SECTION DEF
DEFOGGER

CONTENTS

COUPE

ROADSTER

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000008195872

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

Perform self-diagnosis with CONSULT.

Are any DTC detected?

YES >> Refer to BCS-88, "DTC Index".
NO >> GO TO 3.

3.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 4.

4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH “SYMPTOM DIAGNOSIS”

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

>> GO TO 5.

5.IDENTIFY MALFUNCTIONING PARTS WITH “COMPONENT DIAGNOSIS”

Perform the diagnosis with “Component diagnosis” of the applicable system.

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

7.FINAL CHECK

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

Are all malfunctions corrected?

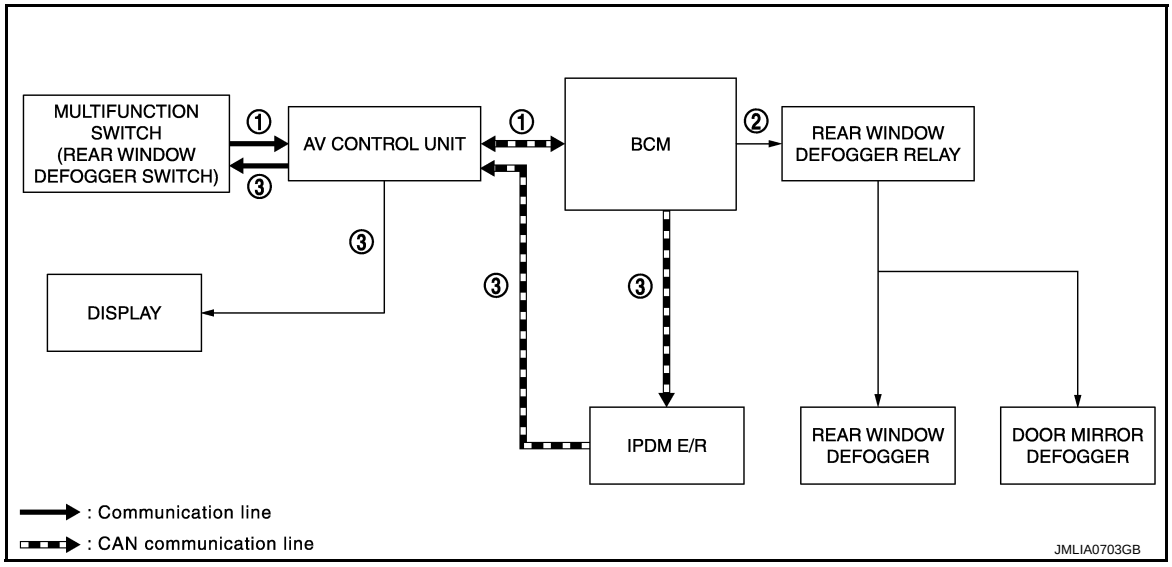
YES >> INSPECTION END
NO >> GO TO 4.

SYSTEM DESCRIPTION

REAR WINDOW DEFOGGER SYSTEM
WITH NAVIGATION

WITH NAVIGATION : System Diagram

INFOID:0000000008195873



1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

WITH NAVIGATION : System Description

INFOID:0000000008195874

OPERATION DESCRIPTION

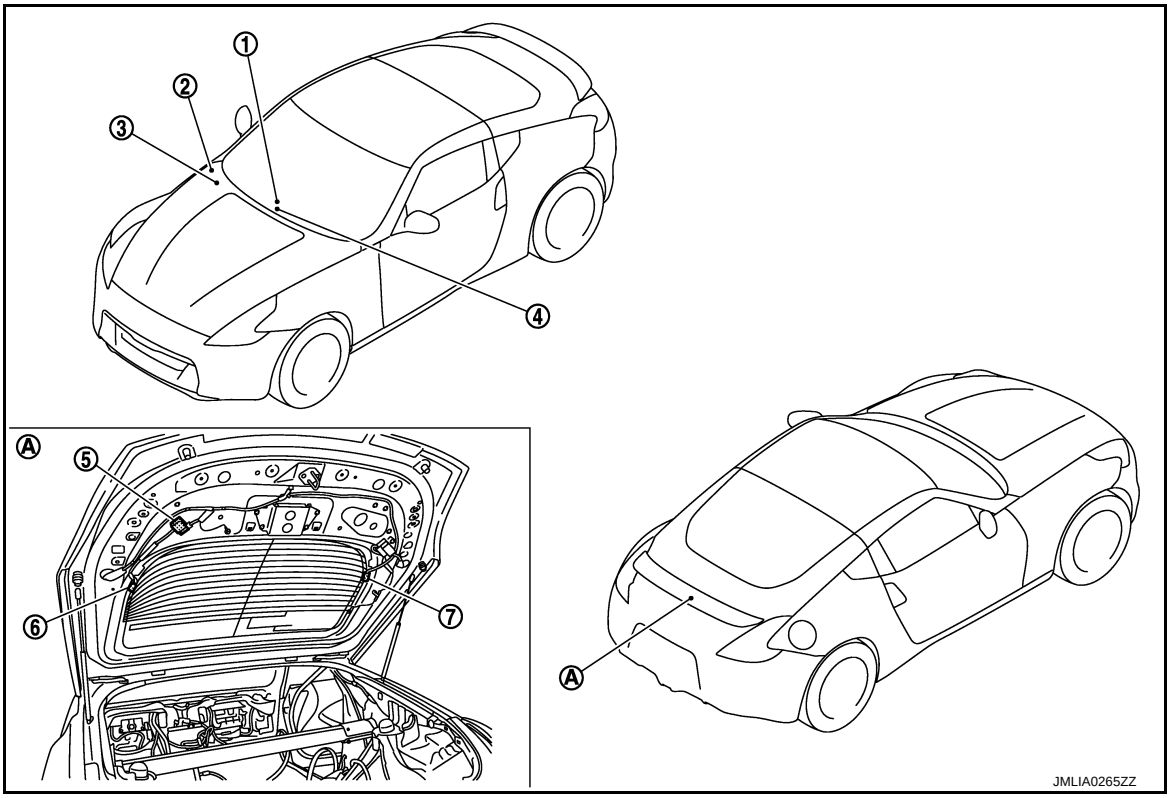
- Turn rear window defogger switch ON when the ignition switch is ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV control unit transmits rear window defogger switch signal to BCM via CAN communication.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

TIMER FUNCTION

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

WITH NAVIGATION : Component Parts Location

INFOID:0000000008195875



1. Multifunction switch (rear window defogger switch)
2. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
3. BCM
   Refer to BCS-10, "Component Parts Location".
4. AV control unit
   Refer to AV-126, "Component Parts Location".
5. Condenser
6. Rear window defogger connector
7. Rear window defogger connector

A. Behind back door assembly

WITH NAVIGATION : Component Description

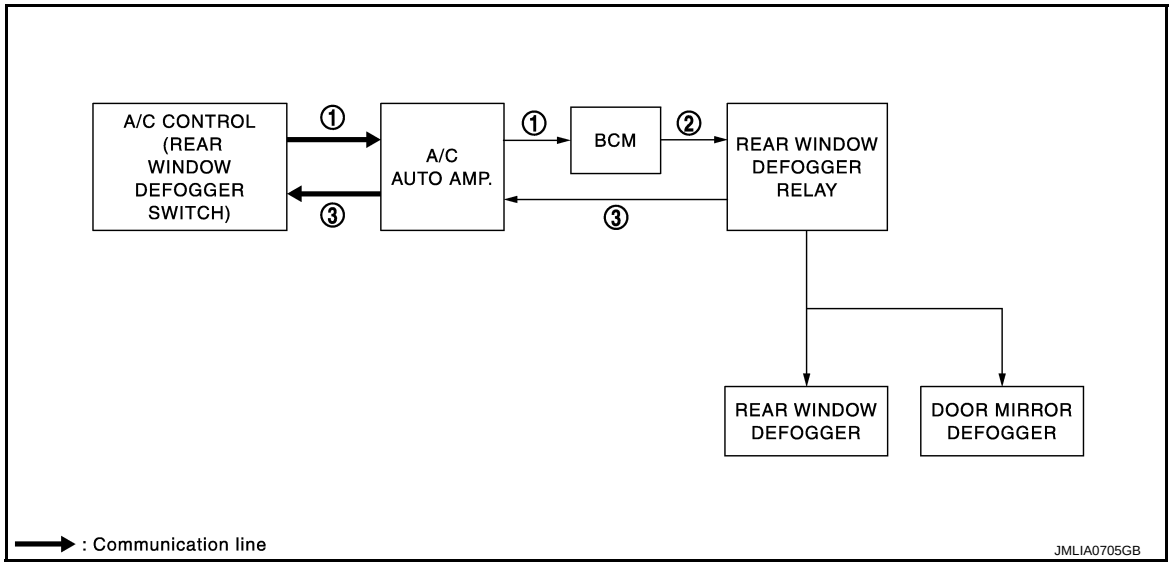
INFOID:0000000008195876

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

WITHOUT NAVIGATION

WITHOUT NAVIGATION : System Diagram

INFOID:0000000008195877



1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

WITHOUT NAVIGATION : System Description

INFOID:0000000008195878

OPERATION DESCRIPTION

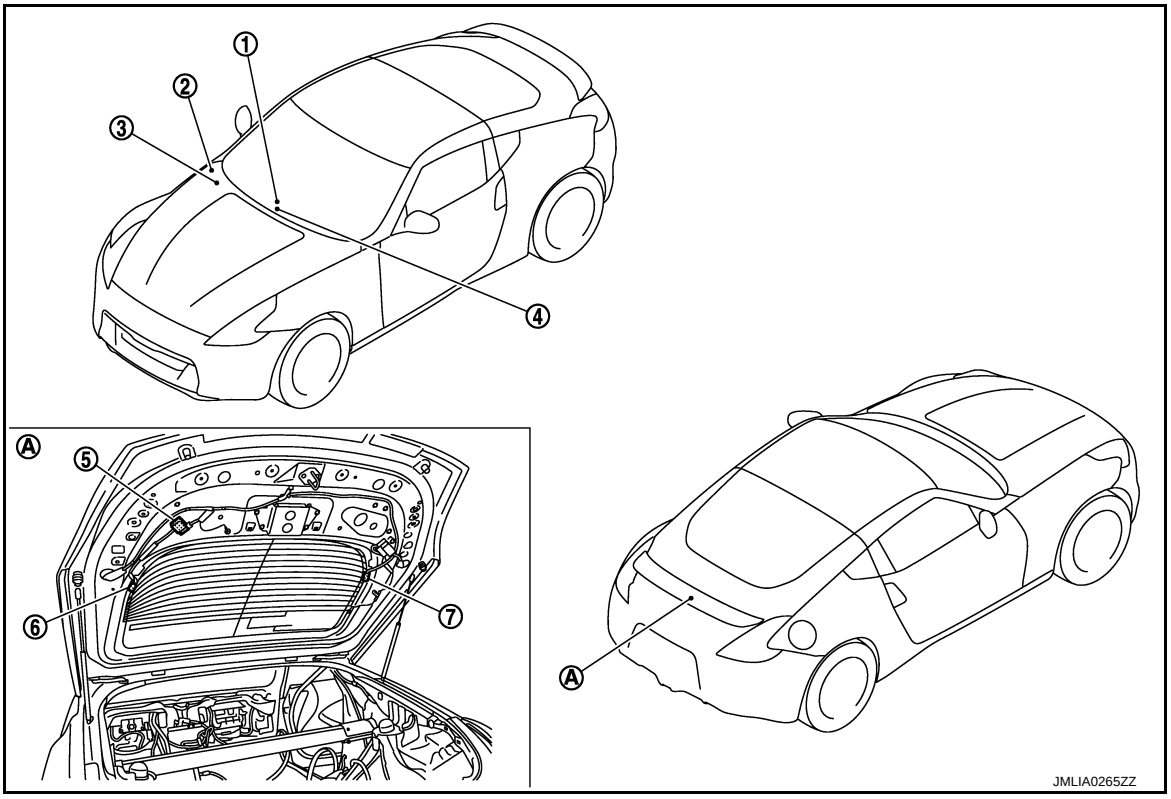
- Turn rear window defogger switch ON when the ignition switch is ON. Then A/C control (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON when rear window defogger switch signal is received.
- Rear window defogger and door mirror defogger (with mirror defogger) are supplied with power and operates when rear window defogger relay turns ON.
- Rear window defogger relay transmits rear window defogger ON signal to A/C auto amp. when rear window defogger operates.
- At the same time, A/C auto amp. transmits rear defogger ON signal to A/C controller (rear window defogger switch) and illuminates rear window defogger switch indicator.

TIMER FUNCTION

- BCM turns rear window defogger relay ON for approximately 15 minutes when rear window defogger switch is turned ON. It makes rear window defogger and door mirror defoggers (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 operation also occurs during timer operation, if the ignition switch is turned OFF.

WITHOUT NAVIGATION : Component Parts Location

INFOID:0000000008195879



1. A/C controller
2. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
3. BCM
   Refer to BCS-10, "Component Parts Location".
4. A/C auto amp.
   Refer to HAC-23, "Component Parts Location".
5. Condenser
6. Rear window defogger connector
7. Rear window defogger connector

A. Behind back door assembly

WITHOUT NAVIGATION : Component Description

INFOID:0000000008195880

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

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008831267

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION
BCM can perform the following functions for each system.
NOTE:
It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

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

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

FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power supply position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK”* to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”*
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”*.) to low power consumption mode
	LOCK		Power supply position is “LOCK”*
	OFF		Power supply position is “OFF” (Ignition switch OFF)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

REAR WINDOW DEFOGGER

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

INFOID:0000000008195882

DATA MONITOR
NOTE:

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

Monitor Item	Description
REAR DEF SW	• Without navigation: Displays “Press (ON)/other (OFF)” status determined with the rear window defogger switch • With navigation: 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	Rear window defogger operates when “ON” on CONSULT screen is touched

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000008195883

1.CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Battery power supply	K
	10

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END
NO >> Repair harness or connector.

REAR WINDOW DEFOGGER SWITCH

WITH NAVIGATION

WITH NAVIGATION : Description

INFOID:0000000008195884

- The rear window defogger and door mirror defogger (with mirror defogger) are operated by turning the rear window defogger switch ON.
- The indicator lamp in the multifunction switch illuminates when the rear window defogger and door mirror defogger (with door mirror defogger) are operating.

WITH NAVIGATION : Component Function Check

INFOID:0000000008195885

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-14, "WITH NAVIGATION : Diagnosis Procedure".

WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000008195886

1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check multifunction switch (rear window defogger switch) operate.
Refer to AV-138, "On Board Diagnosis Function".

Is the inspection result normal?

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

WITHOUT NAVIGATION

WITHOUT NAVIGATION : Description

INFOID:0000000008195887

- The rear window defogger is operated by turning the rear window defogger switch ON.
- The indicator lamp in the A/C controller illuminates when the rear window defogger is operating.

WITHOUT NAVIGATION : Component Function Check

INFOID:0000000008195888

1.CHECK FUNCTION

With CONSULT

1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” or “BCM” using CONSULT.
3. Select “REAR DEF SW” in “DATA MONITOR” mode.
4. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REAR DEF SW	Rear window defogger switch	ON	On
		OFF	Off

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-14, "WITHOUT NAVIGATION : Diagnosis Procedure".

WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000008195889

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

Check A/C control system.
Refer to HAC-5, "Work Flow".

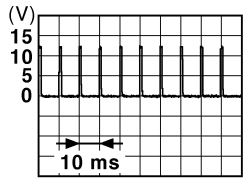
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
A/C auto amp.			
Connector	Terminal		
M66	27	Ground	

JPMIA0012GB

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-80, "BASE AUDIO : Removal and Installation" (Base audio) or HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (BOSE audio without navigation).

NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

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

BCM		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M123	130	M66	27	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	130		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".

NO >> Repair or replace harness.

REAR WINDOW DEFOGGER RELAY

Description

INFOID:0000000008195890

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

Component Function Check

INFOID:0000000008195891

1.CHECK FUNCTION

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger relay power supply circuit function is OK.
NO >> Refer to DEF-16, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195892

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.3, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 1

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

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M123	151	Ground	Rear window defogger switch	ON	0
				OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

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

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

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	151		Not existed

Is the inspection result normal?

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

4.CHECK REAR WINDOW DEFOGGER RELAY

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

Refer to DEF-17, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear window defogger relay.

5.CHECK FUSE BLOCK (J/B)

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace fuse block (J/B).

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

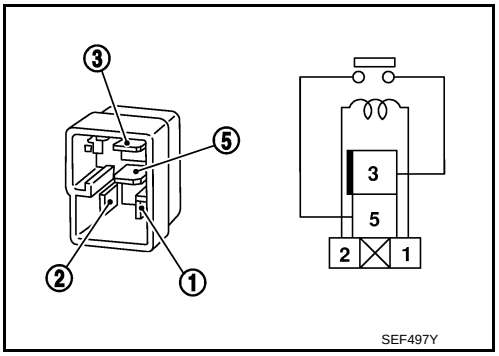
Component Inspection

INFOID:0000000008195893

1.CHECK REAR WINDOW DEFOGGER RELAY

1. Turn ignition switch OFF.
2. Remove rear window defogger relay.
3. Check continuity between rear window defogger relay terminals.

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



Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear window defogger relay.

REAR WINDOW DEFOGGER

Description

INFOID:0000000008195894

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:0000000008195895

1.CHECK REAR WINDOW DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger is OK.
NO >> Refer to DEF-18, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195896

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 20A fuse [No.14, No.15, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Rear window defogger					
Connector	Terminal				
D201	1	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

Rear window defogger		Ground	Continuity
Connector	Terminal		
D107	2		Existed

Is the inspection result normal?

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

4.CHECK REAR WINDOW DEFOGGER CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect condenser connector and rear window defogger connector.
3. Check continuity between condenser (condenser side) connector and rear window defogger harness connector.

Condenser		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
D106	1	D201	1	Existed

4. Check continuity between condenser (condenser side) connector and ground.

Condenser		Ground	Continuity
Connector	Terminal		
D106	1		Not existed

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace condenser. Refer to DEF-73, "Removal and Installation"

5. CHECK REAR WINDOW DEFOGGER CIRCUIT 2

1. Disconnect fuse block (J/B) connector.
2. Check continuity between fuse block (J/B) harness connector and condenser harness connector.

Fuse block (J/B)		Condenser		Continuity
Connector	Terminal	Connector	Terminal	
B6	10G	D106	1	Existed
	11G			

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

Fuse block (J/B)		Ground	Continuity
Connector	Terminal		
B6	10G		Not existed
	11G		

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

6. CHECK FUSE BLOCK (J/B)

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Fuse block (J/B)					
Connector	Terminal				
B6	10G	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0
	11G			ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace fuse block (J/B).

7. CHECK FILAMENT

Check filament.

Refer to DEF-20, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace filament. Refer to DEF-71, "Inspection and Repair".

8. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000008195897

1. CHECK FILAMENT

Check the filament for damage.
Refer to DEF-71, "Inspection and Repair"

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair filament.

REAR WINDOW DEFOGGER ON SIGNAL

Description

INFOID:0000000008195898

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

Component Function Check

INFOID:0000000008195899

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Rear window defogger ON signal function is OK.
NO >> Refer to DEF-21, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195900

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP ON SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
A/C auto amp.					
Connector	Terminal				
M66	26	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-80, "BASE AUDIO : Removal and Installation" (base audio) or HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (Bose audio without navigation).
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP CIRCUIT

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

Fuse block (J/B)		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	M66	26	Existed

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

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

Is the inspection result normal?

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

NO >> Repair or replace harness.

DOOR MIRROR DEFOGGER

Description

INFOID:0000000008195901

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:0000000008195902

1.CHECK DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that both side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Door mirror defogger is OK.
NO >> Refer to DEF-23, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195903

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Fuse block (J/B)					
Connector	Terminal				
M3	9C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0
	10C		Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace fuse block (J/B).

3.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:0000000008195904

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:0000000008195905

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

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

Is the inspection result normal?

YES >> Driver side door mirror defogger is OK.
NO >> Refer to DEF-24, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195906

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Door mirror (driver side)					
Connector	Terminal				
D3	4	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

2.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	10C	D3	4	Existed

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

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

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace door mirror glass (driver side). Refer to GW-20, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:0000000008195907

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:0000000008195908

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Perform Active Test (“REAR DEFOGGER”) with CONSULT.
2. Touch “ON”.
3. Check that the passenger side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.
NO >> Refer to DEF-26, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195909

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Door mirror (passenger side)					
Connector	Terminal				
D33	4	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

2.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER CIRCUIT

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

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	D33	4	Existed

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

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

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> Replace door mirror glass (passenger side). Refer to GW-20, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

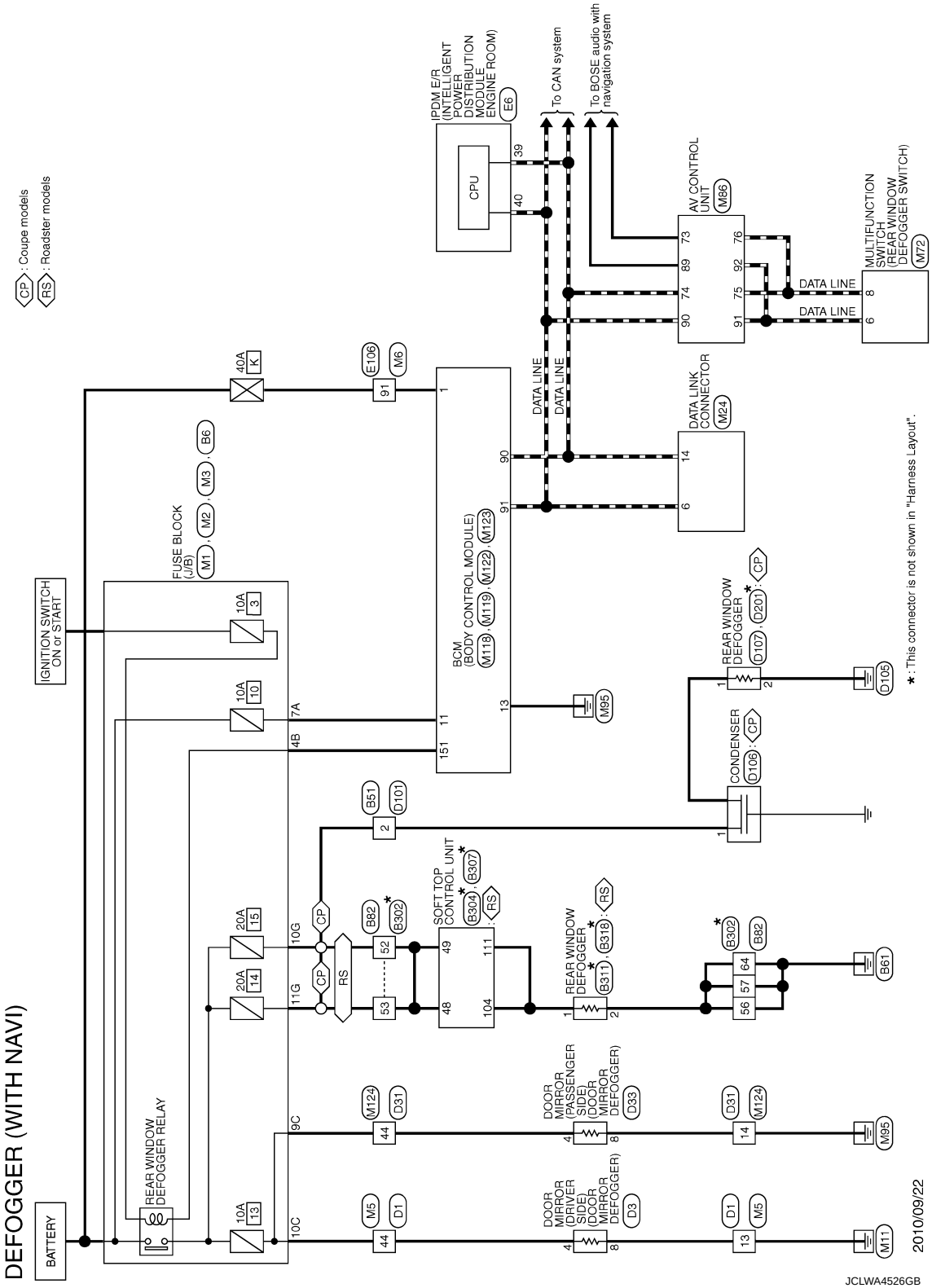
Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

REAR WINDOW DEFOGGER SYSTEM

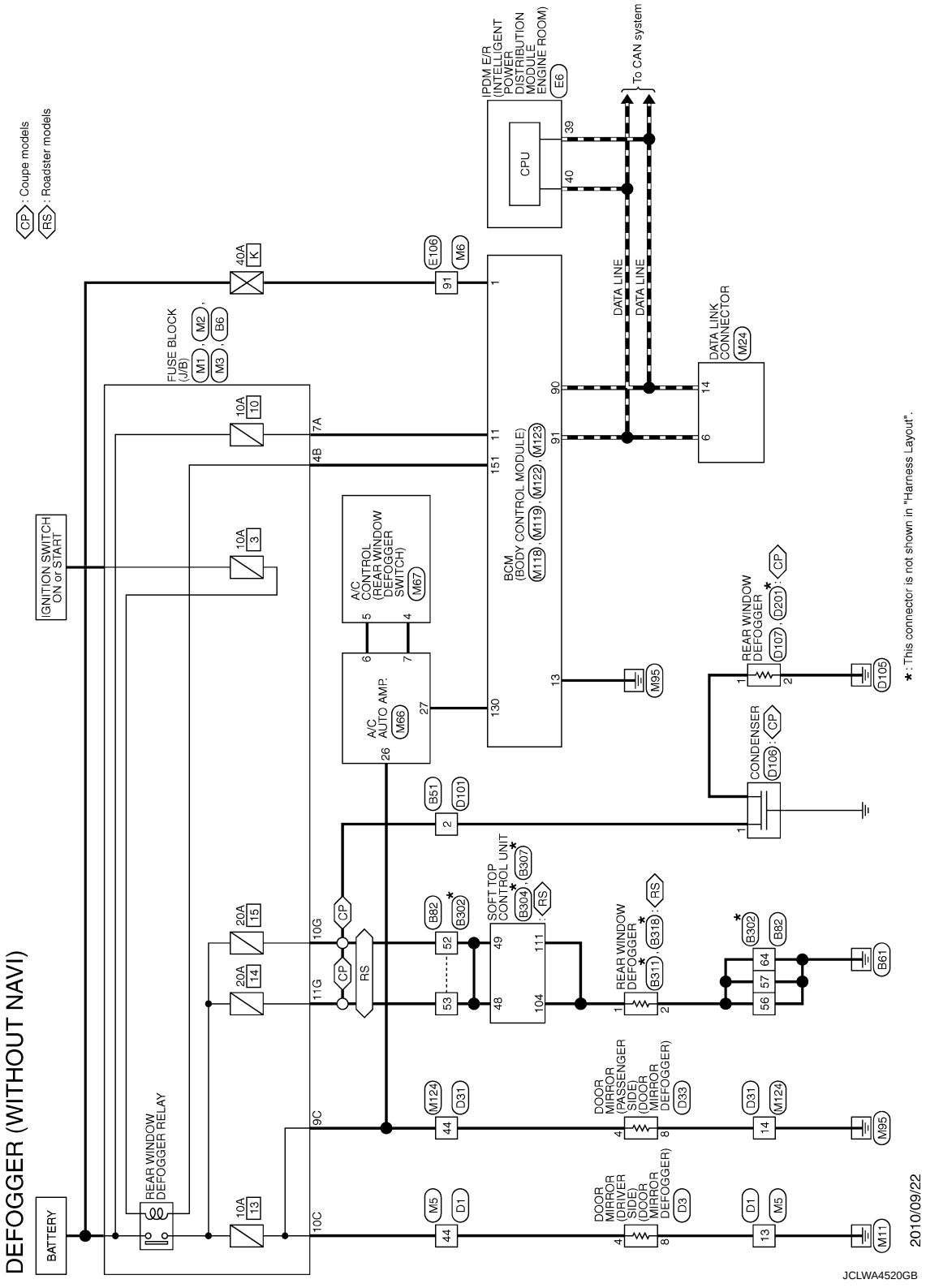
Wiring Diagram - DEFOGGER (WITH NAVI) -

INFOID:0000000008195910



Wiring Diagram - DEFOGGER (WITHOUT NAVI) -

INFOID:0000000008195911



ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000008831269

VALUES ON THE DIAGNOSIS TOOL

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

CONSULT MONITOR ITEM

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

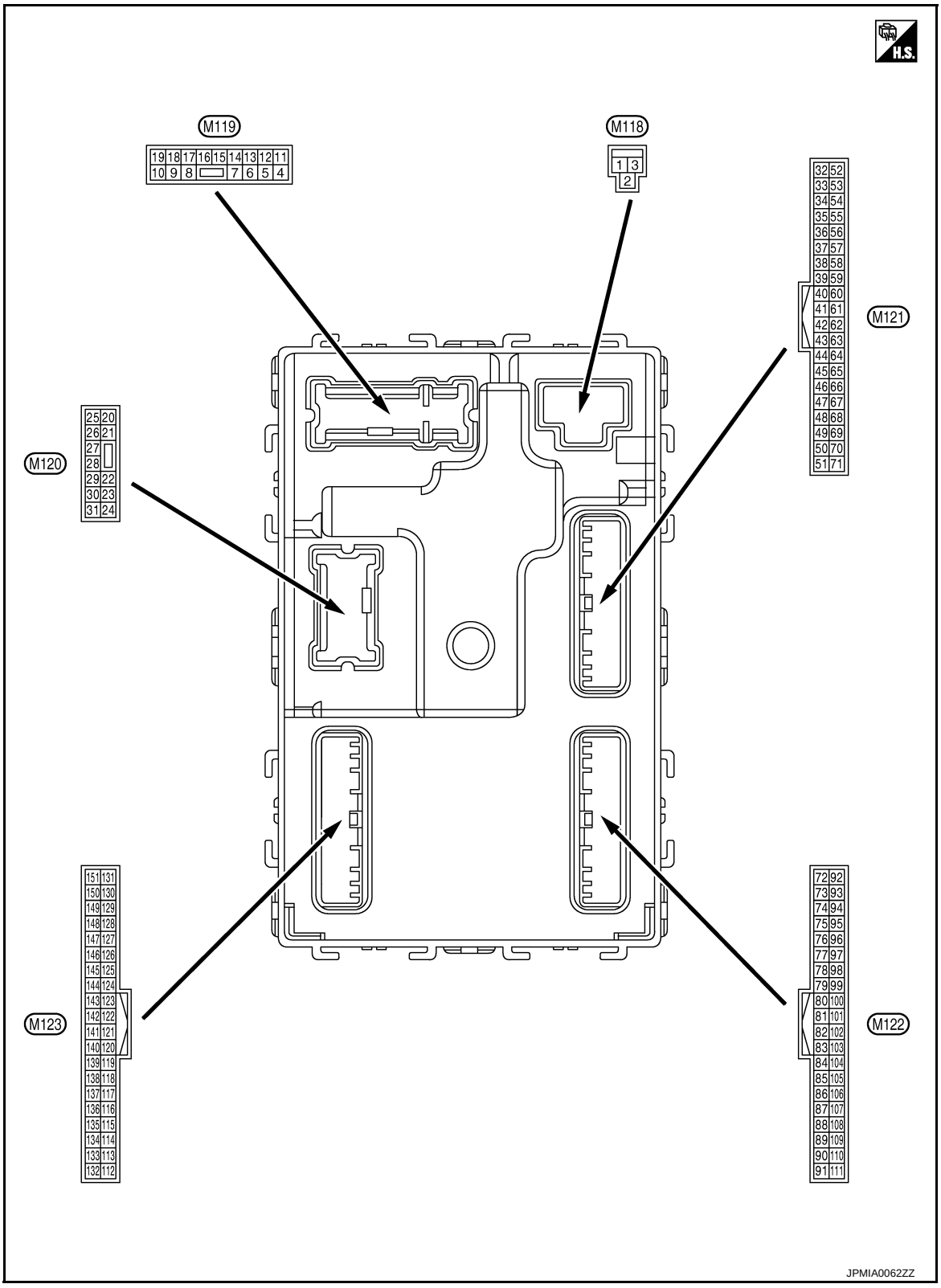
Monitor Item	Condition	Value/Status
DOOR SW-RR	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-RL	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-BK	• Back door closed (Coupe models) • Trunk lid closed (Roadster models)	Off
	• Back door opened (Coupe models) • Trunk lid opened (Roadster models)	On
CDL LOCK SW	Other than door lock and unlock switch LOCK	Off
	Door lock and unlock switch LOCK	On
CDL UNLOCK SW	Other than door lock and unlock switch UNLOCK	Off
	Door lock and unlock 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 OFF	Off
	Hazard switch is ON	On
REAR DEF SW **NOTE:** For models with NAVI this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
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	• Back door opener switch OFF (Coupe models) • Trunk lid opener switch OFF (Roadster models)	Off
	• While the back door opener switch is turned ON (Coupe models) • While the trunk lid opener switch is turned ON (Roadster models)	On
TRNK/HAT MNTR	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD **NOTE:** For Coupe models this item is not monitored.	TRUNK OPEN button of the Intelligent Key is not pressed	Off
	TRUNK OPEN of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On

Monitor Item	Condition	Value/Status
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -RL	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -BD/TR	• Back door request switch is not pressed (Coupe models) • Trunk lid door request switch is not pressed (Roadster models)	Off
	• Back door request switch is pressed (Coupe models) • Trunk lid door request switch is pressed (Roadster models)	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	**NOTE:** The item is indicated, but not monitored.	Off
ACC RLY -F/B	**NOTE:** The item is indicated, but not monitored.	Off
CLUCH SW **NOTE:** For A/T models this item is not monitored.	The clutch pedal is not depressed	Off
	The clutch pedal is depressed	On
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW **NOTE:** For M/T models with Synchro-Rev Match mode this item is not monitored.	• Selector lever in P position (A/T models) • The clutch pedal is depressed (M/T models without SynchroRev Match mode)	Off
	• Selector lever in any position other than P (A/T models) • The clutch pedal is not depressed (M/T models without SynchroRev Match mode)	On
SFT PN/N SW **NOTE:** For roadster M/T models and coupe M/T models without SynchroRev Match mode this item is not monitored.	• Selector lever in any position other than P and N (A/T models) • Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode)	Off
	• Selector lever in P or N position (A/T models) • Control lever in neutral position (Coupe M/T models with SynchroRev Match mode)	On
S/L -LOCK	**NOTE:** The item is indicated but not monitored.	Off
S/L -UNLOCK	**NOTE:** The item is indicated but not monitored.	Off
S/L RELAY-F/B	**NOTE:** The item is indicated but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On

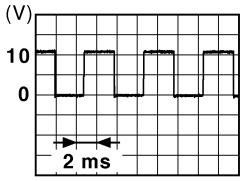
Monitor Item	Condition	Value/Status
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	• Selector lever in any position other than P and N (A/T models) • The clutch pedal is not depressed (M/T models)	Off
	• Selector lever in P or N position (A/T models) • The clutch pedal is depressed (M/T models)	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	**NOTE:** The item is indicated but not monitored.	Off
S/L UNLK-IPDM	**NOTE:** The item is indicated but not monitored.	Off
S/L RELAY-REQ	**NOTE:** The item is indicated but not monitored.	Off
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 (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	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	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key

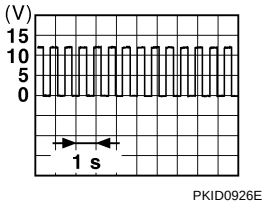
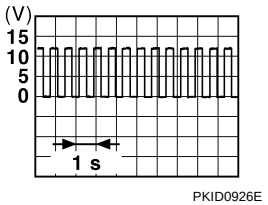
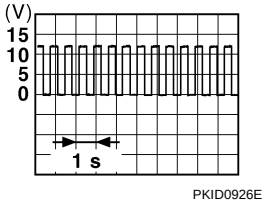
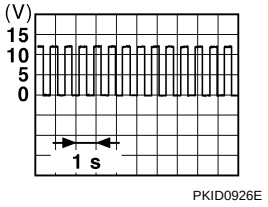
Monitor Item	Condition	Value/Status
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent Key is registered to BCM	Done
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

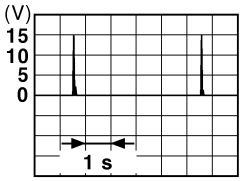
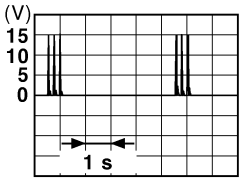
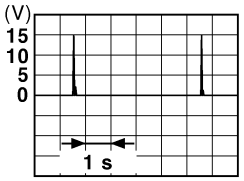
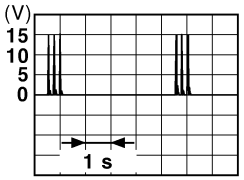
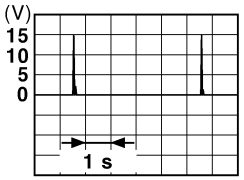
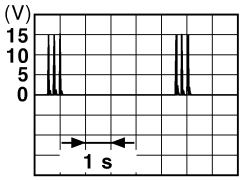
TERMINAL LAYOUT

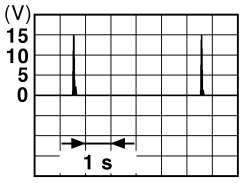
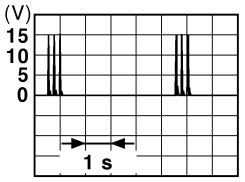
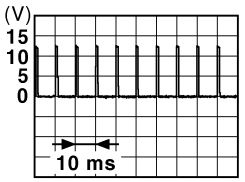
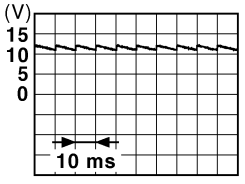


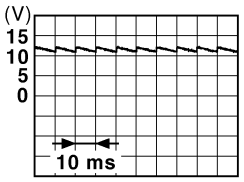
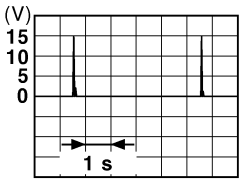
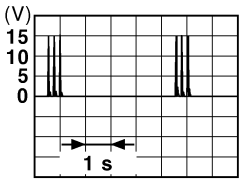
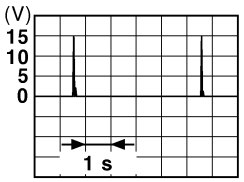
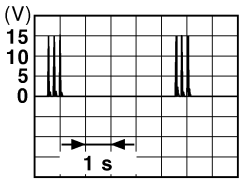
PHYSICAL VALUES

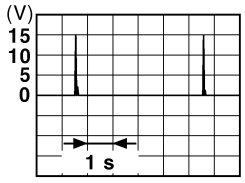
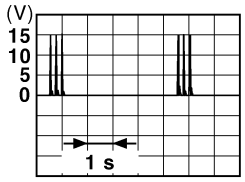
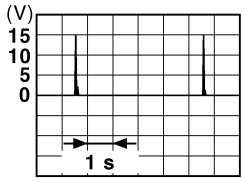
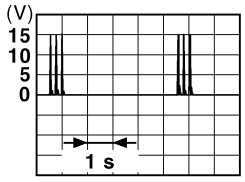
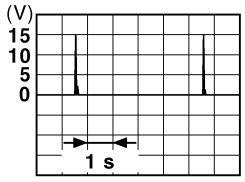
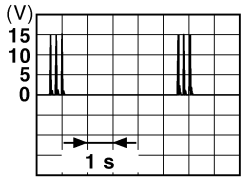
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
4 (R)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		12 V
5 (G)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V
					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)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
11 (BR)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position.  JSNIA0010GB
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC	0 V

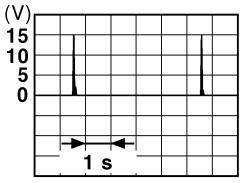
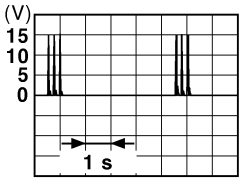
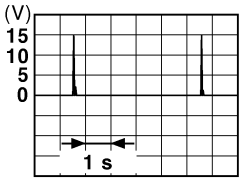
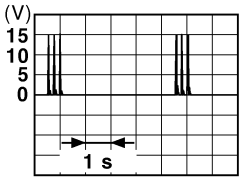
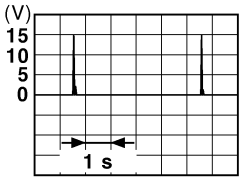
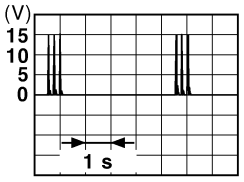
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (O)	Ground	Turn signal LH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (P)	Ground	Interior room lamp control	Output	Interior room lamp	OFF	12 V
					ON	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
23 (L)*1 (Y)*2	Ground	Back door/Trunk lid open	Output	Back door/ Trunk lid	OPEN (Back door/Trunk lid opener actuator is activated)	12 V
					Other than OPEN (Back door/Trunk lid opener actuator is not activated)	0 V
24*8 (O)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
25 (LG)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
30 (R)	Ground	Luggage room/Trunk room lamp	Output	Luggage room/ Trunk room lamp	ON	0 V
					OFF	12 V

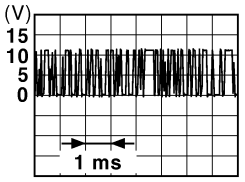
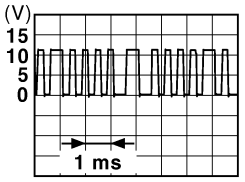
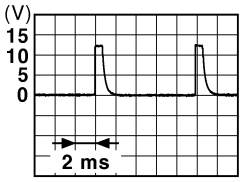
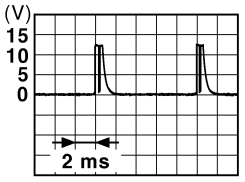
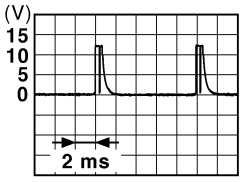
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (G)	Ground	Luggage room/Trunk room antenna (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (R)	Ground	Luggage room/Trunk room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (B)	Ground	Rear bumper antenna (–)	Output	When the back door/trunk lid door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

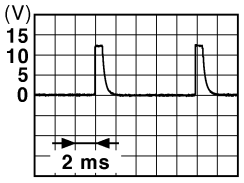
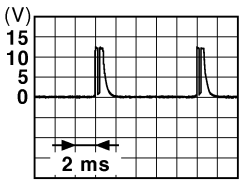
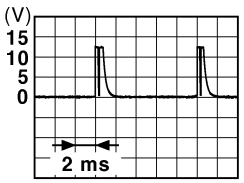
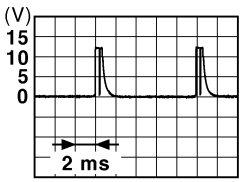
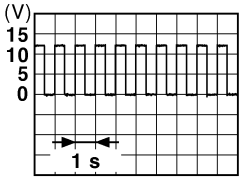
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (W)	Ground	Rear bumper antenna (+)	Output	When the back door/trunk lid door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (V)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON (A/T models)	When selector lever is in P or N position	12 V
					When selector lever is not in P or N position	0 V
				Ignition switch ON (M/T models)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0 V
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (W)	Ground	Back door/Trunk Lid door request switch	Input	Back door/ Trunk lid door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (G)	Ground	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0 V
					Not sounding	12 V
66 (R)	Ground	Back door/Trunk room lamp switch	Input	Back door/ Trunk room lamp switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

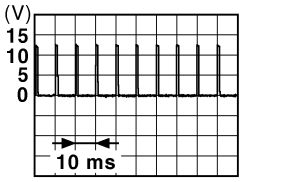
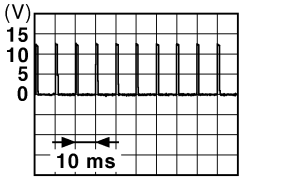
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
72 (L)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
73 (P)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

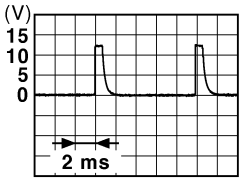
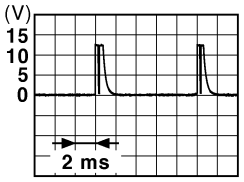
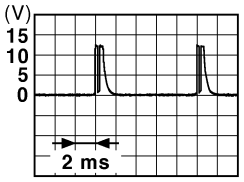
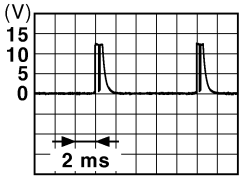
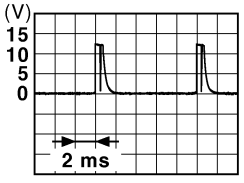
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (SB)	Ground	Passenger door antenna (–)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (–)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

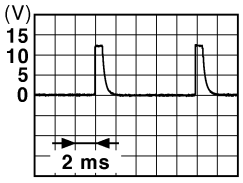
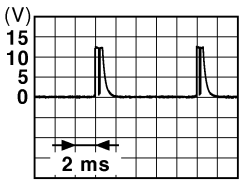
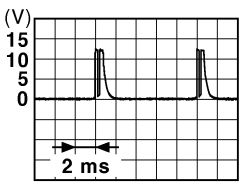
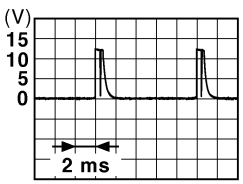
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
78*2 (L)	Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
79*2 (R)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

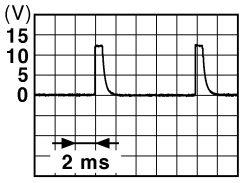
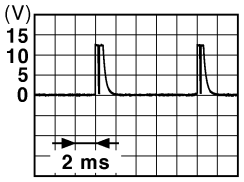
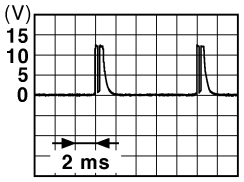
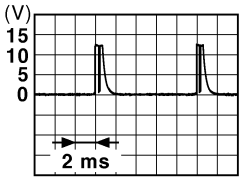
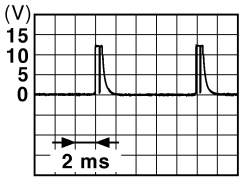
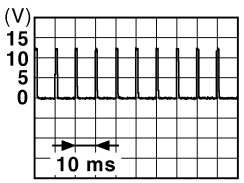
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
83 (GR)	Ground	Remote keyless entry receiver (front) communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on the Intelligent Key		 JMKIA0065GB
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3 V

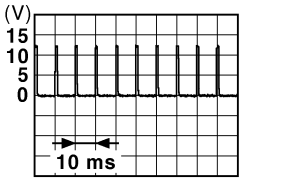
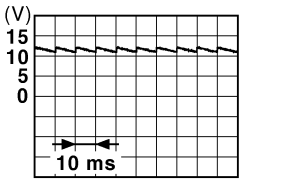
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
90 (P)	Ground	CAN-L	Input/ Output	—		—
91 (L)	Ground	CAN-H	Input/ Output	—		—
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 JPMIA0015GB 6.5 V
					ON	12 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON	0 V

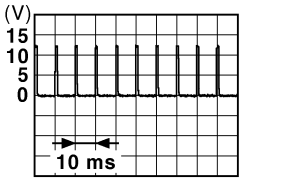
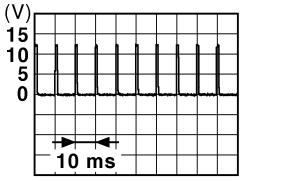
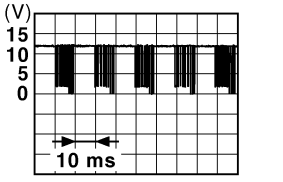
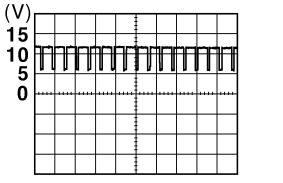
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96*3 (Y)	Ground	A/T shift selector (Detention switch) power supply	Output	—		12 V
99*6 (R)	Ground	Selector lever P position switch (A/T models)	Input	Selector lever	P position	0 V
					Any position other than P	12 V
		Clutch pedal position switch (M/T models without SynchroRev Match mode)		Clutch pedal position switch	OFF (Clutch pedal is depressed)	0 V
					ON (Clutch pedal is not depressed)	Battery voltage
100 (GR)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (O)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch OFF		12 V

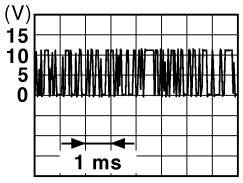
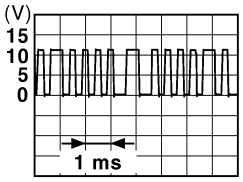
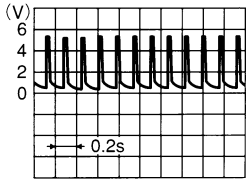
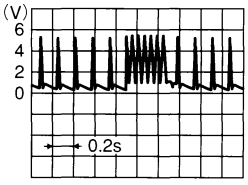
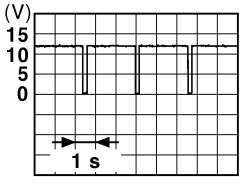
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

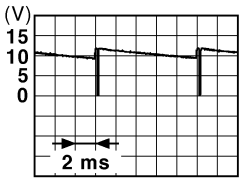
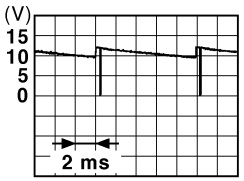
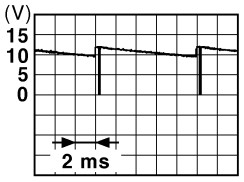
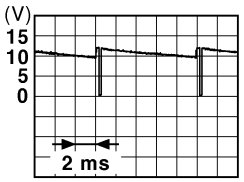
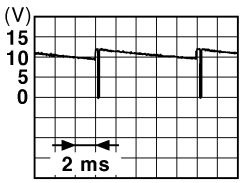
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3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

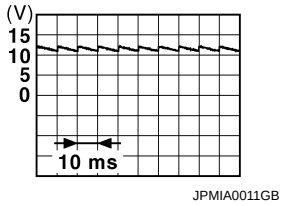
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch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

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
113 (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
114*4 (R)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
					ON (Clutch pedal is depressed)	Battery voltage
115*9 (O)	—	—	—	—		—
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 depressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (R)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot		12 V
				When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
129*2 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1 V
					ON	0 V
130*7 (L)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (Y)*1 (V)*2	Ground	Power window switch and soft top control unit communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		12 V
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

Terminal No. (Wire color) +	Terminal No. (Wire color) –	Description: Signal name	Description: Input/ Output	Condition		Value (Approx.)
139 (L)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch OFF (Remote keyless entry receiver communication)	During waiting	 JMKIA0064GB
					When operating either button on the Intelligent Key	 JMKIA0065GB
				Ignition switch ON (Tire pressure receiver communication)	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
140*5 (G)	Ground	Selector lever P/N position (A/T models)	Input	Selector lever	P or N position	12 V
					Except P and N positions	0 V
		Park/neutral position switch (Coupe M/T models with Synchro-Rev Match mode)		Ignition switch ON	Control lever in neutral position	Battery voltage
					Control lever in any position other than neutral	0 V
141 (Y)	Ground	Security indicator lamp	Output	Security indicator lamp	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	12 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches 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 switches 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 switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	 JPMIA0035GB 10.7 V
					Lighting switch PASS	
					Turn signal switch LH	

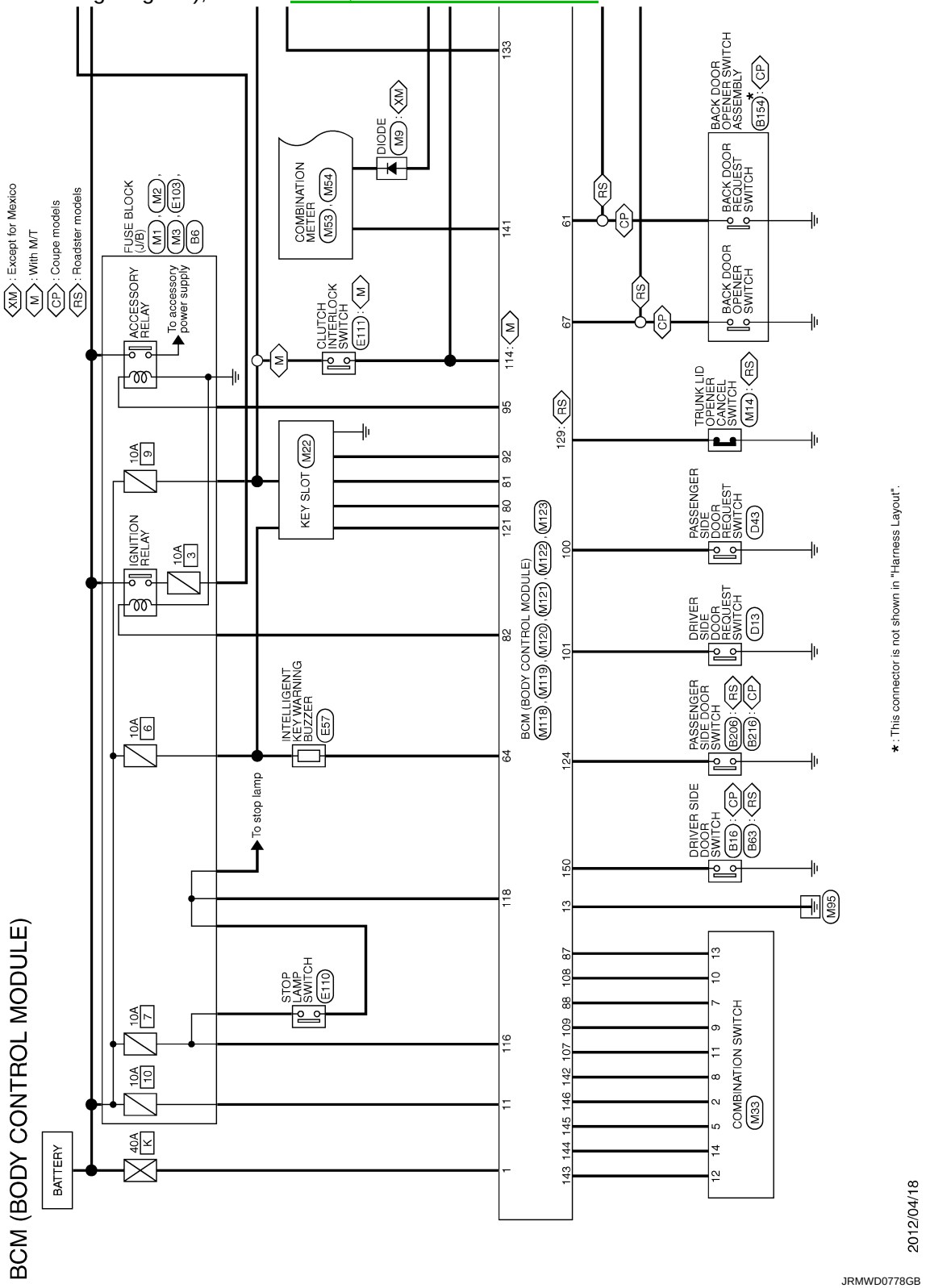
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

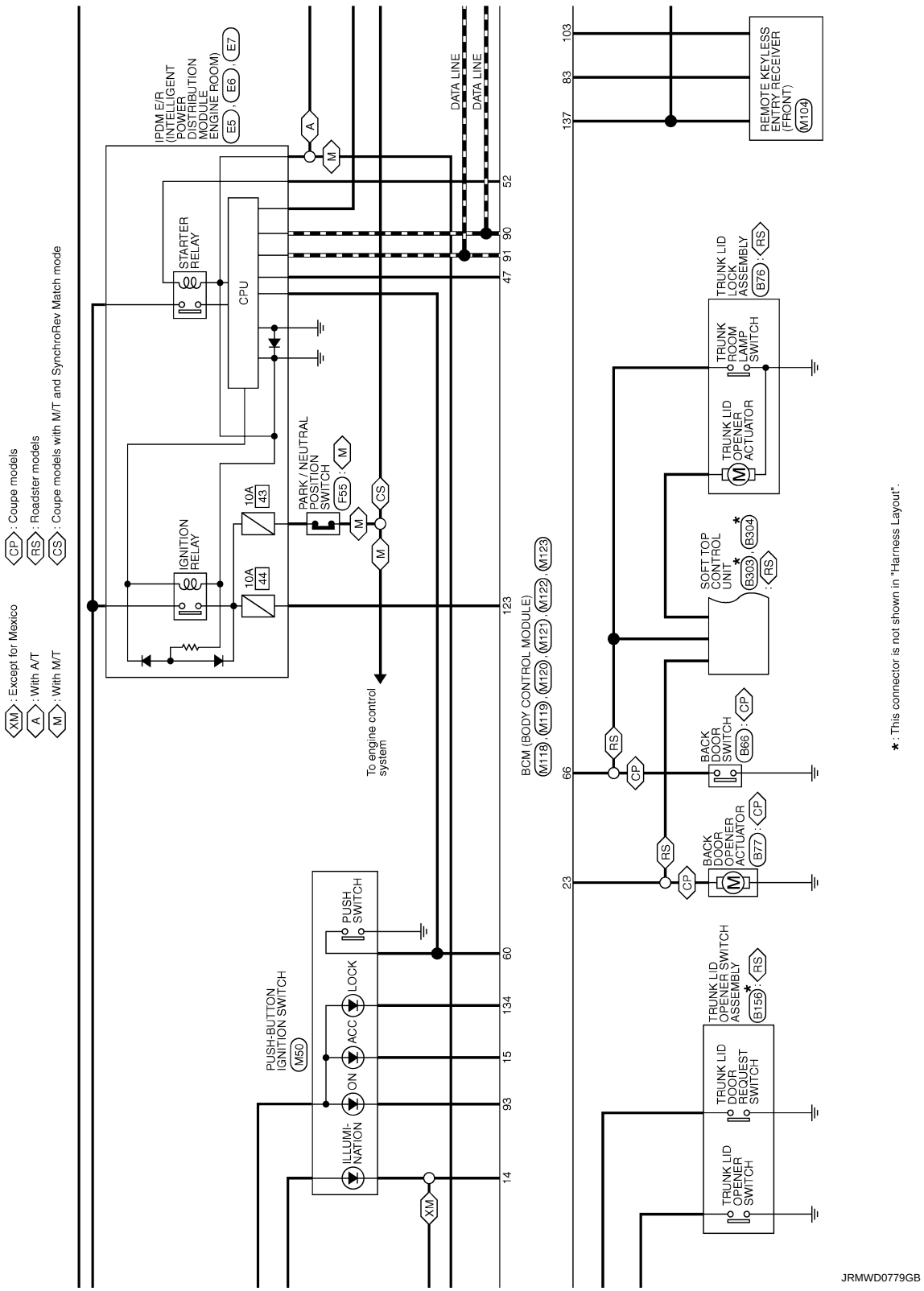
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

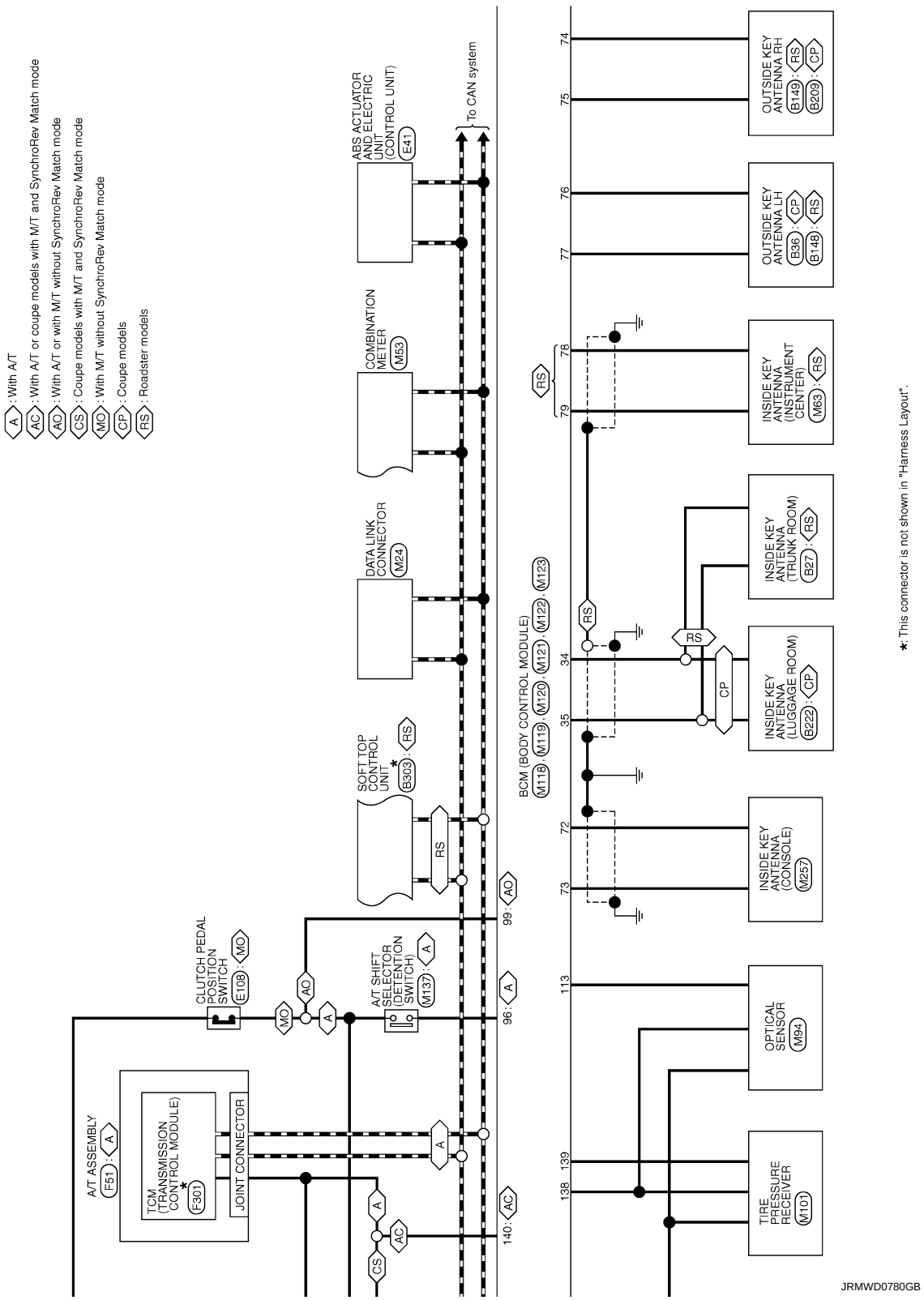
Wiring Diagram - BCM -

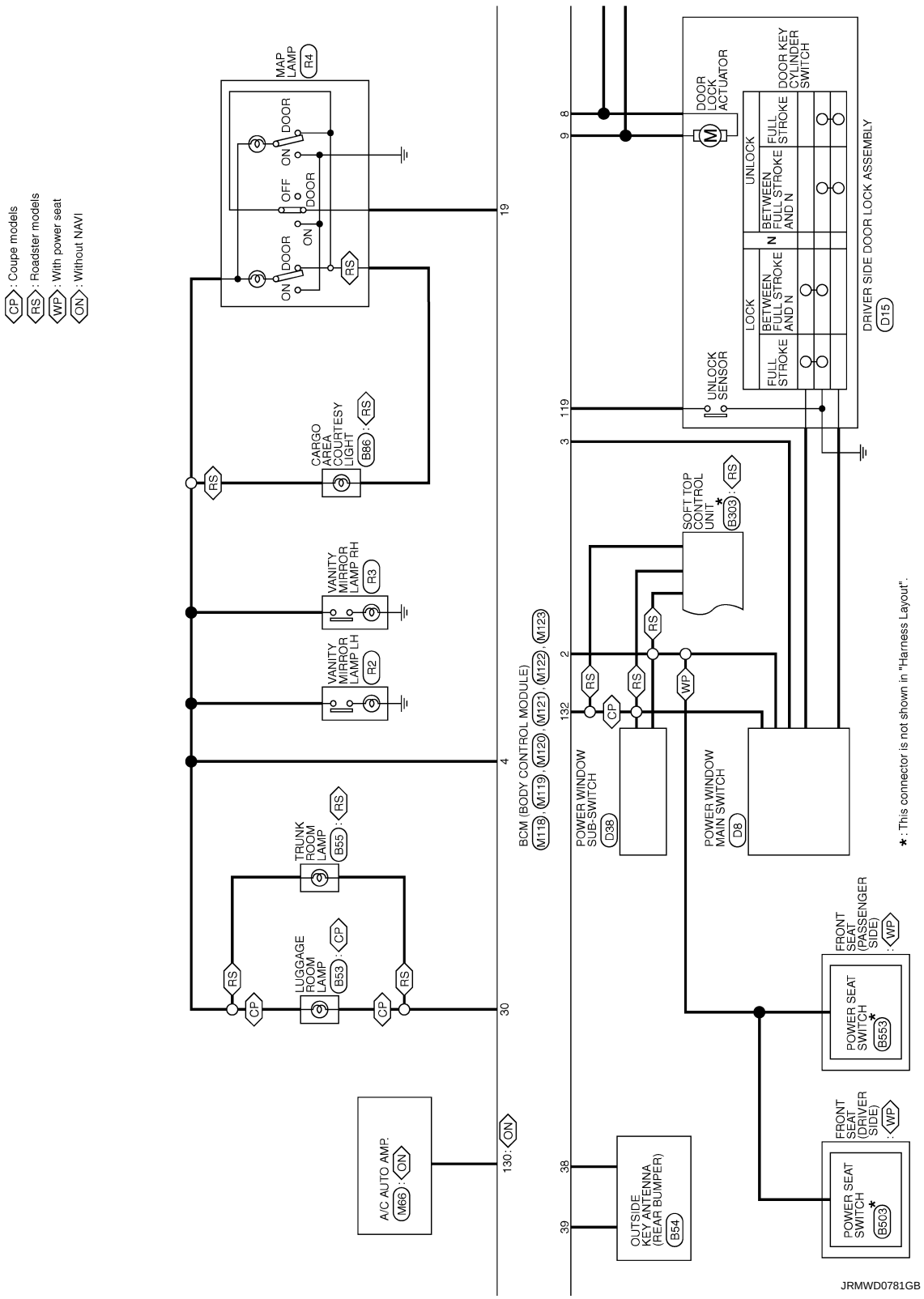
INFOID:0000000008831270

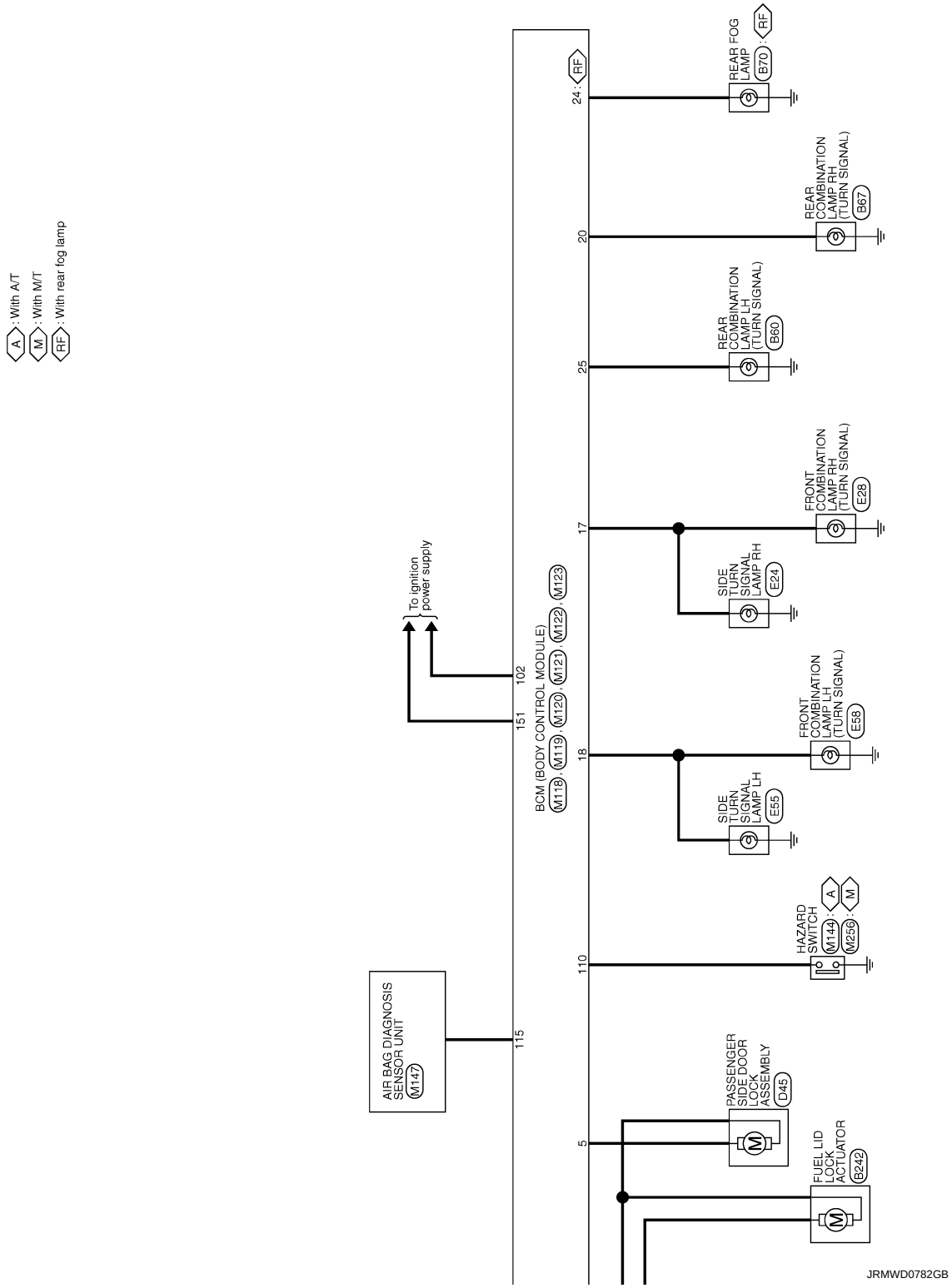
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E5 E6 E7
STARTER RELAY
CPU
IGNITION RELAY
10A 43
10A 44
PARK / NEUTRAL POSITION SWITCH F55
DATA LINE
DATA LINE
To engine control system
BCM (BODY CONTROL MODULE) M118 M119 M120 M121 M122 M123
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
LOCK
ACC
ON
ILLUMI-NATION
REMOTE KEYLESS ENTRY RECEIVER (FRONT) M104
TRUNK LID LOCK ASSEMBLY B76
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
SOFT TOP CONTROL UNIT B303 B304
BACK DOOR SWITCH B66
BACK DOOR OPENER ACTUATOR B77
TRUNK LID OPENER SWITCH ASSEMBLY B158
TRUNK LID DOOR REQUEST SWITCH
TRUNK LID OPENER SWITCH
CP : Coupe models
RS : Roadster models
CS : Coupe models with M/T and SynchroRev Match mode
XM : Except for Mexico
A : With A/T
M : With M/T
* : This connector is not shown in "Harness Layout".
JRMWD0779GB


A : With A/T
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
CS : Coupe models with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
CP : Coupe models
RS : Roadster models
A/T ASSEMBLY
F51 : A
TCM (TRANSMISSION CONTROL MODULE) *
F301
JOINT CONNECTOR
CLUTCH PEDAL POSITION SWITCH
E108 : MO
A/T SHIFT SELECTOR (DETENTION SWITCH)
M137 : A
SOFT TOP CONTROL UNIT *
B303 : RS
DATA LINK CONNECTOR
M24
COMBINATION METER
M53
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
E41
To CAN system
99 : AO
96 : A
140 : AC
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
OPTICAL SENSOR
M94
TIRE PRESSURE RECEIVER
M101
INSIDE KEY ANTENNA (CONSOLE)
M257
INSIDE KEY ANTENNA (LUGGAGE ROOM)
B222 : CP
INSIDE KEY ANTENNA (TRUNK ROOM)
B27 : RS
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M63 : RS
OUTSIDE KEY ANTENNA LH
B36 : CP
B148 : RS
OUTSIDE KEY ANTENNA RH
B149 : RS
B209 : CP
*: This connector is not shown in "Harness Layout".
JRMWD0780GB


CP : Coupe models
RS : Roadster models
WP : With power seat
ON : Without NAVI
MAP LAMP R4
DOOR ON
OFF
DOOR ON
DOOR ON
RS
CARGO AREA COURTESY LIGHT B86 : RS
VANITY MIRROR LAMP RH R3
VANITY MIRROR LAMP LH R2
TRUNK ROOM LAMP B55 : RS
LUGGAGE ROOM LAMP B53 : CP
A/C AUTO AMP. M66 ON
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
DRIVER SIDE DOOR LOCK ASSEMBLY D15
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
SOFT TOP CONTROL UNIT* B309
POWER WINDOW SUB-SWITCH D38
POWER WINDOW MAIN SWITCH D8
FRONT SEAT (PASSENGER SIDE) : WP
POWER SEAT SWITCH* B553
FRONT SEAT (DRIVER SIDE) : WP
POWER SEAT SWITCH* B503
OUTSIDE KEY ANTENNA (REAR BUMPER) B54
*: This connector is not shown in "Harness Layout".
JRMWD0781GB



Fail-safe

INFOID:0000000008831271

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled • Status 1 - Clutch switch signal (CAN from ECM): ON - Clutch interlock switch signal: OFF (0 V) • Status 2 - Clutch switch signal (CAN from ECM): OFF - Clutch interlock switch signal: ON (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000008831272

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING

Priority	DTC
4	• 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 • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: BCM • B2615: BCM • B2616: BCM • B2617: BCM • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E8: CLUTCH SW • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• 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 • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000008831273

NOTE:
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to DEF-79, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	BCS-49
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-50
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-51

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-46
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-49
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-50
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-52
B2195: ANTI SCANNING	×	—	—	—	SEC-53
B2553: IGNITION RELAY	—	×	—	—	PCS-50
B2555: STOP LAMP	—	×	—	—	SEC-54
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-56
B2557: VEHICLE SPEED	×	×	×	—	SEC-58
B2560: STARTER CONT RELAY	×	×	×	—	SEC-59
B2562: LOW VOLTAGE	—	×	—	—	BCS-52
B2601: SHIFT POSITION	×	×	×	—	SEC-60
B2602: SHIFT POSITION	×	×	×	—	SEC-63
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69
B2605: PNP SW	×	×	×	—	SEC-71
B2608: STARTER RELAY	×	×	×	—	SEC-73
B260A: IGNITION RELAY	×	×	×	—	PCS-52
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-75
B2614: BCM	—	×	×	—	PCS-54
B2615: BCM	—	×	×	—	PCS-57
B2616: BCM	—	×	×	—	PCS-60
B2617: BCM	×	×	×	—	SEC-79
B2618: BCM	×	×	×	—	PCS-63
B261A: PUSH-BTN IGN SW	—	×	×	—	PCS-64
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-82
B2621: INSIDE ANTENNA	—	×	—	—	DLK-228
B2622: INSIDE ANTENNA	—	×	—	—	•DLK-59 (Coupe) •DLK-230 (Roadster)
B2623: INSIDE ANTENNA	—	×	—	—	•DLK-61 (Coupe) •DLK-232 (Roadster)
B26E8: CLUTCH SW	×	×	×	—	SEC-76
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-78
C1704: LOW PRESSURE FL	—	—	—	×	WT-20
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1708: [NO DATA] FL	—	—	—	×	WT-22
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-25
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-27
C1734: CONTROL UNIT	—	—	—	×	WT-29

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000008195917

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DEF-13, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

2. CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
- With Navigation: Refer to DEF-14, "WITH NAVIGATION : Component Function Check".
- Without Navigation: Refer to DEF-14, "WITHOUT NAVIGATION : Component Function Check".

Is the inspection result normal?

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

3. CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-16, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4. CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to DEF-18, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000008195918

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DEF-13, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
Refer to DEF-14, "WITH NAVIGATION : Component Function Check"(With Navi) or DEF-14, "WITHOUT NAVIGATION : Component Function Check"(Without Navi).

Is the inspection result normal?

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

3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-16, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

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

Diagnosis Procedure

INFOID:0000000008195919

1.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to DEF-18, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE

BOTH SIDES

BOTH SIDES : Diagnosis Procedure

INFOID:0000000008195920

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.
Refer to DEF-23, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008195921

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-24, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008195922

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.
Refer to DEF-26, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

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

Diagnosis Procedure

INFOID:0000000008195923

1.CHECK AV CONTROL FUNCTION

Check that the AV control unit is operating normally. Refer to AV-173, "Work Flow".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

WITH NAVIGATION

WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000008195924

1.CHECK REAR WINDOW DEFOGGER OPERATION

Check rear window defogger operation.

Is the inspection result normal?

YES >> Check AV control system. Refer to AV-173, "Work Flow".
NO >> Check rear window defogger system. Refer to DEF-5, "Work Flow".

WITHOUT NAVIGATION

WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000008195925

1.CHECK A/C CONTROLLER FUNCTION

Check that the A/C controller is operating normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check A/C control system. Refer to HAC-5, "Work Flow".

2.CHECK REAR WINDOW DEFOGGER ON SIGNAL

Check rear window defogger ON signal.
Refer to DEF-21, "Component Function Check".

Is the inspection result normal?

YES >> Replace A/C controller (rear window defogger switch). Refer to HAC-78, "BASE AUDIO : Removal and Installation" (Base audio) or HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (BOSE audio without navigation).
NO >> Repair or replace the malfunctioning parts.

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000008195926

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR USA AND CANADA : Precaution for Battery Service

INFOID:0000000008195927

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

FOR MEXICO

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

INFOID:0000000008195928

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

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Always observe the following items for preventing accidental activation.

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- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR MEXICO : Precaution for Battery Service

INFOID:0000000008195929

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

REMOVAL AND INSTALLATION

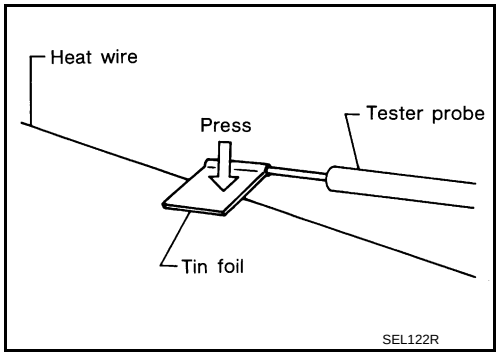
FILAMENT

Inspection and Repair

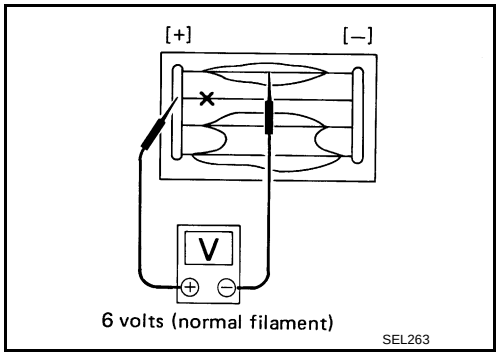
INFOID:0000000008195930

INSPECTION

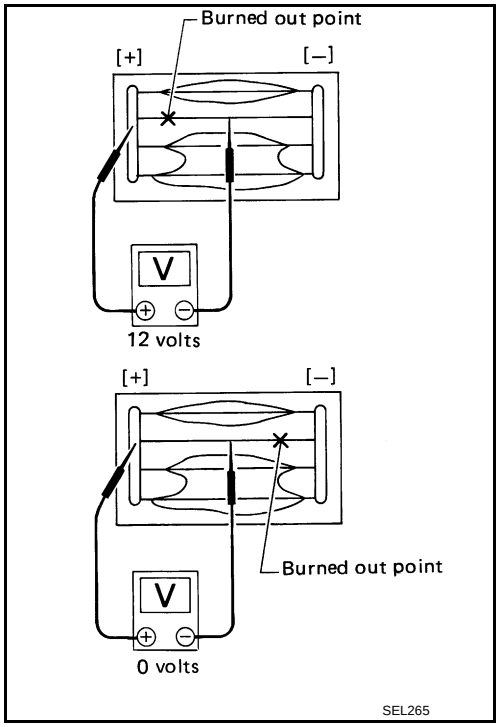
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



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



REPAIR

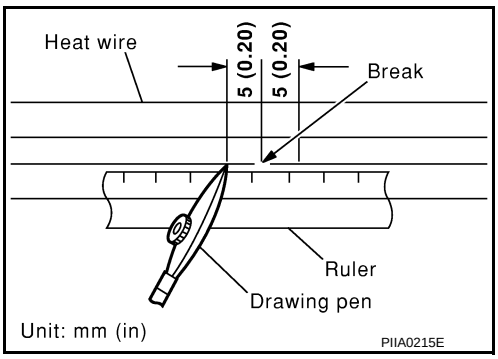
REPAIR EQUIPMENT

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

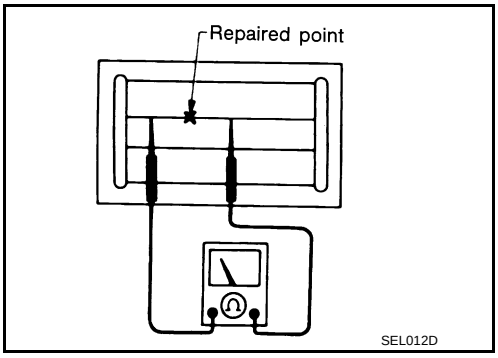
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

REPAIRING PROCEDURE

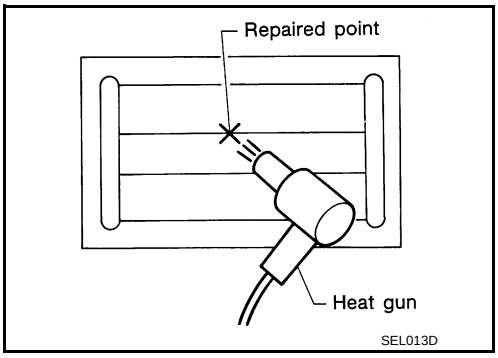
1. Wipe broken heat wire and its surrounding area clean with a cloth dampened in alcohol.
2. Apply a small amount of conductive silver composition to tip of drawing pen.
   Shake silver composition container before use.
3. Place ruler on glass along broken line. Deposit conductive silver composition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



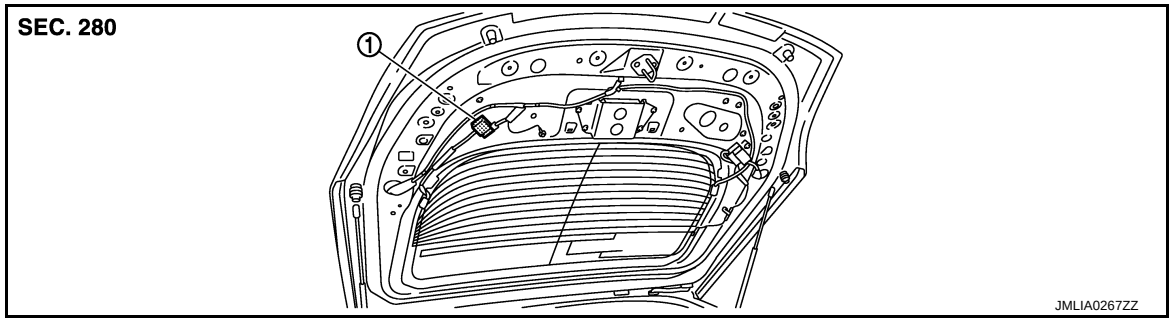
5. Apply a constant stream of hot air directly to the repaired area for approximately 20 minutes with a heat gun. A minimum distance of 3 cm (1.2 in) should be kept between repaired area and hot air outlet.
   If a heat gun is not available, let the repaired area dry for 24 hours.



CONDENSER

Exploded View

INFOID:0000000008195931



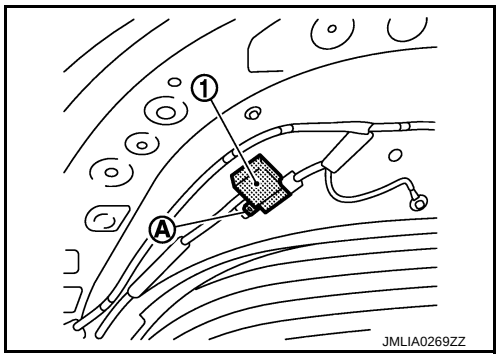
1. Condenser

Removal and Installation

INFOID:0000000008195932

REMOVAL

1. Remove the back door finisher lower.
   Refer to INT-33, "Removal and Installation".
2. Remove bolt (A), and then remove condenser (1) from the vehicle body.



INSTALLATION

Install in the reverse order of removal.

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000008195933

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

Perform self-diagnosis with CONSULT.

Are any DTC detected?

YES >> Refer to BCS-88, "DTC Index".
NO >> GO TO 3.

3.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes.
Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 4.

4.IDENTIFY THE MALFUNCTIONING SYSTEM WITH “SYMPTOM DIAGNOSIS”

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

>> GO TO 5.

5.IDENTIFY MALFUNCTIONING PARTS WITH “COMPONENT DIAGNOSIS”

Perform the diagnosis with “Component diagnosis” of the applicable system.

>> GO TO 6.

6.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 7.

7.FINAL CHECK

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

Are all malfunctions corrected?

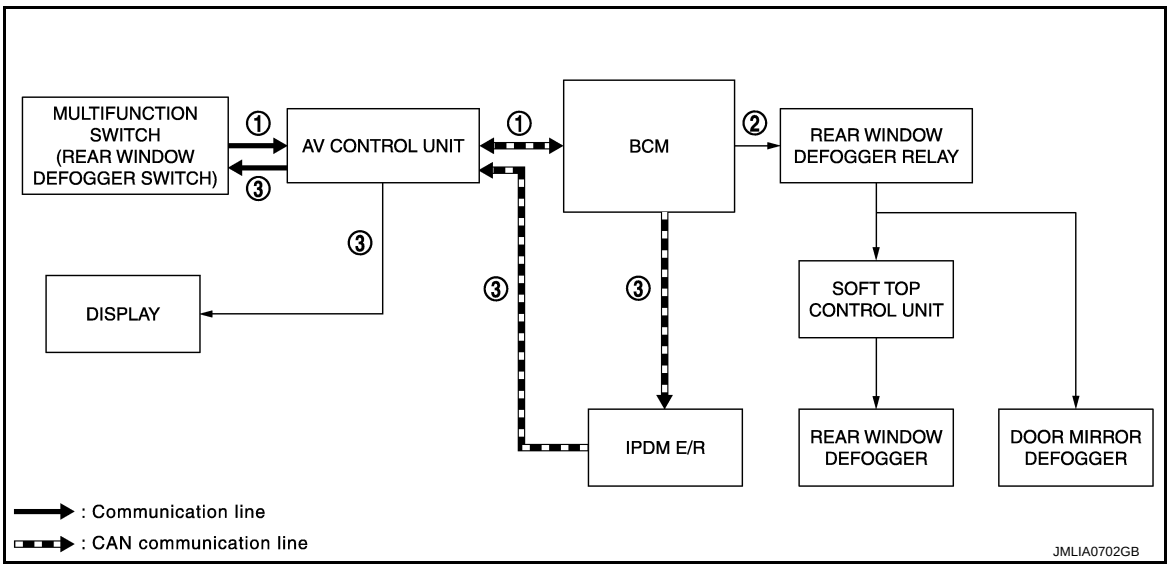
YES >> INSPECTION END
NO >> GO TO 4.

SYSTEM DESCRIPTION

REAR WINDOW DEFOGGER SYSTEM
WITH NAVIGATION

WITH NAVIGATION : System Diagram

INFOID:0000000008195934



1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

WITH NAVIGATION : System Description

INFOID:0000000008195935

OPERATION DESCRIPTION

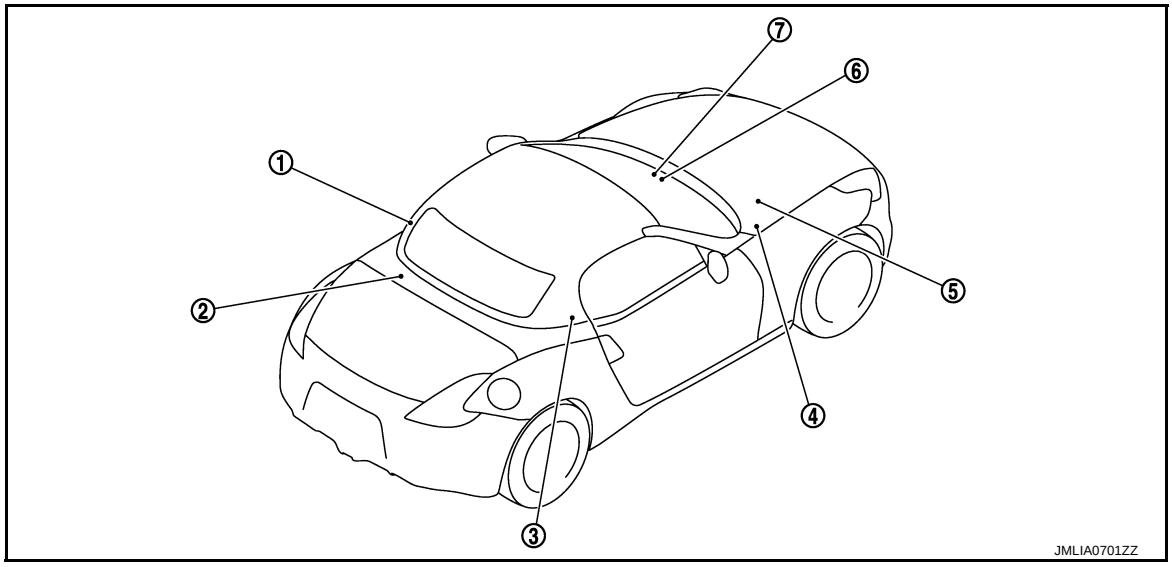
- Turn rear window defogger switch ON when the ignition switch is ON. Then multifunction switch (rear window defogger switch) transmits rear window defogger switch signal to AV control unit via AV communication. AV control unit transmits rear window defogger switch signal to BCM via CAN communication.
- BCM turns rear window defogger relay ON and transmits rear window defogger ON signal to IPDM E/R via CAN communication when rear window defogger switch signal is received.
- Door mirror defoggers are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay sends power supply to soft top control unit.
- Soft top control unit detects roof state and controls rear window defogger operation.
- IPDM E/R transmits rear window defogger ON signal to AV control unit via CAN communication.
- When receiving the signal, AV control unit indicates rear defogger ON on the display. At the same time, AV control unit transmits rear defogger ON signal to multifunction switch (rear window defogger switch) via AV communication and illuminates rear window defogger switch indicator.

TIMER FUNCTION

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

WITH NAVIGATION : Component Parts Location

INFOID:0000000008195936



1. Rear window defogger connector
2. Soft top control unit
   Refer to RF-11, "Component Parts Location".
3. Rear window defogger connector
4. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
5. BCM
   Refer to BCS-10, "Component Parts Location".
6. AV control unit
   Refer to AV-126, "Component Parts Location".
7. Multifunction switch (rear window defogger switch)

WITH NAVIGATION : Component Description

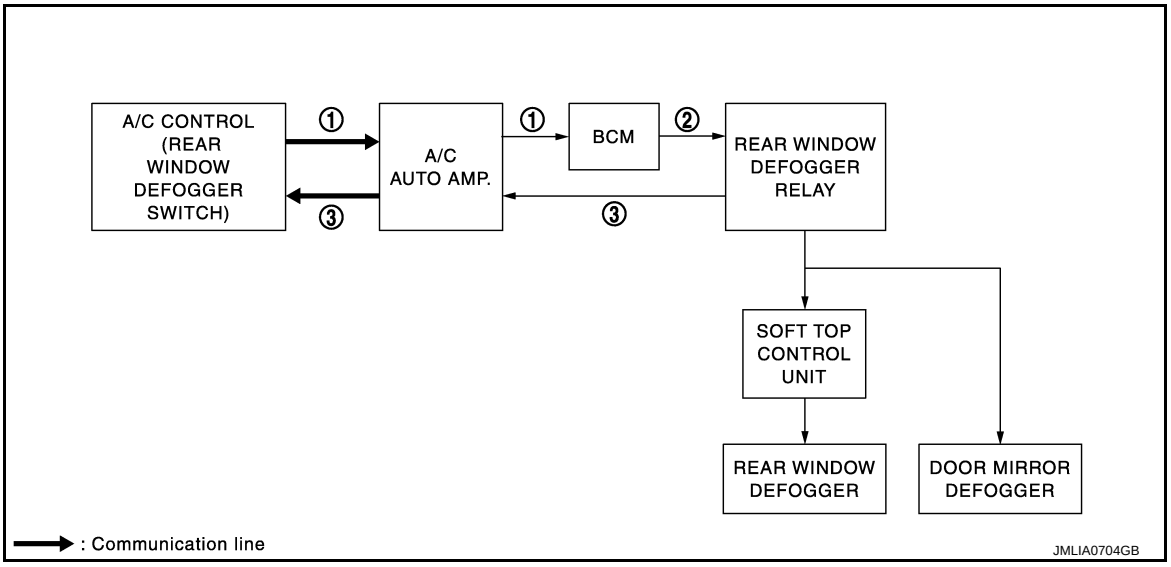
INFOID:0000000008195937

Multifunction switch (Rear window defogger switch)	• The rear window defogger switch is installed. • Turns the indicator lamp ON when detecting the operation of rear window defogger relay.
AV control unit	Displays the rear window defogger is ON on the display when detecting the operation of rear window defogger relay.
BCM	• Operates the rear window defogger relay when receiving rear window defogger switch signal. • Performs the timer control of rear window defogger relay.
Rear window defogger relay	• Operates the door mirror defoggers with the control signal from BCM. • Power is supplied to the soft top control unit (rear window defogger) with the control signal from BCM.
Door mirror defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.
Soft top control unit	Soft top control unit detects roof state and controls rear window defogger operation.
Rear window defogger	Heats the heating wire with the power supply from the soft top control unit to prevent the rear window from fogging up.
IPDM E/R	Transmits rear window defogger ON signal to AV control unit via CAN communication.

WITHOUT NAVIGATION

WITHOUT NAVIGATION : System Diagram

INFOID:0000000008195938



1. Rear window defogger switch signal
2. Rear window defogger relay ON signal
3. Rear window defogger ON signal

WITHOUT NAVIGATION : System Description

INFOID:0000000008195939

OPERATION DESCRIPTION

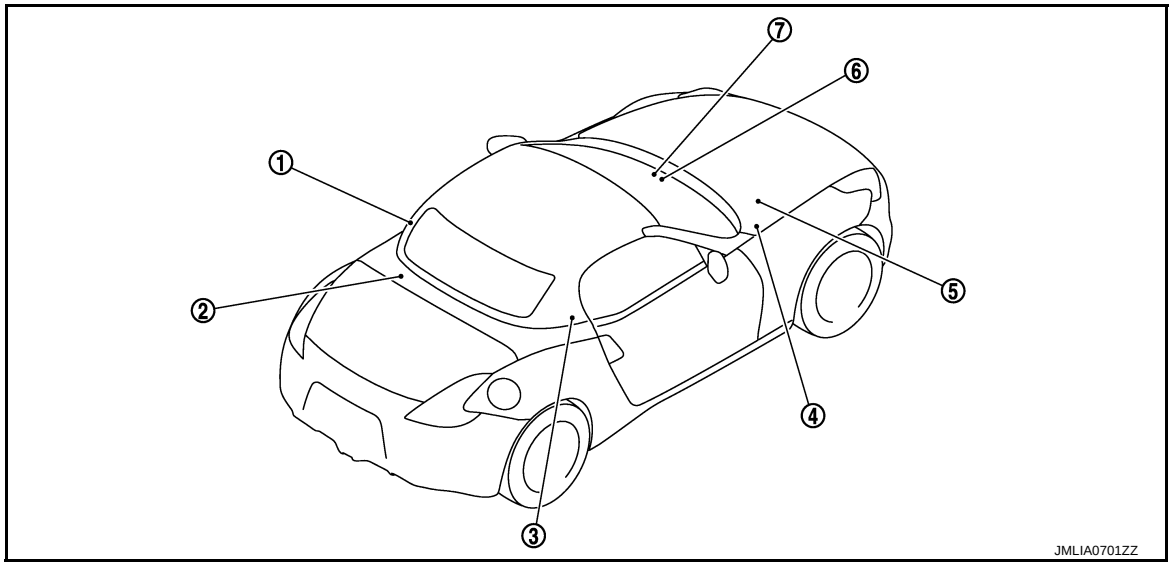
- Turn rear window defogger switch ON when the ignition switch is ON. Then A/C control (rear window defogger switch) transmits rear window defogger switch signal to A/C auto amp. and BCM.
- BCM turns rear window defogger relay ON when rear window defogger switch signal is received.
- Door mirror defoggers are supplied with power and operate when rear window defogger relay turns ON.
- Rear window defogger relay sends power supply to soft top control unit.
- Soft top control unit detects roof state and controls rear window defogger operation.
- Rear window defogger relay transmits rear window defogger ON signal to A/C auto amp. when rear window defogger operates.
- At the same time, A/C auto amp. transmits rear defogger ON signal to A/C controller (rear window defogger switch) and illuminates rear window defogger switch indicator.

TIMER FUNCTION

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

WITHOUT NAVIGATION : Component Parts Location

INFOID:0000000008195940



1. Rear window defogger connector
2. Soft top control unit
   Refer to RF-11, "Component Parts Location".
3. Rear window defogger connector
4. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
5. BCM
   Refer to BCS-10, "Component Parts Location".
6. A/C auto amp.
   Refer to HAC-23, "Component Parts Location".
7. A/C control (rear window defogger switch)

WITHOUT NAVIGATION : Component Description

INFOID:0000000008195941

A/C control (Rear window defogger switch)	• The rear window defogger switch is installed. • Turns the indicator lamp ON when detecting the operation of rear window defogger relay.
A/C auto amp.	Transmit rear window defogger switch signal to BCM via CAN communication.
BCM	• Operates the rear window defogger relay with the operation of rear window defogger switch. • Performs the timer control of rear window defogger relay.
Rear window defogger relay	• Operates the door mirror defoggesr with the control signal from BCM. • Power is supplied to the soft top control unit (rear window defogger) with the control signal from BCM.
Door mirror defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the door mirror from fogging up.
Soft top control unit	Soft top control unit detects roof state and controls rear window defogger operation.
Rear window defogger	Heats the heating wire with the power supply from the rear window defogger relay to prevent the rear window from fogging up.

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008831268

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION
BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

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

NOTE:

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

FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power supply position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK”* to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”*
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”*.) to low power consumption mode
	LOCK		Power supply position is “LOCK”*
	OFF		Power supply position is “OFF” (Ignition switch OFF)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

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

REAR WINDOW DEFOGGER

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

INFOID:0000000008195943

DATA MONITOR
NOTE:

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

Monitor Item	Description
REAR DEF SW	• Without navigation: Displays “Press (ON)/other (OFF)” status determined with the rear window defogger switch • With navigation: 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	Rear window defogger operates when “ON” on CONSULT screen is touched

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000008195944

1.CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Battery power supply	K
	10

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END
NO >> Repair harness or connector.

REAR WINDOW DEFOGGER SWITCH

WITH NAVIGATION

WITH NAVIGATION : Description

INFOID:0000000008195945

- The rear window defogger or door mirror defogger (with mirror defogger) are operated by turning the rear window defogger switch ON.
- The indicator lamp in the rear window defogger illuminates when the rear window defogger or door mirror defogger (with mirror defogger) are operating.

WITH NAVIGATION : Component Function Check

INFOID:0000000008195946

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-83, "WITH NAVIGATION : Diagnosis Procedure"

WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000008195947

1.CHECK MULTIFUNCTION SWITCH (REAR WINDOW DEFOGGER SWITCH)

Check multifunction switch (rear window defogger switch) operate. Refer to AV-13, "Diagnosis Description" (Base audio) or AV-138, "Description" (BOSE audio).

Is the inspection result normal?

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

WITHOUT NAVIGATION

WITHOUT NAVIGATION : Description

INFOID:0000000008195948

- The rear window defogger or door mirror defogger (with mirror defogger) are operated by turning the rear window defogger switch ON.
- The indicator lamp in the rear window defogger illuminates when the rear window defogger or door mirror defogger (with mirror defogger) are operating.

WITHOUT NAVIGATION : Component Function Check

INFOID:0000000008195949

1.CHECK FUNCTION

With CONSULT

1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” or “BCM” using CONSULT.
3. Select “REAR DEF SW” in “DATA MONITOR” mode.
4. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
REAR DEF SW	Rear window defogger switch	ON	On
		OFF	Off

Is the inspection result normal?

YES >> Rear window defogger switch function is OK.
NO >> Refer to DEF-83, "WITHOUT NAVIGATION : Diagnosis Procedure".

WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000008195950

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

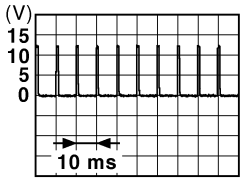
Check A/C control system.
Refer to HAC-5, "Work Flow".

Is the inspection result normal?

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

2.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Signal (Reference value)
A/C auto amp.			
Connector	Terminal		
M66	27	Ground	 JPMIA0012GB

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation".
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER SWITCH CIRCUIT

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

BCM		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M123	130	M66	27	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	130		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-95, "Removal and Installation".
NO >> Repair or replace harness.

REAR WINDOW DEFOGGER RELAY

Description

INFOID:0000000008195951

- Operates the door mirror defogger (with door mirror defogger) with the control signal from BCM.
- Power is supplied to the soft top control unit (rear window defogger) with the control signal from BCM.

Component Function Check

INFOID:0000000008195952

1.CHECK FUNCTION

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger relay power supply circuit function is OK.
NO >> Refer to DEF-85, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195953

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.3, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 1

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

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M123	151	Ground	Rear window defogger switch	ON	0
				OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER RELAY CIRCUIT 2

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

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

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	151		Not existed

Is the inspection result normal?

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

4.CHECK REAR WINDOW DEFOGGER RELAY

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

Refer to DEF-86, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace rear window defogger relay.

5.CHECK FUSE BLOCK (J/B)

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace fuse block (J/B).

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident"

>> INSPECTION END

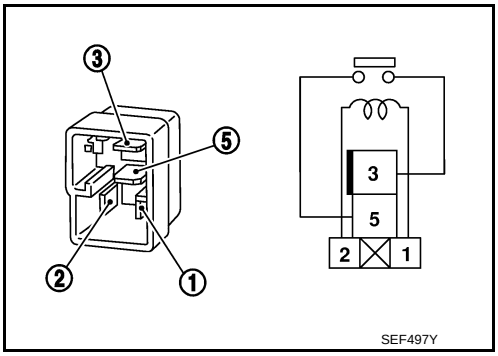
Component Inspection

INFOID:0000000008195954

1.CHECK REAR WINDOW DEFOGGER RELAY

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

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



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Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace rear window defogger relay.

SOFT TOP CONTROL UNIT

Description

INFOID:0000000008195955

Soft top control unit detects roof state and controls rear defogger.

Component Function Check

INFOID:0000000008195956

1.CHECK REAR WINDOW DEFOGGER

With CONSULT

1. Turn ignition switch ON and soft top fully close.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Soft top control unit is OK.
NO >> Refer to DEF-87, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195957

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.

- 20A fuse [No.14, located in fuse block (J/B)]
- 20A fuse [No.15, located in fuse block (J/B)]

Is the inspection result normal

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK SOFT TOP CONTROL UNIT CIRCUIT

1. Disconnect soft top control unit connector and fuse block (J/B) connector.
2. Check continuity between soft top control unit and fuse block (J/B) harness connector.

Fuse block (J/B)		Soft top control unit		Continuity
Connector	Terminal	Connector	Terminal	
B6	10G	B304	49	Existed
	11G		48	

3. Check continuity between soft top control unit and ground.

Soft top control unit		Ground	Continuity
Connector	Terminal		
B304	49		Not existed
	48		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness and ground.

3.CHECK FUSE BLOCK (J/B)

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Fuse block (J/B)					
Connector	Terminal				
B6	10G	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0
	11G			ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace fuse block (J/B).

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

REAR WINDOW DEFOGGER

Description

INFOID:0000000008195958

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:0000000008195959

1.CHECK REAR WINDOW DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the rear window heating wire is getting warmer.

Is the inspection result normal?

YES >> Rear window defogger is OK.
NO >> Refer to DEF-89, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195960

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(–)	Condition		Voltage (V) (Approx.)
Rear window defogger					
Connector	Terminal				
B311	1	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect soft top control unit connector.
3. Check continuity between soft top control unit harness connector and rear window defogger harness connector.

Soft top control unit		Rear window defogger		Continuity
Connector	Terminal	Connector	Terminal	
B307	104	B311	1	Existed
	111			

4. Check continuity between soft top control unit harness connector and ground.

Soft top control unit		Ground	Continuity
Connector	Terminal		
B307	104		Not existed
	111		

Is the inspection result normal?

YES >> Replace soft top control unit. Refer to RF-235, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK GROUND CIRCUIT

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

Rear window defogger		Ground	Continuity
Connector	Terminal		
B318	2		Existed

Is the inspection result normal?

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

4.CHECK FILAMENT

Check filament.
Refer to DEF-90, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace filament. Refer to DEF-151, "Inspection and Repair".

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident"

>> INSPECTION END

Component Inspection

INFOID:0000000008195961

1.CHECK FILAMENT

Check the filament for damage.
Refer to DEF-151, "Inspection and Repair"

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair filament.

REAR WINDOW DEFOGGER ON SIGNAL

Description

INFOID:0000000008195962

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

Component Function Check

INFOID:0000000008195963

1.CHECK FUNCTION

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

Is the inspection result normal?

YES >> Rear window defogger ON signal function is OK.
NO >> Refer to DEF-91, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195964

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse [No.13, located in fuse block (J/B)].

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP ON SIGNAL

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

(+)		(–)	Condition		Voltage (V) (Approx.)
A/C auto amp.					
Connector	Terminal				
M66	26	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> Replace A/C auto amp. Refer to HAC-81, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation".
NO >> GO TO 3.

3.CHECK REAR WINDOW DEFOGGER INDICATOR LAMP CIRCUIT

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

Fuse block (J/B)		A/C auto amp.		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	M66	26	Existed

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

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

Is the inspection result normal?

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

DOOR MIRROR DEFOGGER

Description

INFOID:0000000008195965

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

Component Function Check

INFOID:0000000008195966

1.CHECK DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that both side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Door mirror defogger is OK.
NO >> Refer to DEF-92, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195967

1.CHECK FUSE

1. Turn ignition switch OFF.
2. Check the following.

- 10A fuse (No.13, located in fuse block (J/B))

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

2.CHECK FUSE BLOCK (J/B)

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

(+)		(-)	Condition		Voltage (V) (Approx.)
Fuse block (J/B)					
Connector	Terminal				
M3	9C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0
	10C			ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace fuse block (J/B).

DRIVER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:0000000008195968

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:0000000008195969

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the driver side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Driver side door mirror defogger is OK.
NO >> Refer to DEF-93, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195970

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Condition		Voltage (V) (Approx.)
Door mirror (driver side)					
Connector	Terminal				
D3	4	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Turn ignition switch ON.
4. Check voltage between fuse block (J/B) harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace fuse block (J/B).

3.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between fuse block (J/B) harness connector and door mirror (driver side) harness connector.

Fuse block (J/B)		Door mirror (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	10C	D3	4	Existed

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

4.CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-94, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door mirror (driver side). Refer to GW-20, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END.

Component Inspection

INFOID:0000000008195971

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)			Continuity
Connector	Terminal		
D3	4	8	Existed

Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace door mirror (driver side). Refer to GW-20, "Removal and Installation".

PASSENGER SIDE DOOR MIRROR DEFOGGER

Description

INFOID:0000000008195972

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:0000000008195973

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

With CONSULT
1. Turn ignition switch ON.
2. Select “REAR DEFOGGER” of “BCM” using CONSULT.
3. Select “REAR DEFOGGER” in “ACTIVE TEST” mode.
4. Touch “ON”.
5. Check that the passenger side door mirror glass is getting warmer.

Is the inspection result normal?

YES >> Passenger side door mirror defogger is OK.
NO >> Refer to DEF-95, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008195974

1.CHECK POWER SUPPLY CIRCUIT

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

(+)		(-)	Condition		Voltage (V) (Approx.)
Door mirror (Passenger side)					
Connector	Terminal				
D33	4	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 2.

2.CHECK FUSE BLOCK (J/B) OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect fuse block (J/B) connector.
3. Turn ignition switch ON.
4. Check voltage between fuse block (J/B) harness connector and ground.

(+)		(-)	Condition		Voltage (V) (Approx.)
Fuse block (J/B)					
Connector	Terminal				
M3	9C	Ground	Rear window defogger switch	ON	Battery voltage
				OFF	0

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace fuse block (J/B).

3.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

1. Turn ignition switch OFF.

2. Check continuity between fuse block (J/B) harness connector and door mirror (passenger side) harness connector.

Fuse block (J/B)		Door mirror (passenger side)		Continuity
Connector	Terminal	Connector	Terminal	
M3	9C	D33	4	Existed

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

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

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace harness.

4.CHECK GROUND CIRCUIT

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

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

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace harness.

5.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER

Check passenger side door mirror defogger.
Refer to DEF-96, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace door mirror (passenger side).Refer to GW-20, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Check intermittent incident.
Refer to GI-45, "Intermittent Incident".

>> INSPECTION END.

Component Inspection

INFOID:0000000008195975

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)			Continuity
Connector	Terminal		
D33	4	8	Existed

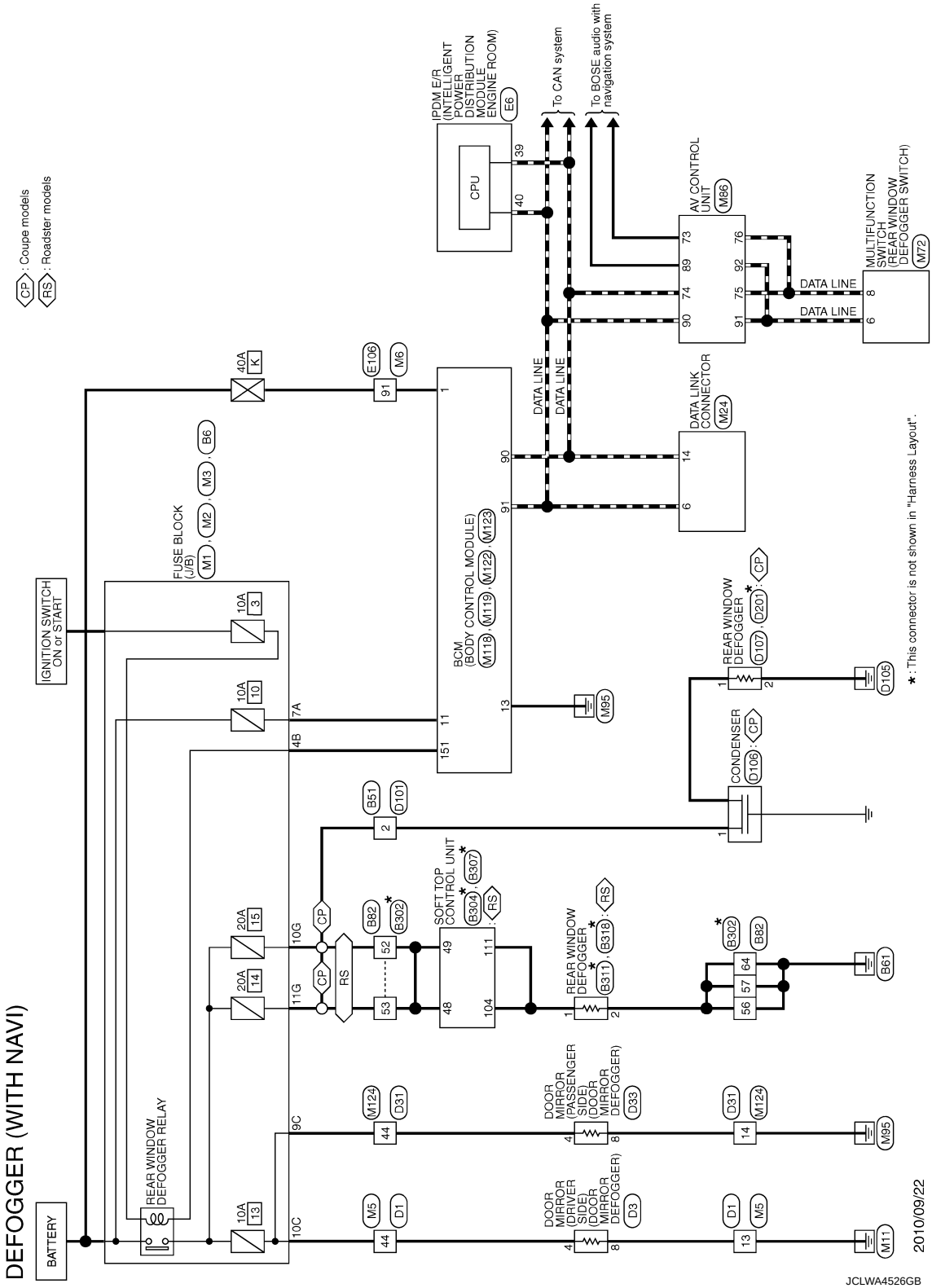
Is the inspection result normal?

YES >> INSPECTION END.
NO >> Replace door mirror (passenger side). Refer to GW-20, "Removal and Installation".

REAR WINDOW DEFOGGER SYSTEM

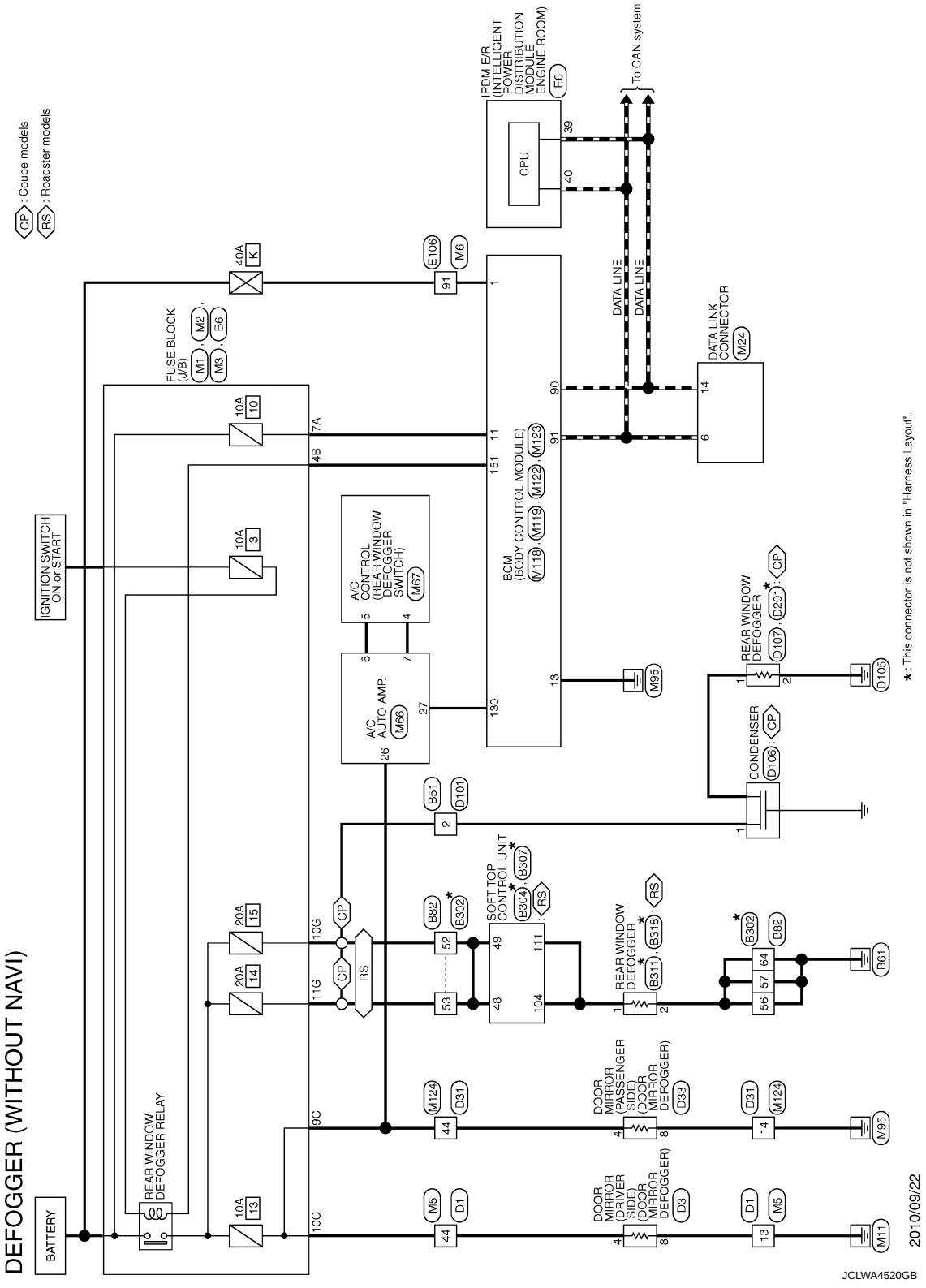
Wiring Diagram - DEFOGGER (WITH NAVI) -

INFOID:0000000008195976



Wiring Diagram - DEFOGGER (WITHOUT NAVI) -

INFOID:0000000008195977



ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000008831274

VALUES ON THE DIAGNOSIS TOOL

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

CONSULT MONITOR ITEM

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

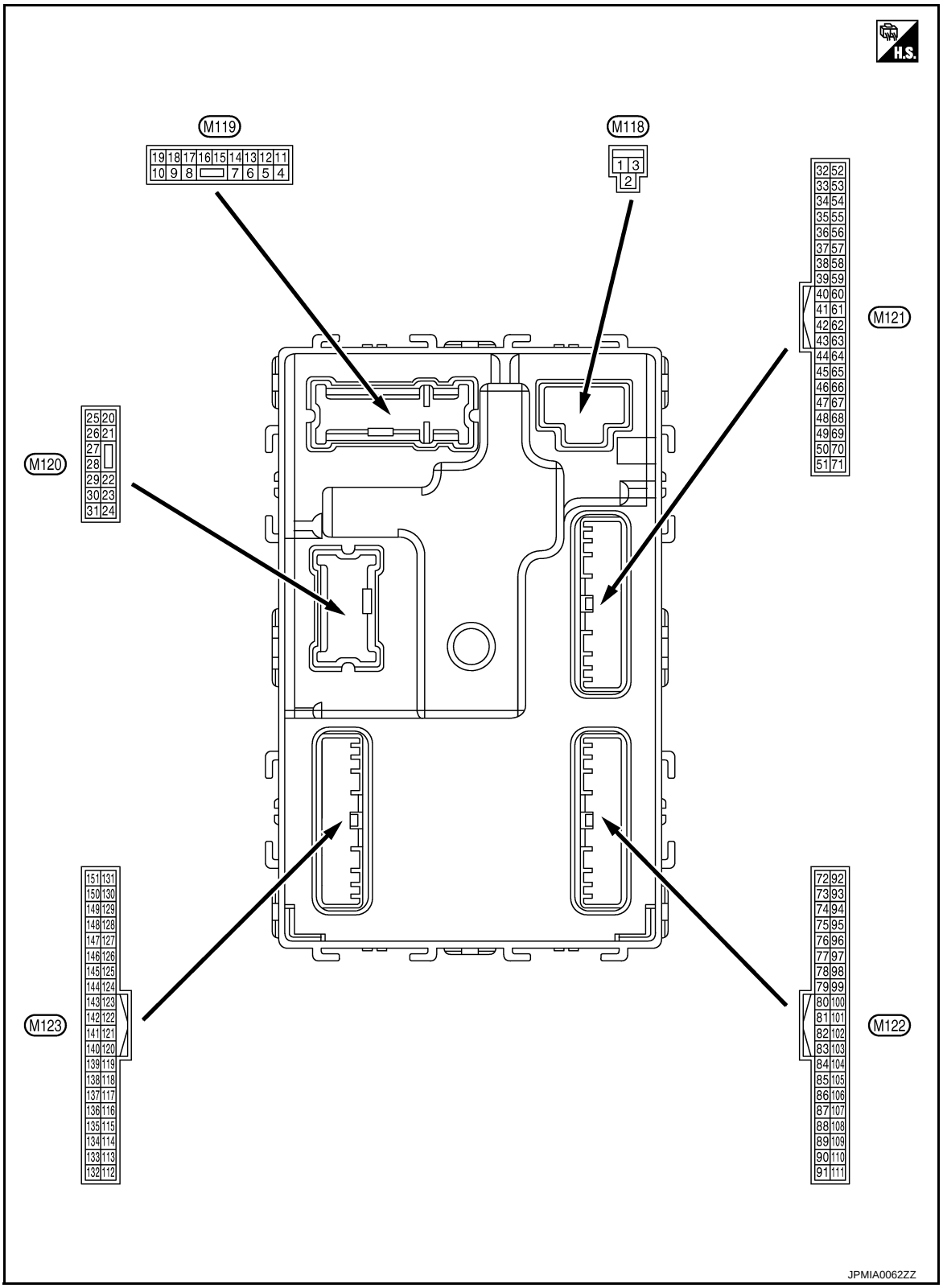
Monitor Item	Condition	Value/Status
DOOR SW-RR	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-RL	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-BK	• Back door closed (Coupe models) • Trunk lid closed (Roadster models)	Off
	• Back door opened (Coupe models) • Trunk lid opened (Roadster models)	On
CDL LOCK SW	Other than door lock and unlock switch LOCK	Off
	Door lock and unlock switch LOCK	On
CDL UNLOCK SW	Other than door lock and unlock switch UNLOCK	Off
	Door lock and unlock 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 OFF	Off
	Hazard switch is ON	On
REAR DEF SW **NOTE:** For models with NAVI this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
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	• Back door opener switch OFF (Coupe models) • Trunk lid opener switch OFF (Roadster models)	Off
	• While the back door opener switch is turned ON (Coupe models) • While the trunk lid opener switch is turned ON (Roadster models)	On
TRNK/HAT MNTR	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off
	LOCK button of the Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed	On
RKE-TR/BD **NOTE:** For Coupe models this item is not monitored.	TRUNK OPEN button of the Intelligent Key is not pressed	Off
	TRUNK OPEN of the Intelligent Key is pressed	On
RKE-PANIC	PANIC button of the Intelligent Key is not pressed	Off
	PANIC button of the Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is not pressed	Off
	UNLOCK button of the Intelligent Key is pressed and held	On
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On

Monitor Item	Condition	Value/Status
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -RL	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -BD/TR	• Back door request switch is not pressed (Coupe models) • Trunk lid door request switch is not pressed (Roadster models)	Off
	• Back door request switch is pressed (Coupe models) • Trunk lid door request switch is pressed (Roadster models)	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	**NOTE:** The item is indicated, but not monitored.	Off
ACC RLY -F/B	**NOTE:** The item is indicated, but not monitored.	Off
CLUCH SW **NOTE:** For A/T models this item is not monitored.	The clutch pedal is not depressed	Off
	The clutch pedal is depressed	On
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
BRAKE SW 2	The brake pedal is not depressed	Off
	The brake pedal is depressed	On
DETE/CANCL SW **NOTE:** For M/T models with Synchro-Rev Match mode this item is not monitored.	• Selector lever in P position (A/T models) • The clutch pedal is depressed (M/T models without SynchroRev Match mode)	Off
	• Selector lever in any position other than P (A/T models) • The clutch pedal is not depressed (M/T models without SynchroRev Match mode)	On
SFT PN/N SW **NOTE:** For roadster M/T models and coupe M/T models without SynchroRev Match mode this item is not monitored.	• Selector lever in any position other than P and N (A/T models) • Control lever in any position other than neutral position (Coupe M/T models with SynchroRev Match mode)	Off
	• Selector lever in P or N position (A/T models) • Control lever in neutral position (Coupe M/T models with SynchroRev Match mode)	On
S/L -LOCK	**NOTE:** The item is indicated but not monitored.	Off
S/L -UNLOCK	**NOTE:** The item is indicated but not monitored.	Off
S/L RELAY-F/B	**NOTE:** The item is indicated but not monitored.	Off
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On

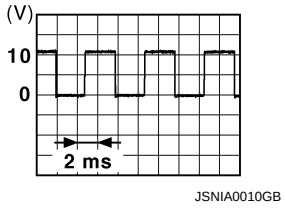
Monitor Item	Condition	Value/Status
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	• Selector lever in any position other than P and N (A/T models) • The clutch pedal is not depressed (M/T models)	Off
	• Selector lever in P or N position (A/T models) • The clutch pedal is depressed (M/T models)	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	**NOTE:** The item is indicated but not monitored.	Off
S/L UNLK-IPDM	**NOTE:** The item is indicated but not monitored.	Off
S/L RELAY-REQ	**NOTE:** The item is indicated but not monitored.	Off
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 (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	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	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key

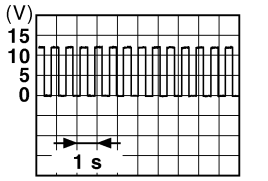
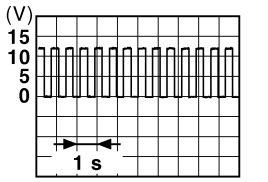
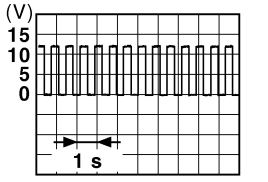
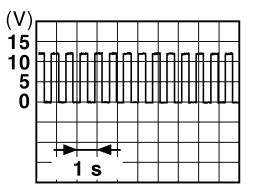
Monitor Item	Condition	Value/Status
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent Key is registered to BCM	Done
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

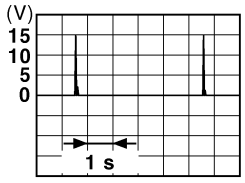
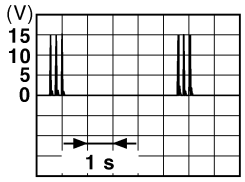
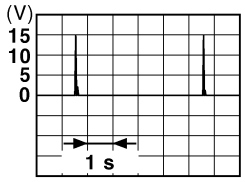
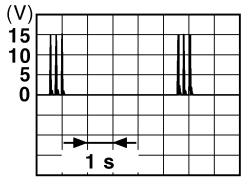
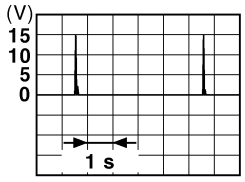
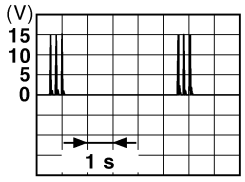
TERMINAL LAYOUT

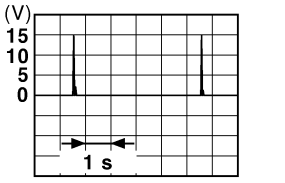
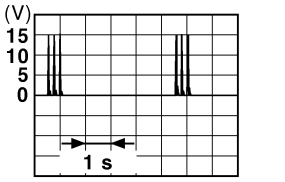
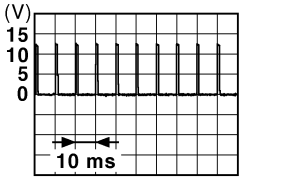
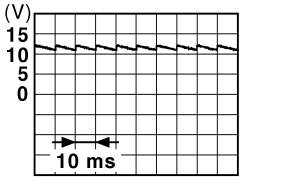


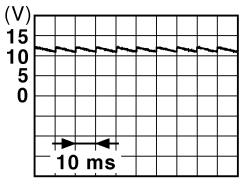
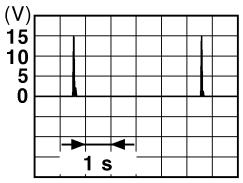
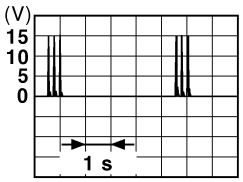
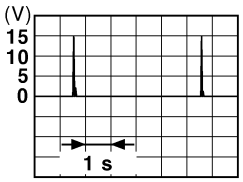
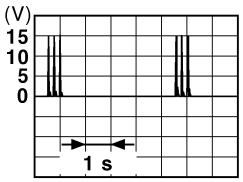
PHYSICAL VALUES

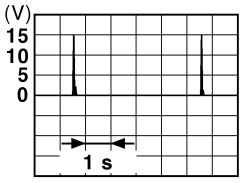
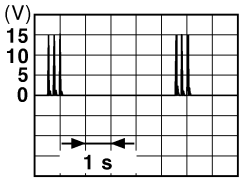
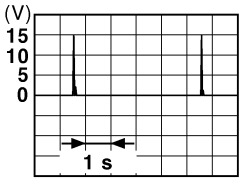
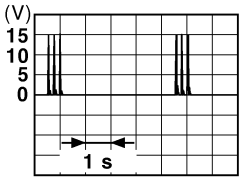
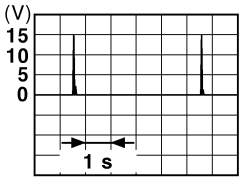
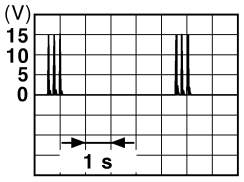
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
4 (R)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		12 V
5 (G)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	12 V
					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)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
11 (BR)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	**NOTE:** When the illumination brightening/dimming level is in the neutral position.  JSNIA0010GB
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC	0 V

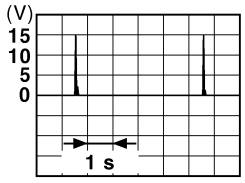
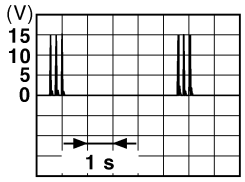
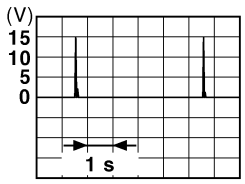
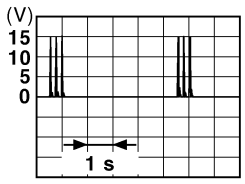
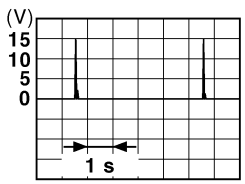
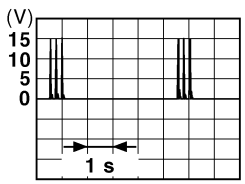
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (O)	Ground	Turn signal LH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (P)	Ground	Interior room lamp control	Output	Interior room lamp	OFF	12 V
					ON	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
23 (L)*1 (Y)*2	Ground	Back door/Trunk lid open	Output	Back door/ Trunk lid	OPEN (Back door/Trunk lid opener actuator is activated)	12 V
					Other than OPEN (Back door/Trunk lid opener actuator is not activated)	0 V
24*8 (O)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
25 (LG)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
30 (R)	Ground	Luggage room/Trunk room lamp	Output	Luggage room/ Trunk room lamp	ON	0 V
					OFF	12 V

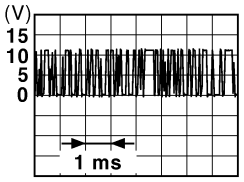
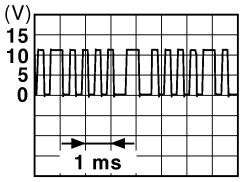
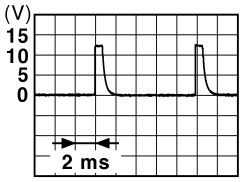
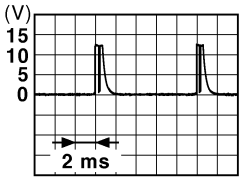
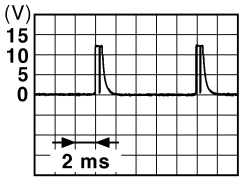
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (G)	Ground	Luggage room/Trunk room antenna (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (R)	Ground	Luggage room/Trunk room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (B)	Ground	Rear bumper antenna (–)	Output	When the back door/trunk lid door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

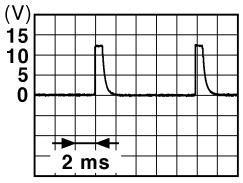
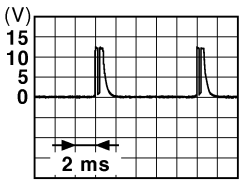
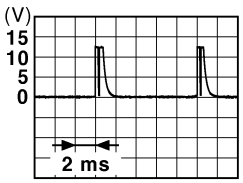
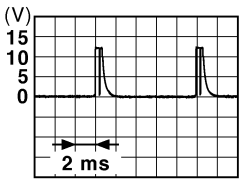
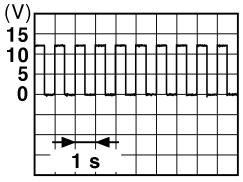
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (W)	Ground	Rear bumper antenna (+)	Output	When the back door/trunk lid door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (V)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON (A/T models)	When selector lever is in P or N position	12 V
					When selector lever is not in P or N position	0 V
				Ignition switch ON (M/T models)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0 V
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (W)	Ground	Back door/Trunk Lid door request switch	Input	Back door/ Trunk lid door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (G)	Ground	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0 V
					Not sounding	12 V
66 (R)	Ground	Back door/Trunk room lamp switch	Input	Back door/ Trunk room lamp switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

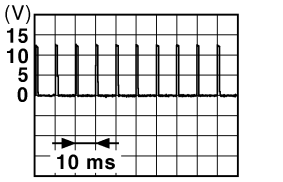
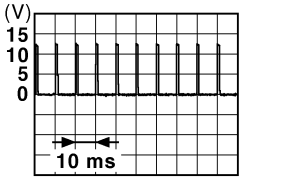
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
72 (L)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
73 (P)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

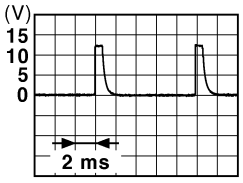
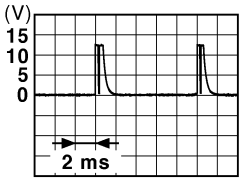
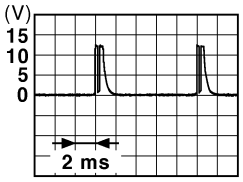
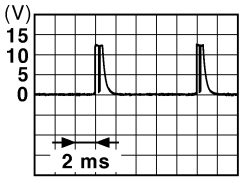
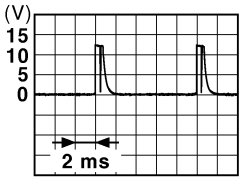
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (SB)	Ground	Passenger door antenna (–)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
76 (V)	Ground	Driver door antenna (–)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

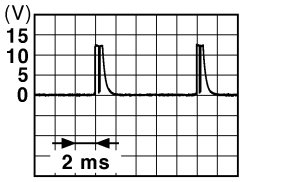
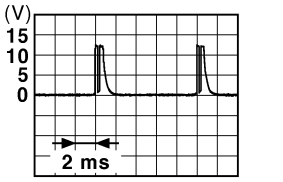
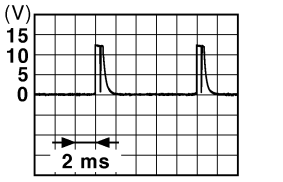
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
78*2 (L)	Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
79*2 (R)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

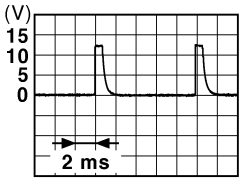
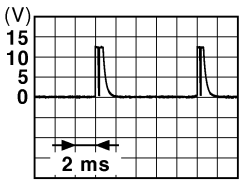
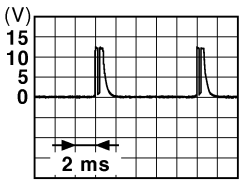
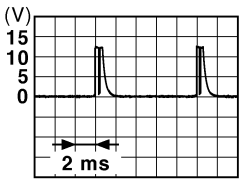
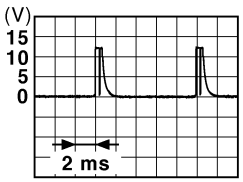
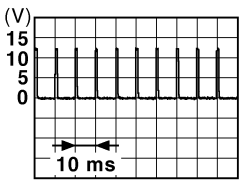
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
83 (GR)	Ground	Remote keyless entry receiver (front) communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on the Intelligent Key		 JMKIA0065GB
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3 V

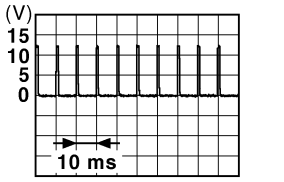
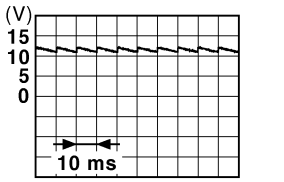
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
90 (P)	Ground	CAN-L	Input/ Output	—		—
91 (L)	Ground	CAN-H	Input/ Output	—		—
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 JPMIA0015GB 6.5 V
					ON	12 V
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON	0 V

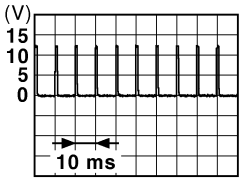
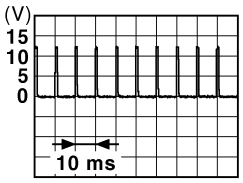
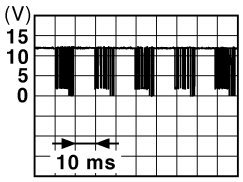
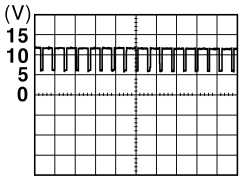
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96*3 (Y)	Ground	A/T shift selector (Detention switch) power supply	Output	—		12 V
99*6 (R)	Ground	Selector lever P position switch (A/T models)	Input	Selector lever	P position	0 V
					Any position other than P	12 V
		Clutch pedal position switch (M/T models without SynchroRev Match mode)		Clutch pedal position switch	OFF (Clutch pedal is depressed)	0 V
					ON (Clutch pedal is not depressed)	Battery voltage
100 (GR)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (Y)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (O)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
103 (LG)	Ground	Remote keyless entry receiver (front) power supply	Output	Ignition switch OFF		12 V

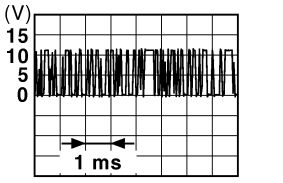
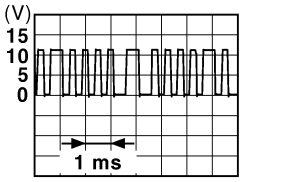
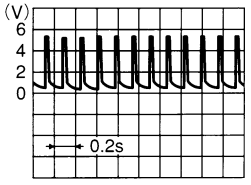
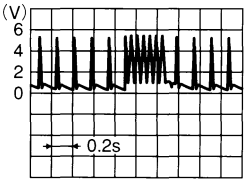
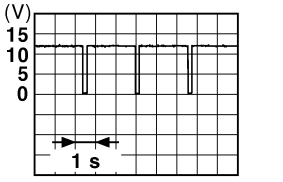
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

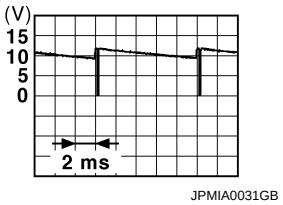
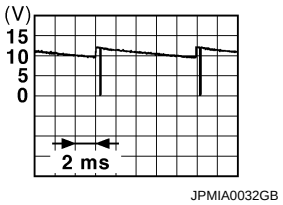
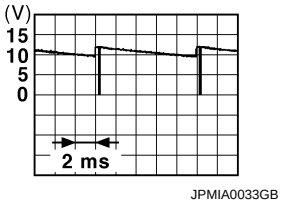
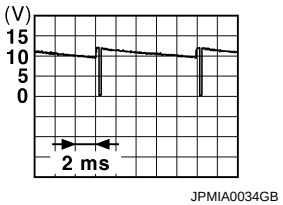
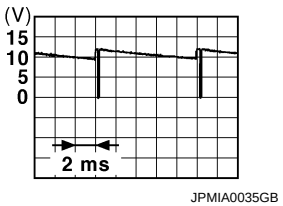
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3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

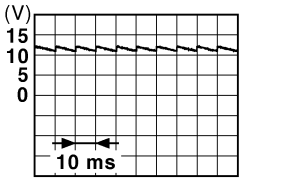
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND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

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
113 (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
114*4 (R)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
					ON (Clutch pedal is depressed)	Battery voltage
115*9 (O)	—	—	—	—		—
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 depressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (R)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot		12 V
				When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
129*2 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1 V
					ON	0 V
130*7 (L)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (Y)*1 (V)*2	Ground	Power window switch and soft top control unit communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		12 V
133 (G)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
					ON (Tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
139 (L)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch OFF (Remote keyless entry receiver communication)	During waiting	 JMKIA0064GB
					When operating either button on the Intelligent Key	 JMKIA0065GB
				Ignition switch ON (Tire pressure receiver communication)	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
140*5 (G)	Ground	Selector lever P/N position (A/T models)	Input	Selector lever	P or N position	12 V
					Except P and N positions	0 V
		Park/neutral position switch (Coupe M/T models with Synchro-Rev Match mode)		Ignition switch ON	Control lever in neutral position	Battery voltage
					Control lever in any position other than neutral	0 V
141 (Y)	Ground	Security indicator lamp	Output	Security indicator lamp	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	12 V

Terminal No. (Wire color) +	Terminal No. (Wire color) –	Description Signal name	Description Input/ Output	Condition		Value (Approx.)
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches 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 switches 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 switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	 JPMIA0035GB 10.7 V
					Lighting switch PASS	
					Turn signal switch LH	

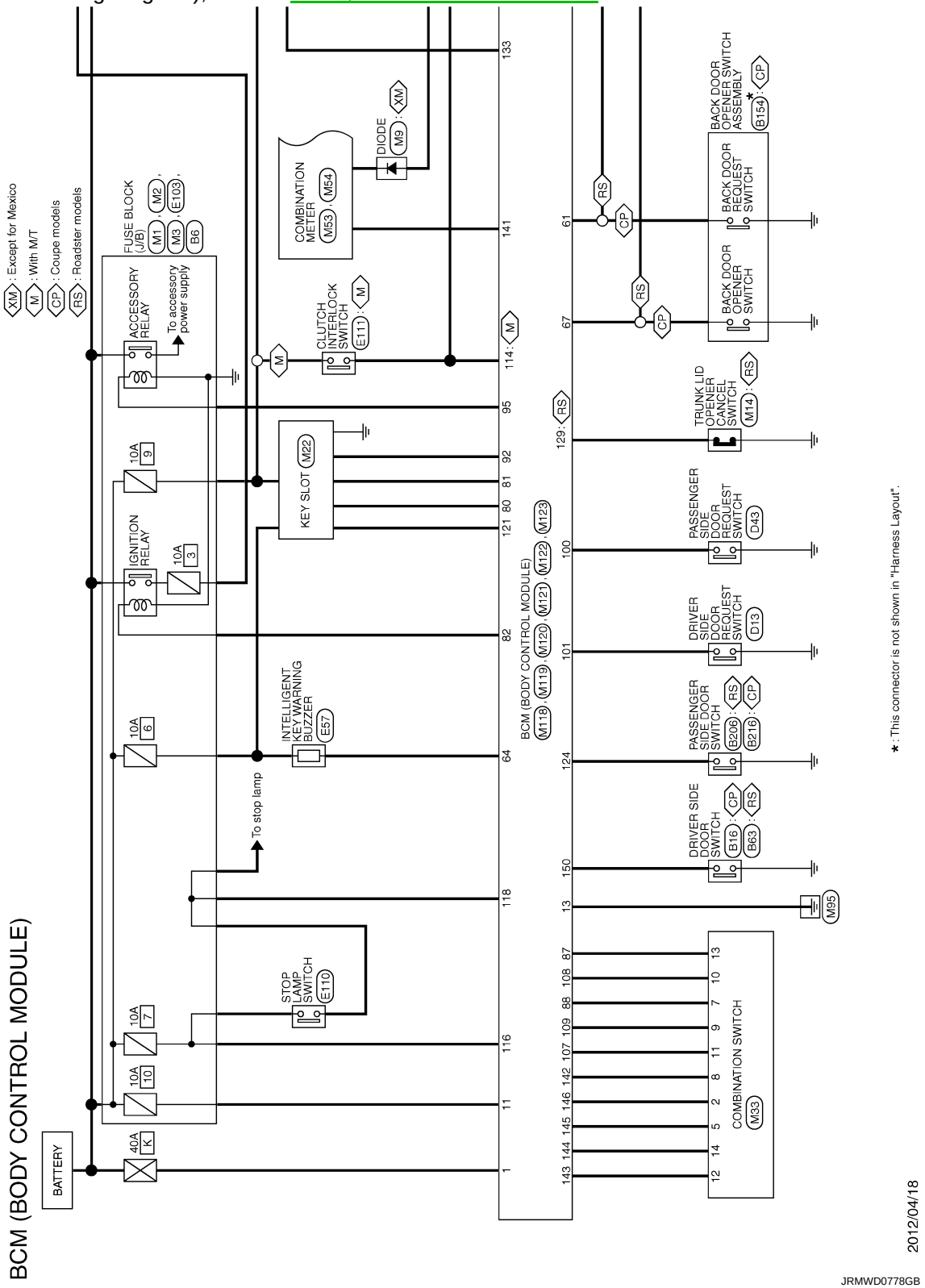
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

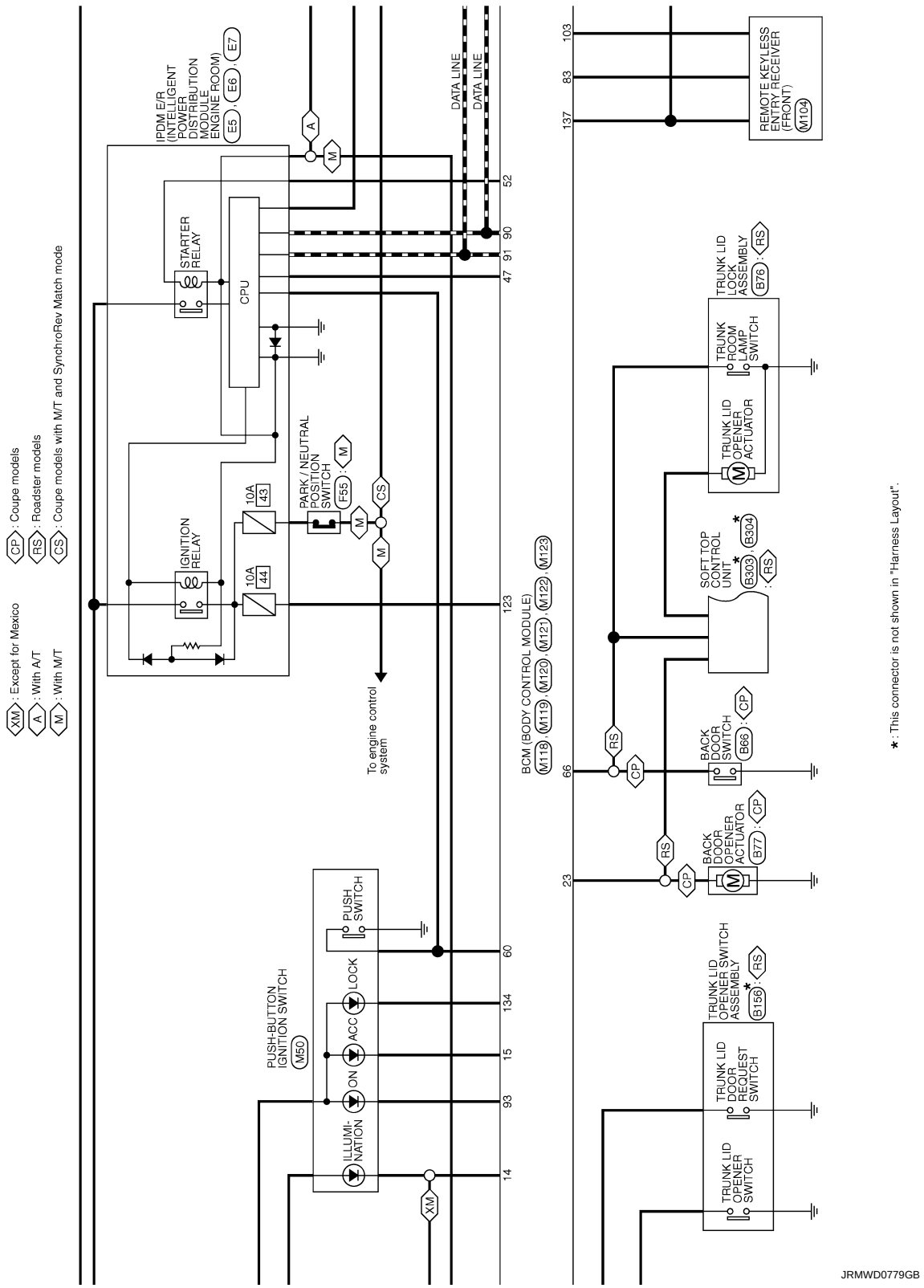
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

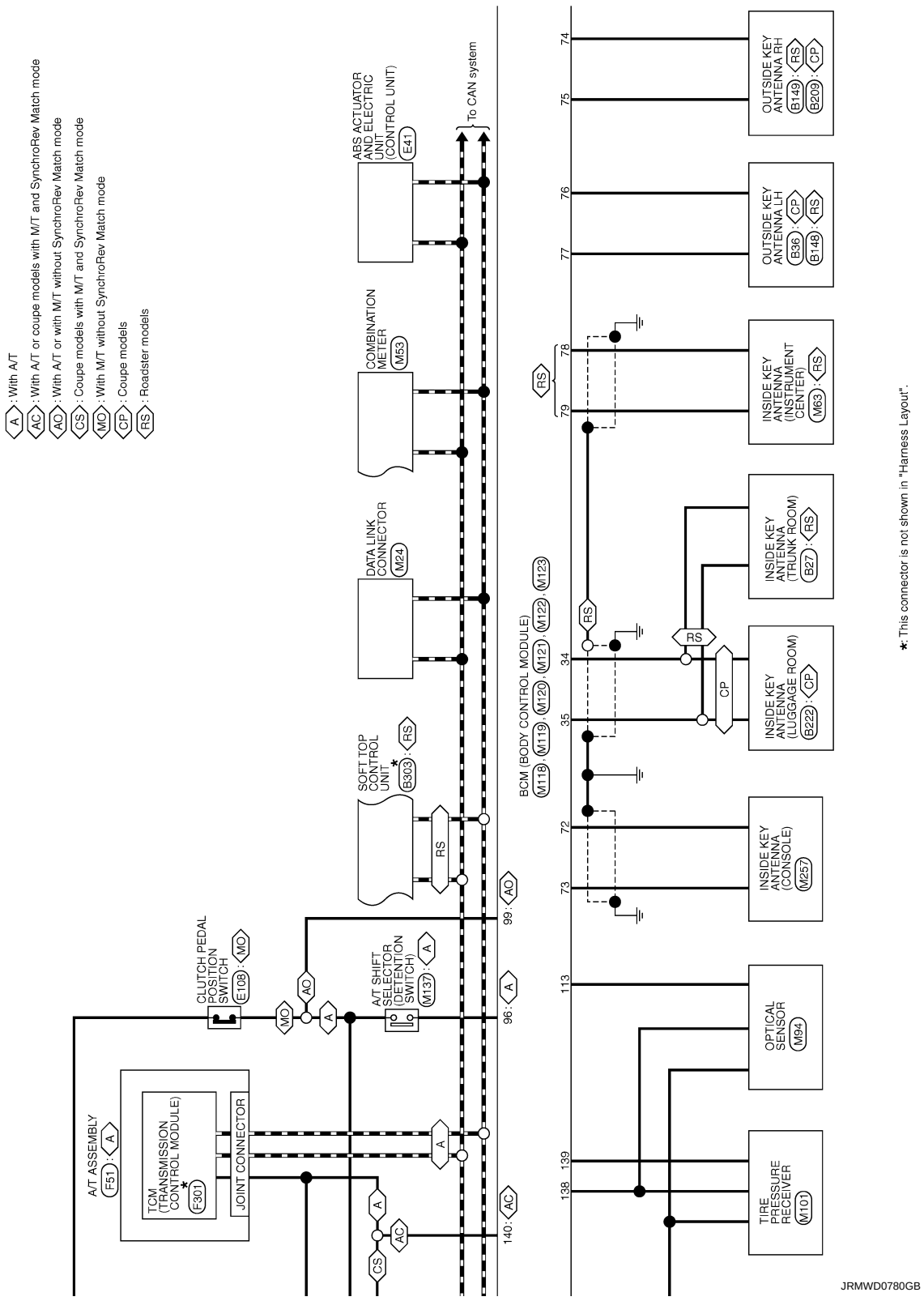
Wiring Diagram - BCM -

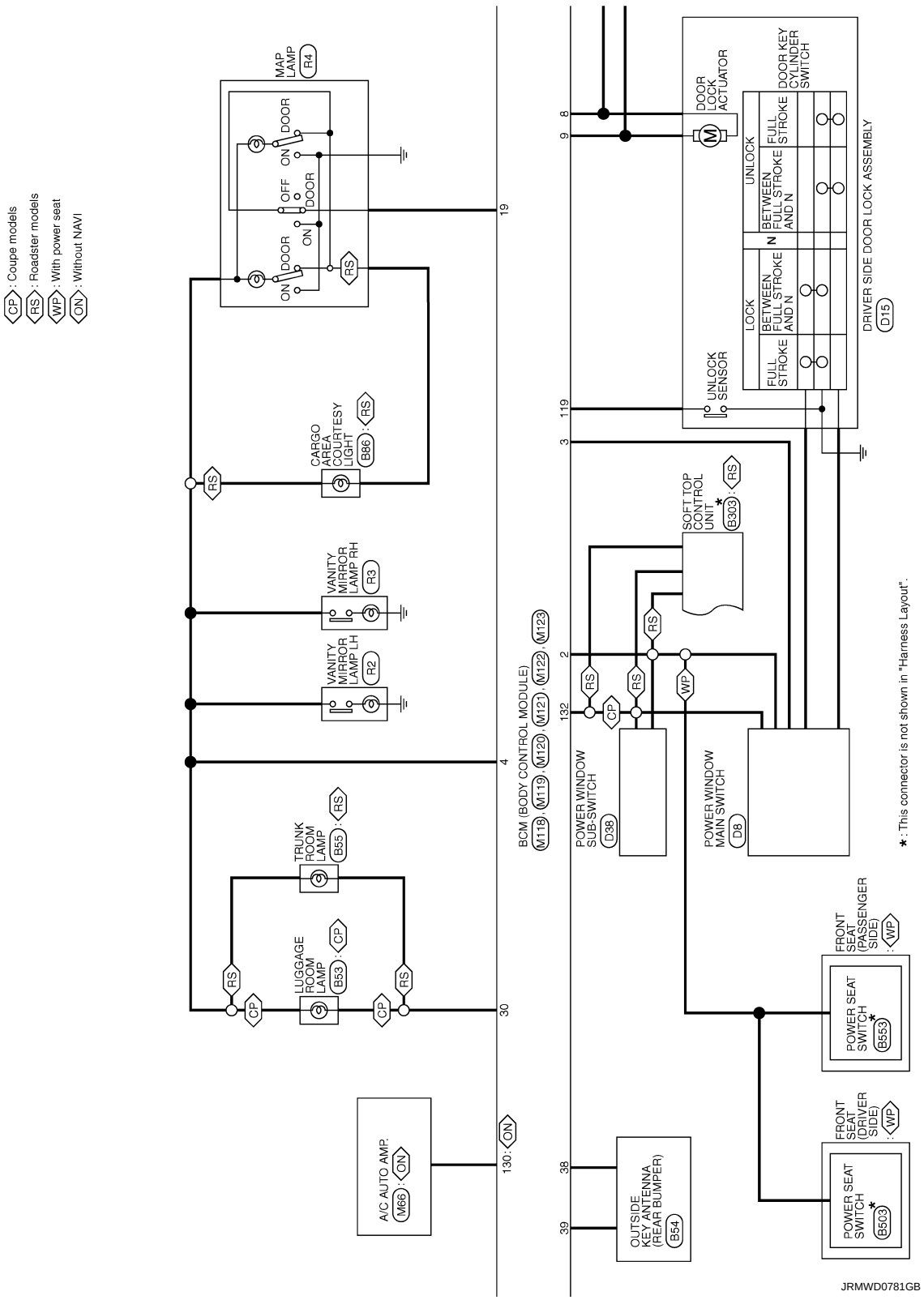
INFOID:0000000008831275

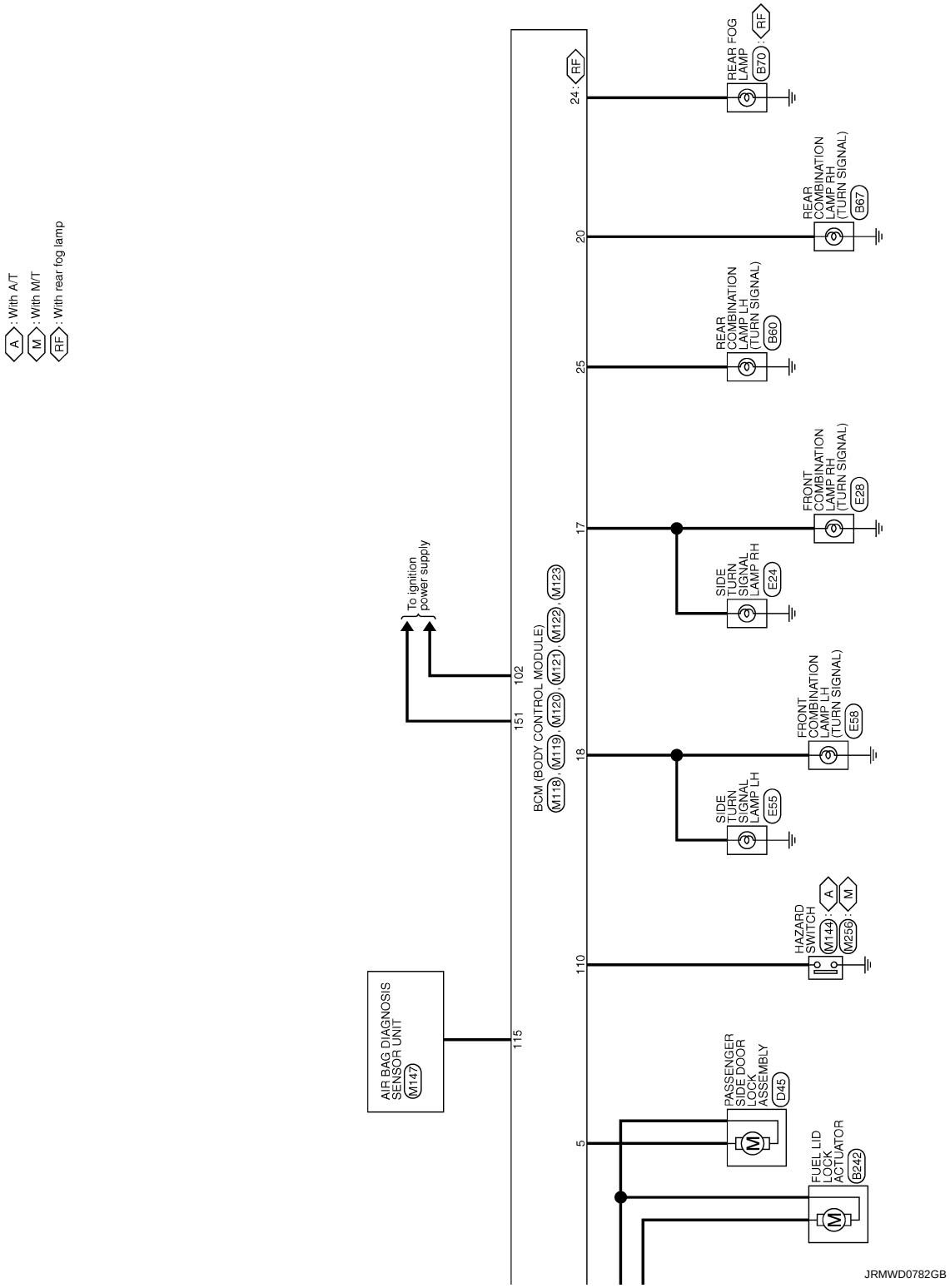
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".




XM : Except for Mexico
A : With A/T
M : With M/T
CP : Coupe models
RS : Roadster models
CS : Coupe models with M/T and SynchroRev Match mode
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E5
E6
E7
STARTER RELAY
CPU
IGNITION RELAY
10A 43
10A 44
PARK / NEUTRAL POSITION SWITCH
F55
DATA LINE
DATA LINE
To engine control system
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
PUSH-BUTTON IGNITION SWITCH
M50
PUSH SWITCH
LOCK
ACC
ON
ILLUMI-NATION
REMOTE KEYLESS ENTRY RECEIVER (FRONT)
M104
TRUNK LID LOCK ASSEMBLY
B76
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
SOFT TOP CONTROL UNIT
B303
B304
BACK DOOR SWITCH
B66
BACK DOOR OPENER ACTUATOR
B77
TRUNK LID OPENER SWITCH ASSEMBLY
B156
TRUNK LID DOOR REQUEST SWITCH
TRUNK LID OPENER SWITCH
* : This connector is not shown in "Harness Layout".
JRMWD0779GB


A : With A/T
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
CS : Coupe models with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
CP : Coupe models
RS : Roadster models
A/T ASSEMBLY
F51 : A
TCM (TRANSMISSION CONTROL MODULE)
F301
JOINT CONNECTOR
CLUTCH PEDAL POSITION SWITCH
E108 : MO
A/T SHIFT SELECTOR (DETENTION SWITCH)
M137 : A
SOFT TOP CONTROL UNIT
B303 : RS
DATA LINK CONNECTOR
M24
COMBINATION METER
M53
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
E41
To CAN system
99 : AO
96 : A
140 : AC
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
74
75
76
77
78
79
34
35
72
73
113
138
139
OUTSIDE KEY ANTENNA RH
B149 : RS
B209 : CP
OUTSIDE KEY ANTENNA LH
B36 : CP
B148 : RS
INSIDE KEY ANTENNA (INSTRUMENT CENTER)
M63 : RS
INSIDE KEY ANTENNA (TRUNK ROOM)
B27 : RS
INSIDE KEY ANTENNA (LUGGAGE ROOM)
B222 : CP
INSIDE KEY ANTENNA (CONSOLE)
M257
OPTICAL SENSOR
M94
TIRE PRESSURE RECEIVER
M101
*: This connector is not shown in "Harness Layout".
JRMWD0780GB


CP : Coupe models
RS : Roadster models
WP : With power seat
ON : Without NAVI
MAP LAMP R4
DOOR
ON
OFF
DOOR
ON
DOOR
ON
RS
19
CARGO AREA COURTESY LIGHT B86 : RS
VANITY MIRROR LAMP RH R3
VANITY MIRROR LAMP LH R2
TRUNK ROOM LAMP B55 : RS
LUGGAGE ROOM LAMP B53 : CP
RS
CP
30
4
130 : ON
A/C AUTO AMP. M66 ON
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
8
9
DOOR LOCK ACTUATOR
UNLOCK
LOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
DOOR KEY CYLINDER SWITCH
DRIVER SIDE DOOR LOCK ASSEMBLY D15
119
UNLOCK SENSOR
3
SOFT TOP CONTROL UNIT * B309 : RS
2
132
POWER WINDOW SUB-SWITCH D38
POWER WINDOW MAIN SWITCH D8
38
39
OUTSIDE KEY ANTENNA (REAR BUMPER) B54
FRONT SEAT (PASSENGER SIDE) : WP
POWER SEAT SWITCH * B553
FRONT SEAT (DRIVER SIDE) : WP
POWER SEAT SWITCH * B503
* : This connector is not shown in "Harness Layout".
JRMWD0781GB



Fail-safe

INFOID:0000000008831276

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
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
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled • Status 1 - Clutch switch signal (CAN from ECM): ON - Clutch interlock switch signal: OFF (0 V) • Status 2 - Clutch switch signal (CAN from ECM): OFF - Clutch interlock switch signal: ON (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000008831277

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	• U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING

Priority	DTC
4	• 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 • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: BCM • B2615: BCM • B2616: BCM • B2617: BCM • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E8: CLUTCH SW • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• 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 • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000008831278

NOTE:
The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to DEF-79, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	BCS-49
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-50
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-51

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-46
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-49
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-50
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-52
B2195: ANTI SCANNING	×	—	—	—	SEC-53
B2553: IGNITION RELAY	—	×	—	—	PCS-50
B2555: STOP LAMP	—	×	—	—	SEC-54
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-56
B2557: VEHICLE SPEED	×	×	×	—	SEC-58
B2560: STARTER CONT RELAY	×	×	×	—	SEC-59
B2562: LOW VOLTAGE	—	×	—	—	BCS-52
B2601: SHIFT POSITION	×	×	×	—	SEC-60
B2602: SHIFT POSITION	×	×	×	—	SEC-63
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69
B2605: PNP SW	×	×	×	—	SEC-71
B2608: STARTER RELAY	×	×	×	—	SEC-73
B260A: IGNITION RELAY	×	×	×	—	PCS-52
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-75
B2614: BCM	—	×	×	—	PCS-54
B2615: BCM	—	×	×	—	PCS-57
B2616: BCM	—	×	×	—	PCS-60
B2617: BCM	×	×	×	—	SEC-79
B2618: BCM	×	×	×	—	PCS-63
B261A: PUSH-BTN IGN SW	—	×	×	—	PCS-64
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-82
B2621: INSIDE ANTENNA	—	×	—	—	DLK-228
B2622: INSIDE ANTENNA	—	×	—	—	•DLK-59 (Coupe) •DLK-230 (Roadster)
B2623: INSIDE ANTENNA	—	×	—	—	•DLK-61 (Coupe) •DLK-232 (Roadster)
B26E8: CLUTCH SW	×	×	×	—	SEC-76
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-78
C1704: LOW PRESSURE FL	—	—	—	×	WT-20
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1708: [NO DATA] FL	—	—	—	×	WT-22
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-25
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-27
C1734: CONTROL UNIT	—	—	—	×	WT-29

SOFT TOP CONTROL UNIT

Reference Value

INFOID:0000000008832322

VALUES ON THE DIAGNOSIS TOOL

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

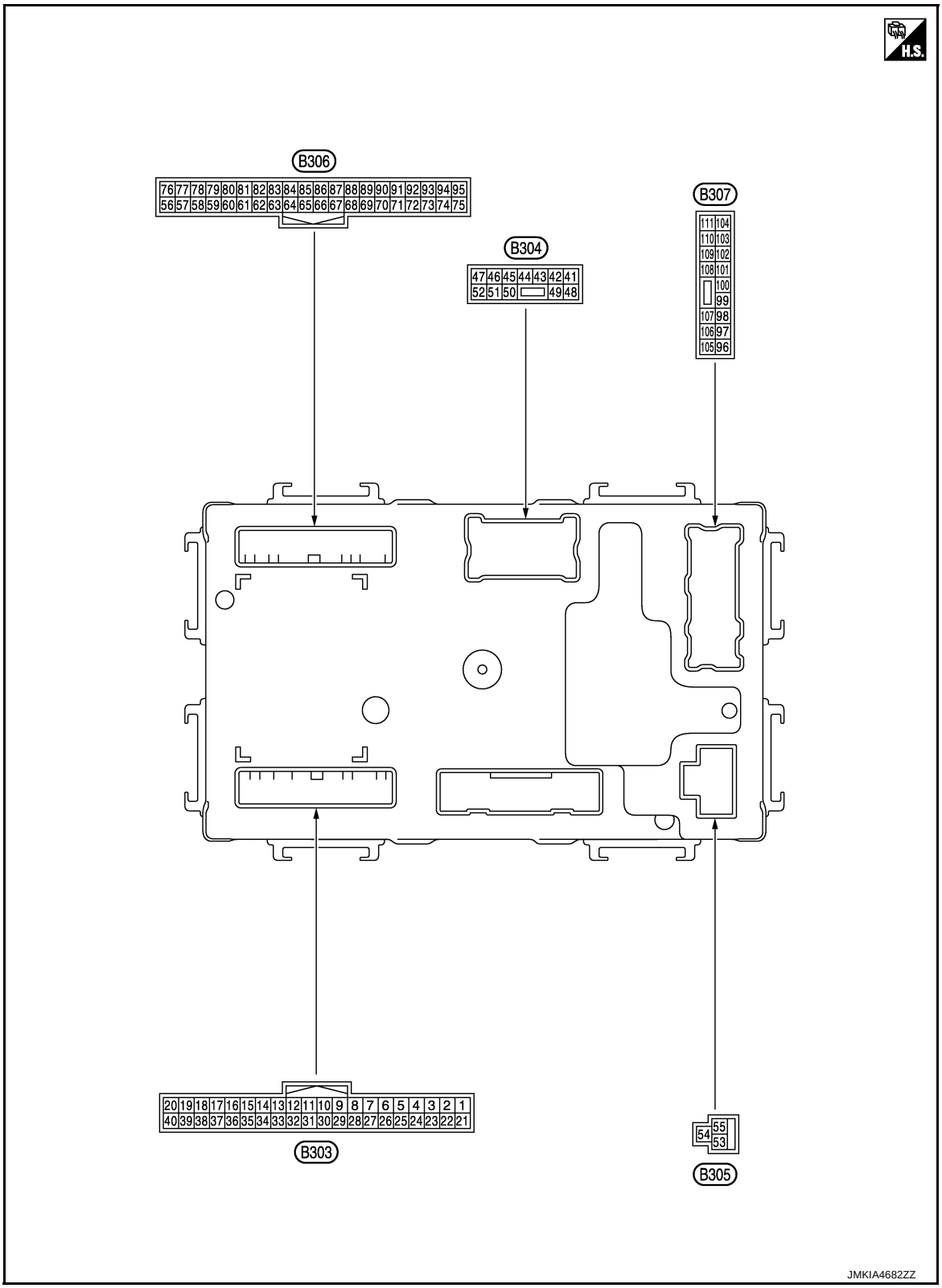
CONSULT MONITOR ITEM

Monitor Item	Condition		Status/Value
ROOF LATCHED RH	State of roof lock is in roof latch RH	Lock position	ON
		Other than above	OFF
		Roof striker sensor RH circuit is open or short	NG
ROOF LATCHED LH	State of roof lock is in roof latch LH	Lock position	ON
		Other than above	OFF
		Roof striker sensor LH circuit is open or short	NG
F/CENTER LOCK	State of roof latch cylinder	Lock	ON
		Other than above	OFF
		Roof latch lock sensor circuit is open or short	NG
R/RAIL RAISED LH	State of roof drive cylinder LH	Soft top is close	ON
		Other than above	OFF
		Roof status sensor LH circuit is open or short	NG
R/RAIL RAISED RH	State of roof drive cylinder RH	Soft top is close	ON
		Other than above	OFF
		Roof status sensor RH circuit is open or short	NG
R/RAIL LOWERED	State of roof drive cylinder LH	Soft top is open	ON
		Other than above	OFF
		Roof status sensor LH circuit is open or short	NG
5TH BOW LOWERED	State of 5th bow drive cylinder LH	5th bow is close	ON
		Other than above	OFF
		5th bow status sensor LH circuit is open or short	NG
5TH BOW RAISED	State of 5th bow drive cylinder RH	5th bow is open	ON
		Other than above	OFF
		5th bow status sensor RH circuit is open or short	NG
S/LID OPEN LH	State of storage lid drive cylinder LH	Storage lid is open	ON
		Other than above	OFF
		Storage lid status sensor LH circuit is open or short	NG
S/LID OPEN RH	State of storage lid drive cylinder RH	Storage lid is open	ON
		Other than above	OFF
		Storage lid status sensor RH circuit is open or short	NG

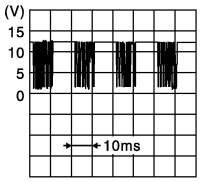
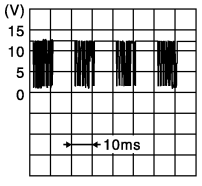
Monitor Item	Condition		Status/Value
S/LID CLOSE RH	State of storage lid drive cylinder RH	Storage lid is close	ON
		Other than above	OFF
		Storage lid status sensor RH circuit is open or short	NG
5TH BOW LATCH OP	State of 5th bow latch cylinder	Unlock	ON
		Other than above	OFF
		5th bow latch open sensor circuit is open or short	NG
SWITCHING VALVE 1	Operation of switching valve 1	Operate	ON
		Stop	OFF
		Switching valve 1 circuit is short	NG
SWITCHING VALVE 2	Operation of switching valve 2	Operate	ON
		Stop	OFF
		Switching valve 2 circuit is short	NG
SWITCHING VALVE 3	Operation of switching valve 3	Operate	ON
		Stop	OFF
		Switching valve 3 circuit is short	NG
SWITCHING VALVE 4	Operation of switching valve 4	Operate	ON
		Stop	OFF
		Switching valve 4 circuit is short	NG
SWITCHING VALVE 5	Operation of switching valve 5	Operate	ON
		Stop	OFF
		Switching valve 5 circuit is short	NG
PUMP OUT (RH)	Operation of hydraulic pump motor	Turning clockwise	ON
		Other than above	OFF
		Hydraulic pump motor (RH) circuit is short	NG
PUMP OUT (LH)	Operation of hydraulic pump motor	Turning counterclockwise	ON
		Other than above	OFF
		Hydraulic pump motor (LH) circuit is short	NG
5TH BOW LATCH CL	State of 5th bow latch cylinder	Lock	ON
		Other than above	OFF
		5th bow latch close sensor circuit is open or short	NG
ROOF SW (OPEN)	State of roof open/close switch	OPEN operation is in operation	ON
		Other than above	OFF
ROOF SW (CLOSE)	State of roof open/close switch	CLOSE operation is in operation	ON
		Other than above	OFF
SHIFT R SIGNAL	Shift position	R position	ON
		Other than R position	OFF
TRUNK OPEN OUT	Operation of trunk lid opener actuator	OPEN operation is in operation	ON
		Other than above	OFF
THER PROTEC PUMP	Thermo protection hydraulic pump	In non-operation	OK
		In operation	NG
THER PROTEC RCU	Thermo protection soft top control unit	In non-operation	OK
		In operation	NG

Monitor Item	Condition		Status/Value
PWR COND RCU	Power supply voltage state of soft top control unit	Normal	OK
		Malfunction	NG
PWR COND P/W	Power supply voltage state of power window	Normal	OK
		Malfunction	NG
LOCAL COMM 1	State of local communication 1	Normal	OK
		It is in sleep mode	SLEEP
		Communication error	NG
LOCAL COMM 2	State of local communication 2	Normal	OK
		It is in sleep mode	SLEEP
		Communication error	NG
REAR DEF OUT	Operation of rear window defogger	Roof position is full close	OK
		Other than above	NG
5BOW STRIK LATCH	State of 5th bow latch	5th bow striker is in 5th bow latch	ON
		Other than above	OFF
		5th bow striker sensor circuit is open or short	NG
P/W OP REQ SW SIG	State of request switch signal	OPEN operation is in operation	ON
		Stop	OFF
PROHIBIT P/W UP	Prohibit of power window up	In operation	ON
		In non-operation	OFF
IGN ON SIG(BCM)	Power position signal	Ignition switch ON	ON
		Other than above	OFF
RF OP REQ SW SIG	State of request switch signal	OPEN operation is in operation	ON
		Stop	OFF

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (BR)	Ground	Sensor power supply (Roof striker sensor LH)	Output	[Engine is running]		12 V
3 (DG)	Ground	Roof striker sensor RH	Input	[Engine is running] • Roof lock assembly	Hooked	0.8 V
					Released	3.0 V
4 (W)	Ground	Roof striker sensor LH	Input	[Engine is running] • Roof lock assembly	Hooked	0.8 V
					Released	3.0 V
8 (Y)	Ground	Back up lamp signal	Input	[Ignition switch: ON] • Shift position	R position	Battery voltage
					Other than above	0 V
9 (SB)	Ground	Power source (Power window)	Input	[Ignition switch: OFF]		Battery voltage
10 (O)	Ground	Trunk lid open request signal (BCM)	Input	[Ignition switch: ON] • Trunk opener	Operate	0 V → Battery voltage → 0 V
					Other than above	0 V
11 (O)	Ground	Roof status signal (Indicator lamp)	Output	[Engine is running] • Soft top indicator lamp	Illuminate	0 V
					Not illuminate	Battery voltage
12 (SB)	Ground	Roof status signal (Audio)	Output	[Engine is running] • Soft top system	Fully open	9.5 V
					Other than above	0 V
14 (L)	Ground	Roof open/close switch (Close)	Input	[Engine is running] • Close switch	Pressed	0 V
					Released	Battery voltage
15 (LG)	Ground	Roof open/close switch (Open)	Input	[Engine is running] • Open switch	Pressed	0 V
					Released	Battery voltage
16 (V)	Ground	Trunk room lamp switch	Input	[Ignition switch: ON] • Trunk lid	Open	0 V
					Other than above	Battery voltage
17 (BG)	Ground	CAN-H	Input/ Output	—		—
18 (P)	Ground	CAN-L	Input/ Output	—		—
19 (LG)	Ground	Local communication (Power window)	Input/ Output	—		 JMKIA4024GB
20 (V)	Ground	Local communication (BCM)	Input/ Output	—		 JMKIA4024GB

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
21 (BR)	Ground	Sensor power supply (Roof striker sensor RH)	Output	[Engine is running]		12 V
29 (DG)	Ground	Ground	—	—		—
35 (P)	Ground	Ground (Roof open/close switch)	—	—		—
41 (DG)	Ground	Trunk lid opener actuator	Output	Trunk lid opener	Operate	0 V → Battery voltage → 0 V
					Stop	0 V
48 (R)	Ground	Power source (Rear window defogger)	Input	[Engine is running] • Rear window defogger	Active	Battery voltage
					Not active	0 V
49 (R)	Ground	Power source (Rear window defogger)	Input	[Engine is running] • Rear window defogger	Active	Battery voltage
					Not active	0 V
53 (R)	Ground	Power source (Roof)	Input	[Engine is running]		Battery voltage
54 (B)	Ground	Ground (Roof)	—	—		—
56 (W)	Ground	5th bow latch close sensor	Input	[Engine is running] • 5th bow latch	Lock	0.8 V
					Other than above	3.0 V
57 (G)	Ground	5th bow latch open sensor	Input	[Engine is running] • 5th bow latch	Unlock	0.8 V
					Other than above	3.0 V
58 (LG)	Ground	Storage lid status sensor RH (Open)	Input	[Engine is running] • Storage lid	Full open	0.8 V
					Other than above	3.0 V
59 (W)	Ground	Storage lid status sensor RH (Close)	Input	[Engine is running] • Storage lid	Full close	0.8 V
					Other than above	3.0 V
60 (DG)	Ground	Storage lid status sensor LH (Open)	Input	[Engine is running] • Storage lid	Full open	0.8 V
					Other than above	3.0 V
61 (Y)	Ground	Roof status sensor RH (Close)	Input	[Engine is running] • Soft top	Raised	0.8 V
					Other than above	3.0 V
66 (L)	Ground	Roof status sensor LH (Open)	Input	[Engine is running] • Soft top	Lowered	0.8 V
					Other than above	3.0 V
68 (P)	Ground	5th bow status sensor RH	Input	[Engine is running] • 5th bow	Raised	0.8 V
					Other than above	3.0 V
69 (V)	Ground	Roof status sensor LH (Close)	Input	[Engine is running] • Soft top	Raised	0.8 V
					Other than above	3.0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
70 (O)	Ground	5th bow status sensor LH	Input	[Engine is running] • 5th bow	Lowered	0.8 V
					Other than above	3.0 V
71 (SB)	Ground	Roof latch lock sensor	Input	[Engine is running] • Roof lock assembly	Lock	0.8 V
					Other than above	3.0 V
72 (W/R)	Ground	Hydraulic pump temperature sensor	Input	[Engine is running]		0 - 4.8 V Output voltage varies with hydraulic pump temperature.
73 (R)	Ground	Hydraulic pump relay 2 ON signal	Input	[Engine is running] • Hydraulic pump motor (Right rotation)	Active	12 V
					Inactive	0 V
74 (R/B)	Ground	Hydraulic pump relay 1 ON signal	Input	[Engine is running] • Hydraulic pump motor (Left rotation)	Active	12 V
					Inactive	0 V
75 (BR)	Ground	Sensor power supply (Roof status sensor LH//5th bow latch open sensor/5th bow latch close sensor/ 5th bow striker sensor)	Output	[Engine is running]		12 V
76 (L)	Ground	5th bow striker sensor	Input	[Engine is running] • 5th bow striker	Hooked	0.8 V
					Released	3.0 V
92 (BG)	Ground	Sensor ground (Hydraulic pump temperature sensor)	—	—		—
93 (BR)	Ground	Sensor power supply (Roof status sensor RH/Storage lid status sensor RH)	Output	[Engine is running]		12 V
94 (BR)	Ground	Sensor power supply (Roof latch lock sensor/5th bow status sensor LH)	Output	[Engine is running]		12 V
95 (BR)	Ground	Sensor power supply (Storage lid status sensor/5th bow status sensor RH)	Output	[Engine is running]		12 V
96 (W)	Ground	Switching valve 4	Output	[Engine is running] • Switching valve 4	Active	12 V
					Inactive	0 V
97 (LG)	Ground	Switching valve 3	Output	[Engine is running] • Switching valve 3	Active	12 V
					Inactive	0 V
98 (L)	Ground	Switching valve 2	Output	[Engine is running] • Switching valve 2	Active	12 V
					Inactive	0 V
99 (O)	Ground	Switching valve 1	Output	[Engine is running] • Switching valve 1	Active	12 V
					Inactive	0 V
100 (BR)	Ground	Hydraulic pump relay 2	Output	[Engine is running] • Hydraulic pump motor (Right rotation)	Active	12 V
					Inactive	0 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
101 (SB)	Ground	Hydraulic pump relay 1	Output	[Engine is running] • Hydraulic pump motor (Left rotation)	Active	12 V
					Inactive	0 V
102 (P)	Ground	Switching valve 5	Output	[Engine is running] • Switching valve 5	Active	12 V
					Inactive	0 V
103 (B)	Ground	Hydraulic unit ground	—	—		—
104 (R)	Ground	Rear window defogger power supply	Output	[Engine is running] • Rear window defogger **NOTE:** Roof is fully closed.	Active	Battery voltage
					Not active	0 V
111 (R)	Ground	Rear window defogger power supply	Output	[Engine is running] • Rear window defogger **NOTE:** Roof is fully closed.	Active	Battery voltage
					Not active	0 V

Fail-safe

INFOID:0000000008832323

FAIL-SAFE CONTROL BY DTC

Soft top control unit performs fail-safe control when any of the following DTCs is detected.

Display contents of CONSULT		Fail-safe	Cancellation
U1000	CAN COMM CIRCUIT	Inhibit soft top operation.	Communication is normal.
U1010	CONTROL UNIT (CAN)	Inhibit soft top operation.	Communication is normal.
U0140	LOCAL COMM-1	Inhibit soft top operation.	Communication is normal.
U0215	LOCAL COMM-2	Inhibit soft top operation.	Communication is normal.
B1701	ROOF CONTROL UNIT	Inhibit soft top operation.	Replace soft top control unit.
B1702	ROOF CONTROL UNIT	Inhibit soft top operation.	Replace soft top control unit.
B1709	ROOF SWITCH(OPEN)	Inhibit soft top operation.	Detects roof open/close switch (OPEN) is OFF.
B170A	ROOF SWITCH(CLOSE)	Inhibit soft top operation.	Detects roof open/close switch (CLOSE) is OFF.
B170F	SENSOR POWER SUPPLY	Inhibit soft top operation.	Detects normal value.
B171A	HYDRAULIC PMP(LH)	Inhibit soft top operation.	Detects normal value.
B171B	HYDRAULIC PMP(RH)	Inhibit soft top operation.	Detects normal value.
B171C	SWITCHING VALVE 1	Inhibit soft top operation.	Detects normal value.
B171D	SWITCHING VALVE 2	Inhibit soft top operation.	Detects normal value.
B172C	ROOF STATE SIG(TRUNK)*	Inhibit soft top operation.	Detects normal value.
B1731	HYDRAULIC STATE 1	Inhibit soft top operation.	Turn ignition switch OFF.
B1758	THERMO PROTECTION	Inhibit soft top operation.	Turn ignition switch OFF and wait at least 5 minutes.
B175C	PWR SOURCE(ROOF)	Inhibit soft top operation.	Power source is 11.4 (V) or more for 0.5 second.
B175D	PWR SOURCE(ROOF)	Inhibit soft top operation.	Power source is14.5 (V) or more for 4 seconds.
B175E	PWR SOURCE(WINDOW)	Inhibit soft top operation and rear power window operation.	Power source (power window) is 9.5 (V) or more.
B175F	PWR SOURCE(WINDOW)	Inhibit soft top operation and rear power window operation.	Power source (power window) is 15.5 (V) or more.
B1766	SWITCHING VALVE 3	Inhibit soft top operation.	Detects normal value.
B1767	SWITCHING VALVE 4	Inhibit soft top operation.	Detects normal value.

Display contents of CONSULT		Fail-safe	Cancellation
B1768	SWITCHING VALVE 5	Inhibit soft top operation.	Detects normal value.
B176A	THERMO PROTECTION	Inhibit soft top operation.	Turn ignition switch OFF and wait at least 5 minutes.
B176B	ROOF WARNING LAMP	Inhibit soft top operation.	Detects normal value.
B176C	STRIKER SENSOR RH	Inhibit soft top operation.	Detects normal value.
B176D	STRIKER SENSOR LH	Inhibit soft top operation.	Detects normal value.
B176E	ROOF LATCH LOCK SENSOR	Inhibit soft top operation.	Detects normal value.
B176F	ROOF STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1770	ROOF STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1771	ROOF STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1772	5BOW STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1773	5BOW STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1774	S/LID STATUS SEN LH	Inhibit soft top operation.	Detects normal value.
B1775	S/LID STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1776	S/LID STATUS SEN RH	Inhibit soft top operation.	Detects normal value.
B1777	REAR DEF OUT SIG	Inhibit soft top and rear window defogger operation.	Detects normal value.
B1778	TRUNK OPEN OUT SIG	Inhibit soft top and trunk lid opener actuator operation.	Detects normal value.
B1779	THERMO PROTECTION	Inhibit soft top operation.	Detects normal value.
B177A	ROOF STATE INCORRECT	Inhibit soft top operation.	Detects normal value.
B177B	ROOF STATE INCORRECT	Inhibit soft top operation.	Detects normal value.
B177C	THERMO PROTECTION	Inhibit soft top operation.	Detects normal value.
B177D	5BOW LATCH OPEN SEN	Inhibit soft top operation.	Detects normal value.
B177E	5BOW LATCH CLOSE SEN	Inhibit soft top operation.	Detects normal value.
B177F	5BOW STRIKER SENSOR	Inhibit soft top operation.	Detects normal value.

*: This item indicates the roof status signal (Audio).

DTC Inspection Priority Chart

INFOID:0000000008832324

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

Priority	Display contents of CONSULT	
1	U1000	CAN COMM CIRCUIT
	U1010	CONTROL UNIT (CAN)
	B170F	SENSOR POWER SUPPLY
	B175C	PWR SOURCE(ROOF)
	B175D	PWR SOURCE(ROOF)
	B175E	PWR SOURCE(WINDOW)
	B175F	PWR SOURCE(WINDOW)
	B1701	ROOF CONTROL UNIT
	B1702	ROOF CONTROL UNIT

Priority	Display contents of CONSULT	
2	B1709	ROOF SWITCH(OPEN)
	B170A	ROOF SWITCH(CLOSE)
	B176B	ROOF WARNING LAMP
	B176C	STRIKER SENSOR RH
	B176D	STRIKER SENSOR LH
	B176E	ROOF LATCH LOCK SEN
	B176F	ROOF STATUS SEN LH
	B1770	ROOF STATUS SEN RH
	B1771	ROOF STATUS SEN LH
	B1772	5BOW STATUS SEN LH
	B1773	5BOW STATUS SEN RH
	B1774	S/LID STATUS SEN LH
	B1775	S/LID STATUS SEN RH
	B1776	S/LID STATUS SEN RH
	B177D	5BOW LATCH OPEN SEN
	B177E	5BOW LATCH CLOSE SEN
	B177F	5BOW STRIKER SENSOR
3	U0140	LOCAL COMM-1
	U0215	LOCAL COMM-2
	B171A	HYDRAULIC PMP(LH)
	B171B	HYDRAULIC PMP(RH)
	B171C	SWITCHING VALVE 1
	B171D	SWITCHING VALVE 2
	B172C	ROOF STATE SIG(TRUNK)*
	B1731	HYDRAULIC STATE 1
	B1758	THERMO PROTECTION
	B1766	SWITCHING VALVE 3
	B1767	SWITCHING VALVE 4
	B1768	SWITCHING VALVE 5
	B176A	THERMO PROTECTION
	B1777	REAR DEF OUT SIG
	B1778	TRUNK OPEN OUT SIG
	B1779	THERMO PROTECTION
	B177A	ROOF STATE INCORRECT
	B177B	ROOF STATE INCORRECT
	B177C	THERMO PROTECTION

*: This item indicates the roof status signal (Audio).

DTC Index

INFOID:0000000008832325

NOTE:
For details of Freeze Frame Data, refer to RF-28, "CONSULT Function".

Display contents of CONSULT		Fail-safe	Freeze Frame Data	Reference page
No DTC is detected. Further testing may be required.		—	—	—
U1000	CAN COMM CIRCUIT	×	×	RF-59

Display contents of CONSULT		Fail-safe	Freeze Frame Data	Reference page
U1010	CONTROL UNIT (CAN)	×	×	RF-60
U0140	LOCAL COMM-1	×	×	RF-61
U0215	LOCAL COMM-2	×	×	RF-62
B1701	ROOF CONTROL UNIT	×	×	RF-64
B1702	ROOF CONTROL UNIT	×	×	RF-65
B1709	ROOF SWITCH-OPEN	×	×	RF-66
B170A	ROOF SWITCH-CLOSE	×	×	RF-68
B170F	SENSOR POWER SUPPLY	×	×	RF-70
B171A	HYDRAULIC PMP(LH)	×	×	RF-73
B171B	HYDRAULIC PMP(RH)	×	×	RF-76
B171C	SWITCHING VALVE 1	×	×	RF-79
B171D	SWITCHING VALVE 2	×	×	RF-81
B172C	ROOF STATE SIG(TRUNK)*	×	×	RF-83
B1731	HYDRAULIC STATE 1	×	×	RF-85
B1758	THERMO PROTECTION	×	×	RF-86
B175C	PWR SOURCE(ROOF)	×	×	RF-87
B175D	PWR SOURCE(ROOF)	×	×	RF-88
B175E	PWR SOURCE(WINDOW)	×	×	RF-89
B175F	PWR SOURCE(WINDOW)	×	×	RF-91
B1766	SWITCHING VALVE 3	×	×	RF-93
B1767	SWITCHING VALVE 4	×	×	RF-95
B1768	SWITCHING VALVE 5	×	×	RF-97
B176A	THERMO PROTECTION	×	×	RF-99
B176B	ROOF WARNING LAMP	×	×	RF-100
B176C	STRIKER SENSOR RH	×	×	RF-102
B176D	STRIKER SENSOR LH	×	×	RF-104
B176E	ROOF LATCH LOCK SEN	×	×	RF-106
B176F	ROOF STATUS SEN LH	×	×	RF-108
B1770	ROOF STATUS SEN RH	×	×	RF-110
B1771	ROOF STATUS SEN LH	×	×	RF-112
B1772	5BOW STATUS SEN LH	×	×	RF-114
B1773	5BOW STATUS SEN RH	×	×	RF-116
B1774	S/LID STATUS SEN LH	×	×	RF-118
B1775	S/LID STATUS SEN RH	×	×	RF-120
B1776	S/LID STATUS SEN RH	×	×	RF-122
B1777	REAR DEF OUT SIG	×	×	RF-124
B1778	TRUNK OPEN OUT SIG	×	×	RF-125
B1779	THERMO PROTECTION	×	×	RF-127
B177A	ROOF STATE INCORRECT	×	×	RF-129
B177B	ROOF STATE INCORRECT	×	×	RF-130
B177C	THERMO PROTECTION	×	×	RF-131
B177D	5BOW LATCH OPEN SEN	×	×	RF-132
B177E	5BOW LATCH CLOSE SEN	×	×	RF-134
B177F	5BOW STRIKER SENSOR	×	×	RF-136

*: This item indicates the roof status signal (Audio).

SYMPTOM DIAGNOSIS

REAR WINDOW DEFOGGER AND DOOR MIRROR DEFOGGERS DO NOT OPERATE

Diagnosis Procedure

INFOID:0000000008195987

1.CHECK POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit.
Refer to DEF-82, "BCM : Diagnosis Procedure".

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER SWITCH

Check rear window defogger switch.
- With Navigation: Refer to DEF-83, "WITH NAVIGATION : Component Function Check".
- Without Navigation: Refer to DEF-83, "WITHOUT NAVIGATION : Component Function Check".

Is the inspection result normal?

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

3.CHECK REAR WINDOW DEFOGGER RELAY

Check rear window defogger relay.
Refer to DEF-85, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

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

Diagnosis Procedure

INFOID:0000000008195988

1.CHECK SOFT TOP CONTROL UNIT CIRCUIT

Check soft top control unit circuit.
Refer to DEF-87, "Component Function Check".

Is the inspection result normal?

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

2.CHECK REAR WINDOW DEFOGGER

Check rear window defogger.
Refer to DEF-89, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

DOOR MIRROR DEFOGGER DOES NOT OPERATE

BOTH SIDES

BOTH SIDES : Diagnosis Procedure

INFOID:0000000008195989

1.CHECK DOOR MIRROR DEFOGGER

Check door mirror defogger.
Refer to DEF-92, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

DRIVER SIDE

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000008195990

1.CHECK DRIVER SIDE DOOR MIRROR DEFOGGER

Check driver side door mirror defogger.
Refer to DEF-93, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

PASSENGER SIDE

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000008195991

1.CHECK PASSENGER SIDE DOOR MIRROR DEFOGGER.

Check passenger side door mirror defogger.
Refer to DEF-95, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

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

Diagnosis Procedure

INFOID:0000000008195992

1.CHECK AV CONTROL FUNCTION

Check that the AV control unit is operating normally. Refer to AV-173, "Work Flow".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".
NO >> GO TO 1.

REAR WINDOW DEFOGGER INDICATOR DOES NOT ILLUMINATE

WITH NAVIGATION

WITH NAVIGATION : Diagnosis Procedure

INFOID:0000000008195993

1.CHECK REAR WINDOW DEFOGGER OPERATION

Check rear window defogger operation.

Is the inspection result normal?

YES >> Check AV control system. Refer to AV-173, "Work Flow".
NO >> Check rear window defogger system. Refer to DEF-74, "Work Flow".

WITHOUT NAVIGATION

WITHOUT NAVIGATION : Diagnosis Procedure

INFOID:0000000008195994

1.CHECK A/C CONTROL FUNCTION

Check that the A/C control is operating normally.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check A/C control system. Refer to HAC-5, "Work Flow".

2.CHECK REAR WINDOW DEFOGGER ON SIGNAL

Check rear window defogger ON signal.
Refer to DEF-91, "Component Function Check".

Is the inspection result normal?

YES >> Replace A/C control (rear window defogger switch). Refer to HAC-78, "BASE AUDIO : Removal and Installation" (Base audio) or HAC-79, "BOSE AUDIO WITHOUT NAVIGATION : Removal and Installation" (BOSE audio without navigation).
NO >> Repair or replace the malfunctioning parts.

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000008195995

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR USA AND CANADA : Precaution for Battery Service

INFOID:0000000008195996

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

FOR MEXICO

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

INFOID:0000000008195997

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

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FOR MEXICO : Precaution for Battery Service

INFOID:0000000008195998

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

REMOVAL AND INSTALLATION

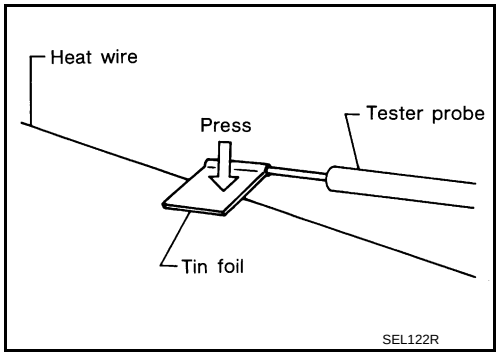
FILAMENT

Inspection and Repair

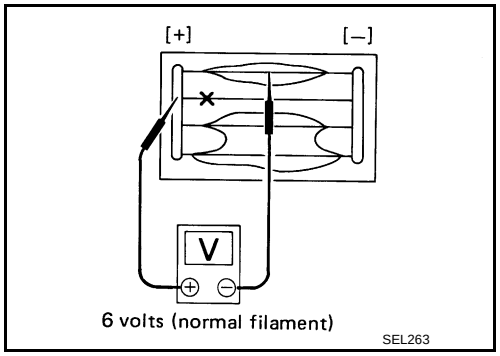
INFOID:0000000008195999

INSPECTION

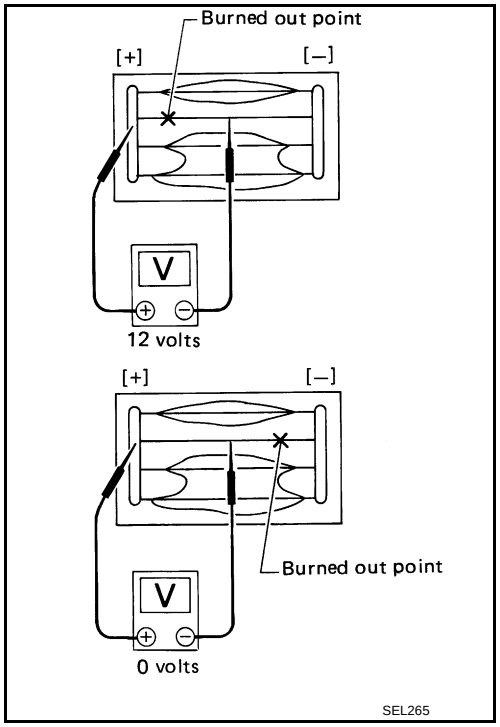
1. When measuring voltage, wrap tin foil around the top of the negative probe. Then press the foil against the wire with your finger.



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



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



REPAIR

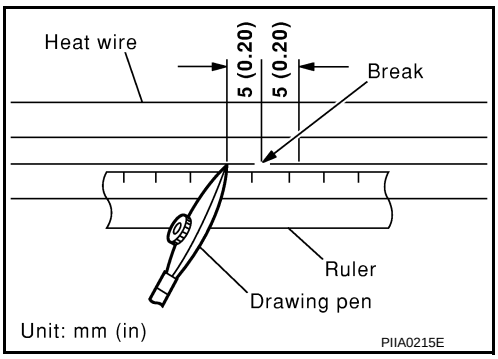
REPAIR EQUIPMENT

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

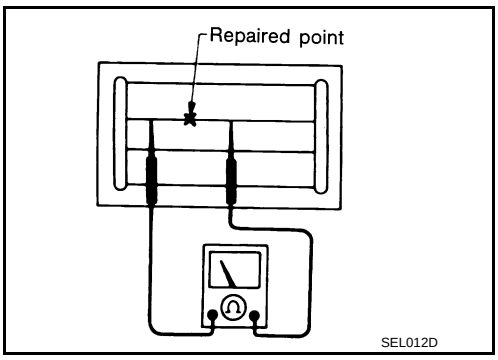
- Ruler 30 cm (11.8 in) long
- Drawing pen
- Heat gun
- Alcohol
- Cloth

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 complete, 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.