SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000009515776

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 SR and SB section of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT 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 three minutes before performing any service.**

Precaution for Work

INFOID:0000000009445809

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components:

- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.

- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.

- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

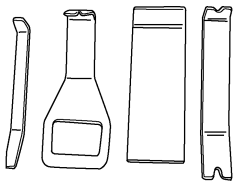
PREPARATION

PREPARATION

Special Service Tool

INFOID:0000000009445810

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

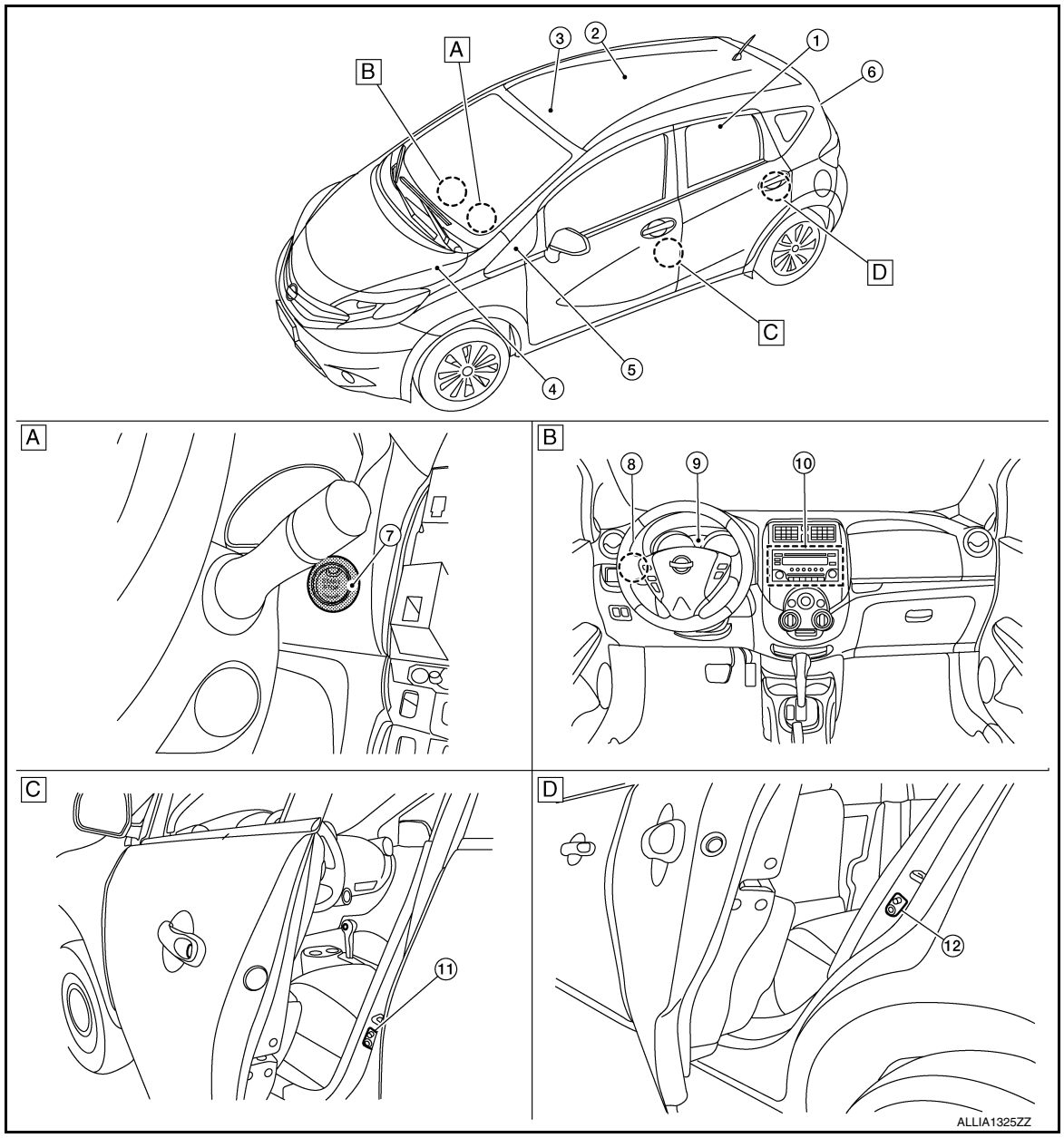
Tool number (Kent-Moore No.) Tool name	Description
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000009642980



No.	Part	Description
1.	Cargo lamp	Refer to INL-57, "Bulb Specifications".
2.	Interior room lamp	Refer to INL-57, "Bulb Specifications".
3.	Map lamp	Refer to INL-57, "Bulb Specifications".
4.	IPDM E/R	Controls the integrated relay according to the request signal from BCM. Refer to PCS-5, "Component Parts Location" (with Intelligent Key) or PCS-34, "Component Parts Location" (without Intelligent Key) for detailed installation location.

No.	Part	Description
5.	BCM	• Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamps ON/OFF. • Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply. • 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). Refer to BCS-6, "BODY CONTROL SYSTEM : Component Parts Location" (with Intelligent Key) or BCS-73, "BODY CONTROL SYSTEM : Component Parts Location" (without Intelligent Key) for detailed installation location.
6.	Back door switch	Refer to DLK-18, "INTELLIGENT KEY SYSTEM : Back Door Lock Assembly" (with Intelligent Key) or DLK-189, "REMOTE KEYLESS ENTRY SYSTEM : Back Door Lock Assembly" (without Intelligent Key).
7.	Push-button ignition switch	Refer to PCS-64, "POWER DISTRIBUTION SYSTEM : System Description".
8.	Combination switch	Refer to EXL-6, "Component Parts Location" (with Intelligent Key) or EXL-6, "Component Parts Location" (without Intelligent Key).
9.	Combination meter	Receives the dimmer signal from BCM. Refer to MWI-10, "METER ILLUMINATION CONTROL : System Description".
10.	Audio unit (without navigation) AV control unit (with navigation)	Receives the dimmer signal from BCM. Refer to AV-8, "Audio unit" (base audio), AV-66, "Audio Unit" (display audio) or AV-134, "AV Control Unit" (navigation).
11.	Front door switch LH (RH side similar)	Refer to DLK-19, "INTELLIGENT KEY SYSTEM : Door Switch" (with Intelligent Key) or DLK-189, "REMOTE KEYLESS ENTRY SYSTEM : Door Switch" (without Intelligent Key).
12.	Rear door switch LH (RH side similar)	Refer to DLK-19, "INTELLIGENT KEY SYSTEM : Door Switch" (with Intelligent Key) or DLK-189, "REMOTE KEYLESS ENTRY SYSTEM : Door Switch" (without Intelligent Key).

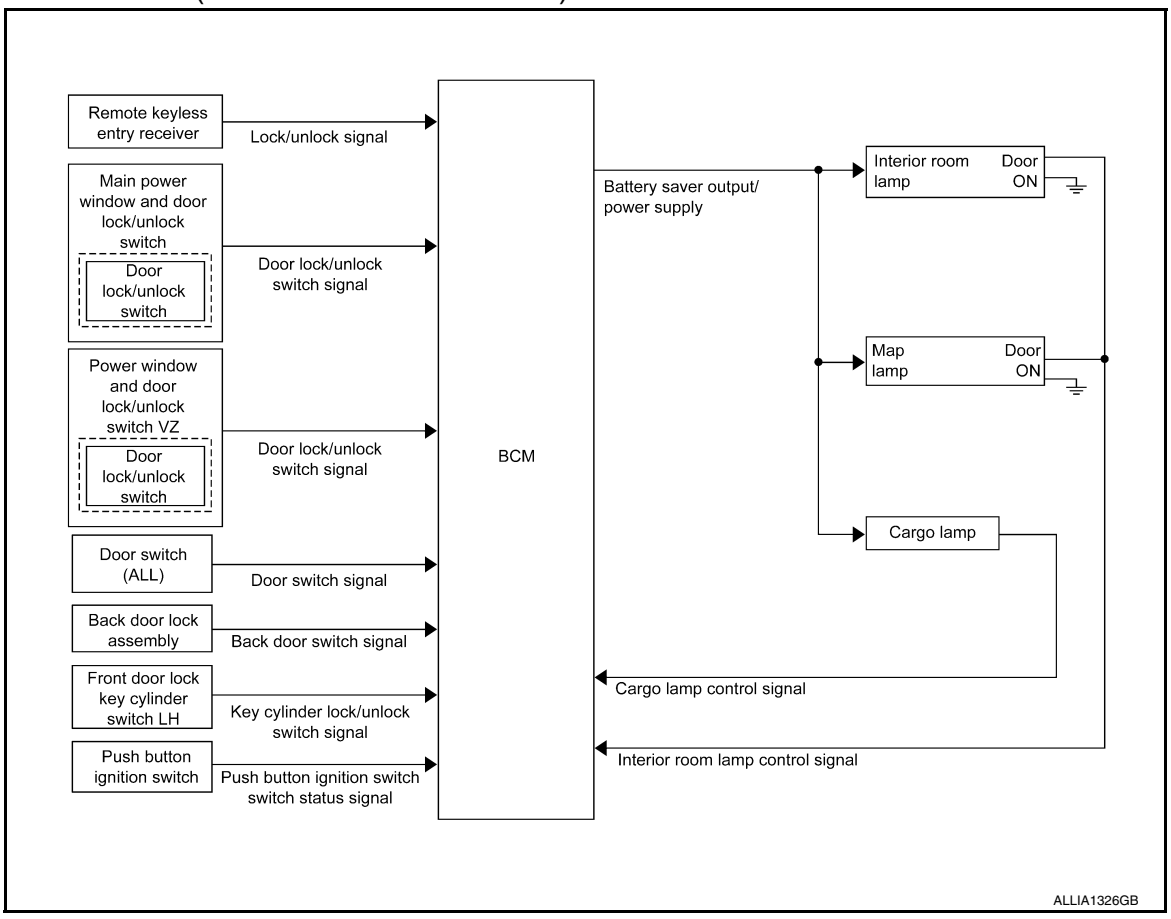
SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

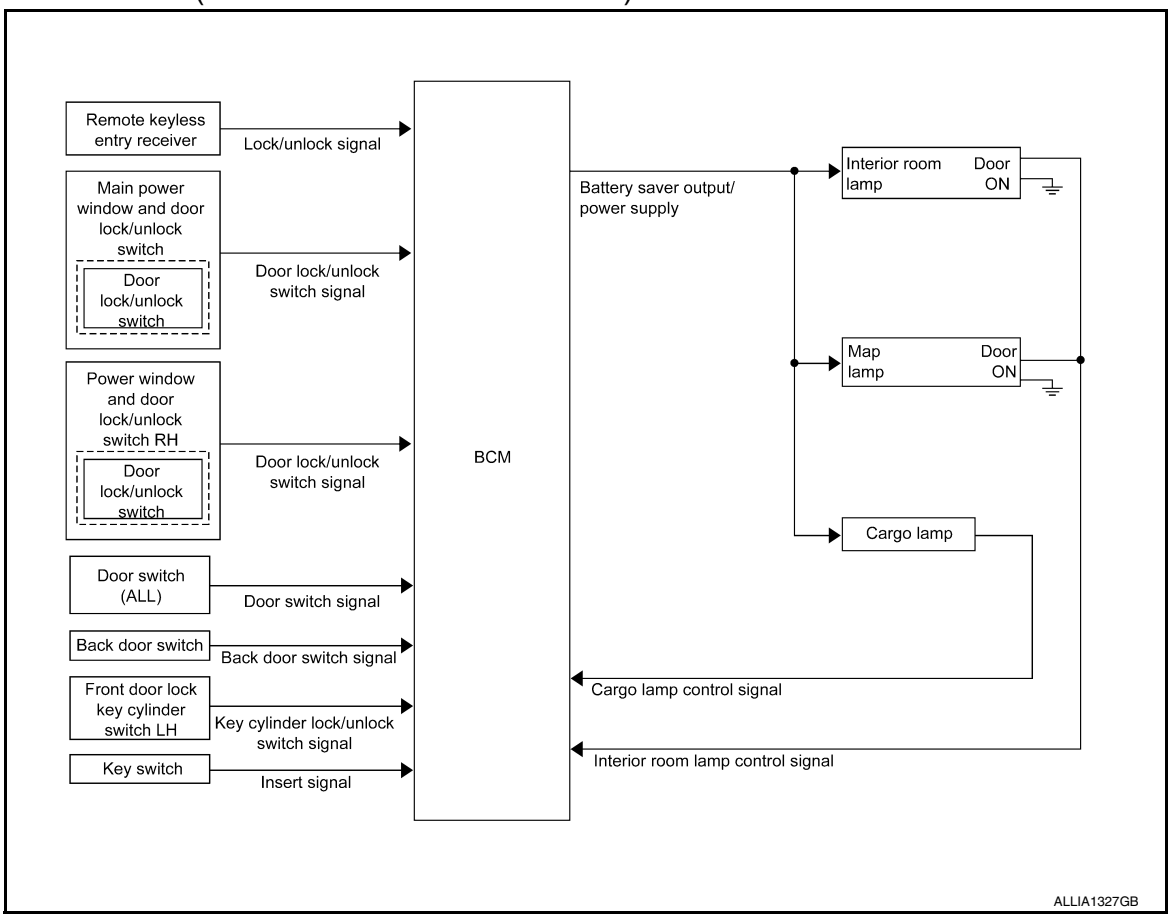
INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

INFOID:0000000009642982

SYSTEM DIAGRAM (WITH INTELLIGENT KEY)



SYSTEM DIAGRAM (WITHOUT INTELLIGENT KEY)



OUTLINE

- Interior room lamp* is controlled by the interior room lamp timer control function of the BCM.
- Cargo lamp is controlled by the cargo lamp control function of the BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM and combination meter.

The timer control functions of the BCM activate based on inputs from the key cylinder lock/unlock switch LH, the door switches, the key switch and door lock/unlock switches.

*Interior room lamp and map lamp (if equipped) (when lamp switch is in DOOR position).

ROOM LAMP TIMER OPERATION

When the interior room lamp switch is in the DOOR position and when all conditions below are met, the BCM begins timer control (maximum 30 seconds) for interior room lamp ON/OFF.

- When the front door LH is unlocked with key fob, main power window and door lock/unlock switch, power window and door lock/unlock switch RH or front door lock assembly LH (key cylinder switch).
- When a door opens → closes and the push-button ignition switch is not pressed (with Intelligent Key).
- When a door opens → closes and the key is not inserted in the ignition switch (without Intelligent Key).

Timer control is cancelled under the following conditions.

- When the front door LH is locked with key fob, main power window and door lock/unlock switch, power window and door lock/unlock switch RH or front door lock assembly LH (key cylinder switch).
- A door is opened (door switch turns ON).
- Ignition switch is turned ON.

Interior lamp operational settings can be changed with the function setting of CONSULT.

INTERIOR LAMP BATTERY SAVER CONTROL

If an interior lamp is left ON and does not turn OFF even when the doors are closed, the BCM turns off power to the interior lamps automatically to save the battery 10 minutes after the ignition switch is turned OFF.
The BCM controls power and ground to all interior lamps.
After the battery saver system turns the lamps OFF, the lamps will illuminate again when

- a signal is received from a key fob, main power window and door lock/unlock switch, power window and door lock/unlock switch RH or when the front door lock assembly LH (key cylinder switch) is locked or unlocked
- a door is opened or closed
- the key is removed from or inserted into the ignition switch (without Intelligent Key).

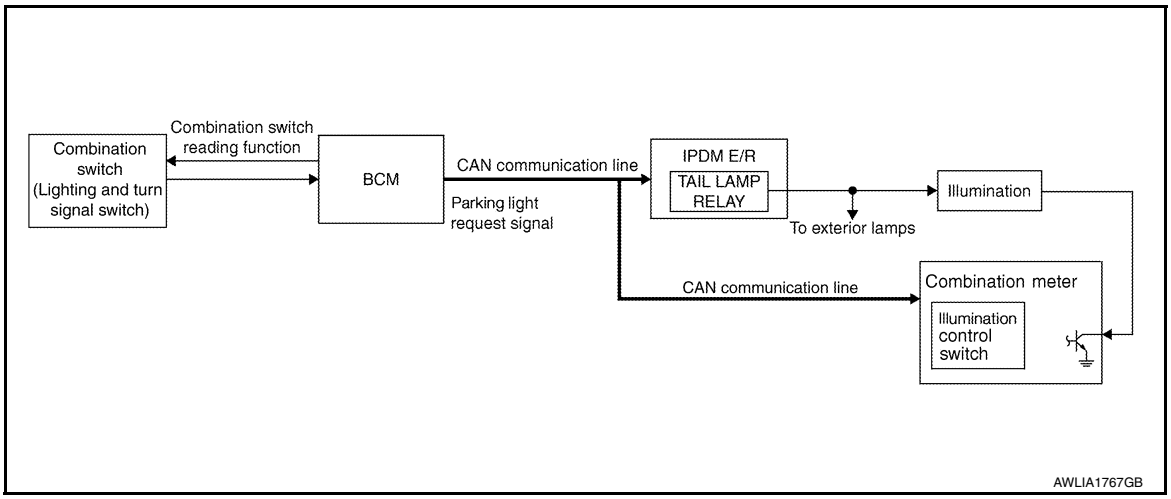
The interior lamp battery saver control time period can be changed with the function setting of CONSULT.

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000009642984

SYSTEM DIAGRAM



OUTLINE

The illumination lamps operation is dependent upon the position of the combination switch (lighting and turn signal switch). When the combination switch (lighting and turn signal switch) is placed in the 1ST or 2ND position the BCM (body control module) receives input requesting the parking lamps to illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) via the CAN communication lines. The CPU (central processing unit) of the IPDM E/R controls the tail lamp relay coil. When energized, this relay directs power to the parking and illumination lamps, which then illuminate.

BATTERY SAVER CONTROL

When the combination switch (lighting and turn signal switch) is in the 1st or 2nd position and the ignition switch is turned from ON or ACC to OFF, the battery saver control feature is activated. Under this condition, the illumination lamps remain illuminated for 10 minutes unless the combination switch (lighting and turn signal switch) position is changed. If the combination switch (lighting and turn signal switch) position is changed, then the illumination lamps are turned off after a 15 second delay. When the combination switch (lighting and turn signal switch) is turned from OFF to 1st or 2nd position after illumination lamps have been turned off by the battery saver control, the illumination lamps illuminate again.

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)
COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000009695430

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
ECU identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	• The vehicle specification can be read and saved. • The vehicle specification can be written when replacing BCM.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		ECU identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN DIAG SUPPORT MNTR
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×			
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×		×	×		
Interior room lamp battery saver	BATTERY SAVER			×	×	×		
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×		×		
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		
Panic alarm system	PANIC ALARM				×			

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000009695431

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW-DR [On/Off]	Indicates condition of door request switch LH.
REQ SW-AS [On/Off]	Indicates condition of door request switch RH.
REQ SW -BD/TR [On/Off]	Indicates condition of back door request switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.

ACTIVE TEST

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [OTR ULK/AS UNLK/DR UNLK/ALL UNLK/ALL LOCK].

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTOMATIC LOCK/UNLOCK SELECT	Lock/Unlock*	Automatic door locks function operates in lock and unlock.
	Lock Only	Automatic door locks function operates in lock only.
	Unlock Only	Automatic door locks function operates in unlock only.
	Off	Automatic door locks function OFF.
AUTOMATIC DOOR LOCK SELECT	P RANGE	Doors lock automatically when shifted out of Park (P).
	VH SPD*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
AUTOMATIC DOOR UNLOCK SELECT	MODE6*	Drivers door unlocks automatically when key is removed.
	MODE5	Drivers door unlocks automatically when shifted into Park (P).
	MODE4	Drivers door unlocks automatically when ignition is switched from ON to OFF.
	MODE3	Doors unlock automatically when key is removed.
	MODE2	Doors unlock automatically when shifted into Park (P).
	MODE1	Doors unlock automatically when ignition is switched from ON to OFF.

*: Initial setting

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000009695432

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.
PUSH -SW [On/Off]	Indicates condition of push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INT LAMP	This test is able to check interior room lamp operation [On/Off].

WORK SUPPORT

Support Item	Setting		Description
R LAMP TIMER LOGIC SET	MODE 2		Interior room lamp timer activates with all doors.
	MODE 1*		Interior room lamp timer activates with the driver door only.
SET I/L D-UNLCK INTCON	On*		Interior room lamp timer function ON.
	Off		Interior room lamp timer function OFF.
ROOM LAMP TIMER SET	MODE 4	30 sec.	Sets the interior room lamp ON time. (Timer operating time).
	MODE 3*	15 sec.	
	MODE 2	7.5 sec.	

*: Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000009695433

SELF DIAGNOSTIC RESULT

Refer to BCS-48, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
REQ SW -BD/TR [On/Off]	×	Indicates condition of back door request switch.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
CLUTCH SW [On/Off]	×	Indicates condition of clutch interlock switch.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake switch.

Monitor Item [Unit]	Main	Description
BRAKE SW 2 [On/Off]		Indicates condition of brake switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of P (park) position.
SFT PN/N SW [On/Off]	×	Indicates condition of P (park) or N (neutral) position.
UNLK SEN -DR [On/Off]	×	Indicates condition of door unlock sensor.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
DETE SW -IPDM [On/Off]		Indicates condition of detent switch received from TCM on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
SFT P -MET [On/Off]		Indicates condition of P (park) position from TCM on CAN communication line.
SFT N -MET [On/Off]		Indicates condition of N (neutral) position from IPDM E/R on CAN communication line.
ENGINE STATE [Stop/Start/Crank/Run]	×	Indicates condition of engine state from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE OPE COUN2 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Take Out/Knob/Key/Off].
LCD	This test is able to check combination meter display information [Off/LK WN/OUTKEY/NO KY/BATT/INSRT/SFT P/ROTAT/ID NG/B&P I/B&P N].
BATTERY SAVER	This test is able to check battery saver operation [On/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
PUSH SWITCH INDICATOR	This test is able to check push-button ignition switch indicator operation [On/Off].
INT LAMP	This test is able to check interior room lamp operation [On/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
FLASHER	This test is able to check hazard lamp operation [LH/RH/Off].
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
HORN	This test is able to check horn operation [On].
P RANGE	This test is able to check CVT shift selector illumination operation [On/Off].

WORK SUPPORT

Support Item	Setting		Description
LOCK/UNLOCK BY I-KEY	On*		Door lock/unlock function from Intelligent Key ON.
	Off		Door lock/unlock function from Intelligent Key OFF.
ANTI KEY LOCK IN FUNCTI	On*		Anti lock out setting ON.
	Off		Anti lock out setting OFF.
ANS BACK I-KEY UNLOCK	Off		No buzzer reminder when doors are unlocked with request switch.
	On*		Buzzer reminder when doors are unlocked with request switch.
ANS BACK I-KEY LOCK	Horn Chirp		Horn chirp reminder when doors are locked with request switch.
	Buzzer*		Buzzer reminder when doors are locked with request switch.
	Off		No reminder when doors are locked with request switch.
HORN WITH KEYLESS LOCK	Off		Horn chirp reminder when doors are locked with Intelligent Key.
	On*		No horn chirp reminder when doors are locked with Intelligent Key.
HAZARD ANSWER BACK	Lock/Unlock*		Hazard warning lamp activation when doors are locked/unlocked with Intelligent Key or request switch.
	Unlock Only		Hazard warning lamp activation when doors are unlocked with Intelligent Key or request switch.
	Lock Only		Hazard warning lamp activation when doors are locked with Intelligent Key or request switch.
	Off		No hazard warning lamp activation when doors are locked/unlocked with Intelligent Key or request switch.
INSIDE ANT DIAGNOSIS	—		This function allows inside key antenna self-diagnosis.
CONFIRM KEY FOB ID	—		Intelligent Key ID code can be checked.
SHORT CRANKING OUTPUT	Start	70 msec	Starter motor operation duration time setting.
		100 msec	
		200 msec	
	End		—
PANIC ALARM SET	MODE 3	1.5 sec	Intelligent Key panic alarm button setting.
	MODE 2	OFF	
	MODE 1*	0.5 sec	
LO- BATT OF KEY FOB WARN	On*		Intelligent Key low battery warning ON.
	Off		Intelligent Key low battery warning OFF.
AUTO LOCK SET	MODE7	5 min	Auto door lock time setting.
	MODE6	4 min	
	MODE5	3 min	
	MODE4	2 min	
	MODE3*	1 min	
	MODE2	30 sec	
	MODE1	Off	

*: Initial Setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000009695434

DATA MONITOR

Monitor Item [Unit]	Description
REQ SW -DR [On/Off]	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	Indicates condition of door request switch RH.
PUSH SW [On/Off]	Indicates condition push-button ignition switch.
UNLK SEN -DR [On/Off]	Indicates condition of door unlock sensor.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
RKE-LOCK [On/Off]	Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates condition of unlock signal from Intelligent Key.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check battery saver operation [On/Off].

WORK SUPPORT

Support Item	Setting		Description
BATTERY SAVER SET	ON*		Exterior lamp battery saver function ON.
	OFF		Exterior lamp battery saver function OFF.
ROOM LAMP TIMER SET	MODE 3*	10 min.	Sets interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 1	15 min.	

*: Initial setting

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)
COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000009695435

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
ECU identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	• The vehicle specification can be read and saved. • The vehicle specification can be written when replacing BCM.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		ECU identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN DIAG SUPPORT MNTR
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×			
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Remote keyless entry system	MULTI REMOTE ENT			×	×	×		
Exterior lamp	HEAD LAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×		×	×		
Interior room lamp battery saver	BATTERY SAVER			×	×	×		
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×		×		
Signal buffer system	SIGNAL BUFFER			×	×			
TPMS	AIR PRESSURE MONITOR		×	×	×	×		
Panic alarm system	PANIC ALARM				×			

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000009695436

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
ACC ON SW [On/Off]	Indicates condition of ignition switch ACC position.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
VEHICLE SPEED [km/h/mph]	Indicates vehicle speed signal received from combination meter on CAN communication line.

ACTIVE TEST

Test Item	Description
DOOR LOCK	This test is able to check door lock operation [OTR ULK/DR UNLK/ALL UNLK/ALL LCK].

WORK SUPPORT

Support Item	Setting	Description
AUTOMATIC DOOR LOCK SELECT	P RANGE	Doors lock automatically when shifted out of Park (P).
	VH SPD*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
AUTOMATIC DOOR UNLOCK SELECT	MODE6*	Drivers door unlocks automatically when key is removed.
	MODE5	Drivers door unlocks automatically when shifted into Park (P).
	MODE4	Drivers door unlocks automatically when ignition is switched from ON to OFF.
	MODE3	Doors unlock automatically when key is removed.
	MODE2	Doors unlock automatically when shifted into Park (P).
	MODE1	Doors unlock automatically when ignition is switched from ON to OFF.
AUTOMATIC LOCK/UNLOCK SELECT	Lock/Unlock*	Automatic door locks function operates in lock and unlock.
	Lock Only	Automatic door locks function operates in lock only.
	Unlock Only	Automatic door locks function operates in unlock only.
	Off	Automatic door locks function OFF.

* : Initial setting

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:0000000009695437

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
ACC SW [On/Off]	Indicates condition of ignition switch ACC position.

ACTIVE TEST

Test Item	Description
INT LAMP	This test is able to check interior room lamp operation [On/Off].

WORK SUPPORT

Support Item	Setting		Description
SET I/L D-UNLCK INTCON	On*		Interior room lamp timer function ON.
	Off		Interior room lamp timer function OFF.
ROOM LAMP TIMER SET	MODE 4	30 sec.	Sets the interior room lamp ON time. (Timer operating time).
	MODE 3*	15 sec.	
	MODE 2	7.5 sec.	
	MODE 1	OFF	
ROOM LAMP ON TIME SET	MODE7	0 sec.	Sets the interior room lamp gradual brightening time.
	MODE6	5 sec.	
	MODE5	4 sec.	
	MODE4	3 sec.	
	MODE3	2 sec.	
	MODE2*	1 sec.	
	MODE1	0.5 sec.	
ROOM LAMP OFF TIME SET	MODE7	0 sec.	Sets the interior room lamp gradual dimming time.
	MODE6	5 sec.	
	MODE5	4 sec.	
	MODE4	3 sec.	
	MODE3	2 sec.	
	MODE2*	1 sec.	
	MODE1	0.5 sec.	
R LAMP TIMER LOGIC SET	MODE 2		Interior room lamp timer activates with all doors.
	MODE 1*		Interior room lamp timer activates with the driver door only.

* : Initial setting

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000009695438

DATA MONITOR

Monitor Item [Unit]	Description
IGN ON SW [On/Off]	Indicates condition of ignition switch ON position.
KEY ON SW [On/Off]	Indicates condition of key switch.
DOOR SW-DR [On/Off]	Indicates condition of front door switch LH.
DOOR SW-AS [On/Off]	Indicates condition of front door switch RH.
DOOR SW-RR [On/Off]	Indicates condition of rear door switch RH.
DOOR SW-RL [On/Off]	Indicates condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicates condition of back door switch.
CDL LOCK SW [On/Off]	Indicates condition of lock signal from door lock and unlock switch.
CDL UNLOCK SW [On/Off]	Indicates condition of unlock signal from door lock and unlock switch.
KEYLESS LOCK [On/Off]	Indicates condition of lock signal from keyfob.
KEYLESS UNLOCK [On/Off]	Indicates condition of unlock signal from keyfob.
KEY CYL LK-SW [On/Off]	Indicates condition of lock signal from door key cylinder switch.
KEY CYL UN-SW [On/Off]	Indicates condition of unlock signal from door key cylinder switch.
ACC SW [On/Off]	Indicates condition of ignition switch ACC position.

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check battery saver operation [On/Off].

WORK SUPPORT

Support Item	Setting		Description
ROOM LAMP TIMER SET	MODE 3*	10 min.	Sets interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 1	15 min.	

* : Initial setting

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000009642988

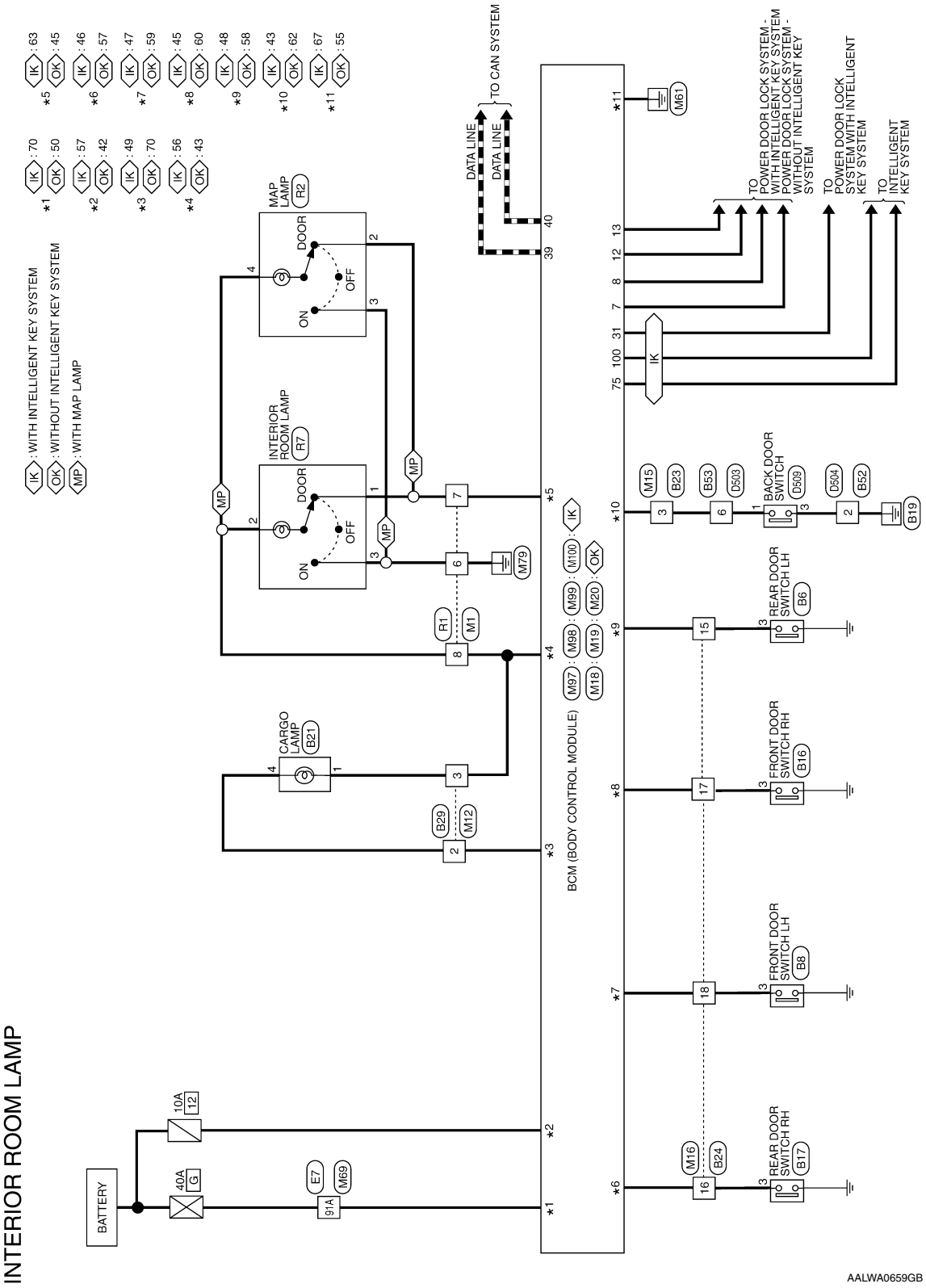
ECU	Reference
BCM (with Intelligent Key)	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"
BCM (without Intelligent Key)	BCS-95, "Reference Value"
	BCS-108, "Fail-safe"
	BCS-109, "DTC Inspection Priority Chart"
	BCS-109, "DTC Index"

WIRING DIAGRAM

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000009642989



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INTERIOR ROOM LAMP CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
6	B	–
7	R	–
8	W	–

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	L	–
3	W	–

Connector No.	M15
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	–

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

12	11	10	9	8	7	6	5	4	3	2	1
24	23	22	21	20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
15	W	–
16	BR	–
17	O	–
18	SB	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
7	W	KEY CYLINDER UNLOCK SW
8	GR	KEY CYLINDER LOCK SW
12	GR	CENTRAL DOOR LOCK SW

Terminal No.	Color of Wire	Signal Name
13	BR	CENTRAL DOOR UNLOCK SW
39	L	CAN-H
40	P	CAN-L

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Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

H.S.

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name
42	Y	BATTERY FUSE
43	W	BATTERY SAVER OUTPUT
45	R	ROOM LAMP OUTPUT
50	G	BATT F/L
55	B	GND

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	BLACK

H.S.

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
57	BR	DOOR SW RR
58	W	DOOR SW RL
59	SB	DOOR SW DR
60	O	DOOR SW AS
62	P	DOOR SW BACK FUEL LID OPEN SW
70	L	LUGGAGE LAMP OUTPUT

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

5A	4A	3A	2A	1A
	10A	9A	8A	7A	6A
21A	20A	19A	18A	17A	16A	15A	14A	13A	12A	11A
	30A	29A	28A	27A	26A	25A	24A	23A	22A	
41A	40A	39A	38A	37A	36A	35A	34A	33A	32A	31A
	50A	49A	48A	47A	46A	45A	44A	43A	42A	
61A	60A	59A	58A	57A	56A	55A	54A	53A	52A	51A
	70A	69A	68A	67A	66A	65A	64A	63A	62A	
81A	80A	79A	78A	77A	76A	75A	74A	73A	72A	71A
	90A	89A	88A	87A	86A	85A	84A	83A	82A	
95A	94A	93A	92A	91A						
100A	99A	98A	97A	96A						

Terminal No.	Color of Wire	Signal Name
91A	G	–

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

H.S.

71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name
75	GR	REQUEST SW (DR)
100	L	REQUEST SW (AS)

Connector No.	M97
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	BLACK

H.S.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
7	W	KEY CYLINDER UNLOCK SW
8	GR	KEY CYLINDER LOCK SW
12	GR	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
31	Y	DOOR LOCK STATUS SW (DR)
39	L	CAN-H
40	P	CAN-L

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Terminal No.	Color of Wire	Signal Name
46	BR	DOOR SW (RR)
47	SB	DOOR SW (DR)
48	W	DOOR SW (RL)
49	L	LUGGAGE LAMP OUTPUT

Connector No.	M100
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	BLACK

H.S.

41	42	43	44	45	46	47	48	49
50		51		52	53	54		55

Terminal No.	Color of Wire	Signal Name
43	P	DOOR SW (BACK)
45	O	DOOR SW (AS)

Connector No.	B6
Connector Name	REAR DOOR SWITCH LH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
3	V	–

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

H.S.

56	57	58	59	60	61	62	63	64
65		66	67	68		69		70

Terminal No.	Color of Wire	Signal Name
56	W	BATTERY SAVER OUTPUT
57	Y	BATTERY (FUSE)
63	R	ROOM LAMP OUTPUT
67	B	GND
70	G	BATTERY (F/L)

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

11A	12A	13A	14A	15A	16A	17A	18A	19A	20A	21A
	22A	23A	24A	25A	26A	27A	28A	29A	30A	

31A	32A	33A	34A	35A	36A	37A	38A	39A	40A	41A
	42A	43A	44A	45A	46A	47A	48A	49A	50A	

51A	52A	53A	54A	55A	56A	57A	58A	59A	60A	61A
	62A	63A	64A	65A	66A	67A	68A	69A	70A	

71A	72A	73A	74A	75A	76A	77A	78A	79A	80A	81A
	82A	83A	84A	85A	86A	87A	88A	89A	90A	

91A	92A	93A	94A	95A
96A	97A	98A	99A	100A

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Connector No.	B8
Connector Name	FRONT DOOR SWITCH LH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	LG	–

Connector No.	B16
Connector Name	FRONT DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	L	–

Connector No.	B17
Connector Name	REAR DOOR SWITCH RH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	R	–

Connector No.	B21
Connector Name	CARGO LAMP
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	SB	–
4	Y	–

Connector No.	B23
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
3	P	–

Connector No.	B24
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
15	V	–
16	R	–
17	L	–
18	LG	–

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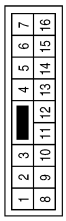
Connector No.	B29
Connector Name	WIRE TO WIRE
Connector Color	WHITE

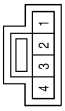
H.S.



Terminal No.	Color of Wire	Signal Name
2	Y	–
3	SB	–

Connector No.	B52
Connector Name	WIRE TO WIRE
Connector Color	WHITE

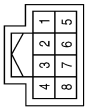
H.S.



Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	B53
Connector Name	WIRE TO WIRE
Connector Color	WHITE

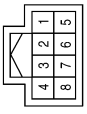
H.S.



Terminal No.	Color of Wire	Signal Name
6	P	–

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Color	WHITE

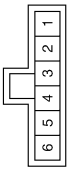
H.S.



Terminal No.	Color of Wire	Signal Name
6	B	–
7	W	–
8	Y	–

Connector No.	R2
Connector Name	MAP LAMP
Connector Color	WHITE

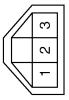
H.S.



Terminal No.	Color of Wire	Signal Name
2	W	–
3	B	–
4	Y	–

Connector No.	R7
Connector Name	INTERIOR ROOM LAMP
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	B	–
2	Y	–
3	W	–

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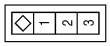
Connector No.	D509
Connector Name	BACK DOOR SWITCH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	P	–
3	B	–

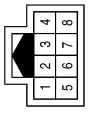
Connector No.	D504
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2	B	–

Connector No.	D503
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
6	P	–

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< WIRING DIAGRAM >

ILLUMINATION

Wiring Diagram

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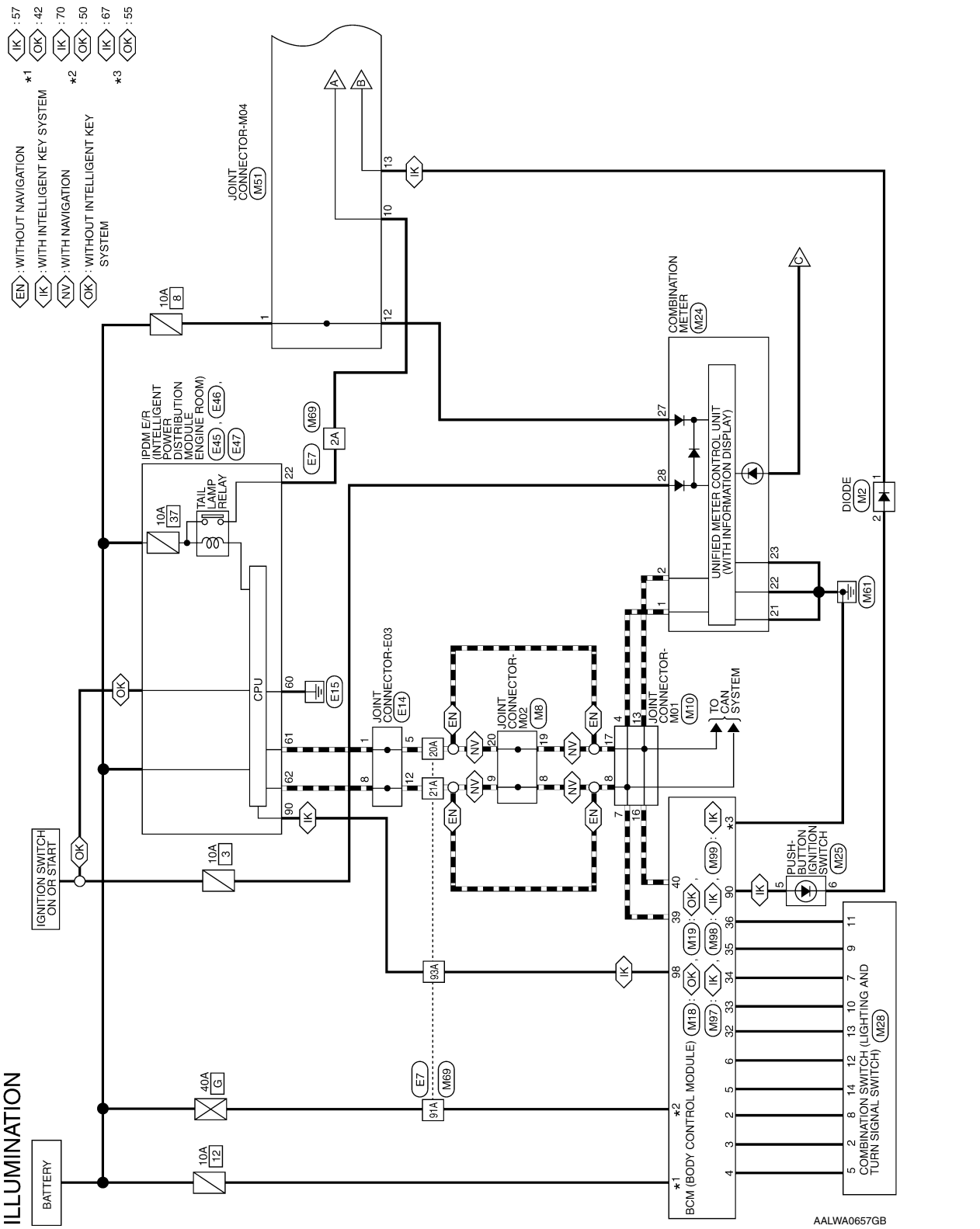

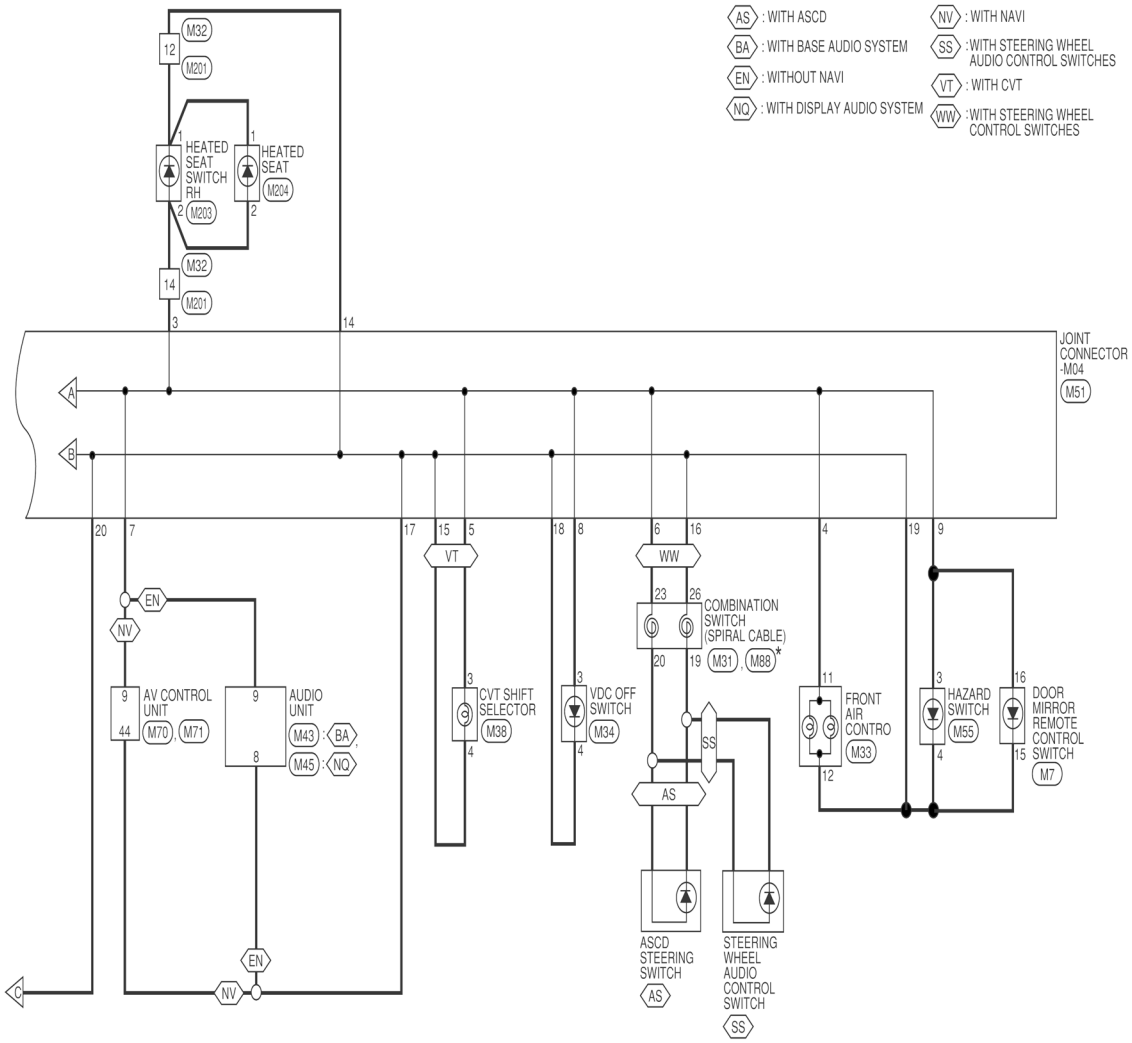

∗ : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

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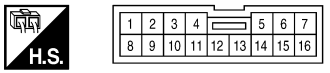
ILLUMINATION CONNECTORS

Connector No.	M2
Connector Name	DIODE
Connector Color	–

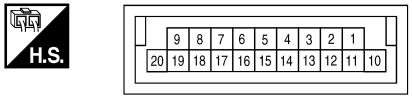
Terminal No.	Color of Wire	Signal Name
1	B	–
2	B	–

Connector No.	M7
Connector Name	DOOR MIRROR REMOTE CONTROL SWITCH
Connector Color	WHITE



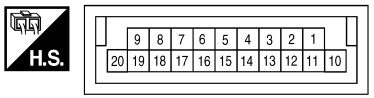
Terminal No.	Color of Wire	Signal Name
15	B	–
16	G	–

Connector No.	M8
Connector Name	JOINT CONNECTOR M02
Connector Color	GREEN



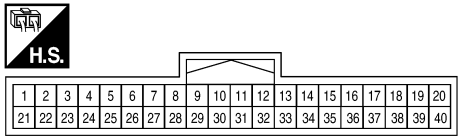
Terminal No.	Color of Wire	Signal Name
8	L	–
9	L	–
19	P	–
20	P	–

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
4	L	–
7	L	–
8	L	–
13	P	–
16	P	–
17	P	–

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)(WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	BR	COMBINATION SW INPUT 5
3	Y	COMBINATION SW INPUT 4
4	L	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	R	COMBINATION SW INPUT 1
32	P	COMBINATION SW OUTPUT 5
33	V	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	GR	COMBINATION SW OUTPUT 2
36	LG	COMBINATION SW OUTPUT 1
39	L	CAN-H
40	P	CAN-L

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Connector No.	M19
Connector Name	BCM(BODY CONTROL MODULE)(WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

H.S.

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name
42	Y	BATT(FUSE)
50	G	BATT(F/L)
55	B	GND

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	R/W	BAT
28	GR	IGN

Connector No.	M25
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Color	WHITE

H.S.

4		3
5	6	7	8

Terminal No.	Color of Wire	Signal Name
5	W	–
6	B	–

Connector No.	M28
Connector Name	COMBINATION SWITCH (LIGHTING AND TURN SIGNAL SWITCH)
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
2	Y	–
5	L	–
7	W	–
8	BR	–
9	GR	–

Terminal No.	Color of Wire	Signal Name
10	V	–
11	LG	–
12	R	–
13	P	–
14	G	–

Connector No.	M31
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	YELLOW

H.S.

23	26	34
28	29	30

Terminal No.	Color of Wire	Signal Name
23	GR	–
26	B	–

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Connector No.	M32
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
12	B	–
14	R	–

Connector No.	M33
Connector Name	FRONT AIR CONTROL
Connector Color	BLACK

H.S.

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

Terminal No.	Color of Wire	Signal Name
11	W	ILL+
12	B	ILL-

Connector No.	M34
Connector Name	VDC OFF SWITCH
Connector Color	GRAY

H.S.

6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
3	W	–
4	B	–

Connector No.	M38
Connector Name	CVT SHIFT SELECTOR
Connector Color	WHITE

H.S.

1	2	3	4
5	6	7	8

Terminal No.	Color of Wire	Signal Name
3	SB	–
4	B	–

Connector No.	M43
Connector Name	AUDIO UNIT (WITH BASE AUDIO SYSTEM)
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9
19	10	11	12	13	14	15	16	17	18	20

Terminal No.	Color of Wire	Signal Name
8	B	ILL (-)
9	LG/R	ILL (+)

Connector No.	M45
Connector Name	AUDIO UNIT (WITH DISPLAY AUDIO SYSTEM)
Connector Color	WHITE

H.S.

1	2	3	4	5	6	7	8	9
19	10	11	12	13	14	15	16	17	18	20

Terminal No.	Color of Wire	Signal Name
8	B	ILL (-)
9	LG/R	ILL (+)

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Connector No.	M55
Connector Name	HAZARD SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	B	–
4	W	–

Connector No.	M51
Connector Name	JOINT CONNECTOR-M04
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	–
4	W	–
5	SB	–
6	GR	–
7	LG/R	–
8	W	–

Terminal No.	Color of Wire	Signal Name
9	W	–
10	W	–
12	R/W	–
13	B	–
15	B	–
16	B	–
17	B	–
19	B	–
20	B	–

Connector No.	M70
Connector Name	AV CONTROL UNIT
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
9	LG/R	ILL (+), LIGHT SW

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
2A	W	–
20A	P	–
21A	L	–
91A	G	–
93A	O	–

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Connector No.	M71
Connector Name	AV CONTROL UNIT
Connector Color	WHITE

H.S.

32	31	30	29	28	27	26	25	24	23	22	21
44	43	42	41	40	39	38	37	36	35	34	33

Terminal No.	Color of Wire	Signal Name
44	B	ILL (-)

Connector No.	M88
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Color	GRAY

H.S.

20	19	18	17	16	15	14	13

Terminal No.	Color of Wire	Signal Name
19	P	ILL (-)
20	Y	ILL (+)

Connector No.	M97
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	BLACK

H.S.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
2	BR	COMB SW INPUT5
3	Y	COMB SW INPUT4
4	L	COMB SW INPUT3
5	G	COMB SW INPUT2
6	R	COMB SW INPUT1
32	P	COMB SW OUTPUT5
33	V	COMB SW OUTPUT4
34	W	COMB SW OUTPUT3

Terminal No.	Color of Wire	Signal Name
35	GR	COMB SW OUTPUT2
36	LG	COMB SW OUTPUT1
39	L	CAN-H
40	P	CAN-L

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE)(WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

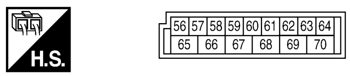
H.S.

71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name
90	W	HIGH SIDE ENGINE START SW ILLUMINATION LED
98	O	IGN RELAY OUTPUT1 (USM)

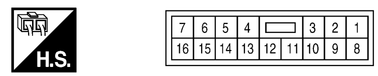
AALIA1459GB

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE)(WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
57	Y	BATTERY (FUSE)
67	B	GND
70	G	BATTERY (F/L)

Connector No.	M201
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12	B	–
14	R	–

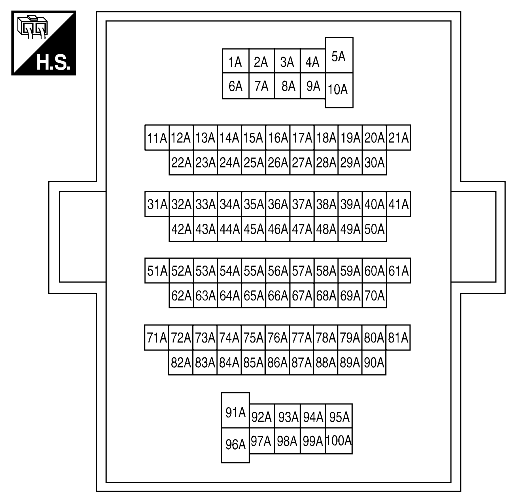
Connector No.	M203
Connector Name	HEATED SEAT SWITCH RH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	B	–
2	R	–

Connector No.	M204
Connector Name	HEATED SEAT SWITCH LH
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	B	–
2	R	–

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2A	P	–
20A	P	–
21A	L	–
91A	Y	–
93A	L	–

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Connector No.	E14
Connector Name	JOINT CONNECTOR-E03
Connector Color	BLUE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	P	–
5	P	–
8	L	–
12	L	–

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

H.S.

21	20		19	18	17
28	27	26	25	24	23	22

Terminal No.	Color of Wire	Signal Name
22	P	TAIL/ILLUMI

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
60	B	GND (SIGNAL)
61	P	CAN-L
62	L	CAN-H

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

84	83	82	81	80	79	78	77
92	91	90	89	88	87	86	85

Terminal No.	Color of Wire	Signal Name
90	L	IGN SIGNAL

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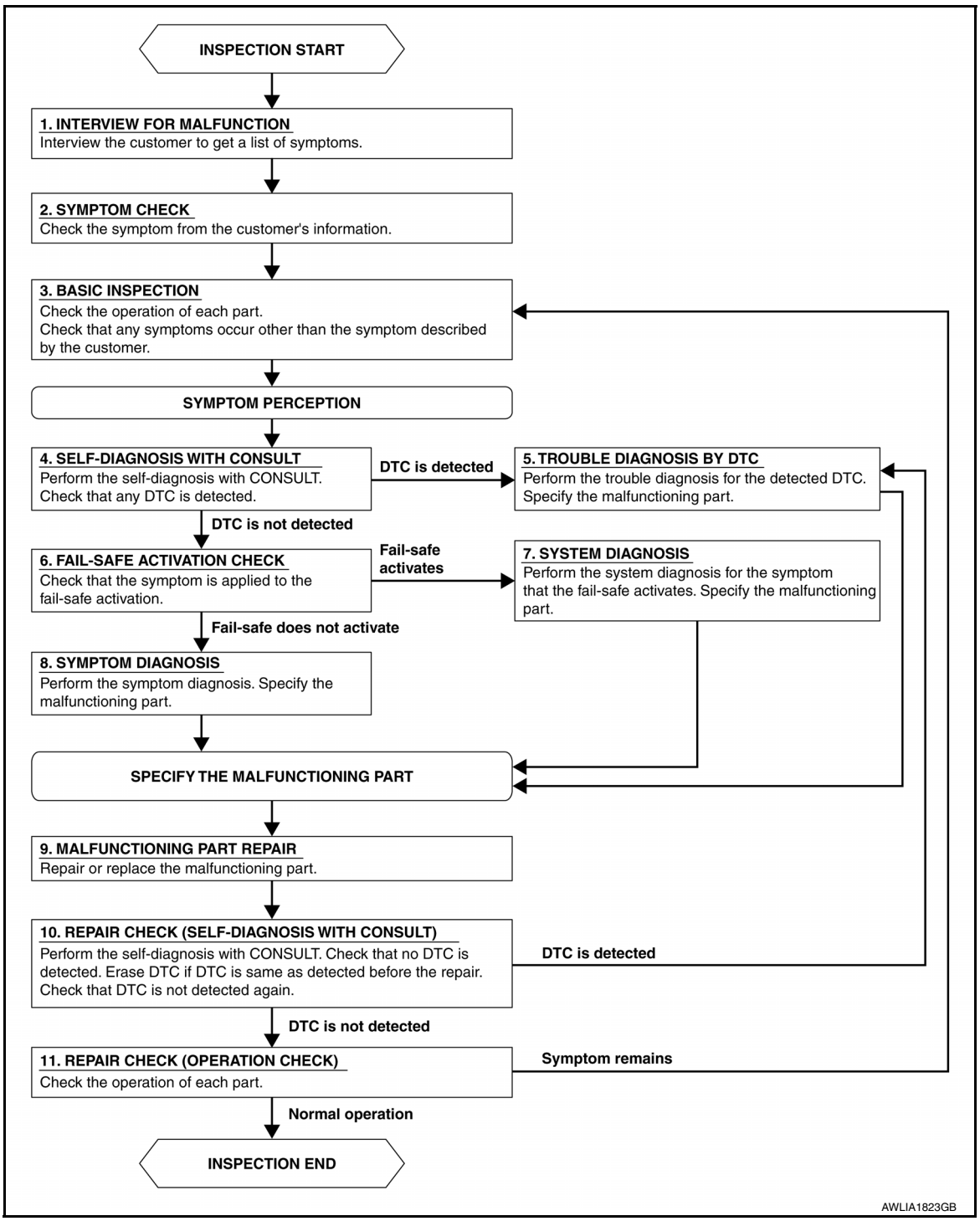
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000009697560

OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

>> GO TO 2.

2.SYMPTOM CHECK

Check the symptom from the customer's information.

>> GO TO 3.

3.BASIC INSPECTION

Check the operation of each part. Check that any symptom occurs other than the interviewed symptom.

>> GO TO 4.

4.SELF-DIAGNOSIS WITH CONSULT

Perform the self-diagnosis with CONSULT. Check that any DTC is detected.

Is any DTC detected?

YES >> GO TO 5.
NO >> GO TO 6.

5.TROUBLE DIAGNOSIS BY DTC

Perform the trouble diagnosis for the detected DTC. Specify the malfunctioning part.

>> GO TO 9.

6.FAIL-SAFE ACTIVATION CHECK

Check that the symptom is applied to the fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7.
NO >> GO TO 8.

7.SYSTEM DIAGNOSIS

Perform the system diagnosis for the system that the fail-safe activates. Specify the malfunctioning part.

>> GO TO 9.

8.SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Specify the malfunctioning part.

>> GO TO 9.

9.MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

10.REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT)

Perform the self-diagnosis with CONSULT. Check that any DTC is not detected. Erase DTC if DTC is detected before the repair. Check that DTC is not detected again.

Is any DTC detected?

YES >> GO TO 5.
NO >> GO TO 11.

11.REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

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

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:0000000009701573

Regarding Wiring Diagram information, refer to BCS-51, "Wiring Diagram".

1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
57	Battery power supply	12 (10A)
70		G (40A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M99.
2. Check voltage between BCM connector M99 and ground.

BCM		Ground	Voltage
Connector	Terminal		
M99	57	—	Battery voltage
	70		

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M99 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M99	67	—	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair harness or connector.

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:0000000009701574

Regarding Wiring Diagram information, refer to BCS-111, "Wiring Diagram".

1.CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
37	Battery power supply	8 (10A)
42		12 (10A)
50		G (40A)
11	Ignition switch ACC or ON	18 (10A)
38	Ignition switch ON or START	2 (10A)

Is the fuse blown?

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

2.CHECK POWER SUPPLY CIRCUIT

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

BCM		Ground	Ignition switch position		
Connector	Terminal		OFF	ACC	ON
M18	11	—	0 V	Battery voltage	Battery voltage
	37		Battery voltage		
	38		0 V	0 V	
M19	42		Battery voltage	Battery voltage	
	50				

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	55	—	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair harness or connector.

BATTERY SAVER OUTPUT/POWER SUPPLY CIRCUIT

Description

INFOID:0000000009695418

Provides the battery saver output/power supply. Also cuts the power supply when the interior lamp battery saver is activated.

Component Function Check

INFOID:0000000009695419

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY FUNCTION

CONSULT
1. Turn ignition switch ON.
2. Turn each interior lamp to the ON position.
- Interior room lamp
- Map lamp (if equipped)
- Cargo lamp
3. Select BATTERY SAVER of BCM (BATTERY SAVER) active test item.
4. While operating the test item, check that each interior room lamp turns ON/OFF.

OFF : Interior room lamp OFF
ON : Interior room lamp ON

Is the inspection result normal?

YES >> Battery saver output/power supply circuit is normal.
NO >> Refer to INL-41, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009695420

Regarding Wiring Diagram information, refer to INL-21, "Wiring Diagram".

1.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OUTPUT

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

With Intelligent Key

(+)		(-)	Test item	Voltage
Connector	Terminal		BATTERY SAVER	
M99	56	Ground	OFF	0V
			ON	Battery voltage

Without Intelligent Key

(+)		(-)	Test item	Voltage
Connector	Terminal		BATTERY SAVER	
M19	43	Ground	OFF	0V
			ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-70, "Removal and Installation" (with Intelligent Key) or BCS-127, "Removal and Installation" (without Intelligent Key).

2.CHECK BATTERY SAVER OUTPUT/POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect the following connectors.
- BCM
- Interior room lamp
- Map lamp (if equipped)
- Cargo lamp

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

With Intelligent Key

BCM		Each interior lamp			Continuity
Connector	Terminal	Connector		Terminal	
M99	56	Interior room lamp	R7	2	Yes
		Map lamp (if equipped)	R2	4	
		Trunk room lamp	B21	1	

Without Intelligent Key

BCM		Each interior lamp			Continuity
Connector	Terminal	Connector		Terminal	
M19	43	Interior room lamp	R7	2	Yes
		Map lamp (if equipped)	R2	4	
		Trunk room lamp	B21	1	

Is the inspection result normal?

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

3. CHECK BATTERY SAVER OUTPUT/POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM connector and ground.

With Intelligent Key

Connector	Terminal	—	Continuity
M99	56	Ground	No

Without Intelligent Key

Connector	Terminal	—	Continuity
M19	43	Ground	No

Is the inspection result normal?

YES >> Check that each interior room lamp has no internal short circuit.
NO >> Repair or replace the harness or connector.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000009695421

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:0000000009695422

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

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

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

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-43, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009695423

Regarding Wiring Diagram information, refer to INL-21, "Wiring Diagram".

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT
1. Turn ignition switch OFF.
2. Remove all the bulbs of map lamp and interior room lamp.
3. Turn ignition switch ON.
4. Select INT LAMP of BCM (INT LAMP) ACTIVE TEST item.
5. While operating the test item, check continuity between BCM harness connector and ground.

With Intelligent Key

BCM		Ground	Test item		Continuity
Connector	Terminal				
M99	63		INT LAMP	On	Yes
				Off	No

Without Intelligent Key

BCM		Ground	Test item		Continuity
Connector	Terminal				
M19	45		INT LAMP	On	Yes
				Off	No

Is the inspection result normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-70, "Removal and Installation" (with Intelligent Key) or BCS-127, "Removal and Installation" (without Intelligent Key).

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and map lamp connector or interior room lamp connector.
3. Check continuity between BCM harness connector and map lamp harness connector or interior room lamp harness connector.

With Intelligent Key

BCM		Lamp		Continuity
Connector	Terminal	Connector	Terminal	
M99	63	R2 (map lamp)	2	Yes
		R7 (interior room lamp)	3	

Without Intelligent Key

BCM		Lamp		Continuity
Connector	Terminal	Connector	Terminal	
M19	45	R2 (map lamp)	2	Yes
		R7 (interior room lamp)	3	

Is the inspection result normal?

YES >> Check that map lamp or interior room lamp has no internal open circuit.
NO >> Repair or replace harness or connector.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

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

With Intelligent Key

BCM		Ground	Continuity
Connector	Terminal		
M99	63		No

Without Intelligent Key

BCM		Ground	Continuity
Connector	Terminal		
M19	45		No

Is the inspection result normal?

YES >> Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-70, "Removal and Installation" (with Intelligent Key) or BCS-127, "Removal and Installation" (without Intelligent Key).
NO >> GO TO 4.

4.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Disconnect interior room lamp connector or map lamp connector.
2. Check continuity between BCM harness connector and ground.

With Intelligent Key

BCM		Ground	Continuity
Connector	Terminal		
M99	63		No

Without Intelligent Key

BCM		Ground	Continuity
Connector	Terminal		
M19	45		No

Is the inspection result normal?

YES >> Check that map lamp or interior room lamp has no internal short circuit.
NO >> Repair or replace harness or connector.

CARGO LAMP CONTROL CIRCUIT

Description

INFOID:0000000009695424

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

Component Function Check

INFOID:0000000009695425

CAUTION:

Before performing the diagnosis, check that the following is normal.

- **Battery saver output/power supply**
- **Cargo lamp bulb**

Diagnosis Procedure

INFOID:0000000009695426

Regarding Wiring Diagram information, refer to INL-21, "Wiring Diagram".

1.CHECK CARGO LAMP OUTPUT

1. Turn ignition switch OFF.
2. Remove the cargo lamp bulb.
3. Check continuity between BCM harness connector and ground.

With Intelligent Key

BCM		Ground	Condition		Continuity
Connector	Terminal				
M100	49		Back door	Open	Yes
				Closed	No

Without Intelligent Key

BCM		Ground	Condition		Continuity
Connector	Terminal				
M20	70		Back door	Open	Yes
				Closed	No

Is the inspection result normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-70, "Removal and Installation" (with Intelligent Key) or BCS-127, "Removal and Installation" (without Intelligent Key).

2.CHECK CARGO LAMP OPEN CIRCUIT

Check continuity between BCM harness connector and cargo lamp harness connector.

With Intelligent Key

BCM		Cargo lamp		Continuity
Connector	Terminal	Connector	Terminal	
M100	49	B21	4	Yes

Without Intelligent Key

BCM		Cargo lamp		Continuity
Connector	Terminal	Connector	Terminal	
M20	70	B21	4	Yes

Is the inspection result normal?

YES >> Replace cargo lamp.
NO >> Repair or replace the harness or connector.

3.CHECK TRUNK ROOM LAMP SHORT CIRCUIT

1. Disconnect BCM harness connector.
2. Check continuity between BCM harness connector and ground.

With Intelligent Key

BCM		Ground	Continuity
Connector	Terminal		
M100	49		No

Without Intelligent Key

BCM		Ground	Continuity
Connector	Terminal		
M20	70		No

Is the inspection result normal?

YES >> Replace BCM after making sure battery saver output/power supply circuit is not shorted to voltage. Refer to BCS-70, "Removal and Installation" (with Intelligent Key) or BCS-127, "Removal and Installation" (without Intelligent Key).

NO >> Repair or replace the harness or connector.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000009695427

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

Component Function Check

INFOID:0000000009695428

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select ENGINE SW ILLUMI of BCM (INTELLGENT KEY) active test item.
3. While operating the test item, 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

Is the inspection result normal?

YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to INL-48, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000009695429

Regarding Wiring Diagram information, refer to INL-28, "Wiring Diagram".

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT
1. Turn the ignition switch ON.
2. Select ENGINE SW ILLUMI of BCM (INTELLIGENT KEY) active test item.
3. While operating the test item, check voltage between push-button ignition switch connector and ground.

Terminals			Test item	Voltage
(+)		(-)		
Push-button ignition switch		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M25	5		ON	Battery voltage
			OFF	0 V

Is the inspection result normal?

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

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

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

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M98	90	M25	5	Yes

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace the harness or connectors.

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

Check continuity between BCM connector M98 terminal 90 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M98	90		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-70, "Removal and Installation".
NO >> Repair or replace the harness or connectors.

4.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

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

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M25	6		Yes

Is the inspection result normal?

YES >> Replace push-button ignition switch. Refer to PCS-103, "Removal and Installation".
NO >> GO TO 5.

5.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM connector and push-button ignition switch connector.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M98	92	M25	6	Yes

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-70, "Removal and Installation".
NO >> Repair or replace the harness or connectors.

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000009643000

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

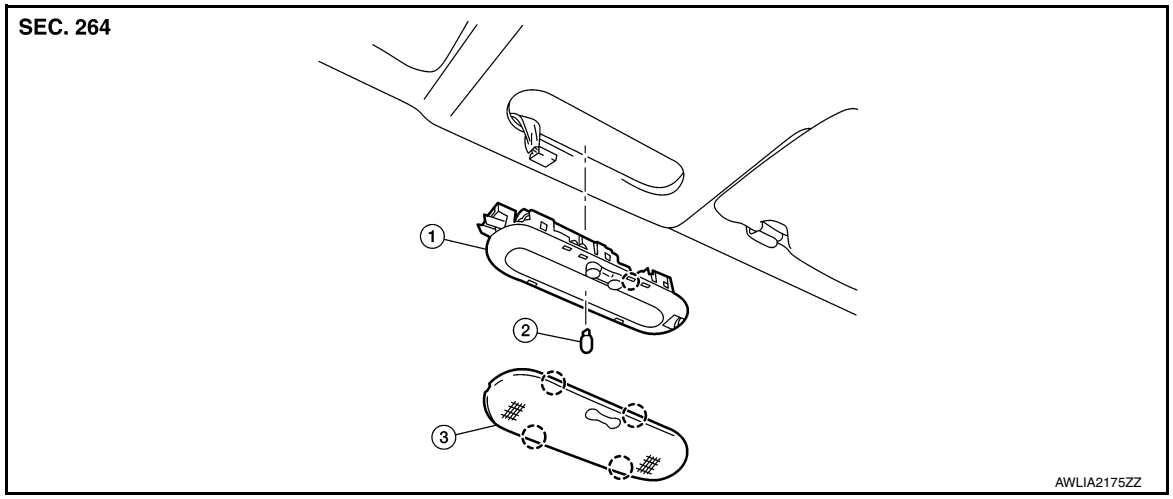
Symptom	Possible cause	Inspection item
• Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-95 (with Intelligent Key) or DLK-225 (without Intelligent Key).
		Interior room lamp control circuit Refer to INL-43.
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-11 (with Intelligent Key) or INL-17 (without Intelligent Key).
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to INL-14 (with Intelligent Key) or INL-19 (without Intelligent Key).
Cargo lamp does not turn ON even though the back door is open. (It turns ON when turning the cargo lamp ON.)	• Harness between BCM and cargo lamp • Harness between BCM and back door switch • BCM	Back door switch circuit Refer to DLK-93 (with Intelligent Key) or DLK-225 (without Intelligent Key).
		Cargo lamp circuit Refer to INL-46.

REMOVAL AND INSTALLATION

MAP LAMP

Exploded View

INFOID:0000000008969463



1. Map lamp
2. Bulb
3. Lens

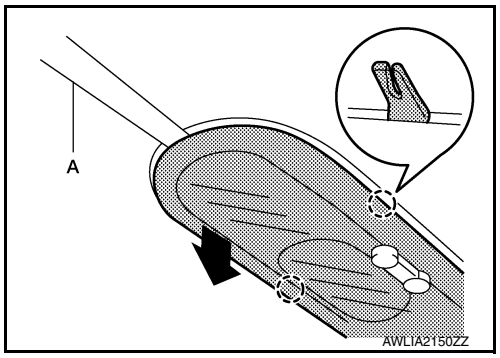
◌ Pawl

Removal and Installation

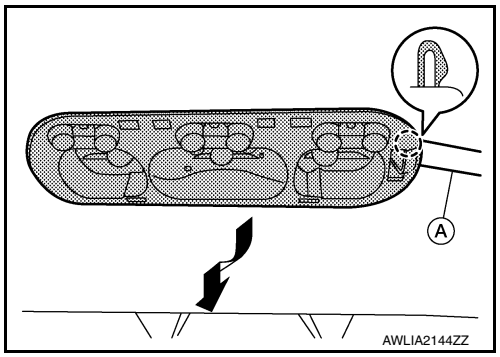
INFOID:0000000008969464

REMOVAL

1. Release lens pawls using a suitable tool (A) and remove.
   ◌: Pawl



2. Release map lamp pawl using suitable tool (A).
   ◌: Pawl
3. Disconnect the harness connector from map lamp and remove.



INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000008969465

WARNING:

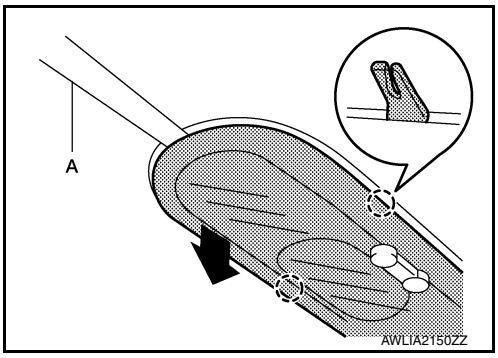
Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp.**

REMOVAL

1. Release lens pawls using suitable tool (A) and remove.
   ◌: Pawl



2. Remove the bulb.

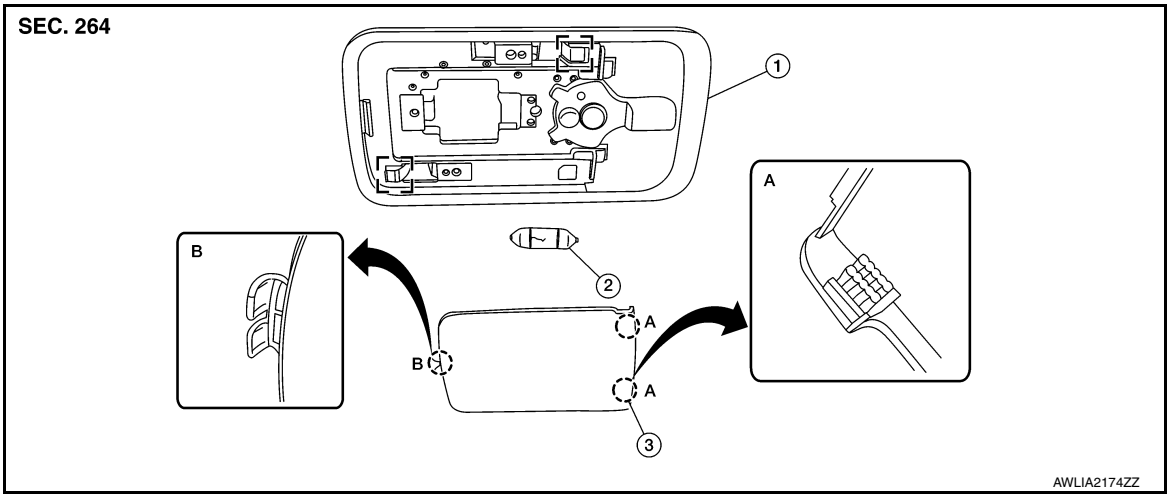
INSTALLATION

Installation is in the reverse order of removal.

INTERIOR ROOM LAMP

Exploded View

INFOID:0000000008969466



1. Interior room lamp
2. Bulb
3. Lens
A. Pawls to release first for lens removal
B. Pawl to install first for lens installation
Pawl
Metal clip

Removal and Installation

INFOID:0000000008969467

REMOVAL

1. Release interior room lamp metal clips using a suitable tool.
2. Disconnect the harness connector from room lamp and remove.

INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000008969468

WARNING:
Do not touch bulb while it is lit or right after being turned OFF. Burning may result.
CAUTION:
- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp.**

REMOVAL

1. Release interior room lamp lens pawls using a suitable tool and remove.
2. Remove bulb.

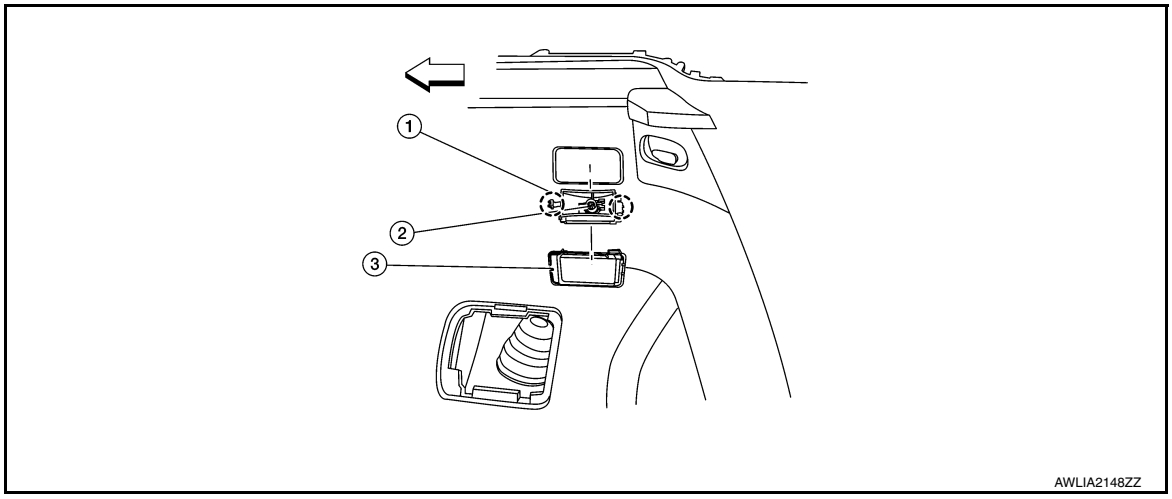
INSTALLATION

Installation is in the reverse order of removal.
NOTE:
Insert the lens hook end RH side first when installing lens.

CARGO ROOM LAMP

Exploded View

INFOID:0000000009445820



1. Cargo room lamp
2. Bulb
3. Lens

⇦ Front

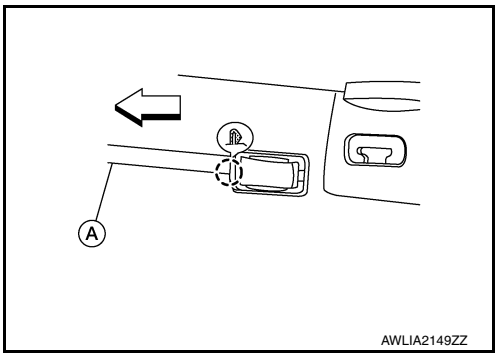
◌ Pawl

Removal and Installation

INFOID:0000000009445819

REMOVAL

1. Release cargo room lamp pawl with a suitable tool (A)
   ◌: Pawl
   ⇦: Front
2. Disconnect harness connector from cargo room lamp and remove.



INSTALLATION

Installation is in the reverse order of removal.

Bulb Replacement

INFOID:0000000009445818

WARNING:

Do not touch bulb while it is lit or right after being turned OFF. Burning may result.

CAUTION:

- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp.**

REMOVAL

1. Release cargo room lamp lens pawl using a suitable tool.
2. Remove the bulb.

INSTALLATION

Installation is in the reverse order of removal.

SHIFT SELECTOR LAMP

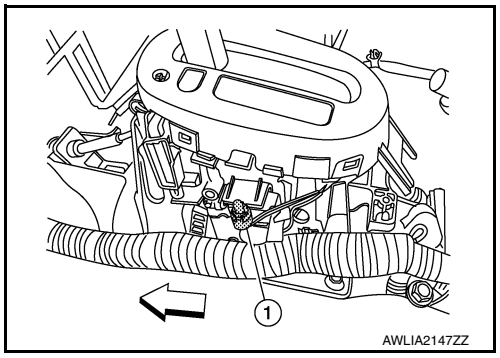
Bulb Replacement

INFOID:0000000009445814

WARNING:
Do not touch bulb while it is lit or right after being turned OFF. Burning may result.
CAUTION:
- **Do not touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to protect damage to bulb.**
- **Do not leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp.**

REMOVAL

1. Remove the center console assembly. Refer to IP-18, "Removal and Installation".
2. Remove shift selector lamp bulb from bulb socket (1).
   ⇦: Front



INSTALLATION
Installation is in the reverse order of removal.

ILLUMINATION CONTROL SWITCH

Removal and Installation

INFOID:0000000009445815

The illumination control switch is part of the combination meter. Refer to MWI-54, "Removal and Installation".

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000009445817

Item	Wattage (W)*
Map lamp (if equipped)	5
Interior room lamp	8
Cargo room lamp	5
Shift selector lamp	—

*: Always check with the Parts Department for the latest parts info.