

SECTION **DEF**
DEFOGGER

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000000962678

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

Perform self diagnosis 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.PERFORM "BASIC INSPECTION"

Perform the basic inspection.Refer to [DEF-58, "Basic Inspection"](#).

>> GO TO 5.

5.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 6.

6.IDENTIFY MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"

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

>> GO TO 7.

7.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 8.

8.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.

Is the malfunctioning part repaired or replaced?

YES >> Trouble diagnosis is completed.

NO >> GO TO 4.

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REAR WINDOW DEFOGGER SYSTEM

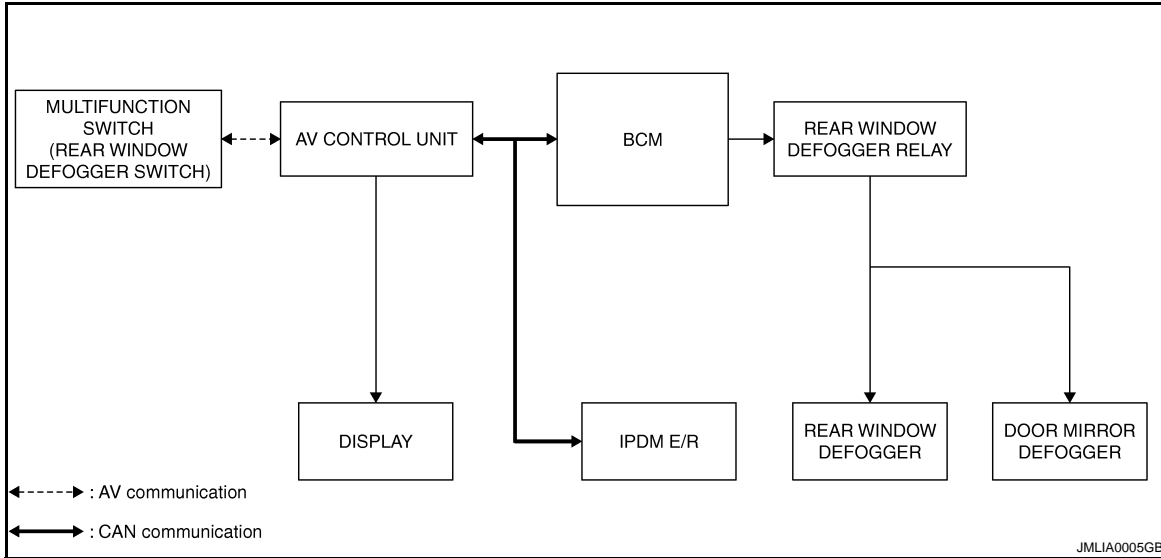
< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS

REAR WINDOW DEFOGGER SYSTEM

System Diagram

INFOID:000000000962679



System Description

INFOID:000000000962680

Operation Description

- Turn rear window defogger switch ON when the ignition switch is turned ON. Then malfunction 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 when rear defogger switch signal is received.
- Rear window defogger and door mirror defogger (with mirror defogger) are supplied with power and operate when rear window defogger relay turns ON.
- BCM transmits rear window defogger control signal to AV control unit via CAN communication when rear window defogger operates.
- Rear window defogger ON is displayed when AV control unit receives signals. The indicator of the rear window defogger switch also turns ON when rear defogger control signal is transmitted to multifunction switch (rear window defogger switch) with AV communication.

Timer function

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON while ignition switch is ON. It makes rear window defogger and door mirror defogger (with 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	Acuator
Rear window defogger switch	Defogger switch signal	Rear window defogger & Door mirror defogger* control	Rear window defogger
Push button ignition switch	Ignition signal		Door mirror defogger*

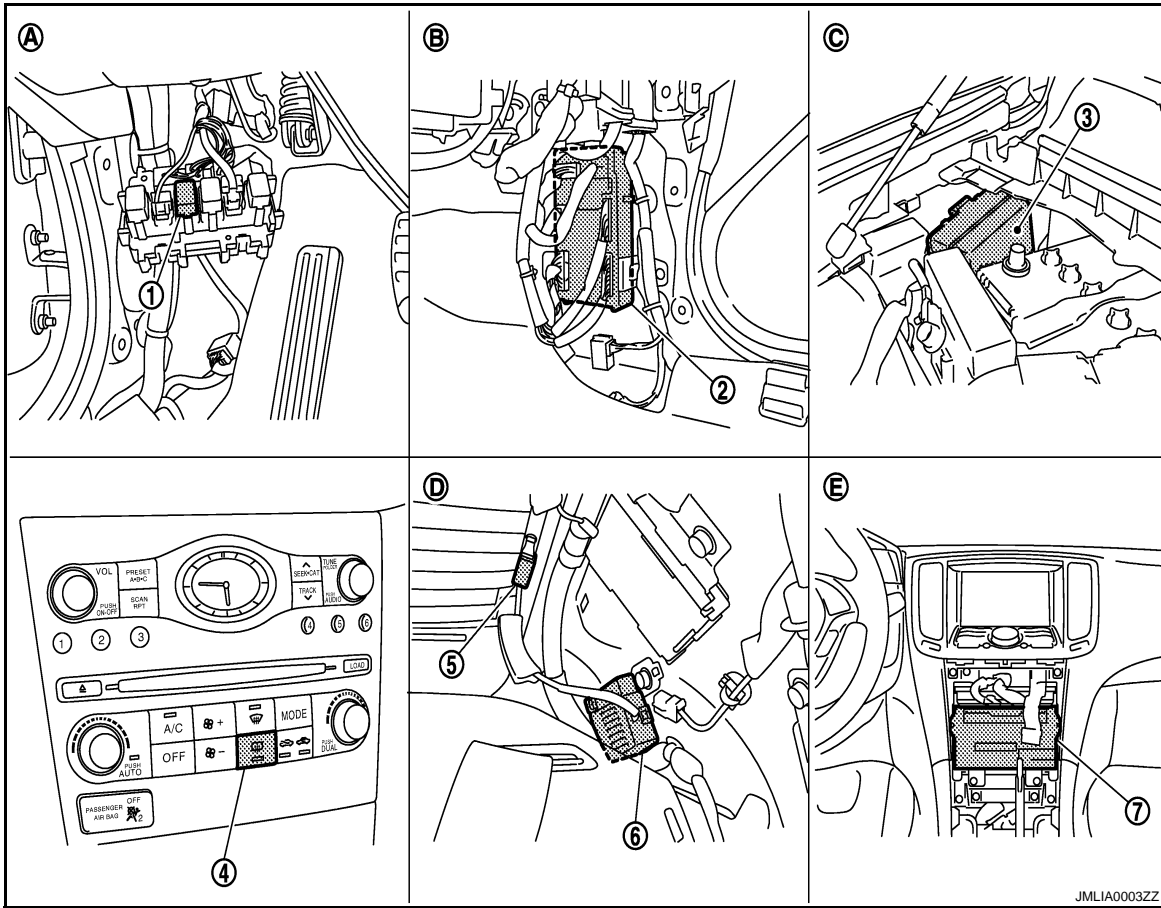
*: With mirror defogger

Component Parts Location

INFOID:000000000962681

REAR WINDOW DEFOGGER SYSTEM

< FUNCTION DIAGNOSIS >



- | | | |
|--|-------------------------------------|--------------------------------|
| 1. Rear window defogger relay | 2. BCM M118, M119, M122, M123 | 3. IPDM E/R E6 |
| 4. Rear window defogger switch (built in multifunction switch M72) | 5. Rear window defogger B401, B402 | 6. Condenser B26 |
| 7. AV control unit | | |
| With NAVI M87, M88 | | |
| Without NAVI M83, M85 | | |
| A. Dash side lower (driver side) | B. Dash side lower (passenger side) | C. Engine room dash panel (RH) |
| D. Behind rear pillar finisher (LH) | E. Behind cluster lid C | |

Component Description

INFOID:0000000000962682

BCM	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Operates the rear window defogger and the door mirror defogger with the control signal from BCM.
Multifunction switch (Rear window defogger switch)	<ul style="list-style-type: none"> The rear window defogger switch is installed. Turns the indicator lamp ON when detecting the operation of rear window defogger.
AV control unit	<ul style="list-style-type: none"> Displays the rear window defogger ON to the display when detecting the operation of rear window defogger.
Rear window defogger	<ul style="list-style-type: none"> 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*	<ul style="list-style-type: none"> Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.

*: With mirror defogger

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000000962683

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-DIAG RESULTS	Displays the diagnosis results judged by BCM. Refer to BCS-74, "DTC Index" .
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from BCM.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.
ECU IDENTIFICATION	The BCM part number is displayed.
CONFIGURATION	This function is not used even though it is displayed.

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.

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 conditioner*	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
BCM	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Trunk open	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONI-TOR)	×	×	×

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

REAR WINDOW DEFOGGER

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

INFOID:000000000962684

Data monitor

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Monitor Item	Description
REAR DEF SW	This is displayed even when it is not equipped.
PUSH SW	Indicates [ON/OFF] condition of push switch.

ACTIVE TEST

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.

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REAR WINDOW DEFOGGER SWITCH

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

REAR WINDOW DEFOGGER SWITCH

Description

INFOID:000000000962685

- The rear window defogger is operated by turning the rear window defogger switch ON.
- Turns the indicator lamp in the rear window defogger switch ON when operating the rear window defogger.

Component Function Check

INFOID:000000000962686

1. CHECK REAR WINDOW DEFOGGER SWITCH FUNCTION

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

Is the inspection result normal?

- YES >> Rear window defogger switch function is OK.
NO >> Refer to [DEF-8, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000000962687

1. CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Does malfunction switch operate normally?

Base audio without navigation. Refer to [AV-19, "Diagnosis Description"](#).

Bose audio without navigation. Refer to [AV-138, "Diagnosis Description"](#).

Bose audio with navigation. Refer to [AV-333, "Diagnosis Description"](#).

Is the inspection result normal?

- YES >> INSPECTION END.
NO >> Replace multifunction switch (rear window defogger switch). Refer to [AV-541, "Removal and Installation"](#).

REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER RELAY

Description

INFOID:000000000962688

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

Component Function Check

INFOID:000000000962689

1.CHECK REAR WINDOW DEFOGGER RELAY POWER SUPPLY CIRCUIT

Check that an operation noise of rear window defogger relay can be heard when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger relay power supply circuit is OK.
NO >> Refer to [DEF-9. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000000962690

1.CHECK REAR WINDOW DEFOGGER RELAY GROUND CIRCUIT

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

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
BCM connector	Terminal		
M123	151	ON	0
		OFF	Battery voltage

Is the inspection result normal?

- YES >> Rear window defogger power supply circuit is OK.
NO >> GO TO 2.

2.CHECK HARNESS CONTINUITY

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

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

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness.

3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to [DEF-10. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace rear window defogger relay.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-39. "Intermittent Incident"](#)

Is the inspection result normal?

- YES >> Check the following.
- Batter power supply circuit.
 - Fuse block (J/B).

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REAR WINDOW DEFOGGER RELAY

< COMPONENT DIAGNOSIS >

NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:000000000962691

1. CHECK REAR WINDOW DEFOGGER RELAY

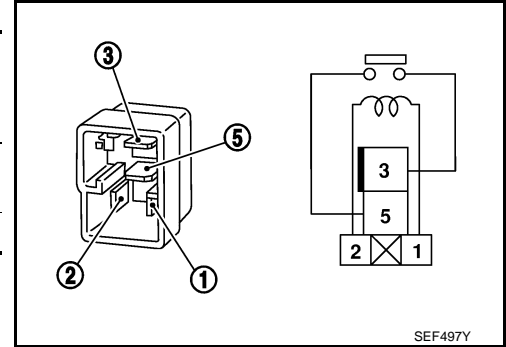
Check rear window defogger relay.

Terminal		Condition	Continuity
Rear window defogger relay			
3	5	12V 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.



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REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

Description

INFOID:000000000962692

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:000000000962693

1.CHECK REAR WINDOW DEFOGGER

Check that the heating wire of rear window defogger is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Rear window defogger is OK.
NO >> Refer to [DEF-11, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000000962694

1.CHECK POWER SUPPLY CIRCUIT

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

Terminals			Condition of rear window defogger switch	Voltage (V) (Approx.)
(+) Rear window defogger connector		(-) Terminal		
B401	1	Ground	ON	Battery voltage
			OFF	0

Is the inspection result normal?

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

2.CHECK GROUND CIRCUIT

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

Rear window defogger connector	Terminal	Ground	Continuity
B402	2		Existed

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Repair or replace harness between rear window defogger and ground.

3.CHECK HARNESS CONTINUITY 1

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

Condenser connector	Terminal	Rear window defogger connector	Terminal	Continuity
B26	1	B401	1	Existed

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace condenser. Refer to [DEF-61, "Removal and Installation"](#).

REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

4.CHECK HARNESS CONTINUITY 2

1. Remove rear window defogger relay.
2. Check continuity between rear window defogger relay connector and condenser connector.

Fuse block (J/B) connector	Terminal	Condenser connector	Terminal	Continuity
B6	10G	B26	1	Existed
	11G			

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace or repair harness between fuse block(J/B) and condenser.

5.CHECK FILAMENT

Check filament.

Refer to [DEF-12, "Component Inspection"](#).

Is the inspection result normal?

YES >> Refer to [GI-39, "Intermittent Incident"](#).

NO >> Repair filament.

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-39, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Check the following.

- Batter power supply circuit.
- Fuse block (J/B).

NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:000000000962695

1.CHECK FILAMENT

Check the filament for damage or blown.

Refer to [DEF-59, "Inspection and Repair"](#).

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Repair filament.

DRIVER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000000962696

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:000000000962697

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check that heating wire of driver side door mirror defogger is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Driver side door mirror defogger is OK.
- NO >> Refer to [DEF-13. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000000962698

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) connector and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
Door mirror (driver side) connector	Terminal		
D3	4	ON	Battery voltage
		OFF	0

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Repair or replace harness between fuse block (J/B) and door mirror (driver side).

2.CHECK GROUND CIRCUIT

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

Door mirror (driver side) connector	Terminal	Ground	Continuity
D3	8		Existed

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace harness between door mirror (driver side) and ground.

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to [DEF-14. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Replace door mirror (driver side). Refer to [MIR-67. "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to [GI-39. "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following.

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DRIVER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

- Batter power supply circuit.
- Fuse block (J/B).

NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:000000000962699

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror (driver side) connector.
3. Check continuity between door mirror terminals.

Door mirror (driver side) connector	Terminal		Continuity
D3	4	8	Existed

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace door mirror (driver side). Refer to [MIR-67. "Removal and Installation"](#).

PASSENGER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:000000000962700

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:000000000962701

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check that the heating wire of passenger side door mirror defogger is heated when turning the rear window defogger switch ON.

Is the inspection result normal?

- YES >> Passenger side door mirror defogger is OK.
NO >> Refer to [DEF-15. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000000962702

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) connector and ground.

Terminals		Condition of rear window defogger switch	Voltage (V) (Approx.)
(+)	(-)		
Door mirror (Passenger side) connector	Terminal		
D33	4	Ground	Battery voltage
			0

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness between fuse block (J/B) and door mirror (passenger side).

2.CHECK GROUND CIRCUIT

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

Door mirror (passenger side) connector	Terminal	Ground	Continuity
D33	8		Existed

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Repair or replace harness between door mirror (passenger side) and ground.

3.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.

Refer to [DEF-16. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Replace door mirror (passenger side). Refer to [MIR-67. "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-39. "Intermittent Incident"](#).

Is the inspection result normal?

PASSENGER SIDE DOOR MIRROR DEFOGGER

< COMPONENT DIAGNOSIS >

- YES >> Check the following.
- Batter power supply circuit.
 - Fuse block (J/B).
- NO >> Repair or replace the malfunctioning parts.

Component Inspection

INFOID:000000000962703

1. CHECK PASSENGER DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.
2. Disconnect door mirror (passenger side) connector.
3. Check continuity between door mirror terminals.

Door mirror (passenger side) connector	Terminal		Continuity
D33	4	8	Existed

Is the inspection result normal?

- YES >> INSPECTION END.
- NO >> Replace door mirror (passenger side). Refer to [MIR-67, "Removal and Installation"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000000962704

VALUES ON THE DIAGNOSIS TOOL

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	NOTE: The item is indicated, but not monitored.	OFF
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
	Rear LH door opened	ON
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	OFF
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Power door lock switch LOCK	ON
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	OFF
HAZARD SW	Hazard switch is not pressed	OFF
	Hazard switch is pressed	ON
REAR DEF SW	NOTE: The item is indicated, but not monitored.	OFF
H/L WASH SW	NOTE: The item is indicated, but not monitored.	OFF
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	LOCK button of Intelligent Key is not pressed	OFF
	LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	OFF
	UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	TRUNK OPEN button of Intelligent Key is not pressed	OFF
	TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	PANIC button of Intelligent Key is not pressed	OFF
	PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	OFF
	UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	Outside of the vehicle bright	Close to 5 V
	Outside of the vehicle dark	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-BD/TR	Trunk request switch is not pressed	OFF	A
	Trunk request switch is pressed	ON	
PUSH SW	Push-button ignition switch (push switch) is not pressed	OFF	B
	Push-button ignition switch (push switch) is pressed	ON	
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	OFF	C
	Ignition switch in ON position	ON	
ACC RLY -F/B	Ignition switch in OFF position	OFF	D
	Ignition switch in ACC or ON position	ON	
CLUCH SW	The clutch pedal is not depressed	OFF	E
	The clutch pedal is depressed	ON	
BRAKE SW 1	The brake pedal is not depressed	ON	F
	The brake pedal is depressed	OFF	
DETE/CANCL SW	Selector lever in P position	OFF	G
	Selector lever in any position other than P	ON	
SFT PN/N SW	Selector lever in any position other than P and N	OFF	H
	Selector lever in P or N position	ON	
S/L -LOCK	Steering is locked	OFF	I
	Steering is unlocked	ON	
S/L -UNLOCK	Steering is unlocked	OFF	J
	Steering is locked	ON	
S/L RELAY-F/B	Ignition switch is OFF or ACC position	OFF	K
	Ignition switch is ON position	ON	
UNLK SEN-DR	Driver door is unlocked	OFF	DEF
	Driver door is locked	ON	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	OFF	M
	Push-button ignition switch (push-switch) is pressed	ON	
IGN RLY1 -F/B	Ignition switch is OFF or ACC position	OFF	N
	Ignition switch is ON position	ON	
DETE SW -IPDM	Selector lever in P position	OFF	O
	Selector lever in any position other than P	ON	
SFT PN -IPDM	Selector lever in any position other than P and N	OFF	P
	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	
S/L UNLK-IPDM	Steering is unlocked	OFF	
	Steering is locked	ON	

BCM (BODY CONTROL MODULE)

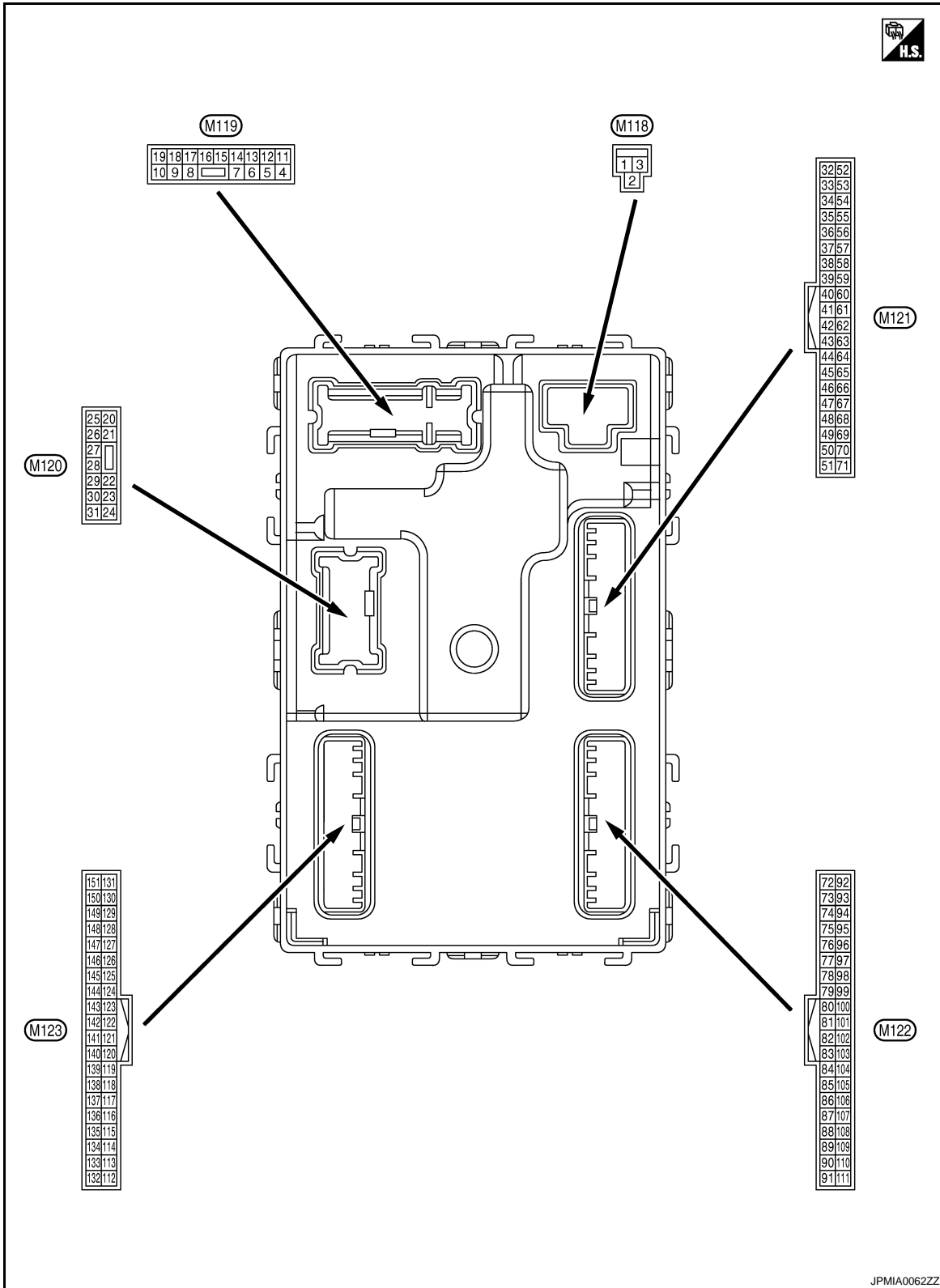
< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
S/L RELAY-REQ	Ignition switch in OFF or ACC position	OFF
	Ignition switch in ON position	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLK
ID OK FLAG	Ignition switch in ACC or ON position	RESET
	Ignition switch in OFF position	SET
PRMT ENG STRT	The engine start is prohibited	RESET
	The engine start is permitted	SET
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	RESET
KEY SW -SLOT	Intelligent Key is not inserted into key slot	OFF
	Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	DONE
	ID of front LH tire transmitter is not registered	YET
ID REGST FR1	ID of front RH tire transmitter is registered	DONE
	ID of front RH tire transmitter is not registered	YET
ID REGST RR1	ID of rear RH tire transmitter is registered	DONE
	ID of rear RH tire transmitter is not registered	YET
ID REGST RL1	ID of rear LH tire transmitter is registered	DONE
	ID of rear LH tire transmitter is not registered	YET
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON
BUZZER	Tire pressure warning alarm is not sounding	OFF
	Tire pressure warning alarm is sounding	ON

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

TERMINAL LAYOUT

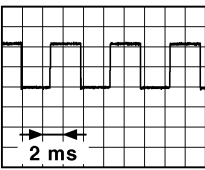


PHYSICAL VALUES

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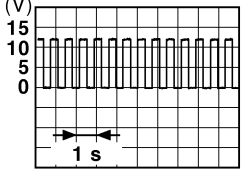
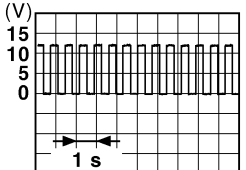
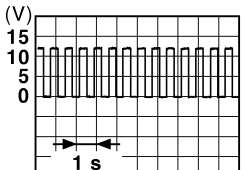
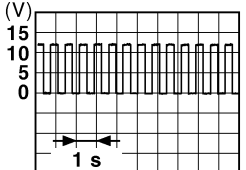
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (LG)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (V)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right;"><small>JSNIA0010GB</small></p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
17 (W)	Ground	Turn signal (front RH)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch RH	 <p style="text-align: right;">PKID0926E 6.5 V</p>	
18 (O)	Ground	Turn signal (front LH)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch LH	 <p style="text-align: right;">PKID0926E 6.5 V</p>	
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
				ON	0 V	
20 (V)	Ground	Turn signal (rear RH)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch RH	 <p style="text-align: right;">PKID0926E 6.5 V</p>	
23 (G)	Ground	Trunk lid opening.	Output	Trunk lid	Open (Trunk lid opener actuator is activated)	Battery voltage
				Close (Trunk lid opener actuator is not activated)	0 V	
25 (G)	Ground	Turn signal (rear LH)	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch LH	 <p style="text-align: right;">PKID0926E 6.5 V</p>	
30 (R)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0 V
				OFF	Battery voltage	

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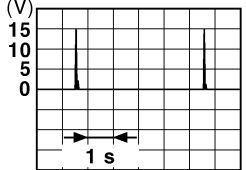
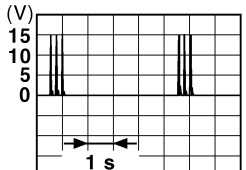
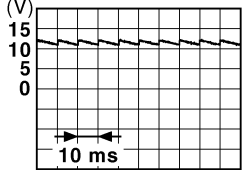
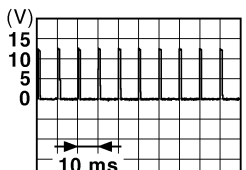
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
34 (SB)	Ground	Trunk room antenna 1 (-)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
35 (V)	Ground	Trunk room antenna 1 (+)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
38 (B)	Ground	Rear bumper anten- na (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

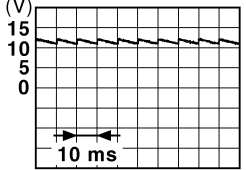
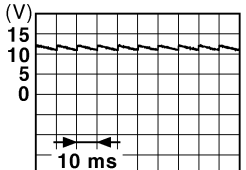
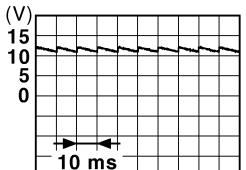
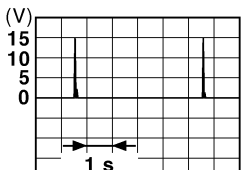
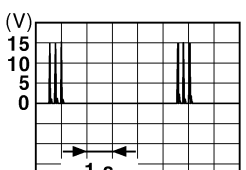
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
39 (W)	Ground	Rear bumper antenna (+)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC Battery voltage ON 0 V
50 (R)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> 11.8 V
				ON (Trunk is open)	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch OFF (M/T models)	When the clutch pedal is depressed Battery voltage When the clutch pedal is not depressed 0 V
				Ignition switch ON (A/T models)	When selector lever is in P or N position and the brake is depressed Battery voltage
					When selector lever is in P or N position and the brake is not depressed 0 V
					0 V
61 (W)	Ground	Trunk request switch	Input	Trunk request switch	ON (Pressed) 0 V OFF (Not pressed)
				 <p style="text-align: right; font-size: small;">JPMIA0016GB</p> 1.0 V	
64 (V)	Ground	Request switch buzzer	Output	Request switch buzzer	Sounding 0 V Not sounding Battery voltage

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0 V
					Not pressed	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>
					ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>
					ON (When rear LH door opens)	0 V
72 (R)	Ground	Room antenna 2 (-) (center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
					When Intelligent Key is not in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

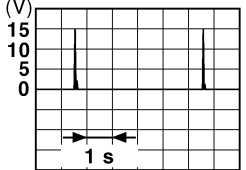
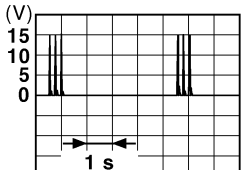
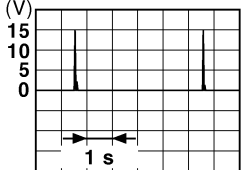
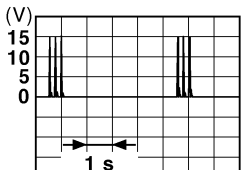
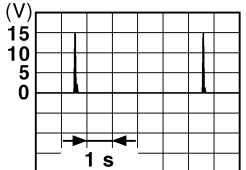
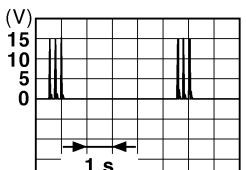
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
73 (G)	Ground	Room antenna 2 (+) (center console)	Output	Ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
74 (SB)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>
75 (BR)	Ground	Passenger door an- tenna (+)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0063GB</p>

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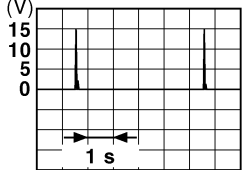
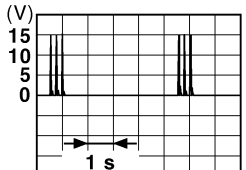
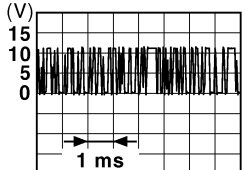
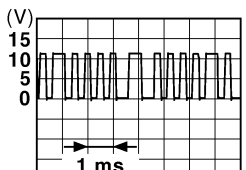
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
78 (Y)	Ground	Room antenna (-) (in- strument panel)	Output	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compart- ment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

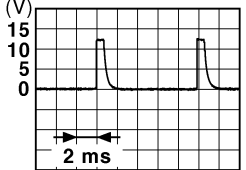

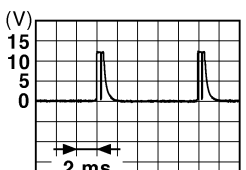
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Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
79 (BR)	Ground	Room antenna (+) (instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment 	
					When Intelligent Key is not in the passenger compart- ment 	
80 (GR)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot. Just after pressing ignition switch. Pointer of tester should move.	
81 (W)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot. Just after pressing ignition switch. Pointer of tester should move.	
82 (R)	Ground	Ignition relay (relay box) control	Output	Ignition switch	OFF or ACC ON	0 V Battery voltage
83 (Y)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		
				When operating either button on Intelligent Key		

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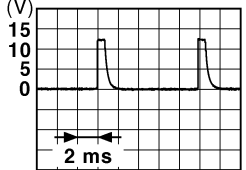
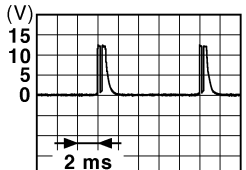

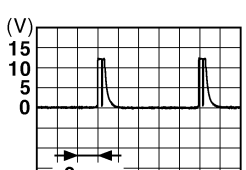
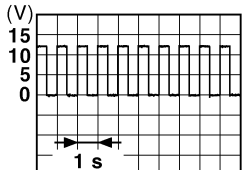
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
87 (BR)	Ground	Combination switch INPUT 5	Input	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
				Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
				Any of the conditions below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <small>JPMIA0041GB</small> 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 <small>JPMIA0036GB</small> 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 <small>JPMIA0037GB</small> 1.3 V
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	 <small>JPMIA0040GB</small> 1.3 V
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed Not pressed 0 V Battery voltage	
90 (P)	Ground	CAN - L	Input/ Output	—	—	
91 (L)	Ground	CAN - H	Input/ Output	—	—	
92 (LG)	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF	0 V
					Blinking	 <small>JPMIA0015GB</small> 6.5 V
					ON	Battery voltage

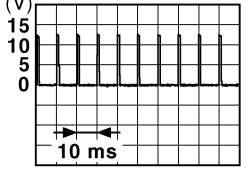
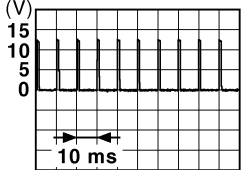
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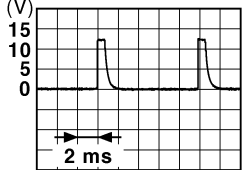
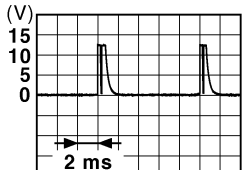

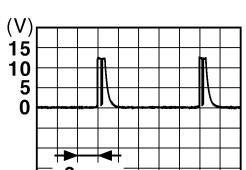

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (GR)	Ground	A/T device (detention switch) power supply	Output	—		Battery voltage
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98 (P)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p>
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p>
102 (O)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
106 (W)	Ground	Steering wheel lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

BCM (BODY CONTROL MODULE)

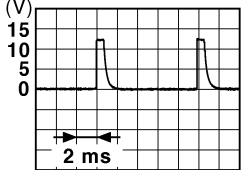
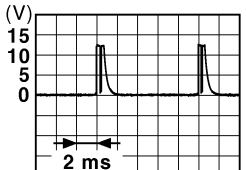
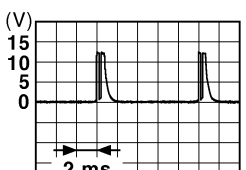
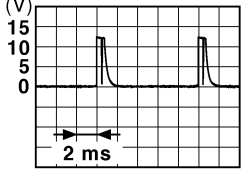
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 1.4 V
					Turn signal switch LH	 1.3 V
					Turn signal switch RH	 1.3 V
					Front wiper switch LO	 1.3 V
					Front washer switch ON	 1.3 V

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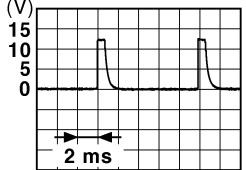
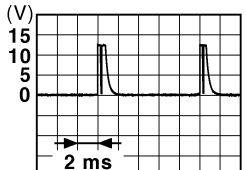

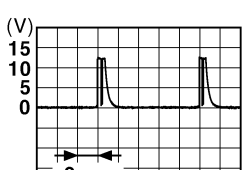

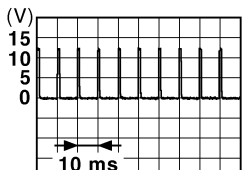
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the conditions below with all switches OFF	<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6  <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 1.4 V
					Lighting switch PASS	 1.3 V
					Lighting switch 2ND	 1.3 V
					Front wiper switch INT	 1.3 V
					Front wiper switch HI	 1.3 V
					Pressed	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	Not pressed	 1.1 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)		
+	-	Signal name	Input/ Output				
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage	
					LOCK or UNLOCK	<p style="text-align: right; font-size: small;">JMkia0066GB</p>	
					For 15 seconds after UN- LOCK	Battery voltage	
				15 seconds or later after UNLOCK	0 V		
113 (P)	Ground	Optical sensor signal	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V	
					When dark outside of the vehicle	Close to 0 V	
114 (R)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V	
						ON (Clutch pedal is de- pressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input	—	Battery voltage		
118 (P)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V	
						ON (Brake pedal is de- pressed)	Battery voltage
				ICC brake hold relay (With ICC)	OFF	0 V	
					ON	Battery voltage	
119 (SB)	Ground	Front door lock as- sembly driver side (unlock sensor)	Input	Driver door	LOCK status	<p style="text-align: right; font-size: small;">JPMIA0011GB</p>	
						UNLOCK status	0 V
							11.8 V
121 (R)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot	Battery voltage		
				When Intelligent Key is not inserted into key slot	0 V		
122 (V)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0 V	
					ACC or ON	Battery voltage	
123 (W)	Ground	IGN feedback signal	Input	Ignition switch	OFF or ACC	0 V	
					ON	Battery voltage	

BCM (BODY CONTROL MODULE)

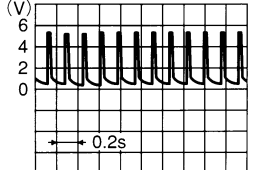

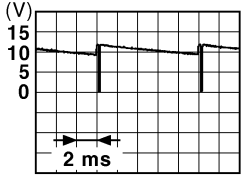
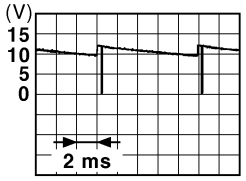
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	<p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p>	
					OFF (When passenger door closes)	0 V
129 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	<p style="text-align: right; font-size: small;">JPMIA0012GB</p> <p style="text-align: center;">1.1 V</p>	
					CANCEL	0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	<p style="text-align: right; font-size: small;">JPMIA0013GB</p> <p style="text-align: center;">10.2 V</p>	
					Ignition switch OFF or ACC	0 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	<p>NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.</p> <p style="text-align: right; font-size: small;">JPMIA0159GB</p>	
					ON (When tail lamps OFF)	5.5 V
					ON (When tail lamps ON)	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	
					OFF	Battery voltage
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	
138 (V)	Ground	Receiver and sensor power supply output	Output	Ignition switch	OFF	
					ACC or ON	5.0 V

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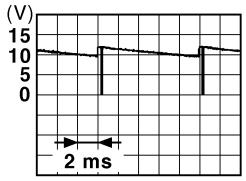
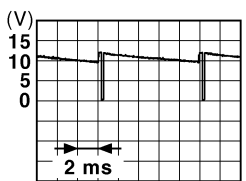
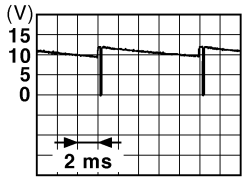
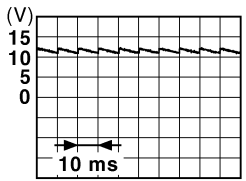
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
139 (L)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state  OCC3881D	
				When receiving the signal from the transmitter  OCC3880D		
140 (GR)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position: 12.0 V Except P and N positions: 0 V	
				141 (G)	Ground	Security indicator signal
OFF: Battery voltage						
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent 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 (P)	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 below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
144 (G)	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)	
					Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT	
					Front wiper switch LO	
					Lighting switch AUTO	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
149 (W)	Ground	Tire pressure warn- ing check switch	Input	—	5 V	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	
					ON (When driver door opens)	0 V
151 (G)	Ground	Rear window defog- ger relay	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

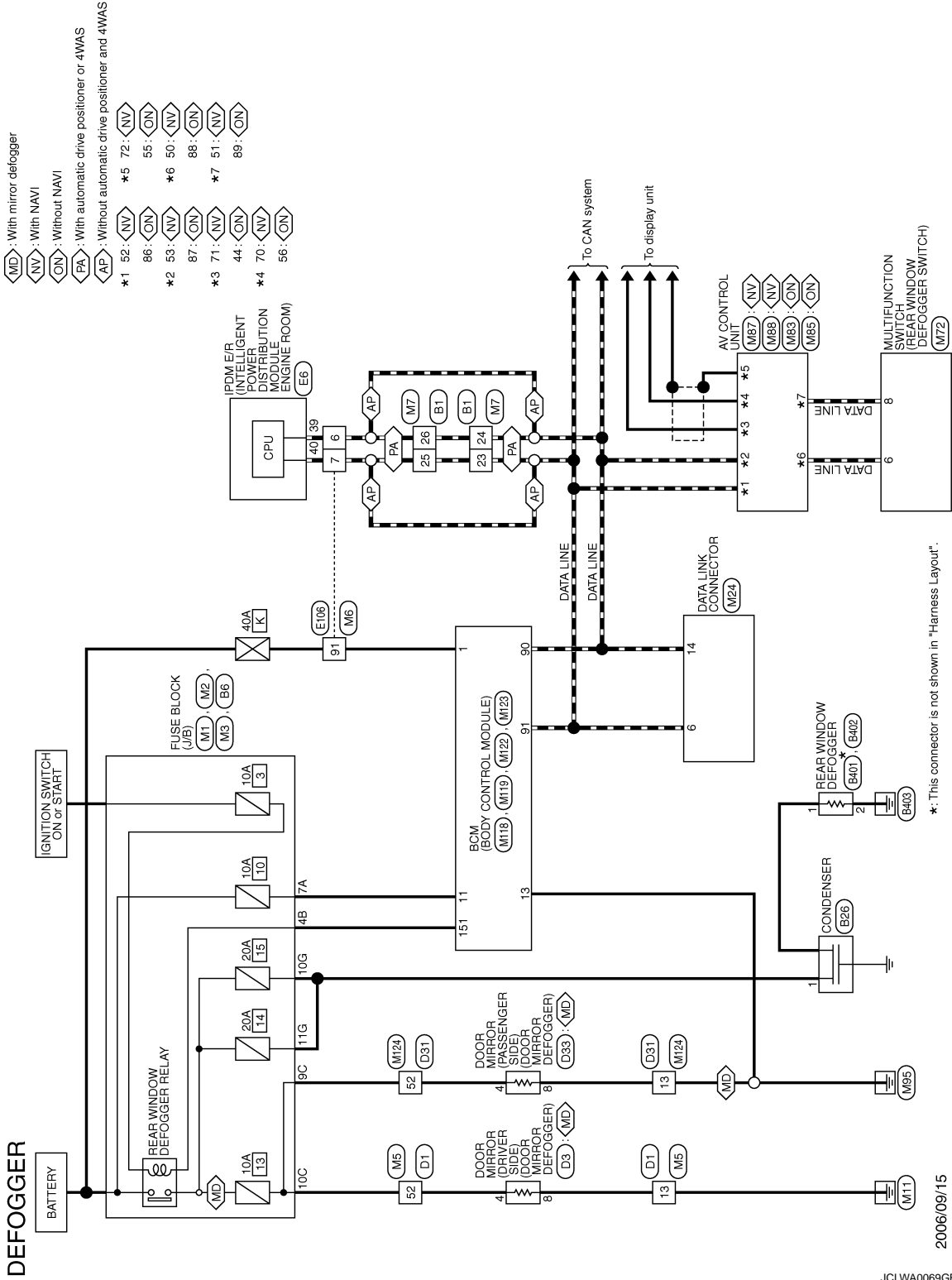
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BCM (BODY CONTROL MODULE)

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Wiring Diagram —DEFOGGER—

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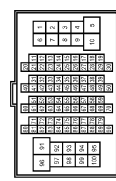
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >


DEFOGGER

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name
23	L	-
24	P	-
25	L	-
26	P	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS




Terminal No.	Color of Wire	Signal Name
10G	W	-
11G	W	-

Connector No.	B26
Connector Name	CONDENSER
Connector Type	M01FW-LC




Terminal No.	Color of Wire	Signal Name
1	Y	-

Connector No.	B401
Connector Name	REAR WINDOW DEFOGGER
Connector Type	F01FB-A



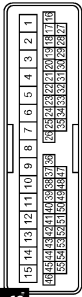
Terminal No.	Color of Wire	Signal Name
1	W	-

Connector No.	B402
Connector Name	REAR WINDOW DEFOGGER
Connector Type	F01FB-A




Terminal No.	Color of Wire	Signal Name
2	-	-

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



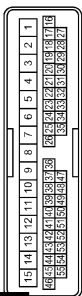
Terminal No.	Color of Wire	Signal Name
13	B	-
52	L	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name
4	L	-
8	B	-

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



Terminal No.	Color of Wire	Signal Name
13	B	-
52	L	-

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BCM (BODY CONTROL MODULE)

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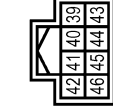
DEFOGGER

Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH12MW-NH



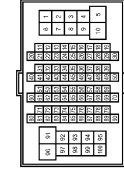
Terminal No.	Color of Wire	Signal Name
4	L	-
8	B	-

Connector No.	E6
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH08FW-NH



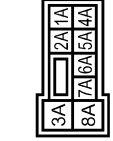
Terminal No.	Color of Wire	Signal Name
39	P	-
40	L	-

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



Terminal No.	Color of Wire	Signal Name
6	P	-
7	L	-
91	W	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



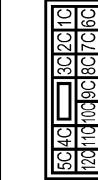
Terminal No.	Color of Wire	Signal Name
7A	R	-

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



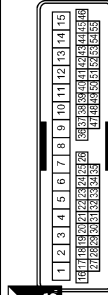
Terminal No.	Color of Wire	Signal Name
4B	G	-

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



Terminal No.	Color of Wire	Signal Name
9C	O	-
10C	L	-

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



Terminal No.	Color of Wire	Signal Name
13	B	-
52	L	-

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



Terminal No.	Color of Wire	Signal Name
6	P	-
7	L	-
91	W	-

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

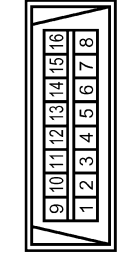
DEFOGGER

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	THROW-CSI6-TM4



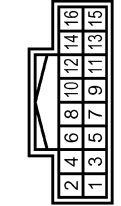
Terminal No.	Color of Wire	Signal Name
23	L	-
24	P	-
25	L	-
26	P	-

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



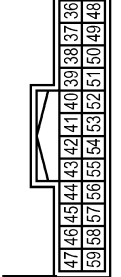
Terminal No.	Color of Wire	Signal Name
6	L	-
14	P	-

Connector No.	M7Z
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



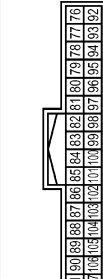
Terminal No.	Color of Wire	Signal Name
6	LG	AV COMM (H)
8	V	AV COMM (L)

Connector No.	M83
Connector Name	AV CONTROL UNIT
Connector Type	TH24FW-NH



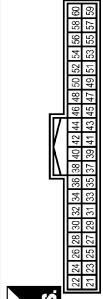
Terminal No.	Color of Wire	Signal Name
44	BR	COMM (DISP->CONT)
55	SHIELD	SHIELD
56	Y	COMM (CONT->DISP)

Connector No.	M85
Connector Name	AV CONTROL UNIT
Connector Type	TH22FW-NH



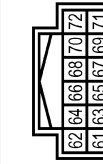
Terminal No.	Color of Wire	Signal Name
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [W/O BOSE system]
89	R	AV COMM (L) [W/O BOSE system]

Connector No.	M87
Connector Name	AV CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name
50	V	AV COMM (H)
51	LG	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M88
Connector Name	AV CONTROL UNIT
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name
70	BR	COMM (CONT->DISP)
71	Y	COMM (DISP->CONT)
72	SHIELD	SHIELD

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



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

JCLWA0072GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

DEFOGGER

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

Terminal No.	Color of Wire	Signal Name
11	R	BAT (FUSE)
13	B	GND

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

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

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FC-NH

Terminal No.	Color of Wire	Signal Name
151	G	REAR DEFOGGER OUTPUT

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

Terminal No.	Color of Wire	Signal Name
13	B	-
52	O	-

JCLWA0073GB

INFOID:000000000962706

Fail Safe

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 ANTENA AMP	Inhibit engine cranking	Erase DTC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
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 <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal
B2563: HI VOLTAGE	<ul style="list-style-type: none"> • Inhibit engine cranking • Inhibit steering lock 	500 ms after the power supply voltage decreases to less than 18 V
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 /h or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> • Ignition switch is in the ON position <ul style="list-style-type: none"> - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

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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 <ul style="list-style-type: none"> • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	<ul style="list-style-type: none"> • Inhibit engine cranking • Inhibit steering lock 	When the following steering lock conditions agree <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B2612: S/L STATUS	<ul style="list-style-type: none"> • Inhibit engine cranking • Inhibit steering lock 	When any of the following conditions is fulfilled <ul style="list-style-type: none"> • 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 RECIV	Inhibit engine cranking	When any of the following conditions is fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)

DTC Inspection Priority Chart

INFOID:000000000962707

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

Priority	DTC
1	<ul style="list-style-type: none"> • B2562: LOW VOLTAGE • B2563: HI VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	<ul style="list-style-type: none"> • B2190: NATS ANTENA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Priority	DTC	A
4	<ul style="list-style-type: none"> • 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 • B2611: ACC RELAY • 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 RECIV • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG 	A B C D E F G H I J
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT 	K DEF M N O P
6	<ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA 	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

NOTE:

- Details of time display
- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor 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-43
B2014: CHAIN OF S/L-BCM	×	—	—	SEC-44
B2190: NATS ANTENNA AMP	×	—	—	SEC-37
B2191: DIFFERENCE OF KEY	×	—	—	SEC-40
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-41
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-42
B2553: IGNITION RELAY	—	—	—	PCS-48
B2555: STOP LAMP	—	—	—	SEC-47
B2556: PUSH-BTN IGN SW	—	×	—	SEC-49
B2557: VEHICLE SPEED	×	×	—	SEC-51
B2560: STARTER CONT RELAY	×	×	—	SEC-52
B2562: LOW VOLTAGE	—	—	—	BCS-36
B2563: HI VOLTAGE	×	×	—	BCS-37
B2601: SHIFT POSITION	×	×	—	SEC-53
B2602: SHIFT POSITION	×	×	—	SEC-56
B2603: SHIFT POSI STATUS	×	×	—	SEC-58
B2604: PNP SW	×	×	—	SEC-61
B2605: PNP SW	×	×	—	SEC-63
B2606: S/L RELAY	×	×	—	SEC-65
B2607: S/L RELAY	×	×	—	SEC-66
B2608: STARTER RELAY	×	×	—	SEC-68
B2609: S/L STATUS	×	×	—	SEC-70
B260A: IGNITION RELAY	×	×	—	PCS-50
B260B: STEERING LOCK VNIT	—	×	—	SEC-74
B260C: STEERING LOCK VNIT	—	×	—	SEC-75
B260D: STEERING LOCK VNIT	—	×	—	SEC-76
B260F: ENG STATE SIG LOST	×	×	—	SEC-77
B2611: ACC RELAY	—	—	—	PCS-52
B2612: S/L STATUS	×	×	—	SEC-79
B2614: ACC RELAY CIRC	—	×	—	PCS-54
B2615: BLOWER RELAY CIRC	—	×	—	PCS-57

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
B2616: IGN RELAY CIRC	—	×	—	PCS-60	A
B2617: STARTER RELAY CIRC	×	×	—	SEC-83	B
B2618: BCM	×	×	—	PCS-63	
B2619: BCM	×	×	—	SEC-85	C
B261A: PUSH-BTN IGN SW	—	×	—	SEC-86	
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	—	SEC-88	D
B2621: INSIDE ANTENNA	—	—	—	DLK-58	
B2622: INSIDE ANTENNA	—	—	—	DLK-60	
B2623: INSIDE ANTENNA	—	—	—	DLK-62	E
B26E1: ENG STATE NO RES	×	×	—	SEC-78	
C1704: LOW PRESSURE FL	—	—	×	WT-14	F
C1705: LOW PRESSURE FR	—	—	×	WT-14	
C1706: LOW PRESSURE RR	—	—	×	WT-14	
C1707: LOW PRESSURE RL	—	—	×	WT-14	G
C1708: [NO DATA] FL	—	—	×	WT-16	
C1709: [NO DATA] FR	—	—	×	WT-16	
C1710: [NO DATA] RR	—	—	×	WT-16	H
C1711: [NO DATA] RL	—	—	×	WT-16	
C1712: [CHECKSUM ERR] FL	—	—	×	WT-19	I
C1713: [CHECKSUM ERR] FR	—	—	×	WT-19	
C1714: [CHECKSUM ERR] RR	—	—	×	WT-19	
C1715: [CHECKSUM ERR] RL	—	—	×	WT-19	J
C1716: [PRESSDATA ERR] FL	—	—	×	WT-22	
C1717: [PRESSDATA ERR] FR	—	—	×	WT-22	
C1718: [PRESSDATA ERR] RR	—	—	×	WT-22	K
C1719: [PRESSDATA ERR] RL	—	—	×	WT-22	
C1720: [CODE ERR] FL	—	—	×	WT-24	DEF
C1721: [CODE ERR] FR	—	—	×	WT-24	
C1722: [CODE ERR] RR	—	—	×	WT-24	
C1723: [CODE ERR] RL	—	—	×	WT-24	M
C1724: [BATT VOLT LOW] FL	—	—	×	WT-27	
C1725: [BATT VOLT LOW] FR	—	—	×	WT-27	
C1726: [BATT VOLT LOW] RR	—	—	×	WT-27	N
C1727: [BATT VOLT LOW] RL	—	—	×	WT-27	
C1729: VHCL SPEED SIG ERR	—	—	×	WT-30	O
C1734: CONTROL UNIT	—	—	×	WT-31	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:000000000962709

1. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.

Refer to [DEF-11, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.

Refer to [DEF-9, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-39, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH OF DOOR MIRROR DEFOGGER OPERATE.

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER DOES NOT OPERATE BUT BOTH OF DOOR MIRROR DEFOGGER OPERATE.

Diagnosis Procedure

INFOID:000000000962710

1. CHECK REAR WINDOW DEFOGGER POWER SUPPLY AND GROUND CIRCUIT

Check rear window defogger power supply and ground circuit.

Refer to [DEF-11, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-39, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

BOTH DOORS MIRROR DEFOGGER DON'T OPERATE BUT REAR WINDOW DEFOGGER OPERATES

Diagnosis Procedure

INFOID:000000000962711

1. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-39, "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Check the following.
- Battery power supply circuit.
 - Fuse block (J/B).
- NO >> Repair or replace the malfunctioning parts.

DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

DRIVER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

Diagnosis Procedure

INFOID:000000000962712

1. CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.

Refer to [DEF-13, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-39, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

PASSENGER SIDE DOOR MIRROR DEFOGGER DOES NOT OPERATE.

Diagnosis Procedure

INFOID:000000000962713

1. CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.

Refer to [DEF-15, "Component Function Check"](#).

Is the inspection result normal?

YES >> Refer to [GI-39, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

ON ISN'T DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED

< SYMPTOM DIAGNOSIS >

ON ISN'T DISPLAYED WHEN PRESSING REAR WINDOW DEFOGGER SWITCH BUT IT IS OPERATED

Diagnosis Procedure

INFOID:000000000962714

CHECK AV CONTROL UNIT FUNCTION

1.

Check that the AV control unit is operating normally.

Base audio without navigation refer to [AV-10, "Work Flow"](#).

Bose audio without navigation refer to [AV-125, "Work Flow"](#).

Bose audio with navigation refer to [AV-313, "Work Flow"](#).

Is the inspection result normal?

YES >> Refer to [GI-39, "Intermittent Incident"](#).

NO >> Repair or replace the malfunctioning parts.

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REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES

< SYMPTOM DIAGNOSIS >

REAR WINDOW DEFOGGER SWITCH DOES NOT LIGHT, BUT REAR WINDOW DEFOGGER OPERATES

Diagnosis Procedure

INFOID:000000000962715

1.REPLACE MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Replace multifunction switch (rear window defogger switch) .

>> Refer to [AV-541. "Removal and Installation"](#).

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000000962716

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section 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 section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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PRE-INSPECTION FOR DIAGNOSTIC

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

PRE-INSPECTION FOR DIAGNOSTIC

Basic Inspection

INFOID:000000000962717

BASIC INSPECTION

1.INSPECTION START

1. Check the service history.
2. Check the following parts.
 - Fuse/circuit breaker blown.
 - Poor connection, open or short circuit of harness connector.
 - Battery voltage.

Is the inspection result normal?

- YES >> Inspection end.
NO >> Repair or replace the malfunctioning parts.

FILAMENT

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

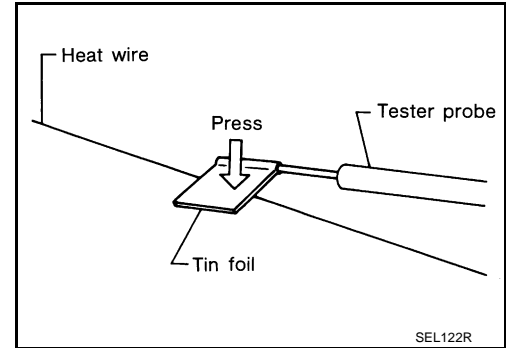
FILAMENT

Inspection and Repair

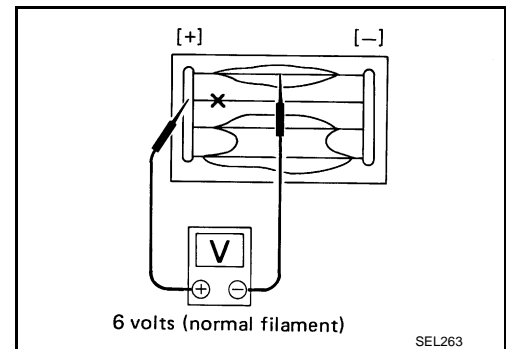
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INSPECTION

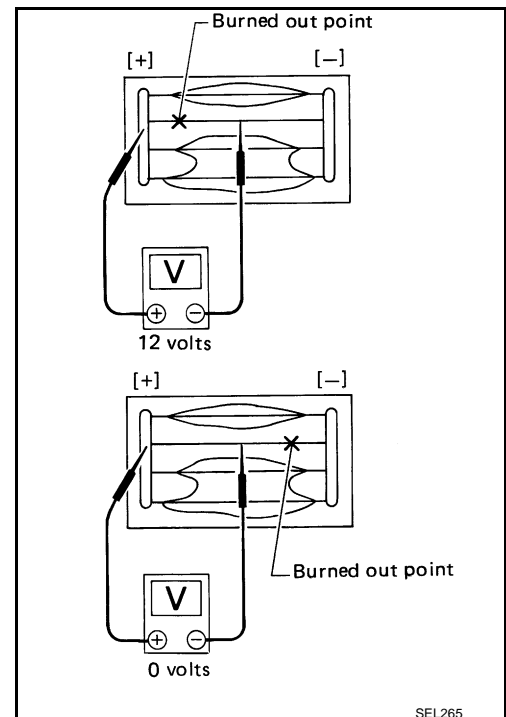
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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 will swing abruptly when probe passes the point.



REPAIR

REPAIR EQUIPMENT

- Conductive silver composition (Dupont No. 4817 or equivalent)

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

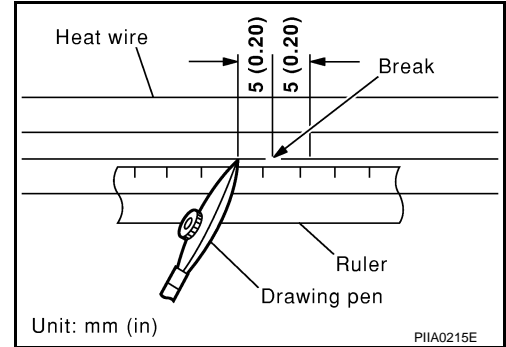
FILAMENT

< ON-VEHICLE REPAIR >

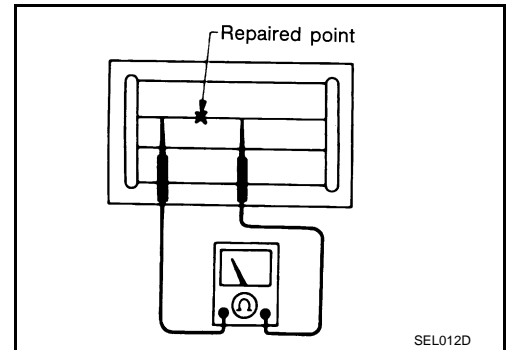
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

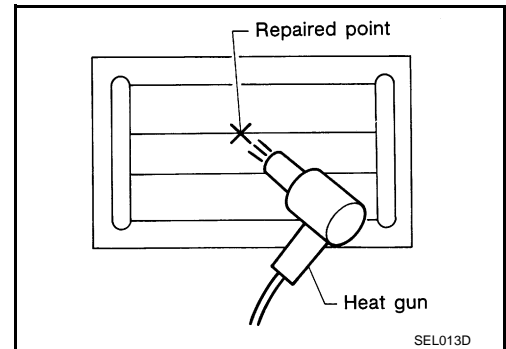
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen.
Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition on 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

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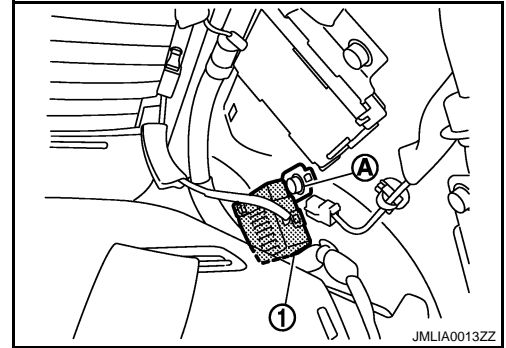
Refer to [INT-13, "Exploded View"](#).

Removal and Installation

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REMOVAL

1. Remove the rear seat cushion and the rear seat back.
Refer to [SE-105, "Removal and Installation"](#).
2. Remove the rear kickplate, rear wheel well garnish and the rear pillar finisher.
Refer to [INT-13, "Removal and Installation"](#).
3. Remove bolt (A), and then remove condenser (1) from the vehicle body.



INSTALLATION

Install in the reverse order of removal.

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

DEF