1DD0 DOOR MIRROR DEFOGGER

LH

LH : DTC Description

INFOID:0000000013695945

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detecting condition	
B1DD0	11	Door mirror defogger output signal (Door mirror defogger output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Door mirror defogger ON condition
				Signal (Terminal)	Door mirror defogger LH power supply or ground
				Threshold	Circuit short to ground
				Diagnosis delay time	Less than 2.5 seconds
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Door mirror defogger ON condition
				Signal (Terminal)	Door mirror defogger LH power supply or ground
				Threshold	Circuit short to battery or open
				Diagnosis delay time	Less than 2.5 seconds

POSSIBLE CAUSE (B1DD0-11)
- Door mirror defogger LH circuit short to ground
- Door mirror defogger LH
- Left front door control unit

POSSIBLE CAUSE (B1DD0-15)
- Door mirror defogger LH circuit short to battery or open
- Door mirror defogger LH
- Left front door control unit

FAIL-SAFE
Inhibit door mirror defogger function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT
1. Turn ignition switch ON and wait at least 2.5 seconds.
2. Press rear window defogger switch.
3. Select “Self Diagnostic Result” mode of “Left front door control uinit” using CONSULT.

Is DTC detected?

YES >> Refer to DEF-35, "LH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

LH : Diagnosis Procedure

INFOID:0000000013695946

B1DD0-11

1.CHECK DOOR MIRROR DEFOGGER LH POWER SUPPLY

With CONSULT
1. Turn ignition switch ON.
2. Select “Door mirror defogger” in “Active Test” mode of “Left front door control unit” using CONSULT.

3. With operating the test items, check voltage between left front door control unit connector and ground.

+		-	Test item		Voltage (Approx.)
Left front door control unit					
Connector	Terminal				
D11	4	Ground	Door mirror defogger	ON	12 V
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 2.

2.CHECK DOOR MIRROR DEFOGGER LH POWER SUPPLY CIRCUIT (SHORT TO GROUND)

1. Turn ignition switch OFF.
2. Disconnect left front door control unit connector and door mirror LH connector.
3. Check continuity between left front door control unit and ground.

Left front door control unit		—	Continuity
Connector	Terminal		
D11	4	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.ERASE DTC

With CONSULT
1. Connect left front door control unit connector and door mirror LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-35, "LH : DTC Description".

Is DTC "B1DD0-11" detected?

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

4.REPLACE DOOR MIRROR DEFOGGER LH AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace left glass mirror. Refer to MIR-69, "GLASS MIRROR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-35, "LH : DTC Description".

Is DTC "B1DD0-11" detected?

YES >> Replace left front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

5.CHECK DOOR MIRROR DEFOGGER LH GROUND CIRCUIT (SHORT TO GROUND)

1. Turn ignition switch OFF.
2. Disconnect left front door control unit connector and door mirror LH connector.
3. Check continuity between left front door control unit and ground.

Left front door control unit		—	Continuity
Connector	Terminal		
D11	3	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

B1DD0-15

1.CHECK DOOR MIRROR DEFOGGER LH POWER SUPPLY

With CONSULT
1. Turn ignition switch ON.
2. Select “Door mirror defogger” in “Active Test” mode of “Left front door control unit” using CONSULT.
3. With operating the test items, check voltage between left front door control unit connector and ground.

+		-	Test item		Voltage (Approx.)
Left front door control unit					
Connector	Terminal				
D11	4	Ground	Door mirror defogger	ON	12 V
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 2.

2.CHECK DOOR MIRROR DEFOGGER LH POWER SUPPLY CIRCUIT (SHORT TO BATTERY)

1. Turn ignition switch OFF.
2. Disconnect left front door control unit connector and door mirror LH connector.
3. Check voltage between left front door control unit harness connector and ground.

+		-	Voltage (Approx.)
Left front door control unit			
Connector	Terminal		
D11	4	Ground	0 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK DOOR MIRROR DEFOGGER LH POWER SUPPLY CIRCUIT (OPEN)

Check continuity between left front door control unit harness connector and door mirror LH.

Left front door control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
D11	4	D42	7	Existed

Is the inspection result normal?

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

4.ERASE DTC

With CONSULT
1. Connect left front door control unit connector and door mirror LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-35, "LH : DTC Description".

Is DTC "B1DD0-15" detected?

YES >> GO TO 5.
NO >> INSPECTION END

5. REPLACE DOOR MIRROR DEFOGGER LH AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace left glass mirror. Refer to MIR-69, "GLASS MIRROR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Left front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-35, "LH : DTC Description".

Is DTC "B1DD0-15" detected?

YES >> Replace left front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

6. CHECK DOOR MIRROR DEFOGGER LH GROUND CIRCUIT (SHORT TO BATTERY)

1. Turn ignition switch OFF.
2. Disconnect left front door control unit connector and door mirror LH connector.
3. Check voltage between left front door control unit harness connector and ground.

+		-	Voltage (Approx.)
Left front door control unit			
Connector	Terminal		
D11	3	Ground	0 V

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair harness or connector.

7. CHECK DOOR MIRROR DEFOGGER LH POWER SUPPLY CIRCUIT (OPEN)

Check continuity between left front door control unit harness connector and door mirror LH.

Left front door control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	
D11	3	D42	19	Existed

Is the inspection result normal?

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

RH

RH : DTC Description

INFOID:0000000013695947

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	CONSULT screen terms [Malfunction type]	DTC detecting condition	
B1DD0	11	Door mirror defogger output signal (Door mirror defogger output signal)	[CIRC SHORT TO GRND]	Diagnosis condition	Door mirror defogger ON condition
				Signal (Terminal)	Door mirror defogger RH power supply or ground
				Threshold	Circuit short to ground
				Diagnosis delay time	Less than 2.5 seconds
	15		[CIRC SHORT TO BATTERY OR OPEN]	Diagnosis condition	Door mirror defogger ON condition
				Signal (Terminal)	Door mirror defogger RH power supply or ground
				Threshold	Circuit short to battery or open
				Diagnosis delay time	Less than 2.5 seconds

POSSIBLE CAUSE (B1DD0-11)
- Door mirror defogger RH circuit short to ground
- Door mirror defogger RH
- Right front door control unit

POSSIBLE CAUSE (B1DD0-15)
- Door mirror defogger RH circuit short to battery or open
- Door mirror defogger RH
- Right front door control unit

FAIL-SAFE
Inhibit door mirror defogger function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

With CONSULT
1. Turn ignition switch ON and wait at least 2.5 seconds.
2. Press rear window defogger switch.
3. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.

Is DTC detected?

YES >> Refer to DEF-39, "RH : Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-56, "Intermittent Incident".
NO-2 >> Confirmation after repair: INSPECTION END

RH : Diagnosis Procedure

INFOID:0000000013695948

B1DD0-11

1.CHECK DOOR MIRROR DEFOGGER RH POWER SUPPLY

With CONSULT
1. Turn ignition switch ON.
2. Select “Door mirror defogger” in “Active Test” mode of “Right front door control unit” using CONSULT.
3. With operating the test items, check voltage between right front door control unit connector and ground.

+		-	Test item		Voltage (Approx.)
Right front door control unit					
Connector	Terminal				
D54	4	Ground	Door mirror defogger	ON	12 V
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 2.

2.CHECK DOOR MIRROR DEFOGGER RH POWER SUPPLY CIRCUIT (SHORT TO GROUND)

1. Turn ignition switch OFF.
2. Disconnect right front door control unit connector and door mirror RH connector.
3. Check continuity between right front door control unit and ground.

Right front door control unit		—	Continuity
Connector	Terminal		
D54	4	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.ERASE DTC

With CONSULT
1. Connect right front door control unit connector and door mirror RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-38, "RH : DTC Description".

Is DTC "B1DD0-11" detected?

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

4.REPLACE DOOR MIRROR DEFOGGER RH AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace right glass mirror. Refer to MIR-69, "GLASS MIRROR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-38, "RH : DTC Description".

Is DTC "B1DD0-11" detected?

YES >> Replace right front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

5.CHECK DOOR MIRROR DEFOGGER RH GROUND CIRCUIT (SHORT TO GROUND)

1. Turn ignition switch OFF.
2. Disconnect right front door control unit connector and door mirror RH connector.
3. Check continuity between right front door control unit and ground.

Right front door control unit		—	Continuity
Connector	Terminal		
D54	3	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

B1DD0-15

1.CHECK DOOR MIRROR DEFOGGER RH POWER SUPPLY

With CONSULT
1. Turn ignition switch ON.
2. Select “Door mirror defogger” in “Active Test” mode of “Right front door control unit” using CONSULT.
3. With operating the test items, check voltage between right front door control unit connector and ground.

+		-	Test item		Voltage (Approx.)
Right front door control unit					
Connector	Terminal				
D54	4	Ground	Door mirror defogger	ON	12 V
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 2.

2.CHECK DOOR MIRROR DEFOGGER RH POWER SUPPLY CIRCUIT (SHORT TO BATTERY)

1. Turn ignition switch OFF.
2. Disconnect right front door control unit connector and door mirror RH connector.
3. Check voltage between right front door control unit harness connector and ground.

+		-	Voltage (Approx.)
Right front door control unit			
Connector	Terminal		
D54	4	Ground	0 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK DOOR MIRROR DEFOGGER RH POWER SUPPLY CIRCUIT (OPEN)

Check continuity between right front door control unit harness connector and door mirror RH.

Right front door control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
D54	4	D92	7	Existed

Is the inspection result normal?

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

4.ERASE DTC

With CONSULT
1. Connect right front door control unit connector and door mirror RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-38, "RH : DTC Description".

Is DTC "B1DD0-15" detected?

YES >> GO TO 5.
NO >> INSPECTION END

5.REPLACE DOOR MIRROR DEFOGGER RH AND ERACE DTC

1. Turn ignition switch OFF.
2. Replace right glass mirror. Refer to MIR-69, "GLASS MIRROR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “Right front door control unit” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DEF-38, "RH : DTC Description".

Is DTC "B1DD0-15" detected?

YES >> Replace right front door control unit. Refer to DLK-286, "Removal and Installation".
NO >> INSPECTION END

6.CHECK DOOR MIRROR DEFOGGER RH GROUND CIRCUIT (SHORT TO BATTERY)

1. Turn ignition switch OFF.
2. Disconnect right front door control unit connector and door mirror RH connector.
3. Check voltage between right front door control unit harness connector and ground.

+		-	Voltage (Approx.)
Right front door control unit			
Connector	Terminal		
D54	3	Ground	0 V

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair harness or connector.

7.CHECK DOOR MIRROR DEFOGGER RH POWER SUPPLY CIRCUIT (OPEN)

Check continuity between right front door control unit harness connector and door mirror RH.

Right front door control unit		Door mirror RH		Continuity
Connector	Terminal	Connector	Terminal	
D54	3	D92	19	Existed

Is the inspection result normal?

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

REAR WINDOW DEFOGGER

Component Function Check

INFOID:0000000013695949

1.CHECK REAR WINDOW DEFOGGER FUNCTION

With CONSULT
1. Turn ignition switch ON.
2. Select “Rear windshield heater” in “Active Test” mode of “HVAC” using CONSULT.
3. Touch “ON”.
4. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger function is OK.
NO >> Refer to DEF-43, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000013695950

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check that the following fuse is not blown (open).

Unit	Location	Fuse No.	Capacity
Condenser	Fuse and fusible link block 2	35	30A

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the cause of blown (open).
NO >> GO TO 2.

2.CHECK REAR WINDOW DEFOGGER POWER SUPPLY-1

With CONSULT
1. Turn ignition switch ON.
2. Select “Rear windshield heater” in “Active Test” mode of “HVAC” using CONSULT.
3. With operating the test items, check voltage between rear window defogger connector and ground.

+		-	Test item		Voltage (Approx.)
Rear window defogger					
Connector	Terminal				
B471	1	Ground	Rear windshield heater	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGER POWER SUPPLY-2

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

+		-	Test item		Voltage (Approx.)
Condenser					
Connector	Terminal				
M196	1	Ground	Rear windshield heater	ON	Battery voltage
				OFF	0 V

Is the inspection result normal?

YES >> Replace condenser. Refer to DEF-46, "Removal and Installation".
NO >> Repair the rear window defogger power supply circuit.

4. CHECK REAR WINDOW DEFOGGER GROUND

1. Turn ignition switch OFF.
2. Disconnect rear window defogger connector.
3. Check continuity between rear window defogger harness connector and ground.

Rear window defogger		—	Continuity
Connector	Terminal		
B472	2	Ground	Existed

Is the inspection result normal?

YES >> Repair rear window defogger filament.
NO >> Repair or replace harness.

SYMPTOM DIAGNOSIS

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

Diagnosis Procedure

INFOID:0000000013695951

1.CHECK REAR WINDOW DEFOGGER

Check rear window defogger. Refer to DEF-43, "Component Function Check".

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace the malfunctioning parts.

REMOVAL AND INSTALLATION

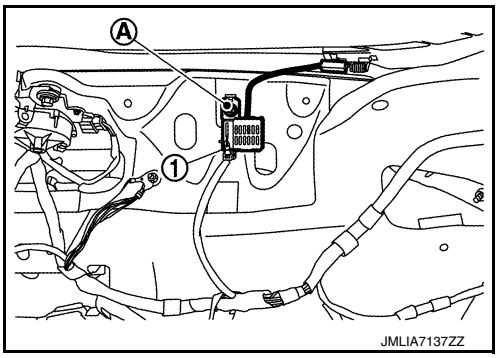
CONDENSER

Removal and Installation

INFOID:0000000013695952

REMOVAL

1. Remove the back door finisher. Refer to INT-43, "Removal and Installation".
2. Disconnect rear window defogger connector and condenser connector.
3. Remove the condenser mounting bolt Ⓐ, and then remove the condenser ①.



INSTALLATION

Install in the reverse order of removal.