

SECTION

DEF

DEFOGGER

A

B

C

CONTENTS

E

BASIC INSPECTION	3	
DIAGNOSIS AND REPAIR WORKFLOW	3	
Work Flow	3	
FUNCTION DIAGNOSIS	4	
REAR WINDOW DEFOGGER SYSTEM	4	
WITH AV CONTROL UNIT	4	
WITH AV CONTROL UNIT : System Diagram	4	
WITH AV CONTROL UNIT : System Description.....	4	
WITH AV CONTROL UNIT : Component Parts Lo-		
cation	5	
WITH AV CONTROL UNIT : Component Descrip-		
tion	5	
WITHOUT AV CONTROL UNIT	6	
WITHOUT AV CONTROL UNIT : System Diagram		
.....	6	
WITHOUT AV CONTROL UNIT : System Descrip-		
tion	6	
WITHOUT AV CONTROL UNIT : Component		
Parts Location	7	
WITHOUT AV CONTROL UNIT : Component De-		
scription	7	
DIAGNOSIS SYSTEM (BCM)	8	
COMMON ITEM	8	
COMMON ITEM : CONSULT-III Function (BCM -		
COMMON ITEM)	8	
REAR WINDOW DEFOGGER	9	
REAR WINDOW DEFOGGER : CONSULT-III		
Function (BCM - REAR DEFOGGER)	9	
COMPONENT DIAGNOSIS	11	
POWER SUPPLY AND GROUND CIRCUIT	11	
Diagnosis Procedure	11	
REAR WINDOW DEFOGGER SWITCH	12	
WITH AV CONTROL UNIT	12	
WITH AV CONTROL UNIT : Description	12	
WITH AV CONTROL UNIT : Component Function		
Check	12	
WITH AV CONTROL UNIT : Diagnosis Procedure...	12	
WITHOUT AV CONTROL UNIT	12	
WITHOUT AV CONTROL UNIT : Description	12	
WITHOUT AV CONTROL UNIT : Component		
Function Check	12	
WITHOUT AV CONTROL UNIT : Diagnosis Pro-		
cedure	12	
REAR WINDOW DEFOGGER RELAY	14	
Description	14	
Component Function Check	14	
Diagnosis Procedure	14	
Component Inspection	15	
REAR WINDOW DEFOGGER	16	
Description	16	
Component Function Check	16	
Diagnosis Procedure	16	
Component Inspection	18	
DOOR MIRROR DEFOGGER	19	
Description	19	
Component Function Check	19	
Diagnosis Procedure	19	
DRIVER SIDE DOOR MIRROR DEFOGGER ...	21	
Description	21	
Component Function Check	21	
Diagnosis Procedure	21	
PASSENGER SIDE DOOR MIRROR DEFOG-		
GER	23	
Description	23	
Component Function Check	23	
Diagnosis Procedure	23	
REAR WINDOW DEFOGGER ON SIGNAL	25	

Description	25	ON IS NOT DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT OPERATES	61
Component Function Check	25	WITH AV CONTROL UNIT	61
Diagnosis Procedure	25	WITH AV CONTROL UNIT : Diagnosis Procedure...	61
ECU DIAGNOSIS	26	WITHOUT AV CONTROL UNIT	61
BCM (BODY CONTROL MODULE)	26	WITHOUT AV CONTROL UNIT : Diagnosis Pro- cedure	61
Reference Value	26	REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE	62
Wiring Diagram - DEFOGGER SYSTEM -	49	WITH AV CONTROL UNIT	62
Fail-safe	53	WITH AV CONTROL UNIT : Diagnosis Procedure...	62
DTC Inspection Priority Chart	55	WITHOUT AV CONTROL UNIT	62
DTC Index	56	WITHOUT AV CONTROL UNIT : Diagnosis Pro- cedure	62
SYMPTOM DIAGNOSIS	58	PRECAUTION	63
REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.	58	PRECAUTIONS	63
Diagnosis Procedure	58	Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER"	63
REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH DOOR MIRROR DE- FOGGERS OPERATE.	59	ON-VEHICLE REPAIR	64
Diagnosis Procedure	59	FILAMENT	64
DOOR MIRROR DEFOGGER DOES NOT OP- ERATE	60	Inspection and Repair	64
BOTH SIDES	60	CONDENSER	66
BOTH SIDES : Diagnosis Procedure	60	Exploded View	66
DRIVER SIDE	60	Removal and Installation	66
DRIVER SIDE : Diagnosis Procedure	60		
PASSENGER SIDE	60		
PASSENGER SIDE : Diagnosis Procedure	60		

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000003806024

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

Perform self diagnosis with CONSULT-III

Is any DTC detected?

YES >> Refer to [BCS-74. "DTC Index"](#)

NO >> GO TO 3.

3.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.

Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 4.

4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

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

>> GO TO 5.

5.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

Perform the diagnosis with "Component diagnosis" of the applicable system.

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

7.FINAL CHECK

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

Are all malfunctions corrected?

YES >> INSPECTION END

NO >> GO TO 4.

A

B

C

D

E

F

G

H

I

J

K

DEF

M

N

O

P

REAR WINDOW DEFOGGER SYSTEM

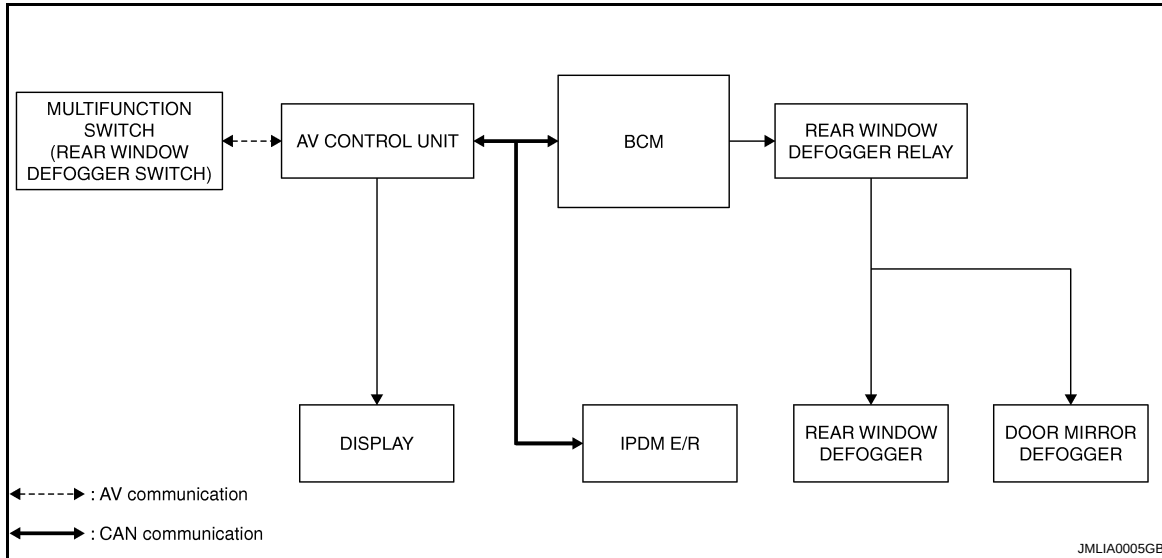
< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS

REAR WINDOW DEFOGGER SYSTEM WITH AV CONTROL UNIT

WITH AV CONTROL UNIT : System Diagram

INFOID:000000003806025



WITH AV CONTROL UNIT : System Description

INFOID:000000003806026

Operation Description

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger control signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger are supplied with power and operate when rear window defogger relay turns ON.
- IPDM E/R transmits rear window defogger control signal to AV control unit via CAN communication.
- When receiving the signal, AV control unit indicates rear defogger ON on the display. At the same time, AV control unit transmits rear defogger control signal to multifunction switch (rear window defogger switch) via AV communication and illuminates rear defogger switch indicator.

Timer function

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defogger (with door mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same reaction also occurs during timer operation, if the ignition switch is turned OFF.

INPUT/OUTPUT SIGNAL CHART

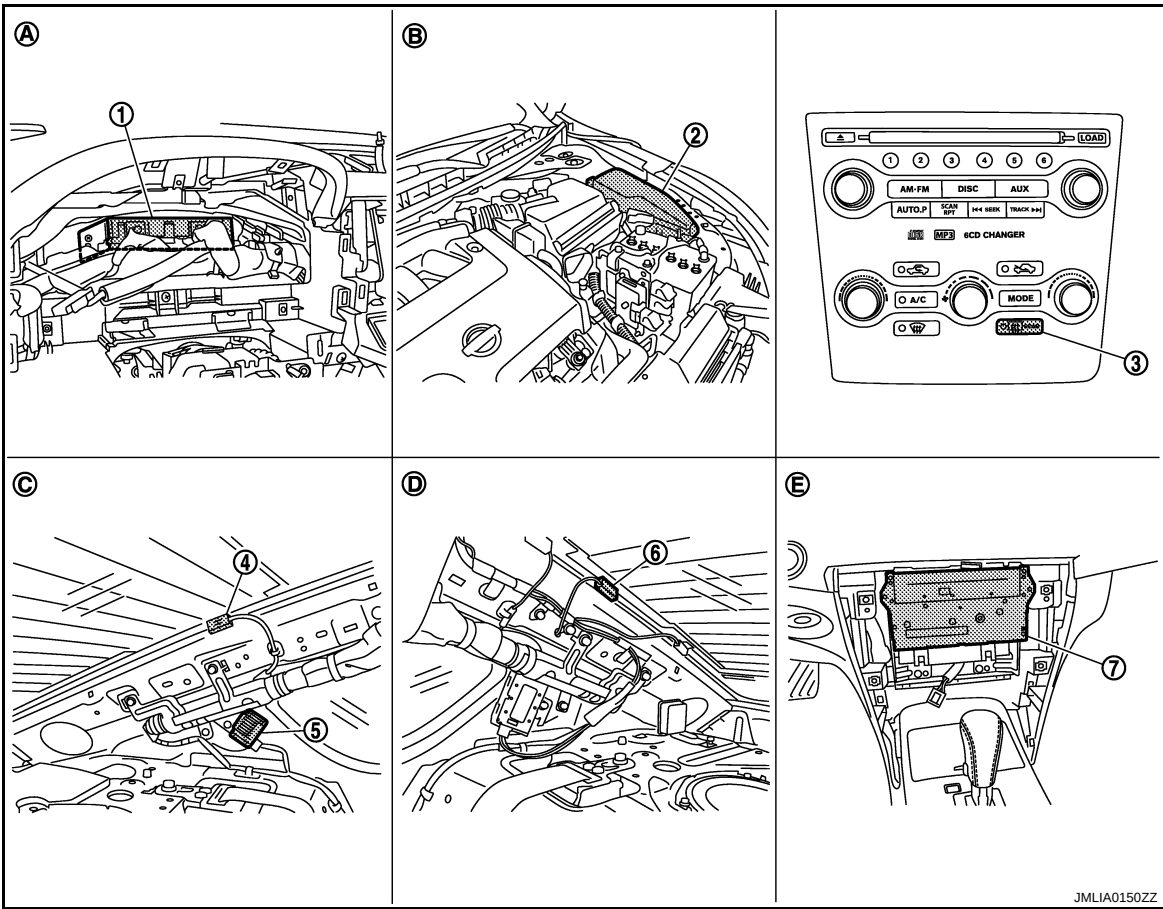
Switch	Input signal to BCM	BCM function	Actuator
Rear window defogger switch	Defogger switch signal	Rear window defogger & Door mirror defogger control	Rear window defogger Door mirror defogger
Push button ignition switch	Ignition signal		

REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

WITH AV CONTROL UNIT : Component Parts Location

INFOID:000000003806027



- | | | |
|--|--------------------------------|---|
| 1. BCM M118, M119, M122, M123 | 2. IPDM E/R E11 | 3. Rear window defogger switch M125 (built-in multifunction switch) |
| 4. Rear window defogger connector B126 | 5. Condenser B125 | 6. Rear window defogger connector B303 |
| 7. AV control unit M129, M131 | | |
| A. Behind the combination meter | B. Engine room dash panel (LH) | C. Behind rear pillar finisher (LH) |
| D. Behind rear pillar finisher (RH) | E. Behind cluster lid C | |

WITH AV CONTROL UNIT : Component Description

INFOID:000000003806028

BCM	- Operates the rear window defogger via rear window defogger switch - Performs the timer control of rear window defogger
Rear window defogger relay	Operates the rear window defogger and the door mirror defogger with the control signal from BCM
IPDM E/R	Transmits rear window defogger control signal to AV control unit via CAN communication
Multifunction switch (Rear window defogger switch)	- The rear window defogger switch is installed - Turns the indicator lamp ON when detecting the operation of rear window defogger
AV control unit	Displays the rear window defogger is ON on the display when detecting the operation of rear window defogger
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	Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up

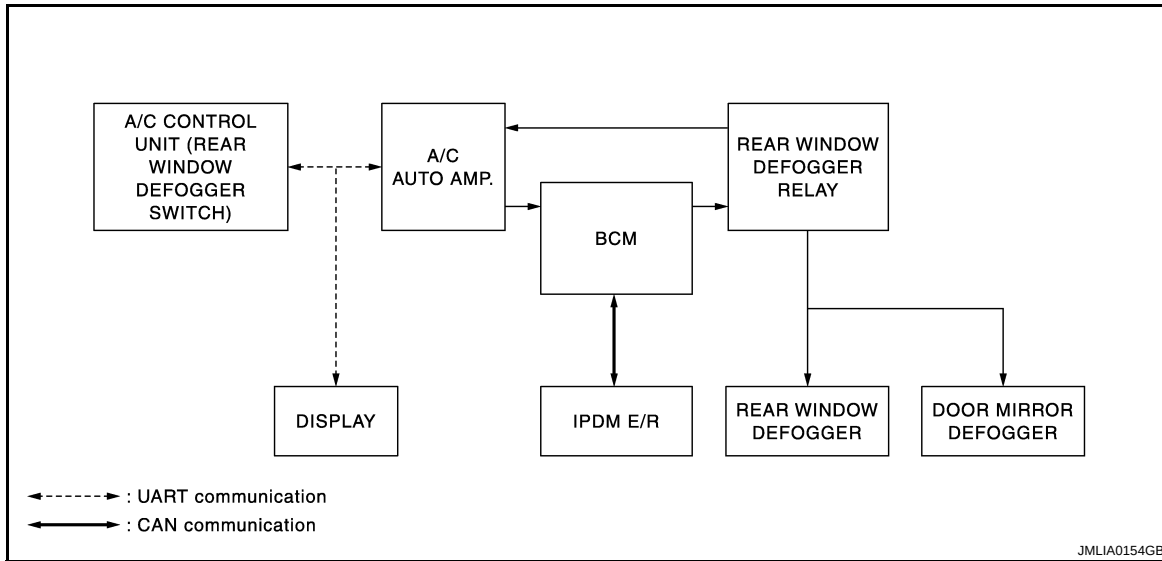
REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

WITHOUT AV CONTROL UNIT

WITHOUT AV CONTROL UNIT : System Diagram

INFOID:000000003806029



WITHOUT AV CONTROL UNIT : System Description

INFOID:000000003806030

Operation Description

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then A/C control unit (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON and transmits rear window defogger control signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay transmits rear window defogger control signal to A/C auto amp. when rear window defogger operates.
- When receiving the signal, A/C auto amp. indicates rear defogger ON on the display. At the same time, A/C auto amp. transmits rear defogger control signal to A/C control unit (rear window defogger switch) and illuminates rear defogger switch indicator.

Timer function

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defogger (with door mirror defogger) operate.
- Timer is canceled after pressing rear window defogger switch again during timer operation. Then BCM turns rear window defogger relay OFF. The same reaction also occurs during timer operation, if the ignition switch is turned OFF.

INPUT/OUTPUT SIGNAL CHART

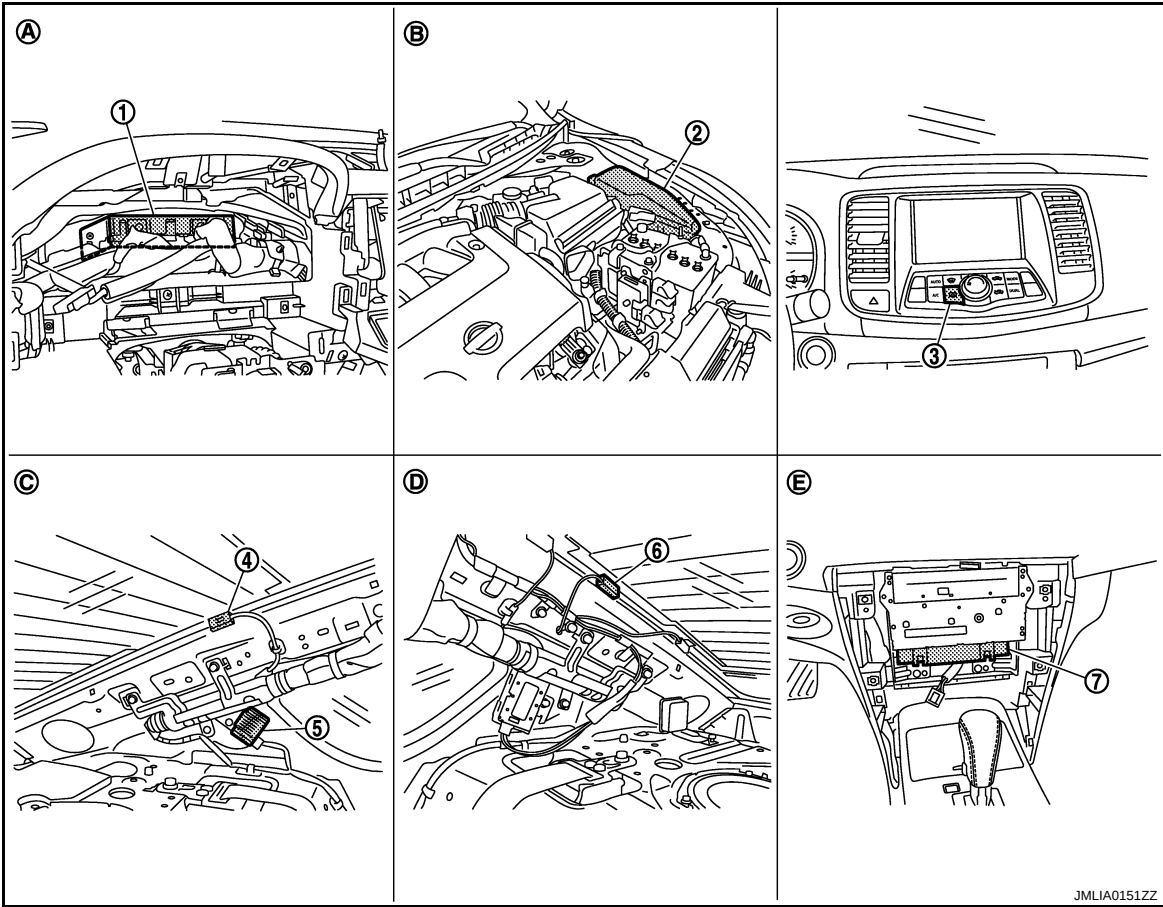
Switch	Input signal to BCM	BCM function	Actuator
Rear window defogger switch	Defogger switch signal	Rear window defogger & Door mirror defogger control	Rear window defogger Door mirror defogger
Push button ignition switch	Ignition signal		

REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >

WITHOUT AV CONTROL UNIT : Component Parts Location

INFOID:000000003806031



- 1. BCM M118, M119, M122, M123
- 2. IPDM E/R E11
- 3. Rear window defogger switch M95 (built-in A/C control)
- 4. Rear window defogger connector B126
- 5. Condenser B125
- 6. Rear window defogger connector B303
- 7. A/C auto amp. M50
- A. Behind the combination meter
- B. Engine room dash panel (LH)
- C. Behind rear pillar finisher (LH)
- D. Behind rear pillar finisher (RH)
- E. Behind cluster lid C

WITHOUT AV CONTROL UNIT : Component Description

INFOID:000000003806032

BCM	- Operates the rear window defogger with the operation of rear window defogger switch - Performs the timer control of rear window defogger
Rear window defogger relay	Operates the rear window defogger and the door mirror defogger with the control signal from BCM
IPDM E/R	Transmit rear window defogger control signal to ECM via CAN communication
A/C control (Rear window defogger switch)	- The rear window defogger switch is installed - Turns the indicator lamp ON when detecting the operation of rear window defogger
A/C auto amp.	Displays the rear window defogger ON to the display when detecting the operation of rear window defogger
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	Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000003940040

APPLICATION ITEM

CONSULT-III 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. Refer to CONSULT-III operation manual.
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	Sub system selection item	Diagnosis mode		
		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 CONDITONER*			
- Intelligent Key system - Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk lid opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
—	RETAINED PWR*		×	
Signal buffer system	SIGNAL BUFFER		×	×
—	TPMS (AIR PRESSURE MONITOR)*	×	×	×

NOTE:

*: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD) AND IGN COUNTER

Freeze Frame Data

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

The BCM records the following condition at the moment a particular DTC is detected.

- Vehicle Speed
- Odo/Trip Meter
- Vehicle Condition (BCM detected condition)

CONSULT screen terms	Description
SLEEP>LOCK	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK".)
SLEEP>OFF	While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
LOCK>ACC	While turning power supply position from "LOCK" to "ACC"
ACC>ON	While turning power supply position from "ACC" to "IGN"
RUN>ACC	While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
CRANK>RUN	While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
RUN>URGENT	While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
ACC>OFF	While turning power supply position from "ACC" to "OFF"
OFF>LOCK	While turning power supply position from "OFF" to "LOCK"
OFF>ACC	While turning power supply position from "OFF" to "ACC"
ON>CRANK	While turning power supply position from "IGN" to "CRANKING"
OFF>SLEEP	While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
LOCK>SLEEP	While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode
LOCK	Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)
OFF	Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
ACC	Power supply position is "ACC" (Ignition switch ACC)
ON	Power supply position is "IGN" (Ignition switch ON with engine stopped)
ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)
CRANKING	Power supply position is "CRANKING" (At engine cranking)

IGN Counter

IGN counter indicates 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 → 3...38 → 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.

REAR WINDOW DEFOGGER

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

INFOID:000000003806034

Data monitor

Monitor Item	Description
REAR DEF SW	• Without AV control unit: Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch • With AV control unit: This is displayed even when it is not equipped
PUSH SW	Indicates [ON/OFF] condition of push switch

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Test Item	Description
REAR DEFOGGER	This test is able to check rear window defogger operation. Rear window defogger operates when "ON" on CONSULT-III screen is touched

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000003806035

1.CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible links are not blown.

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	I (40A)
11		10 (10A)

Is the fuse blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Voltage (Approx.)
Terminal			
BCM			
Connector	Terminal	Ground	Battery voltage
M118	1		
M119	11		

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair or replace harness.

REAR WINDOW DEFOGGER SWITCH

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH WITH AV CONTROL UNIT

WITH AV CONTROL UNIT : Description

INFOID:000000003840821

- The rear window defogger is 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.

WITH AV CONTROL UNIT : Component Function Check

INFOID:000000003840822

1.CHECK FUNCTION

Check that the indicator lamp of rear window defogger illuminates when rear window defogger switch is ON.

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-12, "WITH AV CONTROL UNIT : Diagnosis Procedure"](#)

WITH AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000003840823

1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does multifunction switch operate normally?

- Base audio with AV control unit. Refer to [AV-15, "Diagnosis Description"](#).
- BOSE audio with navigation system. Refer to [AV-419, "Diagnosis Description"](#).
- BOSE audio without navigation system. Refer to [AV-200, "Diagnosis Description"](#).

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Repair or replace the malfunctioning parts.

WITHOUT AV CONTROL UNIT

WITHOUT AV CONTROL UNIT : Description

INFOID:000000003806036

- The rear window defogger is 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.

WITHOUT AV CONTROL UNIT : Component Function Check

INFOID:000000003806037

1.CHECK FUNCTION

Check (REAR DEF) in "DATA MONITOR" mode with CONSULT-III when rear window defogger switch is ON.

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-12, "WITHOUT AV CONTROL UNIT : Diagnosis Procedure"](#)

WITHOUT AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000003806038

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

Check A/C control system.

Refer to [HAC-6, "Work Flow"](#).

Is the inspection result normal?

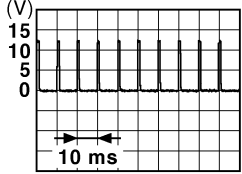
- YES >> GO TO 2.
NO >> Repair or replace the malfunctioning parts.

2.CHECK BCM OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect A/C auto amp. connector.
3. Turn ignition switch ON.
4. Check voltage between A/C auto amp. harness connector and ground with oscilloscope.

REAR WINDOW DEFOGGER SWITCH

< COMPONENT DIAGNOSIS >

A/C auto amp.		(-)	Voltage (V) (Approx)
Connector	Terminal		
M50	27	Ground	

JPMIA0012GB

Is the inspection result normal?

- YES >> Replace A/C auto amp. Refer to [VTL-23, "Removal and Installation"](#).
 NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

- Turn ignition switch OFF.
- Disconnect BCM connector.
- Check continuity between BCM harness connector and A/C auto amp. connector.

BCM		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M123	130	M50	27	Existed

- Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	130		Not existed

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-78, "Removal and Installation"](#).
 NO >> Repair or replace harness.

DEF

REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

INFOID:000000003857611

Power is supplied to the rear window defogger with BCM control.

Component Function Check

INFOID:000000003857612

1.CHECK FUNCTION

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit function is OK.
NO >> Refer to [DEF-14. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000003857613

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.3, 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 REAR WINDOW DEFOGGER RELAY CIRCUIT 1

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector and ground.

(+)		(−)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M123	151	Ground	Rear window de-fogger switch	ON	0
				OFF	Battery voltage

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit is OK.
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

1. Turn ignition switch OFF.
2. Disconnect BCM connector and fuse block (J/B).
3. Check continuity between BCM harness connector and fuse block (J/B) harness connector.

BCM		Fuse block (J/B)		Continuity
Connector	Terminal	Connector	Terminal	
M123	151	M2	4B	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	151		Not existed

Is the inspection result normal?

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

REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

4.CHECK REAR WINDOW DEFOGGER RELAY

1. Disconnect rear window defogger relay,
2. Check rear window defogger relay.

Refer to [DEF-15. "Component Inspection"](#)

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace rear window defogger relay.

5.CHECK FUSE BLOCK (J/B)

1. Install the rear window defogger relay.
2. Turn ignition switch ON.
3. Check voltage between fuse block (J/B) (fuse block side) and ground.

(+)		(-)	Voltage (V) (Approx.)
Fuse block (J/B)			
Connector	Terminal		
M2	4B	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace fuse block (J/B).

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-35. "Intermittent Incident"](#)

>> INSPECTION END

Component Inspection

INFOID:000000003857614

1.CHECK REAR WINDOW DEFOGGER RELAY

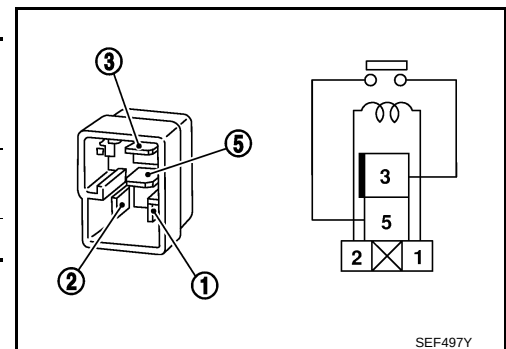
1. Turn ignition switch OFF.
2. Disconnect rear window defogger relay.
3. Check rear window defogger relay.

Terminal		Condition	Continuity
Rear window defogger relay			
3	5	12 V direct current supply between terminals 1 and 2	Existed
		No current supply	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace rear window defogger relay.



DEF

REAR WINDOW DEFOGGER

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER

Description

INFOID:000000003857615

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

Component Function Check

INFOID:000000003857616

1.CHECK REAR WINDOW DEFOGGER

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

- YES >> Rear window defogger is OK.
NO >> Refer to [DEF-16, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000003857617

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 20A fuse [No.15, 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 POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between rear window defogger harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Rear window defogger					
Connector	Terminal				
B303	1	Ground	Rear window de- fogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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		Ground	Continuity
Connector	Terminal		
B126	2		Existed

Is the inspection result normal?

- YES >> GO TO 7.
NO >> Repair or replace harness.

4.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect condenser connector and rear window defogger connector.

REAR WINDOW DEFOGGER

< COMPONENT DIAGNOSIS >

Refer to [GI-35, "Intermittent Incident"](#)

>> INSPECTION END

Component Inspection

INFOID:0000000003857618

1.CHECK FILAMENT

Check the filament for damage.

Refer to [DEF-64, "Inspection and Repair"](#)

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair filament.

DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

DOOR MIRROR DEFOGGER

Description

INFOID:000000003857619

Power is supplied to the door mirror defogger with BCM control.

Component Function Check

INFOID:000000003857620

1.CHECK FUNCTION

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that both side door mirror glasses are getting warmer.

Is the inspection result normal?

- YES >> Door mirror defogger function is OK.
NO >> Refer to [DEF-19. "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000003857621

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, 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 POWER SUPPLY CIRCUIT

1. Disconnect door mirror (driver side) connector.
2. Turn ignition switch ON.
3. Check voltage between door mirror (driver side) harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Door mirror (driver side)					
Connector	Terminal				
D3	3	Ground	Rear window de-fogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

- YES >> GO TO 5.
NO >> GO TO 3.

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Check continuity between fuse block (J/B) harness connector and door mirror (driver side) harness connector.

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	10C	D3	3	Existed

4. Check continuity between fuse block (J/B) harness connector and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
M3	10C		Not existed

Is the inspection result normal?

DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

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

4.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.
2. Check voltage between fuse block (J/B) (fuse block side) and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Fuse block (J/B)					
Connector	Terminal				
M3	10C	Ground	Rear window de-fogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace fuse block (J/B).

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-35, "Intermittent Incident"](#).

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000003857622

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

INFOID:000000003857623

1.CHECK FUNCTION

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
2. Touch "ON".
3. Check that the driver side door mirror glass is getting warmer.

Is the inspection result normal?

- YES >> Driver side door mirror defogger function is OK.
NO >> Refer to [DEF-21, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000003857624

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Turn ignition switch ON.
4. Check voltage between door mirror (driver side) harness connector and ground.

(+)Door mirror (driver side)		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
D3	3	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

2.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Check continuity between fuse block (J/B) harness connector and door mirror (driver side) harness connector.

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	10C	D3	3	Existed

4. Check continuity between fuse block (J/B) harness connector and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
M3	10C		Not existed

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

DRIVER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

Door mirror (driver side)		Ground	Continuity
Connector	Terminal		
D3	11		Existed

Is the inspection result normal?

YES >> Replace door mirror glass (driver side). Refer to [MIR-18, "GLASS MIRROR : Disassembly and Assembly"](#).

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-35, "Intermittent Incident"](#)

Is the inspection result normal?

>> INSPECTION END

PASSENGER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000003857625

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

INFOID:000000003857626

1.CHECK FUNCTION

1. Perform Active Test ("REAR DEFOGGER") with CONSULT-III.
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 function is OK.
NO >> Refer to [DEF-23, "Diagnosis Procedure"](#)

Diagnosis Procedure

INFOID:000000003857627

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.

(+)Door mirror (Passenger side)		(-)	Condition		Voltage (V) (Approx.)
Connector	Terminal				
D43	3	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

2.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Check continuity between fuse block (J/B) harness connector and door mirror (passenger side) harness connector.

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	10C	D43	3	Existed

4. Check continuity between fuse block (J/B) harness connector and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
M3	10C		Not existed

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

PASSENGER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

Door mirror (passenger side)		Ground	Continuity
Connector	Terminal		
D43	11		Existed

Is the inspection result normal?

YES >> Replace door mirror glass (passenger side). Refer to [MIR-18, "GLASS MIRROR : Disassembly and Assembly"](#).

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-35, "Intermittent Incident"](#)

>> INSPECTION END

REAR WINDOW DEFOGGER ON SIGNAL

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER ON SIGNAL

Description

INFOID:000000003840834

Turns the indicator lamp in the rear window defogger switch ON when operating the rear window defogger.

Component Function Check

INFOID:000000003840835

1.CHECK FUNCTION

Check that the indicator lamps of rear window defogger switch are illuminated when turning the rear window defogger switch ON.

Is the inspection result normal?

YES >> Rear window defogger ON signal function is OK.

NO >> Refer to [DEF-25. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000003840836

1.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP ON SIGNAL

1. Turn ignition switch ON.
2. Check voltage between A/C auto amp. harness connector ground.

(+) A/C auto amp.		(-)	Condition	Voltage (V) (Approx.)
Connector	Terminal			
M50	26	Ground	Rear window de-fogger switch	ON
				OFF
				Battery voltage
				0

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to [VTL-23. "Removal and Installation"](#).

NO >> GO TO 2.

2.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector and A/C auto amp. connector.
3. Check continuity between fuse block (J/B) harness connector and A/C auto amp. harness connector.

Fuse block (J/B)		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	M50	26	Existed

4. Check continuity between fuse block (J/B) harness connector and ground.

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
M3	9C		Not existed

Is the inspection result normal?

YES >> Repair or replace fuse block (J/B).

NO >> Repair or replace harness.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000003940041

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
DOOR SW-RL	Rear LH door closed	Off	A
	Rear LH door opened	On	
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off	B
CDL LOCK SW	Other than power door lock switch LOCK	Off	C
	Power door lock switch LOCK	On	
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off	D
	Power door lock switch UNLOCK	On	
KEY CYL LK-SW	NOTE: The item is indicated, but not monitored.	Off	E
KEY CYL UN-SW	NOTE: The item is indicated, but not monitored.	Off	F
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off	G
HAZARD SW	Hazard switch is OFF	Off	H
	Hazard switch is ON	On	
REAR DEF SW NOTE: At model with BOSE audio system this item is indicated, but is not monitored.	Rear window defogger switch is OFF	Off	I
	Rear window defogger switch is ON	On	
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off	J
TR/BD OPEN SW	Trunk lid opener switch OFF	Off	K
	While the trunk lid opener switch is turned ON	On	
TRNK/HAT MNTR	Trunk lid closed	Off	DEF
	Trunk lid opened	On	
RKE-LOCK	LOCK button of the key is not pressed	Off	M
	LOCK button of the key is pressed	On	
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off	N
	UNLOCK button of the key is pressed	On	
RKE-TR/BD	TRUNK OPEN button of the key is not pressed	Off	O
	TRUNK OPEN button of the key is pressed	On	
RKE-PANIC	NOTE: The item is indicated, but not monitored.	Off	P
RKE-P/W OPEN	NOTE: The item is indicated, but not monitored.	Off	
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off	
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On	
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	
	Passenger door request switch is pressed	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Trunk lid opener request switch is not pressed	Off
	Trunk lid opener request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
BRAKE SW 1	The brake pedal is not depressed	On
	The brake pedal is depressed	Off
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	Steering is locked	Off
	Steering is unlocked	On
S/L -UNLOCK	Steering is unlocked	Off
	Steering is locked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is locked	Off
	Steering is unlocked	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

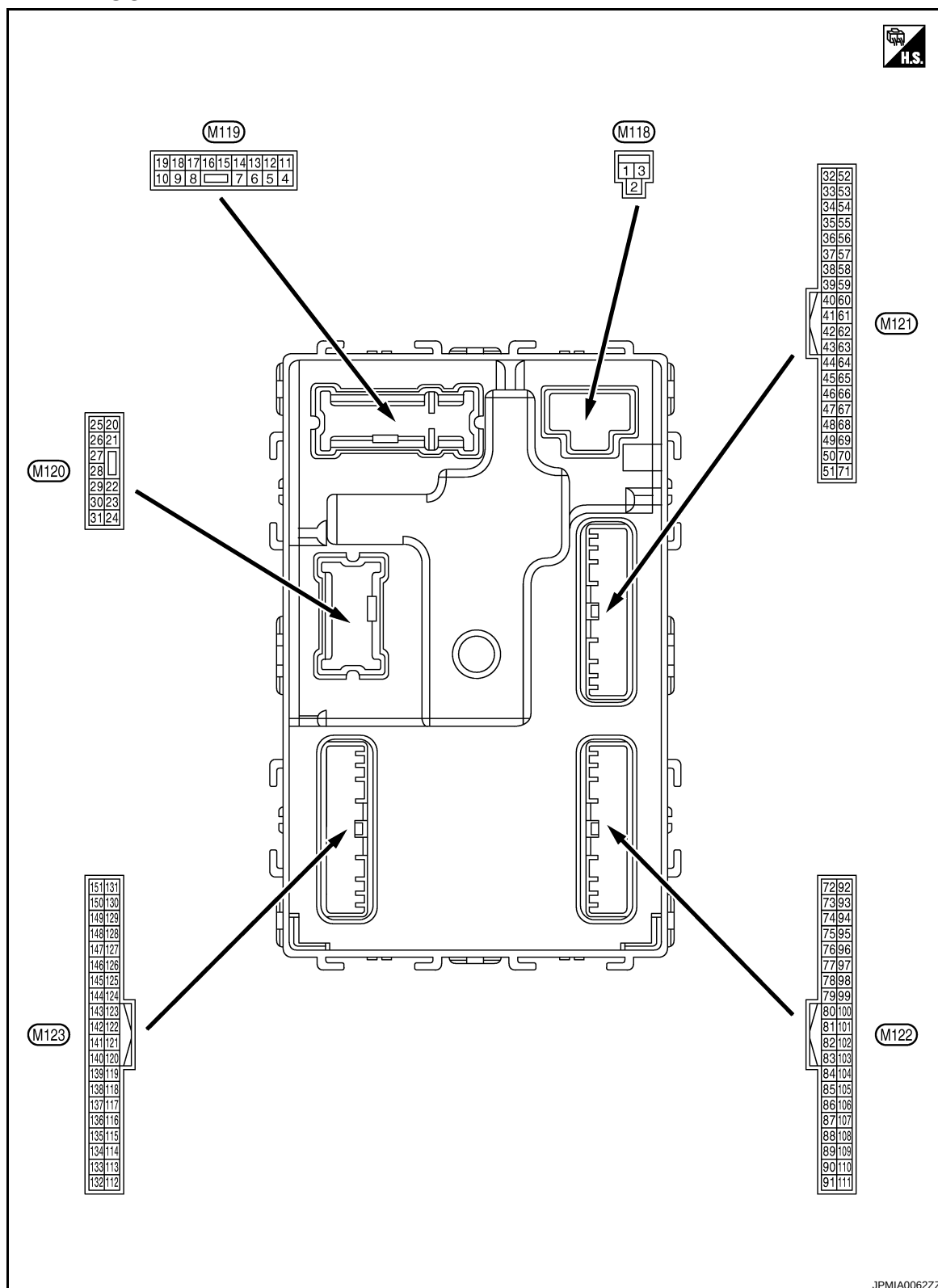
Monitor Item	Condition	Value/Status	
S/L UNLK-IPDM	Steering is unlocked	Off	A
	Steering is locked	On	
S/L RELAY-REQ	Ignition switch in OFF or ACC position	Off	B
	Ignition switch in ON position	On	
VEH SPEED 1	While driving	Equivalent to speedometer reading	C
VEH SPEED 2	While driving	Equivalent to speedometer reading	
DOOR STAT-DR	Driver door is locked	LOCK	D
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Driver door is unlocked	UNLOCK	
DOOR STAT-AS	Passenger door is locked	LOCK	E
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door is unlocked	UNLOCK	
ID OK FLAG	Ignition switch in ACC or ON position	Reset	F
	Ignition switch in OFF position	Set	
PRMT ENG STRT	The engine start is prohibited	Reset	G
	The engine start is permitted	Set	
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset	H
KEY SW -SLOT	The key is not inserted into key slot	Off	
	The key is inserted into key slot	On	I
RKE OPE COUN1	During the operation of the key	Operation frequency of the key	
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—	J
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet	
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done	K
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet	
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done	DEF
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet	M
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done	
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet	N
	The key ID that the key slot receives accords with the second key ID registered to BCM.	Done	
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet	O
	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done	
TP 4	The ID of fourth key is not registered to BCM	Yet	P
	The ID of fourth key is registered to BCM	Done	
TP 3	The ID of third key is not registered to BCM	Yet	
	The ID of third key is registered to BCM	Done	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
TP 2	The ID of second key is not registered to BCM	Yet
	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
	The ID of first key is registered to BCM	Done

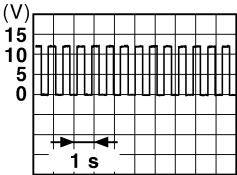
TERMINAL LAYOUT



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	—	Signal name	Input/ Output			
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (G/Y)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (G/Y)	Ground	Rear RH door and rear LH door UNLOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC or ON	0 V
17 (G/B)	Ground	Turn signal RH (Front and door mirror)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 6.5 V

A

B

C

D

E

F

G

H

I

J

K

DEF

M

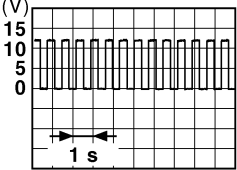
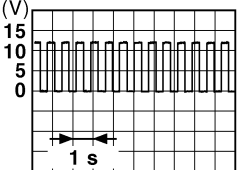
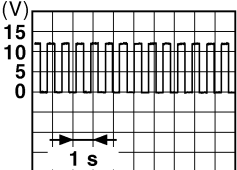
N

O

P

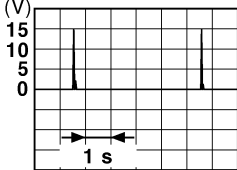
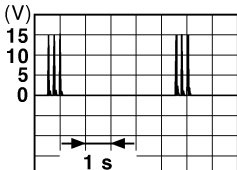
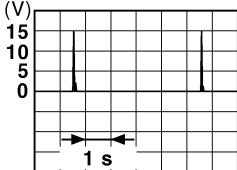
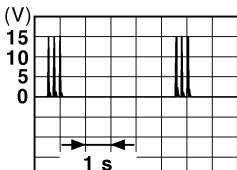
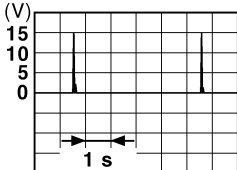
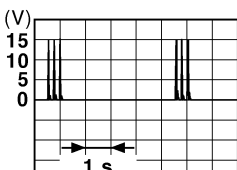
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
18 (G/Y)	Ground	Turn signal LH (Front and door mirror)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
20 (G/B)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
23 (R)	Ground	Trunk lid opening	Output	Trunk lid	OPEN (Trunk lid opener actuator is activated)	Battery voltage
					Other than OPEN (Trunk lid opener actuator is not activated)	0 V
24 (G)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	Battery voltage
25 (G/Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
30 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	OFF	0 V
					ON	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
34 (B)	Ground	Trunk room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (W)	Ground	Trunk room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (L/O)	Ground	Rear bumper anten- na (-)	Output	When the trunk lid opener request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detec- tion area	 JMKIA0063GB

A

B

C

D

E

F

G

H

I

J

K

DEF

M

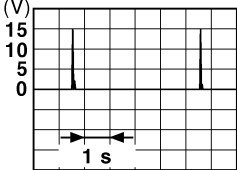
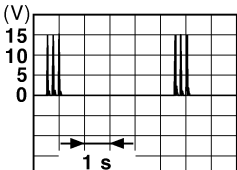
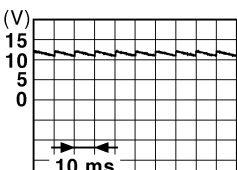
N

O

P

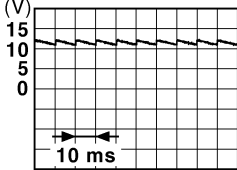
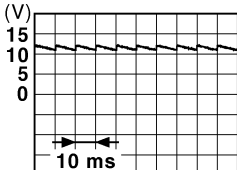
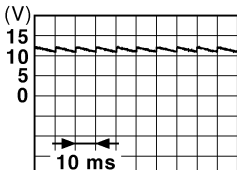
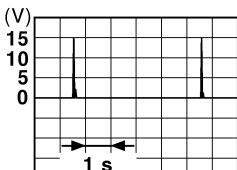
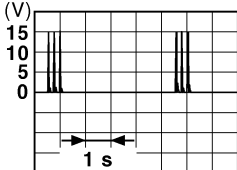
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
39 (BR/W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the trunk lid opener request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (BR/W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
50 (W)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (When trunk lid closes)	 JPMIA0011GB 11.8 V
					ON (When trunk lid opens)	0 V
52 (R)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0.3 V
				Ignition switch OFF		0 V
61 (G/R)	Ground	Trunk lid request switch	Input	Trunk lid request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (GR)	Ground	Request switch buzzer	Output	Request switch buzzer	Sounding	0 V
					Not sounding	Battery voltage

BCM (BODY CONTROL MODULE)

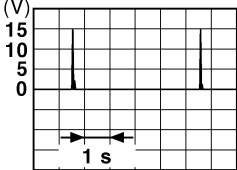
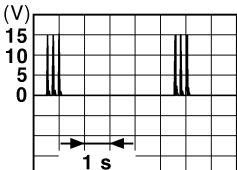
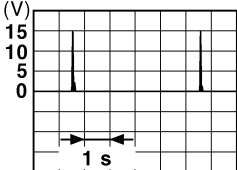
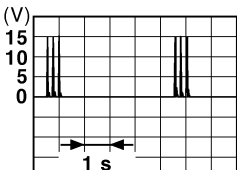
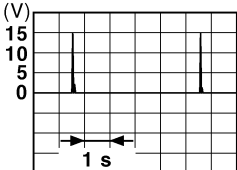
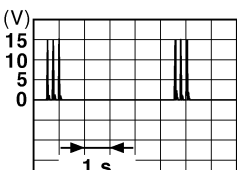
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
67 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
68 (R/W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	 JPMIA0011GB 11.8 V
					ON (When rear RH door opens)	0 V
69 (R/B)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	 JPMIA0011GB 11.8 V
					ON (When rear LH door opens)	0 V
72 (B/R)	Ground	Room antenna 2 (-) (center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

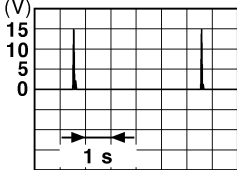
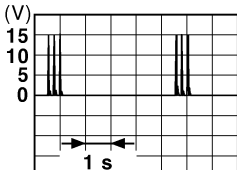
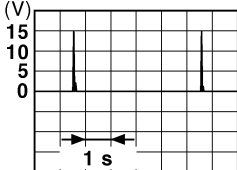
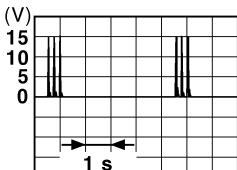
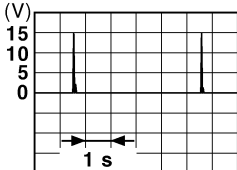
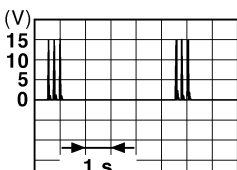
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
73 (W/R)	Ground	Room antenna 2 (+) (center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
74 (B/Y)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detec- tion area	 JMKIA0063GB
75 (LG)	Ground	Passenger door an- tenna (+)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detec- tion area	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detec- tion area	 JMKIA0063GB
77 (P)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detec- tion area	 JMKIA0063GB
78 (R)	Ground	Room antenna 1 (-) (instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

A

B

C

D

E

F

G

H

I

J

K

DEF

M

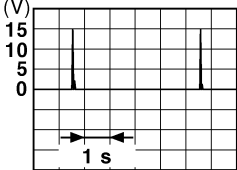
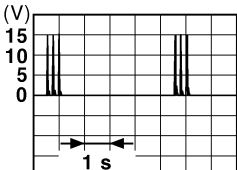
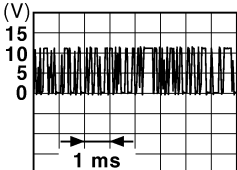
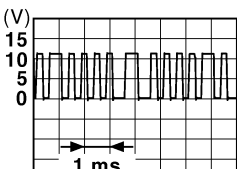
N

O

P

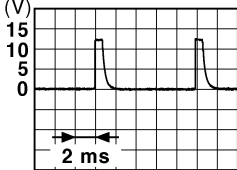
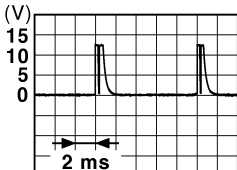
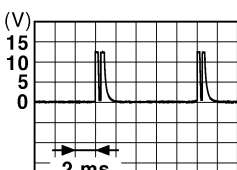
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
79 (G)	Ground	Room antenna 1 (+) (instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
80 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R/B)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
83 (L/O)	Ground	Remote keyless en- try receiver commu- nication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on the key		 JMKIA0065GB

BCM (BODY CONTROL MODULE)

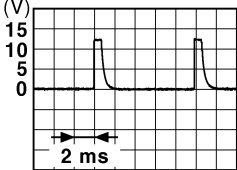
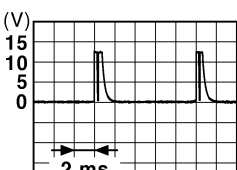
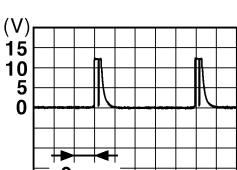
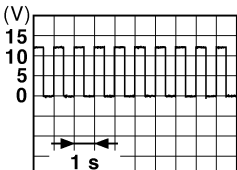
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
87 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 1.4 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 1.2 V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 1.3 V

DEF

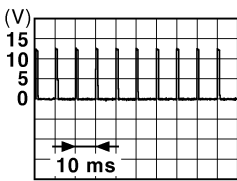
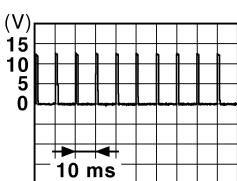
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
88 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Any of the conditions below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
90 (P)	Ground	CAN-L	Input/ Output	—	—	—
91 (L)	Ground	CAN-H	Input/ Output	—	—	—
92 (R/L)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 JPMIA0015GB 6.5 V
					ON	0 V

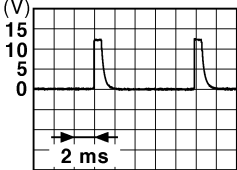
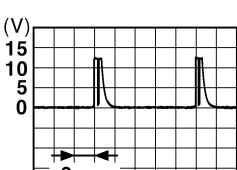
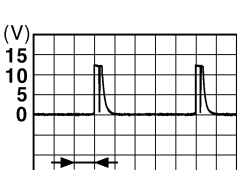
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
93 (Y)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON or ACC	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (Y/R)	Ground	Control device (detection switch) power supply	Output	—		Battery voltage
97 (L/O)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98 (G/R)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (P/L)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMA0016GB 1.0 V
101 (B/W)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMA0016GB 1.0 V
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
106 (G/Y)	Ground	Steering wheel lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

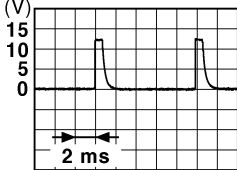
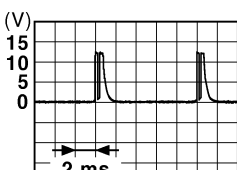
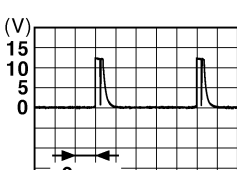
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
107 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	 JPMIA0041GB 1.4 V
					 JPMIA0037GB 1.3 V
					 JPMIA0036GB 1.3 V
					 JPMIA0038GB 1.3 V
					 JPMIA0039GB 1.3 V

BCM (BODY CONTROL MODULE)

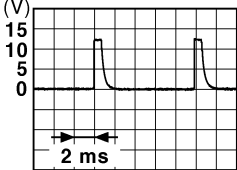
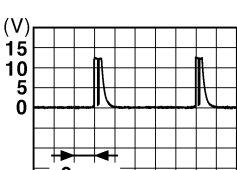
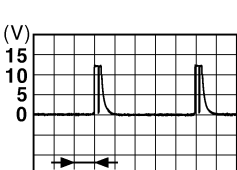
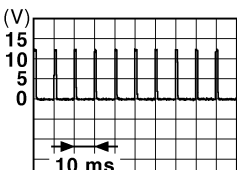
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
108 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)  JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)  JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)  JPMIA0036GB 1.3 V
					Any of the conditions be- low with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6  JPMIA0039GB 1.3 V

DEF

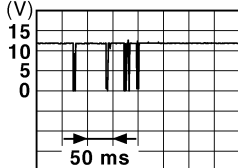
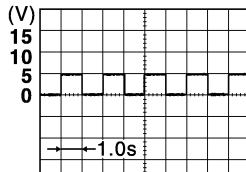
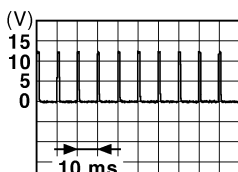
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

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

BCM (BODY CONTROL MODULE)

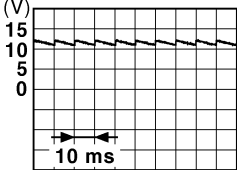
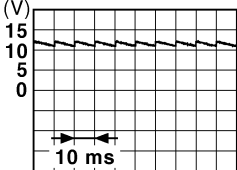
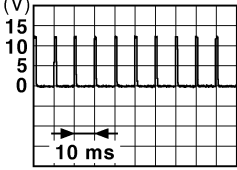
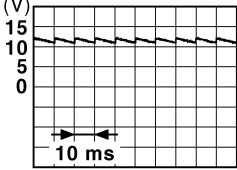
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
111 (L/Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UN- LOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
113 (P/B)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
115 (L)	Ground	Shock sensor	Input	Ignition switch	OFF	0 V
					ACC	5.0 V
					ON	 JPMIA1034GB
						2.5 V
116 (R/W)	Ground	Fuse check (Stop lamp switch)	Input	—	Battery voltage	
118 (O/L)	Ground	Stop lamp switch	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
119 (G/W)	Ground	Front door lock as- sembly driver side (unlock sensor)	Input	Driver door	LOCK status (unlock sen- sor switch OFF)	 JPMIA0012GB
					UNLOCK status (unlock sensor switch ON)	0 V
						1.1 V
121 (Y)	Ground	Key slot switch	Input	When the key is inserted into key slot	Battery voltage	
				When the key is not inserted into key slot	0 V	
122 (V/R)	Ground	ACC feedback	Input	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
123 (G/W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

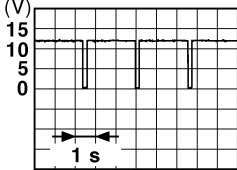
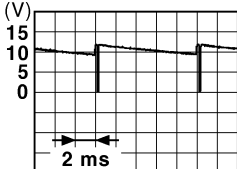
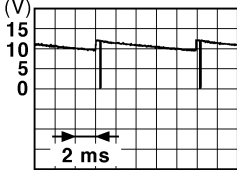
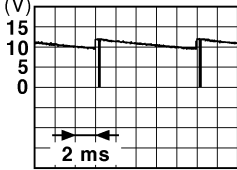
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
124 (R/B)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V
128 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch [power window main switch or front power window switch (passenger side)]	NEUTRAL position	 JPMIA0011GB 11.8 V
					LOCK position	0 V
130* (GR/W)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
131 (GR/R)	Ground	Door lock and unlock switch UN-LOCK	Input	Door lock and unlock switch [power window main switch or front power window switch (passenger side)]	NEUTRAL position	 JPMIA0011GB 11.8 V
					UNLOCK position	0 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON	9.5 V
					OFF	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V/W)	Ground	Receiver and sensor power supply output	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
140 (R/G)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V

BCM (BODY CONTROL MODULE)

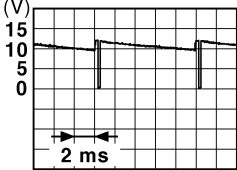
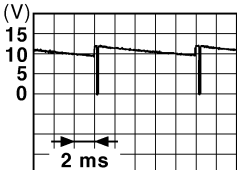
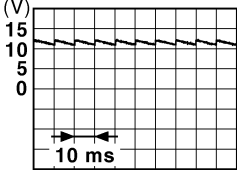
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
141 (L/O)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage
142 (LG/B)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (L/W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Any of the conditions be- low with all switch OFF	
					• Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G/B)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions be- low with all switch OFF	
					• Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	

A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
145 (LG/R)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Front wiper switch INT	 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
146 (G/Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Front fog lamp switch ON	 10.7 V
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	 11.8 V
					ON (When driver door opens)	0 V
151 (G/R)	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

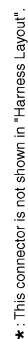
NOTE:

*: Without BOSE audio system

INFOID:0000000003806059

2008/01/23

JCLWM1506GE



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

DEFOGGER

Connector No.	B303
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A



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

Connector No.	B126
Connector Name	REAR WINDOW DEFOGGER
Connector Type	P01FB-A



Terminal No.	2	Color of Wire	B	Signal Name [Specification]	—
--------------	---	---------------	---	-----------------------------	---

Connector No.	B125
Connector Name	CONDENSER
Connector Type	M01FW-LC



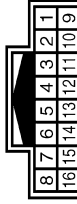
Terminal No.	1	Color of Wire	Y	Signal Name [Specification]	—
--------------	---	---------------	---	-----------------------------	---

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FB-CS



Terminal No.	10G	Color of Wire	Y	Signal Name [Specification]	—
--------------	-----	---------------	---	-----------------------------	---

Connector No.	D43
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH16MW-NH



Terminal No.	3	Color of Wire	O	Signal Name [Specification]	—
Terminal No.	11	Color of Wire	B	Signal Name [Specification]	—

Connector No.	D41
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



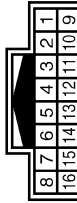
Terminal No.	6	Color of Wire	B	Signal Name [Specification]	—
Terminal No.	7	Color of Wire	O	Signal Name [Specification]	—

Connector No.	D21
Connector Name	WIRE TO WIRE
Connector Type	TH4QFW-NH



Terminal No.	29	Color of Wire	O	Signal Name [Specification]	—
--------------	----	---------------	---	-----------------------------	---

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH16MW-NH



Terminal No.	3	Color of Wire	O	Signal Name [Specification]	—
Terminal No.	11	Color of Wire	B	Signal Name [Specification]	—

JCLWM1507GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

DEFOGGER

Connector No.	D12
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



7	6	5	4	3	2	1
16	15	14	13	12	11	10
9	8					

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH70FW-HH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
11	P	-
12	L	-
82	LG	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS30FW-M2



3A	2A	1A
8A	7A	6A
5A	4A	

Terminal No.	Color of Wire	Signal Name [Specification]
7A	Y/R	-

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



4B	3B	2B	1B
10B	9B	8B	7B
6B	5B	4B	3B

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



5C	4C	3C	2C	1C
12C	11C	10C	9C	8C
7C	6C			

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



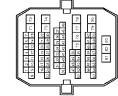
9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8

Terminal No.	Color of Wire	Signal Name [Specification]
4B	G/R	-

Terminal No.	Color of Wire	Signal Name [Specification]
9C	GR	-
10C	L/Y	-

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

Terminal No.	Color of Wire	Signal Name [Specification]
11	P	-
12	L	-
82	W/B	-



JCLWM1508GE

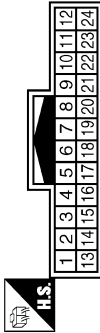
A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

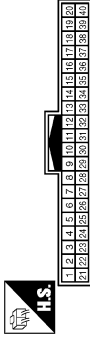
DEFOGGER

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



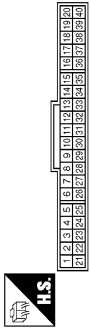
Terminal No.	Color of Wire	Signal Name [Specification]
6	B	-
7	L/Y	-

Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
29	L/Y	-

Connector No.	M50
Connector Name	A/C AUTO AMP.
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	TX(AMP>SW&DISP)
7	P	RX(SW&)
19	B	GROUND
26	GR	REAR WINDOW DEFOGGER FEEDBACK SIGNAL
27	GR/W	REAR WINDOW DEFOGGER ON SIGNAL
39	B	GROUND

Connector No.	M85
Connector Name	A/C CONTROL
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	RX(AMP>SW)
4	P	TX(SW&)

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



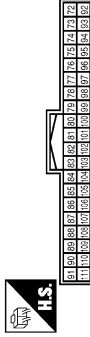
Terminal No.	Color of Wire	Signal Name [Specification]
1	W/B	BAT (F/L)

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



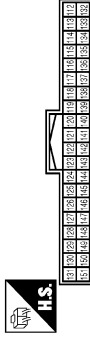
Terminal No.	Color of Wire	Signal Name [Specification]
11	Y/R	BAT FUSE
13	B	GND

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



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

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



Terminal No.	Color of Wire	Signal Name [Specification]
130	GR/W	REAR DEFOGGER SW
151	G/R	REAR WINDOW DEFOGGER RELAY

JCLWM1509GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

DEFOGGER

Connector No.	M125
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



2	4	6	8	10	12	14	16
1	3	5	7	9	11	13	15

Terminal No.	Color of Wire	Signal Name [Specification]
6	W	M-CAN H
8	B	M-CAN L

Connector No.	M123
Connector Name	AV CONTROL UNIT
Connector Type	TH24FW-NH



47	46	45	44	43	42	41	40	39	38	37	36
59	68	57	56	55	54	53	62	51	60	49	48

Terminal No.	Color of Wire	Signal Name [Specification]
44	G	COMM (DISP->CONT)
55	SHIELD	SHIELD
56	R	COMM (CONT->DISP)

Connector No.	M131
Connector Name	AV CONTROL UNIT
Connector Type	TH22FW-NH



01	00	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52
02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21

Terminal No.	Color of Wire	Signal Name [Specification]
68	L	CAN-H
67	P	CAN-L
88	W	AV COMM (H)
89	B	AV COMM (L)

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	NS16MF-CS



1	2	3	4	5	6	7		
8	9	10	11	12	13	14	15	16

Terminal No.	Color of Wire	Signal Name [Specification]
3	B/P	-

Fail-safe

FAIL-SAFE CONTROL BY DTC
BCM performs fail-safe control when any DTC is detected.

DEF

M

N

O

P

A

B

C

D

E

F

G

H

I

J

K

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent - Starter motor relay control signal - Starter relay status signal (CAN)
B2609: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When the following steering lock conditions agree - BCM steering lock control status - Steering lock condition No. 1 signal status - Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled - IGN relay (IPDM E/R) control signal: OFF (Battery voltage) - Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) - Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions is fulfilled - Power position changes to ACC - Receives engine status signal (CAN)
B2612: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When any of the following conditions is fulfilled - Steering lock unit status signal (CAN) is received normally - The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E1: ENG STATE NO RES	Inhibit engine cranking	When any of the following conditions is fulfilled - Power position changes to ACC - Receives engine status signal (CAN)
B26E9: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions is fulfilled - Steering condition No. 1 signal: LOCK (0 V) - Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

DTC Inspection Priority Chart

INFOID:000000003940043

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	- U1000: CAN COMM CIRCUIT - U1010: CONTROL UNIT (CAN)
3	- B2190: NATS ANTENNA AMP - B2191: DIFFERENCE OF KEY - B2192: ID DISCORD BCM-ECM - B2193: CHAIN OF BCM-ECM

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Priority	DTC
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E1: ENG STATE NO RES • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • U0415: VEHICLE SPEED SIG
5	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000003940044

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data and IGN Counter, refer to [DEF-8, "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data	Intelligent Key warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	BCS-33
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-34
U0415: VEHICLE SPEED SIG	—	—	—	BCS-35
B2013: ID DISCORD BCM-S/L	×	×	—	SEC-46
B2014: CHAIN OF S/L-BCM	×	×	—	SEC-47
B2190: NATS ANTENNA AMP	×	—	—	SEC-39
B2191: DIFFERENCE OF KEY	×	—	—	SEC-42

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Freeze Frame Data	Intelligent Key warn- ing lamp ON	Reference page
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-43
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-45
B2553: IGNITION RELAY	—	×	—	PCS-49
B2555: STOP LAMP	—	×	—	SEC-50
B2556: PUSH-BTN IGN SW	—	×	×	SEC-52
B2557: VEHICLE SPEED	×	×	×	SEC-54
B2560: STARTER CONT RELAY	×	×	×	SEC-55
B2562: LOW VOLTAGE	—	×	—	BCS-36
B2601: SHIFT POSITION	×	×	×	SEC-56
B2602: SHIFT POSITION	×	×	×	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	SEC-61
B2604: PNP SW	×	×	×	SEC-64
B2605: PNP SW	×	×	×	SEC-67
B2606: S/L RELAY	×	×	×	SEC-69
B2607: S/L RELAY	×	×	×	SEC-70
B2608: STARTER RELAY	×	×	×	SEC-72
B2609: S/L STATUS	×	×	×	SEC-74
B260A: IGNITION RELAY	×	×	×	PCS-51
B260B: STEERING LOCK UNIT	—	×	×	SEC-78
B260C: STEERING LOCK UNIT	—	×	×	SEC-79
B260D: STEERING LOCK UNIT	—	×	×	SEC-80
B260F: ENG STATE SIG LOST	×	×	×	SEC-81
B2612: S/L STATUS	×	×	×	SEC-85
B2614: ACC RELAY CIRC	—	×	×	PCS-53
B2615: BLOWER RELAY CIRC	—	×	×	PCS-55
B2616: IGN RELAY CIRC	—	×	×	PCS-57
B2617: STARTER RELAY CIRC	×	×	×	SEC-89
B2618: BCM	×	×	×	PCS-59
B2619: BCM	×	×	×	SEC-91
B261A: PUSH-BTN IGN SW	—	×	×	SEC-92
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	SEC-95
B2621: INSIDE ANTENNA	—	×	—	DLK-50
B2622: INSIDE ANTENNA	—	×	—	DLK-52
B2623: INSIDE ANTENNA	—	×	—	DLK-54
B26E1: ENG STATE NO RES	×	×	×	SEC-82
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	SEC-83
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	SEC-84

A

B

C

D

E

F

G

H

I

J

K

DEF

M

N

O

P

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGER DO NOT OPERATE.

Diagnosis Procedure

INFOID:000000003940018

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.

Refer to [DEF-11, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

• With AV control unit: Refer to [DEF-12, "WITH AV CONTROL UNIT : Component Function Check"](#)

• Without AV control unit: Refer to [DEF-12, "WITHOUT AV CONTROL UNIT : Component Function Check"](#)

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-14, "Component Function Check"](#).

Is the inspection result normal?

YES >> Repair or replace fuse block (J/B).

NO >> Repair or replace the malfunctioning parts.

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:0000000003806065

1.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.

Refer to [DEF-16, "Component Function Check"](#).

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-35, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

DEF

DOOR MIRROR DEFOGGER DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

DOOR MIRROR DEFOGGER DOES NOT OPERATE BOTH SIDES

BOTH SIDES : Diagnosis Procedure

INFOID:0000000003806066

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.

Refer to [DEF-19, "Component Function Check"](#).

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-35, "Intermittent Incident"](#).

NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000003806067

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to [DEF-21, "Component Function Check"](#).

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-35, "Intermittent Incident"](#).

NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000003806068

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.

Refer to [DEF-23, "Component Function Check"](#).

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-35, "Intermittent Incident"](#).

NO >> GO TO 1.

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

< SYMPTOM DIAGNOSIS >

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

WITH AV CONTROL UNIT

WITH AV CONTROL UNIT : Diagnosis Procedure

INFOID:0000000003806069

1.CHECK AV CONTROL FUNCTION

Check that the AV control unit is operating normally.

- Base audio: Refer to [AV-45, "Work Flow"](#).
- BOSE audio with navigation: Refer to [AV-398, "Work Flow"](#).
- BOSE audio without navigation: Refer to [AV-185, "Work Flow"](#).

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-35, "Intermittent Incident"](#).

NO >> GO TO 1.

WITHOUT AV CONTROL UNIT

WITHOUT AV CONTROL UNIT : Diagnosis Procedure

INFOID:0000000003888342

1.CHECK A/C CONTROL FUNCTION

Check that the A/C control is operating normally.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check A/C control system. Refer to [HAC-6, "Work Flow"](#).

2.CHECK REAR WINDOW DEFOGGER DISPLAY

Check that ON appears on the display when rear window defogger is activated.

Is the inspection result normal?

YES >> Replace A/C control (rear window defogger switch). Refer to [VTL-21, "Removal and Installation"](#).

NO >> Check rear window defogger indicator. Refer to [DEF-62, "WITHOUT AV CONTROL UNIT : Diagnosis Procedure"](#).

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE WITH AV CONTROL UNIT

WITH AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000003806070

1.CHECK REAR WINDOW DEFOGGER OPERATION

Check rear window defogger operation.

Is the inspection result normal?

YES-1 >> Base audio: Check AV control system. Refer to [AV-45, "Work Flow"](#)

YES-2 >> BOSE audio with navigation: Check AV control system. Refer to [AV-398, "Work Flow"](#)

YES-3 >> BOSE audio without navigation: Check AV control system. Refer to [AV-185, "Work Flow"](#)

NO >> Check rear window defogger system. Refer to [DEF-3, "Work Flow"](#)

WITHOUT AV CONTROL UNIT

WITHOUT AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000003840906

1.CHECK A/C CONTROL FUNCTION

Check that the A/C control is operating normally.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check A/C control system. Refer to [HAC-6, "Work Flow"](#).

2.CHECK REAR WINDOW DEFOGGER ON SIGNAL

Check rear window defogger ON signal.

Refer to [DEF-25, "Component Function Check"](#).

Is the inspection result normal?

YES >> Replace A/C control (rear window defogger switch). Refer to [VTL-21, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

PRECAUTION

PRECAUTIONS

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

INFOID:000000003940045

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. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIRBAG".
- 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.

A
B
C
D
E
F
G
H
I
J
K
DEF
M
N
O
P

FILAMENT

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

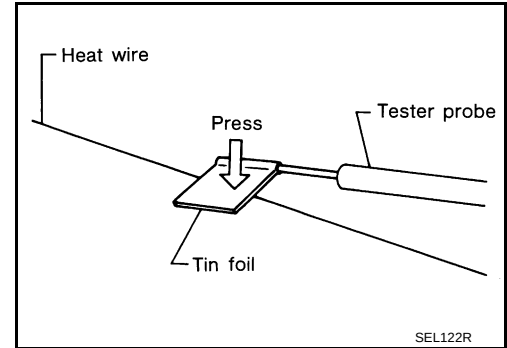
FILAMENT

Inspection and Repair

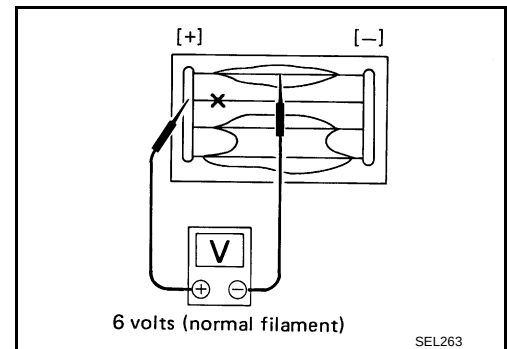
INFOID:000000003806072

INSPECTION

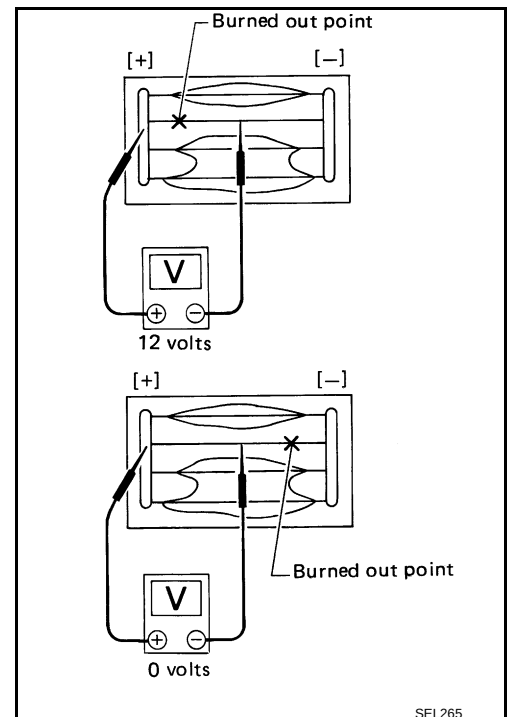
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



2. Attach probe circuit tester (in Volt range) to middle portion of each filament.



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 swings abruptly when probe passes the point.



REPAIR

REPAIR EQUIPMENT

- Conductive silver composition (DuPont No. 4817 or an equivalent)

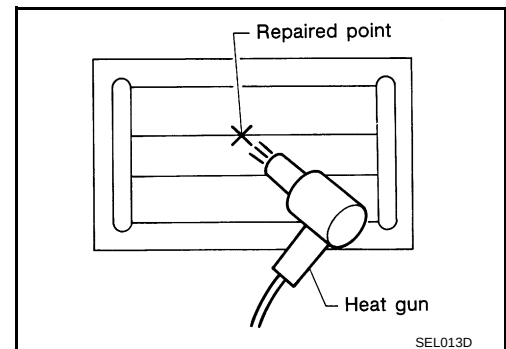
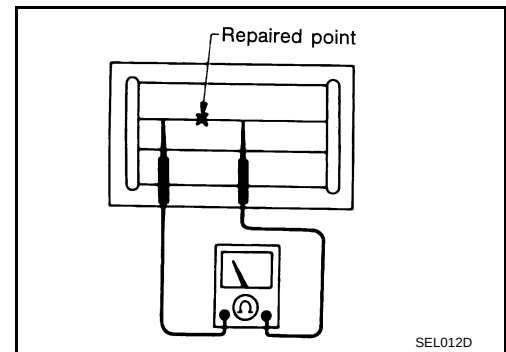
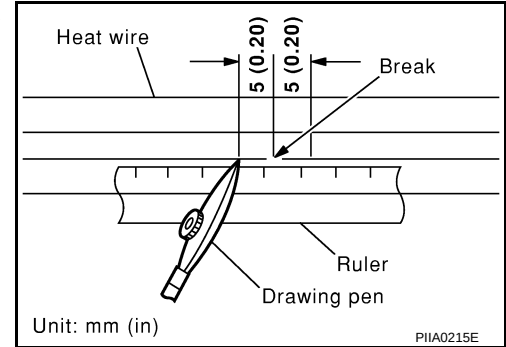
FILAMENT

< ON-VEHICLE REPAIR >

- 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.
3. 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.



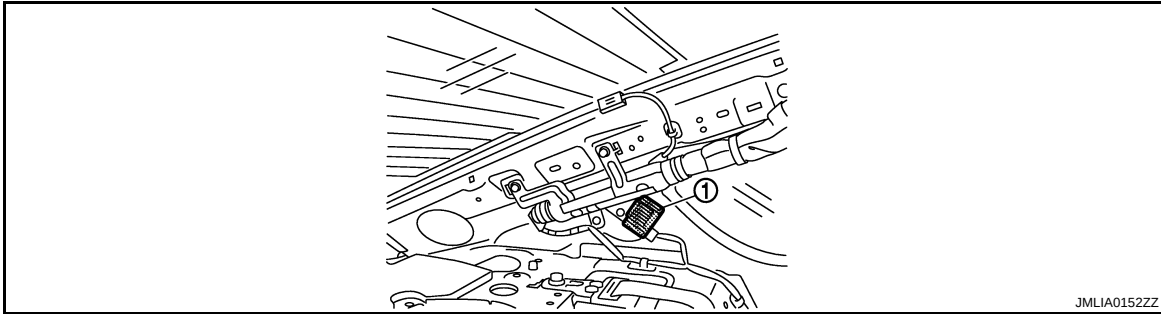
CONDENSER

< ON-VEHICLE REPAIR >

CONDENSER

Exploded View

INFOID:000000003841332



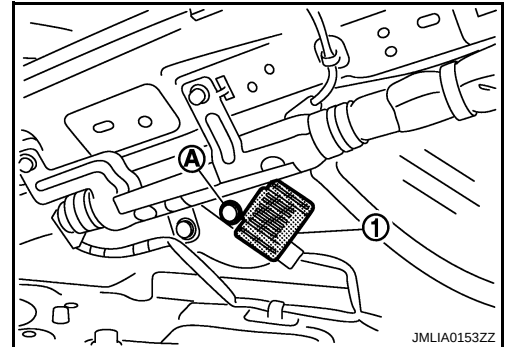
1. Condenser

Removal and Installation

INFOID:000000003806074

REMOVAL

1. Remove the rear seat cushion and the rear seatback.
 - With ventilation seat: Refer to [SE-99, "Removal and Installation"](#).
 - Without ventilation seat: Refer to [SE-142, "Removal and Installation"](#).
2. Remove the rear kicking plate, rear wheel well garnish and the rear pillar finisher. Refer to [INT-39, "Removal and Installation"](#).
3. Remove bolt (A), and then remove condenser (1) from the vehicle body.



INSTALLATION

Install in the reverse order of removal.