SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

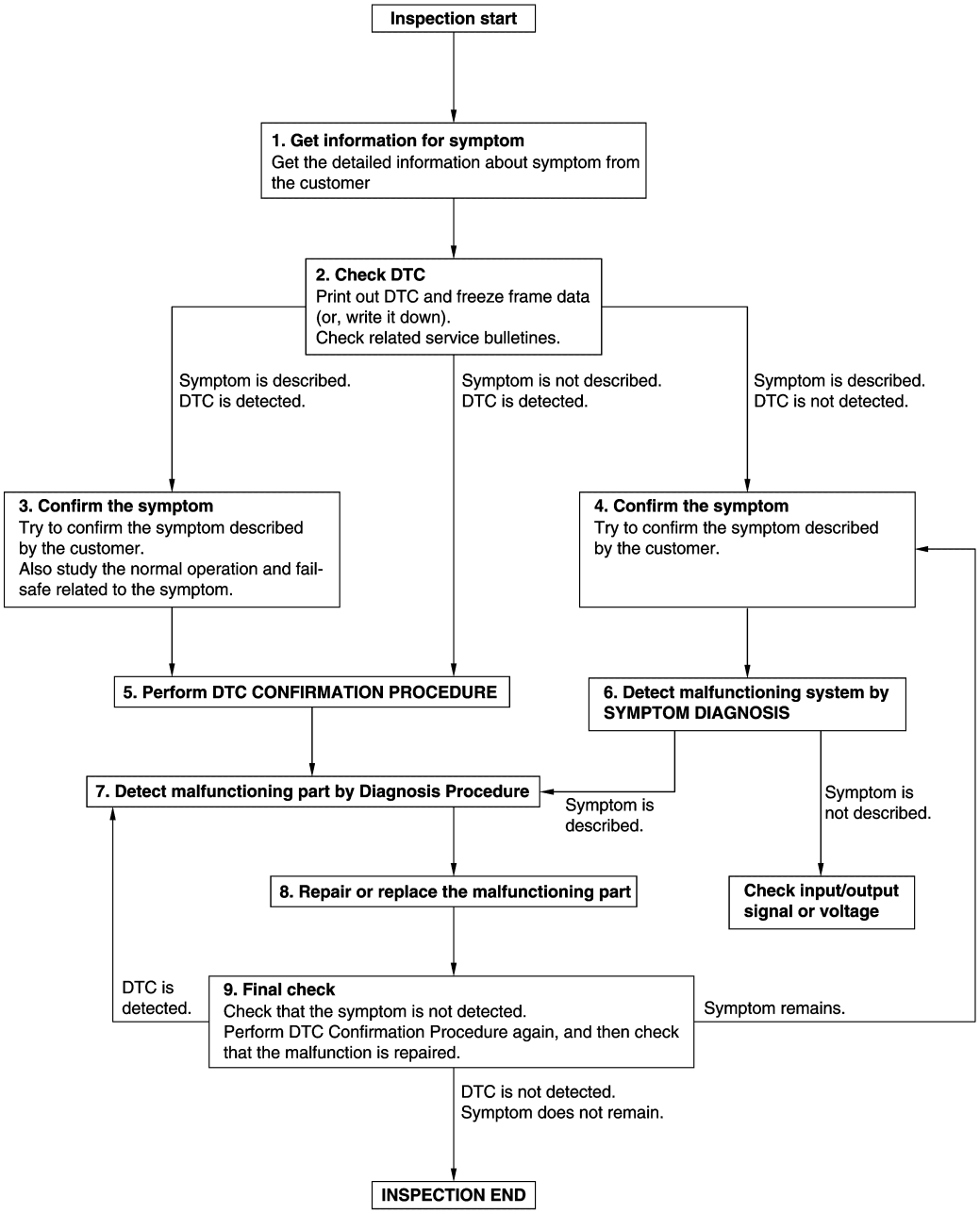
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000009718398

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2.CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected.

- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.
Symptom is described, DTC is not detected>>GO TO 4.
Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to DTC INSPECTION PRIORITY CHART, and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-44, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-44, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
3. Check DTC. If DTC is detected, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

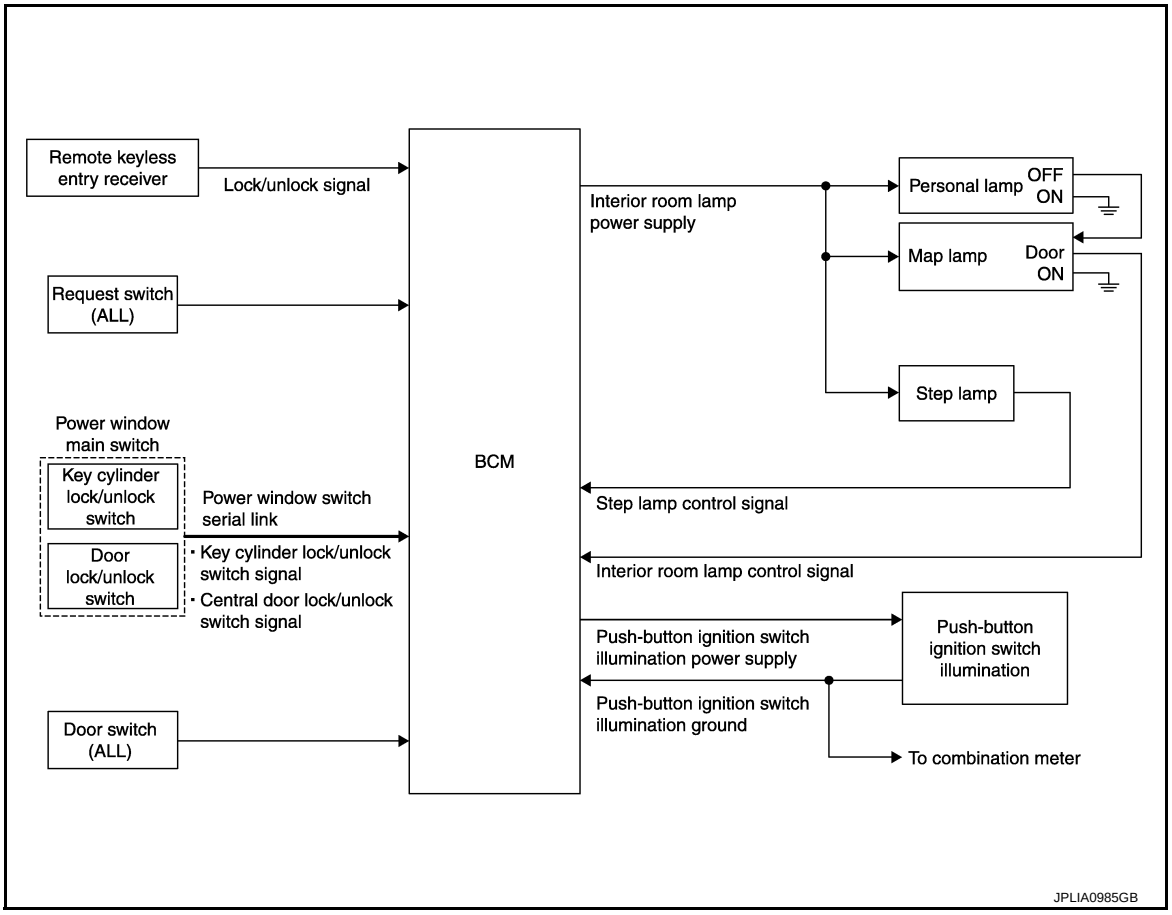
YES-1 >> DTC is detected: GO TO 7.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

SYSTEM DESCRIPTION

INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram

INFOID:0000000009718399



System Description

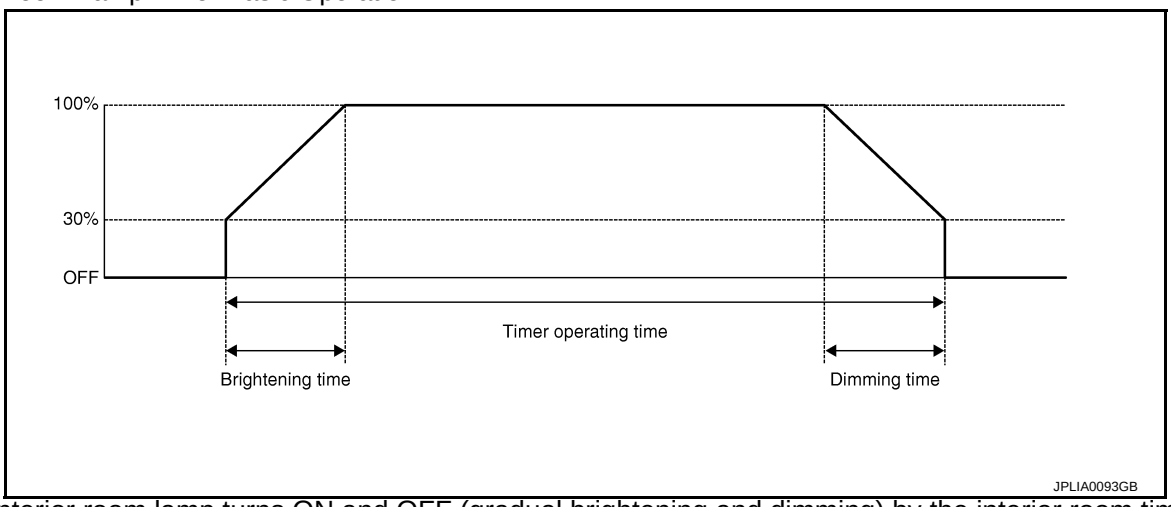
INFOID:0000000009718400

OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
  *: Map lamp and personal lamp (when map lamp switch is in DOOR position).
- Step lamp is controlled by step lamp control function of BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.

INTERIOR ROOM LAMP TIMER CONTROL

Interior Room Lamp Timer Basic Operation



- The interior room lamp turns ON and OFF (gradual brightening and dimming) by the interior room timer.
- BCM judges the vehicle condition with the following items. It activates the interior room timer.
- Ignition switch status
- Door switch signal (ALL)
- Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/unlock switch, door lock/unlock switch)

NOTE:
Each function of interior room lamp timer can be set by CONSULT. Refer to INL-16, "INT LAMP : CONSULT Function (BCM - INT LAMP)".

Interior Room Lamp ON Operation
- BCM always turns the interior room lamp ON when any door opens.
- BCM activates the interior room timer in any of the following conditions to turn the interior room lamp ON for a period of time.
- Any door opens before all doors close.
- Ignition switch is turned ON → OFF.
- Any door unlock signal is detected when all doors close with ignition switch OFF.

NOTE:
Restart the timer if new condition is input during the timer operating time.

Interior Room Lamp OFF Operation
BCM stops the timer in any of the following conditions to turns the interior room lamp OFF.
- The timer operating time is expired.
- Ignition switch position is other than OFF with all doors close.
- Any door lock operation is detected with all doors close.

STEP LAMP CONTROL
BCM controls the step lamp (ground-side) to turn ON with any door switch ON.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CONTROL

Push-button Ignition Switch Illumination Basic Operation
- BCM provides the power supply and the ground to turn the push-button ignition switch illumination ON.
- BCM cuts the ground supply while the each illumination (tail lamp) ON. BCM switches to the ground control with the meter illumination control function.

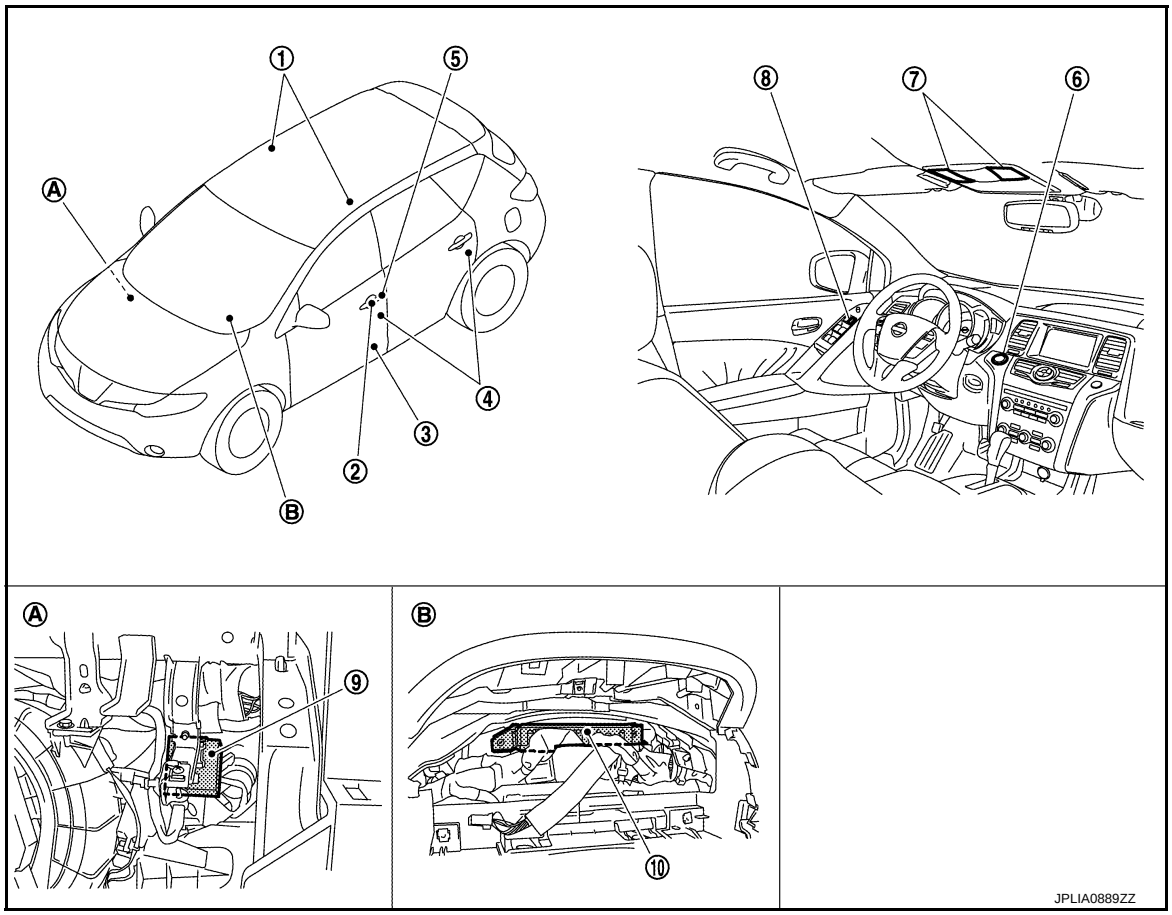
Push-button Ignition Switch Illumination ON Operation
BCM turns the push-button ignition switch illumination ON in the following conditions.
- Ignition switch ON
- Each illumination (tail lamp) ON
- Any of the following conditions with ignition switch OFF
- Engine start permission is entered.
- Intelligent Key inserted into the key slot.
- Driver door is LOCK → UNLOCK.
- Driver door is open.

Push-button Ignition Switch Illumination OFF Operation

BCM turns the push-button ignition switch illumination OFF in any of the following conditions.
- The push-button ignition switch illumination ON conditions do not satisfy.
- All of the following conditions with ignition switch OFF
- Each illumination (tail lamp) OFF
- The push-button ignition switch illumination ON conditions do not change (15 seconds after the ignition switch OFF) or the driver door is UNLOCK → LOCK.

Component Parts Location

INFOID:0000000009718401



1. Personal lamp
2. Request switch
3. Step lamp
4. Door switch
5. Key cylinder switch
6. Push-button ignition switch illumination
7. Map lamp
8. Door lock switch
9. Remote keyless entry receiver
10. BCM

A. Over the glove box
B. Behind the combination meter

Component Description

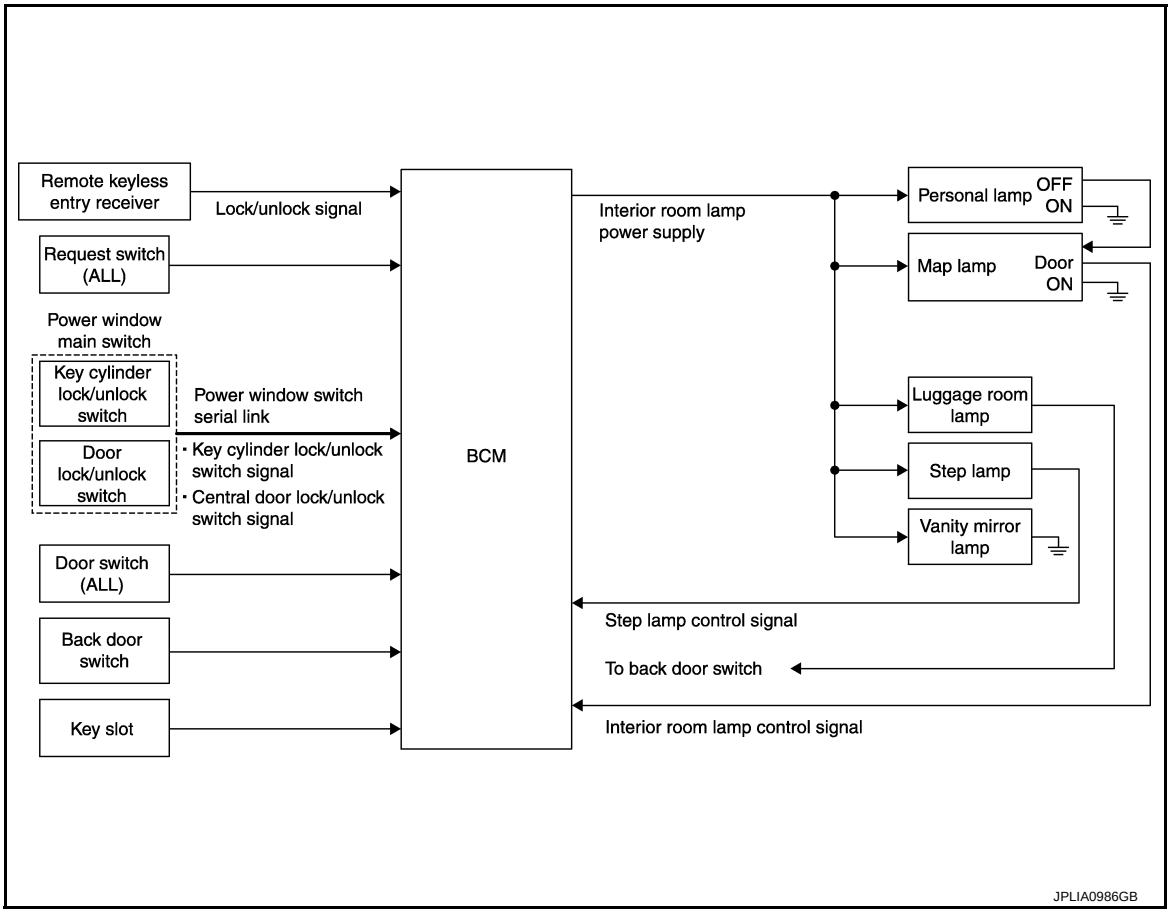
INFOID:0000000009718402

Part	Description
BCM	• Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamp ON/OFF. • Turns the step lamp ON /OFF according to any door switch status.
Remote keyless entry receiver	• Receives the lock/unlock signal from keyfob. • Transmits the lock/unlock signal to BCM.
• Request switch • Key cylinder lock/unlock switch • Door lock/unlock switch	Inputs the lock/unlock signal to BCM.
Door switch	Inputs the door switch signal to BCM.

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

System Diagram

INFOID:0000000009718403



System Description

INFOID:0000000009718404

OUTLINE

- Interior room lamp battery saver is controlled by BCM.
- BCM turns applicable lamps OFF depending on the vehicle condition. This function prevents the battery from over-discharging if the driver neglect turning OFF the any lamps.

Applicable lamps

- Map lamp
- Personal lamp
- Step lamp
- Luggage room lamp
- Vanity mirror lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

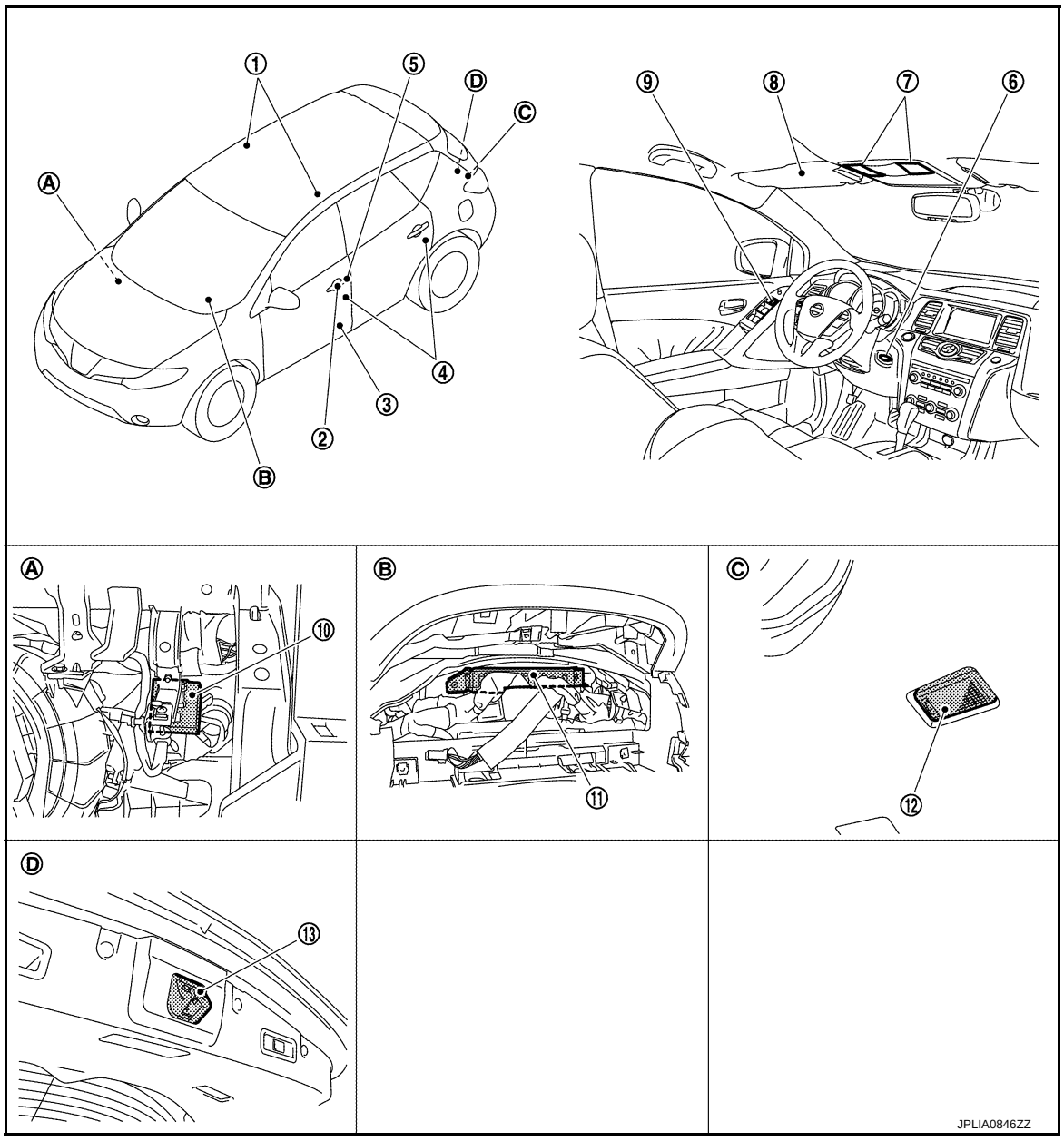
- When the ignition switch is turned OFF, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restart the timer when any of the following signals changes while operating the timer.
  - Ignition switch status
  - Door switch signal (ALL)
  - Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/unlock switch, door lock/unlock switch)
  - Back door switch signal
  - Key switch signal (Key slot)
- BCM provides the interior room lamp power supply continuously when the ignition switch position is other than OFF.

NOTE:

Each function of interior room lamp battery saver can be set by CONSULT. Refer to INL-17, "BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)".

Component Parts Location

INFOID:0000000009718405



1. Personal lamp
2. Request switch
3. Step lamp
4. Door switch
5. Key cylinder switch
6. Key slot
7. Map lamp
8. Vanity mirror lamp
9. Door lock switch
10. Remote keyless entry receiver
11. BCM
12. Luggage room lamp
13. Back door switch

A. Over the glove box
B. Behind the combination meter
C. Back door
D. Back door lock assembly

Component Description

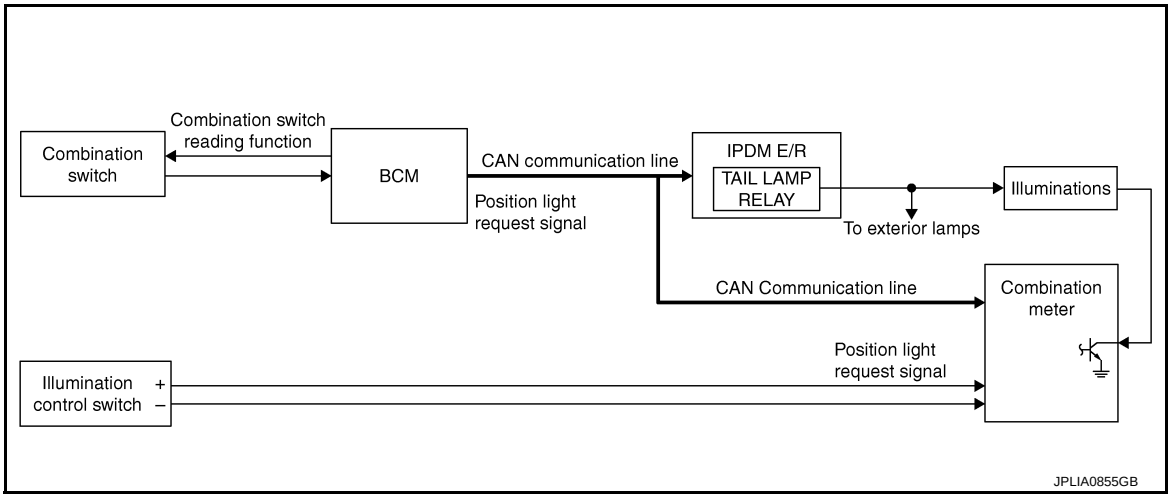
INFOID:0000000009718406

Part	Description
BCM	Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply.
Remote keyless entry receiver	• Receives the lock/unlock signal from keyfob. • Transmits the lock/unlock signal to BCM.
• Request switch • Key cylinder lock/unlock switch • Door lock/unlock switch	Inputs the lock/unlock signal to BCM.
• Door switch • Back door switch	Inputs a switch signal to BCM.
Key slot	Inputs the Intelligent Key in status to BCM.

ILLUMINATION CONTROL SYSTEM

System Diagram

INFOID:0000000009718407



System Description

INFOID:0000000009718408

OUTLINE

Each illumination lamp is controlled by each function of BCM, IPDM E/R and combination meter.

Control by BCM
- Combination switch reading function
- Headlamp control function

Control by IPDM E/R
- Relay control function

Control by combination meter
- Meter illumination control function (Refer to MWI-24, "METER ILLUMINATION CONTROL : System Description".)

ILLUMINATION CONTROL

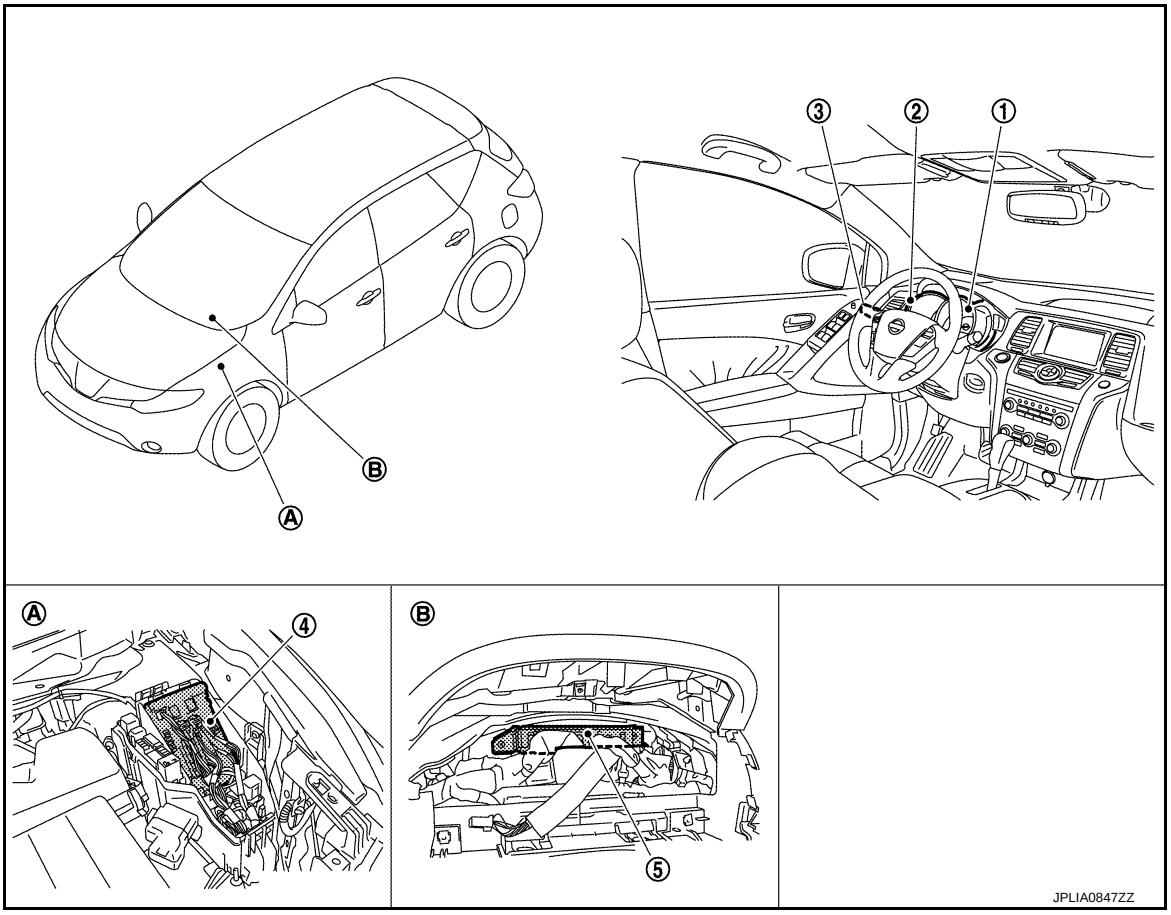
- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits position light request signal to IPDM E/R and combination meter according to tail lamp ON condition.

Tail lamp ON condition
- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment (With auto light system)

- IPDM E/R turns the integrated tail lamp relay ON according to position light request signal. It provides the power supply to each illumination lamp.
- Combination meter enters in the nighttime mode according to position light request signal. Under the nighttime mode the combination meter controls the illuminance by controlling the each illumination lamp (ground side).

Component Parts Location

INFOID:0000000009718409



1. Combination meter
2. Illumination control switch
3. Combination switch
4. IPDM E/R
5. BCM

A Engine room (LH)
B. Behind the combination meter

Component Description

INFOID:0000000009718410

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then it transmits position light request signal to IPDM E/R and combination meter (with CAN communication).
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).
Combination meter	• Enters in nighttime mode according to the request from BCM (with CAN communication). • Controls the each illumination in the nighttime mode. Refer to MWI-24, "METER ILLUMINATION CONTROL : System Description".
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Description".

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

INFOID:0000000010129264

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	×*1	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*2			
• 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 opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

- *1: For models with rain sensor this mode is displayed, but is not used.
- *2: 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 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” (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”*
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”*) to low power consumption mode
	LOCK		Power supply position is “LOCK”*
	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, 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

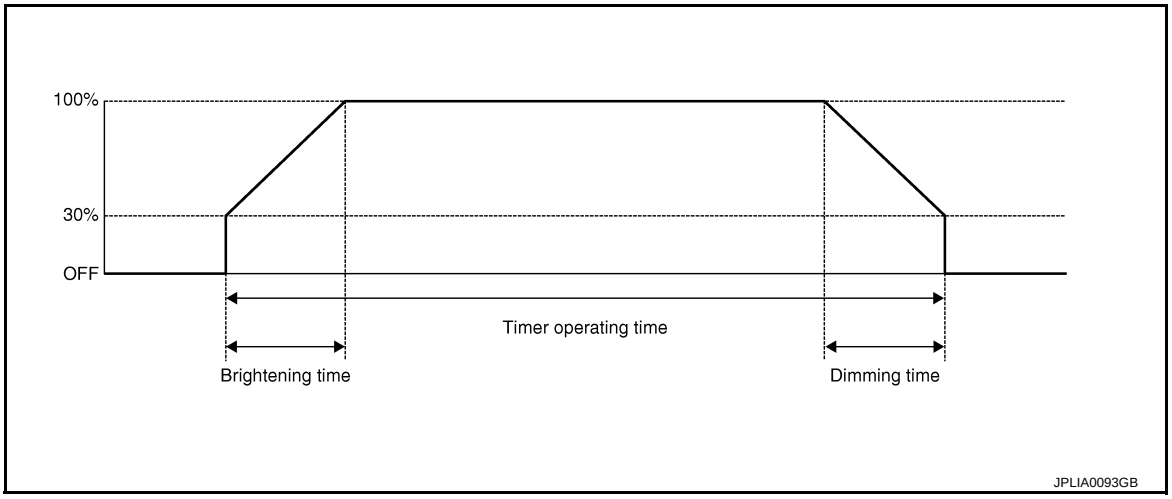
The power supply position shifts to “ACC” when the push-button ignition switch (push switch) is pushed at “LOCK”.

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000009718412

WORK SUPPORT



Service item	Setting item	Setting	
SET I/L D-UNLCK INTCON	ON*	With the interior room lamp timer function	
	OFF	Without the interior room lamp timer function	
ROOM LAMP TIMER SET	MODE 2	7.5 sec.	Sets the interior room lamp ON time. (Timer operating time)
	MODE 3*	15 sec.	
	MODE 4	30 sec.	
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual brightening time.
	MODE 2*	1 sec.	
	MODE 3	2 sec.	
	MODE 4	3 sec.	
	MODE 5	0 sec.	
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual dimming time.
	MODE 2	1 sec.	
	MODE 3	2 sec.	
	MODE 4*	3 sec.	
	MODE 5	0 sec.	
R LAMP TIMER LOGIC SET	MODE 1*	Interior room lamp timer activates with synchronizing all doors.	
	MODE 2	Interior room lamp timer activates with synchronizing the driver door only.	

*: Factory setting

DATA MONITOR

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

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
PUSH SW [On/Off]	The switch status input from push-button ignition switch

Monitor item [Unit]	Description
KEY SW-SLOT [On/Off]	Key switch status input from key slot
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)
DOOR SW-RR [On/Off]	The switch status input from rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	**NOTE:** The item is indicated, but not monitored.
CDL LOCK SW [On/Off]	Lock switch status received from door lock/unlock switch by power window switch serial link
CDL UNLOCK SW [On/Off]	Unlock switch status received from door lock/unlock switch by power window switch serial link
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder lock/unlock switch by power window switch serial link
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder lock/unlock switch by power window switch serial link
BACK DOOR SW [On/Off]	The switch status input from back door switch
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal to turn map lamp and personal lamp ON (Map lamp switch is in DOOR position).
	Off	Stops the interior room lamp control signal to turn map lamp and personal lamp OFF.
STEP LAMP TEST	On	Outputs the step lamp control signal to turn step lamp ON.
	Off	Stops the step lamp control signal to turn step lamp OFF.
LUGGAGE LAMP TEST	On	**NOTE:** The item is displayed, but cannot be tested.
	Off	

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000009718413

WORK SUPPORT

Service item	Setting item	Setting
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function
ROOM LAMP BAT SAV SET	On*	With the interior room lamp battery saver function
	Off	Without the interior room lamp battery saver function

Service item	Setting item	Setting	
ROOM LAMP TIMER SET	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 3*	15 min.	

*: Factory setting

DATA MONITOR

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

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
REQ SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
REQ SW-RL [On/Off]	
PUSH SW [On/Off]	The switch status input from push-button ignition switch
KEY SW-SLOT [On/Off]	Key switch status input from key slot
UNLK SEN-DR [On/Off]	Driver door unlock status input from unlock sensor
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)
DOOR SW-RR [On/Off]	The switch status input from rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	**NOTE:** The item is indicated, but not monitored.
CDL LOCK SW [On/Off]	Lock switch status received from door lock/unlock switch by power window switch serial link
CDL UNLOCK SW [On/Off]	Unlock switch status received from door lock/unlock switch by power window switch serial link
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder lock/unlock switch by power window switch serial link
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder lock/unlock switch by power window switch serial link
BACK DOOR SW [On/Off]	The switch status input from back door switch
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply to turn interior room lamp OFF.
	On	Outputs the interior room lamp power supply to turn interior room lamp ON.*

*: Each lamp switch is in ON position.

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000009718414

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	L
	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.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

INFOID:0000000009718415

Provides the interior room lamp power supply. Also cuts the power supply when the interior room lamp battery saver activating.

Component Function Check

INFOID:0000000009718416

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Turn each interior room lamp ON.
- Map lamp
- Personal lamp
- Step lamp
- Vanity mirror lamp
- Luggage room lamp
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF.

Off : Interior room lamp OFF
On : Interior room lamp ON

Does the interior room lamp turn ON/OFF?

YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to INL-21, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009718417

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “BATTERY SAVER” of BCM (BATTERY SAVER) active test item.
3. With operating the test item, check voltage between BCM harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(–)		
BCM		Ground	BATTERY SAVER	
Connector	Terminal			
M119	4		Off	0 V
			On	Battery voltage

Is the measurement value normal?

YES >> GO TO 2.
NO >> Replace BCM.

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the following connectors.
- Map lamp
- Personal lamp
- Vanity mirror lamp (driver side)
- Vanity mirror lamp (passenger side)
- Luggage room lamp (RH)
- Luggage room lamp (LH)
- Step lamp (driver side)

- Step lamp (passenger side)

3. Check continuity between BCM harness connector and each interior room lamp harness connector.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M119	4	Map lamp	R19	1	Existed
		Personal lamp	R21	1	
		Vanity mirror lamp (driver side)	R24	2	
		Vanity mirror lamp (passenger side)	R10	2	
		Luggage room lamp (RH)	D156	2	
		Luggage room lamp (LH)	D157	2	
		Step lamp (driver side)	D17	1	
		Step lamp (passenger side)	D51	1	

Does continuity exist?

YES >> GO TO 3.
NO >> Repair the harnesses or connectors.

3.CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector and the ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	4		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Check that each interior room lamp has no internal short circuit.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000009718418

Controls each interior room lamp (ground side) by PWM signal.
NOTE:
PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

Component Function Check

INFOID:0000000009718419

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Interior room lamp power supply**
- **Map lamp bulb**
- **Personal lamp bulb**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT ACTIVE TEST
1. Switch the map lamp switch to DOOR.
2. Turn the ignition switch ON.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

On : Interior room lamp gradual brightening
Off : Interior room lamp gradual dimming

Does the interior room lamp turns ON/OFF (gradual brightening/dimming)?

YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-23, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009718420

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT ACTIVE TEST
1. Turn ignition switch OFF.
2. Remove all the bulbs of map lamp and personal lamp.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. With operating the test item, check continuity between BCM harness connector and ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		INT LAMP	
M119	19		On	Existed
			Off	Not existed

Is the measurement value normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector, map lamp connector and personal lamp connector.
3. Check continuity between BCM harness connector, map lamp harness connector and personal lamp harness connector.

BCM		Map lamp/personal lamp			Continuity
Connector	Terminal	Connector		Terminal	
M119	19	Map lamp	R19	2	Existed
		Personal lamp	R21	3	

Does continuity exist?

YES >> Replace the map lamp or the personal lamp.
NO >> Repair the harnesses or connectors.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector, map lamp connector and personal lamp connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	19		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Replace BCM.

STEP LAMP CIRCUIT

Description

INFOID:0000000009718421

Controls the step lamp (ground side) to turn the step lamp ON and OFF.

Component Function Check

INFOID:0000000009718422

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Interior room lamp power supply**
- **Step lamp bulb**

1.CHECK STEP LAMP OPERATION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select "STEP LAMP TEST" of BCM (INT LAMP) active test item.
3. With operating the test items, check that step lamp turns ON/OFF.

On : Step lamp ON
Off : Step lamp OFF

Does the step lamp turn ON/OFF?

YES >> Step lamp circuit is normal.
NO >> Refer to INL-25, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009718423

1.CHECK STEP LAMP OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch OFF.
2. Remove the step lamp bulbs (driver side and passenger side).
3. Turn the ignition switch ON.
4. Select “STEP LAMP TEST” of BCM (INT LAMP) active test item.
5. With operating the test item, check continuity between BCM harness connector and the ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		STEP LAMP TEST	
M119	7		On	Existed
			Off	Not existed

Is the measurement value normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM.

2.CHECK STEP LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector, and step lamp connector.
3. Check continuity between BCM harness connector and step lamp harness connector.

BCM		Step lamp			Continuity
Connector	Terminal	Connector		Terminal	
M119	7	Driver side	D17	2	Existed
		Passen-ger side	D51	2	

Does continuity exist?

YES >> Replace step lamp.
NO >> Repair harnesses or connectors.

3. CHECK STEP LAMP SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Check continuity between BCM harness connector and the ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	7		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Replace BCM.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000009718424

Provides the power supply and the ground to control the push-button ignition switch illumination.

Component Function Check

INFOID:0000000009718425

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.
3. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF

On : Push-button ignition switch illumination ON
Off : Push-button ignition switch illumination OFF

Does the push-button ignition switch illumination turn ON/OFF?

YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to INL-27, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009718426

1.CHECK ILLUMINATION CONTROL SWITCHING OPERATION

1. Turn the ignition switch ON.
2. With operating the lighting switch, check that the push-button ignition switch illumination turns ON/OFF

Condition	Push-button ignition switch illumination
• Ignition switch ON • Lighting switch 1ST	ON
• Ignition switch OFF • Lighting switch OFF • Driver door LOCK	OFF

Does the push-button ignition switch illumination turn ON/OFF?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector and the push-button ignition switch connector.
3. Check continuity between BCM harness connector and the push-button ignition switch harness connector.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M119	14	M101	2	Existed

Does the continuity exist?

YES >> Replace BCM.
NO >> Repair the harness or the connector.

3.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.
3. With operating the test item, check voltage between BCM harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(–)		
BCM		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M123	133		ON	5 V
			OFF	0 V

Is the measurement value normal?

YES >> GO TO 4.
NO >> GO TO 5.

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector and the push-button ignition switch connector.
3. Check continuity between BCM harness connector and the push-button ignition switch harness connector.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M123	133	M101	3	Existed

Does the continuity exist?

YES >> Replace push-button ignition switch.
NO >> Repair the harness or the connector.

5. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector and the push-button ignition switch connector.
3. Check continuity between BCM harness connector and the ground.

BCM		Ground	Continuity
Connector	Terminal		
M123	133		Not existed

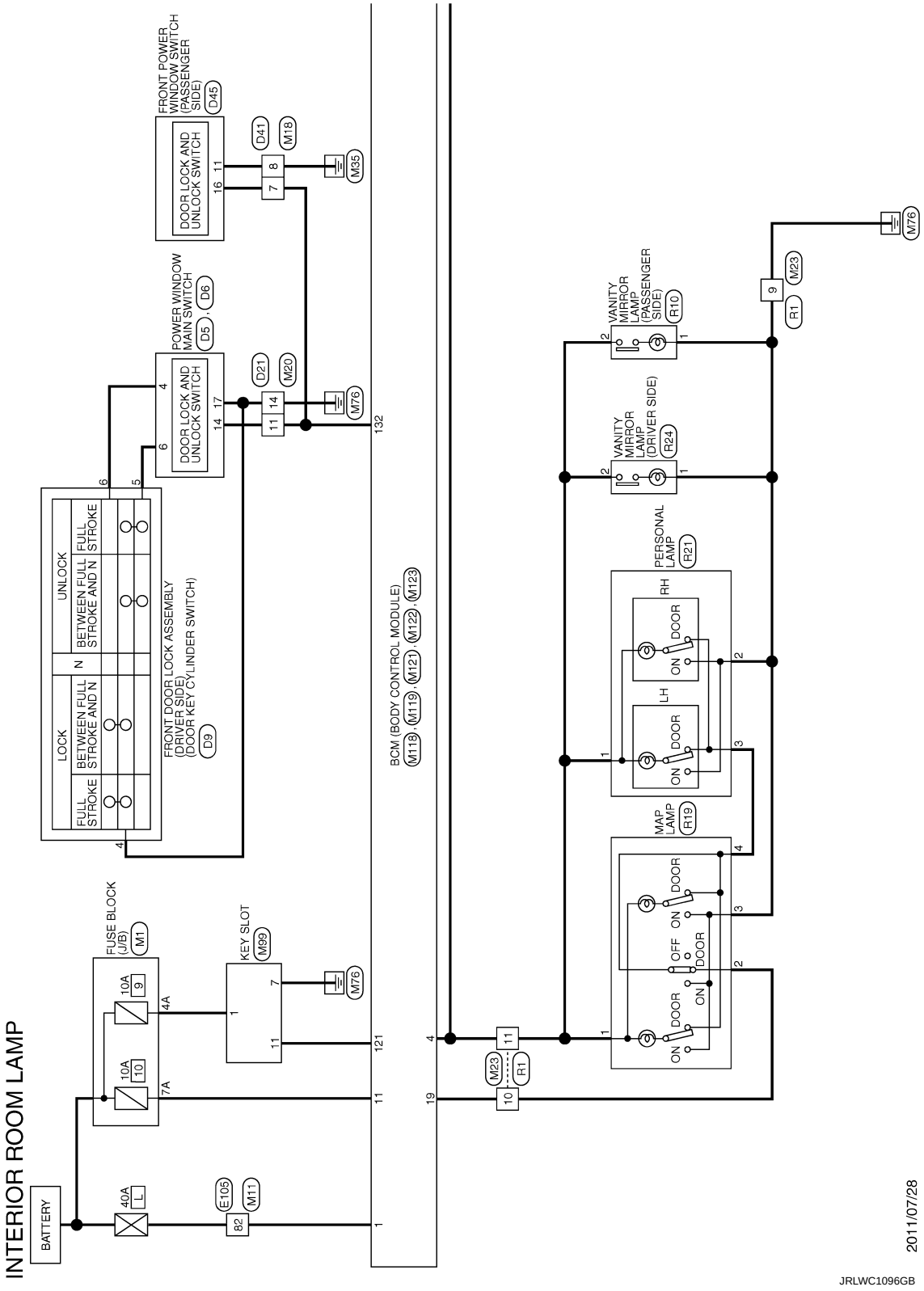
Does the continuity exist?

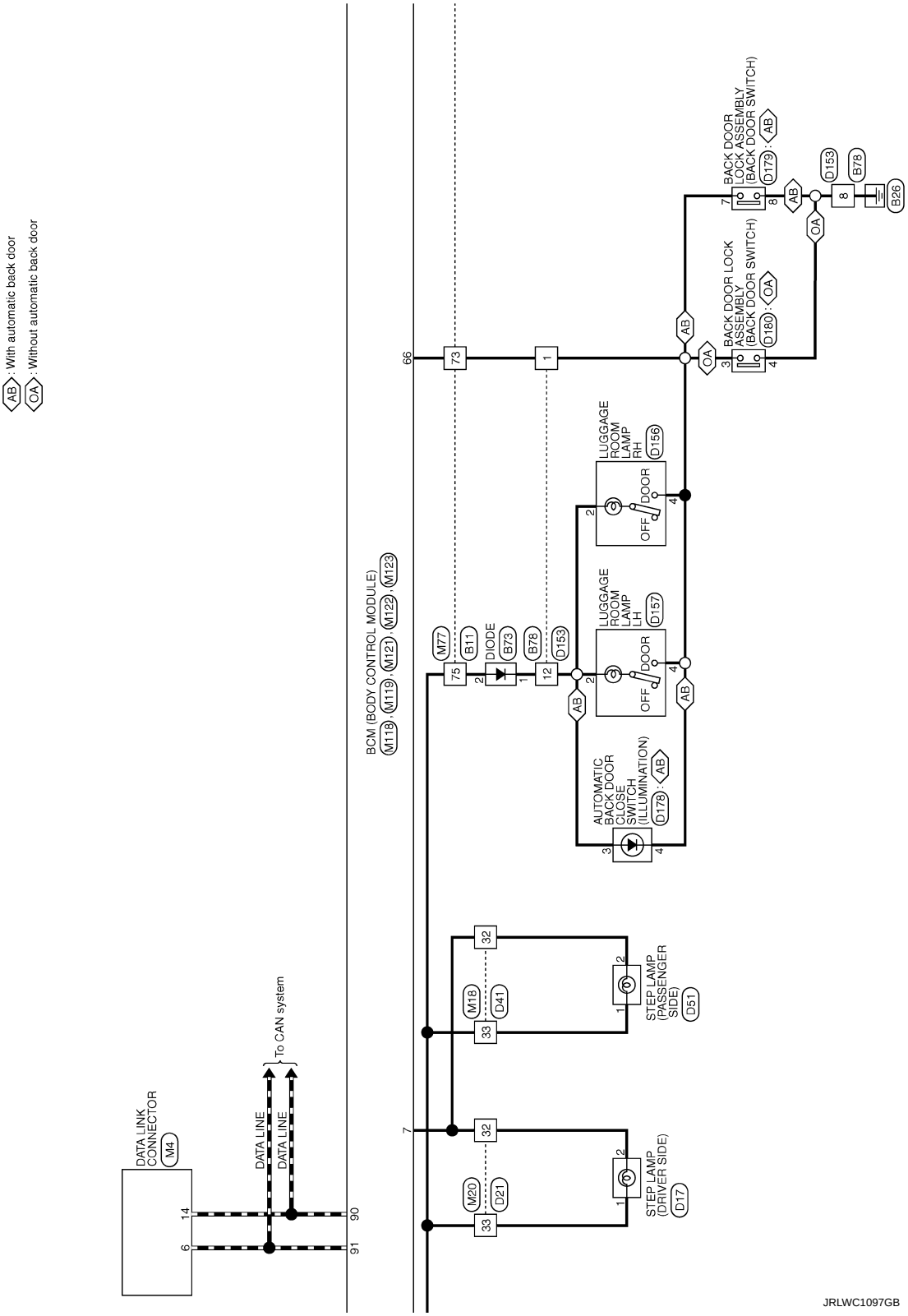
YES >> Repair the harness or the connector.
NO >> Replace BCM.

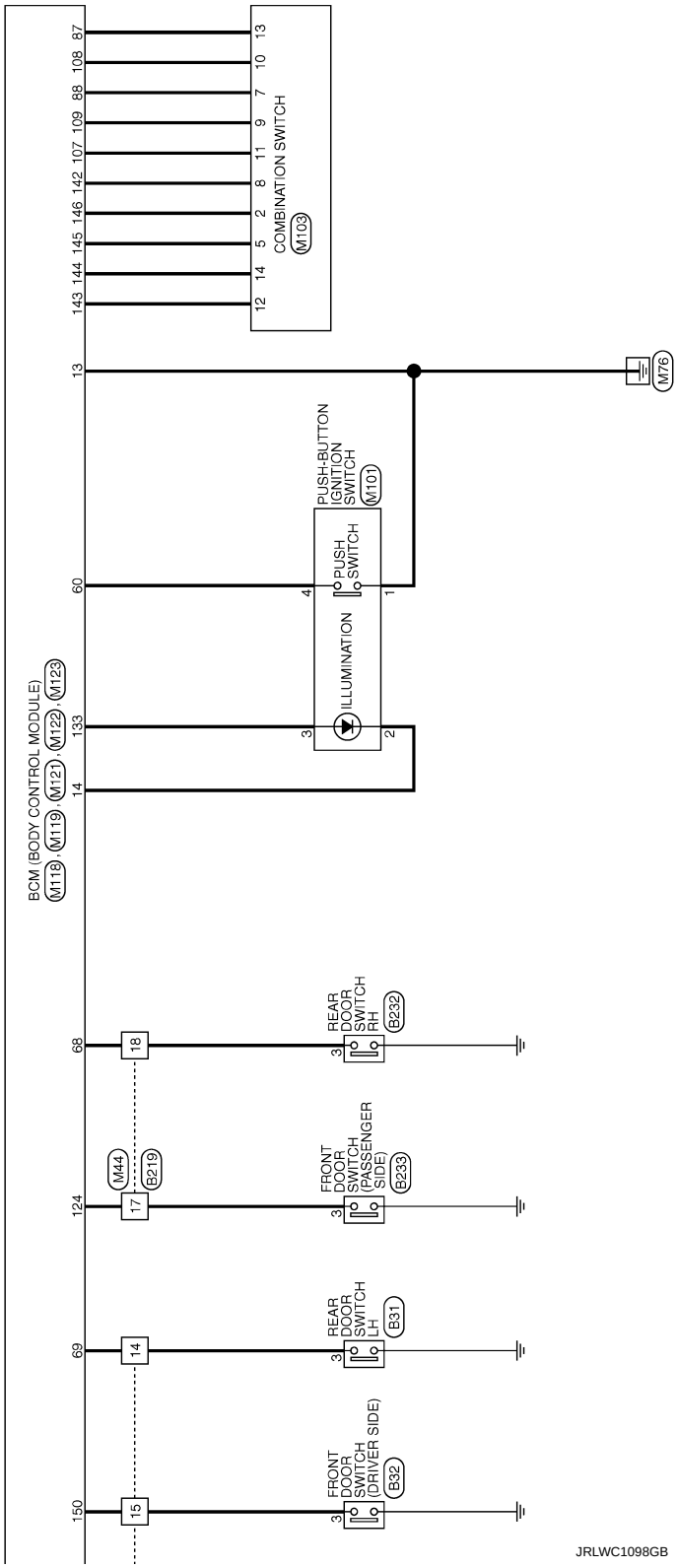
INTERIOR ROOM LAMP CONTROL SYSTEM

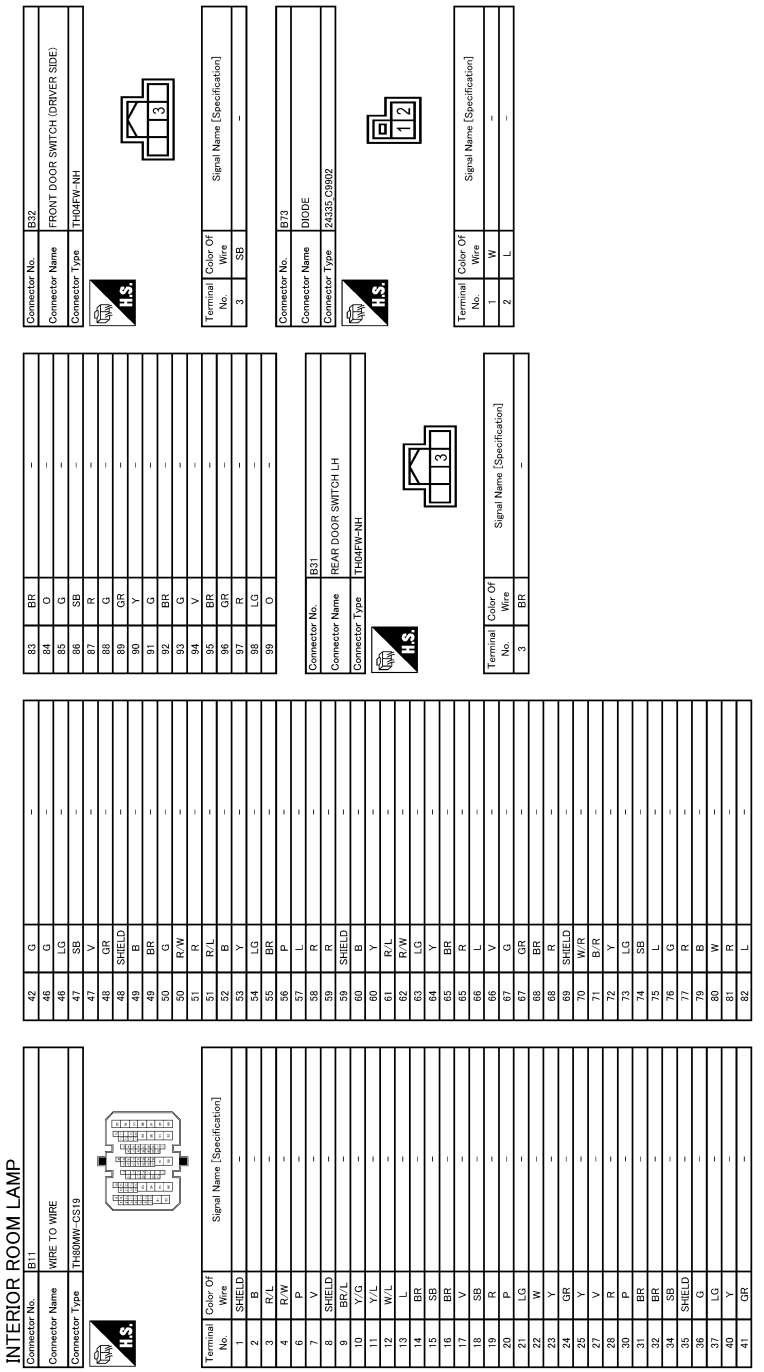
Wiring Diagram - INTERIOR ROOM LAMP -

INFOID:0000000009718427




AB : With automatic back door
OA : Without automatic back door
BCM (BODY CONTROL MODULE)
M118, M119, M121, M122, M123
DATA LINK CONNECTOR
M4
DATA LINE
DATA LINE
To CAN system
STEP LAMP (DRIVER SIDE)
D17
STEP LAMP (PASSENGER SIDE)
D51
AUTOMATIC BACK DOOR CLOSE SWITCH (ILLUMINATION)
D178 : AB
LUGGAGE ROOM LAMP LH
D157
LUGGAGE ROOM LAMP RH
D156
DOOR
OFF
DIODE
B73
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D180 : OA
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D179 : AB
JRLWC1097GB


BCM (BODY CONTROL MODULE)
M118, M119, M121, M122, M123
COMBINATION SWITCH
M103
PUSH-BUTTON IGNITION SWITCH
M101
PUSH SWITCH
ILLUMINATION
M76
REAR DOOR SWITCH RH
B232
FRONT DOOR SWITCH (PASSENGER SIDE)
B233
M44
B219
REAR DOOR SWITCH LH
B31
FRONT DOOR SWITCH (DRIVER SIDE)
B32
JRLWC1098GB



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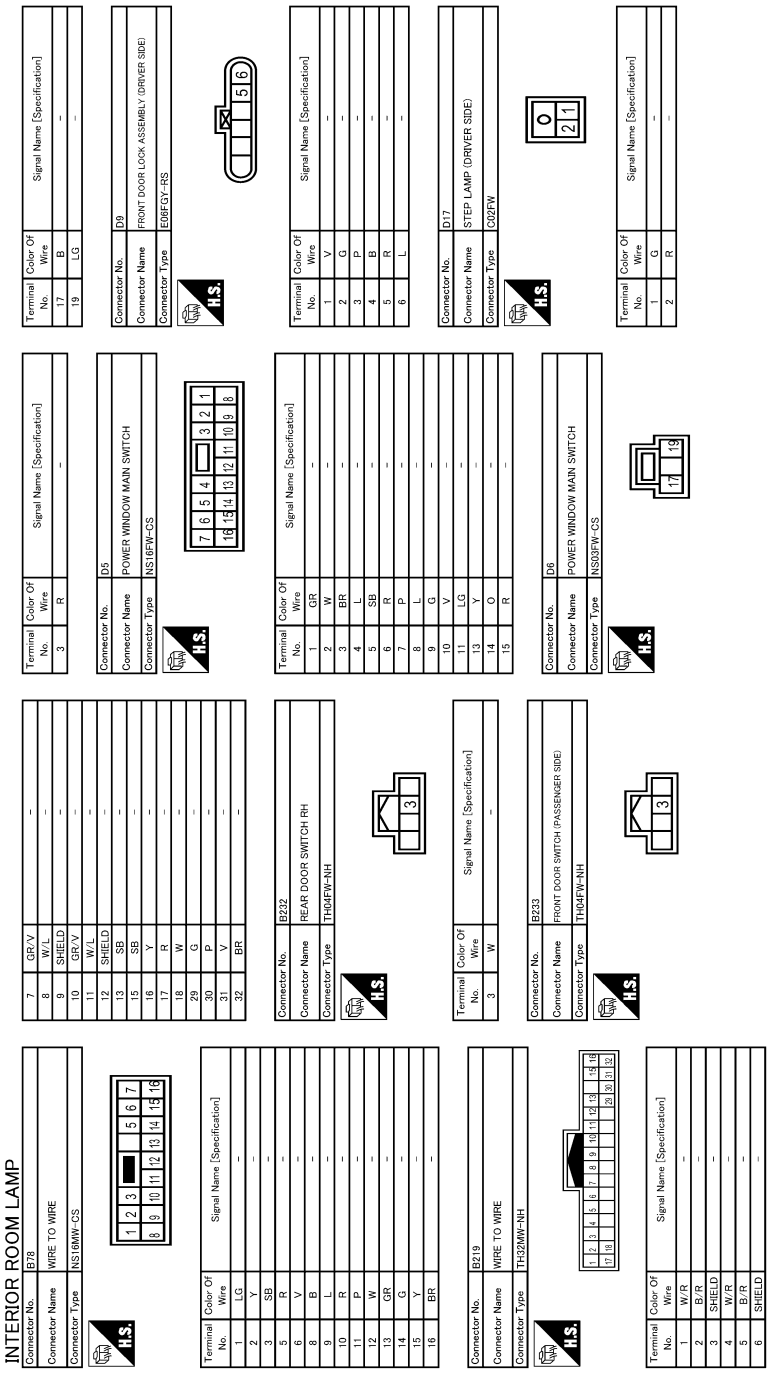

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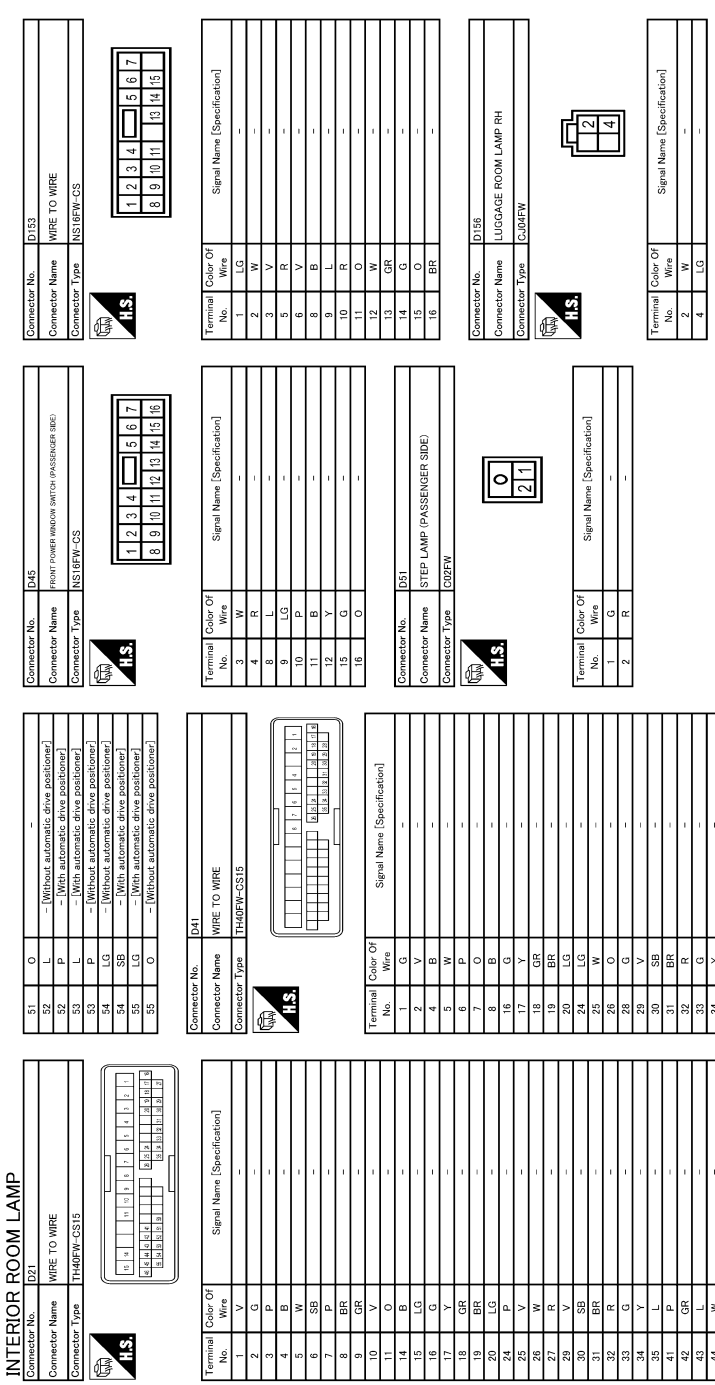

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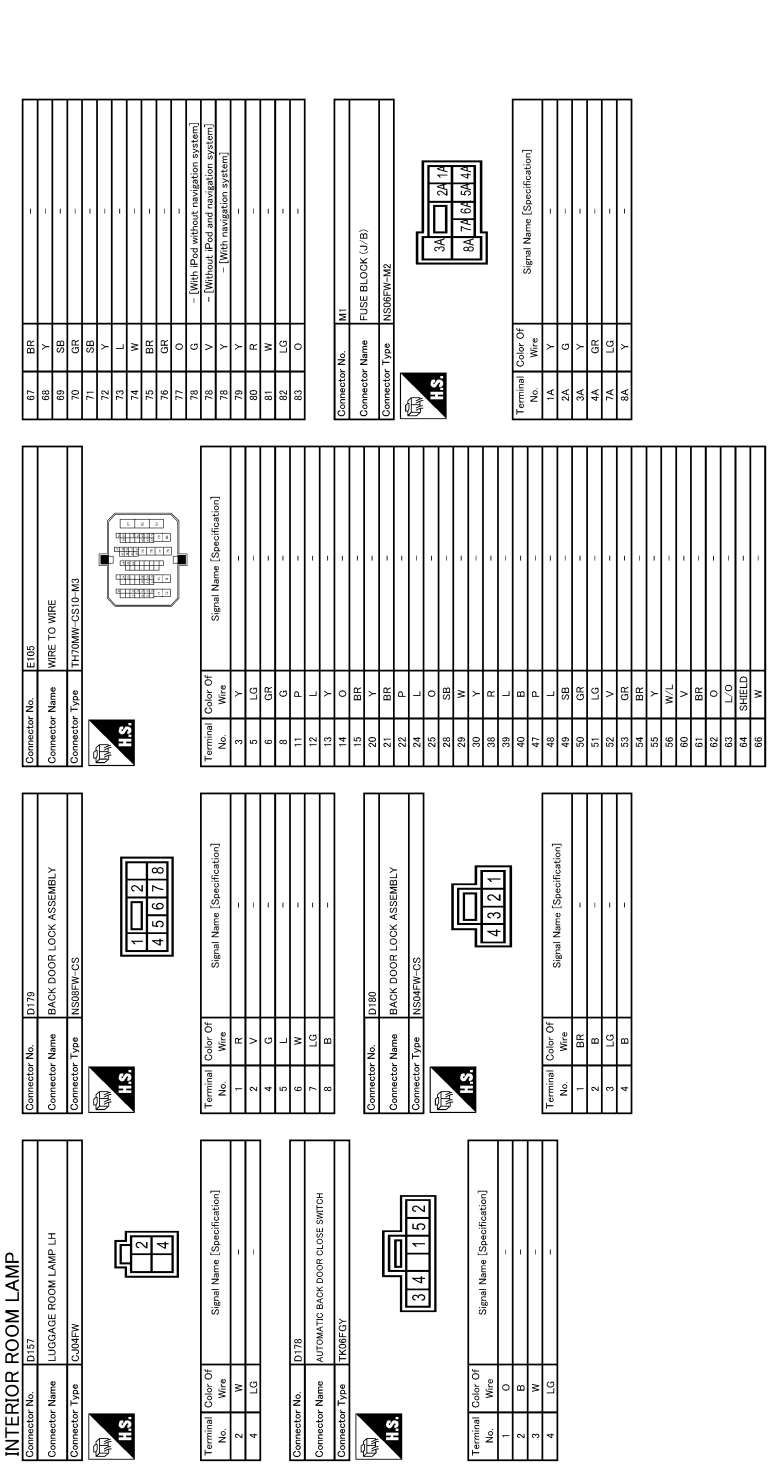


JRLWC9454GB

INTERIOR ROOM LAMP

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	–
4	B	–
5	B	–
6	L	–
7	BR	–
8	G	–
11	SB	–
14	P	–
16	Y	–

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH70FW-CS10-M3

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	P	–
5	BR	–
5	O	–
6	G	–
8	R	–
11	P	–
12	L	–
13	V	–
14	Y	–
15	R	–
20	W	– [Without colour display]
20	Y	– [With colour display]
21	BR	–
22	LG	–
24	Y	–
25	L	–
28	BR	–
29	L	–
30	R	–
38	R	–
39	L	–
40	B	–
47	P	–
48	L	–
49	W	–
50	GR	–
51	LG	–
52	Y	–
53	V	–
54	SB	–
55	P	–
56	LG	–
60	V	–
61	GR	–
62	BR	–
63	V	–
64	SHIELD	–
66	W	–
67	R	–
68	W	–
69	P	–
70	G	–
71	G	–
72	BR	–
73	L	–
74	W	–
75	BR	–
76	R	–
77	G	–
78	Y	–
79	G	–
80	R	–
81	W	–
82	W	–
83	BG	–

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

H.S.

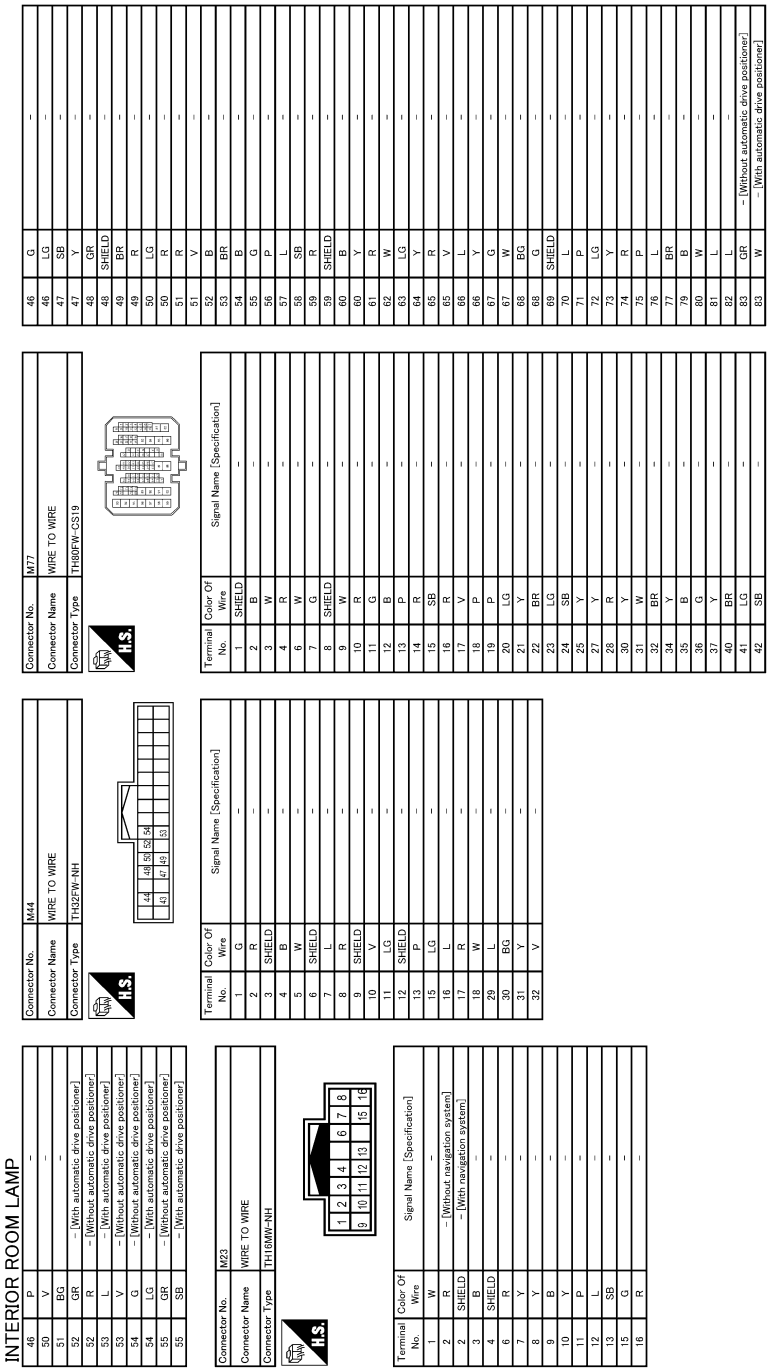
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	–
2	V	–
4	L	– [With iPod without BOSE system]
4	W	– [With BOSE system and base audio without iPod]
5	B	– [With BOSE system]
5	BR	– [Without iPod and BOSE system]
5	W	– [With iPod without BOSE system]
6	GR	–
7	G	–
8	B	–
16	W	–
17	Y	–
18	W	–
19	R	–
20	SB	–
24	LG	–
25	Y	–
26	P	–
28	R	–
29	GR	–
30	G	–
31	V	–
32	Y	–
33	P	–
34	BR	–
35	R	–

Connector No.	M20
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	–
2	G	–
3	W	–
4	B	– [With BOSE system and base audio without iPod]
4	R	– [With iPod without BOSE system]
5	G	– [With iPod without BOSE system]
5	L	– [With BOSE system and base audio without iPod]
6	V	–
7	BR	–
8	W	–
9	SB	–
10	L	–
11	G	–
14	B	–
15	GR	–
16	L	–
17	Y	–
18	W	–
19	Y	–
20	SB	–
24	P	–
25	V	–
26	W	–
27	R	–
29	R	–
30	L	–
31	SB	–
32	W	–
33	P	–
34	BR	–
35	R	–
41	LG	–
42	LG	–
43	BR	–
44	Y	–
45	P	–

JRLWC9455GB



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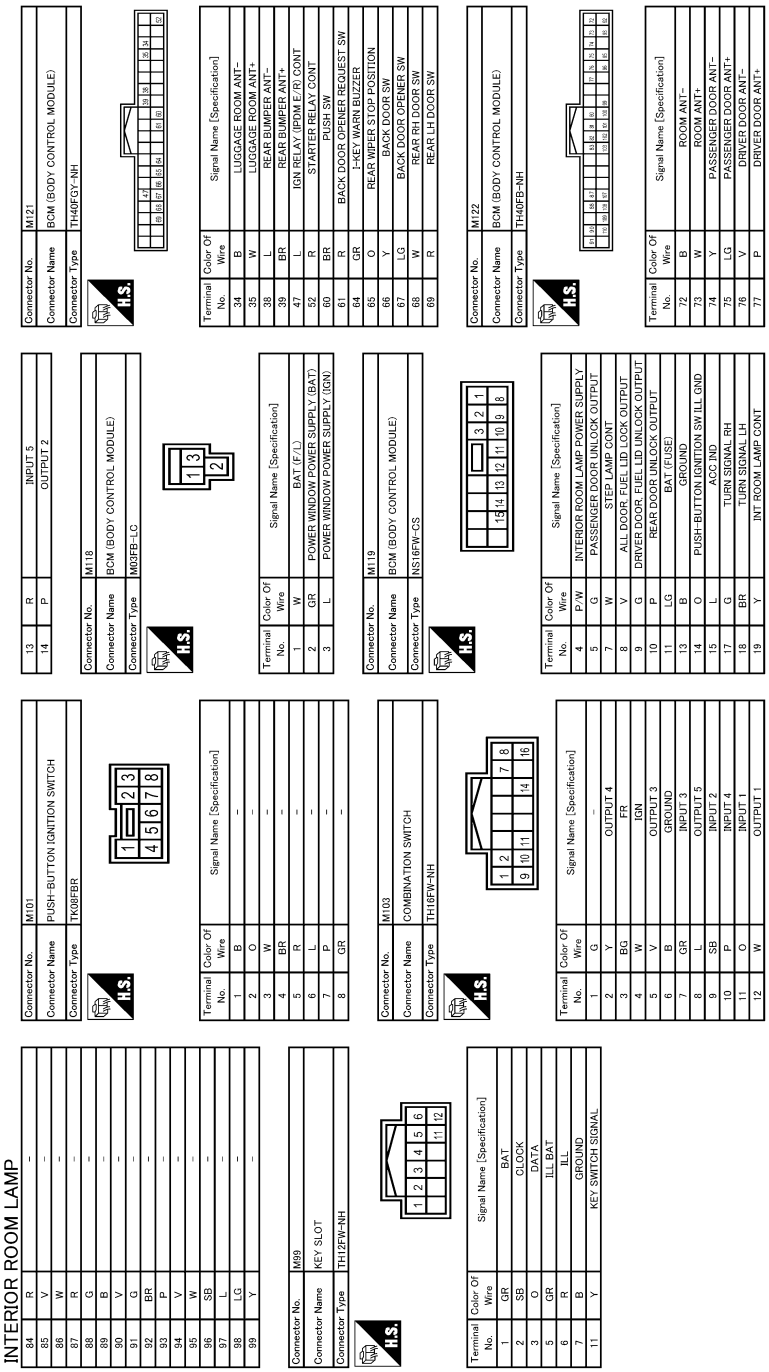

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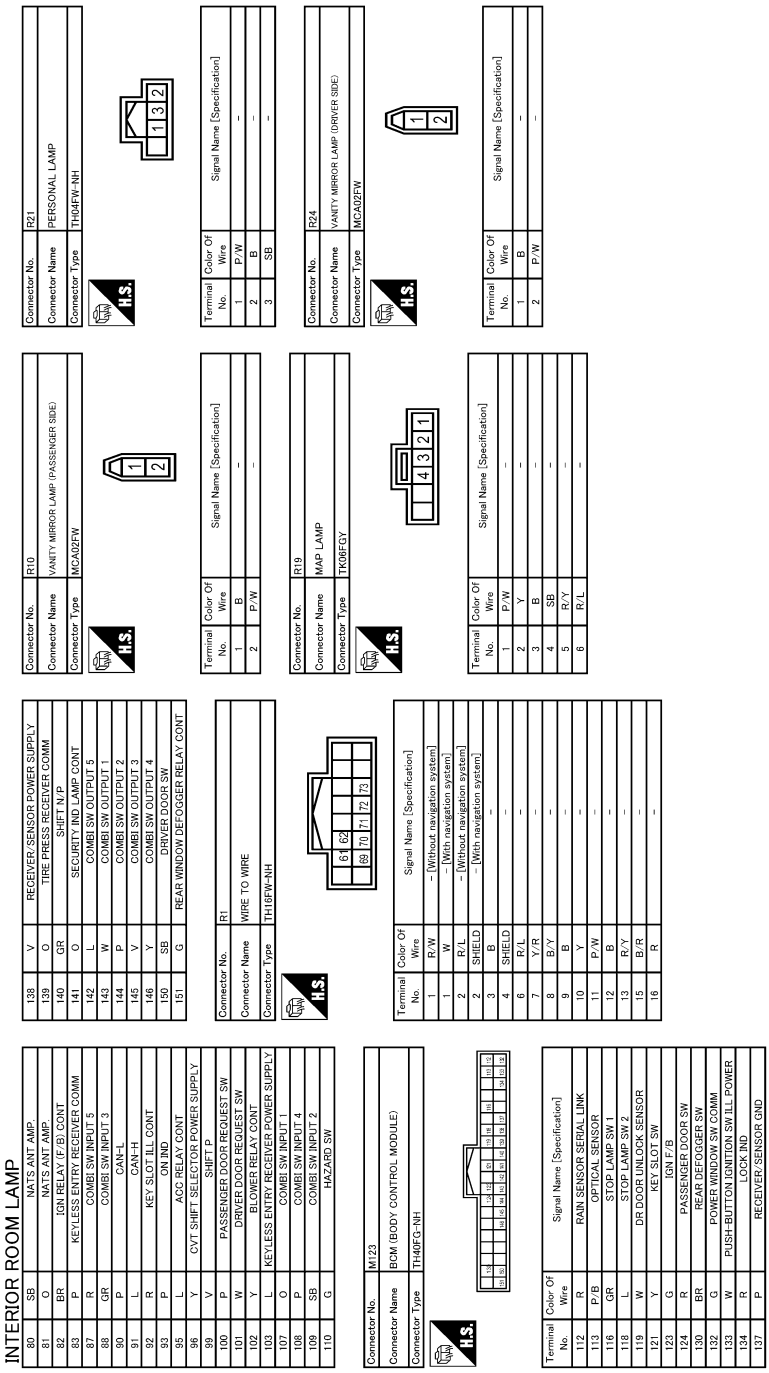

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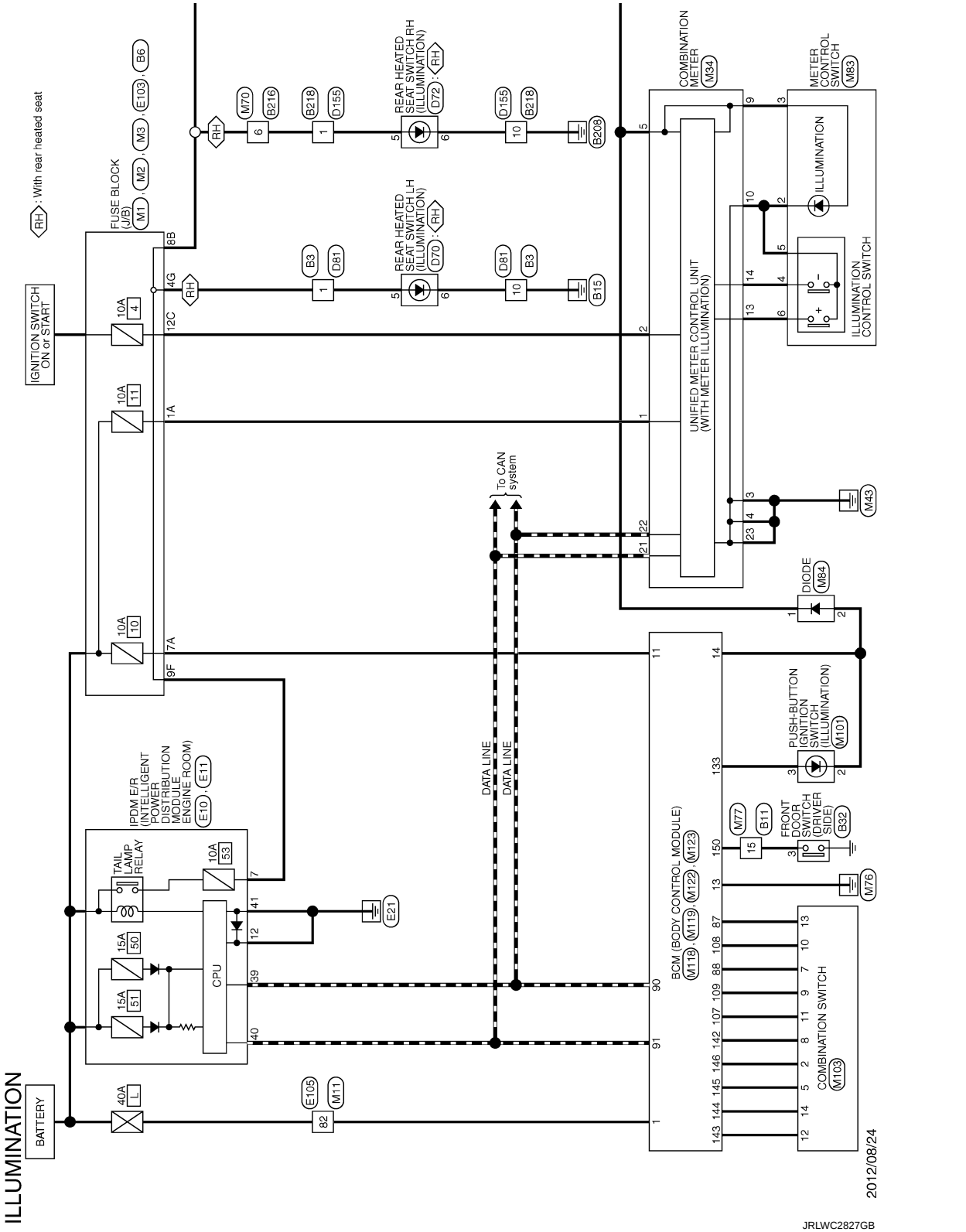
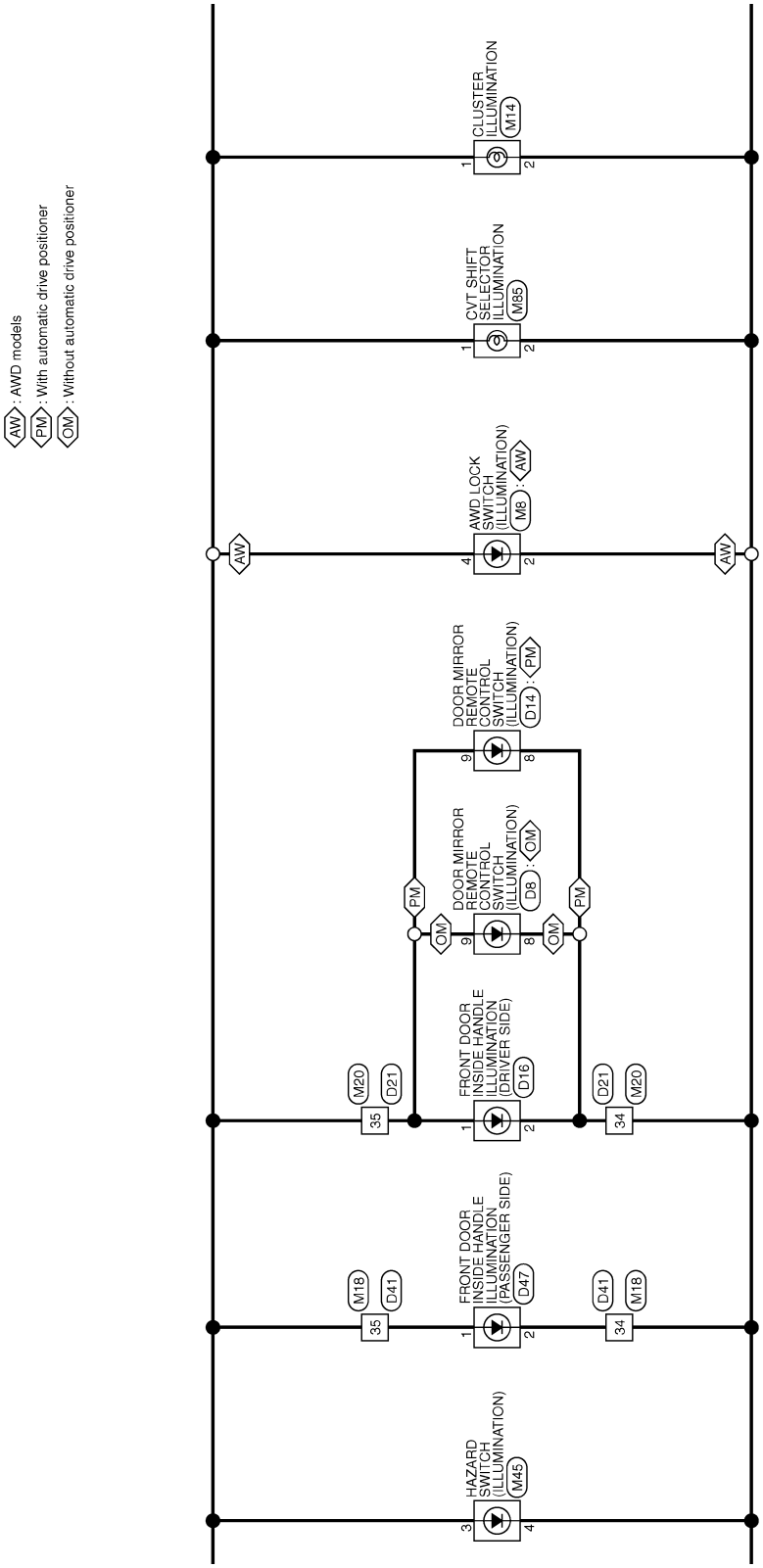
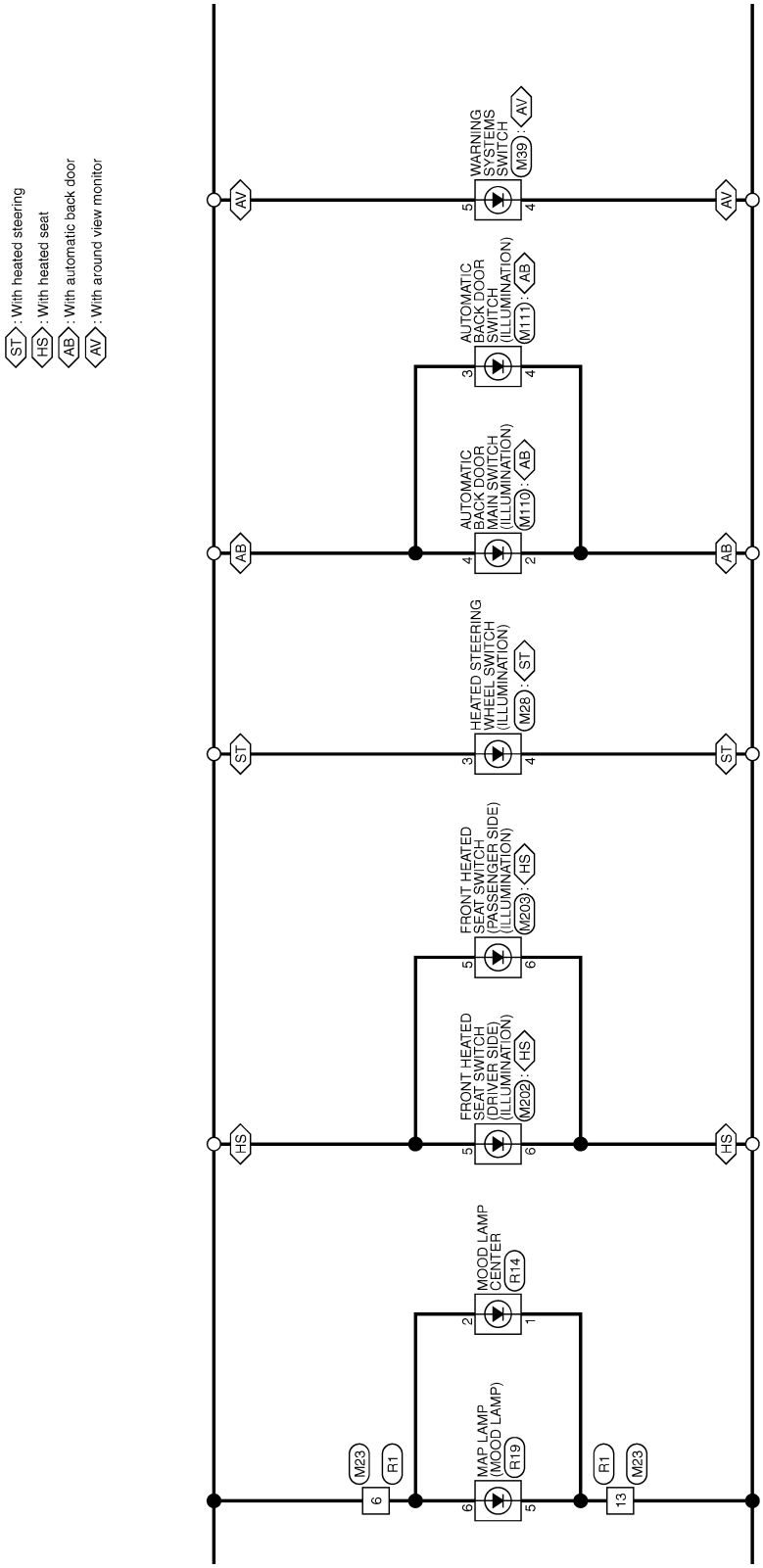
ILLUMINATION

Wiring Diagram - ILLUMINATION -

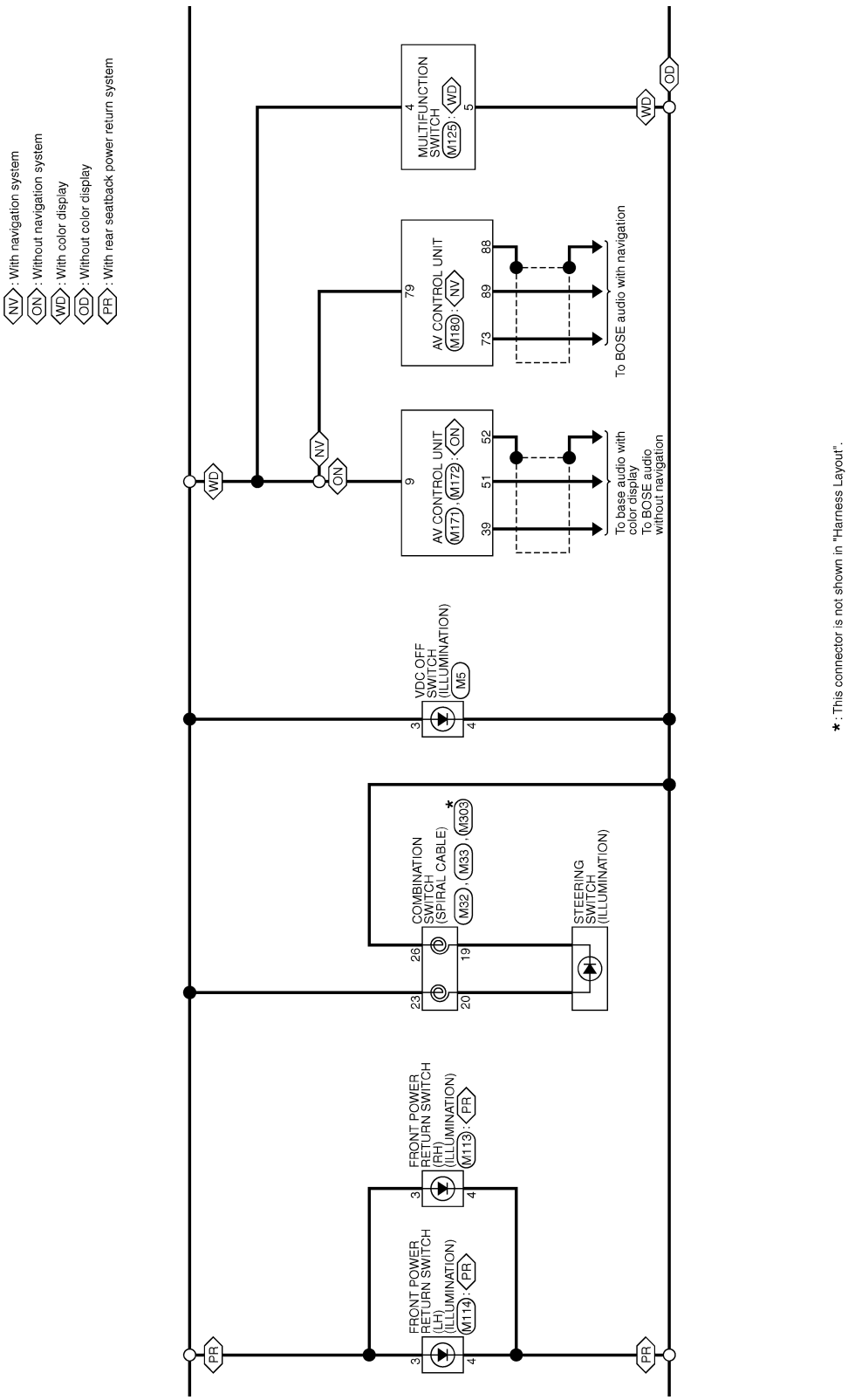
INFOID:0000000009718428

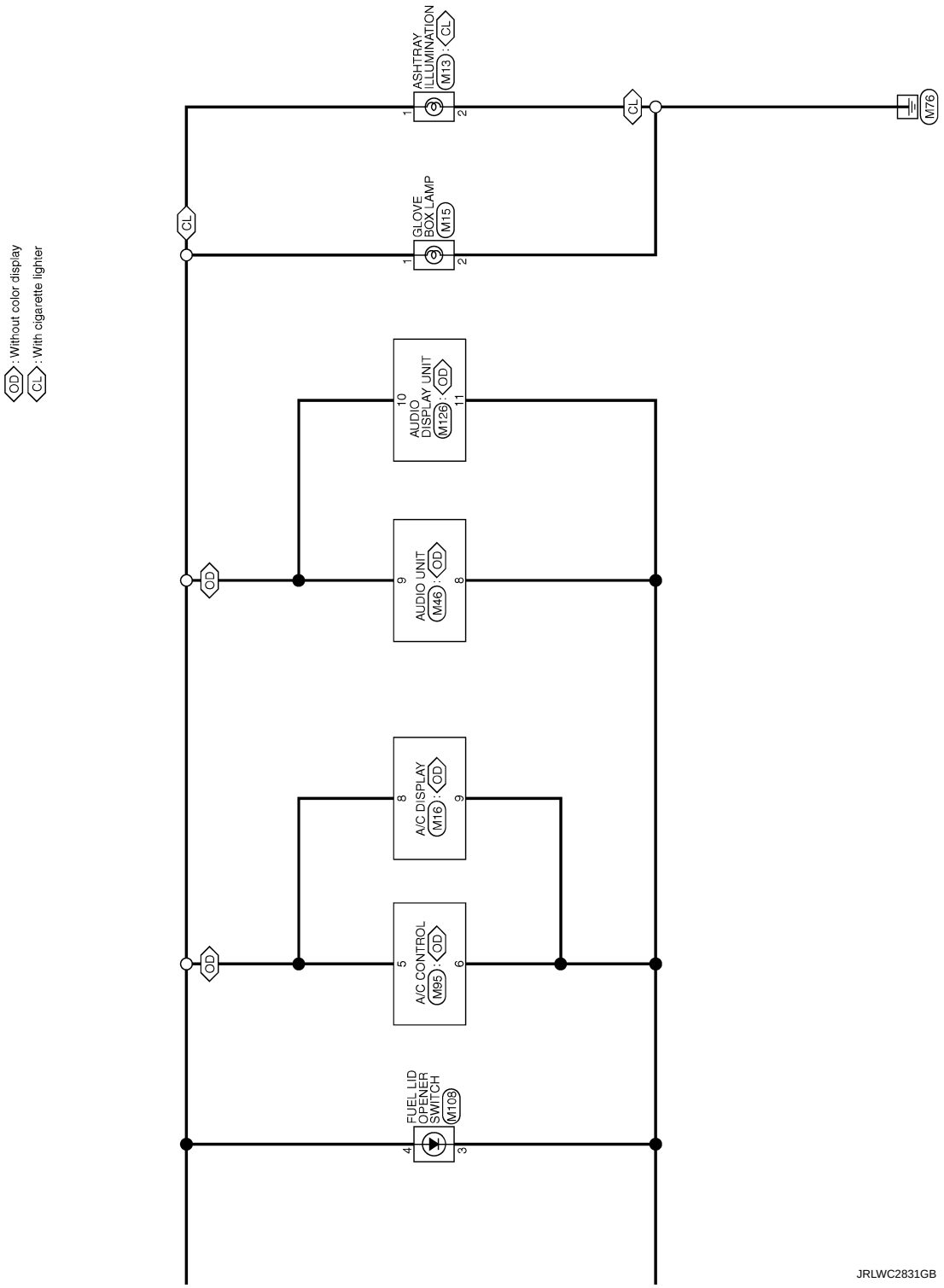


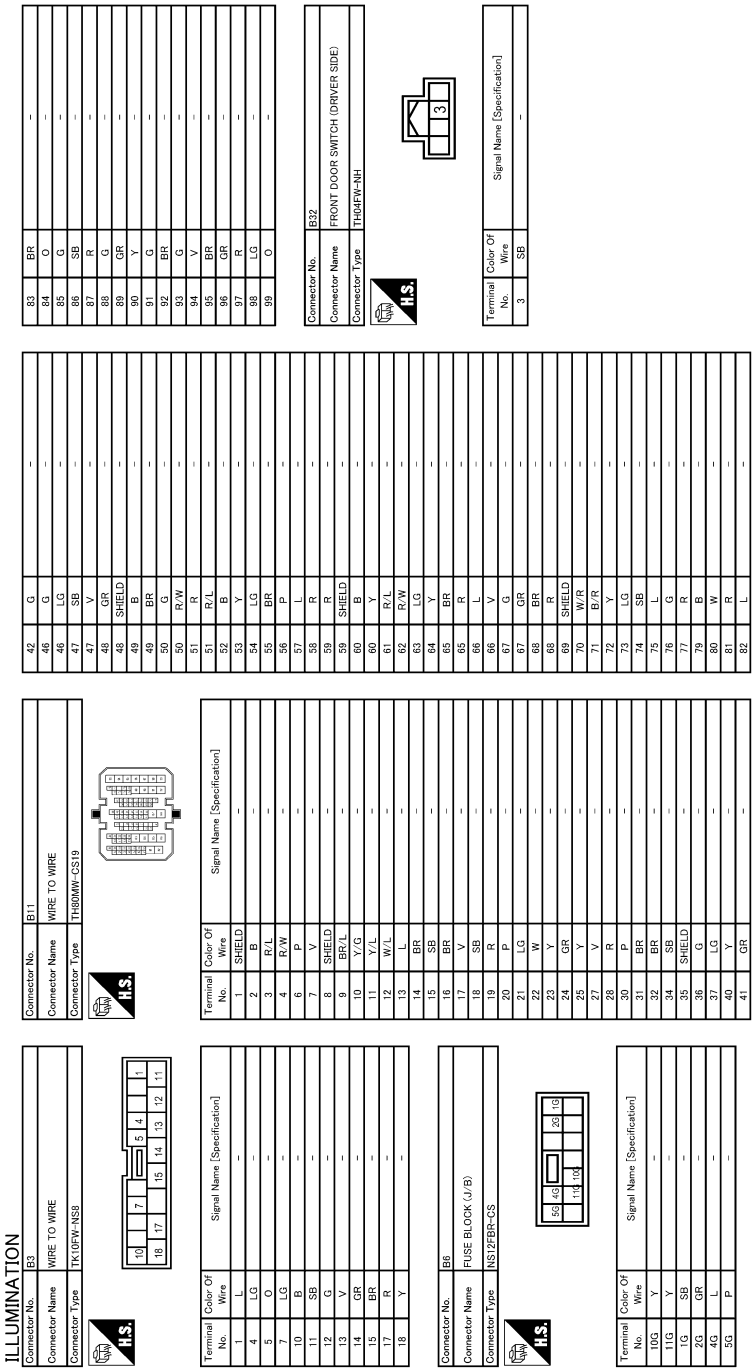

AW : AWD models
PM : With automatic drive positioner
OM : Without automatic drive positioner
CLUSTER ILLUMINATION
M14
CVT SHIFT SELECTOR ILLUMINATION
M85
AWD LOCK SWITCH (ILLUMINATION)
M8 : AW
DOOR MIRROR REMOTE CONTROL SWITCH (ILLUMINATION)
D14 : PM
DOOR MIRROR REMOTE CONTROL SWITCH (ILLUMINATION)
D8 : OM
FRONT DOOR INSIDE HANDLE ILLUMINATION (DRIVER SIDE)
D16
FRONT DOOR INSIDE HANDLE ILLUMINATION (PASSENGER SIDE)
D47
HAZARD SWITCH (ILLUMINATION)
M45
M20
D21
M18
D41
35
34
JRLWC2828GB



JRLWC2829GB


NV : With navigation system
ON : Without navigation system
WD : With color display
OD : Without color display
PR : With rear seatback power return system
MULTIFUNCTION SWITCH
M125
4
5
WD
OD
AV CONTROL UNIT
M180
79
88
89
73
NV
To BOSE audio with navigation
AV CONTROL UNIT
M171
M172
9
52
51
39
ON
To base audio with color display
To BOSE audio without navigation
VDC OFF SWITCH (ILLUMINATION)
M5
3
4
COMBINATION SWITCH (SPIRAL CABLE)
M32
M33
M303
26
23
19
20
STEERING SWITCH (ILLUMINATION)
FRONT POWER RETURN SWITCH (RH) (ILLUMINATION)
M113
FRONT POWER RETURN SWITCH (LH) (ILLUMINATION)
M114
PR
*: This connector is not shown in "Harness Layout".
JRLWC2830GB


OD : Without color display
CL : With cigarette lighter
ASHTRAY ILLUMINATION (M13) : CL
GLOVE BOX LAMP (M15)
AUDIO DISPLAY UNIT (M126) : OD
AUDIO UNIT (M46) : OD
A/C DISPLAY (M16) : OD
A/C CONTROL (M95) : OD
FUEL LID OPENER SWITCH (M108)
M76
JRLWC2831GB



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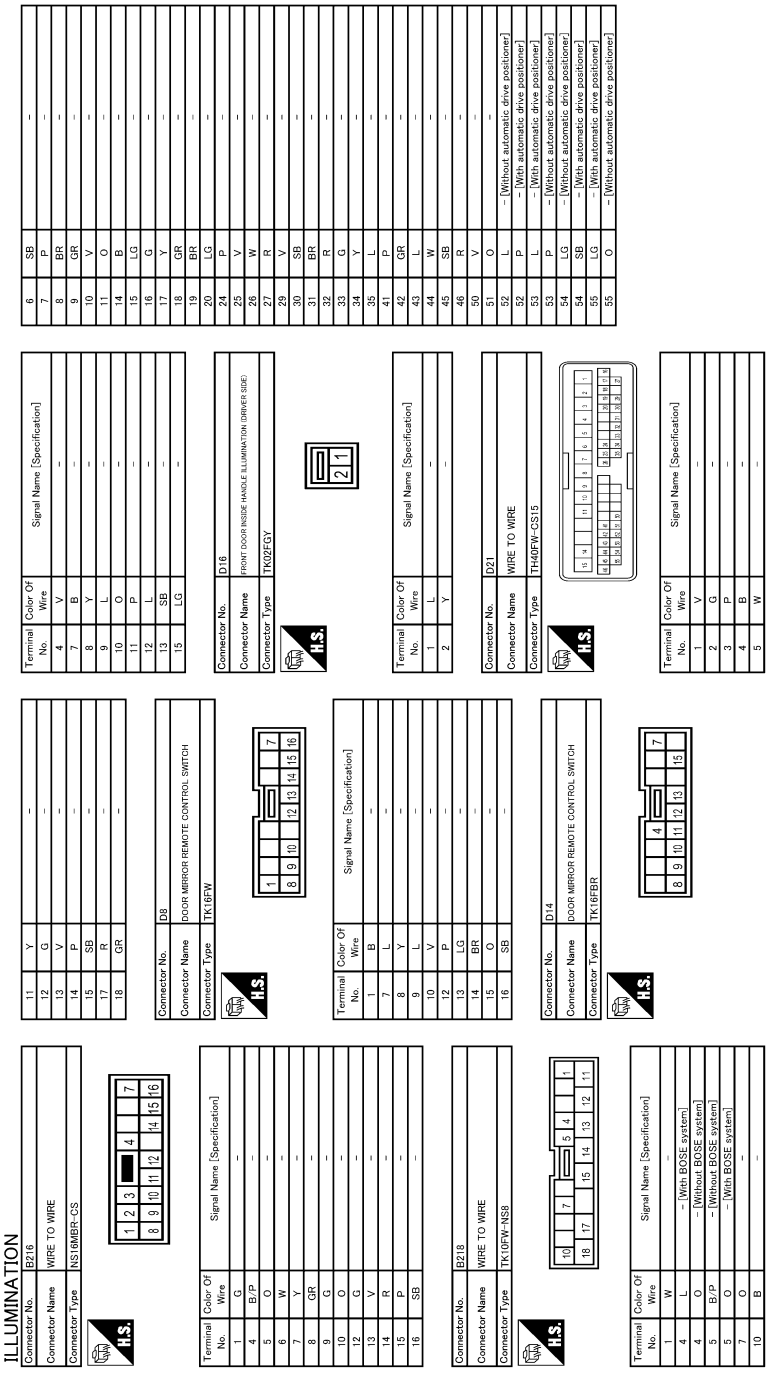

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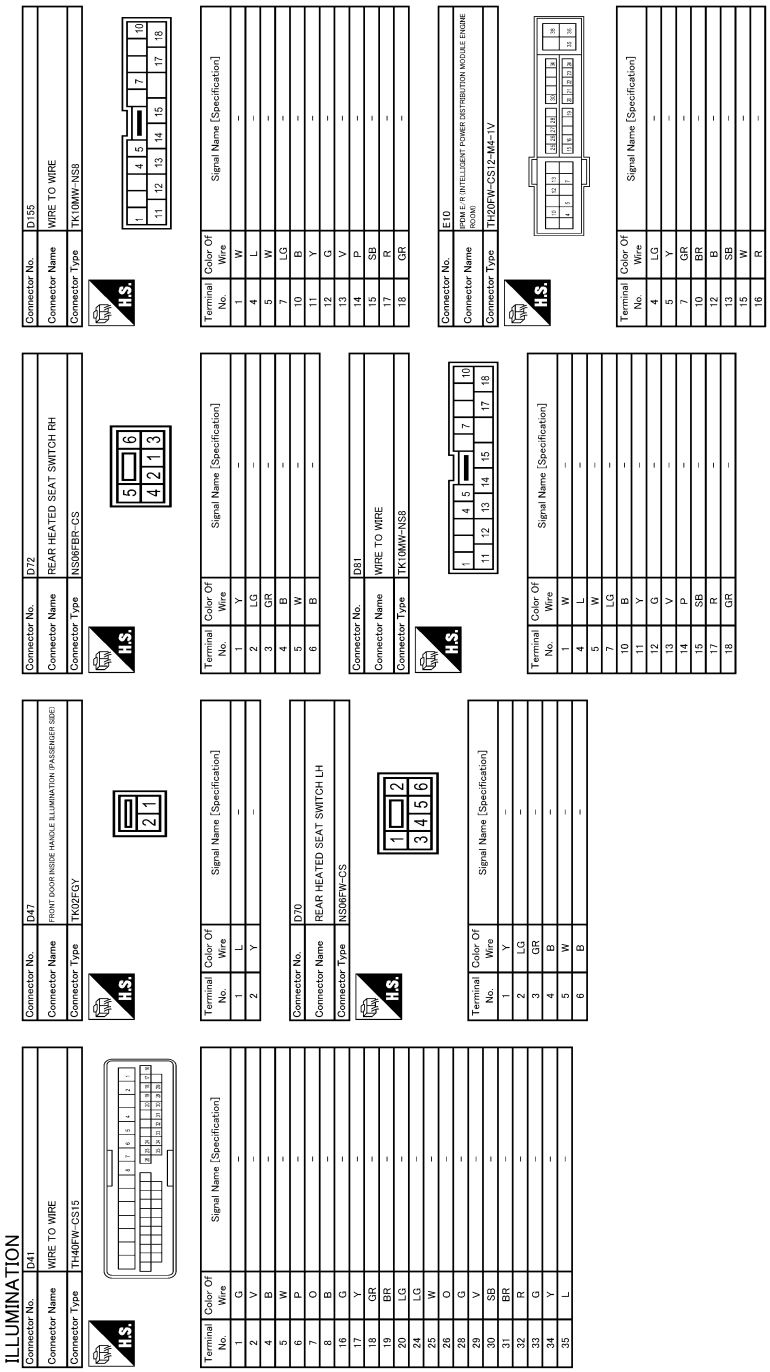

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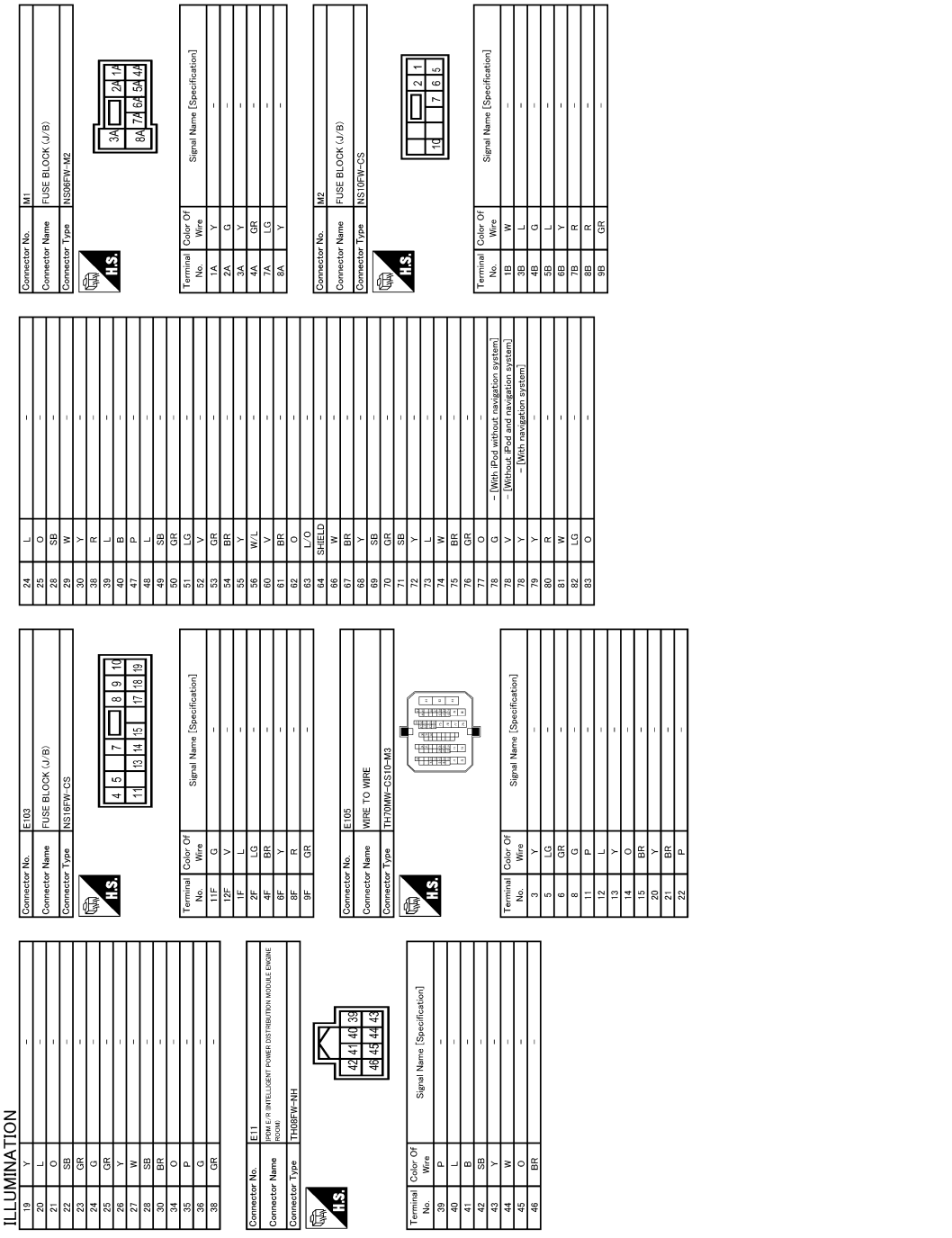

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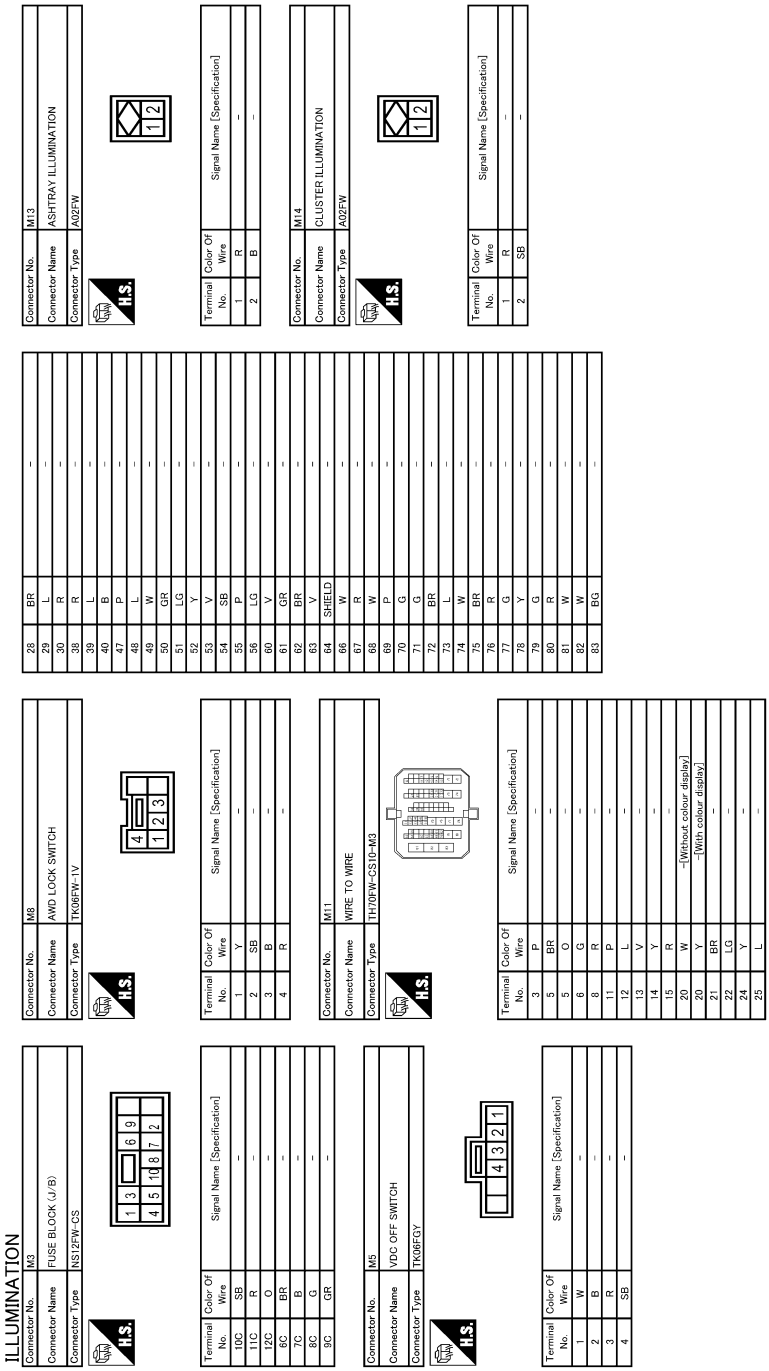

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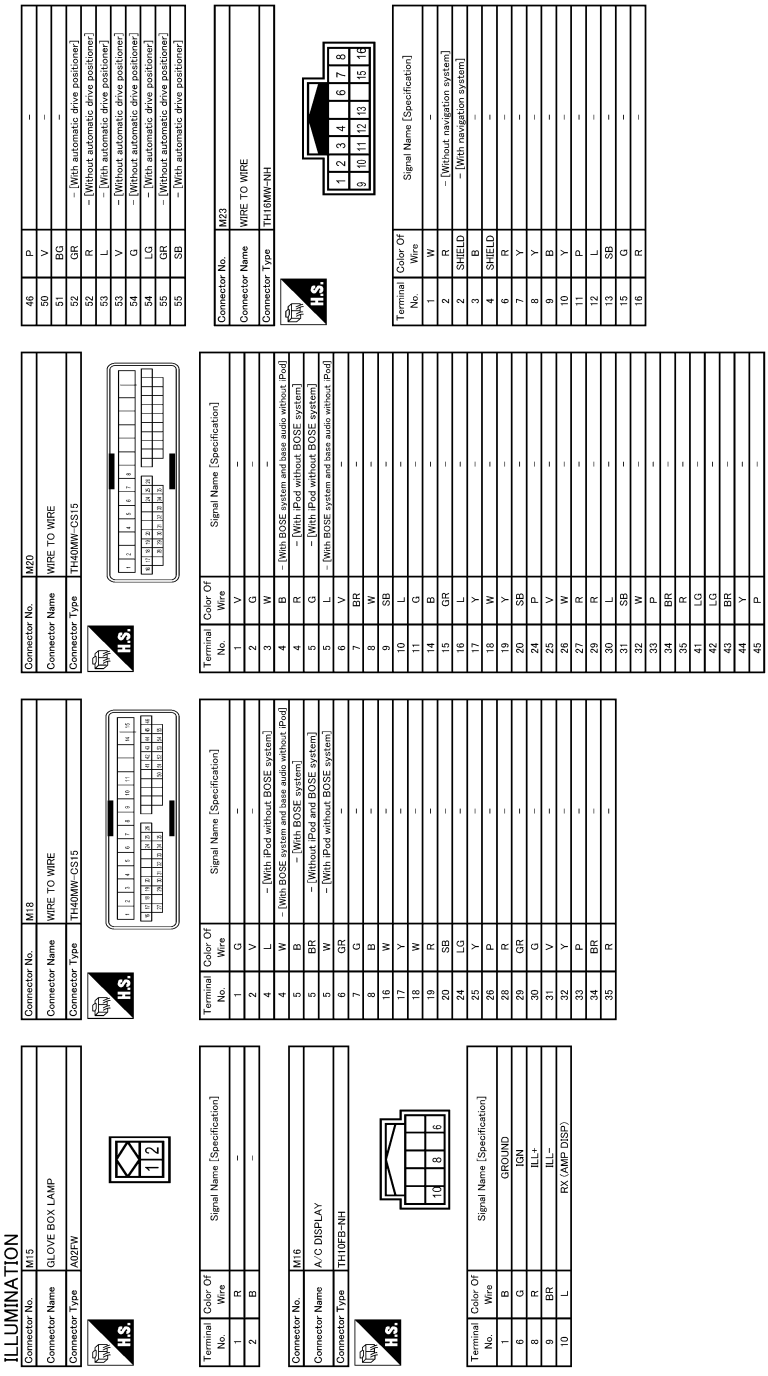
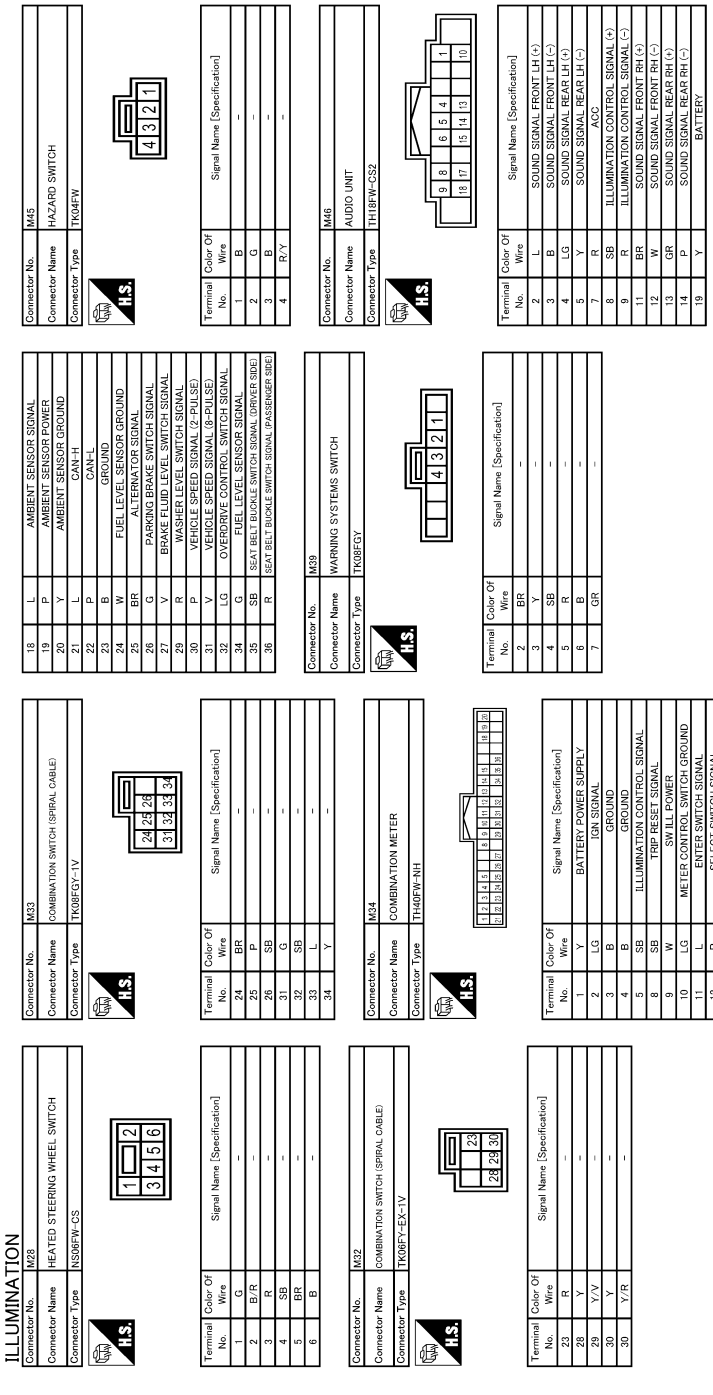


JRLWC9464GB



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ILLUMINATION

Connector No.	M70
Connector Name	WIRE TO WIRE
Connector Type	NS16FBR-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
4	P	–
5	GR	–
6	R	–
7	W	–
8	GR	–
9	L	–
10	GR	–
12	P	–
13	V	–
14	L	–
15	BR	–
16	V	–

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	–
2	B	–
3	W	–
4	R	–
6	W	–
7	G	–
8	SHIELD	–

9	W	–
10	R	–
11	G	–
12	B	–
13	P	–
14	R	–
15	SB	–
16	R	–
17	V	–
18	P	–
19	P	–
20	LG	–
21	Y	–
22	BR	–
23	LG	–
24	SB	–
25	Y	–
27	Y	–
28	R	–
30	Y	–
31	W	–
32	BR	–
34	Y	–
35	B	–
36	G	–
37	Y	–
40	BR	–
41	LG	–
42	SB	–
46	G	–
46	LG	–
47	SB	–
47	Y	–
48	GR	–
48	SHIELD	–
49	BR	–
49	R	–
50	LG	–
50	R	–
51	R	–
51	V	–
52	B	–
53	BR	–
54	B	–
55	G	–
56	P	–
57	L	–
58	SB	–
59	R	–
59	SHIELD	–

60	B	–
60	Y	–
61	R	–
62	W	–
63	LG	–
64	Y	–
65	R	–
65	V	–
66	L	–
66	Y	–
67	G	–
67	W	–
68	BG	–
68	G	–
69	SHIELD	–
70	L	–
71	P	–
72	LG	–
73	Y	–
74	R	–
75	P	–
76	L	–
77	BR	–
79	B	–
80	W	–
81	L	–
82	L	–
83	GR	– [Without automatic drive positioner] – [With automatic drive positioner]
83	W	
84	R	–
85	V	–
86	W	–
87	R	–
88	G	–
89	B	–
90	V	–
91	G	–
92	BR	–
93	P	–
94	V	–
95	W	–
96	SB	–
97	L	–
98	LG	–
99	Y	–

Connector No.	M83
Connector Name	METER CONTROL SWITCH
Connector Type	TH12FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	LG	–
3	W	–
4	GR	–
5	LG	–
6	V	–
11	SB	–
12	L	–

Connector No.	M84
Connector Name	DIODE
Connector Type	24335_09902

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	SB	–
2	O	–

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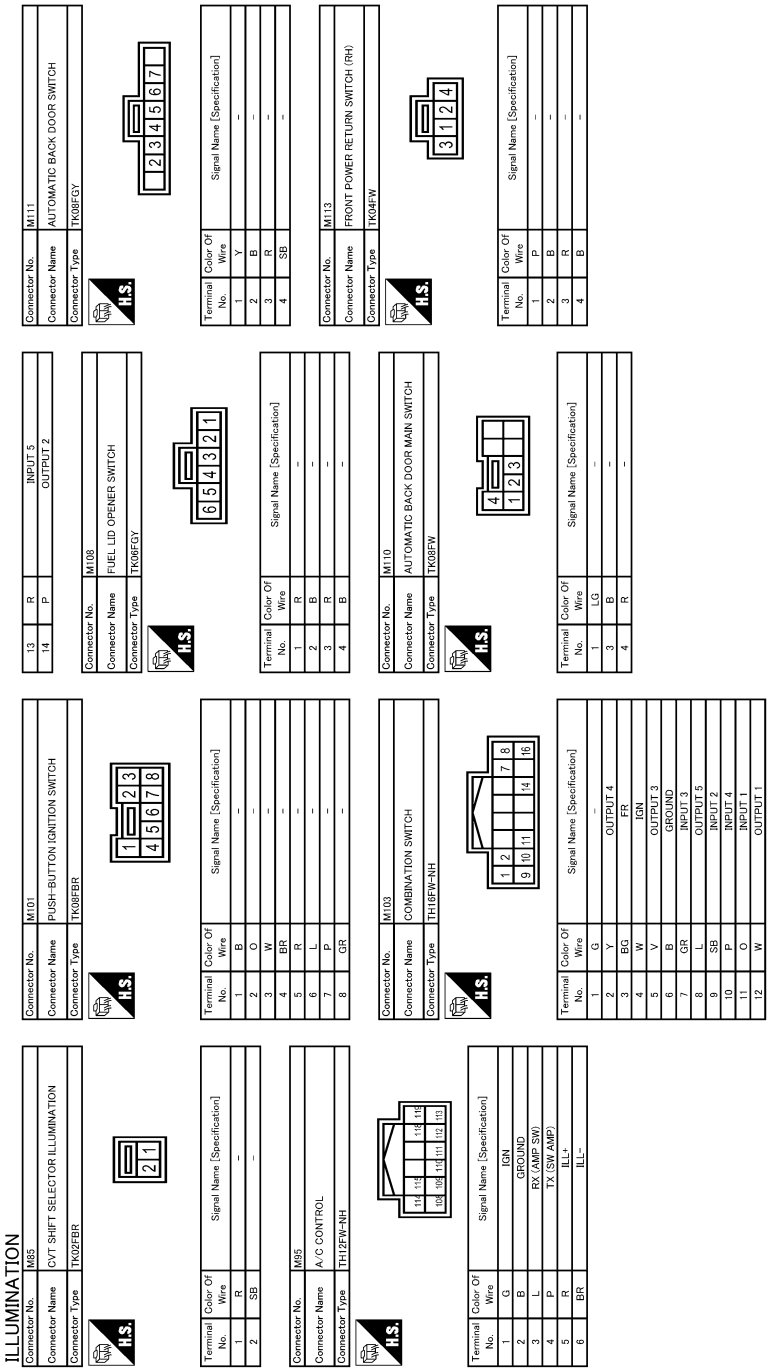

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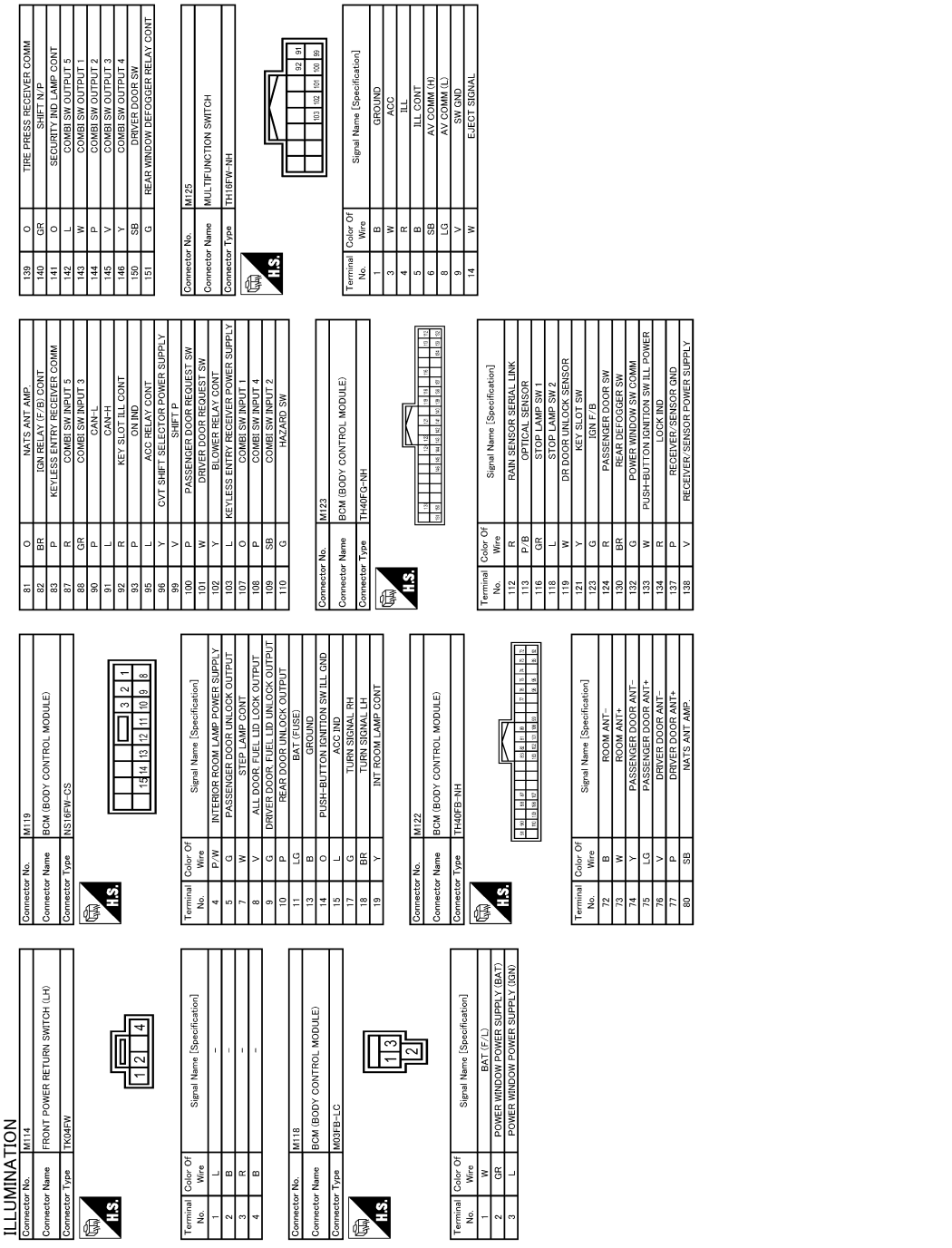

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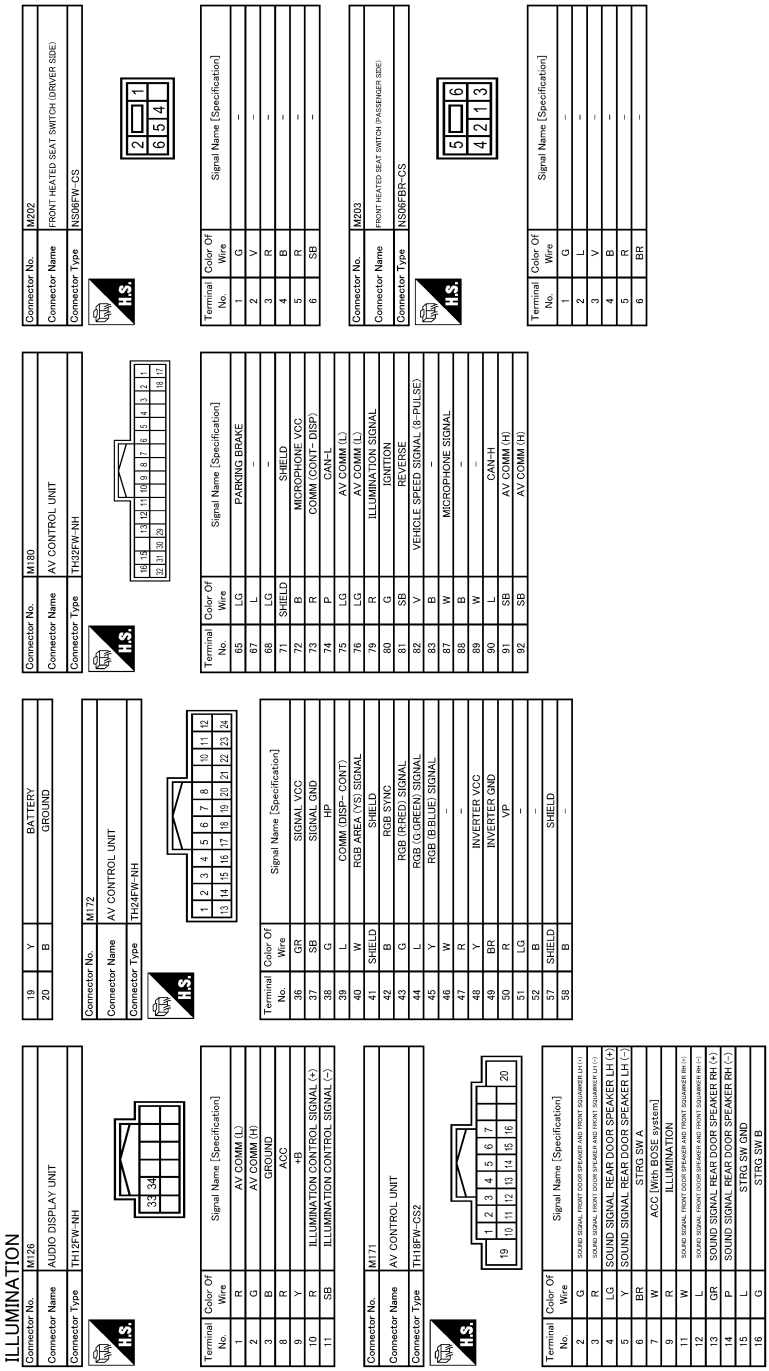

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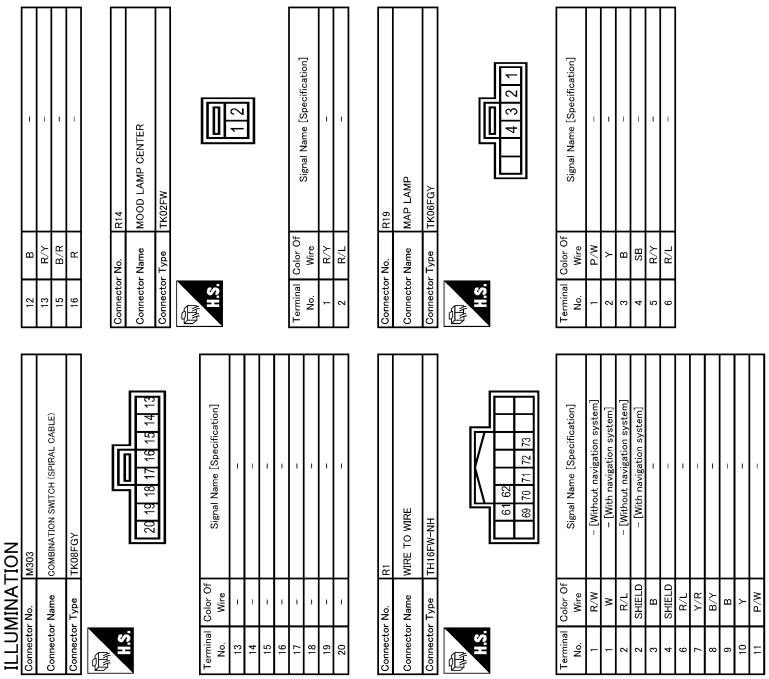


JRLWC9470GB

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000010129266

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/AUTO	Off
	Front wiper switch INT/AUTO	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
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
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

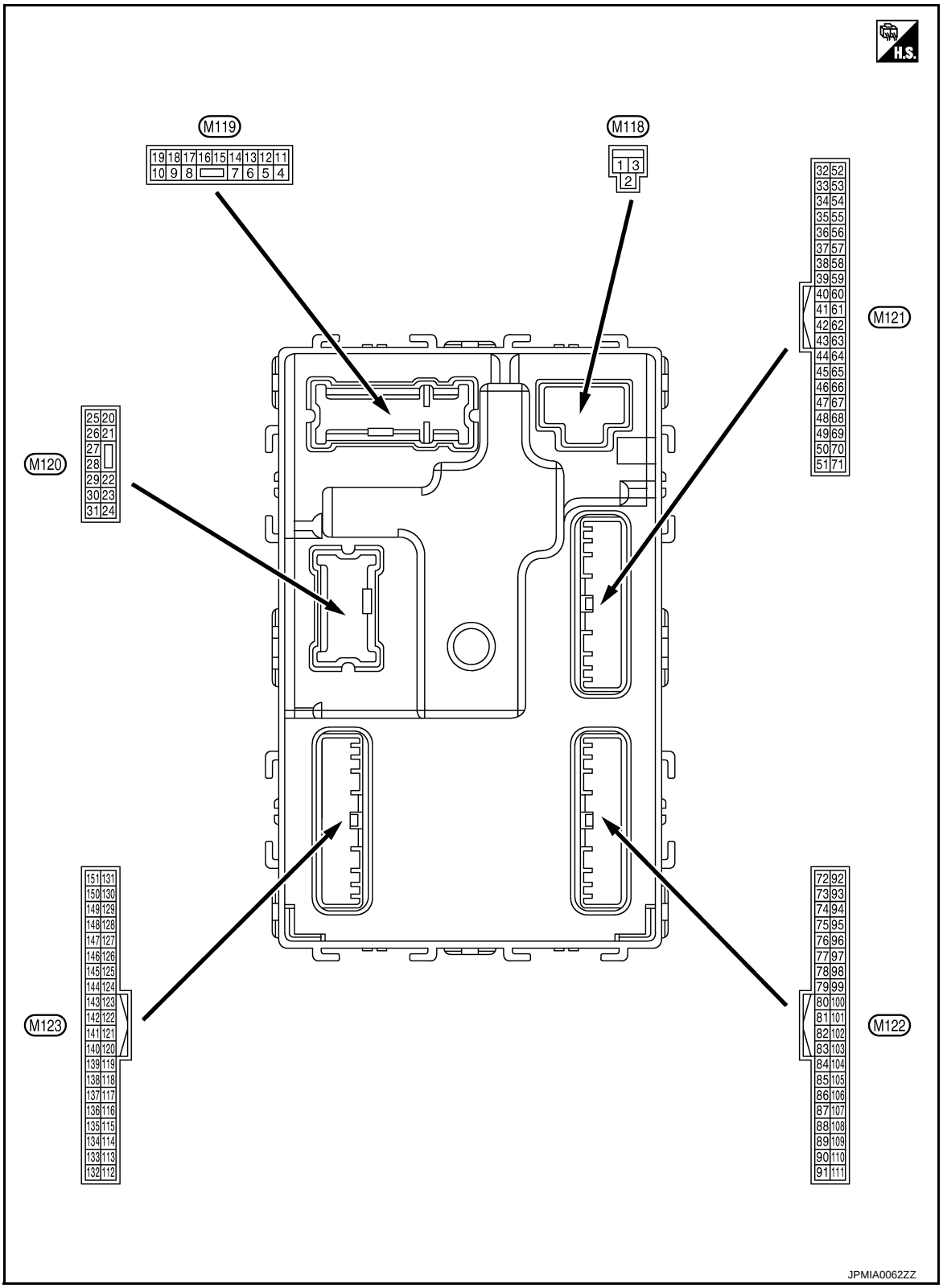
Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	**NOTE:** The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW **NOTE:** For models with BOSE audio system this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TR CANCEL SW	**NOTE:** The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	**NOTE:** The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed and held	On

Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On
OPTICAL SENSOR	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 -RR	**NOTE:** The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	**NOTE:** The item is indicated, but not monitored.	Off
CLUCH SW	**NOTE:** The item is indicated, but not monitored.	Off
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
	Stop lamp switch 1 signal circuit is normal	On
DETE/CANCL SW	Selector lever in P position	Off
	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	**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
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

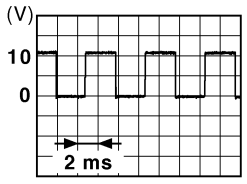
Monitor Item	Condition	Value/Status
SFT PN -IPDM	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	**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 speed-ometer reading
VEH SPEED 2	While driving	Equivalent to speed-ometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Power supply position in LOCK position	Reset
	Power supply position in any position other than LOCK	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	**NOTE:** The item is indicated, but not monitored.	Reset
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off
	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	**NOTE:** The item is indicated, but not monitored.	—
CONFRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done

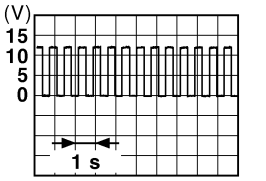
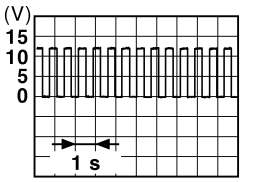
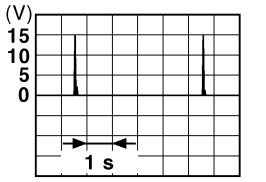
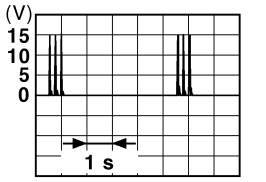
Monitor Item	Condition	Value/Status
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent 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

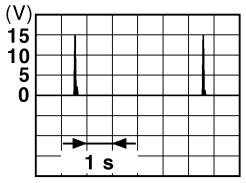
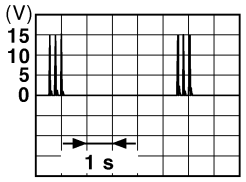
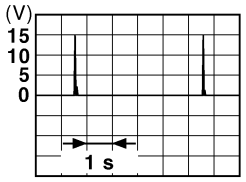
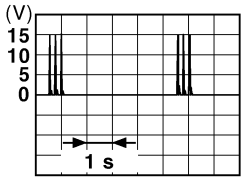
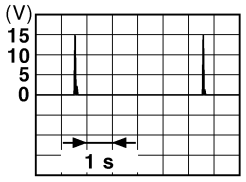
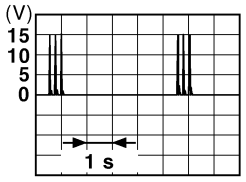
TERMINAL LAYOUT

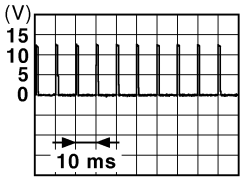
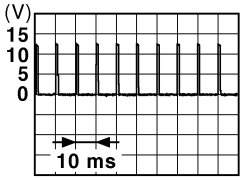
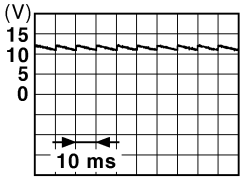
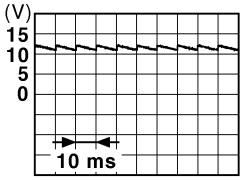


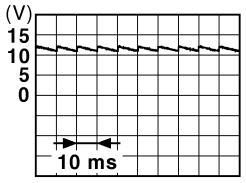
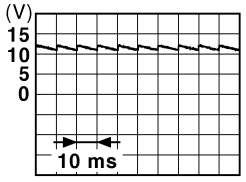
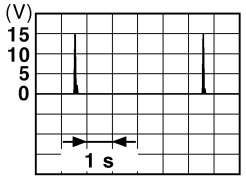
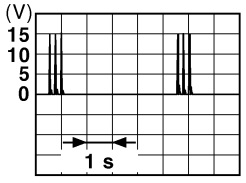
PHYSICAL VALUES

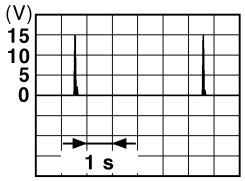
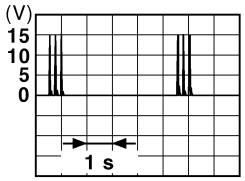
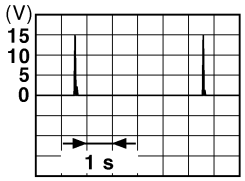
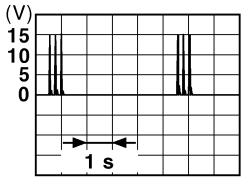
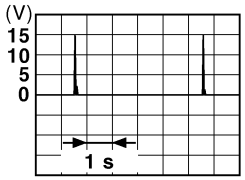
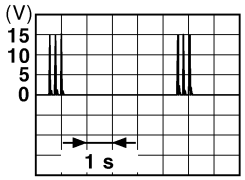
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L)	Ground	P/W power supply (IGN)	Output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

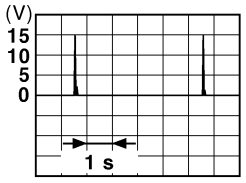
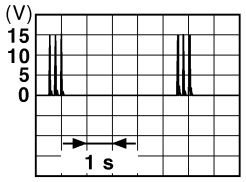
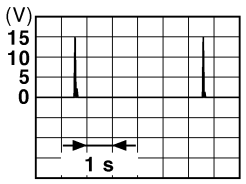
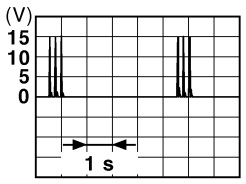
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Interior room lamp control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
23 (BR)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
					Other than OPEN (Back door opener actuator is not activated)	0 V
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage
34 (B)	Ground	Luggage 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

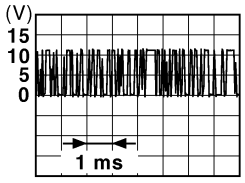
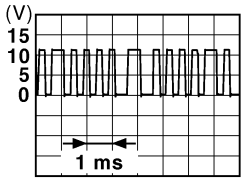
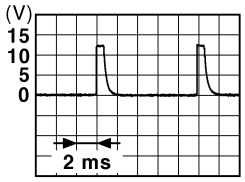
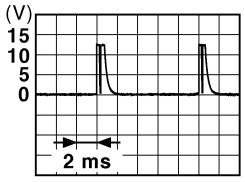
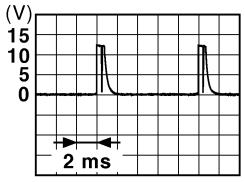
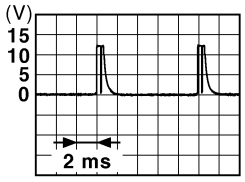
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
35 (W)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (L)	Ground	Rear bumper antenna (-)	Output	When the back 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
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the back 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 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

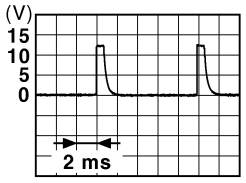
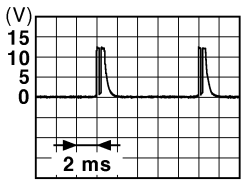
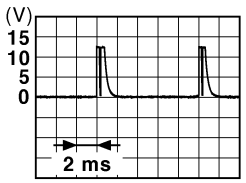
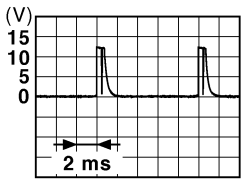
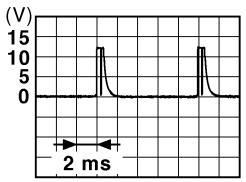
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
52 (R)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0.3 V
				Ignition switch OFF		0 V
60 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (R)	Ground	Back door request switch	Input	Back door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (GR)	Ground	Intelligent key warning buzzer control	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop position	Input	Rear wiper	In stop position	 JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	 JPMIA0011GB 11.8 V
					ON (When back door opens)	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V

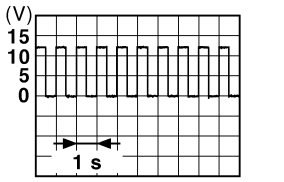
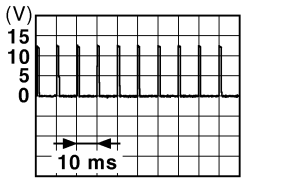
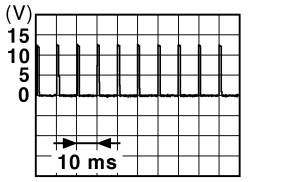
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	 JPMIA0011GB 11.8 V
					ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	 JPMIA0011GB 11.8 V
					ON (When rear LH door opens)	0 V
72 (B)	Ground	Room antenna (-) (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

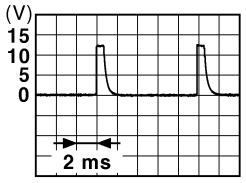
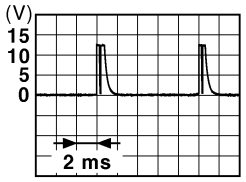
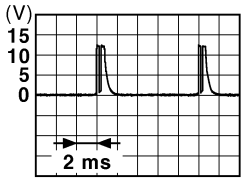
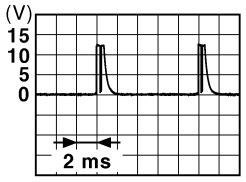
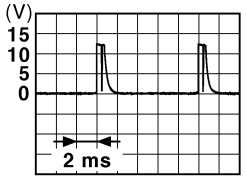
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
73 (W)	Ground	Room antenna (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
74 (Y)	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 (LG)	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

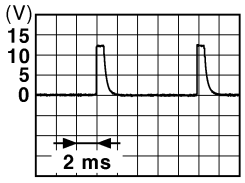
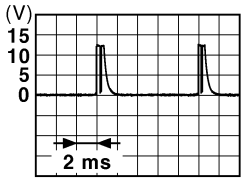
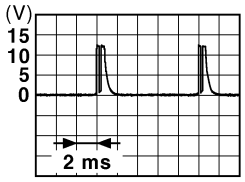
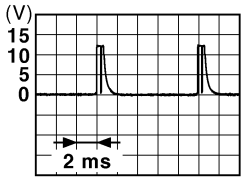
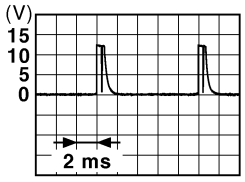
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
77 (P)	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
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

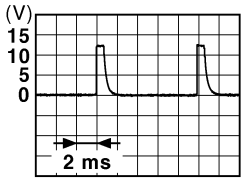
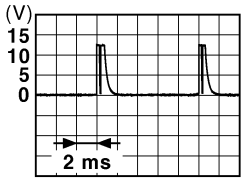
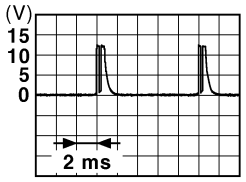
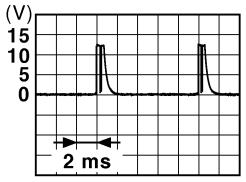
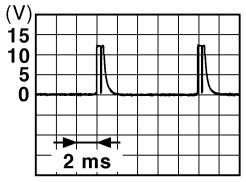
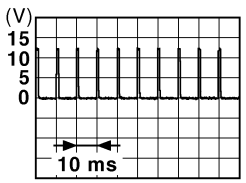
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
83 (P)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 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

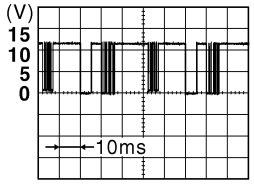
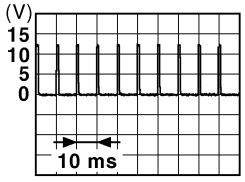
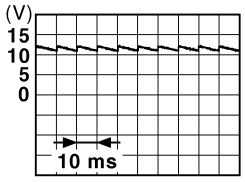
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 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	—		—

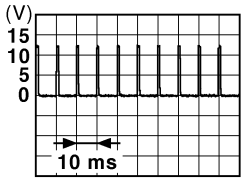
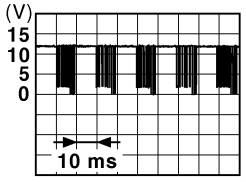
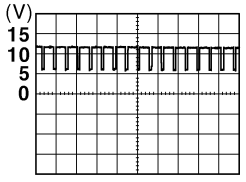
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
92 (R)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 JPMIA0015GB 6.5 V
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output	—		Battery voltage
99 (V)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

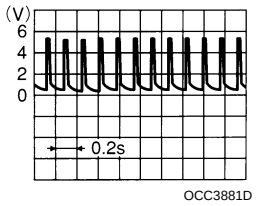
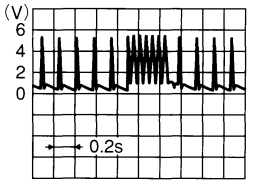
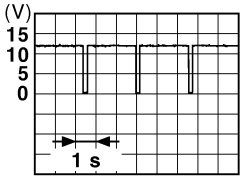
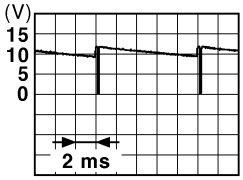
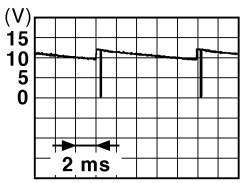
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch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

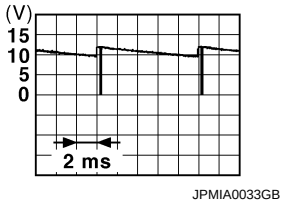
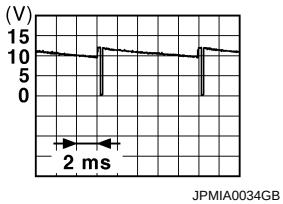
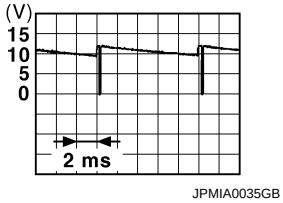
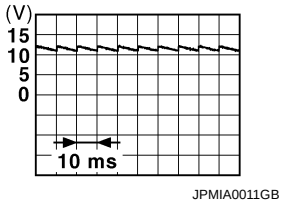
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)	 JPMIA0040GB 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 (SB)	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/ AUTO	 JPMIA0038GB 1.3 V
					Front wiper switch HI	 JPMIA0040GB 1.3 V
110 (G)	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			
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		 JPMIA0156GB 8.7 V
113 (P/B)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (GR)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (L)	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 (W)	Ground	Front door lock assembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sensor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (unlock sensor switch ON)	0 V
121 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0 V
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V

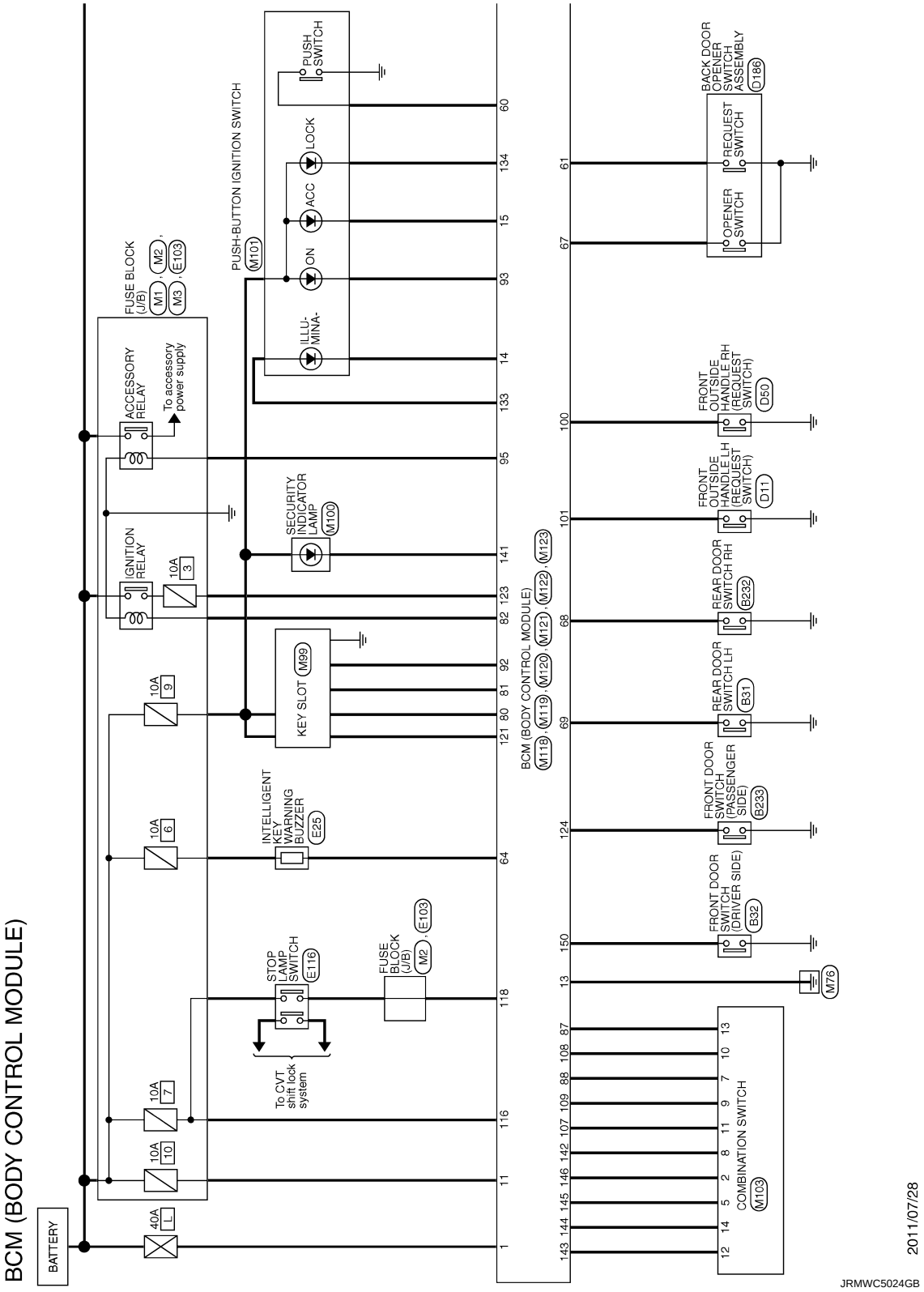
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
130 (BR)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		Battery voltage
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF)	9.5 V
					ON (When tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF (ACC and ON indicator lamps are not illuminated.)	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

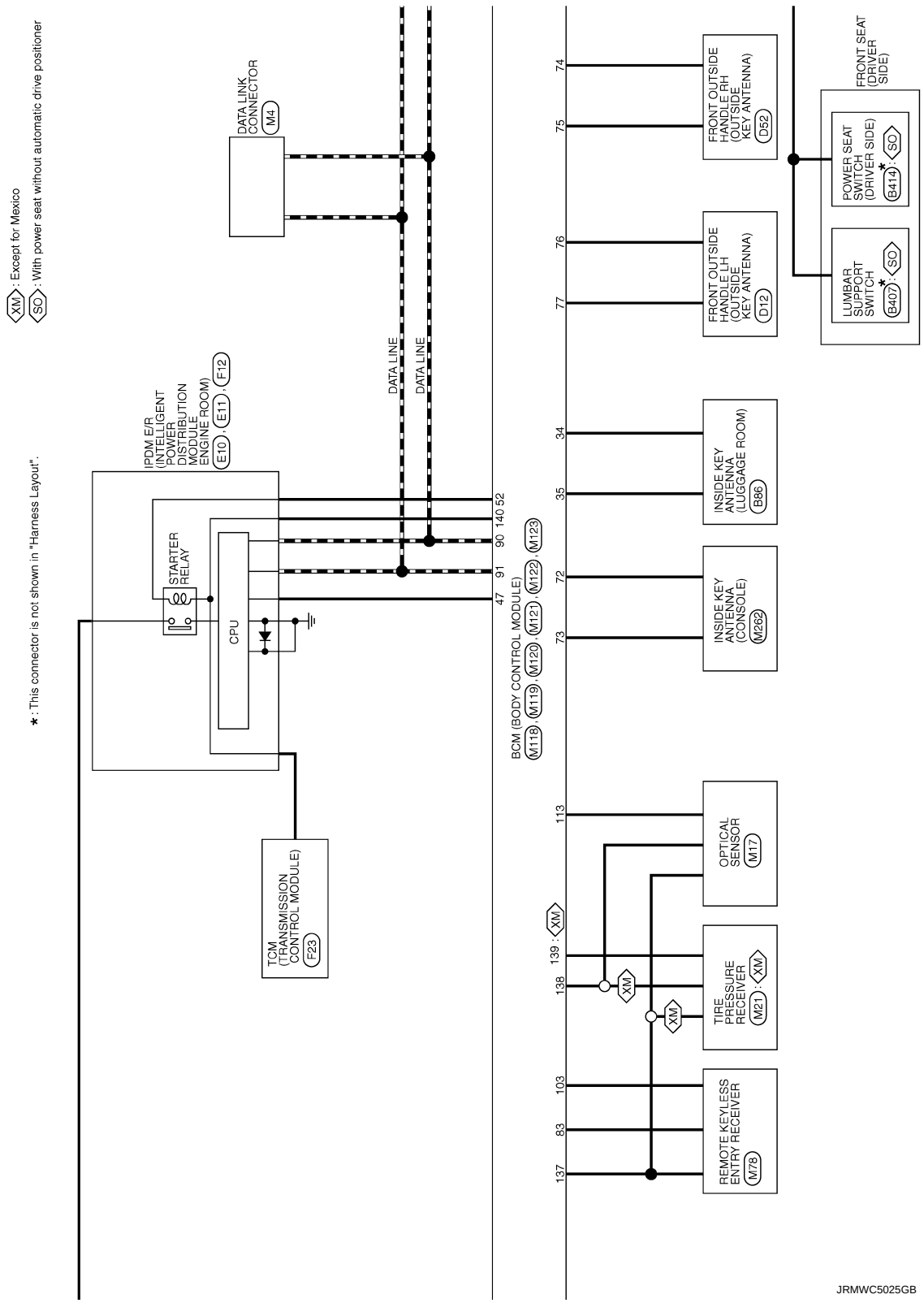
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
139 (O)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
141 (O)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage
142 (L)	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 (W)	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
					Rear wiper switch INT (Wiper intermittent dial 4)	
					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	

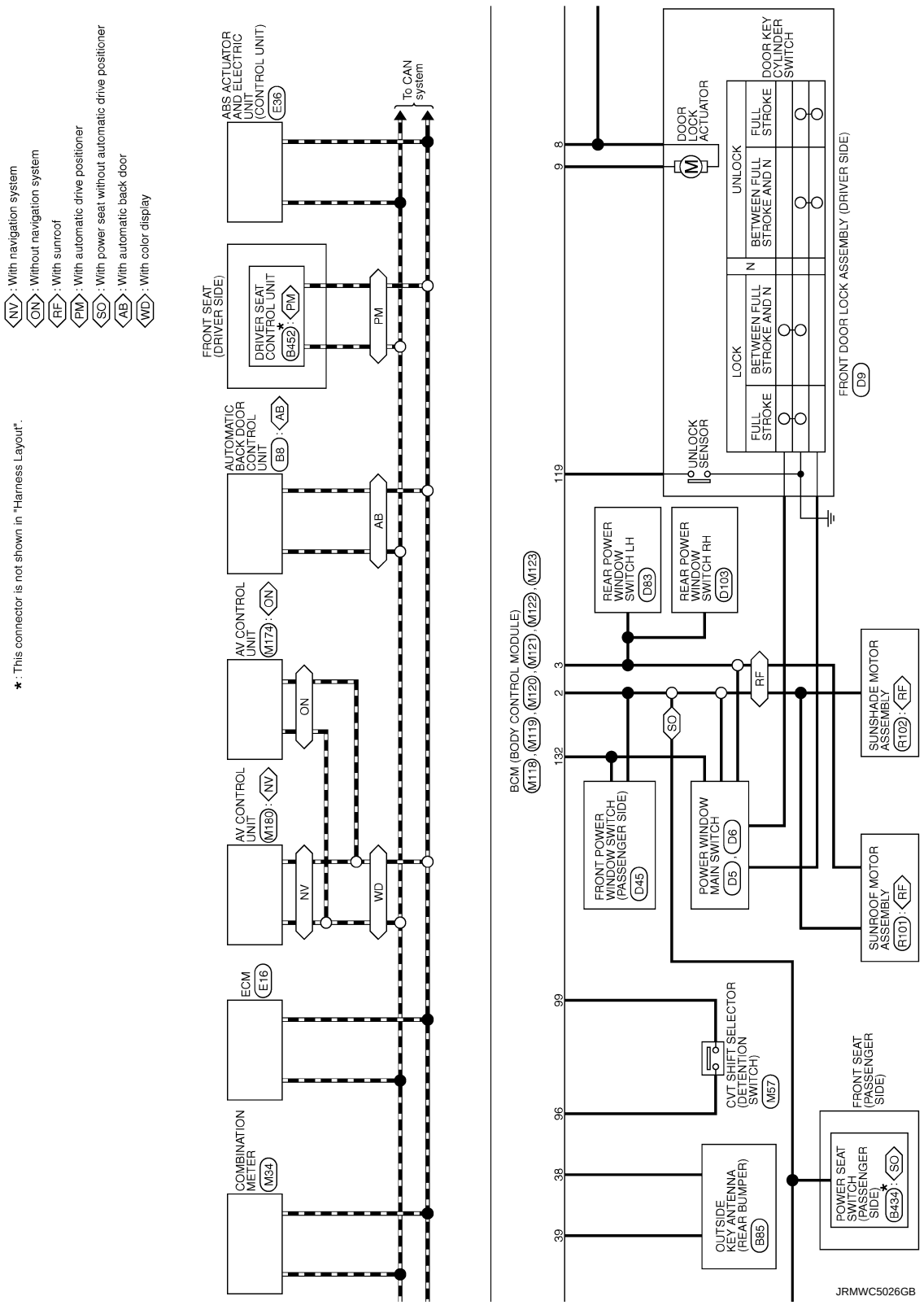
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
144 (P)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
146 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	 JPMIA0035GB 10.7 V
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	 JPMIA0011GB 11.8 V
					ON (When driver door opens)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

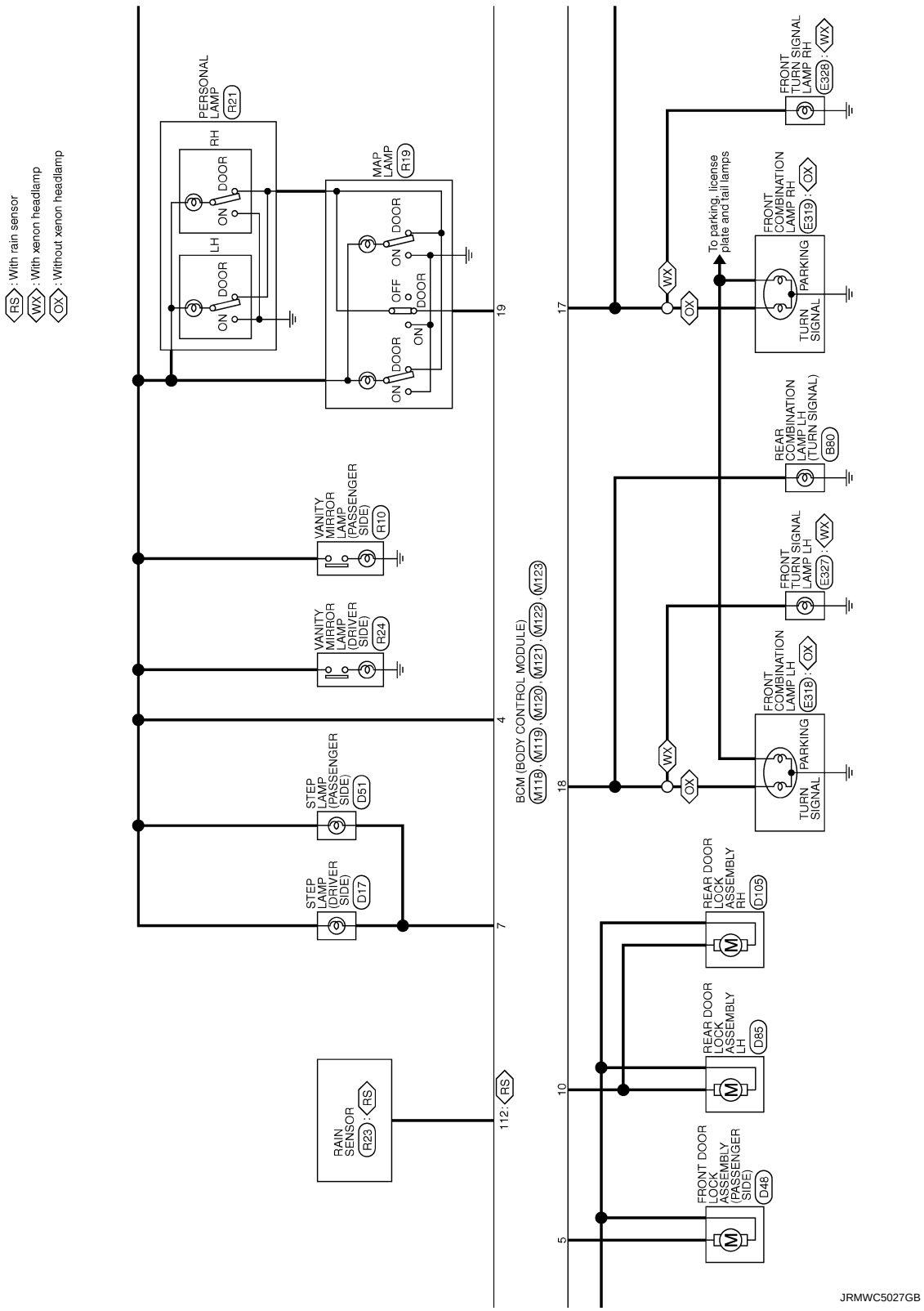
Wiring Diagram - BCM -

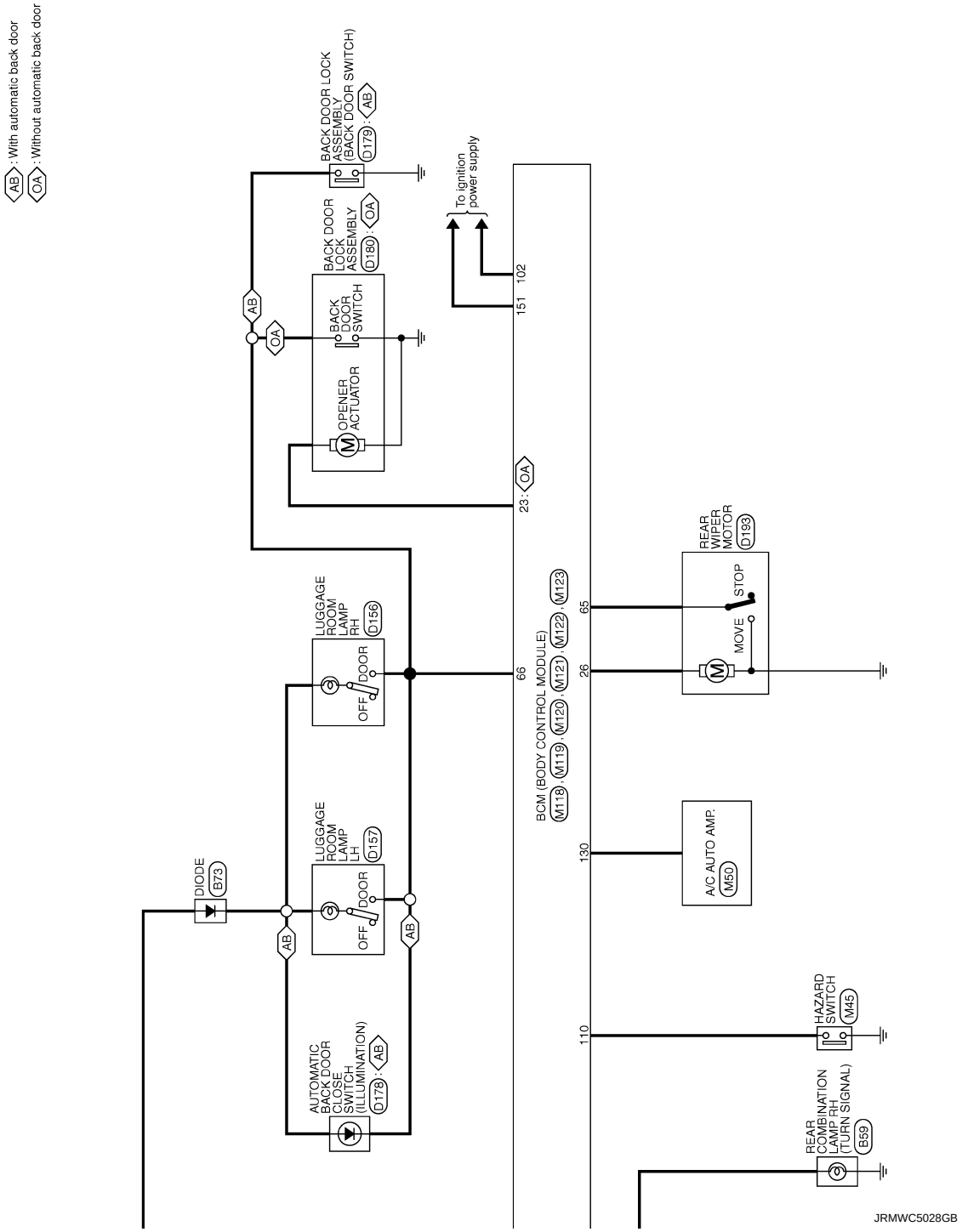
INFOID:0000000010129267

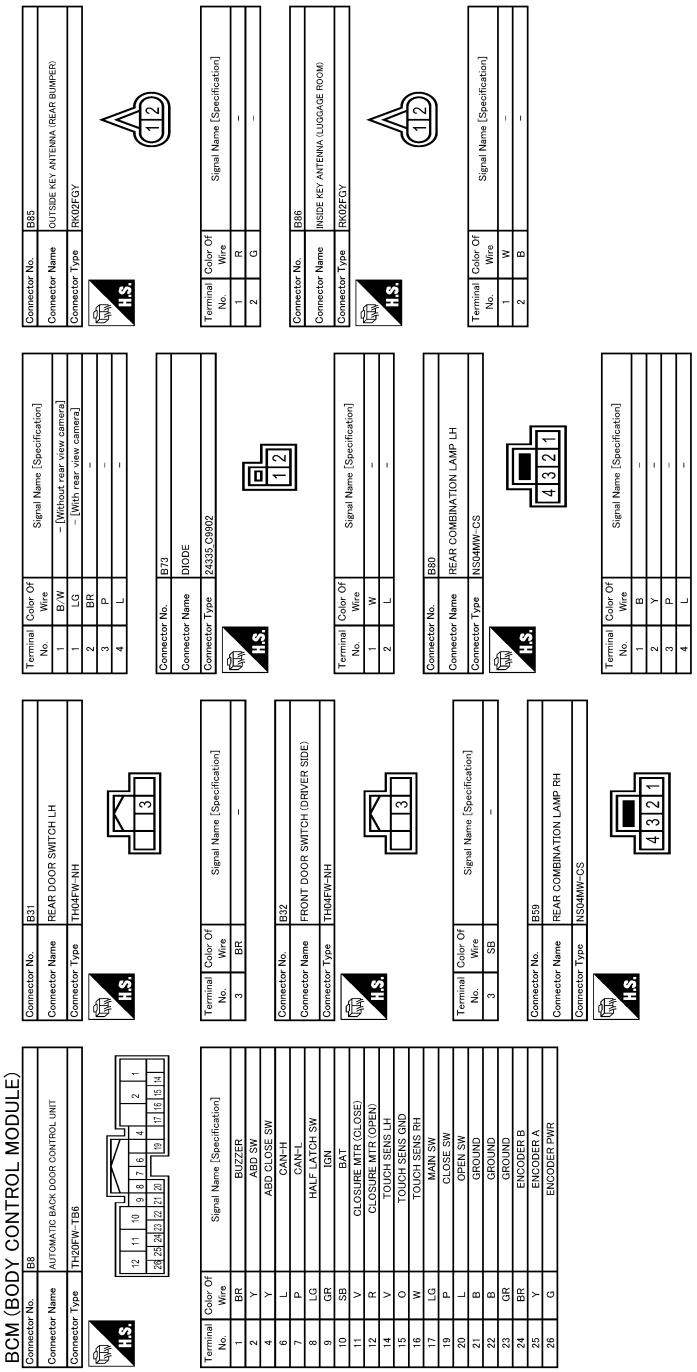



XM : Except for Mexico
SO : With power seat without automatic drive positioner
* : This connector is not shown in "Harness Layout".
DATA LINK CONNECTOR (M4)
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) (E10), (E11) : F12
STARTER RELAY
CPU
DATA LINE
DATA LINE
TCM (TRANSMISSION CONTROL MODULE) (F23)
BCM (BODY CONTROL MODULE) (M118), (M119), (M120), (M121), (M122), (M123)
47 91 90 140 52
137 83 103 138 139 : XM 113 73 72 35 34 77 76 75 74
REMOTE KEYLESS ENTRY RECEIVER (M78)
TIRE PRESSURE RECEIVER (M21) : XM
OPTICAL SENSOR (M17)
INSIDE KEY ANTENNA (CONSOLE) (M262)
INSIDE KEY ANTENNA (LUGGAGE ROOM) (B86)
FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA) (D12)
FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA) (D52)
FRONT SEAT (DRIVER SIDE)
LUMBAR SUPPORT SWITCH (B407) * : SO
POWER SEAT SWITCH (DRIVER SIDE) (B414) * : SO
JRMWC5025GB

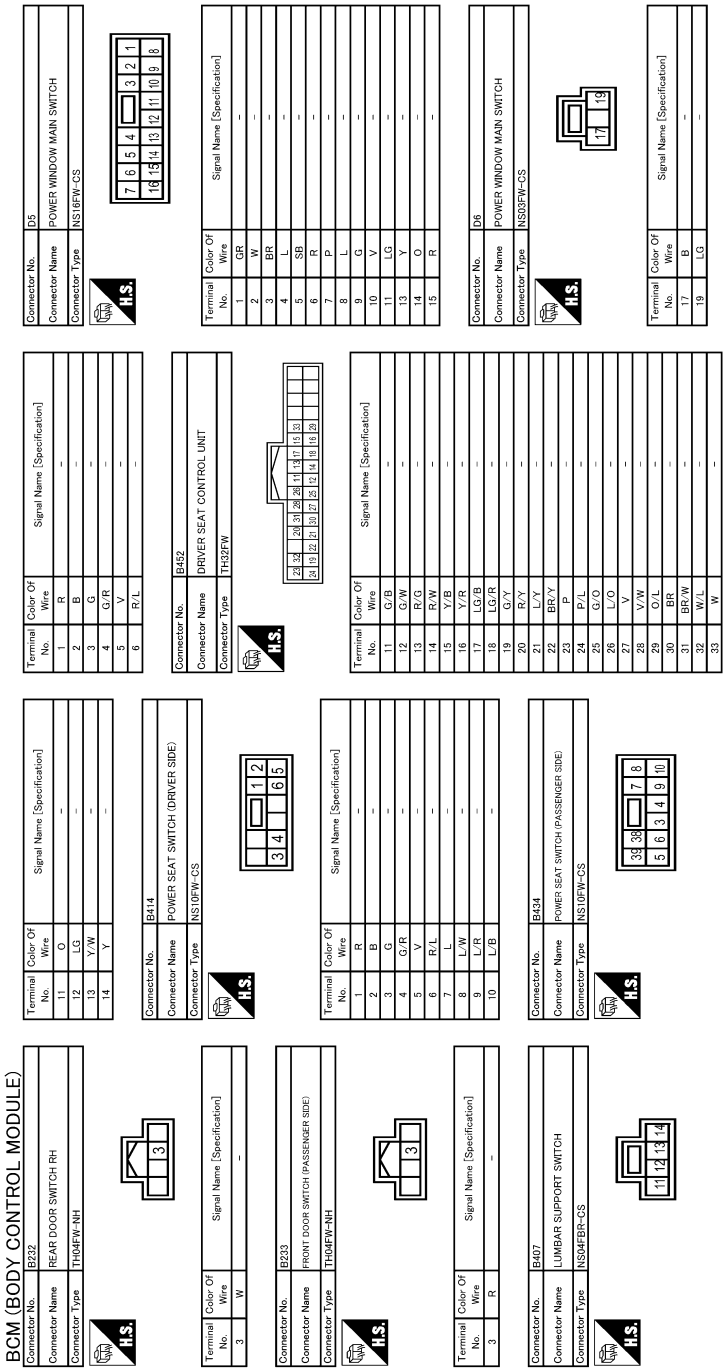

NV : With navigation system
ON : Without navigation system
RF : With sunroof
PM : With automatic drive positioner
SO : With power seat without automatic drive positioner
AB : With automatic back door
WD : With color display
*: This connector is not shown in "Harness Layout".
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E36
To CAN system
FRONT SEAT (DRIVER SIDE)
DRIVER SEAT CONTROL UNIT B452
PM
AUTOMATIC BACK DOOR CONTROL UNIT B8
AB
AV CONTROL UNIT M174
ON
AV CONTROL UNIT M180
NV
WD
ECM E16
COMBINATION METER M34
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
FULL STROKE
BETWEEN FULL STROKE AND N
N
FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) D9
REAR POWER WINDOW SWITCH LH D83
REAR POWER WINDOW SWITCH RH D103
FRONT POWER WINDOW SWITCH (PASSENGER SIDE) D45
POWER WINDOW MAIN SWITCH D5, D6
SUNSHADE MOTOR ASSEMBLY R102
SUNROOF MOTOR ASSEMBLY R101
CVT SHIFT SELECTOR (DETENTION SWITCH) M57
OUTSIDE KEY ANTENNA (REAR BUMPER) B85
POWER SEAT SWITCH (PASSENGER SIDE)* B434
FRONT SEAT (PASSENGER SIDE)
JRMWC5026GB


RS : With rain sensor
WX : With xenon headlamp
OX : Without xenon headlamp
PERSONAL LAMP R21
RH
LH
DOOR
ON
MAP LAMP R19
OFF
VANITY MIRROR LAMP (PASSENGER SIDE) R10
VANITY MIRROR LAMP (DRIVER SIDE) R24
STEP LAMP (PASSENGER SIDE) D51
STEP LAMP (DRIVER SIDE) D17
RAIN SENSOR R23 : RS
112 : RS
19
4
7
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
17
18
10
5
To parking, license plate and tail lamps
FRONT TURN SIGNAL LAMP RH E328 : WX
FRONT COMBINATION LAMP RH E319 : OX
PARKING
TURN SIGNAL
REAR COMBINATION LAMP LH (TURN SIGNAL) B80
FRONT TURN SIGNAL LAMP LH E327 : WX
FRONT COMBINATION LAMP LH E318 : OX
REAR DOOR LOCK ASSEMBLY RH D105
REAR DOOR LOCK ASSEMBLY LH D85
FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE) D48
JRMWC5027GB

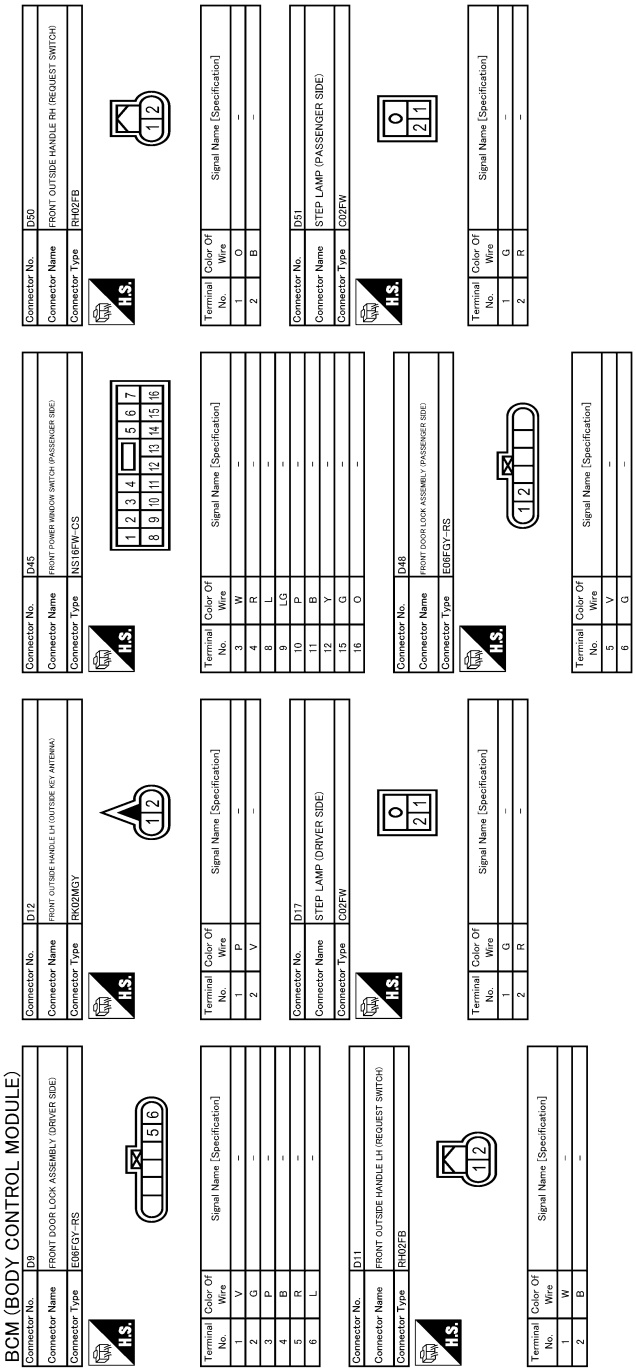

AB : With automatic back door
OA : Without automatic back door
BACK DOOR LOCK ASSEMBLY (BACK DOOR SWITCH)
D179
AB
BACK DOOR LOCK ASSEMBLY
D180
OA
BACK DOOR SWITCH
OPENER ACTUATOR
To ignition power supply
151
102
23 : OA
LUGGAGE ROOM LAMP RH
D156
LUGGAGE ROOM LAMP LH
D157
DOOR
OFF
DIODE
B73
AUTOMATIC BACK DOOR CLOSE SWITCH (ILLUMINATION)
D178
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
66
65
26
130
110
REAR WIPER MOTOR
D193
STOP
MOVE
A/C AUTO AMP.
M50
HAZARD SWITCH
M45
REAR COMBINATION LAMP RH (TURN SIGNAL)
B59
JRMWC5028GB



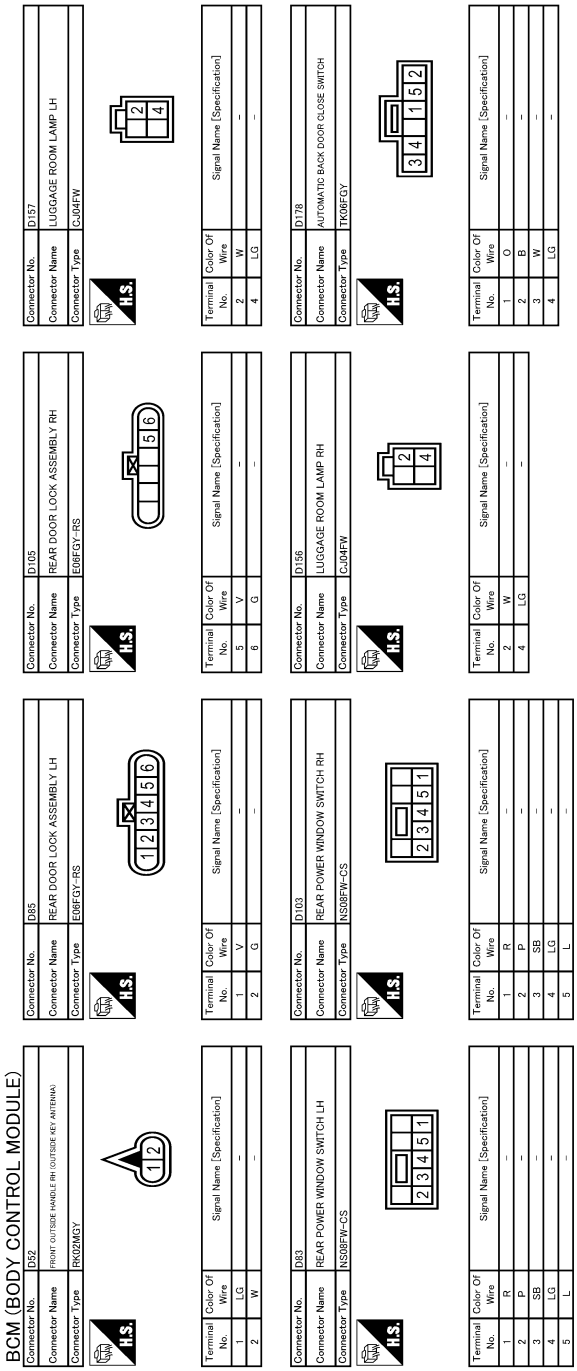
JRMWE5830GB



JRMWE5831GB



JRMWE5832GB



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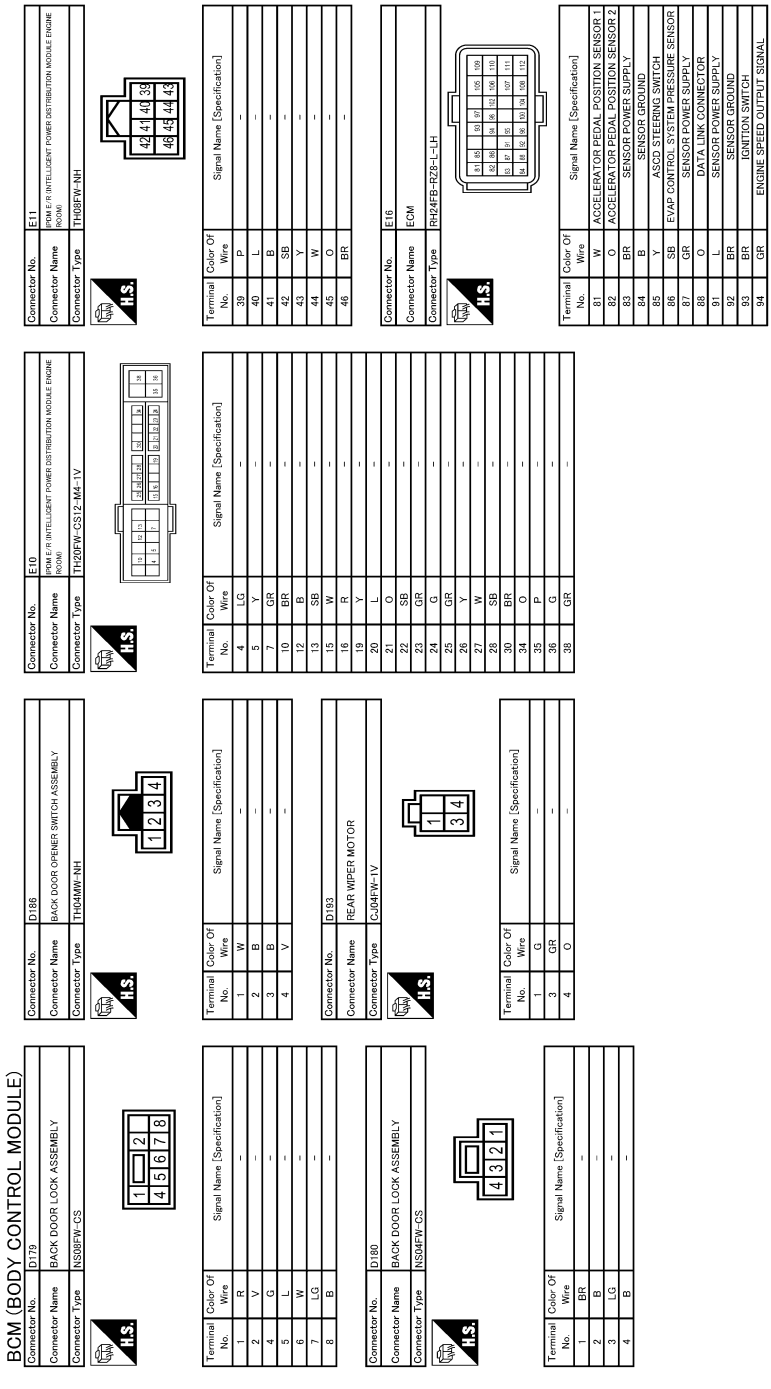
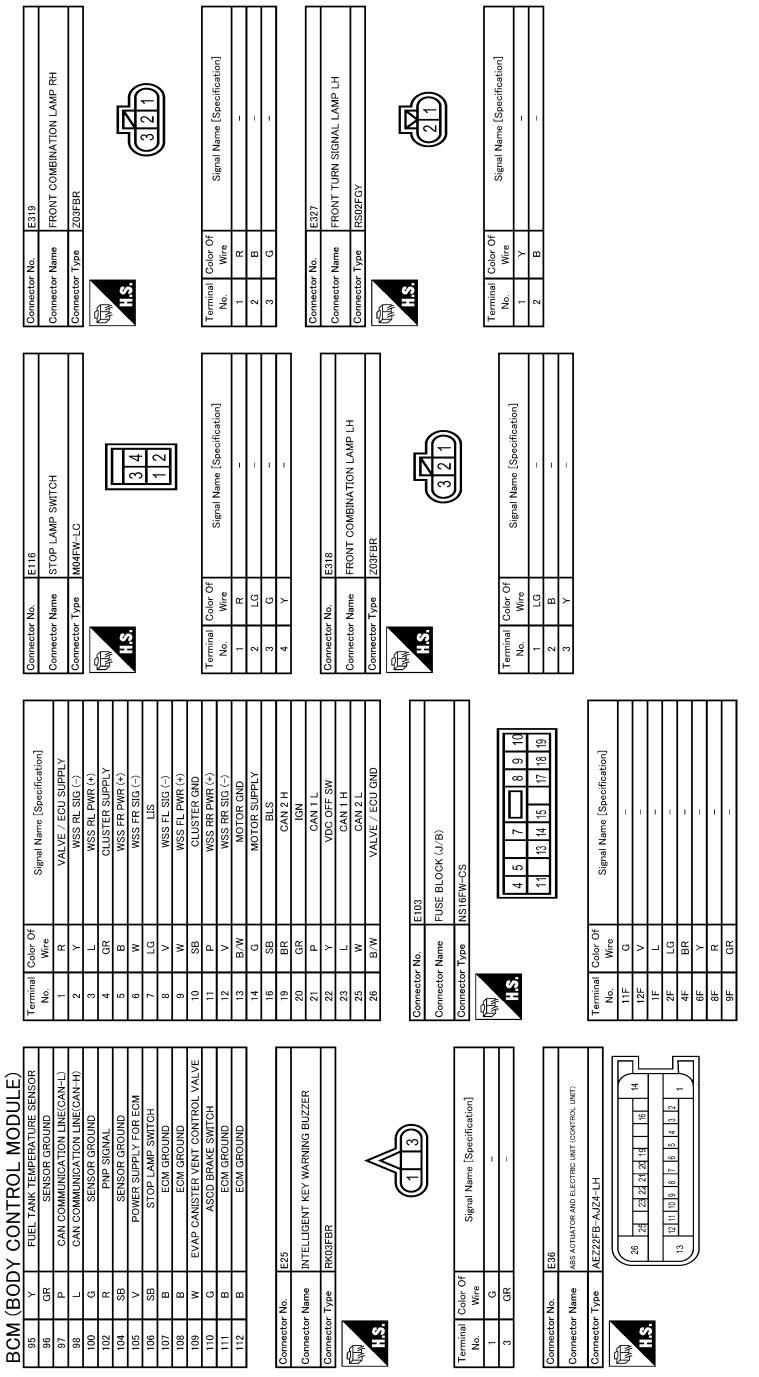


JRMWE5834GB



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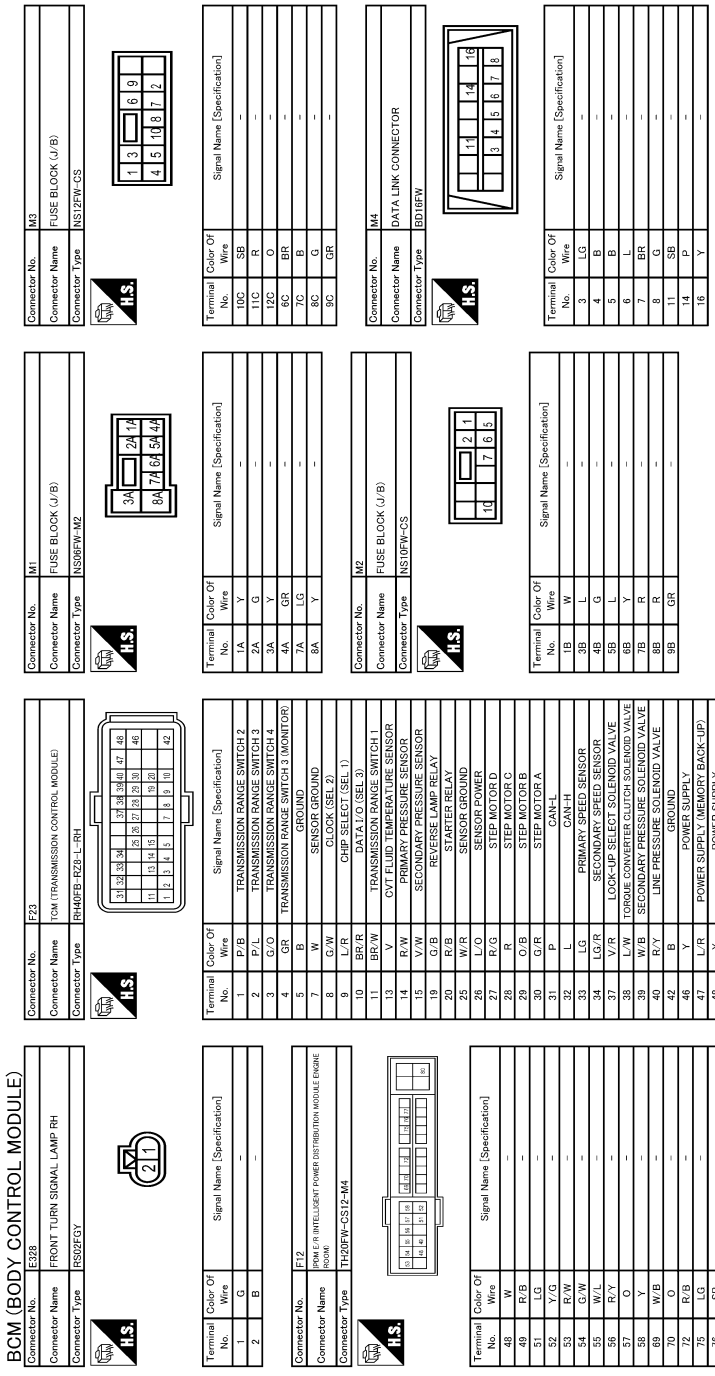

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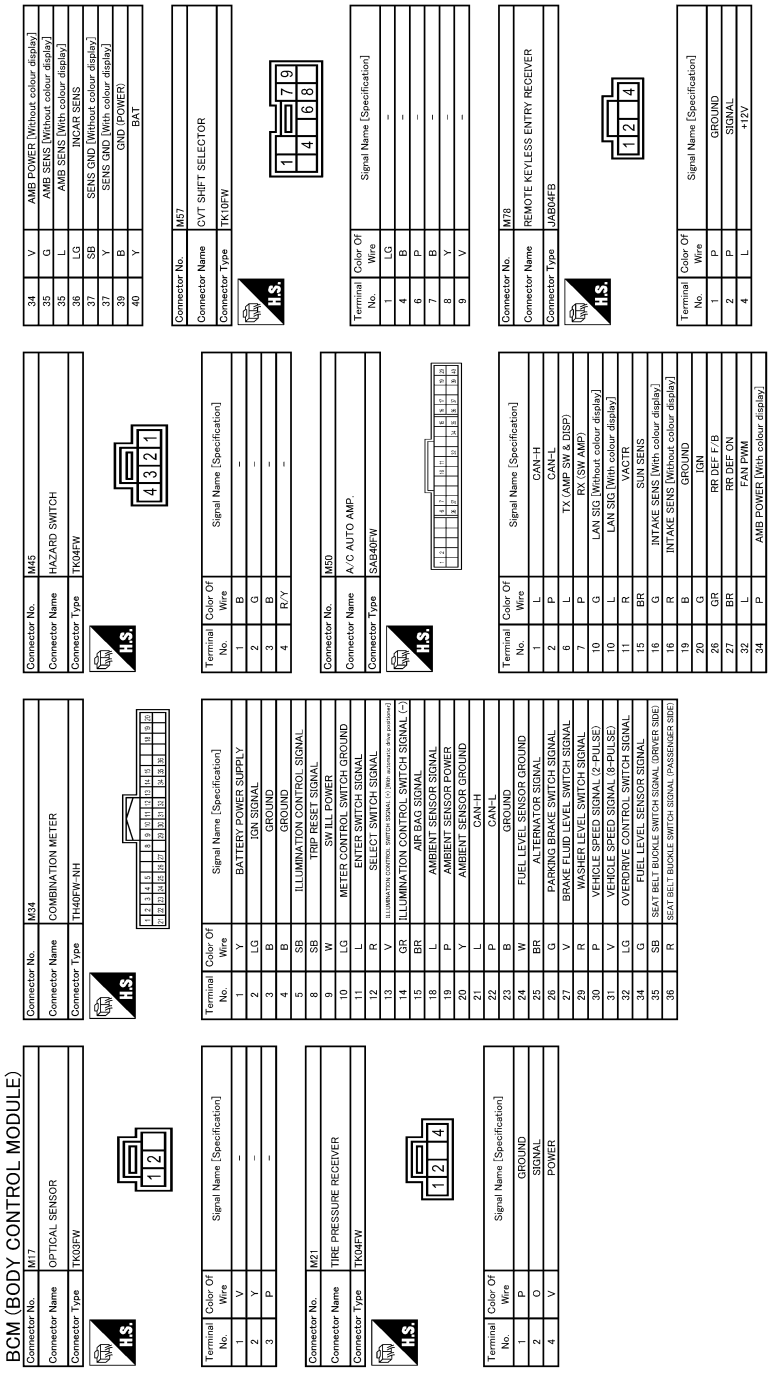
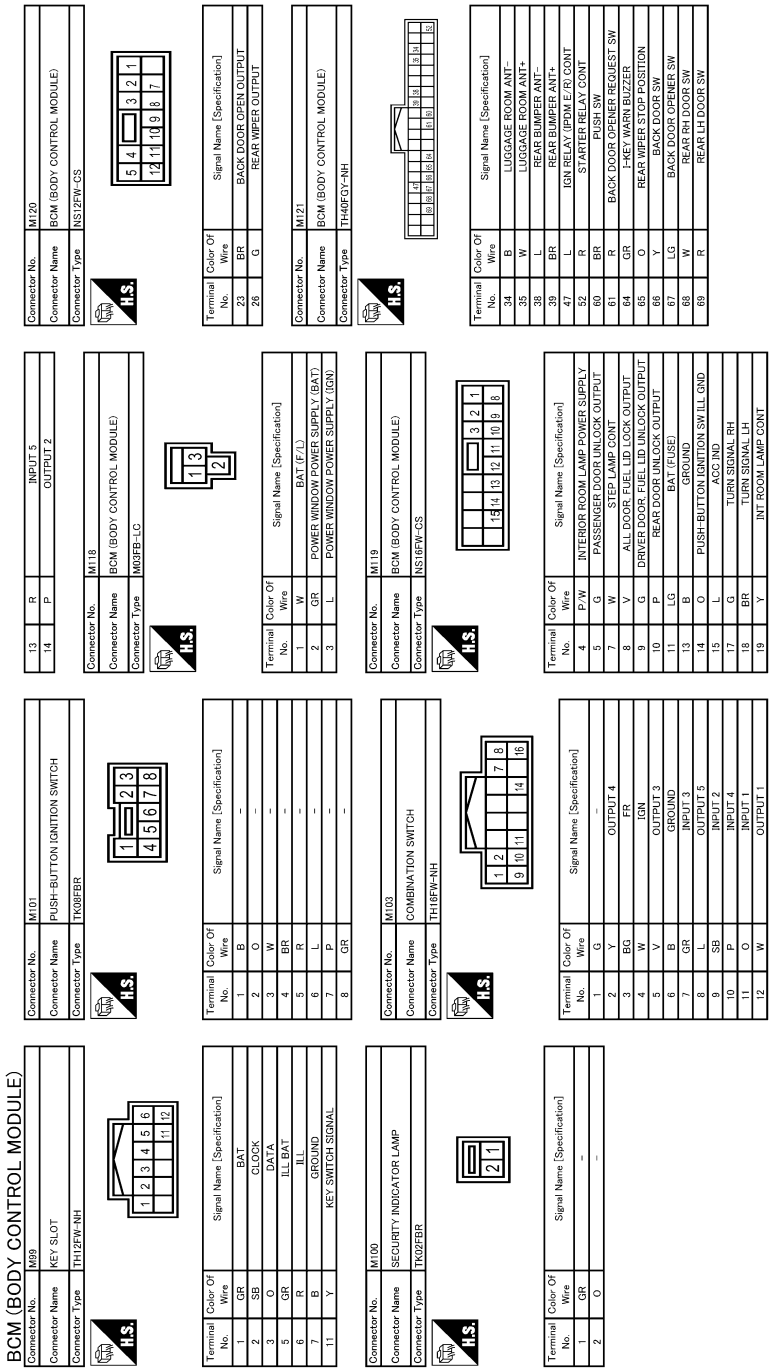


JRMWE5837GB



JRMWE5838GB

BCM (BODY CONTROL MODULE)

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

Terminal No.	Color Of Wire	Signal Name [Specification]
72	B	ROOM ANT–
73	W	ROOM ANT+
74	Y	PASSENGER DOOR ANT–
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	P	DRIVER DOOR ANT+
80	SB	NATS ANT AMP.
81	O	NATS ANT AMP.
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER COMM
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
90	P	CAN–L
91	L	CAN–H
92	R	KEY SLOT ILL CONT
93	P	ON IND.
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW

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

Terminal No.	Color Of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	P/B	OPTICAL SENSOR
116	GR	STOP LAMP SW 1
118	L	STOP LAMP SW 2
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER /SENSOR GND
138	V	RECEIVER /SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER COMM
140	GR	SHIFT N/P
141	O	SECURITY IND LAMP CONT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M174
Connector Name	AV CONTROL UNIT
Connector Type	TH32FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
76	LG	AV COMM (L)
77	SB	AV COMM (H)
78	LG	AV COMM (L)
79	SB	AV COMM (H)
80	P	CAN–L
81	L	CAN–H
82	V	SW GND
86	SHIELD	SHIELD
87	R	TEL VOICE SIGNAL (+)
88	L	TEL VOICE SIGNAL (–)
92	V	VEHICLE SPEED SIGNAL (8–PULSE)
93	G	PARKING BRAKE [Without BOSE system]
94	SB	REVERSE
95	G	IGNITION
96	W	DISK EJECT SIGNAL
102	W	AUX SOUND SIGNAL GND
103	B	AUX SOUND SIGNAL LH (+)
104	R	AUX SOUND SIGNAL RH (+)

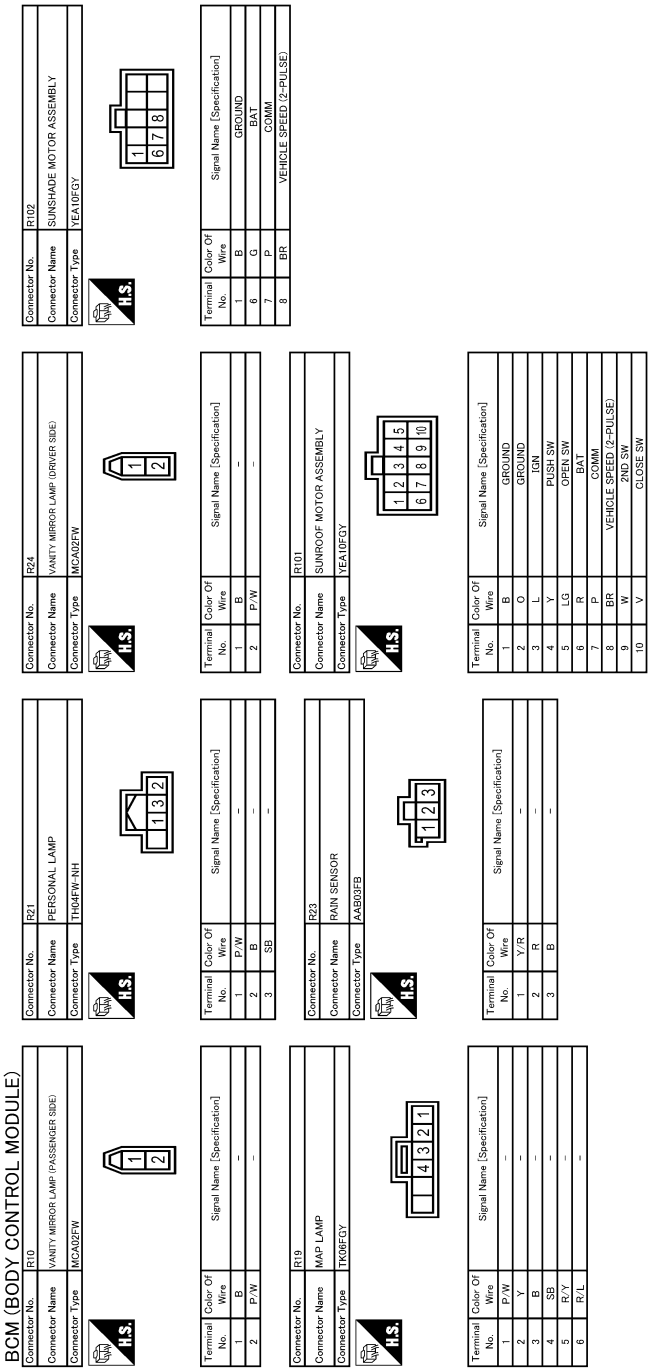
Connector No.	M180
Connector Name	AV CONTROL UNIT
Connector Type	TH32FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
65	LG	PARKING BRAKE
67	L	–
68	LG	–
71	SHIELD	SHIELD
72	B	MICROPHONE VCC
73	R	COMM (CONT– DISP)
74	P	CAN–L
75	LG	AV COMM (L)
76	LG	AV COMM (L)
79	R	ILLUMINATION SIGNAL
80	G	IGNITION
81	SB	REVERSE
82	V	VEHICLE SPEED SIGNAL (8–PULSE)
83	B	–
87	W	MICROPHONE SIGNAL
88	B	–
89	W	–
90	L	CAN–H
91	SB	AV COMM (H)
92	SB	AV COMM (H)

Connector No.	M282
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	–
2	B	–

JRMWE5839GB



JRMWE5840GB

Fail-safe

INFOID:0000000010129268

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

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.
BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

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

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:
If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.
When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation
1. More than 1 minute is passed after the rear wiper stop.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:0000000010129269

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 • 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
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: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • 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	• B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

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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 BCS-18, "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	—	—	—	—	BCS-42
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-43
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-44
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-42
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-45
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-46
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-48
B2195: ANTI SCANNING	×	—	—	—	SEC-49
B2553: IGNITION RELAY	—	×	—	—	PCS-50
B2555: STOP LAMP	—	×	—	—	SEC-50
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-52
B2557: VEHICLE SPEED	×	×	×	—	SEC-54
B2560: STARTER CONT RELAY	×	×	×	—	SEC-55
B2562: LOW VOLTAGE	—	×	—	—	BCS-45
B2601: SHIFT POSITION	×	×	×	—	SEC-56
B2602: SHIFT POSITION	×	×	×	—	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-61
B2604: PNP SW	×	×	×	—	SEC-64
B2605: PNP SW	×	×	×	—	SEC-66
B2608: STARTER RELAY	×	×	×	—	SEC-68
B260A: IGNITION RELAY	×	×	×	—	PCS-52
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-70
B2614: ACC RELAY CIRC	—	×	×	—	PCS-54
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-57
B2616: IGN RELAY CIRC	—	×	×	—	PCS-60
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-72
B2618: BCM	×	×	×	—	PCS-63
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-75
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-78
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-71
C1704: LOW PRESSURE FL	—	—	—	×	WT-23
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-25
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-28
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-29
C1734: CONTROL UNIT	—	—	—	×	WT-30

COMBINATION METER

Reference Value

INFOID:0000000010129271

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.

Monitor Item	Condition		Value/Status
SPEED METER [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading **NOTE:** 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading **NOTE:** 655.35 is displayed when the malfunction signal is received
ODO OUTPUT [km/h or mph]	Ignition switch ON	—	Equivalent to odometer reading in combination meter
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading **NOTE:** 8191.875 is displayed when the malfunction signal is received
FUEL METER [L]	Ignition switch ON	—	Values according to fuel level
W TEMP METER [°C]	Ignition switch ON	—	Values according to engine coolant temperature **NOTE:** 215 is displayed when the malfunction signal is input
FUEL CAP W/L	Ignition switch ON	Fuel filler cap warning display ON	On
		Fuel filler cap warning display OFF	Off
ABS W/L	Ignition switch ON	ABS warning lamp ON	On
		ABS warning lamp OFF	Off
VDC/TCS IND	Ignition switch ON	VDC OFF indicator lamp ON	On
		VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch ON	VDC warning lamp ON	On
		VDC waning lamp OFF	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On
		Brake warning lamp OFF	Off
DOOR W/L	Ignition switch ON	Door warning lamp ON	On
		Door warning lamp OFF	Off
HI-BEAM IND	Ignition switch ON	High-beam indicator lamp ON	On
		High-beam indicator lamp OFF	Off
TURN IND	Ignition switch ON	Turn signal indicator lamp ON	On
		Turn signal indicator lamp OFF	Off
LIGHT IND	Ignition switch ON	Light indicator lamp ON	On
		Light indicator lamp OFF	Off
OIL W/L	Ignition switch ON	Oil pressure warning lamp ON	On
		Oil pressure warning lamp OFF	Off

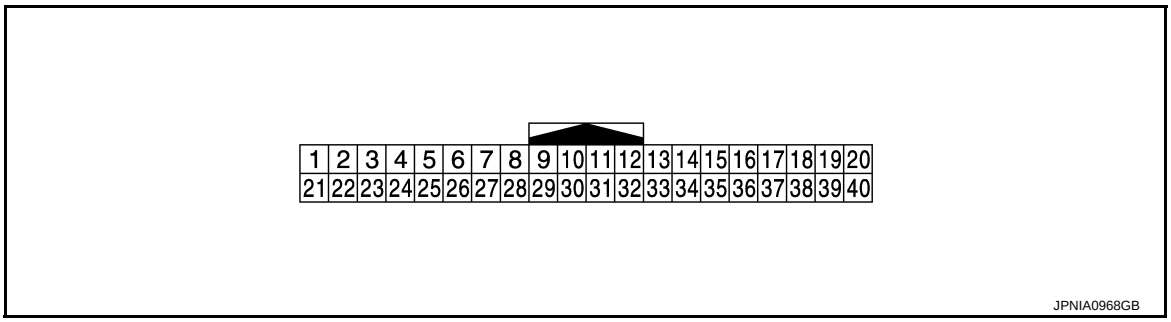
Monitor Item	Condition		Value/Status
MIL	Ignition switch ON	Malfunction indicator lamp ON	On
		Malfunction indicator lamp OFF	Off
CRUISE IND	Ignition switch ON	CRUISE indicator lamp ON	On
		CRUISE indicator lamp OFF	Off
O/D OFF IND	Ignition switch ON	O/D OFF indicator lamp ON	On
		O/D OFF indicator lamp OFF	Off
4WD W/L	Ignition switch ON	AWD warning lamp ON	On
		AWD warning lamp OFF	Off
4WD LOCK IND	Ignition switch ON	AWD LOCK indicator lamp ON	On
		AWD LOCK indicator lamp OFF	Off
FUEL W/L	Ignition switch ON	Low-fuel warning lamp ON	On
		Low-fuel warning lamp OFF	Off
WASHER W/L	Ignition switch ON	Washer warning displayed	On
		Washer warning not displayed	Off
AIR PRES W/L	Ignition switch ON	Low tire pressure lamp ON	On
		Low tire pressure lamp OFF	Off
KEY G/Y W/L	Ignition switch ON	Key warning lamp (green/yellow) ON	On
		Key warning lamp (green/yellow) OFF	Off
LCD	Ignition switch ON	Engine start information display	B&P I
	Ignition switch ACC	Engine start information display	B&P N
	Ignition switch LOCK	Key ID warning display	ID NG
	Ignition switch LOCK	Steering lock information display	ROTAT
	Ignition switch LOCK	P position warning display	SFT P
	Ignition switch LOCK	Intelligent Key insert information display	INSRT
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT
	Ignition switch ON	Take away warning display	NO KY
	Ignition switch LOCK	Key warning display	OUTKY
	Ignition switch ON	ACC warning display	LK WN
SHIFT IND	Ignition switch ON	Shift position indicator P display	P
		Shift position indicator R display	R
		Shift position indicator N display	N
		Shift position indicator D display	D
		Shift position indicator L display	L
O/D OFF SW	Ignition switch ON	Overdrive control switch ON	On
		Overdrive control switch OFF	Off
M RANGE SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off

Monitor Item	Condition		Value/Status
NM RANGE SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
AT SFT UP SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
AT SFT DWN SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
ST SFT UP SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
ST SFT DWN SW	Ignition switch ON	**NOTE:** This item is displayed, but cannot be monitored.	Off
PKB SW	Ignition switch ON	Parking brake switch ON	On
		Parking brake switch OFF	Off
BUCKLE SW	Ignition switch ON	Seat belt (driver side) not fastened	On
		Seat belt (driver side) fastened	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
DISTANCE [km]	Ignition switch ON	—	Possible driving distance calculated by combination meter
A/C AMP CONN	Ignition switch ON	Other than the following	On
		Receives ambient sensor power signal	Off
ENTER SW	Ignition switch ON	When ❑ is pressed	On
		Other than the above	Off
SELECT SW	Ignition switch ON	When ● is pressed	On
		Other than the above	Off
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	—	Equivalent to ambient temperature **NOTE:** This may not match the indicated value on the information display.
FUEL LOW SIG	Ignition switch ON	Low fuel warning displayed	On
		Low fuel warning not displayed	Off
BUZZER	Ignition switch ON	Buzzer ON	On
		Buzzer OFF	Off
BSW IND	Ignition switch ON	Blind Spot Intervention ON indicator (green) ON	On
		Blind Spot Intervention ON indicator (green) OFF	Off
BSW W/L	Ignition switch ON	BSW/Blind Spot Intervention warning lamp (yellow) ON	On
		BSW/Blind Spot Intervention warning lamp (yellow) OFF	Off
LDW IND	Ignition switch ON	Lane departure warning lamp (yellow) or LDW ON indicator lamp (green) ON	On
		Lane departure warning lamp (yellow) and LDW ON indicator lamp (green) OFF	Off

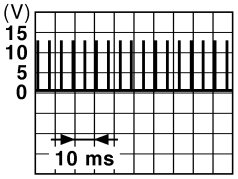
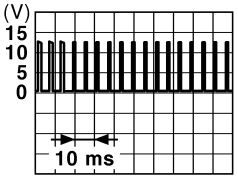
NOTE:

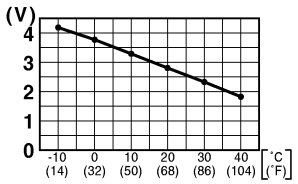
Some items are not available according to vehicle specification.

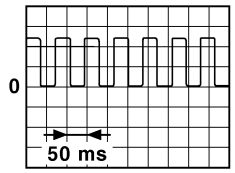
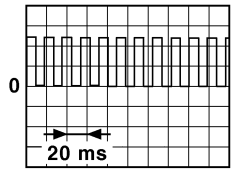
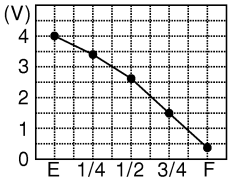
TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (LG)	Ground	IGN signal	Input	Ignition switch ON	—	Battery voltage
3 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
5 (SB)	Ground	Illumination control signal	Output	Ignition switch ON	• Lighting switch 1ST • When meter illumination is maximum	 JPNIA0828GB
					• Lighting switch 1ST • When meter illumination is minimum	 JPNIA0827GB
8 (SB)	10 (LG)	Trip reset signal	Input	Ignition switch ON	When trip reset switch is pressed.	0 V
					Other than the above	5 V
10 (LG)	Ground	Meter control switch ground	—	Ignition switch ON	—	0 V
11 (L)	10 (LG)	Enter switch signal	Input	Ignition switch ON	When ❑ is pressed.	0 V
					Other than the above	5 V
12 (R)	10 (LG)	Select switch signal	Input	Ignition switch ON	When ● is pressed.	0 V
					Other than the above	5 V
13 (Y*1 or V*2)	10 (LG)	Illumination control switch signal (+)	Input	Ignition switch ON	When ☼+ is pressed.	0 V
					Other than the above	5 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
14 (GR)	10 (LG)	Illumination control switch signal (-)	Input	Ignition switch ON	When is pressed.	0 V
					Other than the above	5 V
15 (BR)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V
18 (L)	Ground	Ambient sensor signal	Input	Ignition switch ON	Changes depending to ambient temperature.	 JSNIA0014GB
19 (P)	Ground	Ambient sensor power	Input	Ignition switch ON	—	5 V
20 (Y)	Ground	Ambient sensor ground	Input	Ignition switch ON	—	0 V
21 (L)	—	CAN-H	—	—	—	—
22 (P)	—	CAN-L	—	—	—	—
23 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (W)	Ground	Fuel level sensor ground	—	Ignition switch ON	—	0 V
25 (BR)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	2 V
					Charge warning lamp OFF	12 V
26 (G)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	5 V
27 (V)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal	12 V
					Brake fluid level is less than LOW level	0 V
29 (R)	Ground	Washer level switch signal	Input	Ignition switch ON	Washer level switch ON	0 V
					Washer level switch OFF	5 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
30 (P)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit).  JSNIA0015GB
31 (V)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	**NOTE:** The maximum voltage varies depending on the specification (destination unit).  JSNIA0012GB
32 (LG)	Ground	Overdrive control switch signal	Input	Ignition switch ON	Overdrive control switch pressed.	0 V
					Overdrive control switch not pressed.	12 V
34 (G)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	 JPNIA0740ZZ
35 (SB)	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When driver seat belt is fastened.	12 V
					When driver seat belt is unfastened.	0 V
36 (R)	Ground	Seat belt buckle switch signal (passenger side)	Input	Ignition switch ON	• When getting in the passenger seat. • When passenger seat belt is fastened.	12 V
					• When getting in the passenger seat. • When passenger seat belt is unfastened.	0 V

*1: Without automatic drive positioner

*2: With automatic drive positioner

Wiring Diagram - METER -

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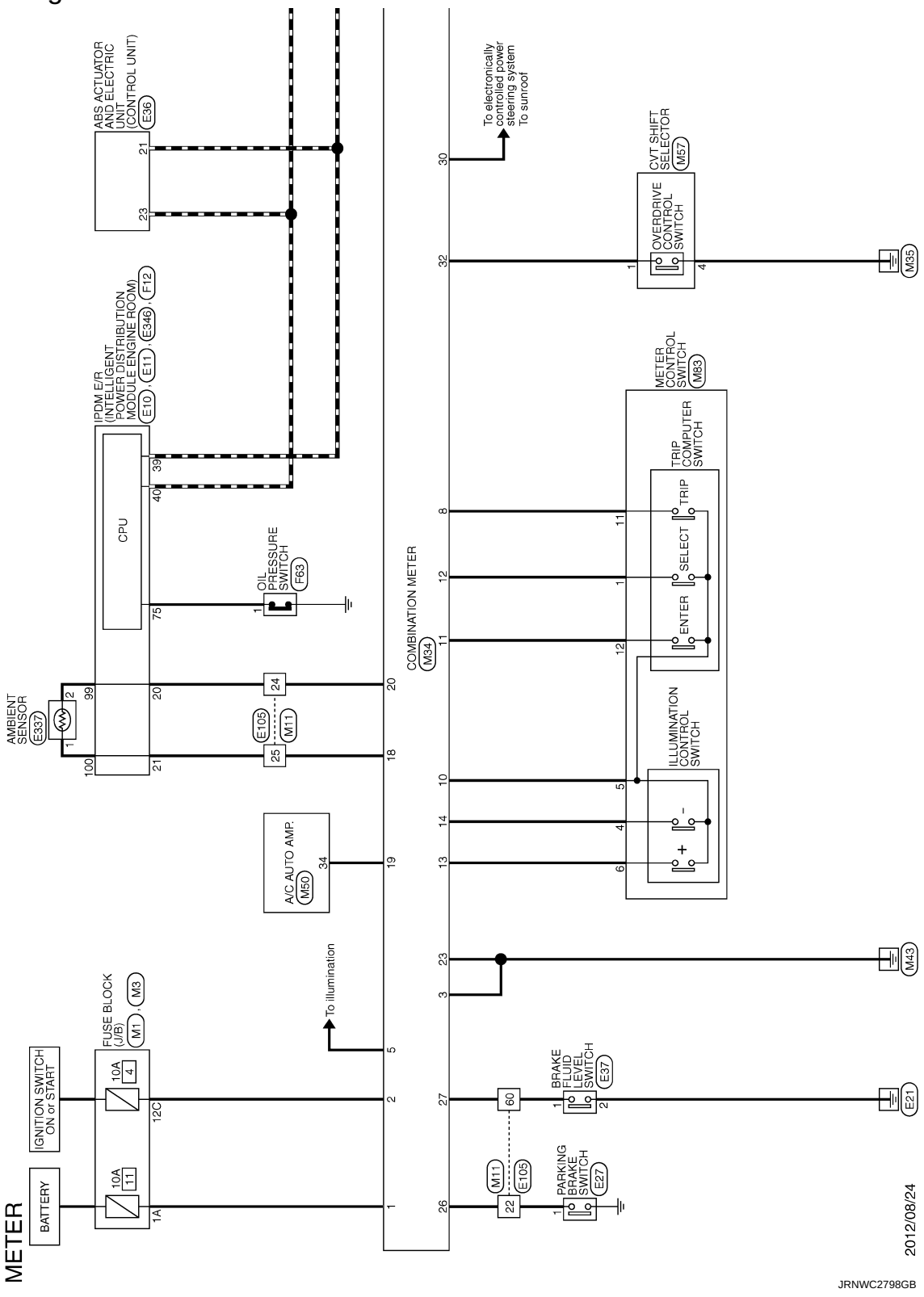
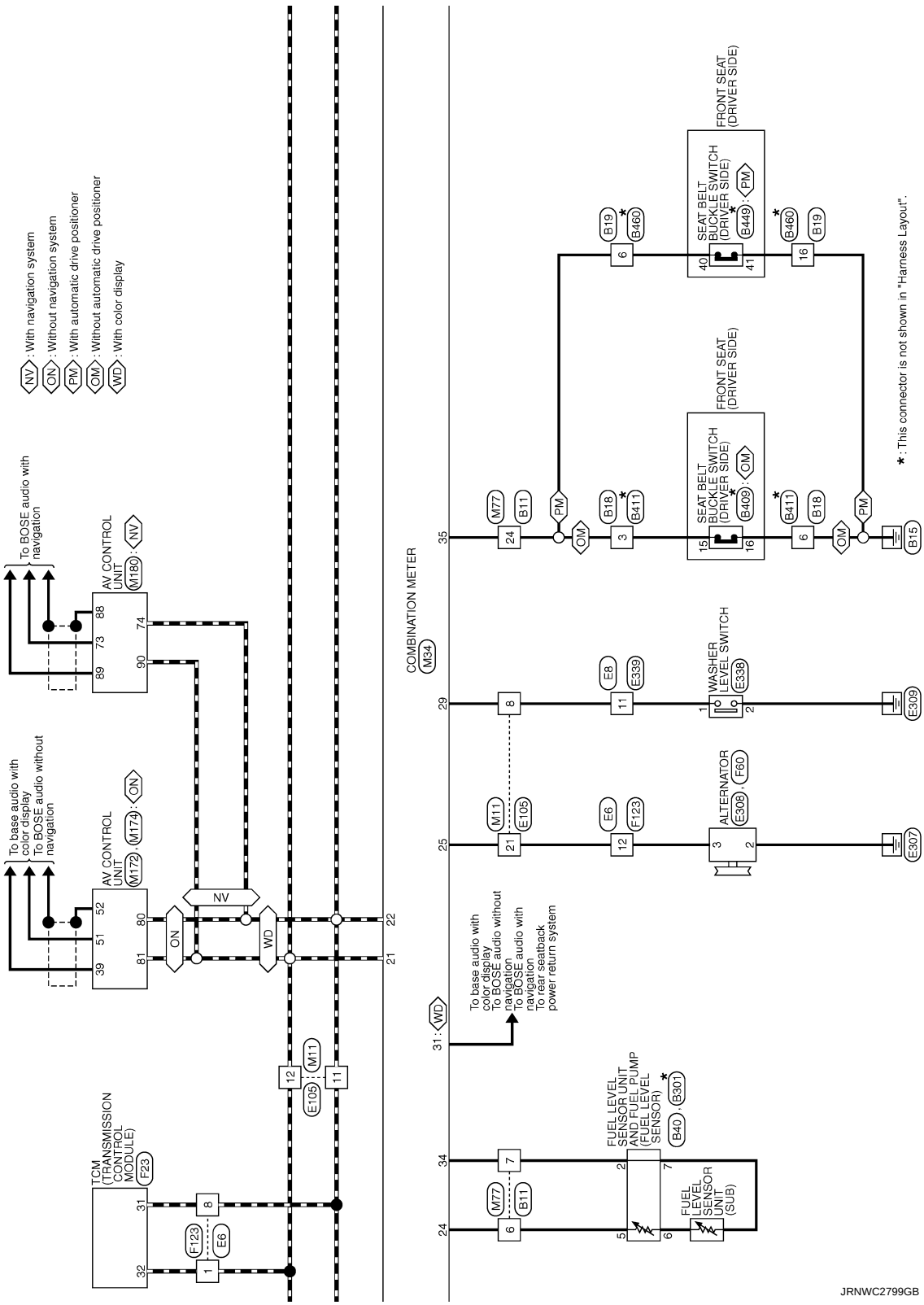
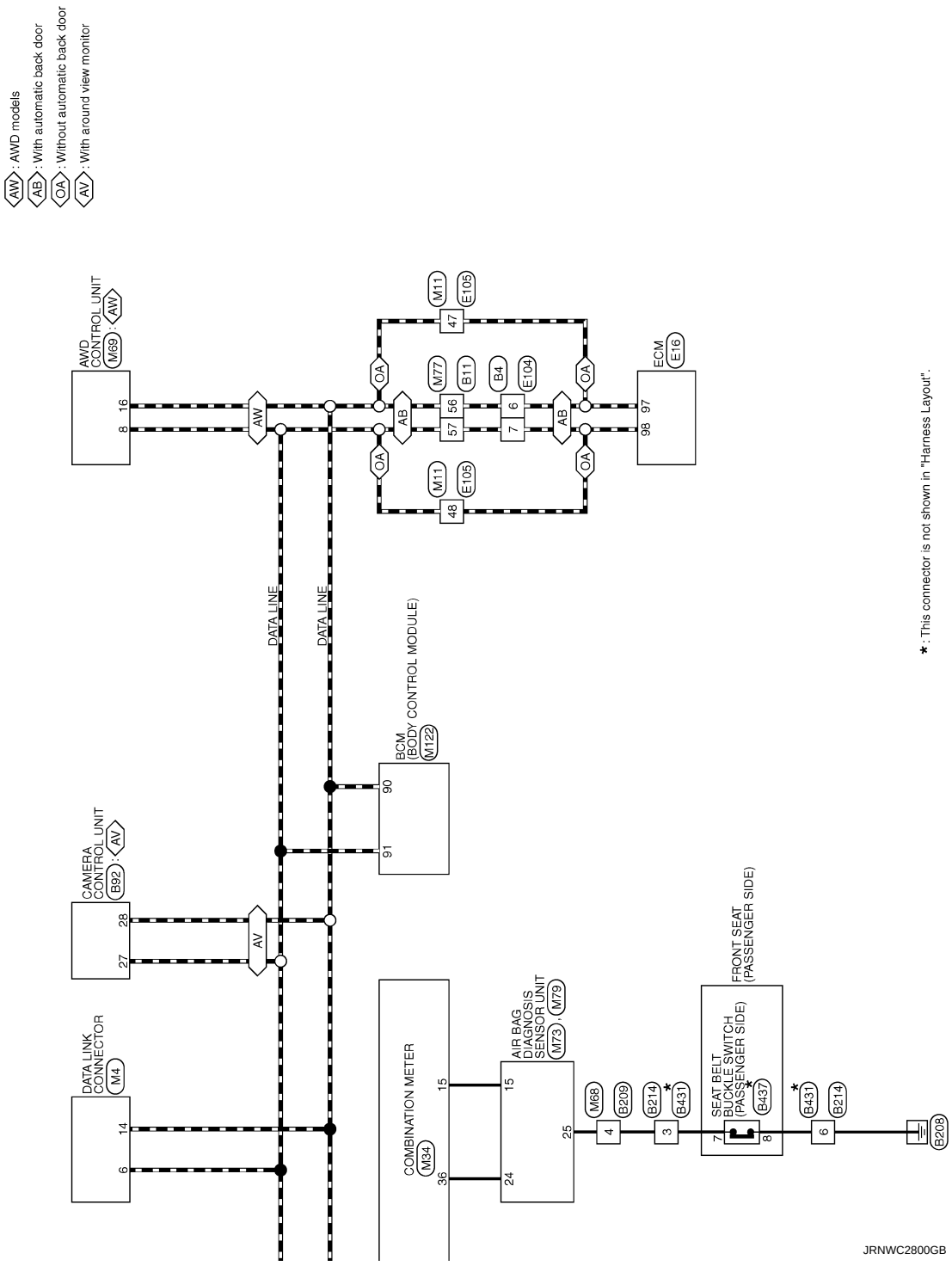
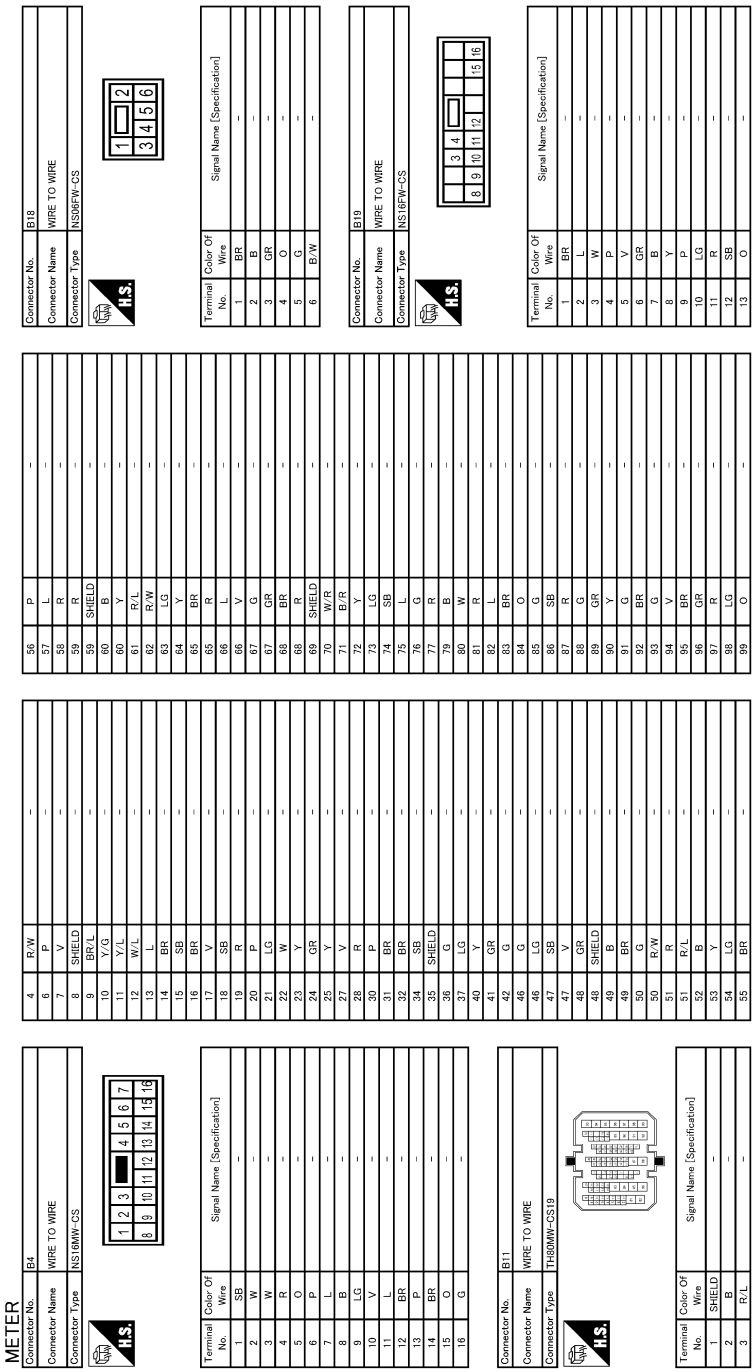
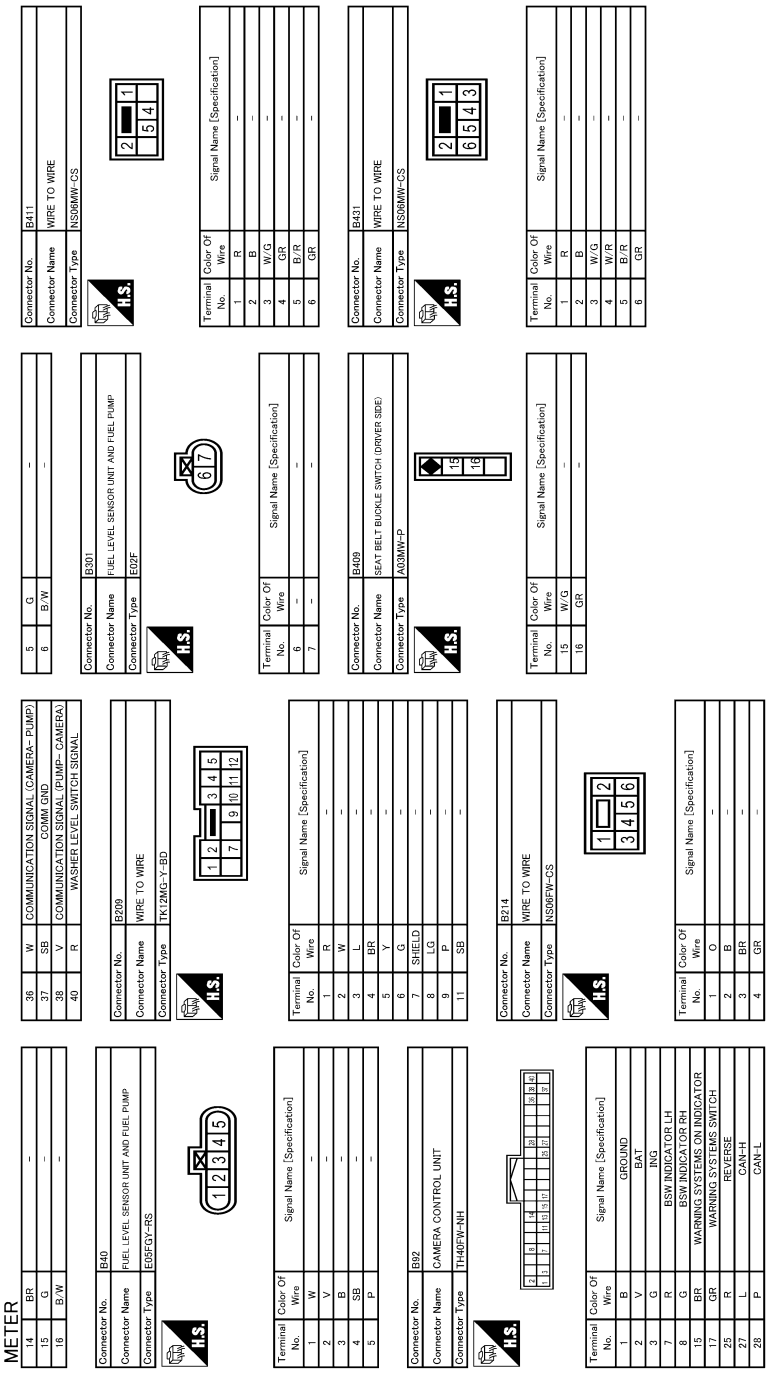



NV : With navigation system
ON : Without navigation system
PM : With automatic drive positioner
OM : Without automatic drive positioner
WD : With color display
To BOSE audio with navigation
AV CONTROL UNIT M180
To base audio with color display
To BOSE audio without navigation
AV CONTROL UNIT M172 M174
NV
ON
WD
TCM (TRANSMISSION CONTROL MODULE) F23
F123 E6
M11 E105
COMBINATION METER M34
To base audio with color display
To BOSE audio without navigation
To BOSE audio with navigation
To rear seatback power return system
FUEL LEVEL SENSOR UNIT AND FUEL PUMP (FUEL LEVEL SENSOR) B301
FUEL LEVEL SENSOR UNIT (SUB) B40
M77 B11
E8 E339
WASHER LEVEL SWITCH E338
E309
E6 F123
ALTERNATOR E308 F60
E307
SEAT BELT BUCKLE SWITCH (DRIVER SIDE) B449 PM
SEAT BELT BUCKLE SWITCH (DRIVER SIDE) B409 OM
FRONT SEAT (DRIVER SIDE)
B19 B460
B18 B411
B15
*: This connector is not shown in "Harness Layout".
JRNWC2799GB

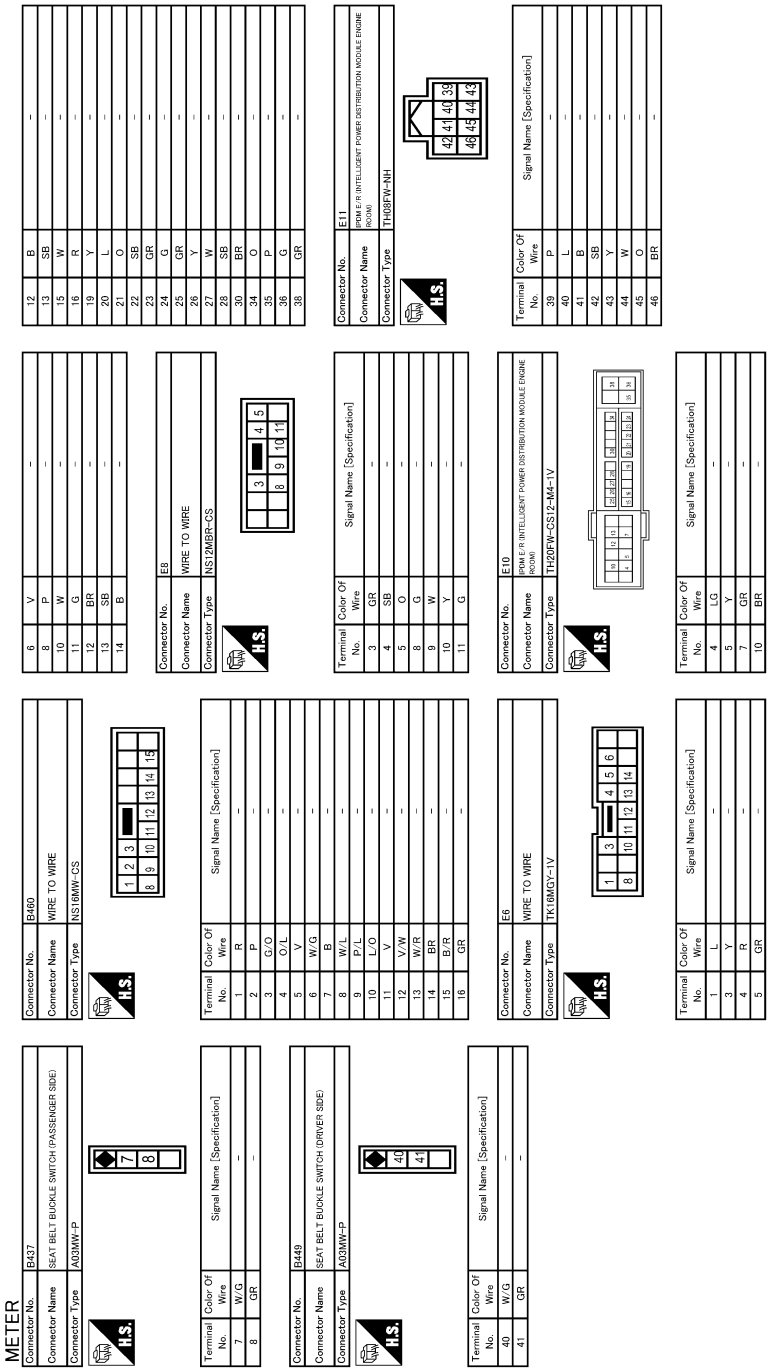

AW : AWD models
AB : With automatic back door
OA : Without automatic back door
AV : With around view monitor
AWD CONTROL UNIT (M69) : AW
ECM (E16)
BCM (BODY CONTROL MODULE) (M122)
CAMERA CONTROL UNIT (B92) : AV
DATA LINK CONNECTOR (M4)
COMBINATION METER (M34)
AIR BAG DIAGNOSIS SENSOR UNIT (M73), (M79)
FRONT SEAT (PASSENGER SIDE)
SEAT BELT BUCKLE SWITCH (PASSENGER SIDE) (B437)
DATA LINE
DATA LINE
*: This connector is not shown in "Harness Layout".
JRNWC2800GB



JRNWC8903GB



JRNWC8904GB



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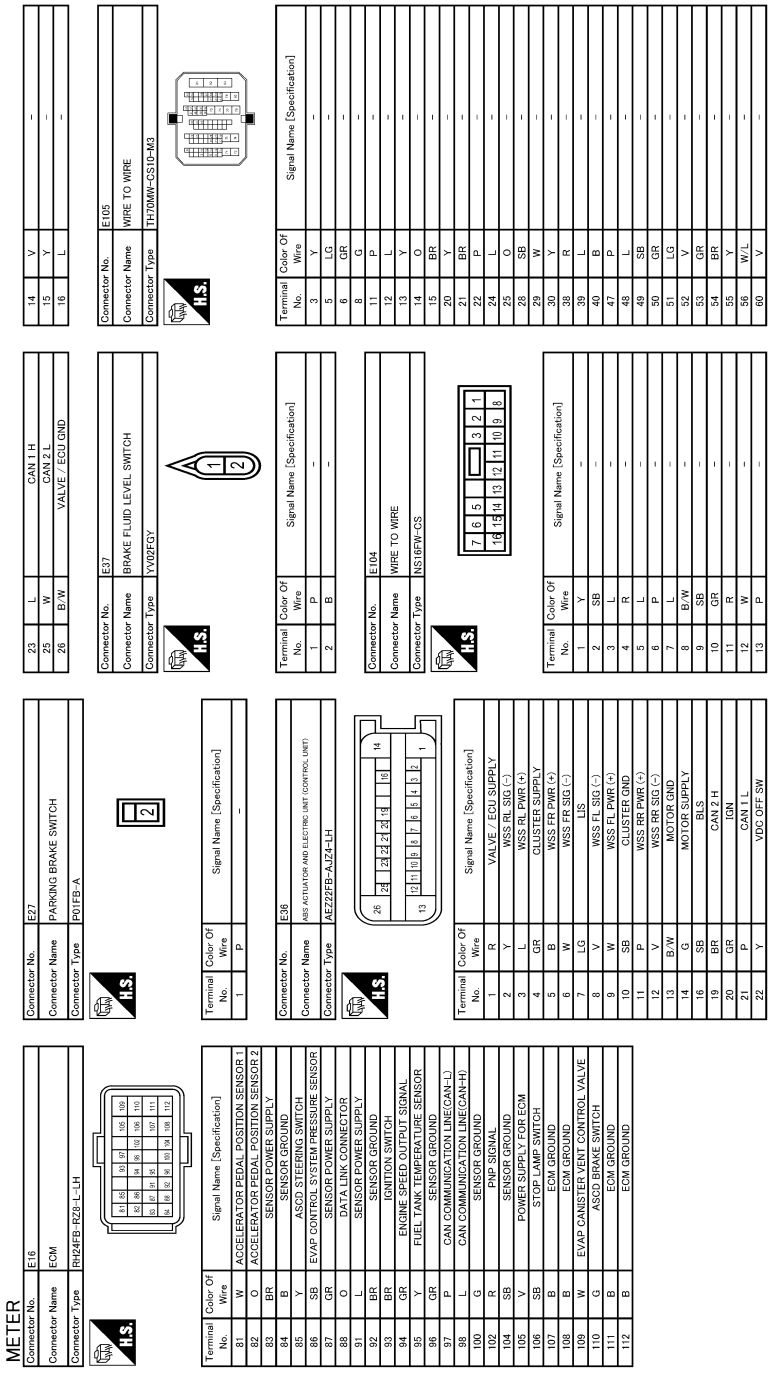

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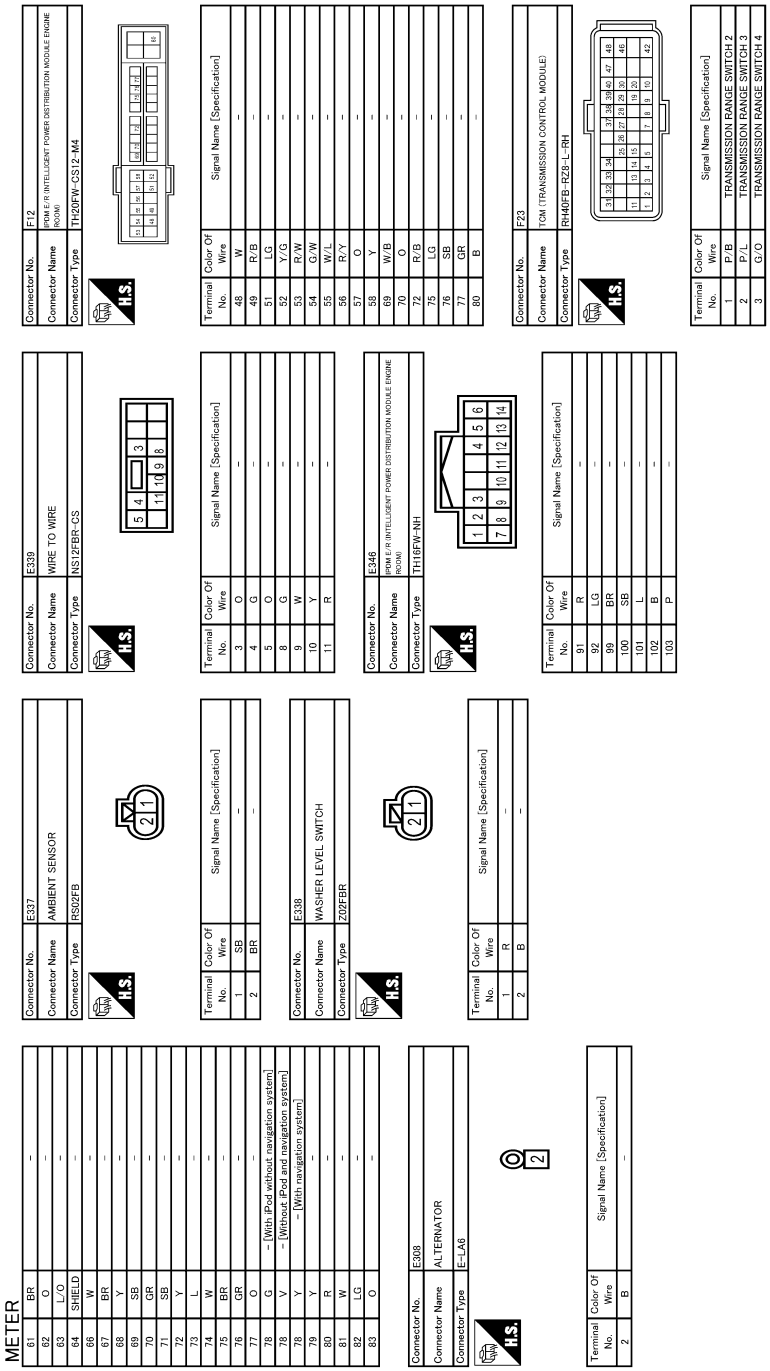

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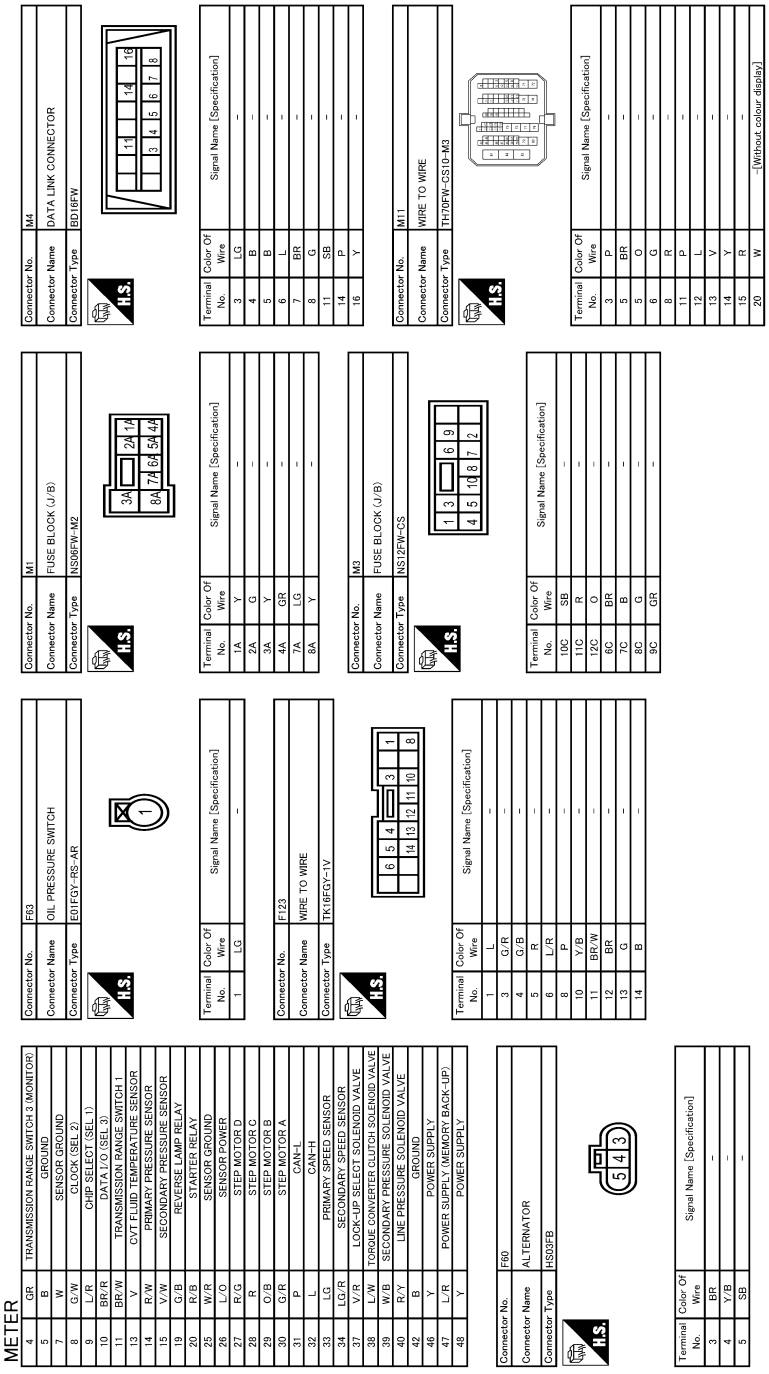

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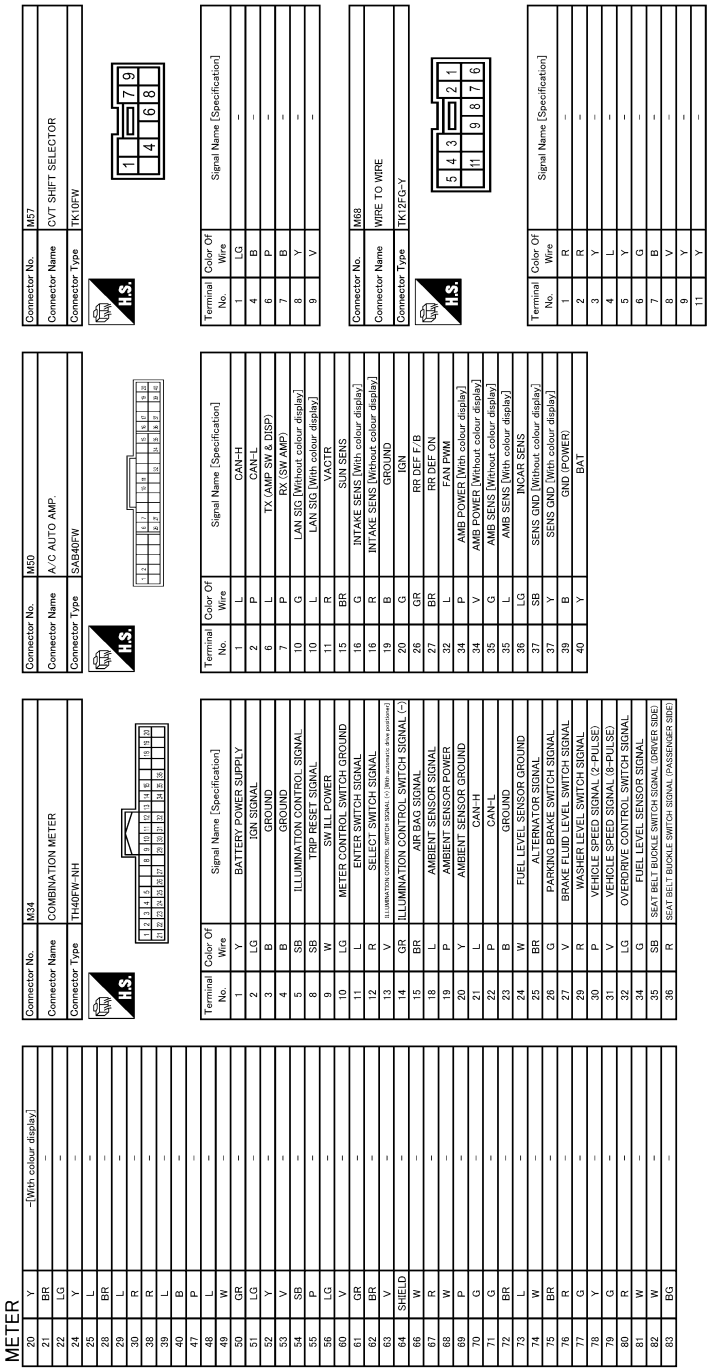


JRNWC8909GB

METER

Connector No.	M69
Connector Name	AWD CONTROL UNIT
Connector Type	TH16FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	AWD SOL–
2	L	AWD SOL–
7	R	IGN
8	L	CAN-H
9	G	SOL BATT
10	B	GROUND
11	B	GROUND
14	Y	LOCK SW
16	P	CAN-L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19

Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	–
2	B	–
3	W	–
4	R	–
6	W	–
7	G	–
8	SHIELD	–
9	W	–
10	R	–
11	G	–
12	B	–
13	P	–
14	R	–
15	SB	–
16	R	–
17	V	–
18	P	–
19	P	–
20	LG	–
21	Y	–
22	BR	–
23	LG	–
24	SB	–
25	Y	–
27	Y	–
28	R	–
30	Y	–
31	W	–
32	BR	–
34	Y	–
35	B	–
36	G	–
37	Y	–
40	BR	–
41	LG	–
42	SB	–
46	G	–
46	LG	–
47	SB	–
47	Y	–
48	GR	–
48	SHIELD	–
49	BR	–
49	R	–
50	LG	–
50	R	–
51	R	–
51	V	–
52	B	–
53	BR	–
54	B	–
55	G	–
56	P	–
57	L	–
58	SB	–
59	R	–
59	SHIELD	–
60	B	–
60	Y	–
61	R	–
62	W	–
63	LG	–
64	Y	–
65	R	–
65	V	–
66	L	–
66	Y	–
67	G	–
67	W	–
68	BG	–
68	G	–
69	SHIELD	–
70	L	–
71	P	–
72	LG	–
73	Y	–
74	R	–
75	P	–
76	L	–
77	BR	–
79	B	–
80	W	–
81	L	–
82	L	–
83	GR	– [Without automatic drive positioner]
83	W	– [With automatic drive positioner]
84	R	–
85	V	–
86	W	–
87	R	–
88	G	–
89	B	–
90	V	–
91	G	–
92	BR	–
93	P	–
94	V	–
95	W	–
96	SB	–
97	L	–
98	LG	–
99	Y	–

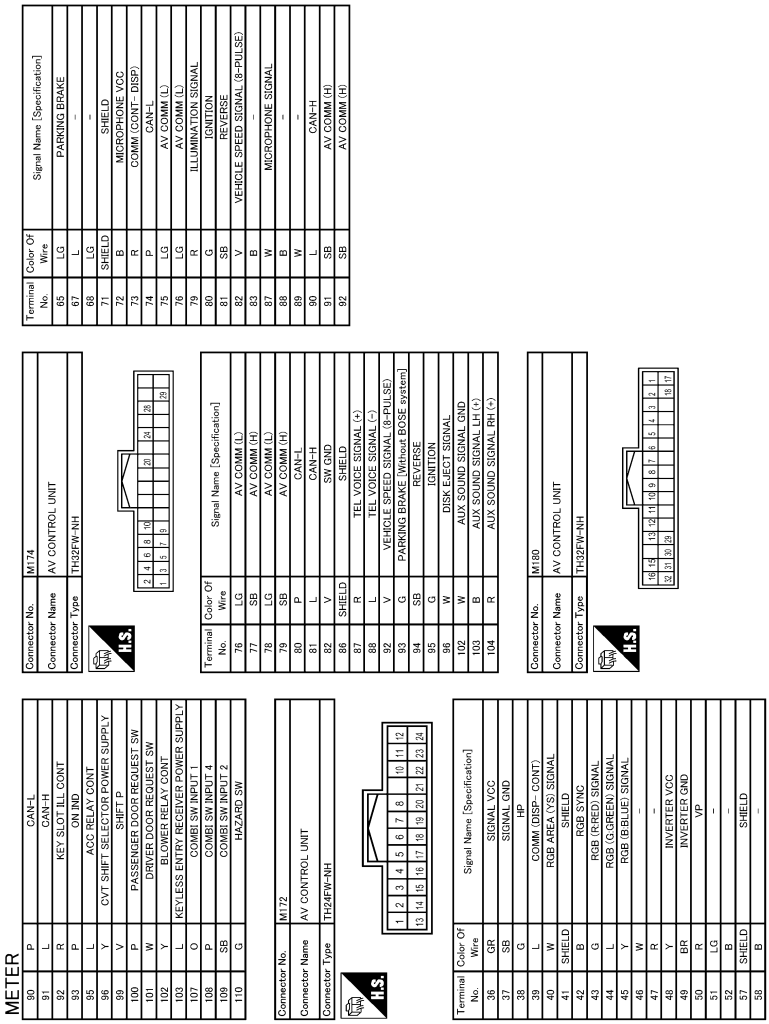
Connector No.	M83
Connector Name	METER CONTROL SWITCH
Connector Type	TH12FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	–
2	LG	–
3	W	–
4	GR	–
5	LG	–
6	V	–
11	SB	–
12	L	–

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

Terminal No.	Color Of Wire	Signal Name [Specification]
72	B	ROOM ANT–
73	W	ROOM ANT+
74	Y	PASSENGER DOOR ANT–
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT–
77	P	DRIVER DOOR ANT+
80	SB	NATS ANT AMP
81	O	NATS ANT AMP
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER COMM
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3

JRNWC8910GB



JRNWC8911GB

Fail-Safe

INFOID:0000000010129273

FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning.

Function		Specifications
Speedometer		Reset to zero by suspending communication.
Tachometer		
Engine coolant temperature gauge		
Illumination control		When suspending communication, changes to nighttime mode.
Information display	Door open warning	The display turns off by suspending communication.
	Parking brake release warning	
	Low tire pressure warning	
	Fuel filler cap warning	
	Instantaneous fuel warning	• When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result. • When reception time of an abnormal signal is more than two seconds, the last result calculated during normal condition is indicated.
	Average fuel consumption	
	Average vehicle speed	
	Travel distance	
Buzzer		The buzzer turns off by suspending communication.
Warning lamp/indicator lamp	ABS warning lamp	The lamp turns on by suspending communication.
	Brake warning lamp	
	AWD warning lamp	
	Malfunction indicator lamp	
	Low tire pressure warning lamp	The lamp turns ON after flashing for 1 minute.
	High beam indicator lamp	The lamp turns off by suspending communication.
	Turn signal indicator lamp	
	Light indicator lamp	
	Oil pressure warning lamp	
	CRUISE indicator lamp	
	O/D OFF indicator lamp	
	VDC warning lamp	
	VDC OFF indicator lamp	
	AWD LOCK indicator lamp	
	Key warning lamp	
	Blind Spot Intervention ON indicator	
	BSW/Blind Spot Intervention warning lamp	
	Lane departure warning lamp	
	LDW ON indicator lamp	

DTC Index

INFOID:0000000010129274

Display contents of CONSULT	Diagnostic item is detected when ...	Refer to
CAN COMM CIRCUIT [U1000]	When combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-39, "Diagnosis Procedure"
CONTROL UNIT (CAN) [U1010]	When detecting error during the initial diagnosis of the CAN controller of combination meter.	MWI-40, "Diagnosis Procedure"

Display contents of CONSULT	Diagnostic item is detected when ...	Refer to
VEHICLE SPEED [B2205]	The abnormal vehicle speed signal is input from the ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-41, "Diagnosis Procedure"
ENGINE SPEED [B2267]	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-42, "Diagnosis Procedure"
WATER TEMP [B2268]	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-43, "Diagnosis Procedure"

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000009718438

CAUTION:
Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Possible cause	Inspection item
All the following lamps are not turned ON. • Map lamp • Personal lamp • Luggage room lamp • Step lamp • Vanity mirror lamp	• Harness between BCM and each interior room lamp • BCM	Interior room lamp power supply circuit Refer to INL-21.
• Interior room lamp is not turned ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-97.
		Interior room lamp control circuit Refer to INL-23.
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to INL-16.
Step lamps (driver side and passenger side) are not turned ON. (Map lamp and personal lamp are turned ON.)	• Harness between BCM and each step lamp • BCM	Step lamp circuit Refer to INL-25.
Step lamps (driver side and passenger side) are not turned OFF. (Map lamp and personal lamp are turned OFF.)		
Push-button ignition switch illumination does not illuminate.	• Harness between BCM and push-button ignition switch • BCM	Push-button ignition switch illumination circuit Refer to INL-27.
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to INL-17.

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

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

INFOID:0000000009718439

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 MEXICO

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

INFOID:0000000009718440

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.

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

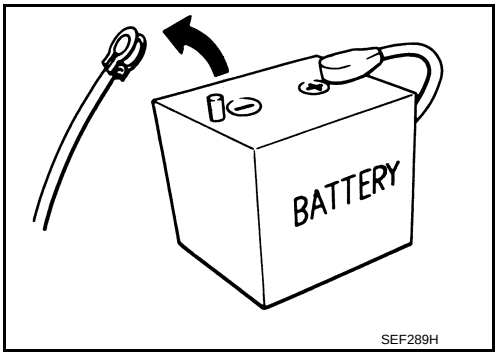
WARNING:

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.**

Precautions for Removing of Battery Terminal

INFOID:0000000010129263



- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.
- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

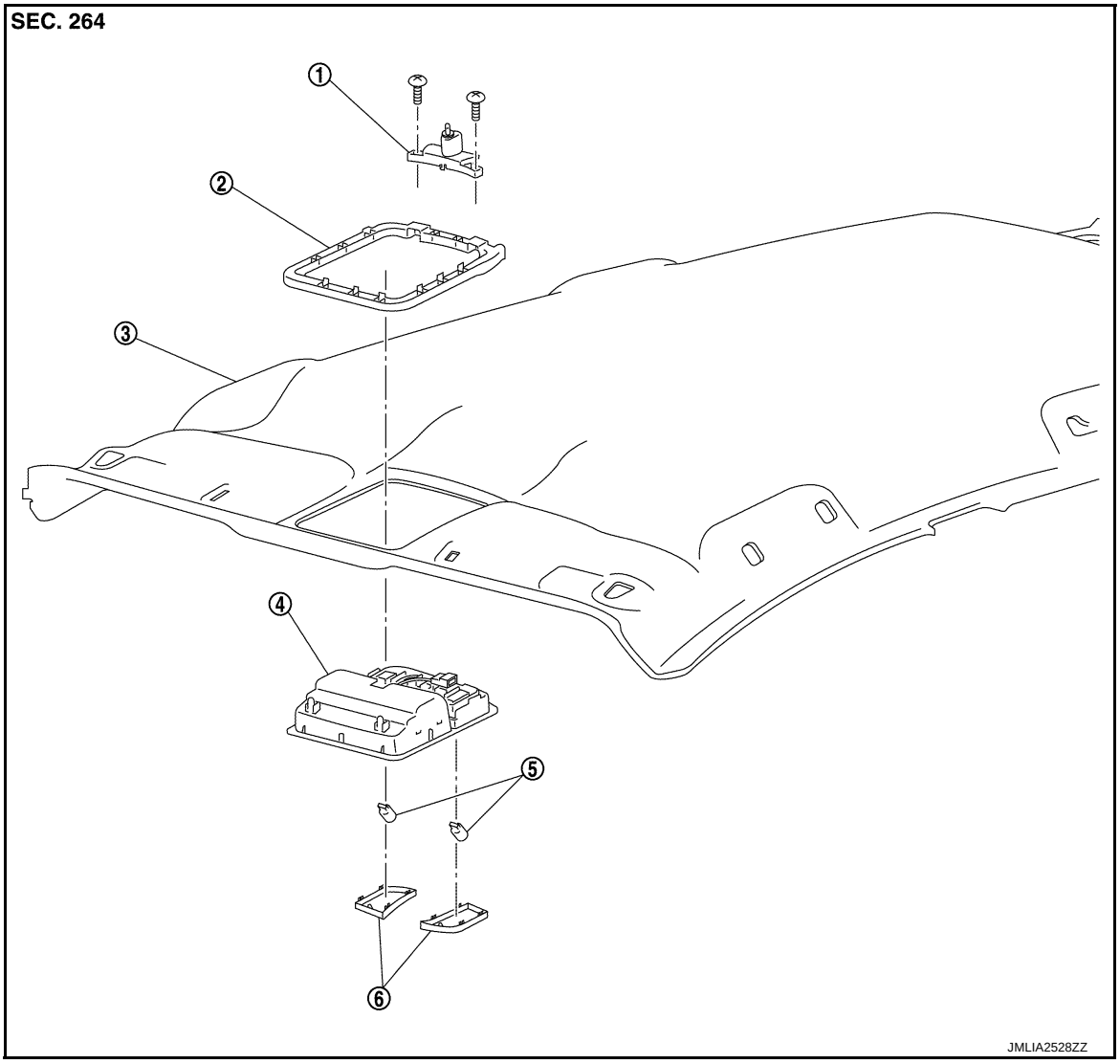
REMOVAL AND INSTALLATION

MAP LAMP

Exploded View

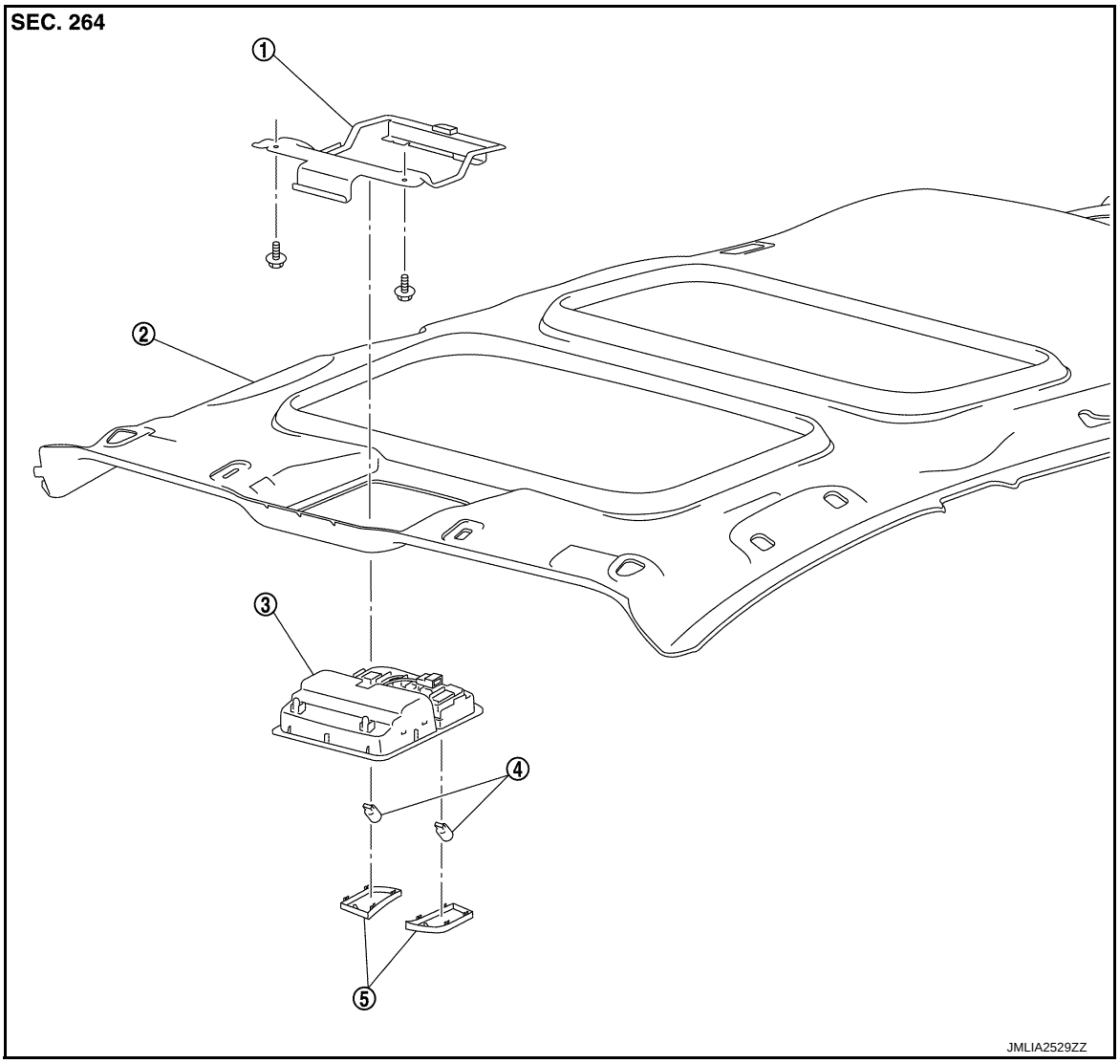
INFOID:0000000009718441

NORMAL ROOF



1. Map lamp bracket
2. Map lamp back plate
3. Headlining
4. Map lamp assembly
5. Bulb
6. Lens

SUN ROOF



1. Map lamp bracket
2. Headlining
3. Map lamp assembly
4. Bulb
5. Lens

Removal and Installation

INFOID:0000000009718442

REMOVAL

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

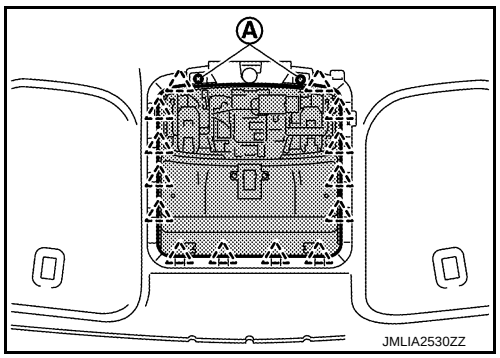
NORMAL ROOF

1. Remove headlining. Refer to INT-26, "NORMAL ROOF : Removal and Installation".
2. Disconnect harness connector.

3. Remove map lamp bracket fixing screws (A), and then remove map lamp bracket.
4. Disengage map lamp assembly fixing pawls, and then remove map lamp assembly.

CAUTION:
When removing, support map lamp assembly by hand so that it dose not drop during the operation.

: Pawl

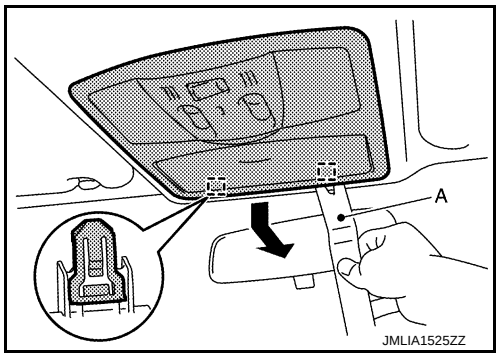


SUN ROOF

1. Disengage map lamp assembly fixing metal clips using a remover tool (A).

: Metal clip

2. Disconnect harness connector, and then remove map lamp assembly.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000009718443

CAUTION:
- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

MAP LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

MOOD LAMP

MAP LAMP

MAP LAMP : Replacement

INFOID:0000000009718444

MAP LAMP

Mood lamp (map lamp) is integrated into the map lamp assembly. Refer to INL-123, "Exploded View".

FRONT DOOR GRIP

FRONT DOOR GRIP : Replacement

INFOID:0000000009718445

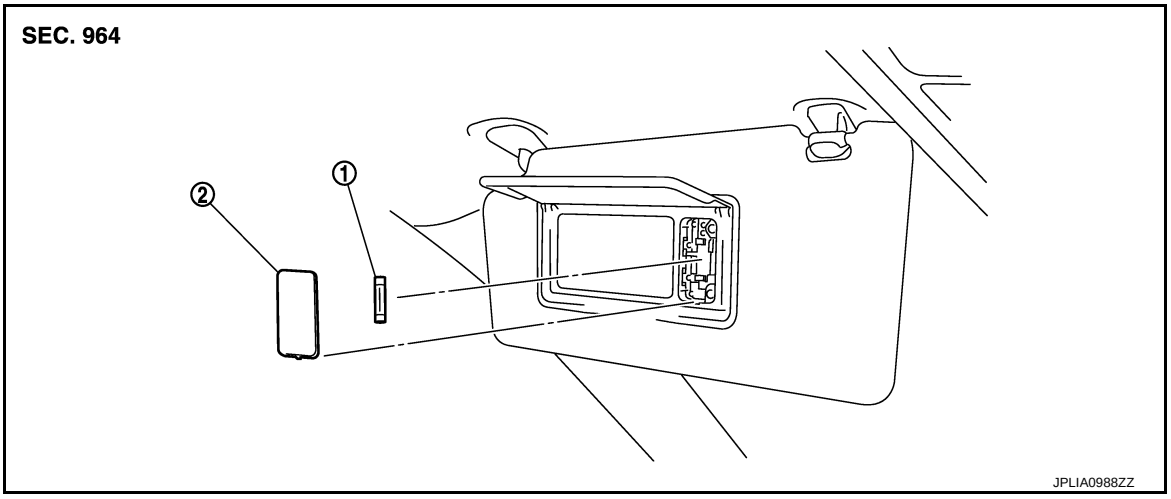
FRONT DOOR

Mood lamp (front door grip) is integrated into the front door trim. Refer to INT-13, "FRONT DOOR FINISHER : Exploded View".

VANITY MIRROR LAMP

Exploded View

INFOID:0000000009718446



1. Bulb
2. Lens

Replacement

INFOID:0000000009718447

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

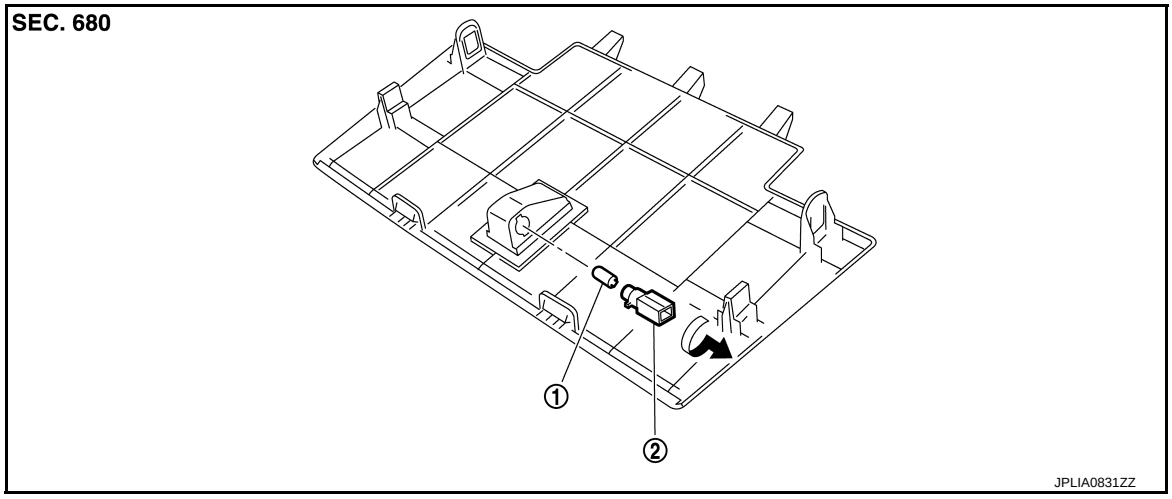
VANITY MIRROR LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

CONSOLE POCKET LAMP

Exploded View

INFOID:0000000009718448



1. Bulb
2. Bulb socket

Replacement

INFOID:0000000009718449

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

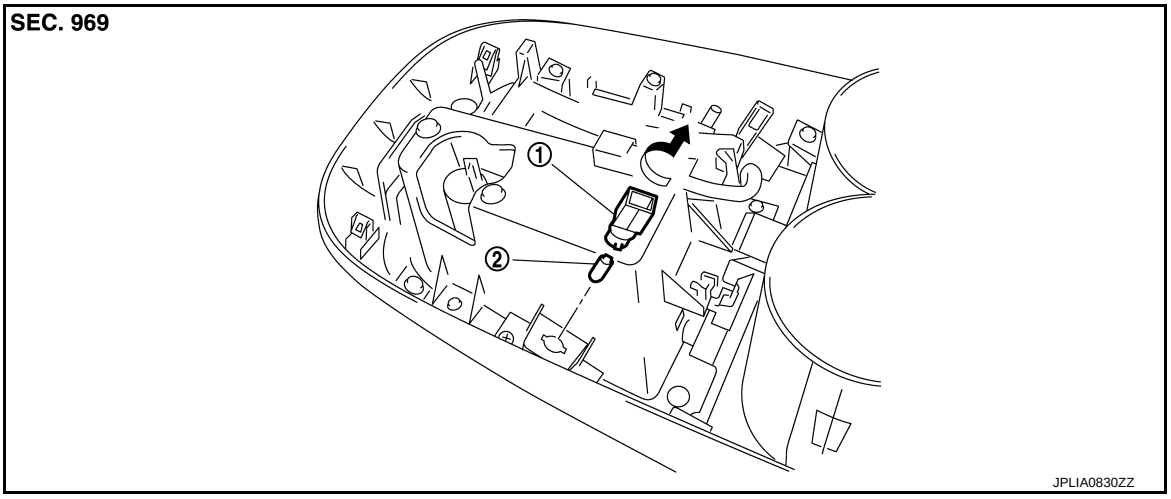
CONSOLE POCKET LAMP BULB

1. Remove the cluster lid C (lower). Refer to IP-14, "Exploded View".
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb.

ASHTRAY ILLUMINATION

Exploded View

INFOID:0000000009718450



1. Bulb socket
2. Bulb

Replacement

INFOID:0000000009718451

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

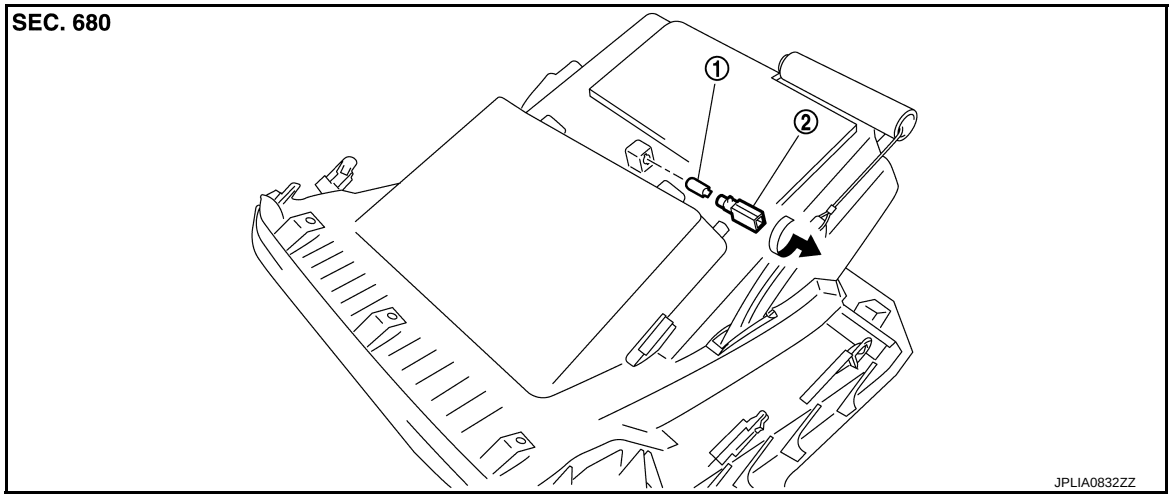
ASHTRAY ILLUMINATION BULB

1. Remove the console finisher assembly. Refer to IP-22, "Exploded View".
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb.

GLOVE BOX LAMP

Exploded View

INFOID:0000000009718452



1. Bulb
2. Bulb socket

Replacement

INFOID:0000000009718453

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

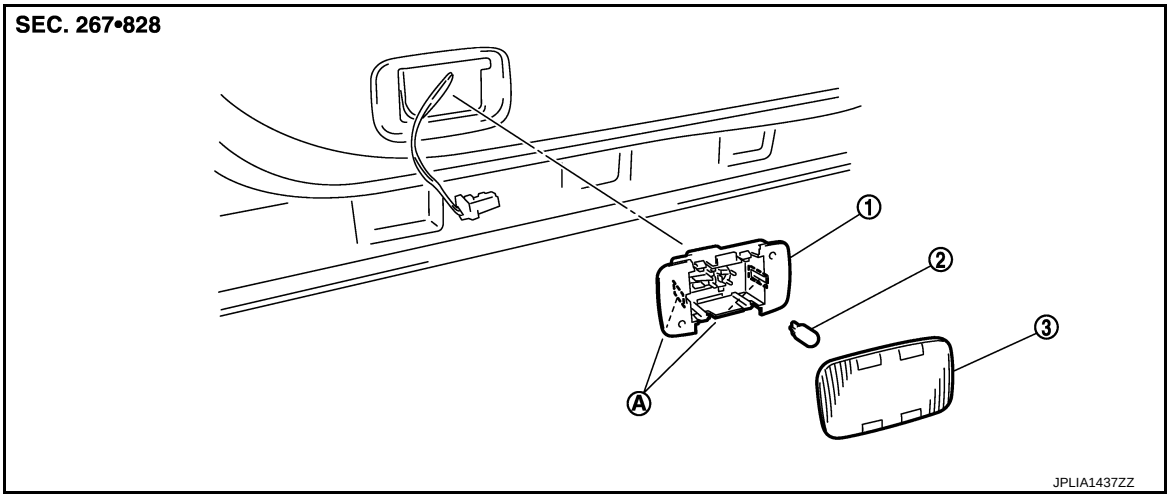
GLOVE BOX LAMP BULB

1. Remove the glove box assembly. Refer to IP-14, "Exploded View".
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb.

STEP LAMP

Exploded View

INFOID:0000000009718454



1. Step lamp case
2. Bulb
3. Lens

A Metal clip

Removal and Installation

INFOID:0000000009718455

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Insert any appropriate tool into the gap between the step lamp and the door trim. Remove the step lamp.
2. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000009718456

CAUTION:
- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

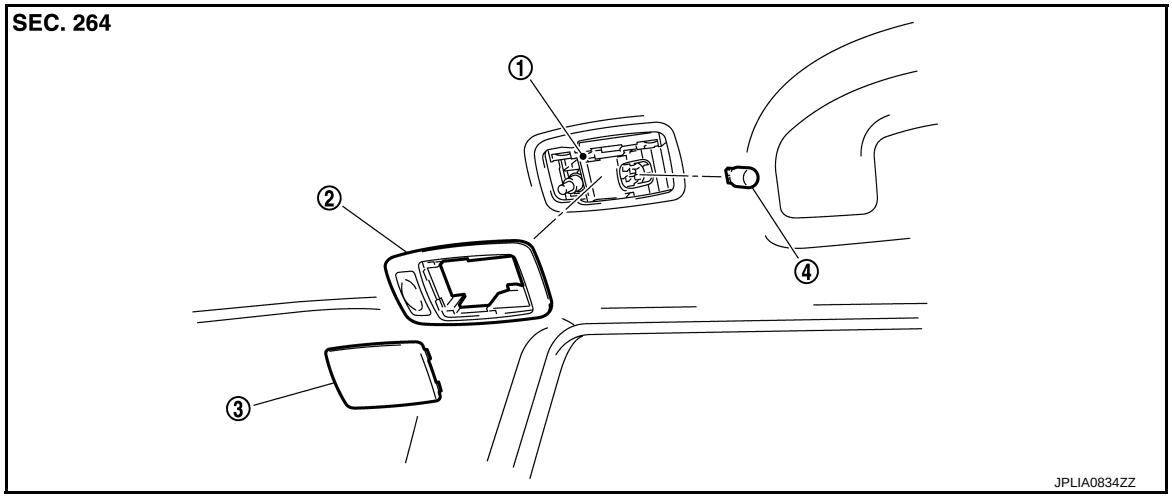
STEP LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

PERSONAL LAMP

Exploded View

INFOID:0000000009718457



1. Personal lamp case
2. Personal lamp finisher
3. Lens
4. Bulb

NOTE:
Replace the personal lamp case as a set (right and left). After removing the headlining assembly, remove the personal lamp case. Refer to INT-26, "NORMAL ROOF : Exploded View" (Normal roof) or INT-30, "SUNROOF : Exploded View" (With sunroof).

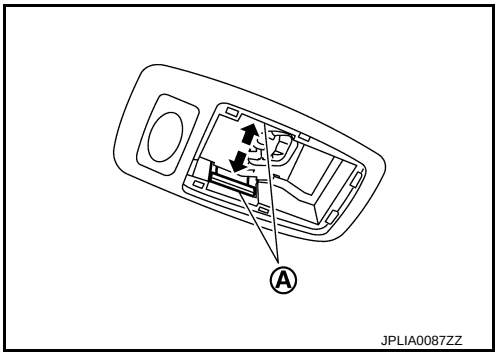
Removal and Installation

INFOID:0000000009718458

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the headlining assembly. Refer to INT-26, "NORMAL ROOF : Removal and Installation" (Normal roof) or INT-30, "SUNROOF : Removal and Installation" (With sunroof).
2. Insert any appropriate tool into the gap between the lens. Remove the lens.
3. Press the both side pawls (A) to the arrow direction (⬅). Remove the personal lamp finisher.
4. Remove the personal lamp case from the headlining assembly.

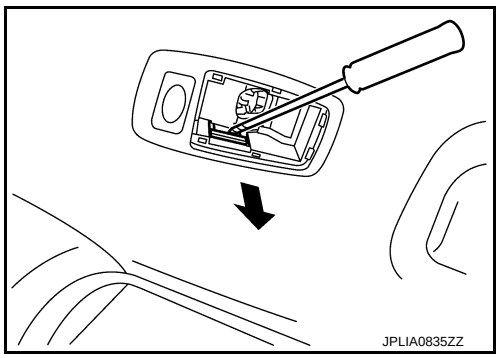


NOTE:
Replace the personal lamp case as a set (right and left).

INSTALLATION

Install in the reverse order of removal.
NOTE:
The following is easier to install the personal lamp finisher.

- Press the personal lamp finisher to the headlining. Pull the personal lamp case pawl to the arrow direction (⬅) with any appropriate tool.



Replacement

INFOID:0000000009718459

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

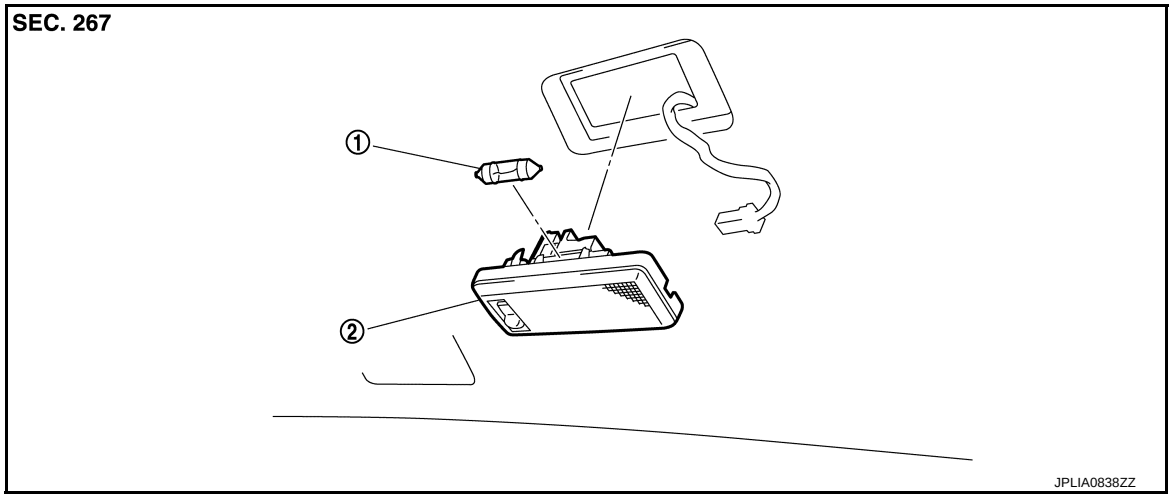
PERSONAL LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

LUGGAGE ROOM LAMP

Exploded View

INFOID:0000000009718460



1. Bulb
2. Luggage room lamp assembly

Removal and Installation

INFOID:0000000009718461

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Insert any appropriate tool into the gap between the luggage room lamp assembly and back door finisher inner. Remove the luggage room lamp assembly.
2. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000009718462

CAUTION:
- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

LUGGAGE ROOM LAMP BULB

1. Remove the luggage room lamp assembly.
2. Remove the bulb.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000009718463

Item		Type	Wattage (W)
Push-button ignition switch illumination		LED	—
Map lamp		Wedge	8
Mood lamp	Map lamp	LED	—
	Front door grip	LED	—
Vanity mirror lamp		—	2
Console pocket lamp		Wedge	1.4
Ashtray illumination		Wedge	1.4
Glove box lamp		Wedge	1.4
Step lamp		Wedge	2.7
Personal lamp		Wedge	8
Luggage room lamp		—	8