

SECTION **BL**

BODY, LOCK & SECURITY SYSTEM

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PRECAUTIONS

PRECAUTIONS

PFP:00001

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

EIS004QW

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 and SB section of this Service Manual.

WARNING:

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

Maintenance Information

EIS004QX

If any of following part is replaced, always replace with new* one.

If it's not (or fail to do so), the electrical system may not be operated properly.

*: New one means a virgin control unit that has never been energized on-board.

RHD MODELS

- BCM (Models without Intelligent Key system)
- Intelligent Key unit (Models with Intelligent Key system)
- ECM
- IPDM E/R
- Combination meter
- EPS control unit

LHD MODELS

- BCM (Models without Intelligent Key system)
- Intelligent Key unit (Models with Intelligent Key system)
- ECM

Precautions

EIS004LF

- After installing removed lids or doors, be sure to adjust hinges and mount points so that lids or doors can open and close properly.
- Confirm parts for proper lubrication, damage or wear. Lubricate, repair or replace as necessary.

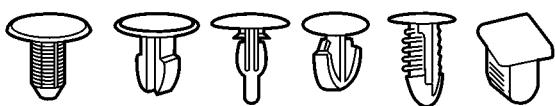
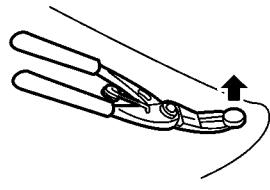
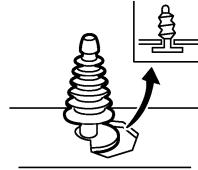
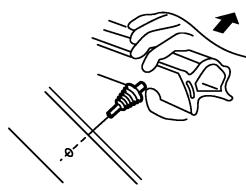
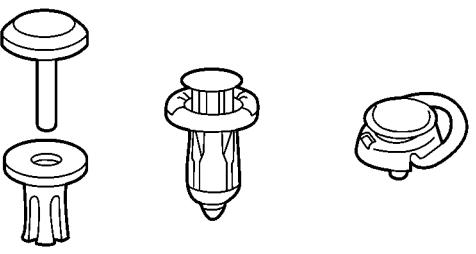
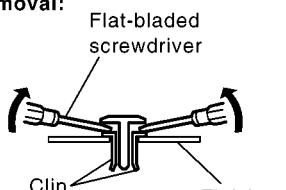
CLIP AND FASTENER

CLIP AND FASTENER

PFP:76906

List of Table

EIS004LI

Symbol No.	Shape	Removal and installation
C103 		 PIIA1350J
CE103 		 PIIA1354J
C205 		<p>Removal:</p>  <p>Flat-bladed screwdriver Clip Finisher</p> MIIB0153E

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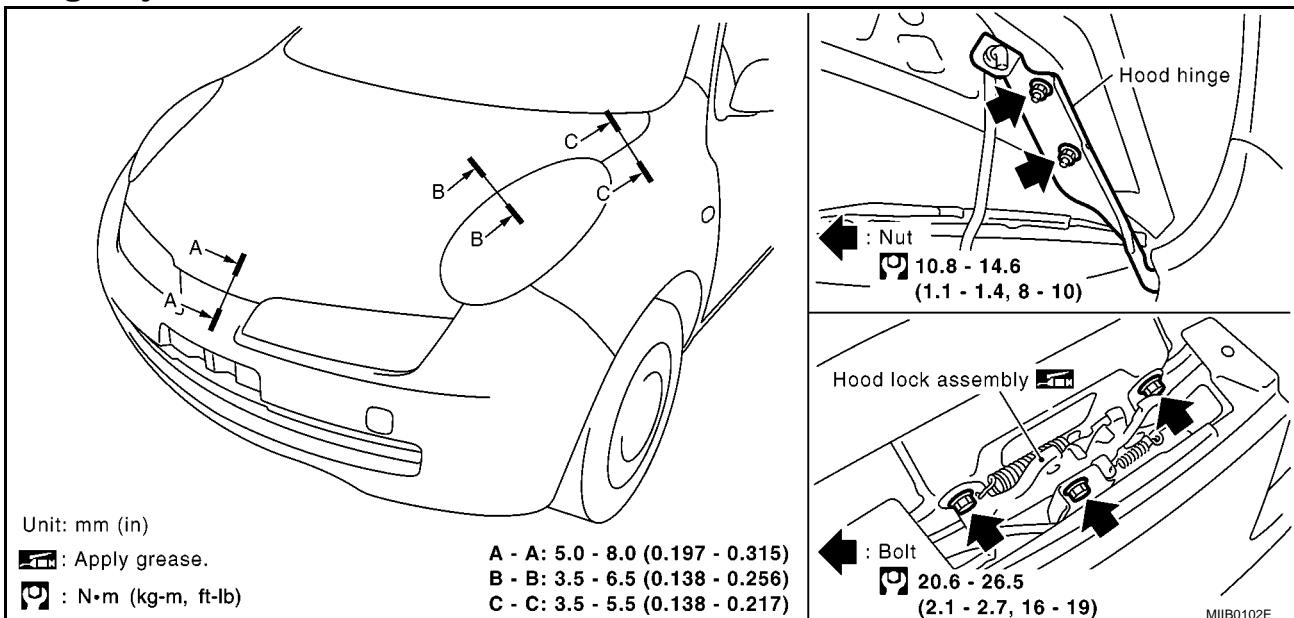
HOOD

HOOD

PFP:F5100

Fitting Adjustment

EIS004LJ



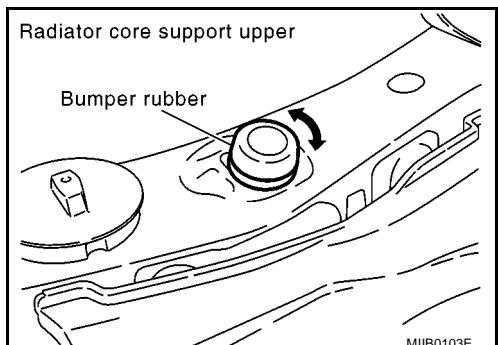
FRONT END HEIGHT ADJUSTMENT AND LATERAL/LONGITUDINAL CLEARANCE ADJUSTMENT

1. Remove hood lock. Rotate bumper rubber to adjust height until hood becomes 1 to 1.5 mm lower than the fender.
2. Position hood lock and engage striker. Check hood lock and striker for looseness. Tighten lock bolts to the specified torque.

CAUTION:

Adjust the clearance between hood and other parts so that the dimensional difference left and right is as follows.

- Hood (B) - Headlamp (B) : 1.5 mm or less**
Hood (C) - Headlamp (C) : 1.0 mm or less



SURFACE MISMATCH ADJUSTMENT

1. Release hood lock, and adjust surface level difference of hood, fender, and headlamp according to the fitting standard dimension, using RH and LH bumper rubbers.

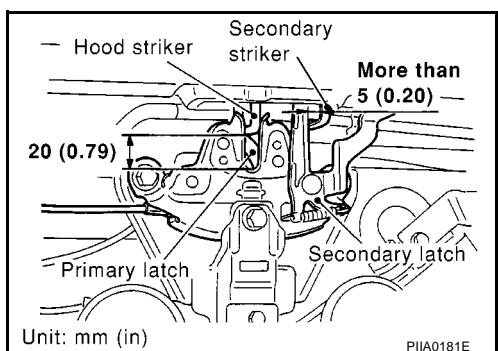
- Hood (B) - Headlamp (B) : 1.0 mm**
Hood (C) - Headlamp (C) : 0.2 mm

2. Install hood lock, and move hood lock laterally until the centers of striker and lock become vertical when viewed from the front.
3. Make sure the secondary latch is securely engaged with the secondary striker from either the dead weight of the hood (free-fall from approx. 200 mm height), or by applying light pressure (approx. 3 kg).

CAUTION:

Do not drop hood from a height of 300 mm or more.

4. Move hood lock-up and down until striker smoothly engages the lock when the hood is closed.
5. After adjustment, tighten lock bolts to the specified torque.

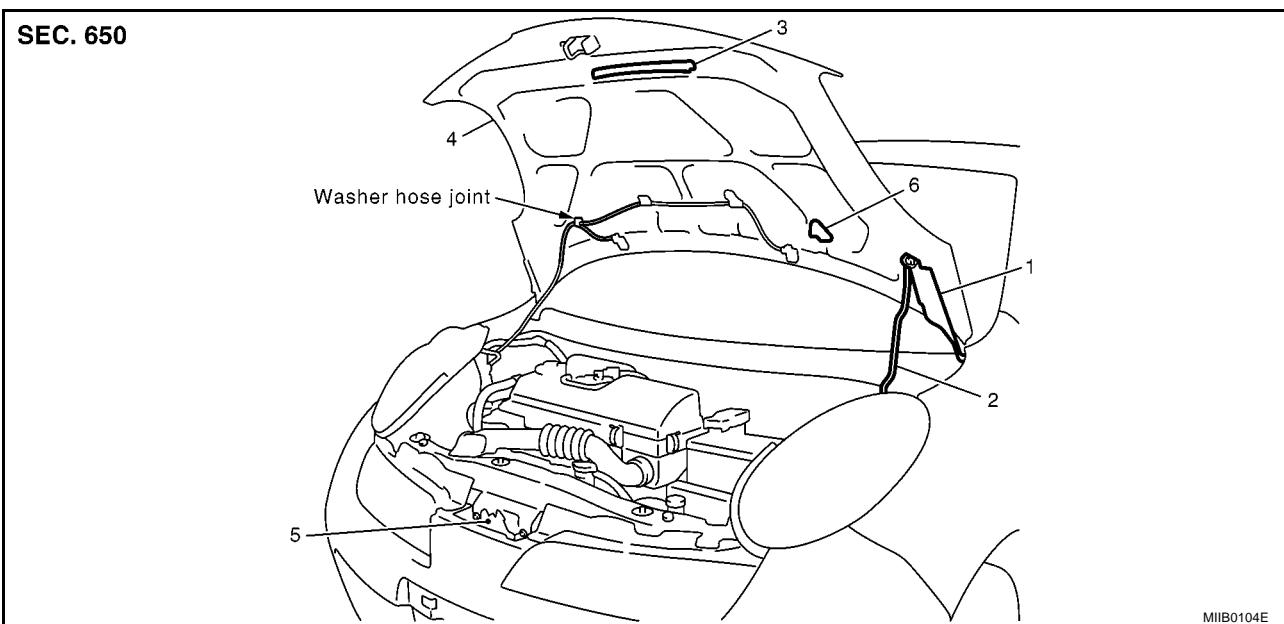


HOOD

Removal and Installation

EIS004LK

SEC. 650



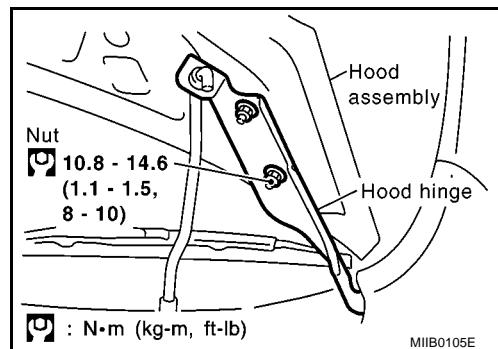
MIIB0104E

- 1. Hood hinge
- 2. Hood stay
- 3. Radiator core seal rubber
- 4. Hood assembly
- 5. Hood lock
- 6. Hood stay holder

REMOVAL

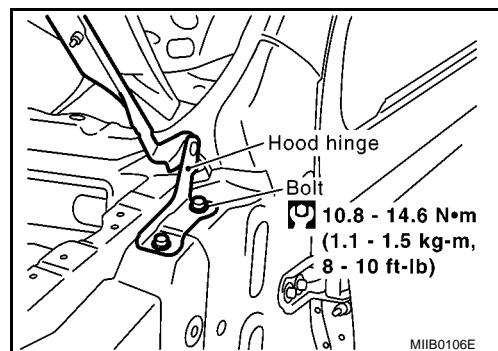
Hood Assembly

1. Disconnect washer hose at the connecting point.
2. Remove hinge nuts on hood and remove hood assembly.



Hood Hinge

1. Remove hood assembly.
2. Remove front fender. Refer to [BL-15, "Removal and Installation"](#).
3. Remove bolts and then remove hood hinge.



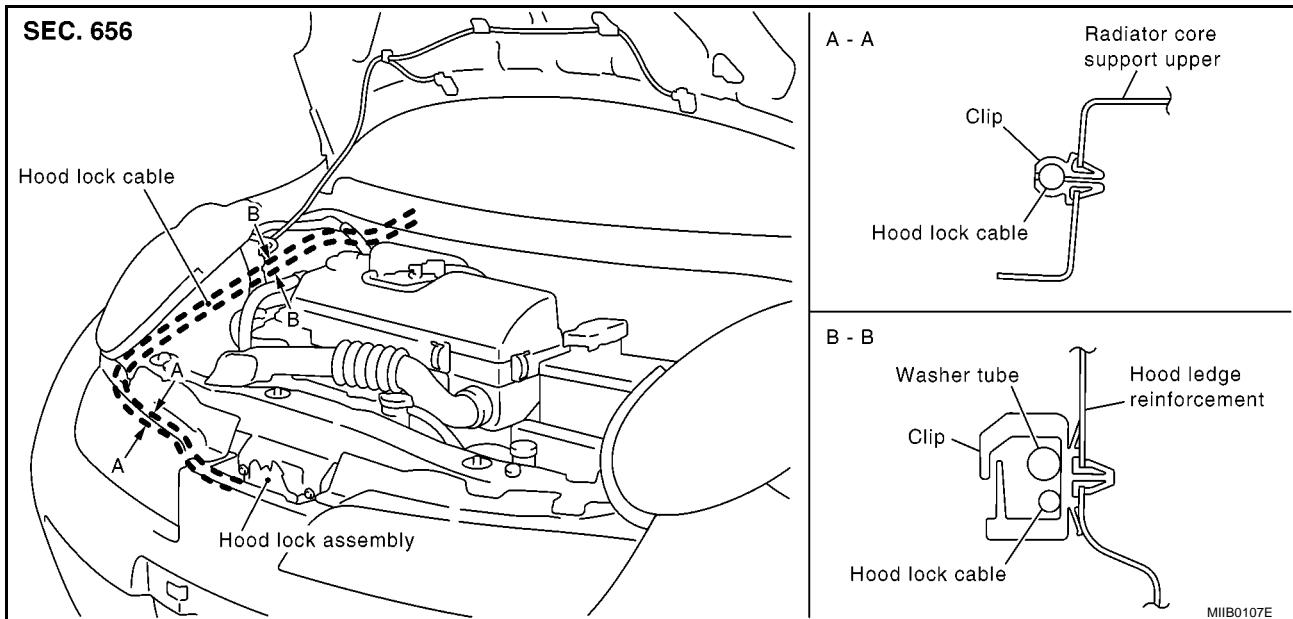
HOOD

INSTALLATION

- Perform installation in the reverse order of removal while being careful of the following items while performing the work.
- Apply Anti-Corrosion Wax M-97 Super or comparable product to the hood hinge, hood ledge, and hood assembly.
- After installing, perform hood fitting adjustment. Refer to [BL-8, "Fitting Adjustment"](#).

Removal and Installation of Hood Lock Control

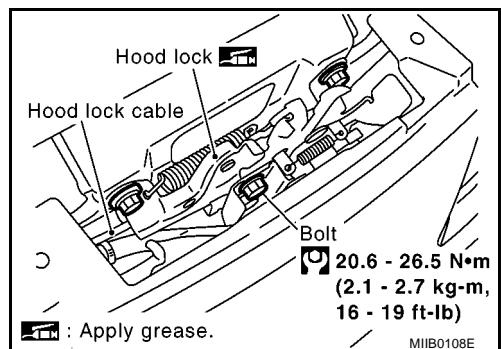
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REMOVAL

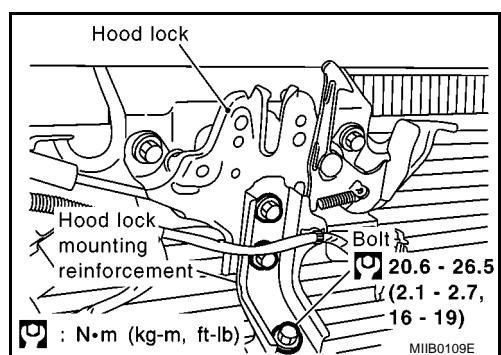
Hood Lock

1. Remove front grille (LH/RH). Refer to [EI-11, "Removal and Installation"](#).
2. Remove hood lock bolts.
3. Remove hood lock cable from hood lock.



Hood Lock Mounting Reinforcement

1. Remove front bumper. Refer to [EI-5, "Removal and Installation"](#).
2. Remove bolts, and then remove hood lock mounting reinforcement.



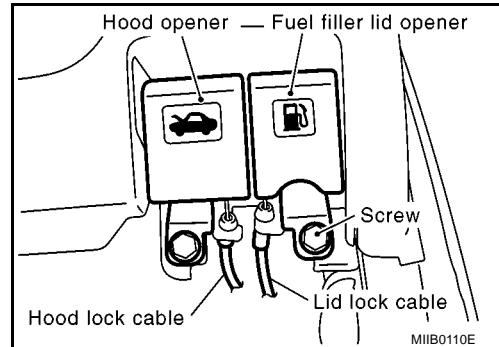
HOOD

Hood Lock Cable

1. Remove front grille (LH/RH). Refer to [EI-11, "Removal and Installation"](#) .
 2. Remove fender protector (RH). Refer to [EI-14, "Removal and Installation"](#) .
 3. Remove hood lock, and remove hood lock cable from hood lock.
 4. Remove radiator core upper support and hood ledge clips, and then remove hood lock cable.
 5. Remove hood opener on bottom right of instrument panel, and then remove hood lock cable.
 6. Remove grommet on lower dashboard, and pull out hood lock cable from passenger room side.

CAUTION:

While pulling the cable, be careful not to damage (peel) hood opener cable outer surface on edges of body through hole.



INSTALLATION

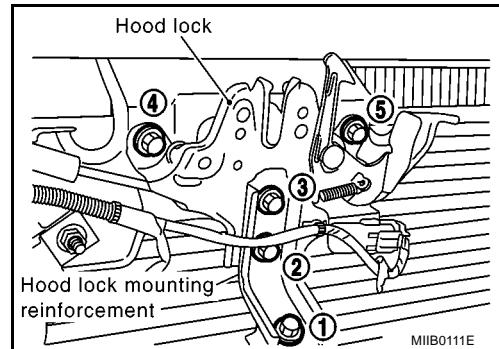
- Perform installation in the reverse order of removal while being careful of the following items while performing the work.
 - After installing, perform hood fitting adjustment. Refer to [BL-8, "Fitting Adjustment"](#) .

Hood Lock Mounting Reinforcement

- When installing hood lock mounting reinforcement, loosen hood bolts, and then tighten bolts in the order shown in the figure.

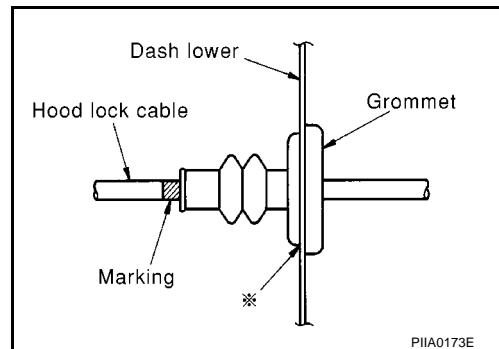
Bolt No. 1 to 5.

Tightening torque (N·m, (kg-m))
: 20.6 - 26.5 (2.1 - 2.7)



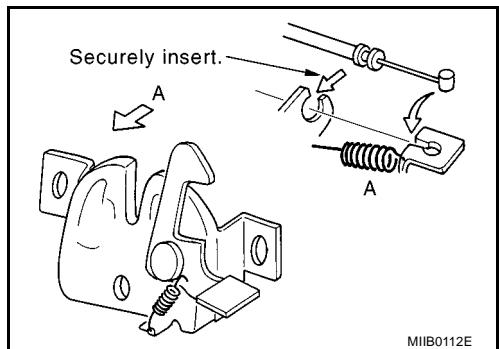
Hood Lock Cable

1. Pass hood lock cable through the opening while keeping the winding radius 100 mm or larger.
 2. After confirming grommet is properly positioned, push it securely into the hole.
 3. Apply sealant (POS seal) to area on the grommet indicated with the * mark.



HOOD

4. Install cable securely to lock.
5. After installing, check hood lock adjustment and hood opener operation.



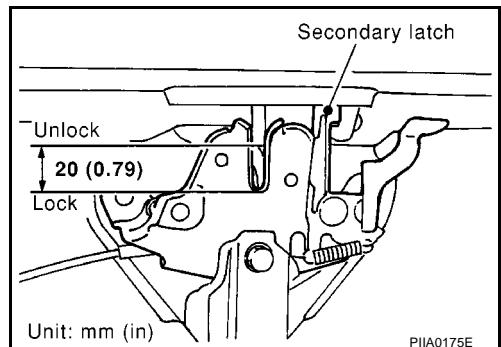
Hood Lock Control Inspection

EIS004LM

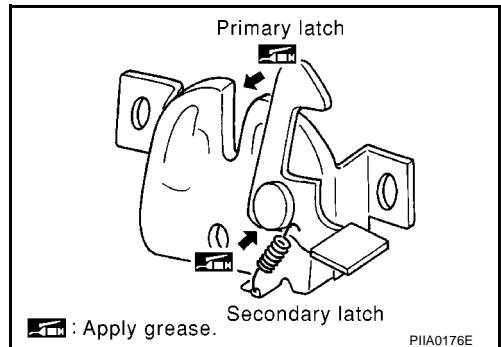
CAUTION:

If hood lock cable is bent or deformed, replace it.

1. Confirm hood lock secondary latch securely engages secondary striker by releasing it from a height of approximately 200 mm.
2. While operating the hood opener carefully, make sure the front end of the hood is lifted by approximately 20 mm. Also, make sure the hood opener returns to the original position.



3. Inspect hood lock grease, and if insufficient, apply grease to the area shown in the figure.



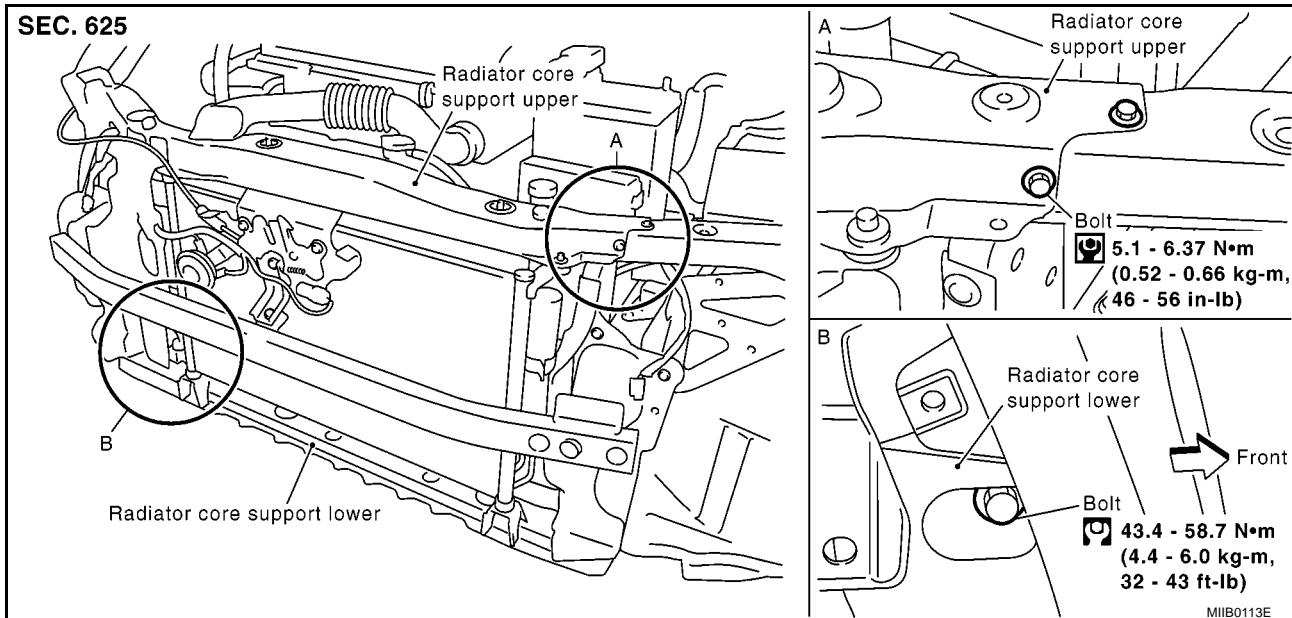
RADIATOR CORE SUPPORT

RADIATOR CORE SUPPORT

PFP:62500

Removal and Installation

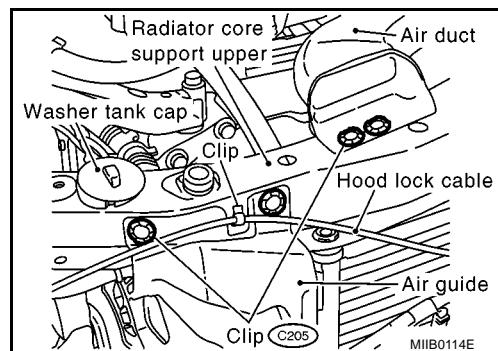
EIS004LN



REMOVAL

Radiator Core Upper Support

1. Remove headlamp (LH/RH). Refer to [LT-41, "Removal and Installation"](#).
2. Remove hood lock assembly and hood lock mounting reinforcement. Refer to [BL-10, "Removal and Installation of Hood Lock Control"](#).
3. Remove hood lock cable and air duct installation clips at top of air guide (RH).
4. Remove washer tank cap, and then pull washer tank inlet downward to pull it out.
5. Remove bolts, and then remove radiator core upper support.



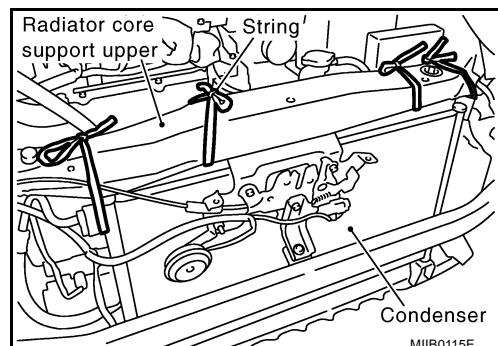
Radiator Core Lower Support

1. Remove front grille (LH/RH). Refer to [EI-11, "Removal and Installation"](#).
2. Remove installation clips on top of air guide (RH).
3. Remove front bumper lower clip. Refer to [EI-5, "Removal and Installation"](#).
4. Remove screws and clips and separate bumper fascia from fender protector left/right.
5. Tie cord to all radiator core upper supports of the radiator and condenser.

NOTE:

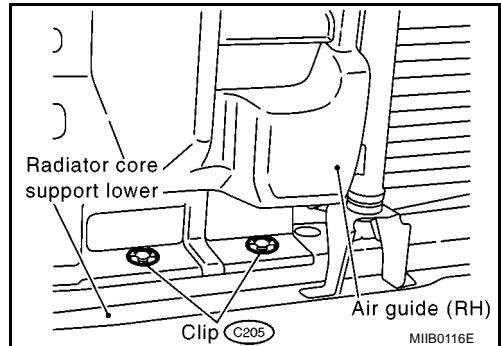
To prevent the compressor and radiator from being dropped when the radiator core lower support is removed.

6. Remove bolts, and lower radiator core lower supports.



RADIATOR CORE SUPPORT

7. Remove air guide (RH) bottom clips, and remove radiator core lower supports from passenger room.



INSTALLATION

Install in the reverse order of removal.

FRONT FENDER

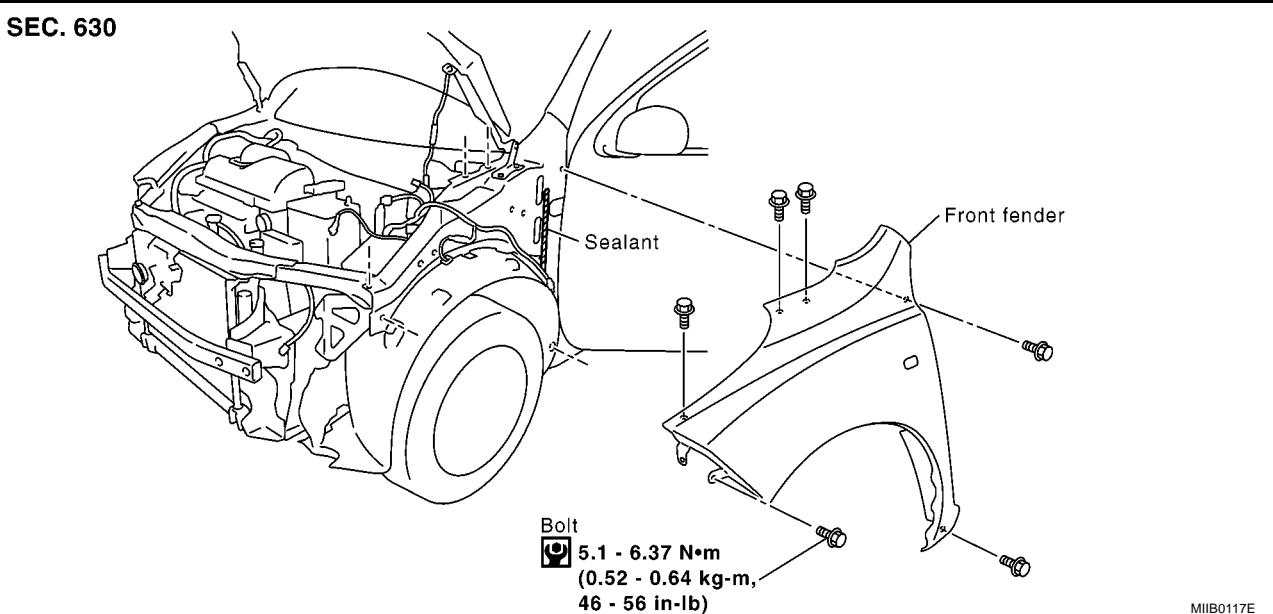
FRONT FENDER

PFP:63100

Removal and Installation

EIS004LO

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REMOVAL

1. Remove side turn signal lamp. Refer to [LT-168, "Removal and Installation"](#) .
2. Remove front bumper. Refer to [EI-5, "Removal and Installation"](#) .
3. Remove headlamps. Refer to [LT-41, "Removal and Installation"](#) .
4. Remove fender protector front fender side clips (2) and screws (3). Refer to [EI-14, "Removal and Installation"](#) .
5. Remove bolts and then front fender.

BL

INSTALLATION

Install in the reverse order of removal.

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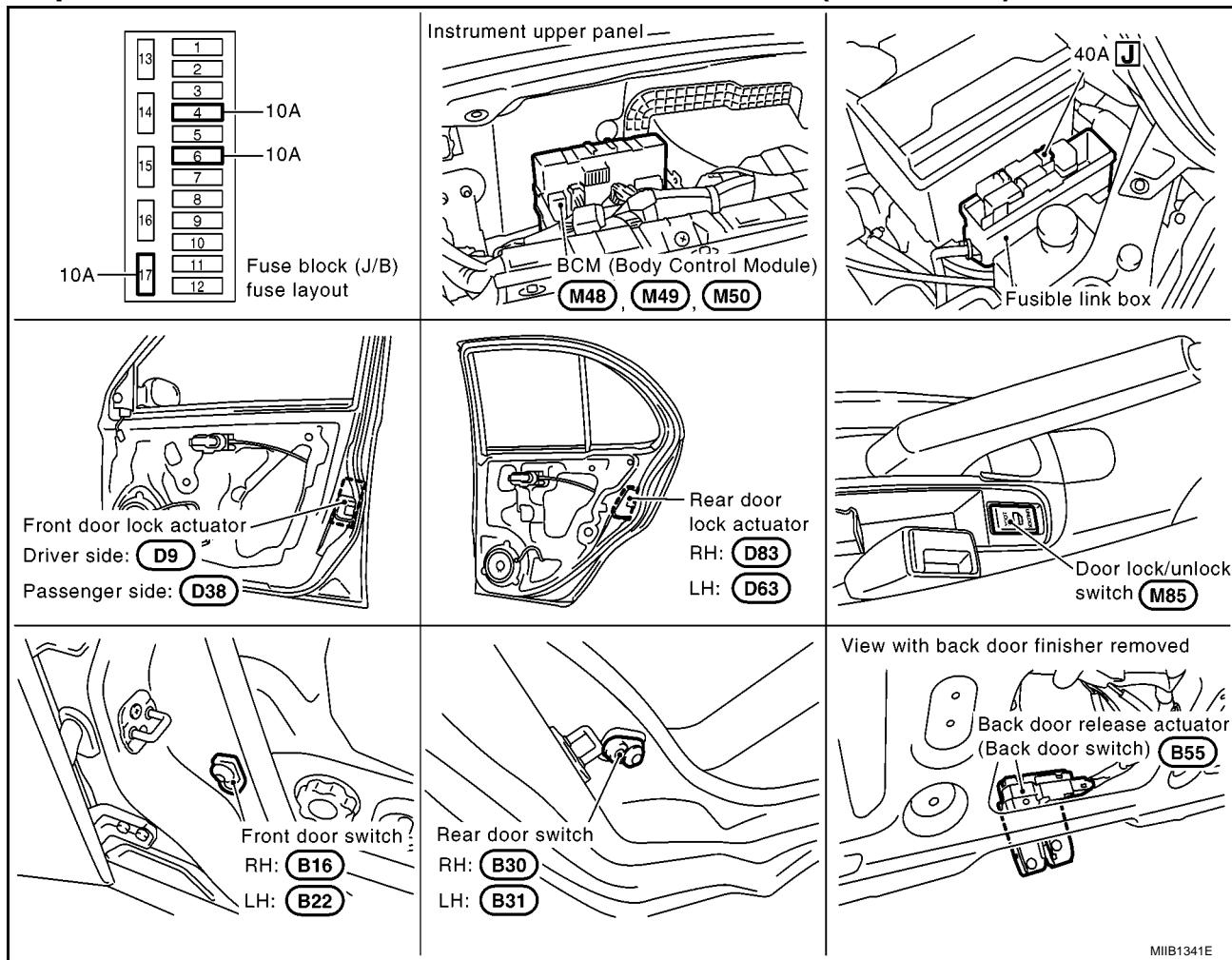
POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM

PFP:24814

Component Parts and Harness Connector Location (Hatchback)

EIS004X9



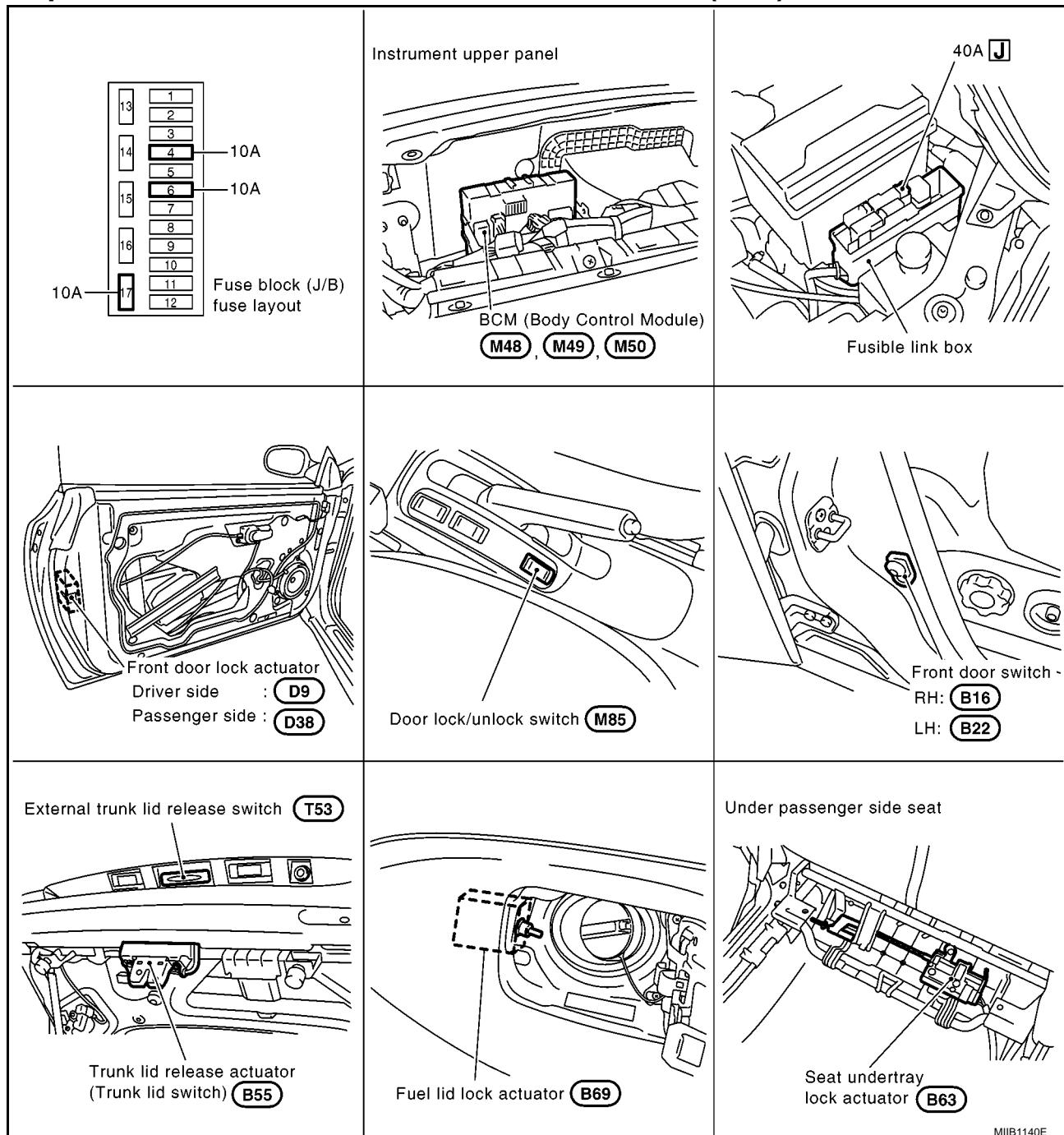
MIB1341E

POWER DOOR LOCK SYSTEM

Component Parts and Harness Connector Location (C+C)

EIS00E20

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MIIIB1140E

POWER DOOR LOCK SYSTEM

System Description OPERATION

EIS004X8

Power is supplied (Without Intelligent Key System)

- through to 40A fusible link (letter J , located in the fusible link box)
- to BCM terminal 74 and 79.
- through 10A fuse [No.6, located in the fuse box (J/B)]
- to key switch terminal 1.

Power is supplied (With Intelligent Key System)

- through to 40A fusible link (letter J , located in the fusible link box)
- to BCM terminal 74 and 79.
- through 10A fuse [No.17, located in the fuse box (J/B)]
- to key switch and ignition knob switch terminal 1 and 3.

When the key switch is ON (Ignition key is inserted in ignition key cylinder), power is supplied

- through key switch terminal 2
- to BCM terminal 3.

When the ignition switch is ON or START, power is supplied

- through 10A fuse [No. 4, located in the fuse block (J/B)]
- to BCM terminal 24.

Ground is supplied

- through BCM terminals 2 and 70
- to body ground M19 and M20.

When the front door switch LH (LHD Models) or RH (RHD Models) is ON (door is open), ground is supplied

- through BCM terminal 29
- through front door switch LH (LHD Models) or RH (RHD Models) terminal 1
- to front door switch LH (LHD Models) or RH (RHD Models) case ground.

When the front door switch RH (LHD Models) or LH (RHD Models) is ON (door is open), ground is supplied

- through BCM terminal 30
- through front door switch RH (LHD Models) or LH (RHD Models) terminal 1
- to front door switch RH (LHD Models) or LH (RHD Models) case ground.

When the rear door switch LH is ON (door is open), ground is supplied

- through BCM terminal 59 (5 door models)
- through rear door switch LH terminal 1
- to rear door switch LH case ground.

When the rear door switch RH is ON (door is open), ground is supplied

- through BCM terminal 60 (5 door models)
- through rear door switch RH terminal 1
- to rear door switch RH case ground.

DOOR LOCK AND UNLOCK SWITCH OPERATION

When door lock/unlock switch is in LOCK position, ground is supplied

- to body grounds M19 and M20
- through door lock/unlock switch terminal 4 and 6
- through BCM (Body Control Module) terminal 6.

With power and ground supplied, doors are locked.

When door lock/unlock switch is in UNLOCK position, ground is supplied

- to body grounds M19 and M20
- through door lock/unlock switch terminal 4 and 5
- through BCM (Body Control Module) terminal 25

With power and ground supplied, all doors are unlocked.

Lock/unlock switch indicated by LED when key in switch is on or on with timer.

POWER DOOR LOCK SYSTEM

SEAT UNDERTRAY LOCK ACTUATOR OPERATION

When door lock/unlock switch and seat undertray lock actuator is unlocked, ground is supplied

- through BCM terminal 76
- through seat undertray lock actuator terminal 1 and 2
- to BCM terminal 77.

When door lock/unlock switch and seat undertray lock actuator is locked, ground is supplied

- through BCM terminal 77
- through seat undertray lock actuator terminal 2 and 1
- to BCM terminal 76.

FUEL LID LOCK ACTUATOR OPERATION

When door lock/unlock switch and fuel lid lock actuator is unlocked, ground is supplied

- through BCM terminal 76
- through fuel lid lock actuator terminal 3 and 1
- to BCM terminal 77.

When door lock/unlock switch and fuel lid lock actuator is locked, ground is supplied

- through BCM terminal 77
- through fuel lid lock actuator terminal 1 and 3
- to BCM terminal 76.

EXTERNAL BACK DOOR RELEASE SWITCH OPERATION (HATCHBACK)

When the external back door release switch is turn on, external back door is opened

Ground is supplied

- through BCM terminal 5
- through external back door release switch terminal 1 and 2
- to body ground B44 and B51.

EXTERNAL BACK DOOR RELEASE ACTUATOR OPERATION

When the back door release actuator receives a release signal from BCM

Ground is supplied

- through BCM terminal 68
- through back door release actuator terminal 3 and 4
- to body ground B44 and B51.

BACK DOOR SWITCH OPERATION

When the back door switch is opened, ground is supplied

- through BCM terminal 10
- through back door switch terminal 1 and 2
- to body ground B44 and B51.

EXTERNAL TRUNK LID RELEASE SWITCH OPERATION (C+C)

When the external trunk lid release switch is turn on, external trunk lid is opened

- through BCM terminal 5
- through external trunk lid release switch terminal 2 and 1
- to body ground B17, B23 and B81.

TRUNK LID RELEASE ACTUATOR OPERATION

When the trunk lid release actuator receives a release signal from BCM

- through BCM terminal 68
- through trunk lid release actuator terminal 3 and 4
- to body ground B17, B23 and B81.

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POWER DOOR LOCK SYSTEM

TRUNK LID SWITCH OPERATION

When the trunk lid switch is opened, ground is supplied

- through BCM terminal 10
- through trunk lid switch terminal 1 and 2
- to body ground B17, B23 and B81.

KEY REMINDER SYSTEM

If the ignition key is in the ignition key cylinder and driver door is open, setting door lock/unlock switch, key or remote controller to "LOCK" locks the door once but then immediately unlocks all doors.

SEAT UNDERTRAY

The seat undertray lock function is dedicated to C+C models, it is located under the passenger side seat as a lockable tray, it provides additional security for convertible car user to prevent invasion through vehicle rooftop, the undertray lock function reacts with the door lock and unlock simultaneously.

UNLOCK LINK FUNCTION

When this function is activated, if the car is locked by door lock/unlock switch, opening the driver or passenger side door from the inside handle will override the lock state and unlock the whole car.

(This function will be deactivate if anti-hijack function is activated.)

Selectable Function

	Door Lock/unlock switch
How to change setting	Press unlock for more than 4 seconds
Contents	Unlock link activate/deactivate
How to confirm	Buzzer should sound for 0.2 seconds

BACK DOOR OPENER OPERATION

Back door can be opened with back door switch: When all door are unlocked, or When back door request switch is pushed (With Intelligent Key system).

AUTO RE-LOCK FUNCTION

The BCM is equipped with an auto re-lock function, when no further user action occurs after an full or partial unlock, the doors will automatically re-lock after 2 minutes (default value). The 2 minutes timer of auto re-lock will be reset if unlock button from the key fob is pressed. The auto re-lock function will not be activated under the following states.

- Key switch is ON
- Mechanical key is inserted
- Any door is opened

NOTE:

For the Intelligent Key system models, this function will be deactivated.

ANTI-HIJACK FUNCTION

With the anti-hijack function enabled, the first unlock request send from key fob will partially unlock only the driver side door (released super lock if equipped). Then if a second unlock signal is send, then all remaining doors will be unlocked.

POWER DOOR LOCK SYSTEM

CAN Communication SYSTEM DESCRIPTION

EIS00DXU

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

EIS00E75

Body type	3door/5door	3door/5door/C+C	3door/5door	3door/5door/C+C	3door/5door
Axle	2WD				
Engine	CR12DE/CR14DE	HR16DE	CR12DE/CR14DE	HR16DE	K9K
Handle	LHD/RHD				
Brake control	ABS			ESP	
Transmission	A/T	M/T	A/T	M/T	
Intelligent Key system	×	×	×	×	×

CAN communication unit

ECM	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Data link connector	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Combination meter	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Intelligent Key unit	×		×		×		×		×		×		×	
EPS control unit	×	×	×	×	×	×	×	×	×	×	×	×	×	×
BCM	×	×	×	×	×	×	×	×	×	×	×	×	×	×
ABS actuator and electric unit (control unit)	×	×	×	×	×	×	×	×	×	×	×	×	×	×
TCM	×	×					×	×						
IPDM E/R	×	×	×	×	×	×	×	×	×	×	×	×	×	×
CAN communication type	<u>BL-22. "TYPE 1/ TYPE 2"</u>		<u>BL-25. "TYPE 3/TYPE 4/ TYPE 5/TYPE 6"</u>			<u>BL-27. "TYPE 7/ TYPE 8"</u>		<u>BL-30. "TYPE 9/TYPE 10/ TYPE 11/TYPE 12"</u>			<u>BL-32. "TYPE 13/ TYPE 14"</u>			

×: Applicable

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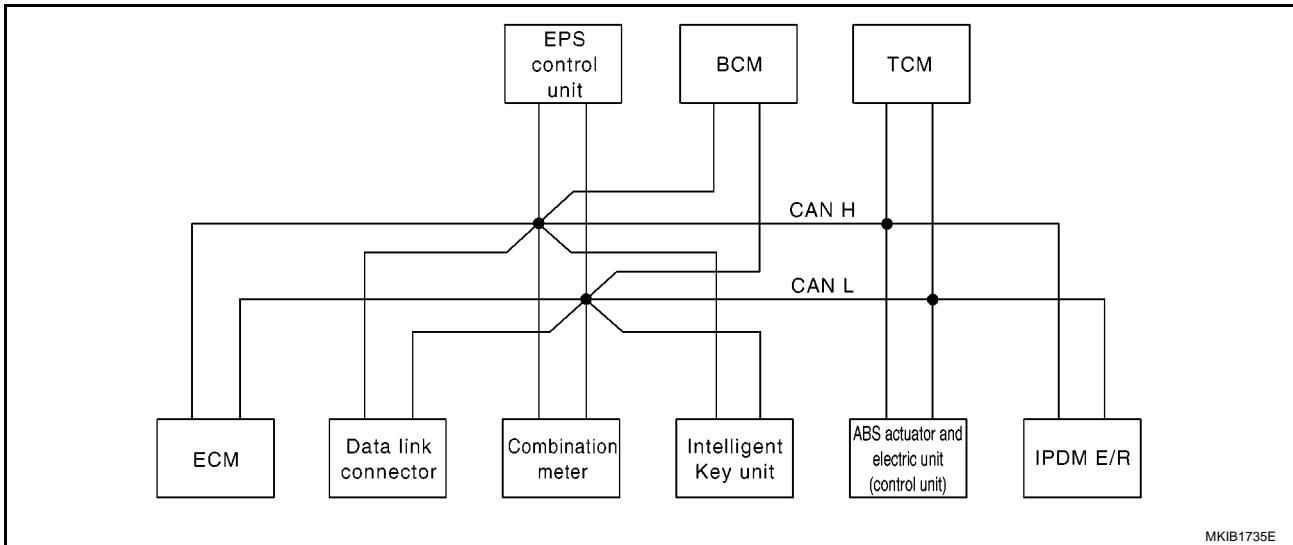
M

POWER DOOR LOCK SYSTEM

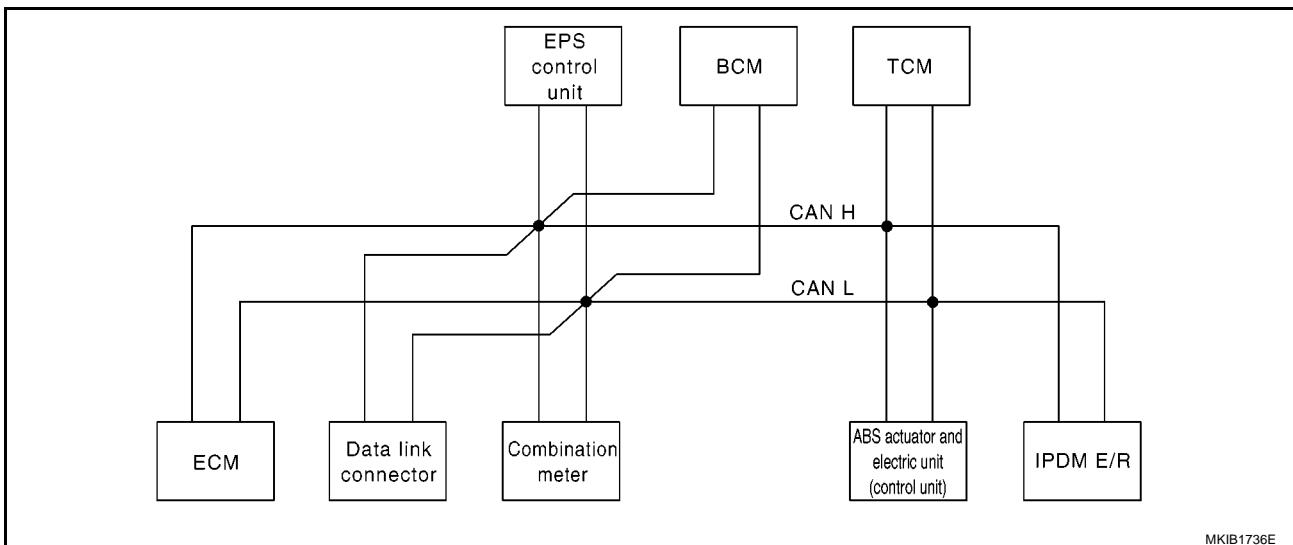
TYPE 1/TYPE 2

System diagram

- Type 1



- Type 2



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actu-ator and electric unit (control unit)	TCM	IPDM E/R
Engine speed signal	T	R						
Engine coolant temperature signal	T	R						
A/T self-diagnosis signal	R						T	
Output shaft revolution signal	R						T	
Accelerator pedal position signal	T						R	
Closed throttle position signal	T						R	
Wide open throttle position signal	T						R	
Overdrive control switch signal		T					R	

POWER DOOR LOCK SYSTEM

Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actua-tor and electric unit (control unit)	TCM	IPDM E/R
A/T position indicator signal		R					T	
Stop lamp switch signal		T					R	
O/D OFF indicator signal		R					T	
Engine and A/T integrated control signal	T						R	
	R						T	
Fuel consumption monitor signal	T	R						
Oil pressure switch signal		R						T
A/C compressor request signal	T							R
Heater fan switch signal	R				T			
Cooling fan speed request signal	T							R
Position lights request signal		R			T			R
Low beam request signal					T			R
Low beam status signal	R							T
High beam request signal		R			T			R
High beam status signal	R							T
Day time light request signal					T			R
Vehicle speed signal	R	R		R		T		
	R	T	R	R	R			
Sleep/wake up signal		R	R		T			R
Door switch signal		R	R		T			R
Turn indicator signal		R			T			
Buzzer output signal		R			T			
		R	T					
MI signal	T	R						
Front wiper request signal					T			R
Front wiper stop position signal					R			T
Rear window defogger switch signal					T			R
Rear window defogger control signal	R							T
EPS warning lamp signal		R		T				
ABS warning lamp signal		R				T		
Brake warning lamp signal		R				T		
Back-up lamp signal				R	T			
Front fog lamp request signal		R			T			R
Rear fog lamp status signal		R			T			
Headlamp washer request signal					T			R
Door lock/unlock request signal			T		R			
Door lock/unlock status signal			R		T			
KEY indicator signal		R	T					
LOCK indicator signal		R	T					
Engine status signal	T			R				

POWER DOOR LOCK SYSTEM

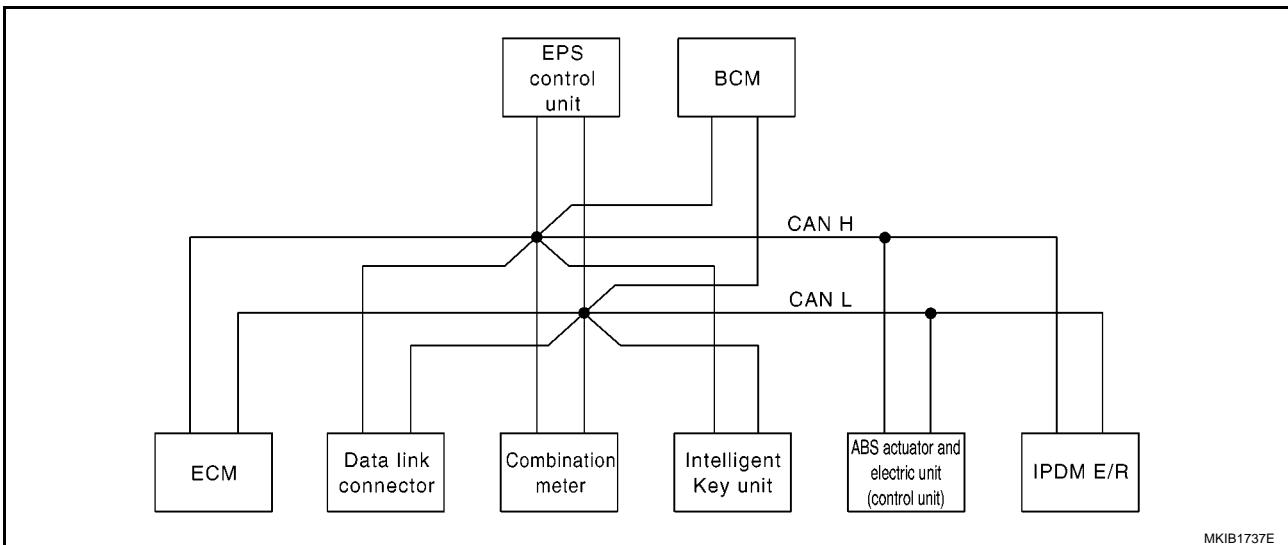
Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actua-tor and electric unit (control unit)	TCM	IPDM E/R
A/C switch signal	R				T			
Brake system malfunction signal		T		R				
Parking brake switch signal		T		R				
R range signal					R			T

POWER DOOR LOCK SYSTEM

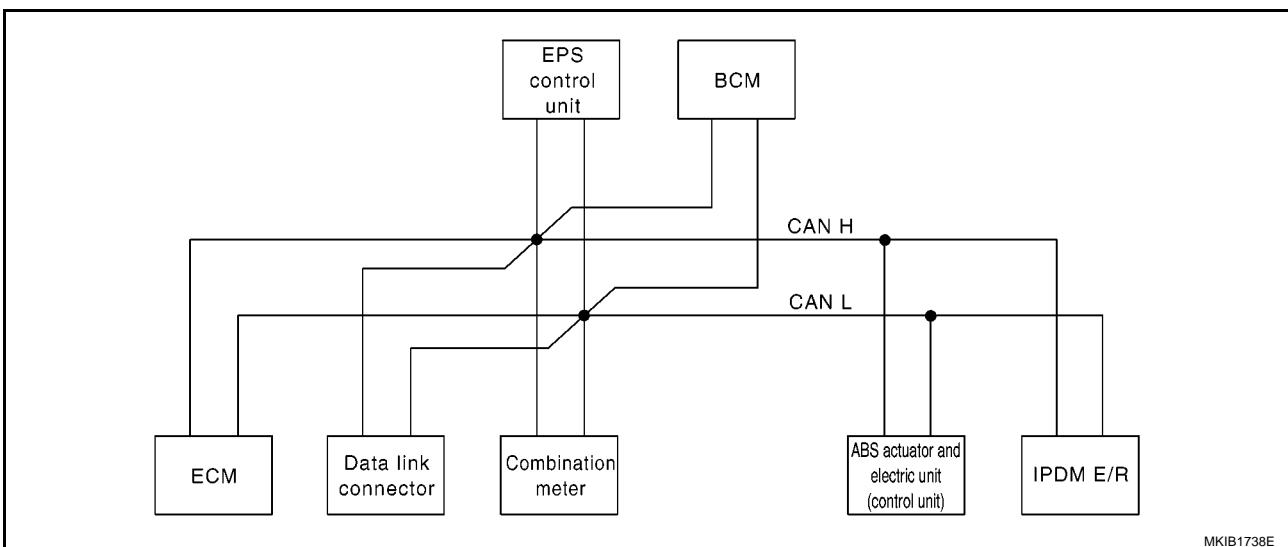
TYPE 3/TYPE 4/TYPE 5/TYPE 6

System diagram

- Type 3/Type 5



- Type 4/Type 6



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Engine speed signal	T	R					
Engine coolant temperature signal	T	R					
Fuel consumption monitor signal	T	R					
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R
Low beam request signal					T		R

POWER DOOR LOCK SYSTEM

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Low beam status signal	R						T
High beam request signal		R			T		R
High beam status signal	R						T
Day time light request signal					T		R
Vehicle speed signal	R	R		R		T	
	R	T	R	R	R		
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
Rear window defogger control signal	R						T
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
A/C switch signal	R				T		
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
R range signal					R		T
Retractable hard top warning lamp signal*		R			T		

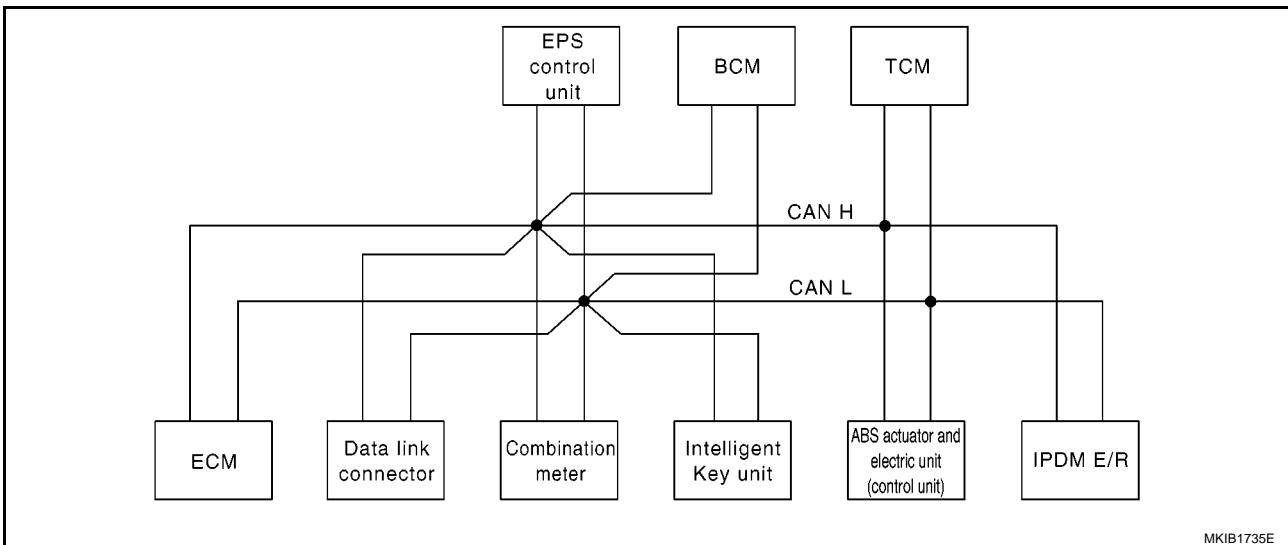
*: C+C only

POWER DOOR LOCK SYSTEM

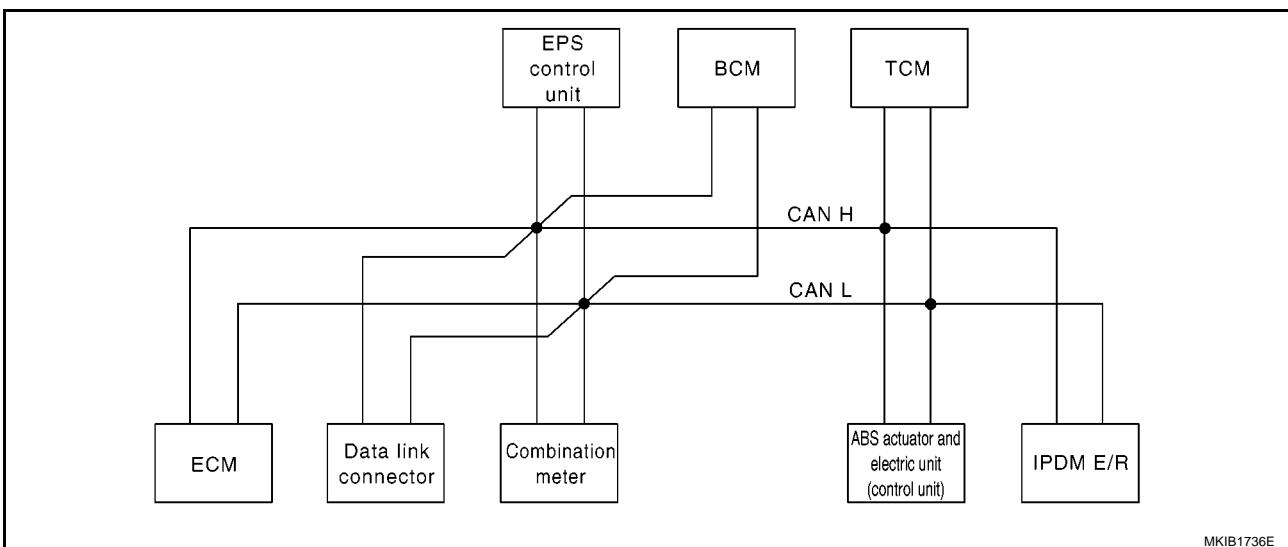
TYPE 7/TYPE 8

System diagram

- Type 7



- Type 8



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
Engine speed signal	T	R				R		
Engine coolant temperature signal	T	R						
A/T self-diagnosis signal	R						T	
Output shaft revolution signal	R						T	
Accelerator pedal position signal	T					R	R	
Closed throttle position signal	T						R	
Wide open throttle position signal	T						R	
Overdrive control switch signal		T					R	
A/T position indicator signal		R					T	

POWER DOOR LOCK SYSTEM

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
A/T shift schedule change demand signal						T	R	
Stop lamp switch signal		T					R	
O/D OFF indicator lamp signal		R					T	
Engine and A/T integrated control signal	T						R	
	R						T	
Fuel consumption monitor signal	T	R						
Oil pressure switch signal		R						T
A/C compressor request signal	T							R
Heater fan switch signal	R				T			
Cooling fan speed request signal	T							R
Position lights request signal		R			T			R
Low beam request signal					T			R
Low beam status signal	R							T
High beam request signal		R			T			R
High beam status signal	R							T
Day time light request signal					T			R
Vehicle speed signal	R	R		R		T		
	R	T	R	R	R			
Sleep/wake up signal		R	R		T			R
Door switch signal		R	R		T			R
Turn indicator signal		R			T			
Buzzer output signal		R			T			
		R	T					
MI signal	T	R						
Front wiper request signal					T			R
Front wiper stop position signal					R			T
Rear window defogger switch signal					T			R
Rear window defogger control signal	R							T
EPS warning lamp signal		R		T				
ABS warning lamp signal		R				T		
ESP warning lamp signal		R				T		
ESP OFF indicator signal		R				T		
SLIP indicator lamp signal		R				T		
Steering angle signal				T		R		
Brake warning lamp signal		R				T		
Back-up lamp signal				R	T			
Front fog lamp request signal		R			T			R
Rear fog lamp status signal		R			T			
Headlamp washer request signal					T			R
Door lock/unlock request signal			T		R			

POWER DOOR LOCK SYSTEM

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
Door lock/unlock status signal			R		T			
KEY indicator signal		R	T					
LOCK indicator signal		R	T					
Engine status signal	T			R				
A/C switch signal	R				T			
A/T torque signal						R	T	
Brake system malfunction signal		T		R				
Parking brake switch signal		T		R				
R range signal					R			T

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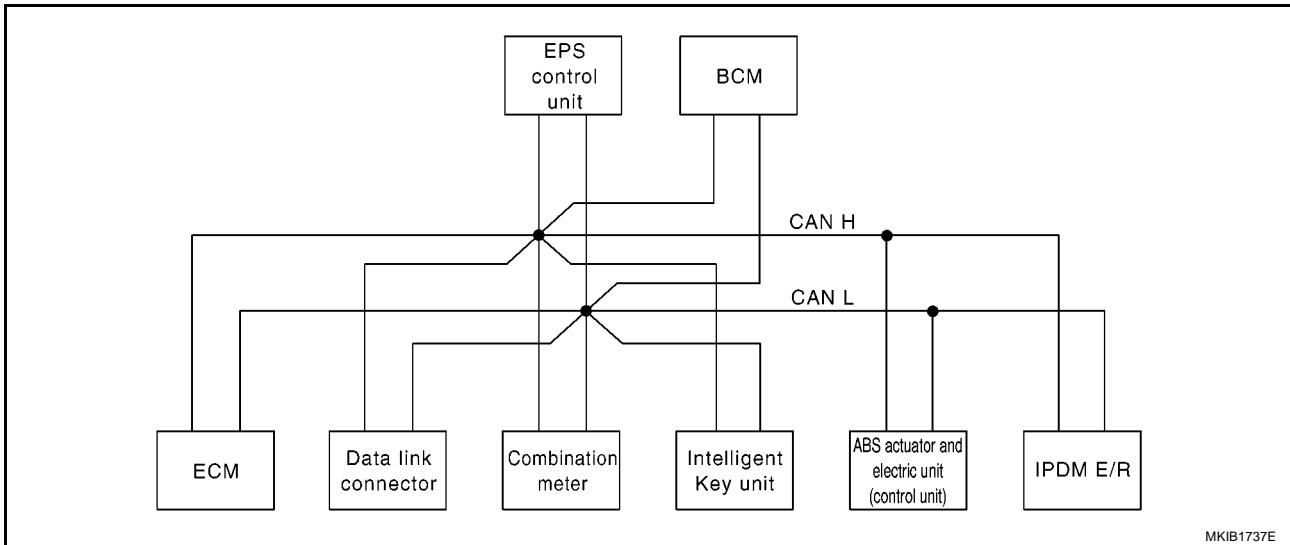
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POWER DOOR LOCK SYSTEM

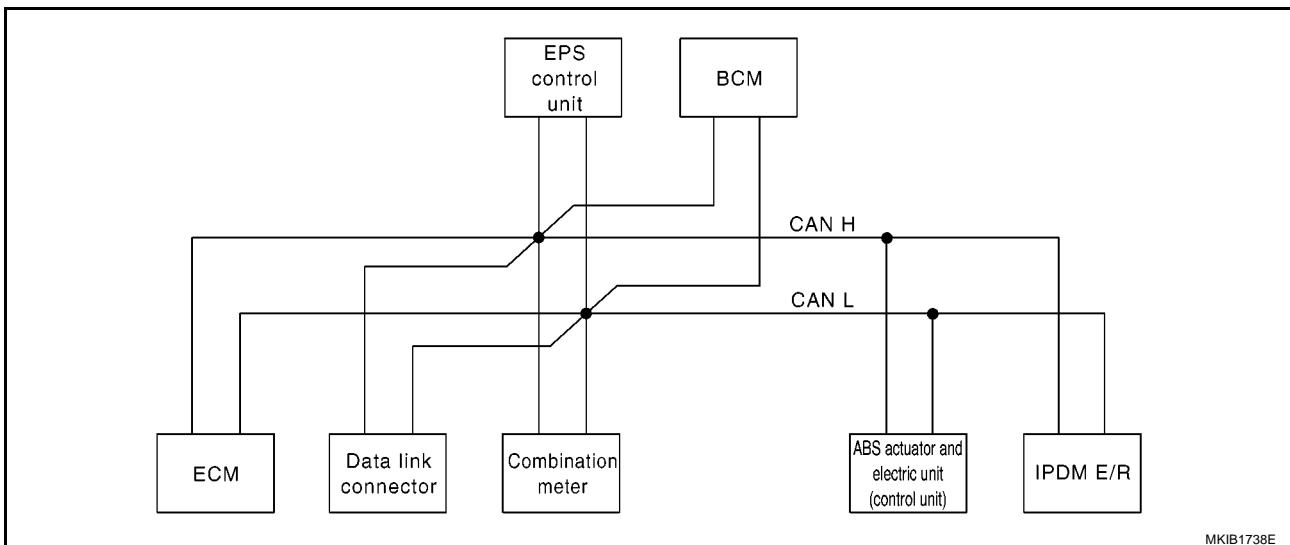
TYPE 9/TYPE 10/TYPE 11/TYPE 12

System diagram

- Type 9/Type 11



- Type 10/Type 12



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina- tion meter.	Intelligent Key unit	EPS con- trol unit	BCM	ABS actu- ator and electric unit (con- trol unit)	IPDM E/R
Engine speed signal	T	R				R	
Engine coolant temperature signal	T	R					
Fuel consumption monitor signal	T	R					
Accelerator pedal position signal	T					R	
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R

POWER DOOR LOCK SYSTEM

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Low beam request signal					T		R
Low beam status signal	R						T
High beam request signal		R			T		R
High beam status signal	R						T
Day time light request signal					T		R
Vehicle speed signal	R	R		R		T	
	R	T	R	R	R		
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
Rear window defogger control signal	R						T
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
ESP warning lamp signal		R				T	
ESP OFF indicator signal		R				T	
SLIP indicator lamp signal		R				T	
Steering angle signal				T			R
Brake warning lamp signal		R					T
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
A/C switch signal	R				T		
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
R range signal					R		T
Retractable hard top warning lamp signal*		R			T		

*: C+C only

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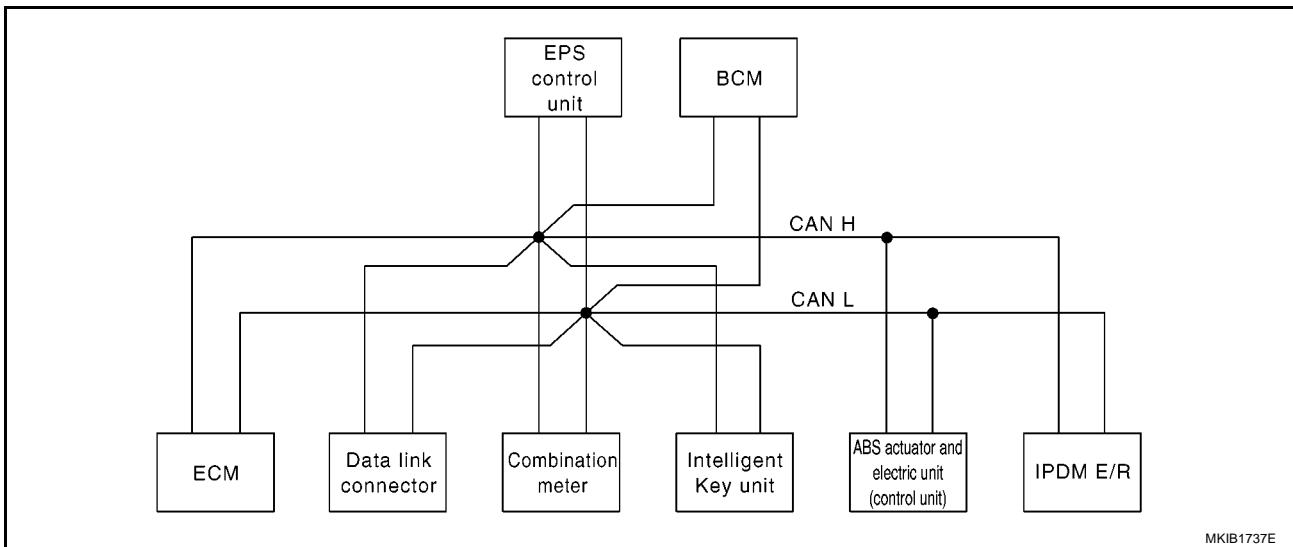
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POWER DOOR LOCK SYSTEM

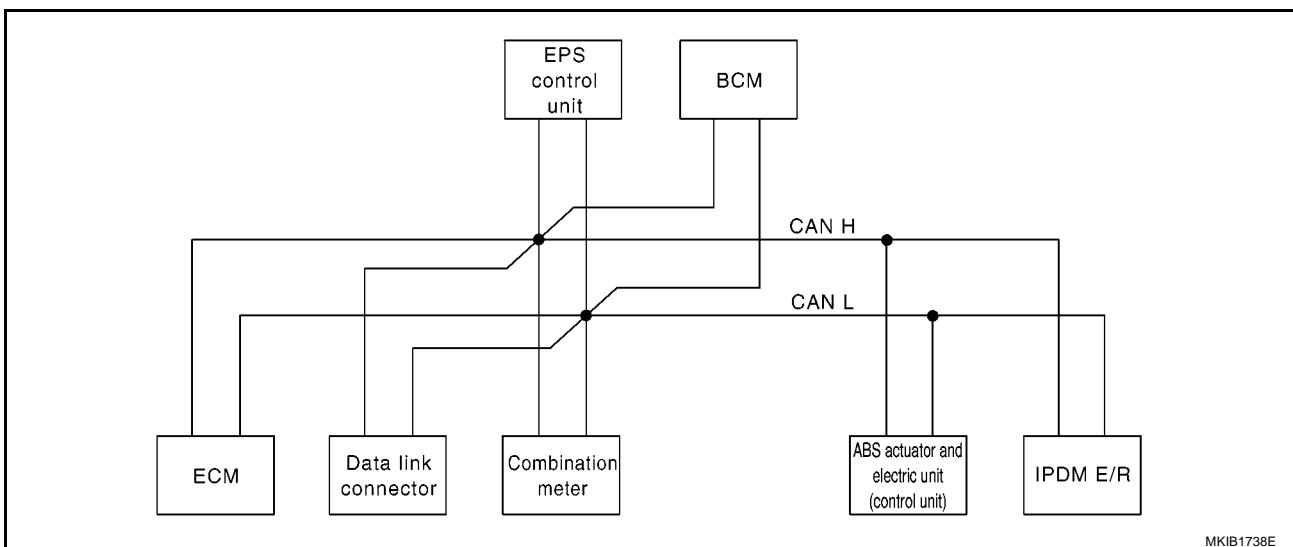
TYPE 13/TYPE 14

System diagram

- Type 13



- Type 14



POWER DOOR LOCK SYSTEM

Input/output signal chart

T: Transmit R: Receive

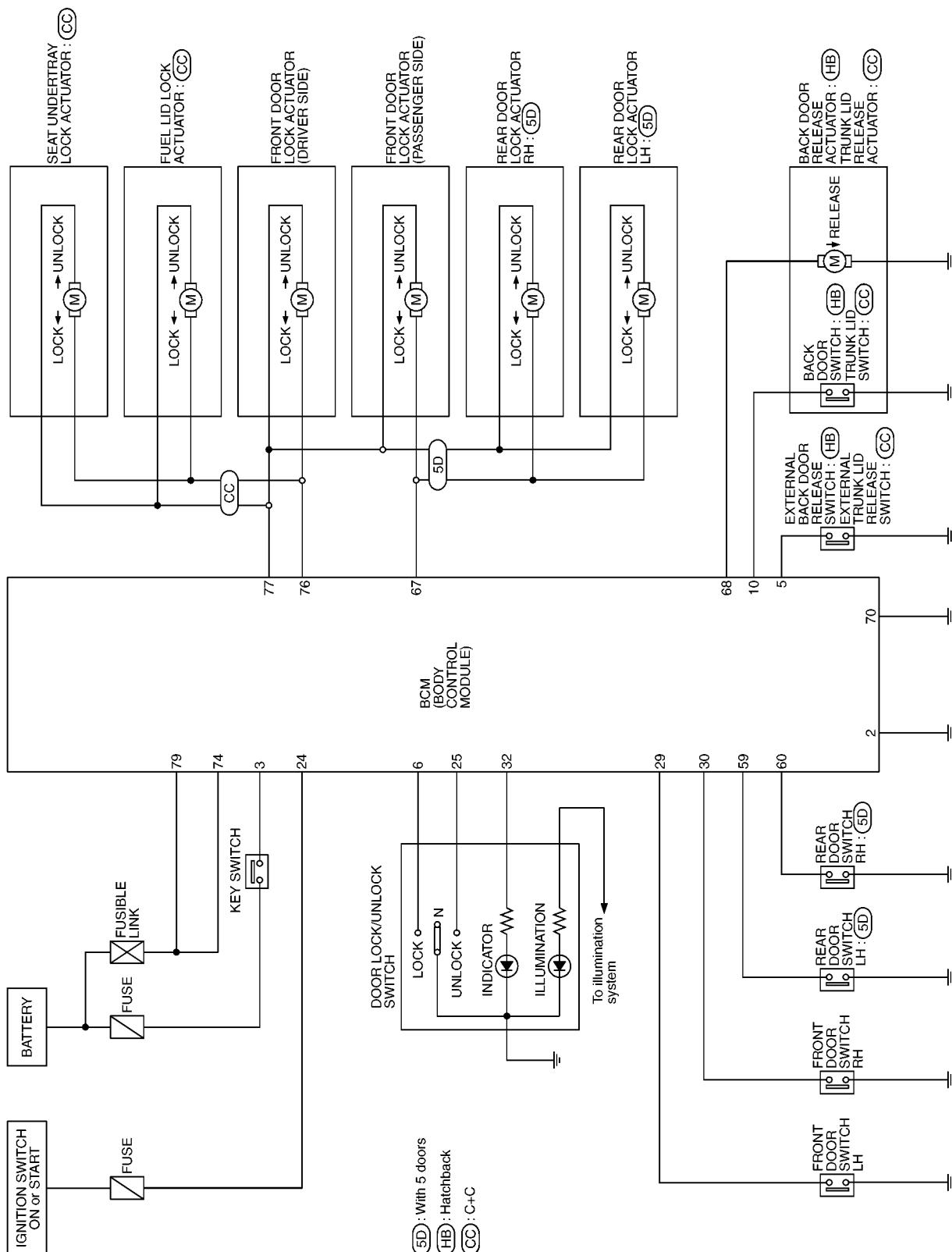
Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Engine speed signal	T	R					
Engine coolant temperature signal	T	R			R		
Fuel consumption monitor signal	T	R					
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R
Low beam request signal					T		R
High beam request signal		R			T		R
Day time light request signal					T		R
Vehicle speed signal	R	R		R	R	T	
	R	T	R	R			
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
Glow indicator signal	T	R					
R range signal					R		T

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POWER DOOR LOCK SYSTEM

Schematic – D/LOCK – (Without Intelligent Key System)

EIS00550



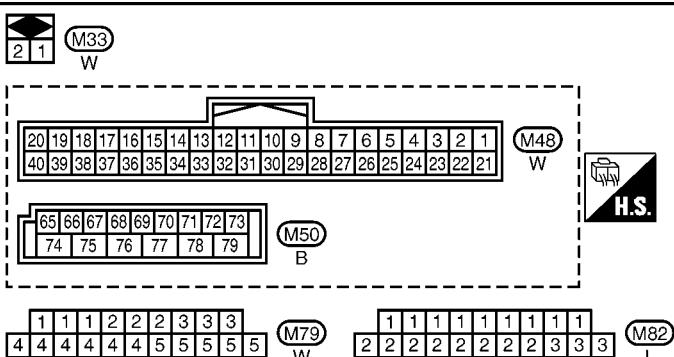
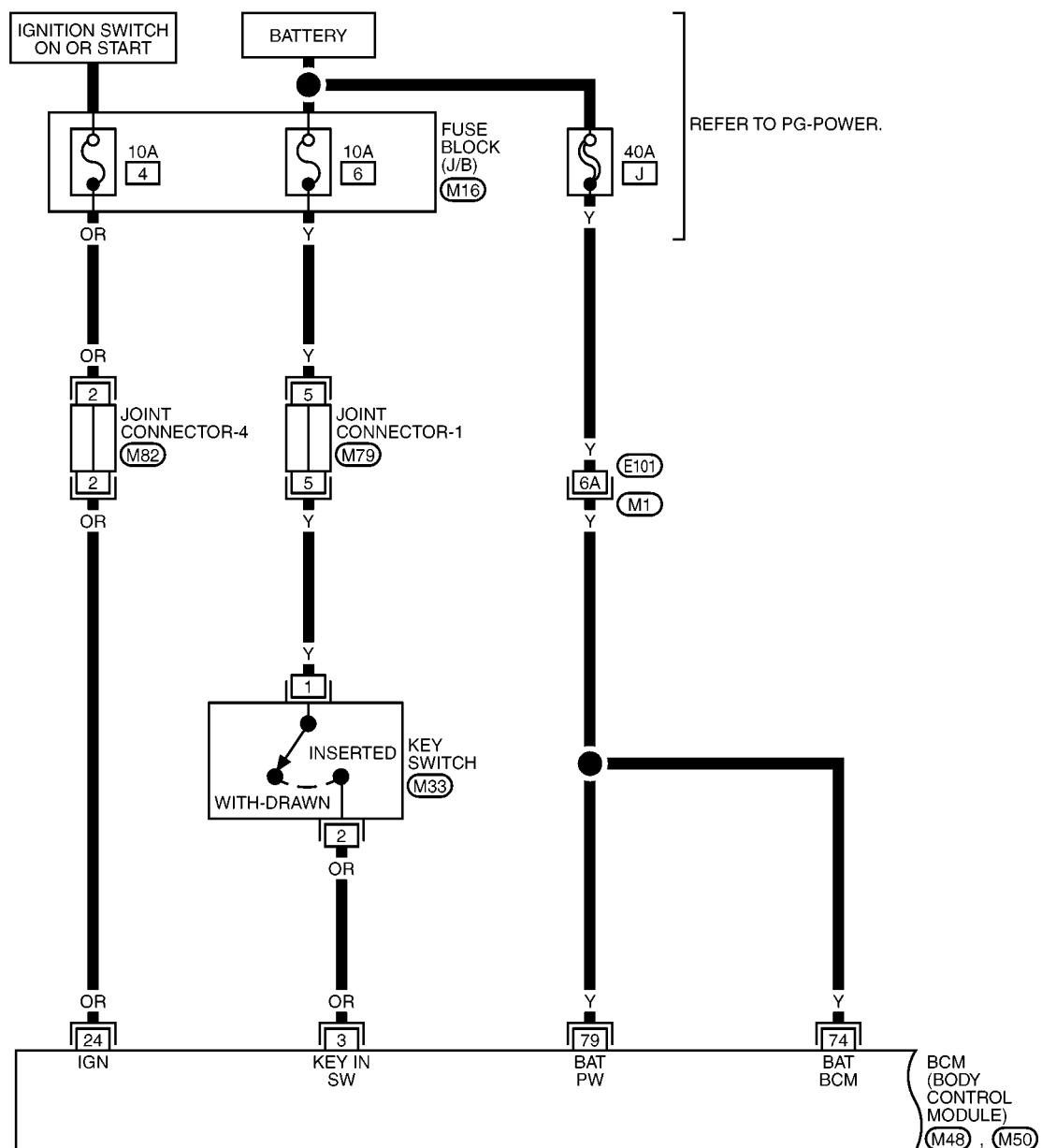
MIWA0602E

POWER DOOR LOCK SYSTEM

Wiring Diagram — D/LOCK — (Without Intelligent Key System)

EIS00551

BL-D/LOCK-01



REFER TO THE FOLLOWING.

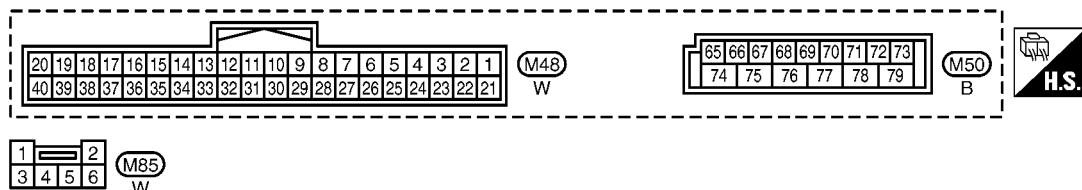
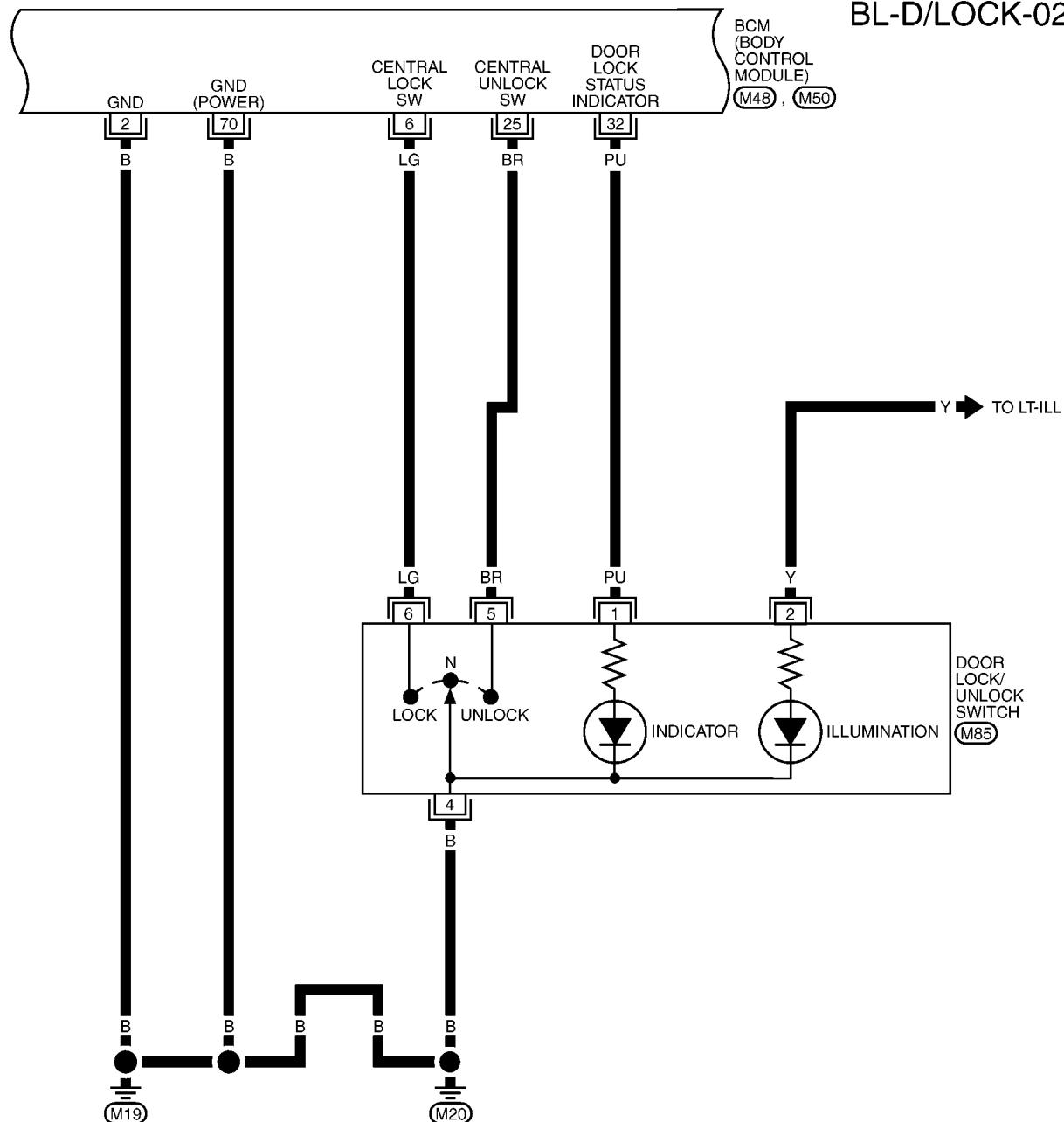
M1 -SUPER MULTIPLE

JUNCTION (SMJ)

(M16) -FUSE BLOCK-

POWER DOOR LOCK SYSTEM

BL-D/LOCK-02

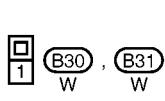
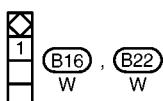
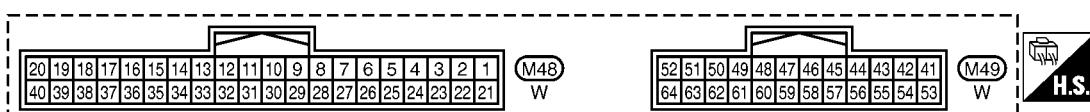
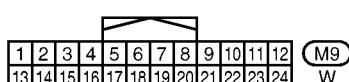
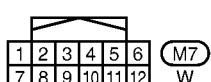
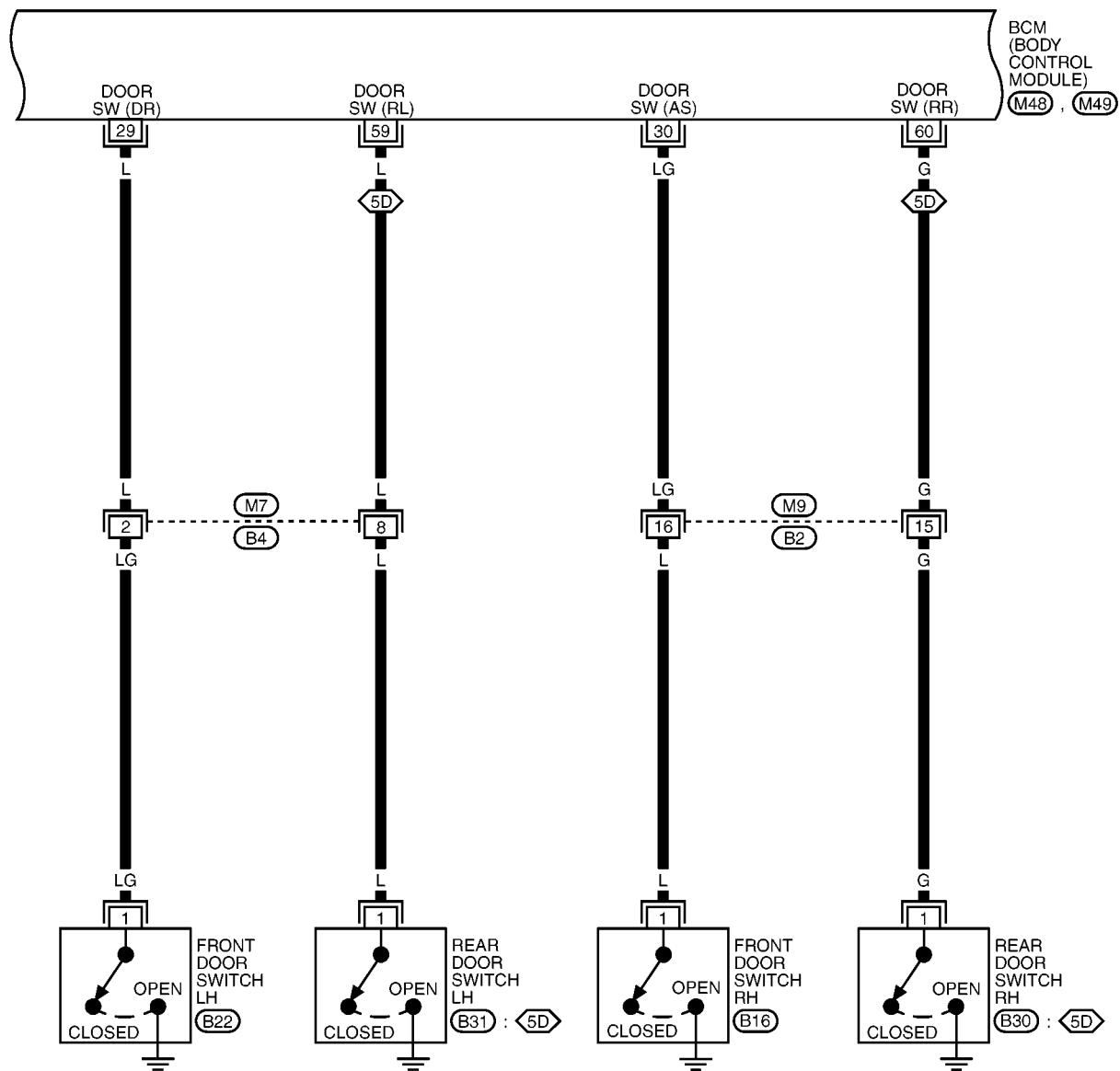


MIWA0517E

POWER DOOR LOCK SYSTEM

BL-D/LOCK-03

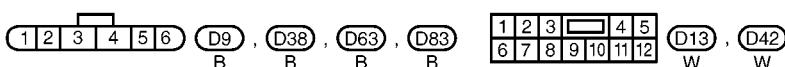
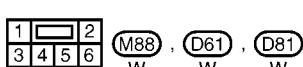
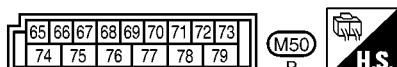
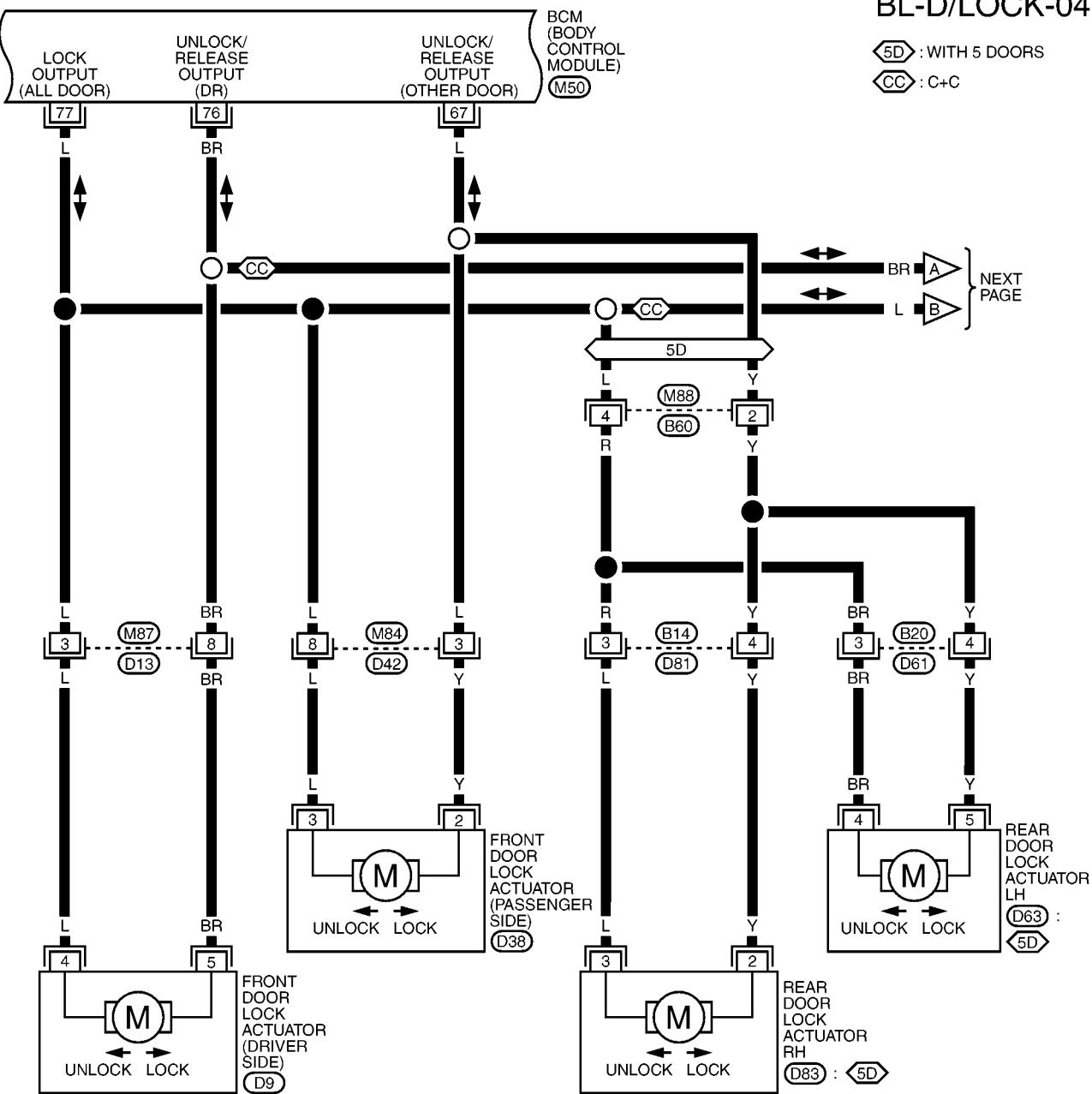
 : WITH 5 DOORS



POWER DOOR LOCK SYSTEM

BL-D/LOCK-04

◆ 5D : WITH 5 DOORS
◆ CC : C+C

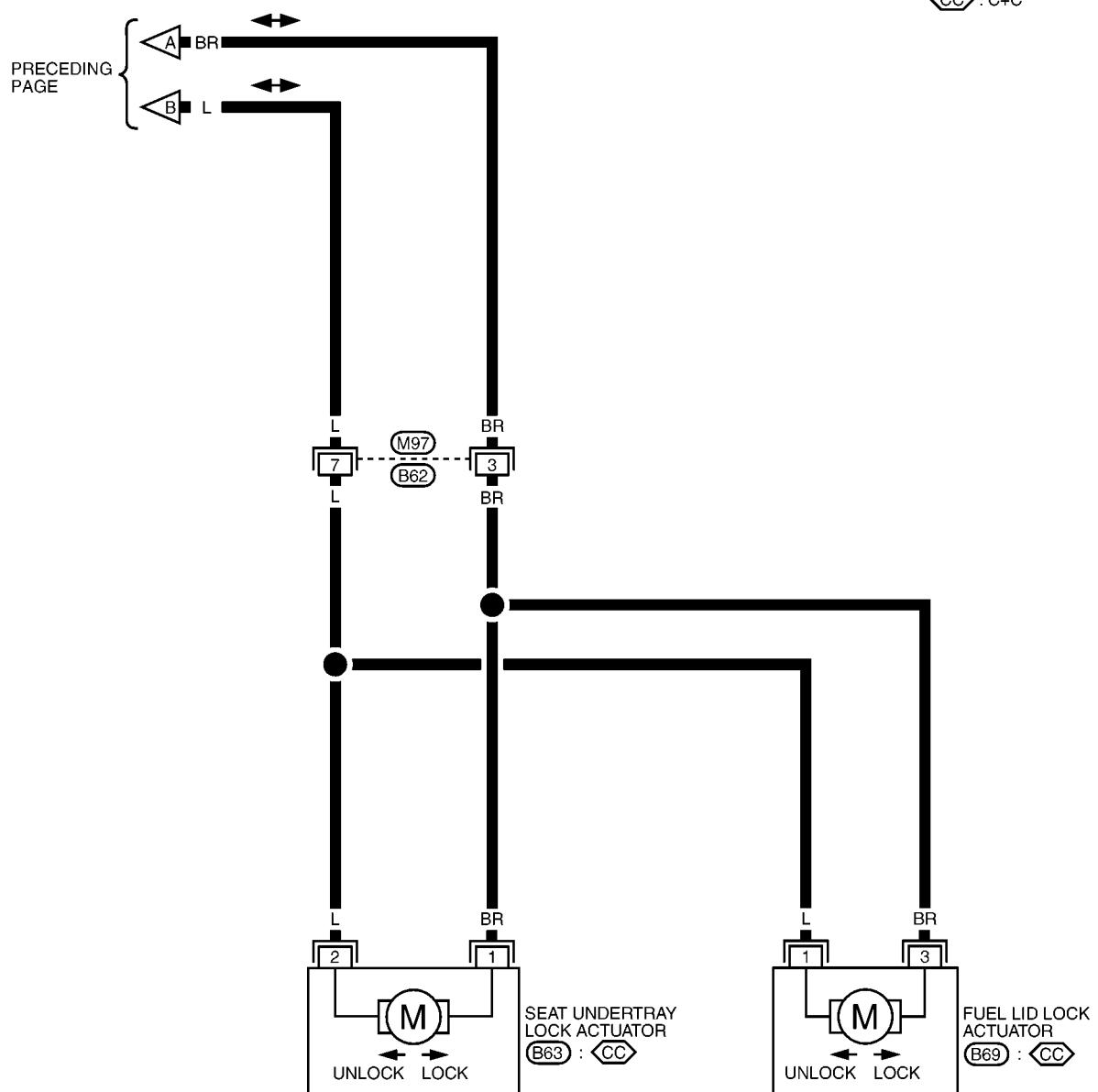


MIWA0603E

POWER DOOR LOCK SYSTEM

BL-D/LOCK-05

 C+C



1 2  3 4
5 6 7 8 9 10  M97
W

 1 2 B63
W

 1 2 3 B69

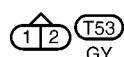
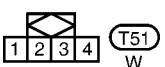
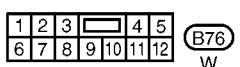
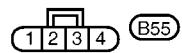
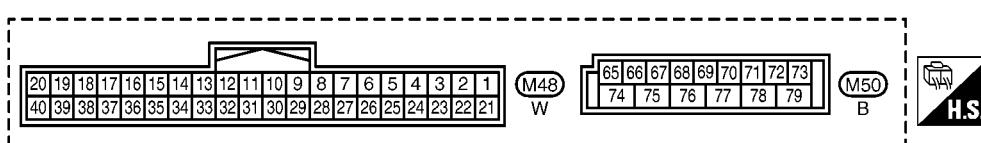
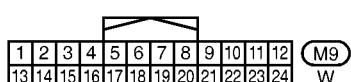
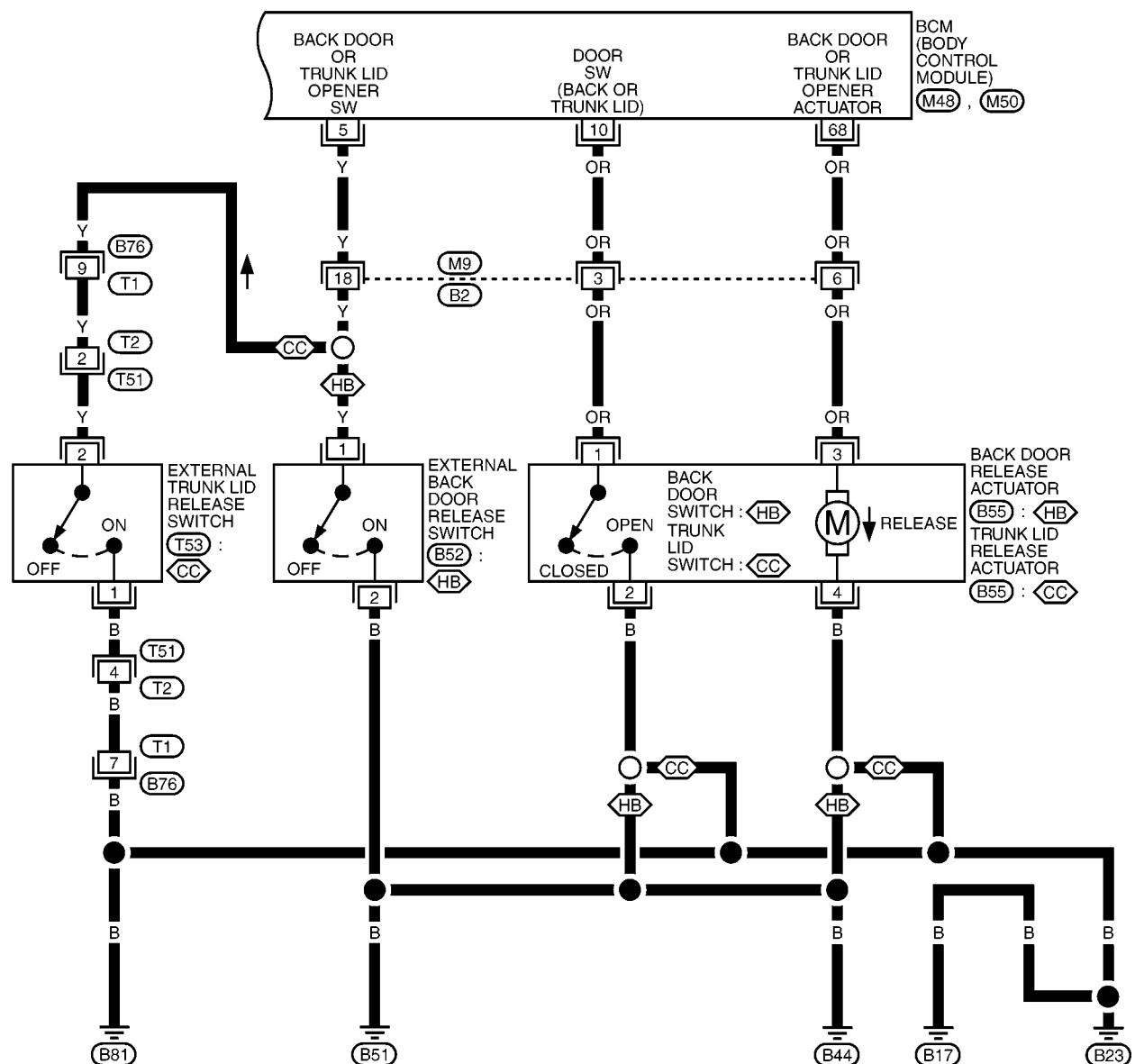
MIWA0604E

POWER DOOR LOCK SYSTEM

BL-D/LOCK-06

: HATCHBACK

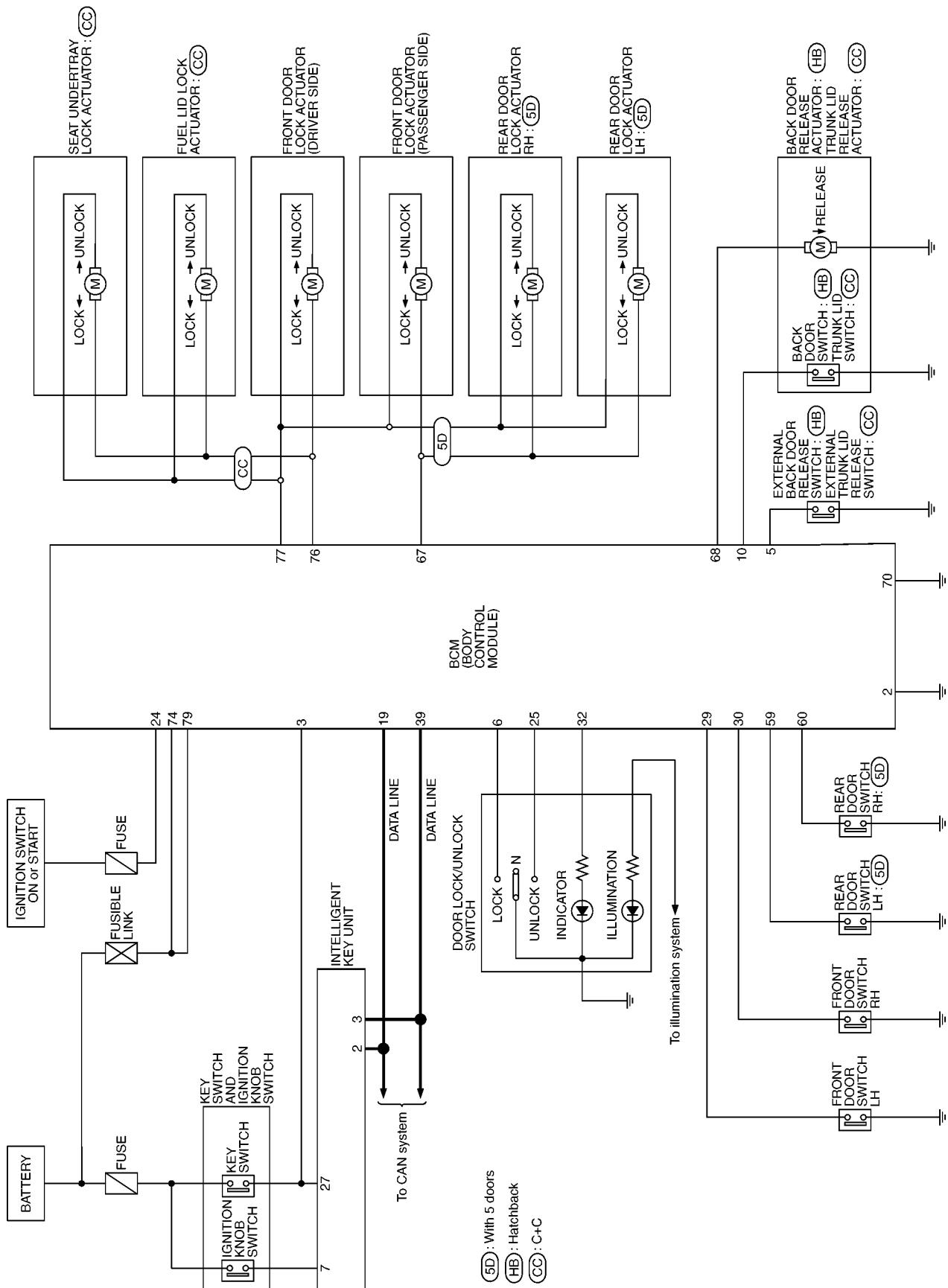
: C+C



POWER DOOR LOCK SYSTEM

Schematic – D/LOCK – (With Intelligent Key System)

EIS00552



MIWA0606E

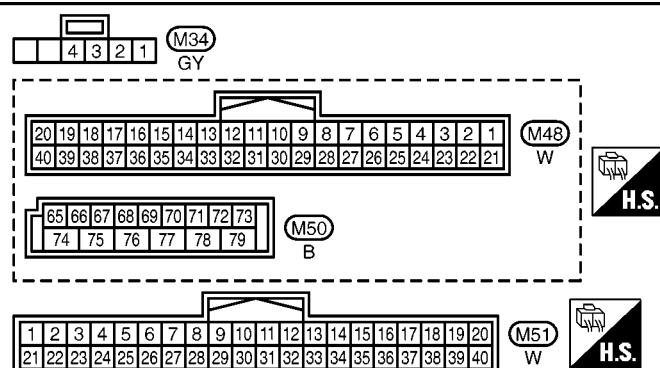
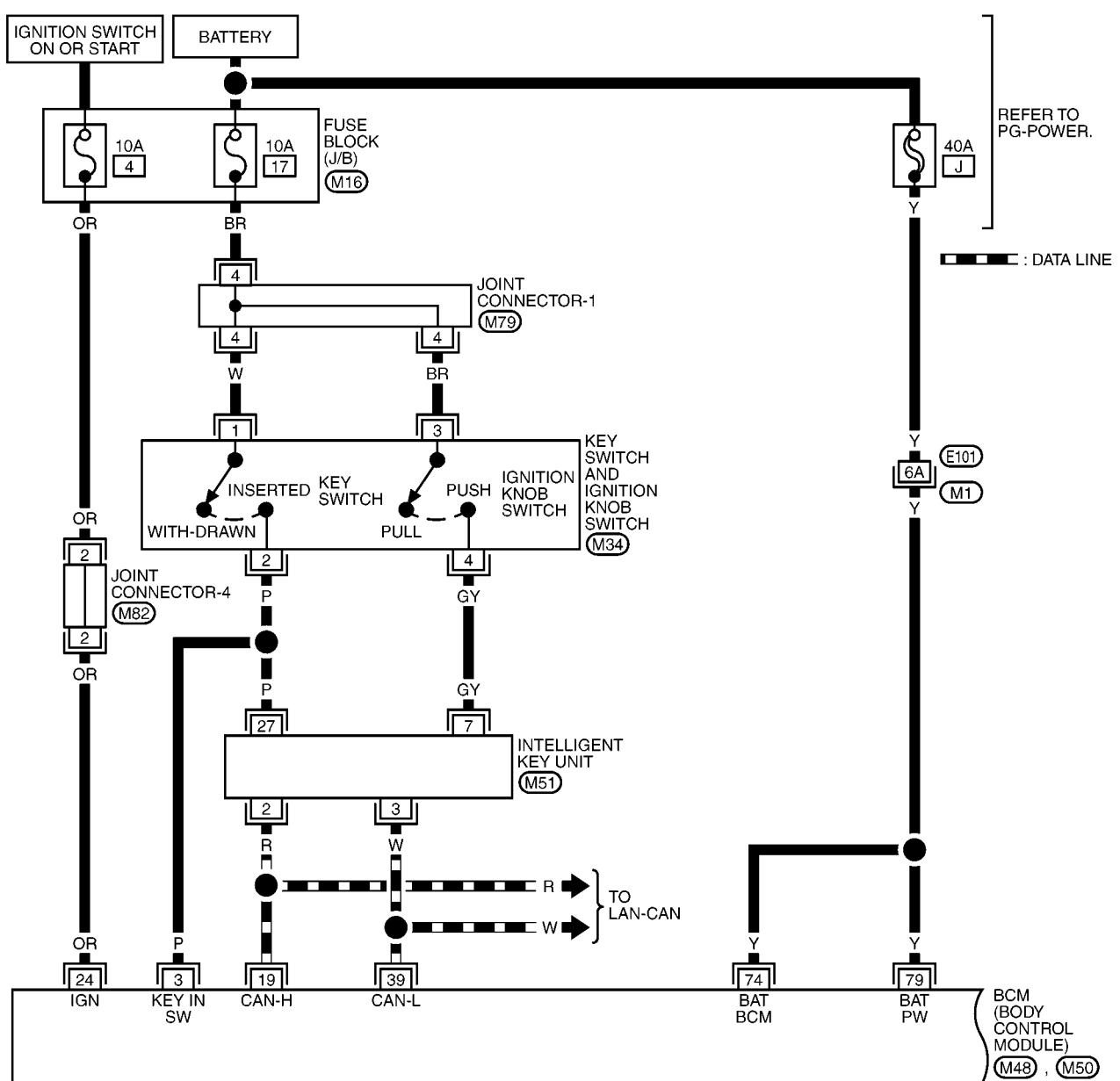
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POWER DOOR LOCK SYSTEM

Wiring Diagram — D/LOCK — (With Intelligent Key System)

EIS00553

BL-D/LOCK-07



REFER TO THE FOLLOWING.

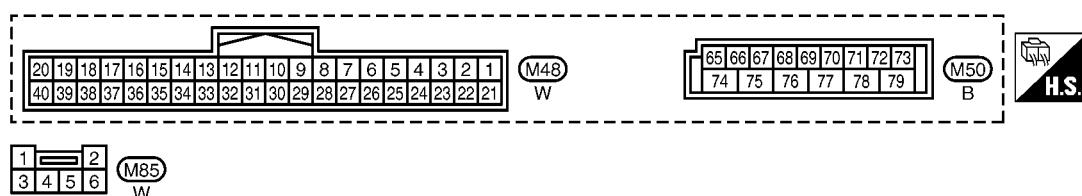
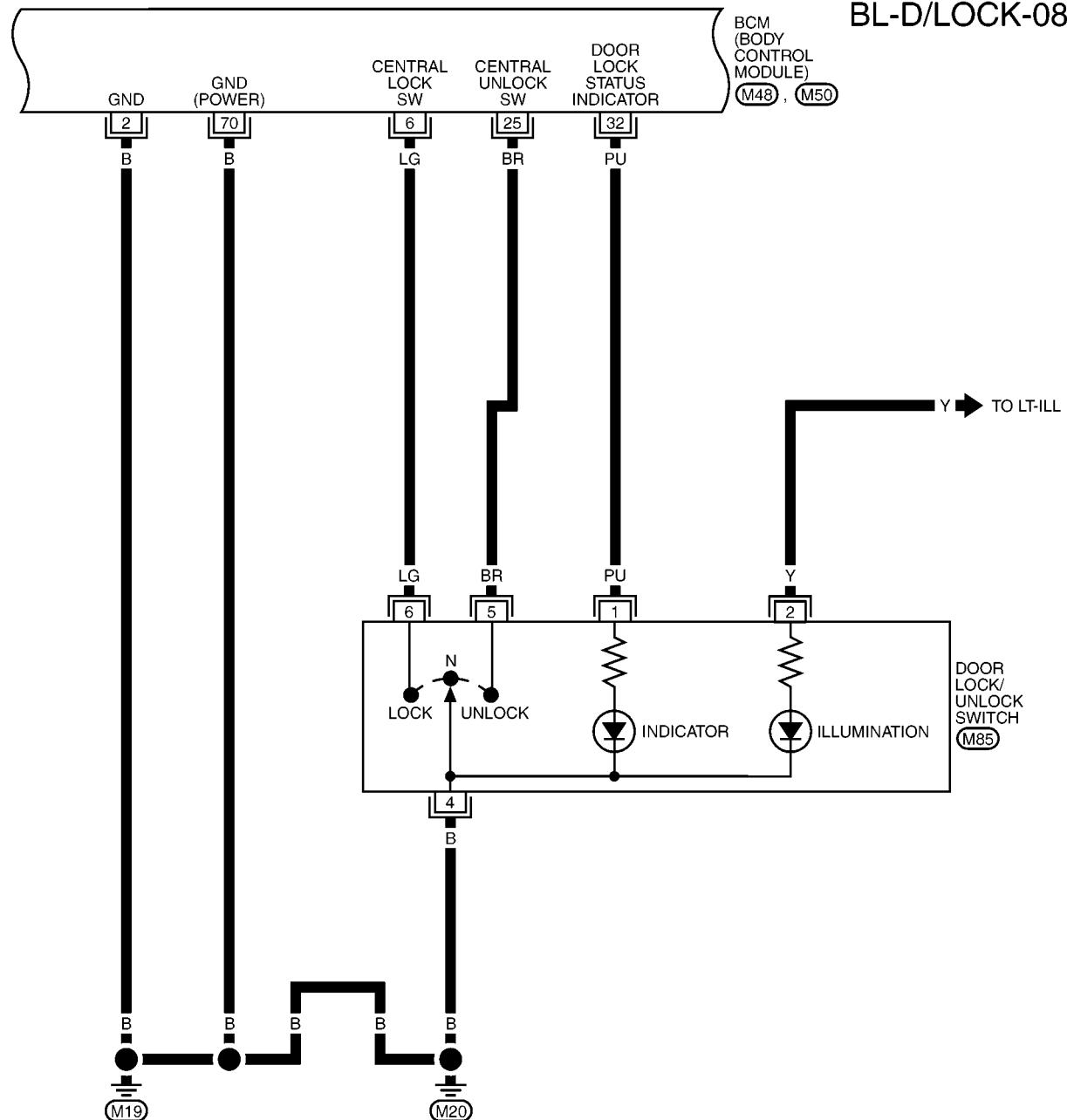
- (M1) - SUPER MULTIPLE JUNCTION (SMJ)
- (M16) - FUSE BLOCK - JUNCTION BOX (J/B)
- (M79), (M82) - JOINT CONNECTOR (J/C)

MIWA0607E

BL-42

POWER DOOR LOCK SYSTEM

BL-D/LOCK-08



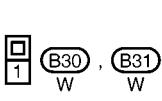
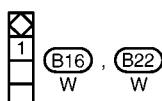
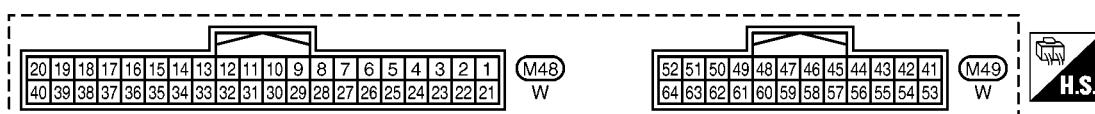
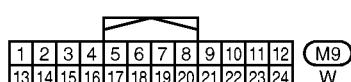
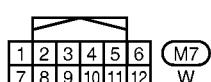
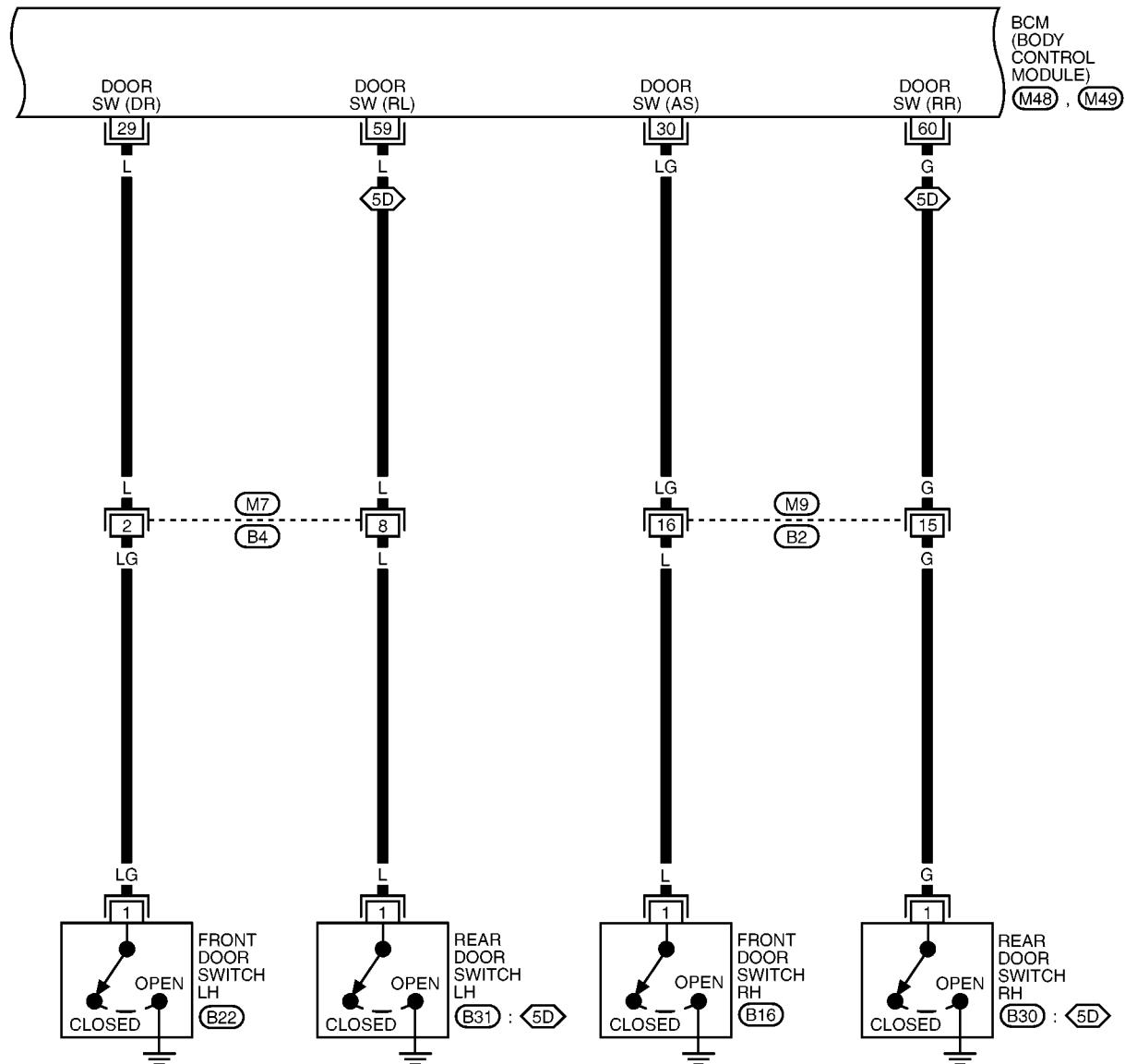
MIWA0608E

BL-43

POWER DOOR LOCK SYSTEM

BL-D/LOCK-09

 : WITH 5 DOORS

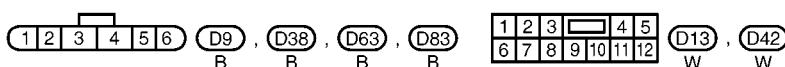
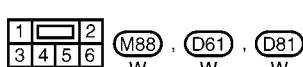
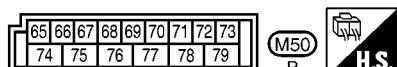
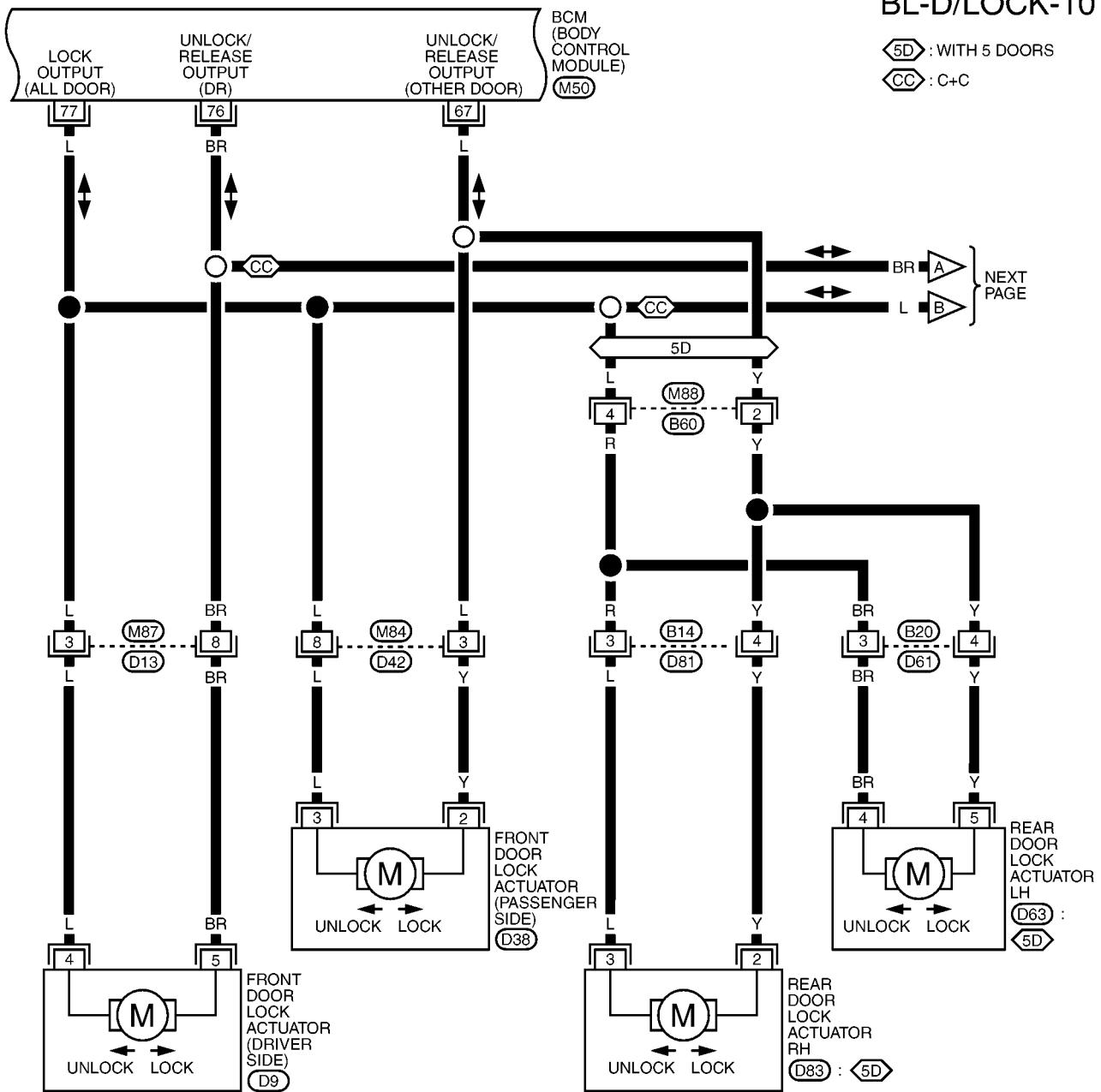


MIWA0609E

POWER DOOR LOCK SYSTEM

BL-D/LOCK-10

 5D : WITH 5 DOORS
 CC : C+C

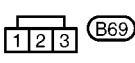
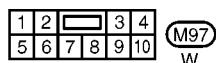
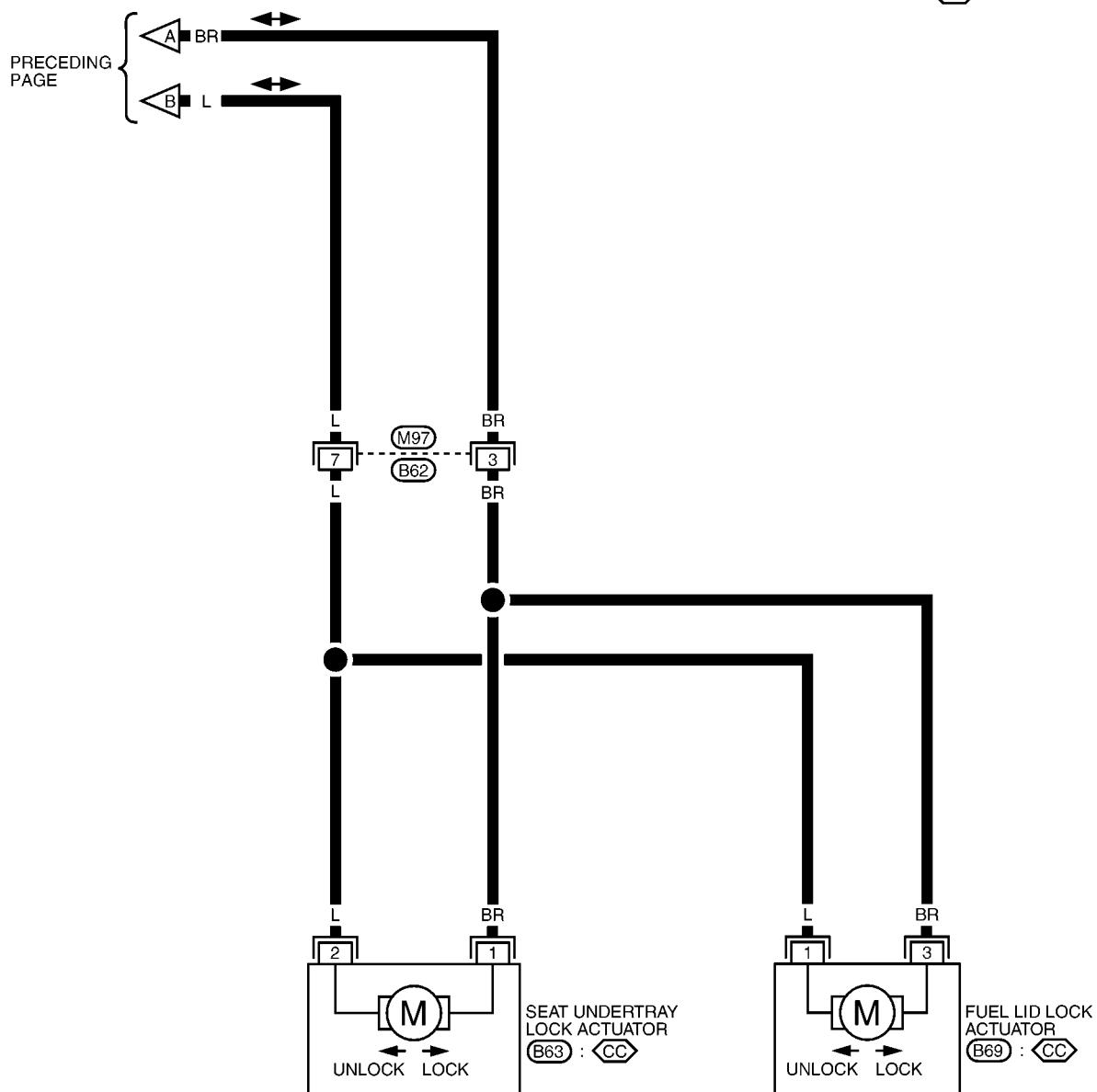


MIWA0610E

POWER DOOR LOCK SYSTEM

BL-D/LOCK-11

 : C+C



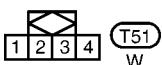
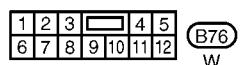
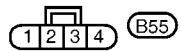
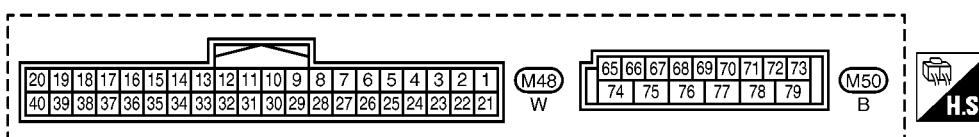
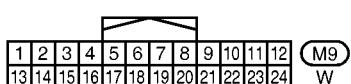
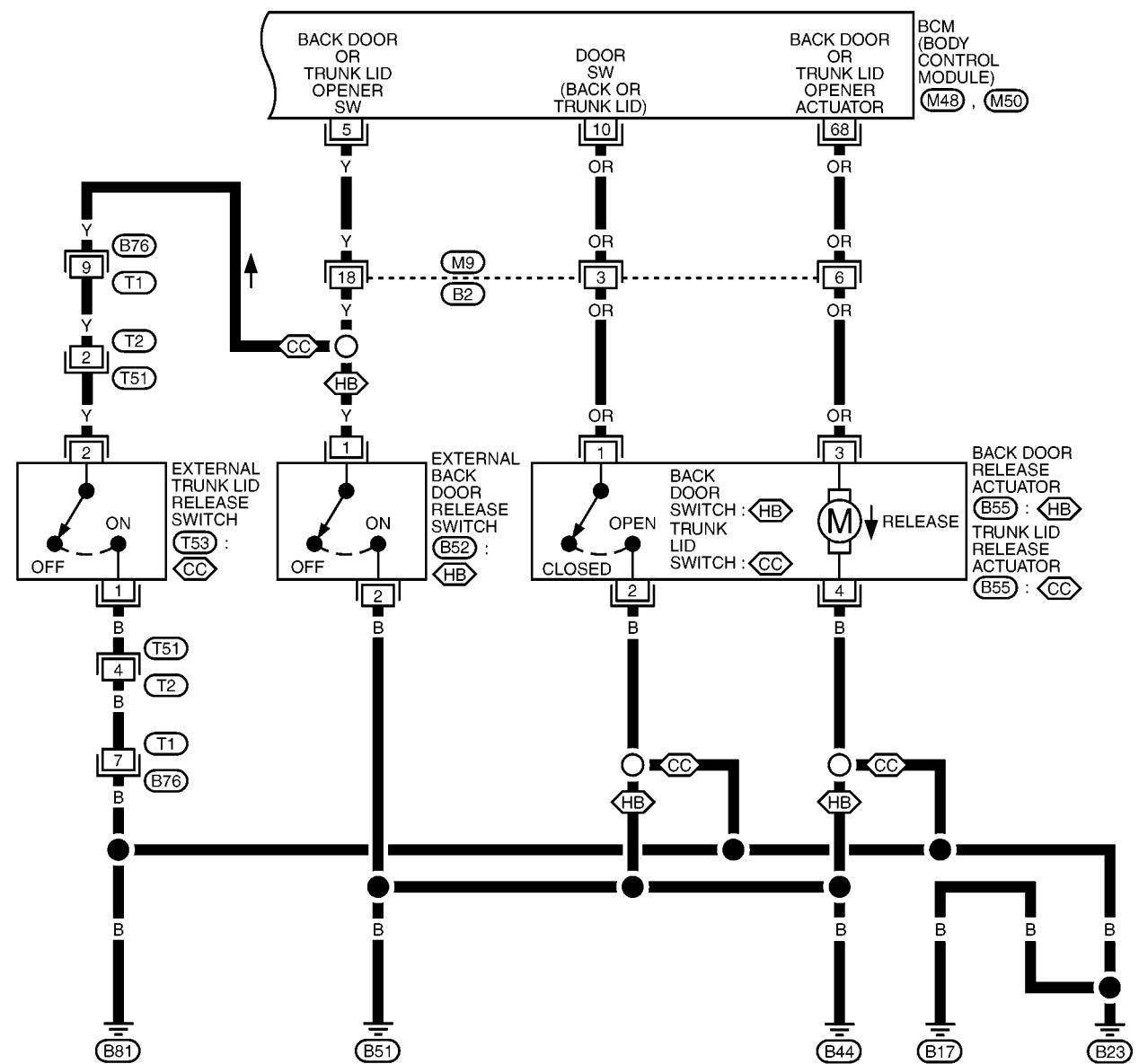
MIWA0611E

POWER DOOR LOCK SYSTEM

BL-D/LOCK-12

HB : HATCHBACK

CC : C+C



MIWA0612E

POWER DOOR LOCK SYSTEM

Terminal and Reference Value for BCM

EIS00554

Terminal	Wire color	Item	Condition	Voltage (V) (Approx.)
2	B	Ground	—	0
3	OR *P	Key switch	Key inserted (ON) → key removed from Ignition key cylinder (OFF)	Battery voltage → 0
5	Y	External back door or trunk lid release switch	Release switch open operation	5 → 0
6	LG	Door lock / unlock switch (Lock signal)	Lock operation (ON)	0
			Other than above (OFF)	5
10	OR	Back door or trunk lid switch	Open (ON) → Close (OFF)	0 → 5
*19	R	CAN-H	—	—
24	OR	Ignition power supply	Ignition switch (ON or START position)	Battery voltage
25	BR	Door lock/unlock switch (Unlock signal)	Unlock operation (ON)	0
			Other than above (OFF)	5
29	L	Front door switch LH	Door open (ON) → close (OFF)	0 → Battery voltage
30	LG	Front door switch RH	Door open (ON) → close (OFF)	0 → Battery voltage
32	PU	Door lock status indicator	Goes OFF → Illuminates (Ignition switch ON and all door closed)	0 → Battery voltage
*39	W	CAN-L	—	—
59	L	Rear door switch LH	Door open (ON) → close (OFF)	0 → Battery voltage
60	G	Rear door switch RH	Door open (ON) → close (OFF)	0 → Battery voltage
67	L	Door lock actuator unlock (Passenger and rear LH, RH doors)	Door lock / unlock switch Unlock operation	0 → Battery voltage
68	OR	Back door or trunk lid release actuator	Door lock/unlock switch (Trunk lid or back door release switch) Open operation	Battery voltage → 0
70	B	Ground (Power)	—	0
74	Y	Battery power supply (BCM)	—	Battery voltage
76	BR	Door lock actuator unlock (DR side door)	Door lock / unlock switch Unlock operation	0 → Battery voltage
77	L	Door lock actuator lock signal (All doors)	Door lock/unlock switch & remote controller lock operation	0 → Battery voltage
79	Y	Battery power supply (Power)	—	Battery voltage

*: With Intelligent Key system

POWER DOOR LOCK SYSTEM

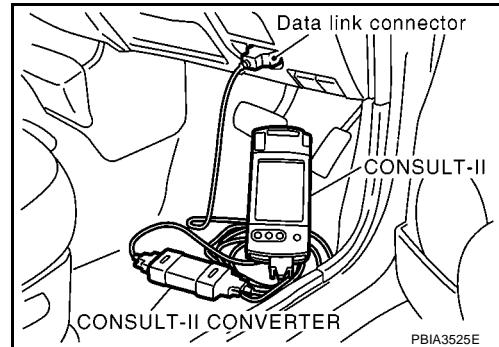
CONSULT-II Inspection Procedure

EIS00555

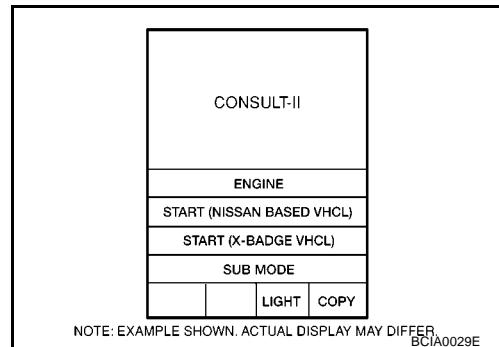
CAUTION:

If CONSULT-II is used with no connector of CONSULT-II CONVERTER, malfunction might be detected in self-diagnosis depending on control which carry out CAN communication.

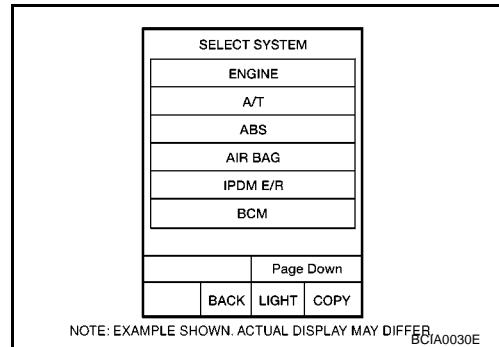
1. Turn ignition switch "OFF".
2. Connect "CONSULT-II" and "CONSULT-II CONVERTER" to the data link connector.



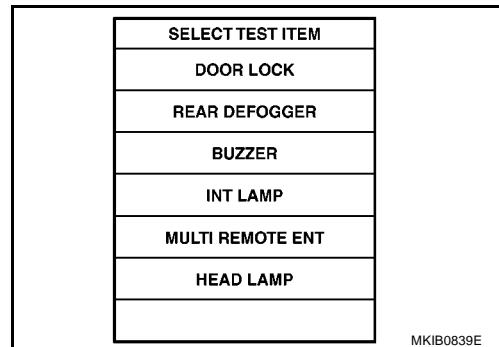
3. Turn ignition switch "ON".
4. Touch "START (NISSAN BASED VHCL)".



5. Touch "BCM" on "SELECT ITEM" screen. If "BCM" is not indicated, go to [GI-36, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).

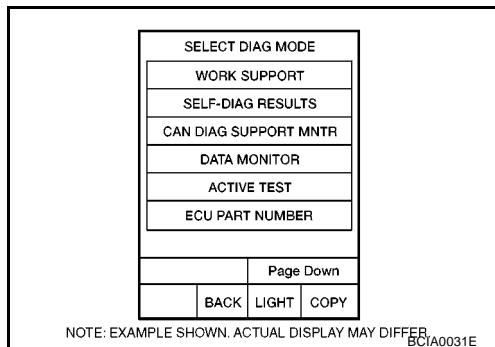


6. Touch "DOOR LOCK".



POWER DOOR LOCK SYSTEM

7. Touch “WORK SUPPORT”, “DATA MONITOR”, or “ACTIVE TEST” on the “SELECT DIAG MODE” screen.



CONSULT-II Application Items

WORK SUPPORT

EIS00556

Supported Item	Description
SECURITY DOOR LOCK SET	Anti-hijack function mode can be changed in this mode.
AUTO LOCK SET	Auto locking function mode can be changed in this mode.

Security Door Lock Set

	ON	OFF
Anti hijack function	Activation	Deactivation

Auto Lock Set

	MODE1	MODE2	MODE3	MODE4	MODE5	MODE6*	MODE7*	MODE8*
Auto locking function	1 minute	2 minutes	3 minutes	4 minutes	5 minutes	-	-	-

*: These mode are not supported.

DATA MONITOR

Monitored Item	Description
IGN ON SW	Indicates [ON/OFF] condition of ignition switch.
PUSH SW (*1)	Indicates [ON/OFF] condition of ignition knob switch.
KEY IN SW (*2)	Indicates [ON/OFF] condition of key switch.
CDL LOCK SW	Indicates [ON/OFF] condition of lock signal from door lock/ unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of unlock signal from door lock/ unlock switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch LH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch RH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of external back door release switch.

*1: Models with Intelligent Key System.

*2: Models without Intelligent Key System.

ACTIVE TEST

Monitored Item	Description
DOOR LOCK	This test is able to check all door lock actuator (except for back door) lock / unlock operation. These actuator lock / unlock when “LOCK” or “UNLOCK” on CONSULT-II screen is touched.
DOOR LOCK IND	This test is able to check door lock / unlock switch's indicator illumination.
TRUNK / BACK DOOR	This test is able to check back door release actuator open operation. These actuator open when “OPEN” on CONSUT-II screen is touched.

POWER DOOR LOCK SYSTEM

Work Flow

EIS00DWY

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to [BL-18, "System Description"](#) .
3. According to the trouble diagnosis, repair or replace the cause of the malfunction. Refer to [BL-51, "TROUBLE DIAGNOSES CHART BY SYMPTOM/WITHOUT INTELLIGENT KEY SYSTEM"](#) or [BL-52, "TROUBLE DIAGNOSES CHART BY SYMPTOM/WITH INTELLIGENT KEY SYSTEM"](#) .
4. Does power door lock system operate normally?
YES: GO TO 5.
NO: GO TO 2.
5. INSPECTION END.

TROUBLE DIAGNOSES CHART BY SYMPTOM/WITHOUT INTELLIGENT KEY SYSTEM

NOTE:

Always check the "Work Flow" before troubleshooting. Refer to [BL-51, "Work Flow"](#) .

Symptom	Malfunctioning system	Refer to page
Power door lock does not operate with door lock / unlock switch.	1. Check power supply and ground circuit of BCM.	BL-53
	2. Check door lock / unlock switch.	BL-54
	3. Check front door lock actuator (driver side).	BL-58
	4. Replace BCM.	BCS-30
Specific door lock actuator does not operate.	1. Check door lock actuator.	BL-58
Front door lock actuator (driver side) does not operate. (All other door lock actuators operate properly)	1. Check front door lock actuator (driver side).	BL-58
All door lock actuator (except driver side) does not operate.	1. Check door lock actuator circuit.	BL-57
	2. Replace BCM.	BCS-30
Key reminder system does not operate.	1. Check key switch.	BL-55
	2. Check door switch.	BL-62
	3. Replace BCM.	BCS-30
Back door does not open. But power door lock operates properly.	1. Check external back door release switch.	BL-72
	2. Check back door release actuator.	BL-74
	3. Replace BCM.	BCS-30
Trunk lid does not open. But power door lock operates properly.*	1. Check external trunk lid release switch.	BL-75
	2. Check trunk lid release actuator.	BL-77
	3. Replace BCM.	BCS-30
Door lock/unlock switch indicator does not illuminate. (All other door lock system is "OK")	1. Check door lock/unlock switch indicator.	BL-79
	2. Replace BCM.	BCS-30
Seat undertray does not operate with power door lock.*	1. Seat undertray lock actuator circuit check.	BL-78
Fuel lid lock does not operate with power door lock.*	1. Fuel lid lock actuator circuit check.	BL-79

*: Only for C+C models.

A

B

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POWER DOOR LOCK SYSTEM

TROUBLE DIAGNOSES CHART BY SYMPTOM/WITH INTELLIGENT KEY SYSTEM

NOTE:

Always check the "Work Flow" before troubleshooting. Refer to [BL-51, "Work Flow"](#) .

Symptom	Malfunctioning system	Refer to page
Power door lock does not operate with door lock / unlock switch.	1. Check power supply and ground circuit of BCM.	BL-53
	2. Check door lock / unlock switch.	BL-54
	3. Check door lock actuator (driver side).	BL-58
	4. Replace BCM.	BCS-30
Specific door lock actuator does not operate.	1. Check door lock actuator.	BL-58
Front door lock actuator (driver side) does not operate. (All other door lock actuators operate properly)	1. Check front door lock actuator (driver side).	BL-58
All door lock actuator (except driver side) does not operate.	1. Check door lock actuator circuit.	BL-57
	2. Replace BCM.	BCS-30
Key reminder system does not operate.	1. Check key switch.	BL-56
	2. Check door switch.	BL-62
	3. Replace BCM.	BCS-30
Back door does not open. But power door lock operates properly.	1. Check external back door release switch.	BL-72
	2. Check back door release actuator.	BL-74
	3. Replace BCM.	BCS-30
Trunk lid does not open. But power door lock operates properly.*	1. Check external trunk lid release switch.	BL-75
	2. Check trunk lid release actuator.	BL-77
	3. Replace BCM.	BCS-30
Door lock/unlock switch indicator does not illuminate. (All other door lock system is "OK")	1. Check door lock/unlock switch indicator.	BL-79
	2. Replace BCM.	BCS-30
Seat undertray does not operate with power door lock.*	1. Seat undertray lock actuator circuit check.	BL-78
Fuel lid lock does not operate with power door lock.*	1. Fuel lid lock actuator circuit check.	BL-79

* Only for (C+C) models.

POWER DOOR LOCK SYSTEM

Check Power Supply and Ground Circuit of BCM

EIS00558

First perform the "SELF-DIAG RESULTS" in "BCM" with CONSULT-II, then perform the each trouble diagnosis of malfunction system indicated "SELF-DIAG RESULTS" of "BCM", Refer to [BCS-21, "CONSULT-II Function \(BCM\)"](#).

1. FUSE INSPECTION

- Check 10A fuse [No.4, located in fuse block (J/B)]
- Check 40A fusible link (letter J located in the fuse and fusible link box).

NOTE:

Refer to [BL-16, "Component Parts and Harness Connector Location \(Hatchback\)"](#).

OK or NG

OK >> GO TO 2.

NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to [PG-5, "POWER SUPPLY ROUTING"](#).

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between BCM connector M48, M50 terminals 24, 74, 79 and ground.

24 (OR) – Ground : Battery voltage

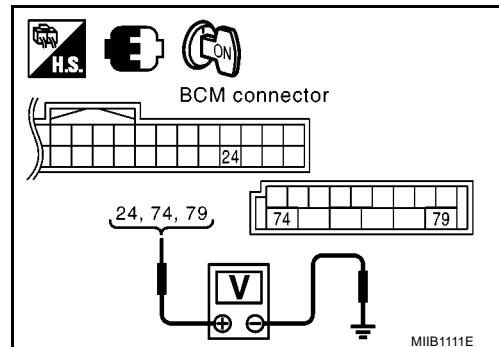
74 (Y) – Ground : Battery voltage

79 (Y) – Ground : Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Check BCM power supply circuit for open or short.



3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector M48, M50 terminals 2, 70 and ground.

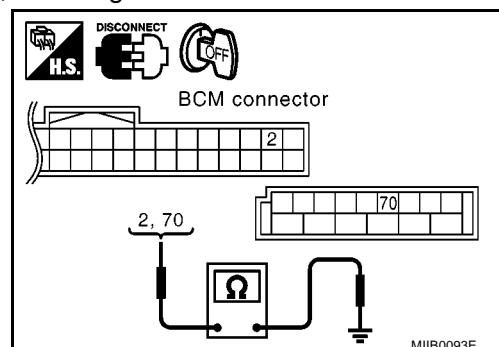
2 (B) – Ground : Continuity should exist.

70 (B) – Ground : Continuity should exist.

OK or NG

OK >> Power supply and ground circuit is OK.

NG >> Check BCM ground circuit for open or short.



POWER DOOR LOCK SYSTEM

Check Door Lock / Unlock Switch

EIS00559

1. CHECK DOOR LOCK / UNLOCK SWITCH SIGNAL

With CONSULT- II

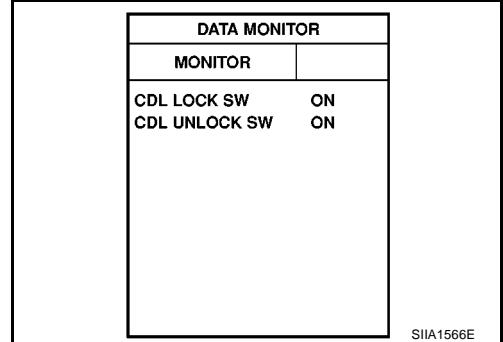
Check door lock / unlock switch input signal ("CDL LOCK SW" "CDL UNLOCK SW") in "DATA MONITOR" mode with CONSULT- II.

When door lock/unlock switch is turned to LOCK:

CDL LOCK SW ⇒ ON

When door lock/unlock switch is turned to UNLOCK:

CDL UNLOCK SW ⇒ ON



Without CONSULT- II

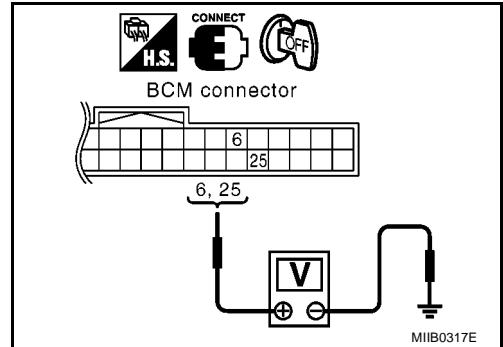
Operate door lock / unlock switch, check voltage between BCM connector M48 terminal 6, 25 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)	
	(+)	(-)			
M48	6 (LG)	Ground	Lock	0	
			Neutral / Unlock	5	
	25 (BR)		Unlock	0	
			Neutral / Lock	5	

OK or NG

OK >> Door lock / unlock switch is OK.

NG >> GO TO 2.



2. CHECK DOOR LOCK/UNLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect door lock / unlock switch connector.
3. Check continuity between door lock / unlock switch terminals 5, 6 and 4.

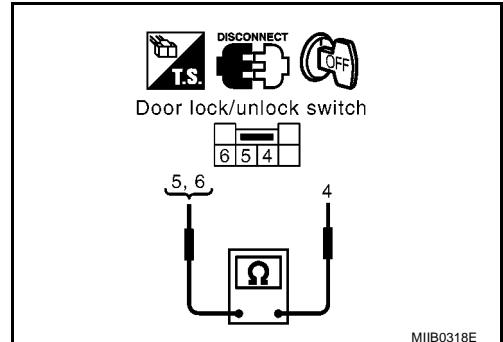
Terminals		Condition	Continuity	
5	4	Unlock	Yes	
		Neutral / Lock	No	
6		Lock	Yes	
		Neutral / Unlock	No	

OK or NG

OK >> Check the following.

- Ground circuit for door lock / unlock switch
- Harness for open or short between BCM and door lock / unlock switch.

NG >> Replace door lock / unlock switch.



POWER DOOR LOCK SYSTEM

Check Key Switch /Without Intelligent Key System

EIS0055A

1. CHECK KEY SWITCH INPUT SIGNAL

With CONSULT-II

Check key switch input signal "KEY IN SW" in "DATA MONITOR" mode with CONSULT- II.

When key is inserted in ignition key cylinder:

KEY IN SW ⇒ ON

When key is removed from ignition key cylinder:

KEY IN SW ⇒ OFF

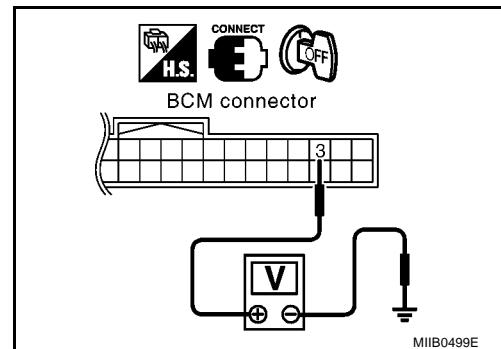
Without CONSULT- II

Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	3 (OR)	Ground	Key is inserted	Battery voltage
			Key is removed	0

OK or NG

OK >> Key switch is OK.
NG >> GO TO 2.



2. CHECK KEY SWITCH

1. Turn ignition switch OFF.
2. Disconnect key switch connector.
3. Check continuity between key switch terminals 1 and 2.

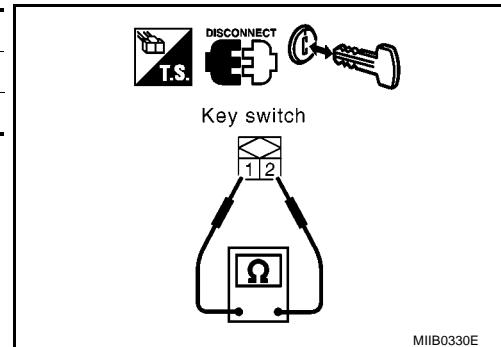
Terminals		Condition	Continuity
1	2	Key is inserted	YES
		Key is removed	NO

OK or NG?

OK >> Check the following.

- 10A fuse [No. 6, located in fuse block (J/B)].
- Harness for open or short between key switch and fuse.
- Harness for open or short between BCM and key switch.

NG >> Replace key switch.



POWER DOOR LOCK SYSTEM

Check Key Switch/With Intelligent Key System

EIS0056D

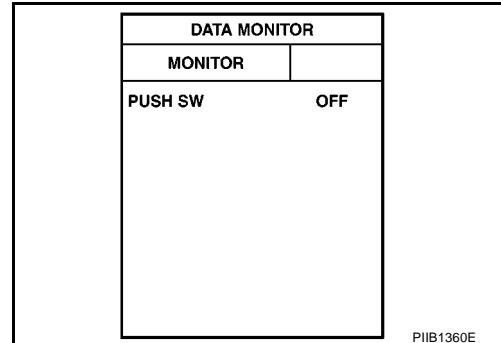
1. KEY SWITCH INSPECTION

With CONSULT-II

Display "PUSH SW" on DATA MONITOR screen, and check if ON-OFF display is linked to ignition knob switch operation.

When ignition knob is pushed : PUSH SW ON

When ignition knob is released : PUSH SW OFF



Without CONSULT-II

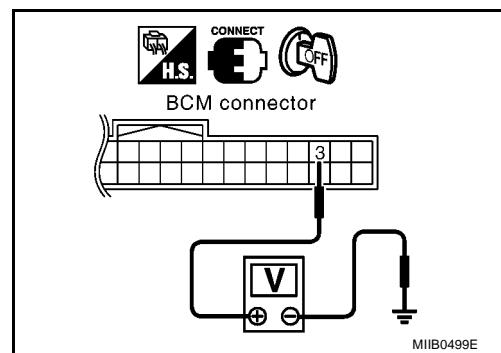
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	3 (P)	Ground	Key is inserted	Battery voltage
			Key is removed	0

OK or NG

OK >> Key switch is OK.

NG >> GO TO 2.



2. KEY SWITCH POWER SUPPLY CIRCUIT INSPECTION

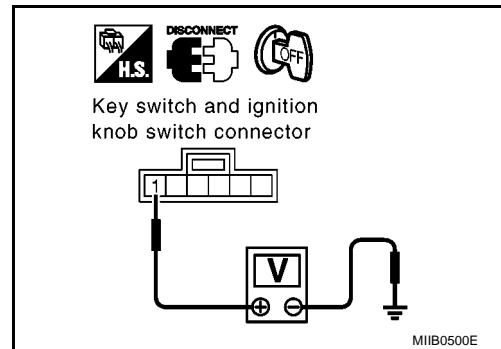
1. Remove mechanical key from ignition knob.
2. Disconnect key switch and ignition knob switch connector.
3. Check voltage between key switch and ignition knob switch connector M34 terminal 1 and ground.

1 (W) - Ground : Approx. 12V

OK or NG

OK >> GO TO 3.

NG >> Repair or replace key switch power supply circuit.



POWER DOOR LOCK SYSTEM

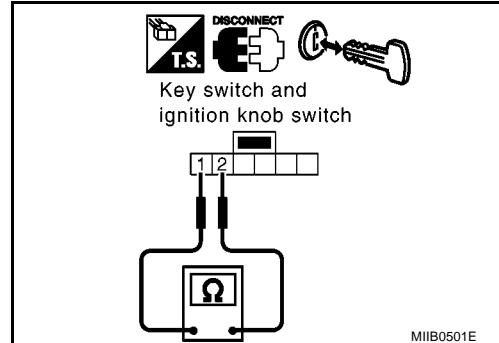
3. KEY SWITCH OPERATION INSPECTION

1. Insert mechanical key into ignition knob.
2. Check continuity between key switch and ignition knob switch connector M34 terminal 1 and 2.

Terminal		Condition	Continuity
1	2	Key is inserted	Yes
1	2	Key is removed	No

OK or NG

- OK >> GO TO 4.
 NG >> Replace key switch.

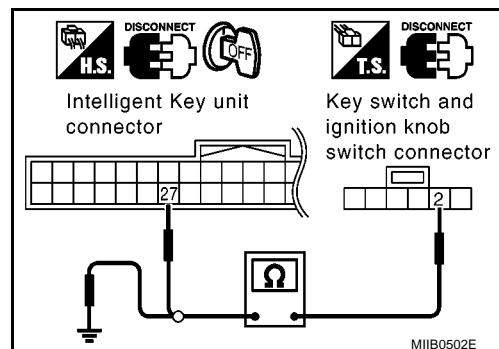


4. KEY SWITCH CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
 2. Check continuity between Intelligent Key unit connector M51 terminal 27 and key switch and ignition knob switch connector M34 terminal 2.
- 27 (P) - 2 (P)** : Continuity should exist.
3. Check continuity between key switch connector M34 terminal 2 and ground.
- 2 (P) - Ground** : Continuity should not exist.

OK or NG

- OK >> Key switch is OK.
 NG >> Repair or replace harness between Intelligent Key unit and key switch and ignition knob switch.



Check Door Lock Actuator Circuit.

EIS0055B

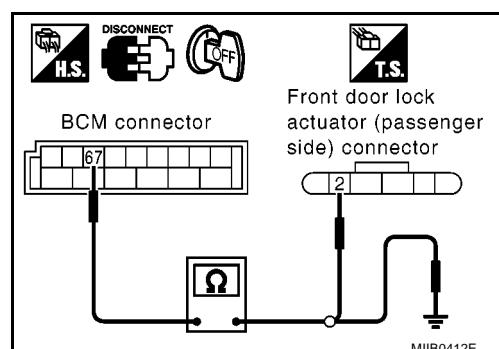
1. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
 2. Check continuity between BCM connector M50 terminal 67 and front door lock actuator (passenger side) connector D38 terminal 2.
- 67 (L) – 2 (Y)** : Continuity should exist.
3. Check continuity between BCM connector M50 terminal 67 and ground.

67 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
 NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

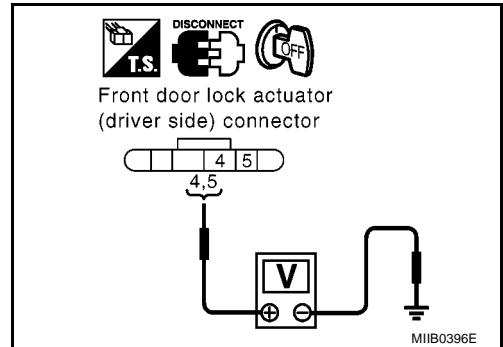
Check Door Lock Actuator DRIVER SIDE

EIS0055C

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect front door lock actuator (driver side) connector.
3. Operate door lock / unlock switch, check voltage between front door lock actuator (driver side) connector D9 terminal 4, 5 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D9	5 (BR)	Ground	Unlock	0 → Battery voltage → 0
	4 (L)		Lock	0 → Battery voltage → 0



OK or NG

- OK >> Replace front door lock actuator (driver side).
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminals 76, 77 and front door lock actuator (driver side) connector D9 terminals 4, 5.

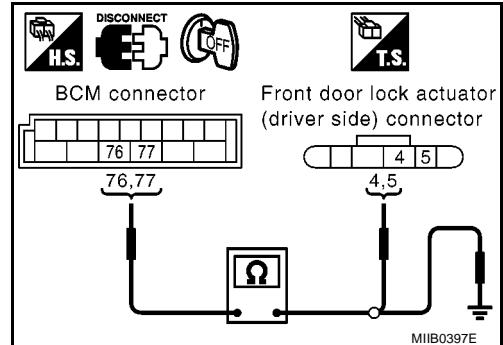
76 (BR) – 5 (BR) : Continuity should exist.
77 (L) – 4 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 76, 77 and ground.

76 (BR) – Ground : Continuity should not exist.
77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



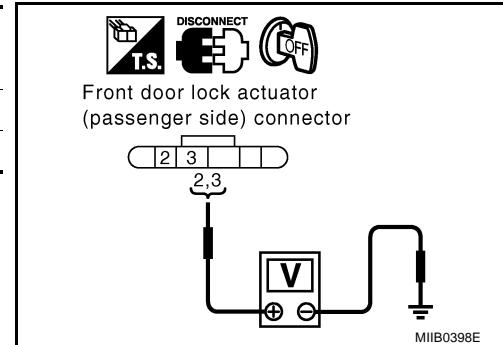
POWER DOOR LOCK SYSTEM

PASSENGER SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
 2. Disconnect front door lock actuator (passenger side) connector.
 3. Operate door lock / unlock switch, check voltage between front door lock actuator (passenger side) connector D38 terminal 2, 3 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D38	3 (L)	Ground	Lock	0 → Battery voltage → 0
	2 (L)		Unlock	0 → Battery voltage → 0



OK or NG

OK >> Replace front door lock actuator (passenger side).
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
 2. Check continuity between BCM connector M50 terminals 67, 77 and front door lock actuator (passenger side) connector D38 terminals 2, 3.

67 (L) – 2 (Y) : Continuity should exist.

77 (L) – 3 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 67, 77 and ground.

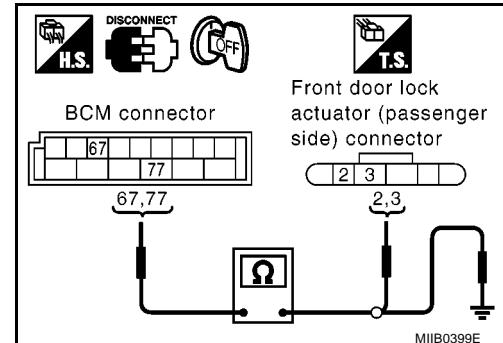
67 (L) – Ground : Continuity should not exist.

77 (L) – Ground : Continuity should not exist.

OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Repair or replace harness.



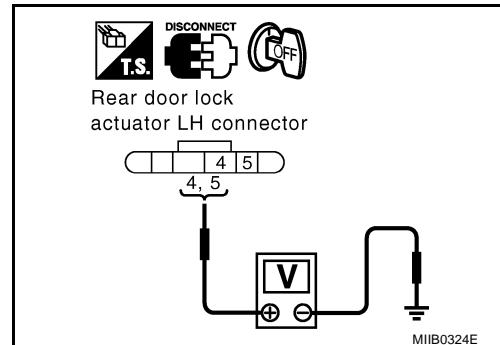
POWER DOOR LOCK SYSTEM

REAR LH SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator LH connector.
3. Operate door lock / unlock switch, check voltage between rear door lock actuator LH connector D63 terminal 4, 5 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D63	4 (BR)	Ground	Lock	0 → Battery voltage → 0
	5 (Y)		Unlock	0 → Battery voltage → 0



OK or NG

- OK >> Replace rear door lock actuator LH.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminals 67, 77 and rear door lock actuator LH connector D63 terminals 4, 5.

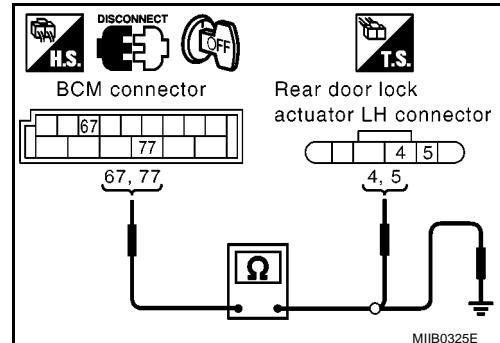
67 (L) – 5 (Y) : Continuity should exist.
77 (L) – 4 (BR) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 67, 77 and ground.

67 (L) – Ground : Continuity should not exist.
77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



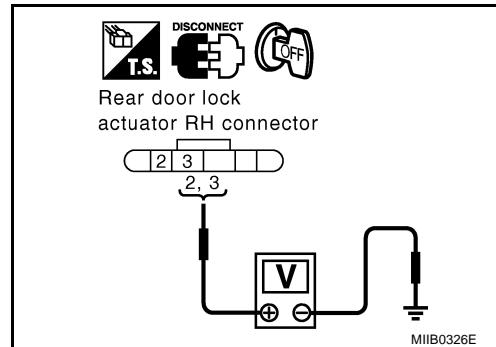
POWER DOOR LOCK SYSTEM

REAR RH SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
 2. Disconnect rear door lock actuator RH connector.
 3. Operate door lock / unlock switch, check voltage between rear door lock actuator RH connector D83 terminal 2, 3 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D83	2 (Y)	Ground	Unlock	0 → Battery voltage → 0
	3 (L)		Lock	0 → Battery voltage → 0



OK or NG

OK >> Replace rear door lock actuator RH.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
 2. Check continuity between BCM connector M50 terminals 67, 77 and rear door lock actuator RH connector D83 terminals 2, 3.

67 (L) – 2 (Y) : Continuity should exist.

77 (L) – 3 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 67, 77 and ground.

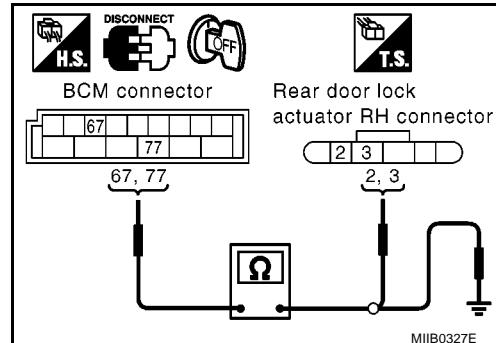
67 (L) – Ground : Continuity should not exist.

77 (L) – Ground : Continuity should not exist.

OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

Check Door Switch DRIVER SIDE

EIS0055D

1. CHECK DOOR SWITCH INPUT SIGNAL



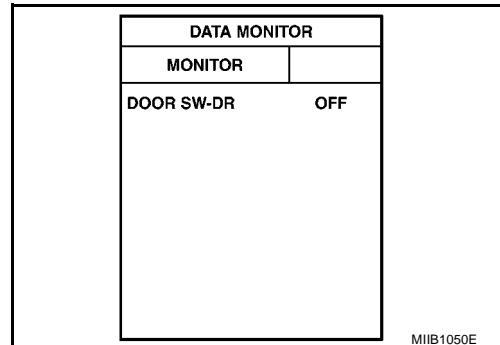
Check door switch "DOOR SW-DR" in "DATA MONITOR" mode with CONSULT-II.

When front door (driver side) is opened:

DOOR SW-DR ⇒ **ON**

When front door (driver side) is close:

DOOR SW-DR ⇒ OFF

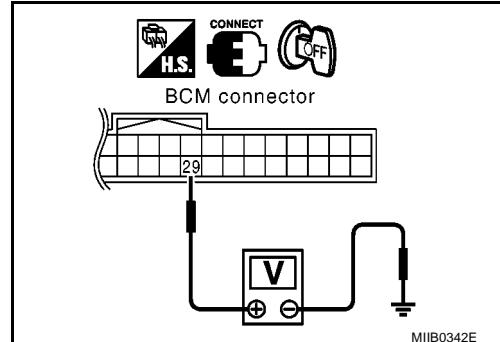


Check voltage between BCM connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	29 (L)	Ground	Open	0
			Close	Battery voltage

OK or NG

OK >> Front door switch LH is OK.
NG >> GO TO 2



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
 2. Disconnect BCM and front door switch LH connector.
 3. Check continuity between BCM connector M48 terminal 29 and front door switch LH connector B22 terminal 1.

29 (L) – 1 (LG) : Continuity should exist.

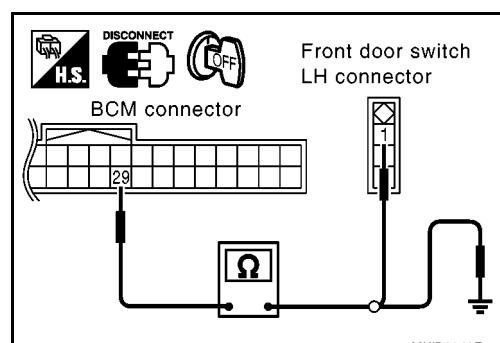
4. Check continuity between BCM connector M48 terminal 29 and ground.

29 (L) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

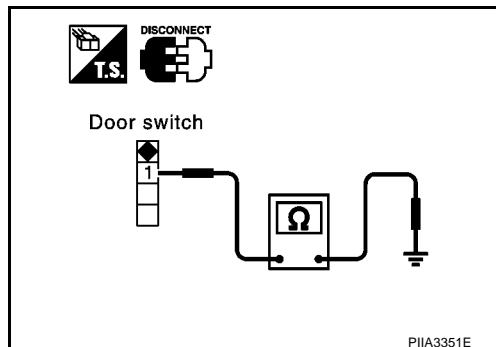
3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground part of door switch.

Terminal	Condition	Continuity
1	Pushed	No
	Released	Yes

OK or NG

- OK >> GO TO 4.
NG >> Replace door switch.



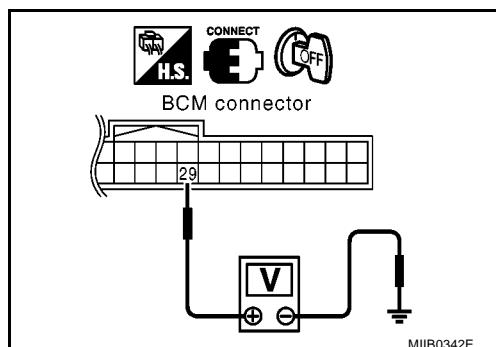
4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 29 and ground.

29 (L) – Ground : Battery voltage

OK or NG

- OK >> Check door switch ground condition.
NG >> Replace BCM.



POWER DOOR LOCK SYSTEM

PASSENGER SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

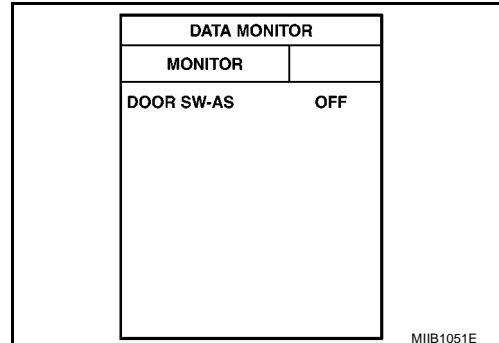
Check door switch "DOOR SW-AS" in "DATA MONITOR" mode with CONSULT- II.

When front door (passenger side) is opened:

DOOR SW-AS ⇒ ON

When front door (passenger side) is close:

DOOR SW-AS ⇒ OFF



Without CONSULT- II

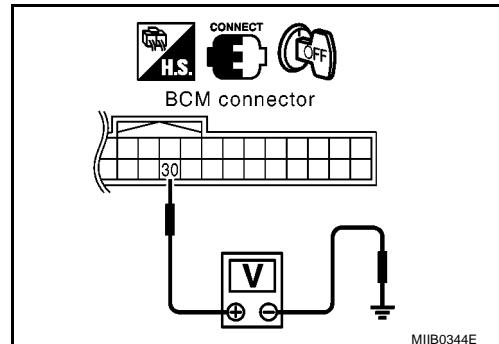
Check voltage between BCM connector M48 terminal 30 and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	30 (LG)	Ground	Open	0
			Close	Battery voltage

OK or NG

OK >> Front door switch RH is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and front door switch RH connector.
3. Check continuity between BCM connector M48 terminal 30 and front door switch RH connector B16 terminal 1.

30 (LG) – 1 (L) : Continuity should exist.

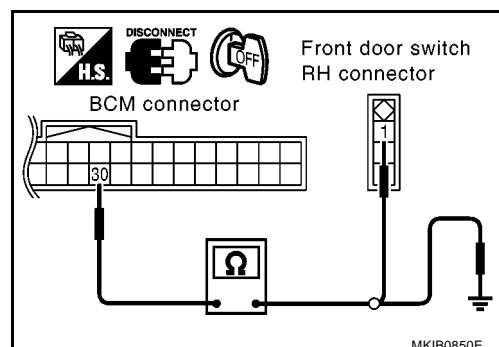
4. Check continuity between BCM connector M48 terminal 30 and ground.

30 (LG) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

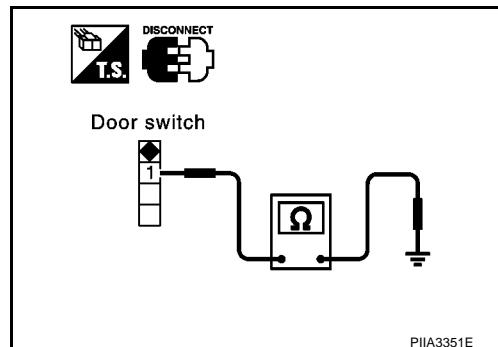
3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground of door switch.

Terminal	Condition	Continuity
1	Pushed	No
	Released	Yes

OK or NG

- OK >> GO TO 4.
NG >> Replace door switch.



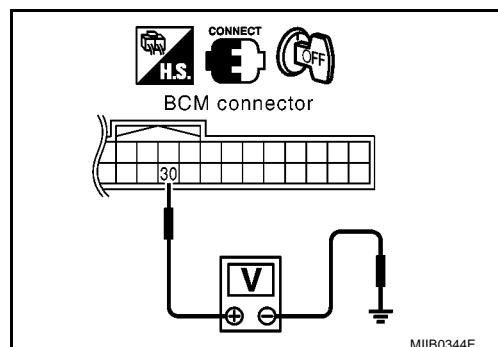
4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 30 and ground.

30 (LG) – Ground : Battery voltage

OK or NG

- OK >> Check door switch ground condition.
NG >> Replace BCM.



POWER DOOR LOCK SYSTEM

REAR LH SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

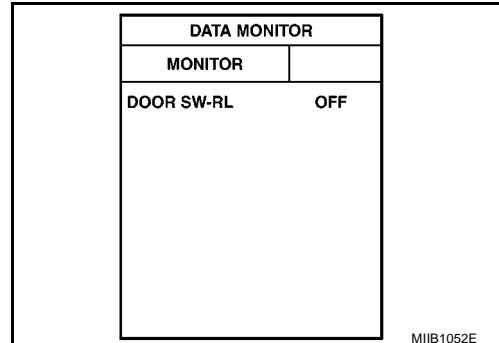
Check door switch "DOOR SW-RL" in "DATA MONITOR" mode with CONSULT- II.

When rear door (LH side) is opened:

DOOR SW-RL ⇒ ON

When rear door (LH side) is close:

DOOR SW-RL ⇒ OFF



Without CONSULT- II

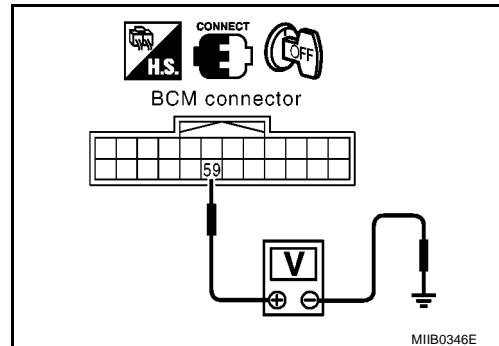
Check voltage between BCM connector M49 terminal 59 and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M49	59 (L)	Ground	Open	0
			Close	Battery voltage

OK or NG

OK >> Rear door switch LH is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door switch LH connector.
3. Check continuity between BCM connector M49 terminal 59 and rear door switch LH connector B31 terminal 1.

59 (L) – 1 (L) : Continuity should exist.

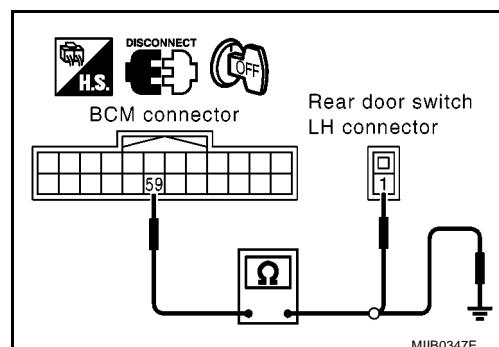
4. Check continuity between BCM connector M49 terminal 59 and ground.

59 (L) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

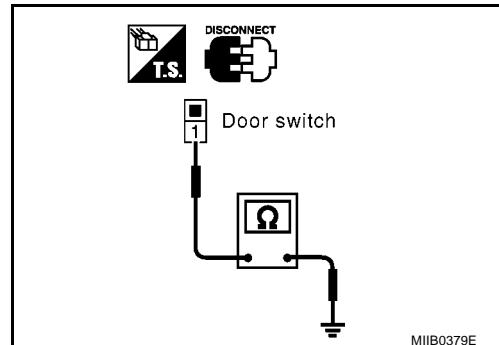
3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground of door switch.

Terminals		Condition	Continuity
1	Ground	Pushed	NO
		Released	YES

OK or NG

- OK >> GO TO 4.
NG >> Replace door switch.



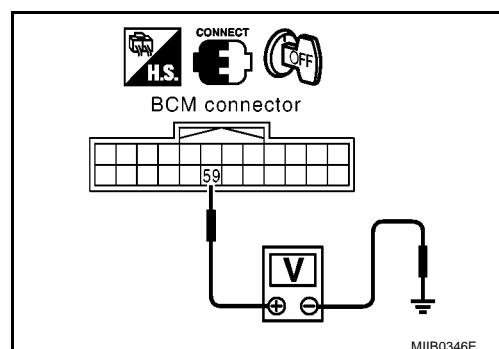
4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M49 terminal 59 and ground.

59 (L) – Ground : Battery voltage

OK or NG

- OK >> Check door switch ground condition.
NG >> Replace BCM.



POWER DOOR LOCK SYSTEM

REAR RH SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

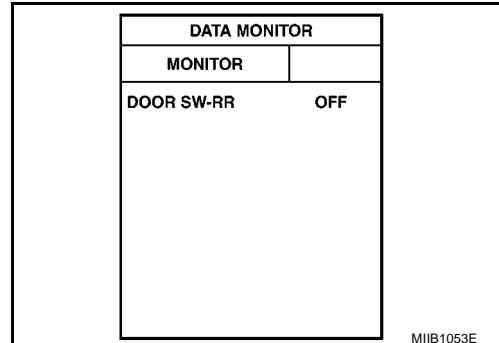
Check door switch "DOOR SW-RR" in "DATA MONITOR" mode with CONSULT- II.

When rear door (RH side) is opened:

DOOR SW-RR ⇒ ON

When rear door (RH side) is close:

DOOR SW-RR ⇒ OFF



Without CONSULT- II

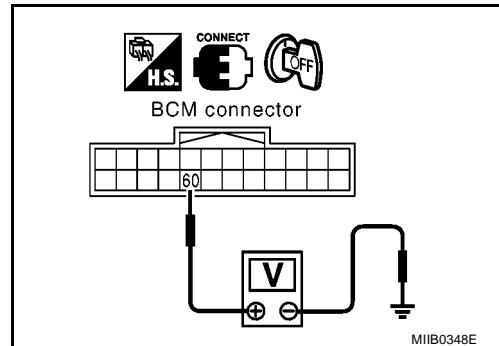
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M49	60 (G)	Ground	Open	0
			Close	Battery voltage

OK or NG

OK >> Rear door switch RH is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door switch RH connector.
3. Check continuity between BCM connector M49 terminal 60 and rear door switch RH connector B30 terminal 1.

60 (G) – 1 (G) : Continuity should exist.

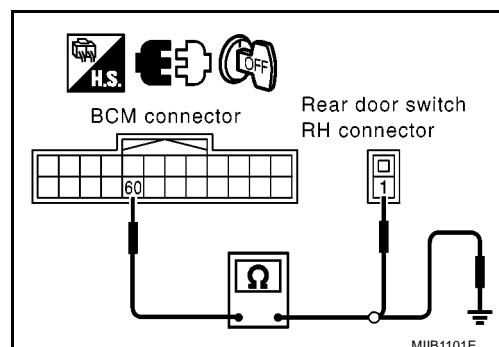
4. Check continuity between BCM connector M49 terminal 60 and ground.

60 (G) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

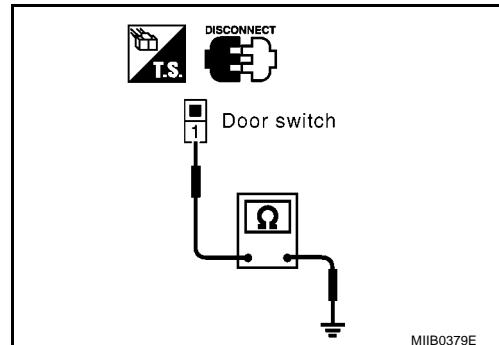
3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground of door switch.

Terminal	Condition	Continuity
1	Pushed	NO
	Released	YES

OK or NG

- OK >> GO TO 4.
 NG >> Replace door switch.



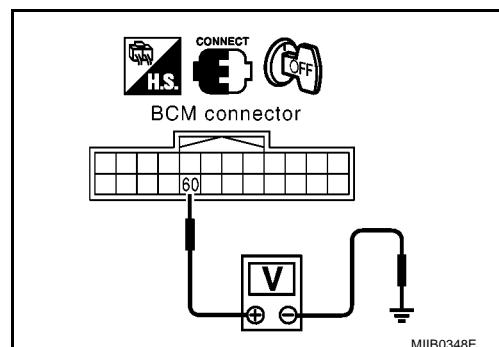
4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M49 terminal 60 and ground.

60 (G) – Ground : Battery voltage

OK or NG

- OK >> Check door switch ground condition.
 NG >> Replace BCM.



BACK DOOR SWITCH (HATCHBACK)

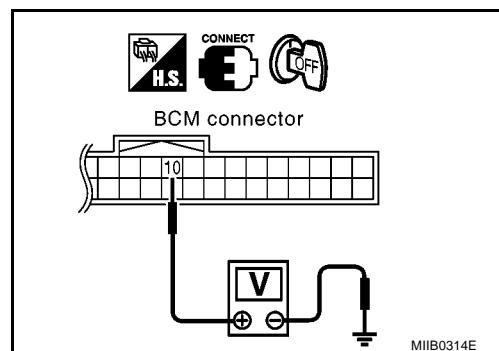
1. CHECK BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 10 and ground.

Terminal	Back door condition	Voltage (V) Approx.
(+) (-)	Closed	5
	Open	0

OK or NG

- OK >> Back door switch circuit is OK.
 NG >> GO TO 2

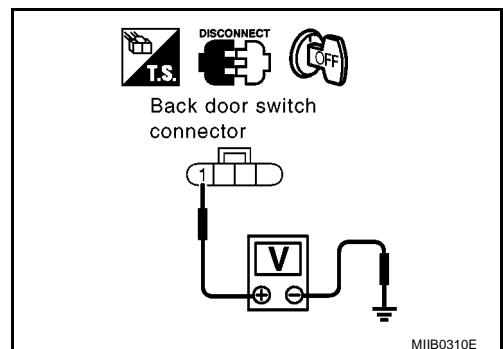


POWER DOOR LOCK SYSTEM

2. CHECK BACK DOOR SWITCH HARNESS

1. Disconnect back door switch connector.
2. Check voltage between back door switch connector B55 terminal 1 and ground. (Check harness for open.)

1 (OR) – Ground : Battery voltage

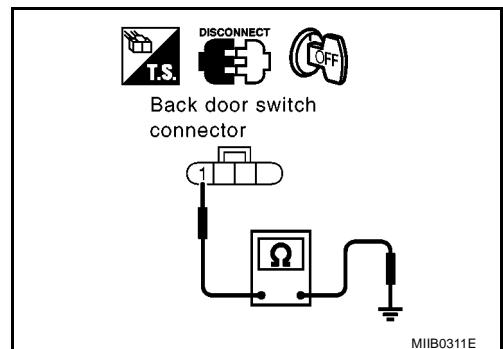


3. Disconnect BCM connector.
4. Check continuity between back door switch connector B55 terminal 1 and ground. (Check harness for short.)

1 (OR) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
NG >> Repair or replace harness.



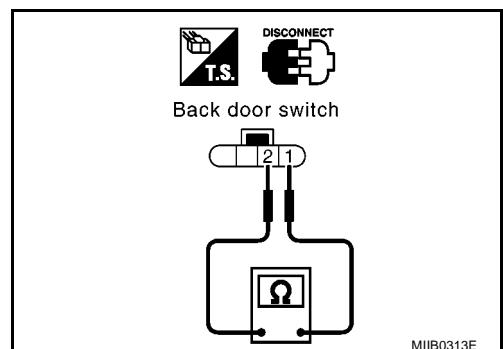
3. CHECK BACK DOOR SWITCH

Check continuity between back door switch terminal 1 and 2.

Terminal		Rear door condition	Continuity
1	2	Closed	No
		Opened	Yes

OK or NG

- OK >> GO TO 4.
NG >> Replace back door release actuator (back door switch).



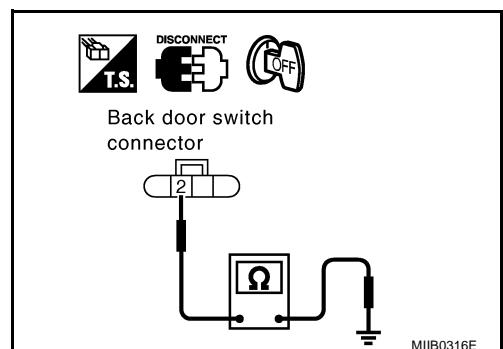
4. CHECK BACK DOOR SWITCH GROUND HARNESS

Check continuity between back door switch connector B55 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check harness connection.
NG >> Replace back door switch.



POWER DOOR LOCK SYSTEM

TRUNK LID SWITCH (C+C)

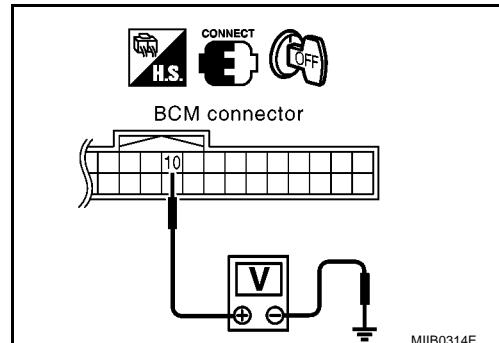
1. CHECK TRUNK LID SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 10 and ground.

Terminal		Back door condition	Voltage (V) Approx.
(+)	(-)		
10 (OR)	Ground	Closed	5
		Open	0

OK or NG

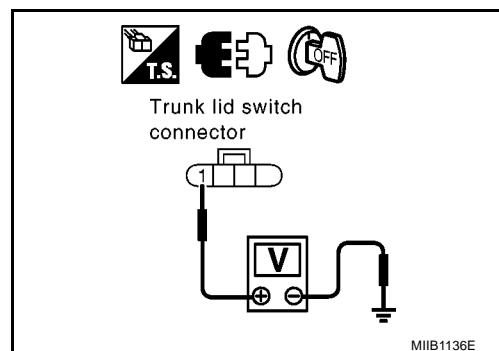
- OK >> Trunk lid switch circuit is OK.
 NG >> GO TO 2



2. CHECK TRUNK LID SWITCH HARNESS

1. Disconnect trunk lid switch connector.
2. Check voltage between trunk lid switch connector B55 terminal 1 and ground. (Check harness for open.)

1 (OR) – Ground : Battery voltage

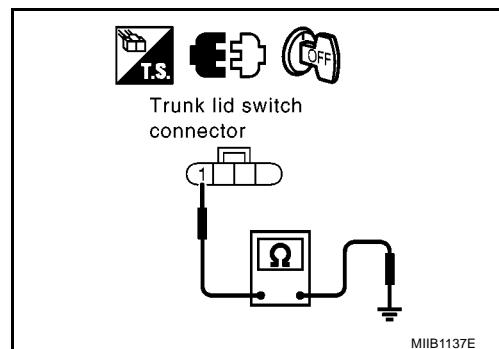


3. Disconnect BCM connector.
4. Check continuity between trunk lid switch connector B55 terminal 1 and ground. (Check harness for short.)

1 (OR) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness.



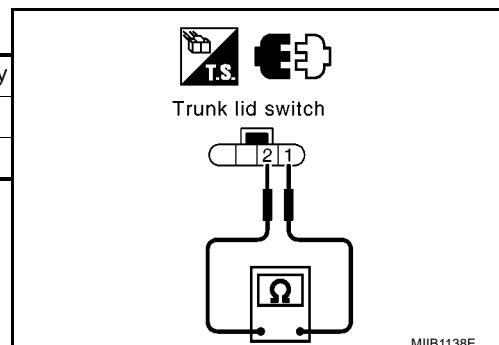
3. CHECK TRUNK LID SWITCH

Check continuity between trunk lid switch terminal 1 and 2.

Terminal		Rear door condition	Continuity
1	2	Closed	No
		Opened	Yes

OK or NG

- OK >> GO TO 4.
 NG >> Replace trunk lid release actuator (trunk lid switch).



POWER DOOR LOCK SYSTEM

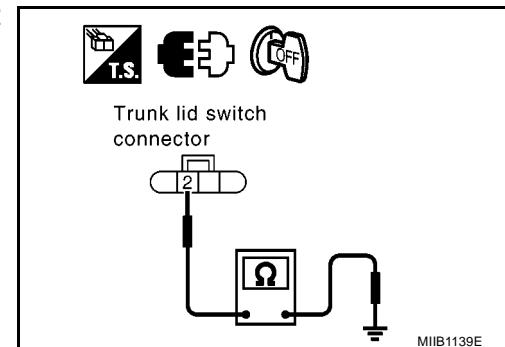
4. CHECK TRUNK LID SWITCH GROUND HARNESS

Check continuity between trunk lid switch connector B55 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check harness connection.
- NG >> Replace trunk lid switch.



Check External Back Door Release Switch (Hatchback)

EIS0055E

1. CHECK EXTERNAL BACK DOOR RELEASE SWITCH INPUT SIGNAL

With CONSULT- II

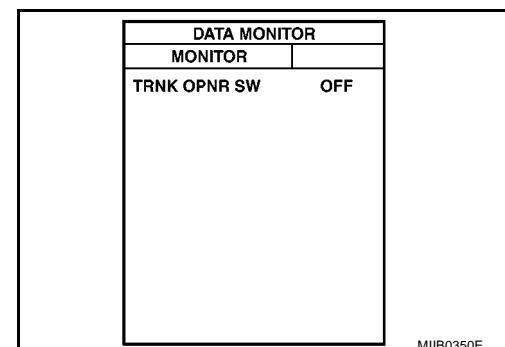
Check external back door release switch "TRNK OPNR SW" in "DATA MONITOR" mode with CONSULT- II.

External back door release switch is pushed

TRNK OPNR SW : ON

External back door release switch is released

TRNK OPNR SW : OFF



Without CONSULT- II

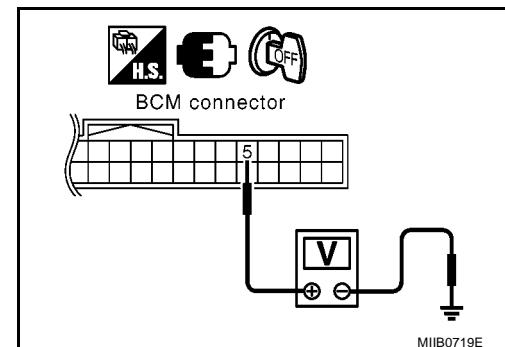
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	5 (Y)	Ground	Pushed	0
			Released	5

OK or NG

- OK >> External back door release switch is OK.

- NG >> GO TO 2.



POWER DOOR LOCK SYSTEM

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and external back door release switch connector.
3. Check continuity between BCM connector M48 terminal 5 and external back door release switch connector B52 terminal 1.

5 (Y) – 1 (Y) : Continuity should exist.

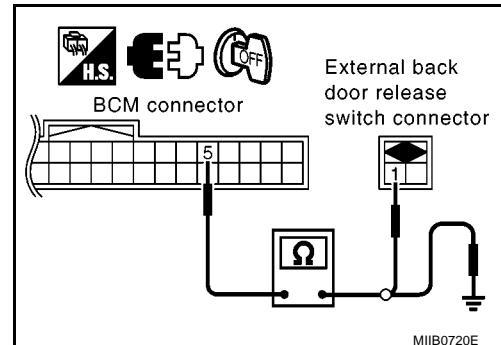
4. Check continuity between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



3. CHECK EXTERNAL BACK DOOR RELEASE SWITCH

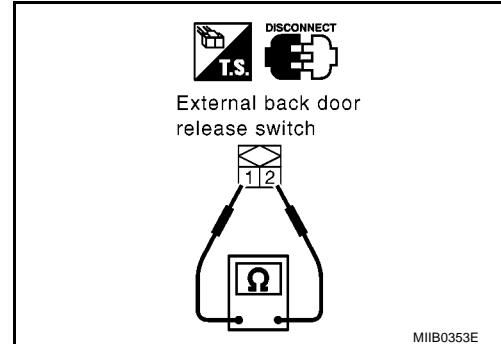
Check continuity between external back door release switch terminals 1 and 2.

Terminals		Condition	Continuity
1	2	Pushed	Yes
		Released	No

OK or NG

OK >> GO TO 4.

NG >> Replace external back door release switch.



4. CHECK BCM OUTPUT SIGNAL

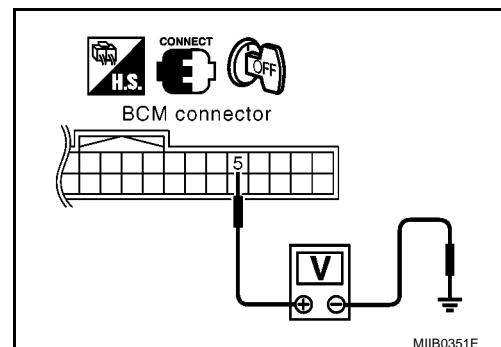
1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Approx. 5V

OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Replace BCM.



POWER DOOR LOCK SYSTEM

Check Back Door Release Actuator (Hatchback)

EIS0055F

1. CHECK BCM OUTPUT SIGNAL

Check back door release output signal

Perform ("TRUNK/BACK DOOR") in "ACTIVE TEST" mode with CONSULT-II.

When "ACTIVE TEST" is executed, does the back door open?

OK or NG

- OK >> Back door release output is OK.
NG >> GO TO 2.

ACTIVE TEST	
TRUNK/BACK DOOR	OFF
ON	

MIIIB0354E

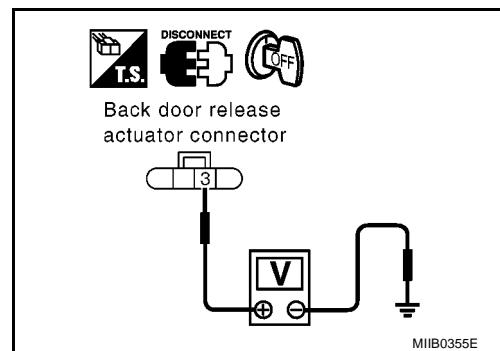
2. CHECK BACK DOOR RELEASE ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect back door release actuator connector.
3. Operate external back door release switch, check voltage between back door release actuator connector B55 terminal 3 and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B55	3 (OR)	Ground	Pushed	0 → Battery voltage → 0

OK or NG

- OK >> GO TO 4.
NG >> GO TO 3.



3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 68 and back door release actuator connector B55 terminal 3.

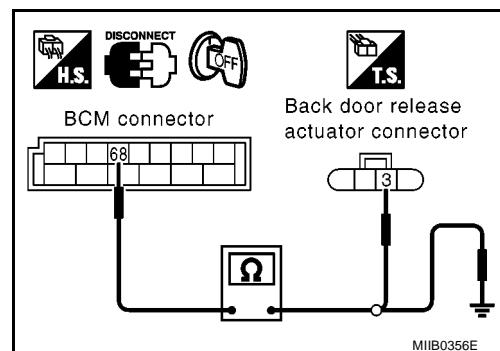
68 (OR) – 3 (OR) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 68 and ground.

68 (OR) – Ground : Continuity should not exist.

OK or NG

- OK >> Replace BCM.
NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

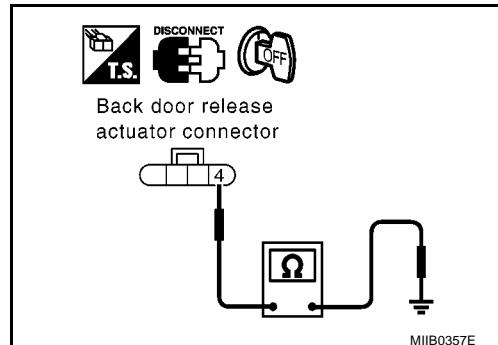
4. CHECK GROUND CIRCUIT

Check continuity between back door release actuator connector B55 terminal 4 and ground.

4 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Replace back door release actuator.
NG >> Repair or replace harness.



EIS00E20

Check External Trunk Lid Release Switch (C+C)

1. CHECK EXTERNAL TRUNK LID RELEASE SWITCH INPUT SIGNAL

With CONSULT- II

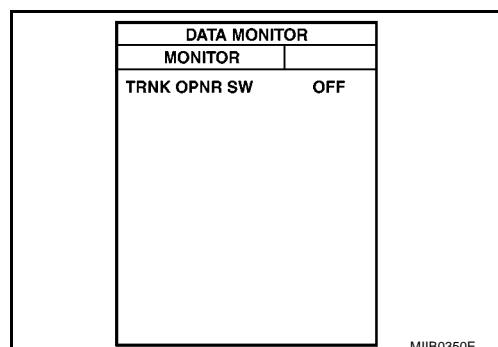
Check external trunk lid release switch "TRNK OPNR SW" in "DATA MONITOR" mode with CONSULT- II.

External trunk lid release switch is pushed

TRNK OPNR SW : ON

External trunk lid release switch is released

TRNK OPNR SW : OFF



A
B
C
D
E
F
G
H
BL
J
K
L
M

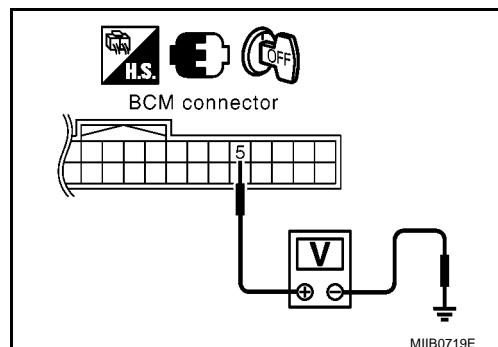
Without CONSULT- II

Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	5 (Y)	Ground	Pushed	0
			Released	5

OK or NG

- OK >> External trunk lid release switch is OK.
NG >> GO TO 2.



POWER DOOR LOCK SYSTEM

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and external trunk lid release switch connector.
3. Check continuity between BCM connector M48 terminal 5 and external trunk lid release switch connector T53 terminal 2.

5 (Y) – 2 (Y) : Continuity should exist.

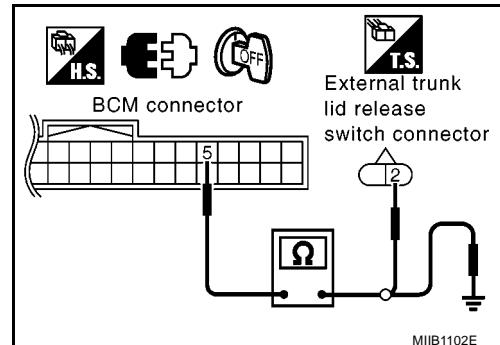
4. Check continuity between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



3. CHECK EXTERNAL TRUNK LID RELEASE SWITCH

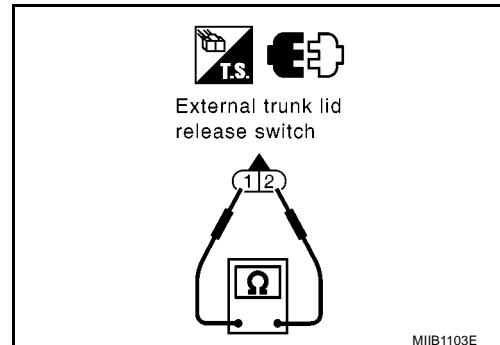
Check continuity between external trunk lid release switch terminals 1 and 2.

Terminals		Condition	Continuity
1	2	Pushed	Yes
		Released	No

OK or NG

OK >> GO TO 4.

NG >> Replace external trunk lid release switch.



4. CHECK BCM OUTPUT SIGNAL

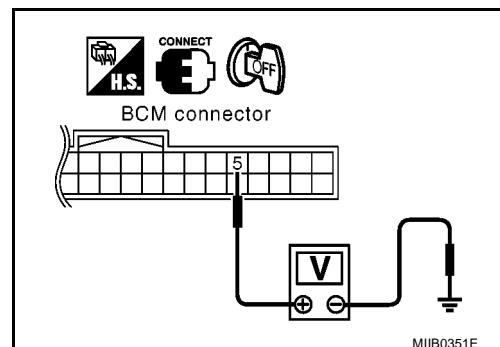
1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Approx. 5V

OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Replace BCM.



POWER DOOR LOCK SYSTEM

Check Trunk Lid Release Actuator (C+C)

EIS00E21

1. CHECK BCM OUTPUT SIGNAL

Check trunk lid release output signal

Perform ("TRUNK/BACK DOOR") in "ACTIVE TEST" mode with CONSULT-II.

When "ACTIVE TEST" is executed, does the trunk lid open?

OK or NG

OK >> Trunk lid release output is OK.
NG >> GO TO 2.

ACTIVE TEST	
TRUNK/BACK DOOR	OFF
ON	

MIIIB0354E

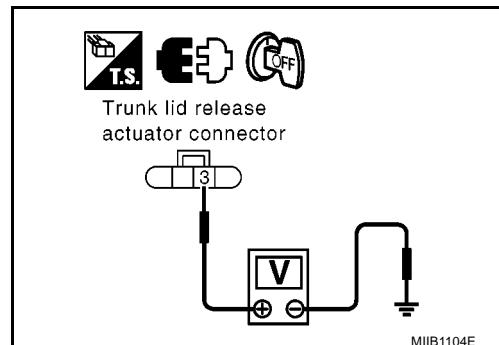
2. CHECK TRUNK LID RELEASE ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect trunk lid release actuator connector.
3. Operate external trunk lid release switch, check voltage between trunk lid release actuator connector B55 terminal 3 and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B55	3 (OR)	Ground	Pushed	0 → Battery voltage → 0

OK or NG

OK >> GO TO 4.
NG >> GO TO 3.



3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 68 and trunk lid release actuator connector B55 terminal 3.

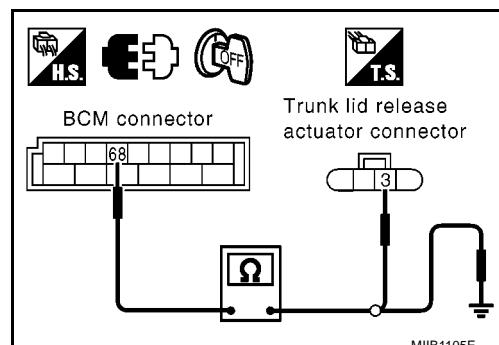
68 (OR) – 3 (OR) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 68 and ground.

68 (OR) – Ground : Continuity should not exist.

OK or NG

OK >> Replace BCM.
NG >> Repair or replace harness.



POWER DOOR LOCK SYSTEM

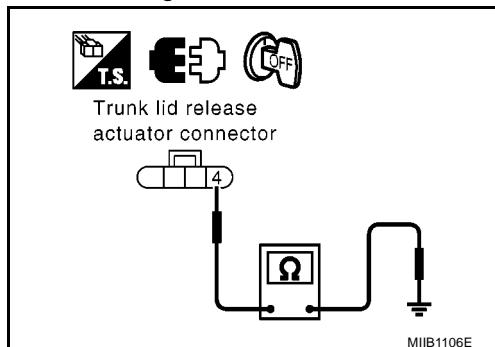
4. CHECK GROUND CIRCUIT

Check continuity between trunk lid release actuator connector B55 terminal 4 and ground.

4 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Replace trunk lid release actuator.
NG >> Repair or replace harness.



EIS00E22

Check Seat Undertray Lock Actuator (C+C)

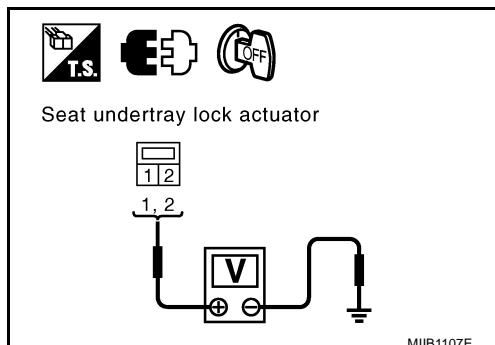
1. CHECK SEAT UNDERTRAY LOCK ACTUATOR CIRCUIT (C+C)

1. Turn ignition switch OFF.
2. Disconnect seat undertray lock actuator connector.
3. Operate seat undertray lock actuator, check voltage between seat undertray lock actuator connector B63 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B63	1 (BR)	Ground	Unlock	0 → Battery voltage → 0
	2 (L)		Lock	0 → Battery voltage → 0

OK or NG

- OK >> Replace seat undertray lock actuator.
NG >> GO TO 2.



EIS00E22

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 76, 77 and seat undertray lock actuator connector B63 terminals 1, 2.

76 (BR) – 1 (BR) : Continuity should exist.

77 (L) – 2 (L) : Continuity should exist.

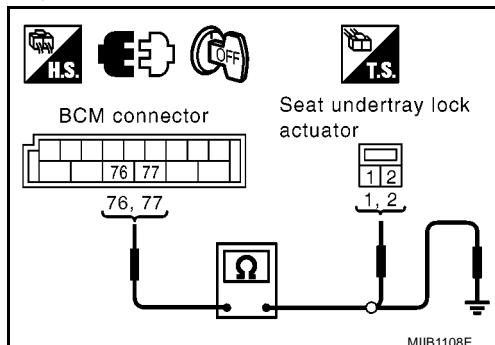
3. Check continuity between BCM connector M50 terminal 76, 77 and ground.

76 (BR) – Ground : Continuity should not exist.

77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check condition of the harness and the connector.
NG >> Repair or replace harness.



EIS00E22

POWER DOOR LOCK SYSTEM

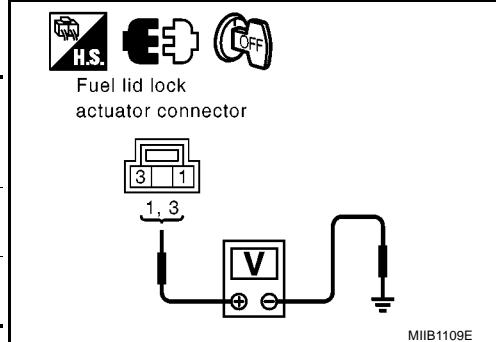
Check Fuel Lid Lock Actuator (C+C)

EIS00E23

1. CHECK FUEL LID LOCK ACTUATOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect fuel lid lock actuator connector.
3. Check voltage between fuel lid lock actuator harness connector B69 terminal 1, 3 and ground.

Connector	Terminal (wire color)		Condition	Voltage [V] (Approx.)
	(+)	(-)		
B69	1 (L)	Ground	Door lock and unlock switch is turned to "LOCK".	0 → Battery voltage → 0
	3 (BR)		Door lock and unlock switch is turned to "UNLOCK".	0 → Battery voltage → 0

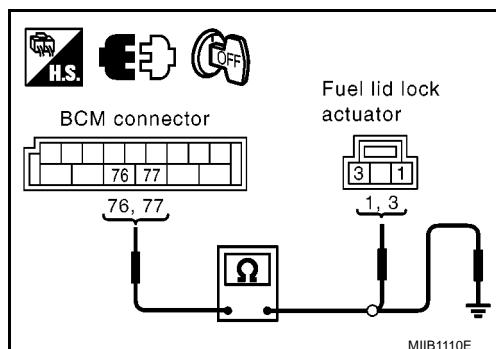


OK >> GO TO 2.

NG >> Replace fuel lid lock actuator.

2. CHECK FUEL LID LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector M50 terminal 76, 77 and fuel lid lock actuator connector B69 terminal 1, 3.
 - 76 (BR) – 3 (BR)** : Continuity should exist.
 - 77 (L) – 1 (L)** : Continuity should exist.
4. Check continuity between BCM harness connector and ground.
 - 76 (BR) – Ground** : Continuity should not exist.
 - 77 (L) – Ground** : Continuity should not exist.



OK >> Fuel lid lock actuator is OK.

NG >> Repair or replace harness.

Check Door Lock/Unlock Switch Indicator

EIS00566

1. CHECK DOOR LOCK/UNLOCK SWITCH INDICATOR

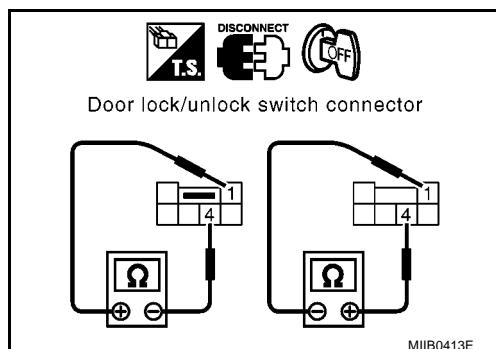
Check continuity between door lock/unlock switch indicator harness connector terminals 1 and 4.

Terminals		Continuity
(+)	(-)	
1	4	Yes
4	1	No

OK or NG

OK >> Check harness for open or short between BCM and door lock/unlock switch.

NG >> replace door lock/unlock switch.



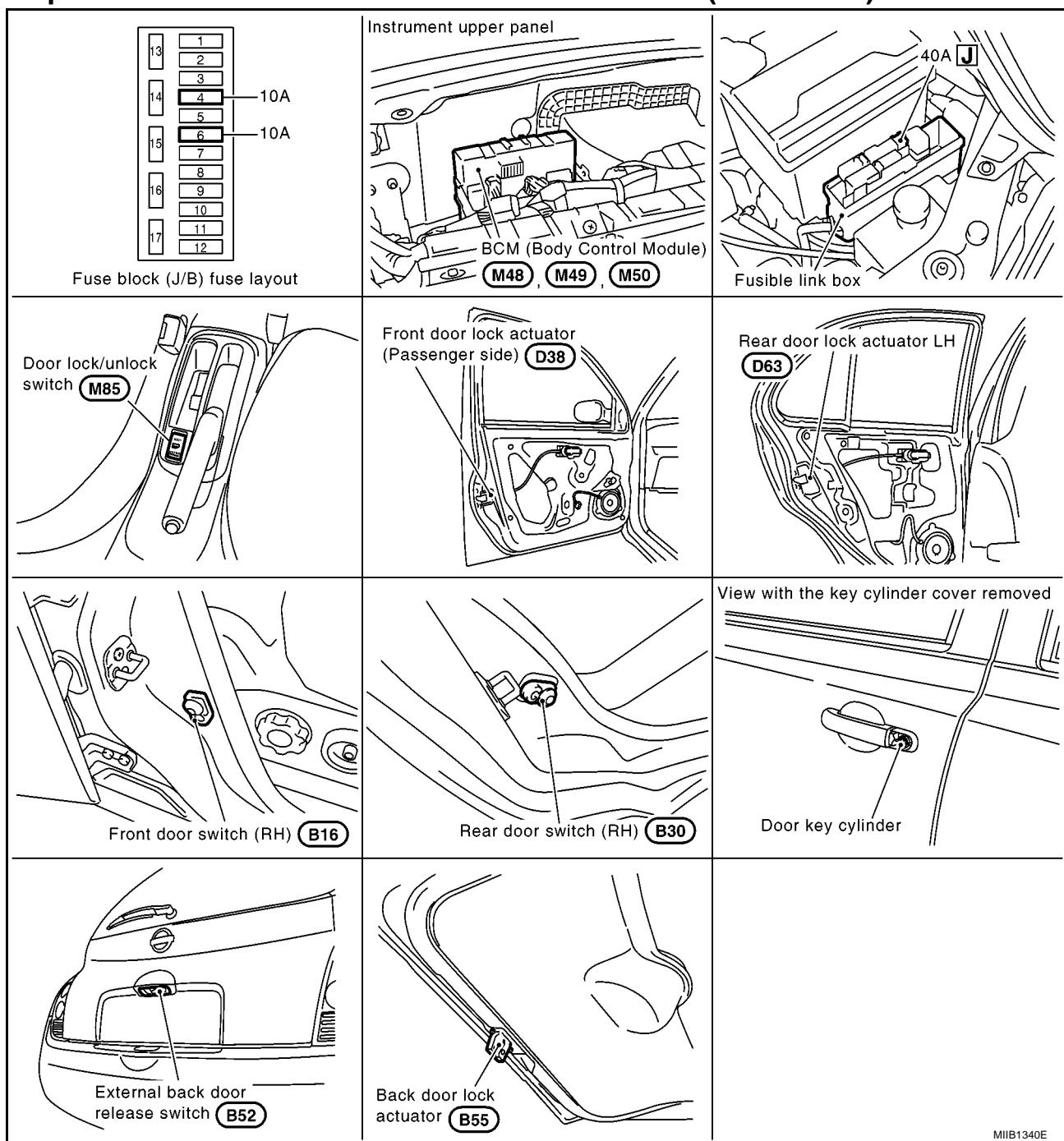
POWER DOOR LOCK — SUPER LOCK —

POWER DOOR LOCK — SUPER LOCK —

PFP:24814

Component Parts and Harness Connector Location (Hatchback)

EIS0054P

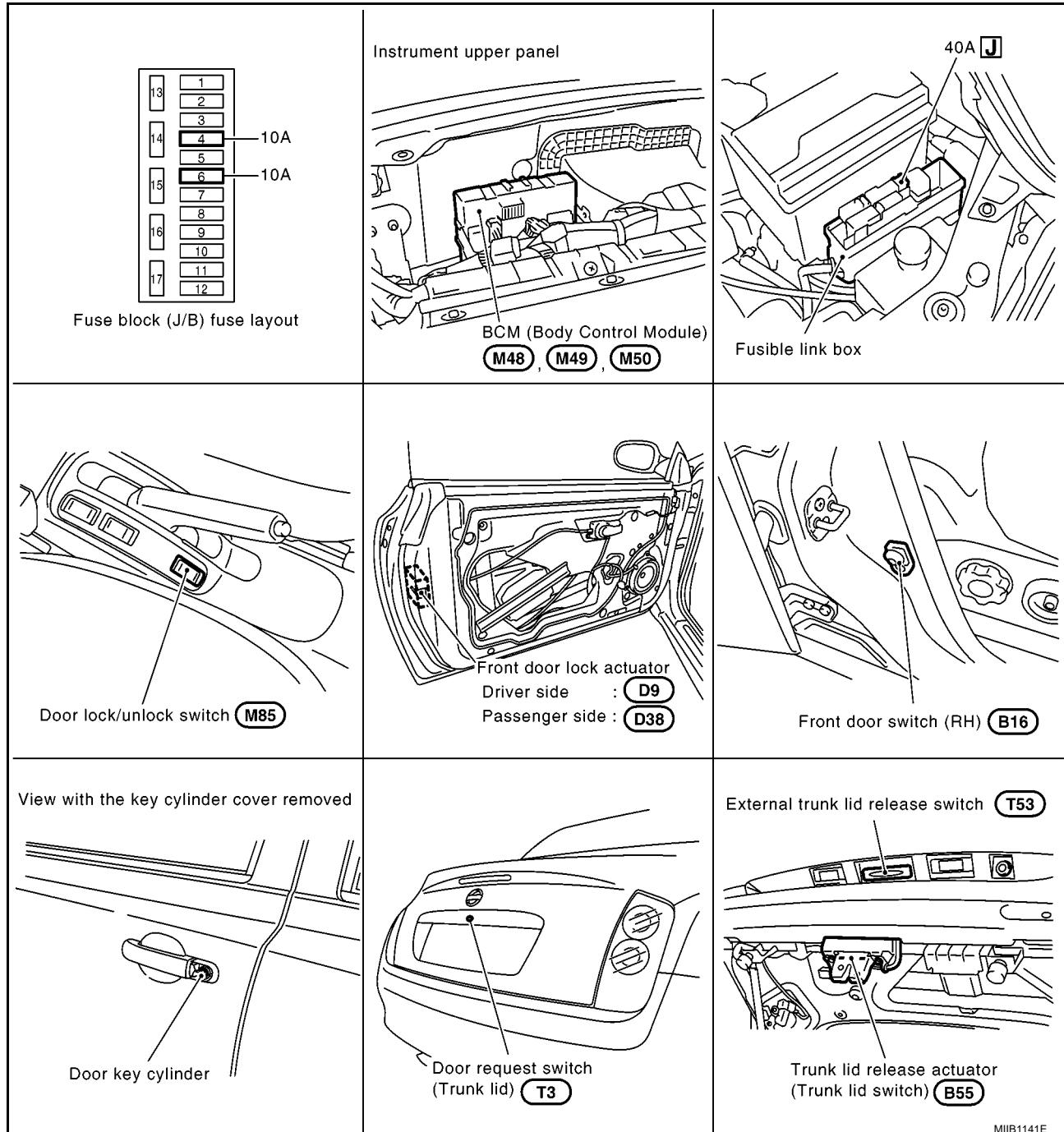


POWER DOOR LOCK — SUPER LOCK —

Component Parts and Harness Connector Location (C+C)

EIS00E2P

A
B
C
D
E
F
G
H
BL
J
K
L
M



MIIIB1141E

System Description

OPERATION

EIS004XP

Power is supplied (Without Intelligent Key System)

- through to 40A fusible link (letter J , located in the fusible link box)
- to BCM terminal 74 and 79.
- through 10A fuse [No.6, located in the fuse box (J/B)]
- to key switch terminal 1.

Power is supplied (With Intelligent Key System)

- through to 40A fusible link (letter J , located in the fusible link box)
- to BCM terminal 74 and 79.
- through 10A fuse [No.17, located in the fuse box (J/B)]
- to key switch and ignition knob switch terminal 1 and 3.

When the key switch is ON (Ignition key is inserted in ignition key cylinder), power is supplied

- through key switch terminal 2
- to BCM terminal 3.

When the ignition switch is ON or START, power is supplied

- through 10A fuse [No. 4, located in the fuse block (J/B)]
- to BCM terminal 24.

Ground is supplied

- through BCM terminals 2 and 70
- to body ground M19 and M20.

When the front door switch LH (LHD Models) or RH (RHD Models) is ON (door is open), ground is supplied

- through BCM terminal 29
- through front door switch LH (LHD Models) or RH (RHD Models) terminal 1
- to front door switch LH (LHD Models) or RH (RHD Models) case ground.

When the front door switch RH (LHD Models) or LH (RHD Models) is ON (door is open), ground is supplied

- through BCM terminal 30
- through front door switch RH (LHD Models) or LH (RHD Models) terminal 1
- to front door switch RH (LHD Models) or LH (RHD Models) case ground.

When the rear door switch LH is ON (door is open), ground is supplied

- through BCM terminal 59 (5 door models)
- through rear door switch LH terminal 1
- to rear door switch LH case ground.

When the rear door switch RH is ON (door is open), ground is supplied

- through BCM terminal 60 (5 door models)
- through rear door switch RH terminal 1
- to rear door switch RH case ground.

DOOR LOCK AND UNLOCK SWITCH OPERATION

When door lock/unlock switch is in LOCK position, ground is supplied

- to body grounds M19 and M20
- through door lock/unlock switch terminal 4 and 6
- through BCM (Body Control Module) terminal 6.

With power and ground supplied, doors are locked.

When door lock/unlock switch is in UNLOCK position, ground is supplied

- to body grounds M19 and M20
- through door lock/unlock switch terminal 4 and 5
- through BCM (Body Control Module) terminal 25

With power and ground supplied, all doors are unlocked.

Lock/unlock switch indicated by LED when key in switch is on or on with timer.

POWER DOOR LOCK — SUPER LOCK —

SEAT UNDERTRAY LOCK ACTUATOR OPERATION

When door lock/unlock switch and seat undertray lock actuator is unlocked, ground is supplied

- through BCM terminal 76
- through seat undertray lock actuator terminal 1 and 2
- to BCM terminal 77.

When door lock/unlock switch and seat undertray lock actuator is locked, ground is supplied

- through BCM terminal 77
- through seat undertray lock actuator terminal 2 and 1
- to BCM terminal 76.

FUEL LID LOCK ACTUATOR OPERATION

When door lock/unlock switch and fuel lid lock actuator is unlocked, ground is supplied

- through BCM terminal 76
- through fuel lid lock actuator terminal 3 and 1
- to BCM terminal 77.

When door lock/unlock switch and fuel lid lock actuator is locked, ground is supplied

- through BCM terminal 77
- through fuel lid lock actuator terminal 1 and 3
- to BCM terminal 76.

EXTERNAL BACK DOOR RELEASE SWITCH OPERATION (HATCHBACK)

When the external back door release switch is turn on, external back door is opened

Ground is supplied

- through BCM terminal 5
- through external back door release switch terminal 1 and 2
- to body ground B44 and B51.

EXTERNAL BACK DOOR RELEASE ACTUATOR OPERATION

When the back door release actuator receives a release signal from BCM

Ground is supplied

- through BCM terminal 68
- through back door release actuator terminal 3 and 4
- to body ground B44 and B51.

BACK DOOR SWITCH OPERATION

When the back door switch is opened, ground is supplied

- through BCM terminal 10
- through back door switch terminal 1 and 2
- to body ground B44 and B51.

EXTERNAL TRUNK LID RELEASE SWITCH OPERATION (C+C)

When the external trunk lid release switch is turn on, external trunk lid is opened

- through BCM terminal 5
- through external trunk lid release switch terminal 2 and 1
- to body ground B17, B23 and B81.

TRUNK LID RELEASE ACTUATOR OPERATION

When the trunk lid release actuator receives a release signal from BCM

- through BCM terminal 68
- through trunk lid release actuator terminal 3 and 4
- to body ground B17, B23 and B81.

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POWER DOOR LOCK — SUPER LOCK —

TRUNK LID SWITCH OPERATION

When the trunk lid switch is opened, ground is supplied

- through BCM terminal 10
- through trunk lid switch terminal 1 and 2
- to body ground B17, B23 and B81.

KEY REMINDER SYSTEM

- If the ignition key is in the ignition key cylinder and driver door is open, setting door lock/unlock switch, key or remote controller to “LOCK” locks the door once but then immediately unlocks all doors.

UNLOCK LINK FUNCTION

When this function is activated, if the car is locked by door lock/unlock switch, opening the driver or passenger side door from the inside handle will override the lock state and unlock the whole car.

(This function will be deactivate if anti-hijack function is activated.)

Selectable Function

	Door Lock/unlock switch
How to change setting	Press unlock for more than 4 seconds
Contents	Unlock link activate/deactivate
How to confirm	Buzzer should sound for 0.2 seconds

BACK DOOR OPENER OPERATION

Back door can be opened with back door switch: When all door are unlocked, or When back door request switch is pushed (With Intelligent Key system).

AUTO RE-LOCK FUNCTION

The BCM is equipped with an auto re-lock function, when no further user action occurs after an full or partial unlock, the doors will automatically re-lock after 2 minutes (default value). The 2 minutes timer of auto re-lock will be reset if unlock button from the key fob is pressed. The auto re-lock function will not be activated under the following states.

- Key switch is ON
- Mechanical key is inserted
- Any door is opened

NOTE:

For the Intelligent Key system models, this function will be deactivated.

ANTI-HIJACK FUNCTION

With the anti-hijack function enabled, the first unlock request send from key fob will partially unlock only the driver side door (released super lock if equipped). Then if a second unlock signal is send, then all remaining doors will be unlocked.

SUPER LOCK OPERATION

When super lock is set, ground is supplied

- through BCM terminals 75
- through each super lock actuators terminals 1 and 2
- to BCM terminal 76

When super lock is released, ground is supplied

- through BCM terminal 76
- through each super lock actuators terminals 2 and 1
- to BCM terminals 75

Door lock and unlock switch operation

When door lock/unlock switch is in LOCK position, ground is supplied

OUTLINE

Power door lock system with super lock and key reminder is controlled by BCM (Body Control Module). Super lock has a higher anti-theft performance than conventional power door lock systems.

When super lock is in released condition, lock/unlock switch operation locks or unlocks door.

POWER DOOR LOCK — SUPER LOCK —

When super lock is in set condition, door operation cannot lock nor unlock door.

OPERATION

Power Door Lock / Unlock and Super Lock Set / Release Operation by Remote Controller or Intelligent Key

- Pressing remote controller LOCK button will lock all doors and set super lock. (Super lock will not be set while key is inserted in the ignition key cylinder.)
- Pressing remote controller UNLOCK button once will unlock driver door and release super lock. Then, if an unlock signal is sent from the remote controller again, all other doors will be unlocked.

Power Door Lock / Unlock and Super Lock Release Operation by Door Key Cylinder

With the key inserted into driver door key cylinder, turning it to UNLOCK will unlock the door and release super lock.

Power Door Lock and Super Lock Release Operation

When the super lock is set, turning the ignition key switch to ON will release the super lock. All doors will unlock once, but then immediately lock again.

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POWER DOOR LOCK — SUPER LOCK —

CAN Communication SYSTEM DESCRIPTION

EIS00DXW

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

EIS00E6X

Body type	3door/5door	3door/5door/C+C	3door/5door	3door/5door/C+C	3door/5door
Axle	2WD				
Engine	CR12DE/CR14DE	HR16DE	CR12DE/CR14DE	HR16DE	K9K
Handle	LHD/RHD				
Brake control	ABS			ESP	
Transmission	A/T	M/T	A/T	M/T	
Intelligent Key system	×	×	×	×	×

CAN communication unit

ECM	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Data link connector	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Combination meter	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Intelligent Key unit	×		×		×		×		×		×		×	
EPS control unit	×	×	×	×	×	×	×	×	×	×	×	×	×	×
BCM	×	×	×	×	×	×	×	×	×	×	×	×	×	×
ABS actuator and electric unit (control unit)	×	×	×	×	×	×	×	×	×	×	×	×	×	×
TCM	×	×					×	×						
IPDM E/R	×	×	×	×	×	×	×	×	×	×	×	×	×	×
CAN communication type	<u>BL-87, "TYPE 1/ TYPE 2"</u>		<u>BL-90, "TYPE 3/TYPE 4/ TYPE 5/TYPE 6"</u>			<u>BL-92, "TYPE 7/ TYPE 8"</u>		<u>BL-95, "TYPE 9/TYPE 10/ TYPE 11/TYPE 12"</u>			<u>BL-97, "TYPE 13/ TYPE 14"</u>			

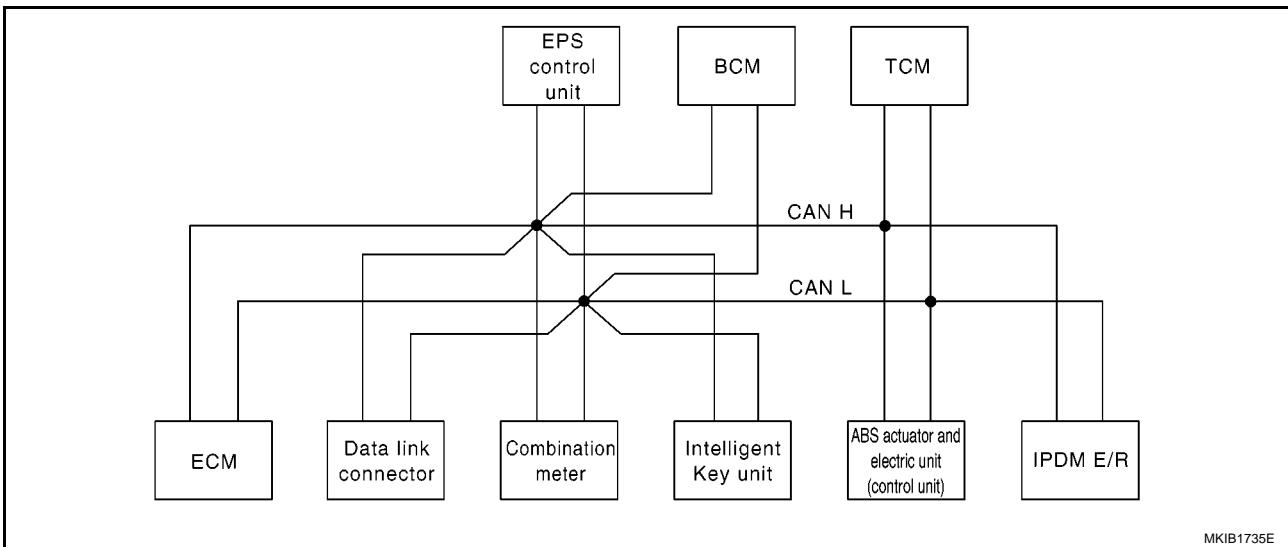
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POWER DOOR LOCK — SUPER LOCK —

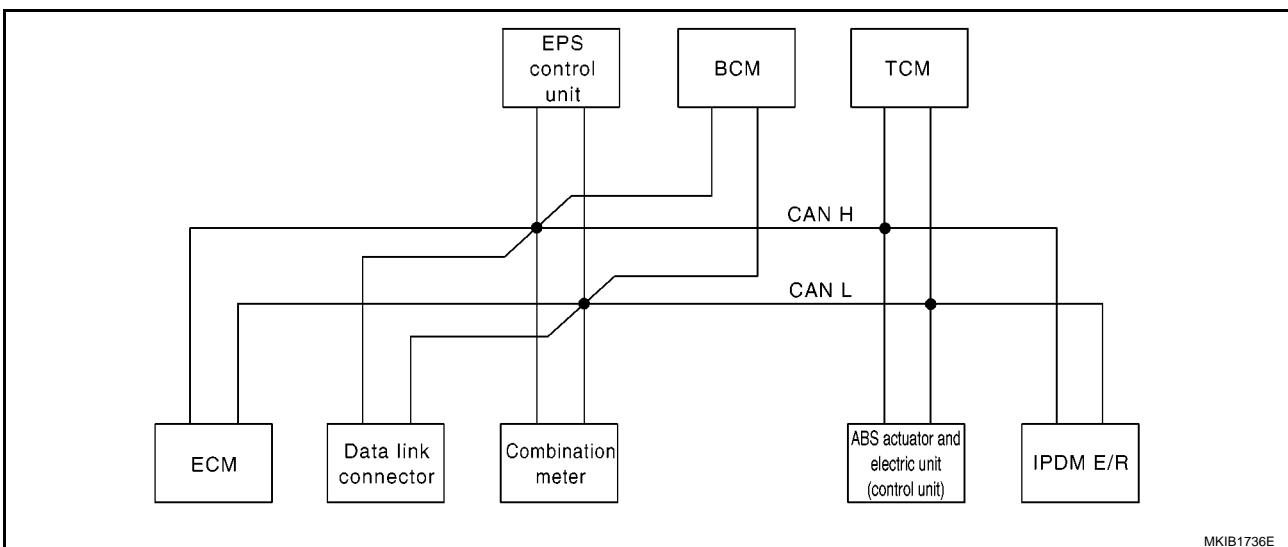
TYPE 1/TYPE 2

System diagram

- Type 1



- Type 2



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combination meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actuator and electric unit (control unit)	TCM	IPDM E/R
Engine speed signal	T	R						
Engine coolant temperature signal	T	R						
A/T self-diagnosis signal	R						T	
Output shaft revolution signal	R						T	
Accelerator pedal position signal	T							R
Closed throttle position signal	T							R
Wide open throttle position signal	T							R
Overdrive control switch signal		T						R

POWER DOOR LOCK — SUPER LOCK —

Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actua-tor and electric unit (control unit)	TCM	IPDM E/R
A/T position indicator signal		R					T	
Stop lamp switch signal		T					R	
O/D OFF indicator signal		R					T	
Engine and A/T integrated control signal	T						R	
	R						T	
Fuel consumption monitor signal	T	R						
Oil pressure switch signal		R						T
A/C compressor request signal	T							R
Heater fan switch signal	R				T			
Cooling fan speed request signal	T							R
Position lights request signal		R			T			R
Low beam request signal					T			R
Low beam status signal	R							T
High beam request signal		R			T			R
High beam status signal	R							T
Day time light request signal					T			R
Vehicle speed signal	R	R		R		T		
	R	T	R	R	R			
Sleep/wake up signal		R	R		T			R
Door switch signal		R	R		T			R
Turn indicator signal		R			T			
Buzzer output signal		R			T			
		R	T					
MI signal	T	R						
Front wiper request signal					T			R
Front wiper stop position signal					R			T
Rear window defogger switch signal					T			R
Rear window defogger control signal	R							T
EPS warning lamp signal		R		T				
ABS warning lamp signal		R				T		
Brake warning lamp signal		R				T		
Back-up lamp signal				R	T			
Front fog lamp request signal		R			T			R
Rear fog lamp status signal		R			T			
Headlamp washer request signal					T			R
Door lock/unlock request signal			T		R			
Door lock/unlock status signal			R		T			
KEY indicator signal		R	T					
LOCK indicator signal		R	T					
Engine status signal	T			R				

POWER DOOR LOCK — SUPER LOCK —

Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actua-tor and electric unit (control unit)	TCM	IPDM E/R
A/C switch signal	R				T			
Brake system malfunction signal		T		R				
Parking brake switch signal		T		R				
R range signal					R			T

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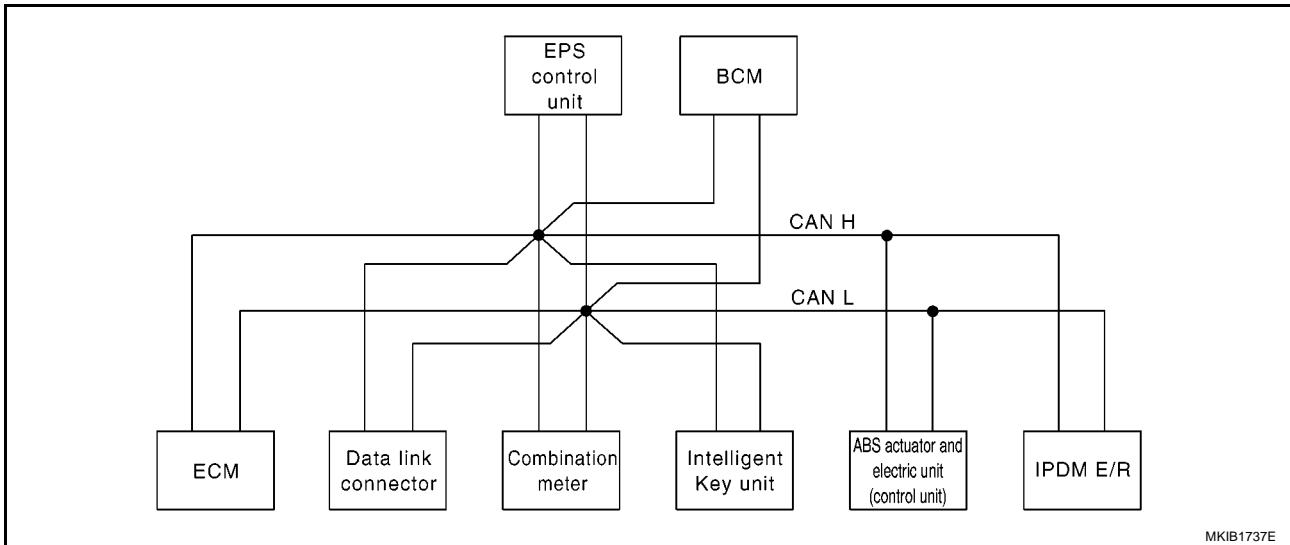
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POWER DOOR LOCK — SUPER LOCK —

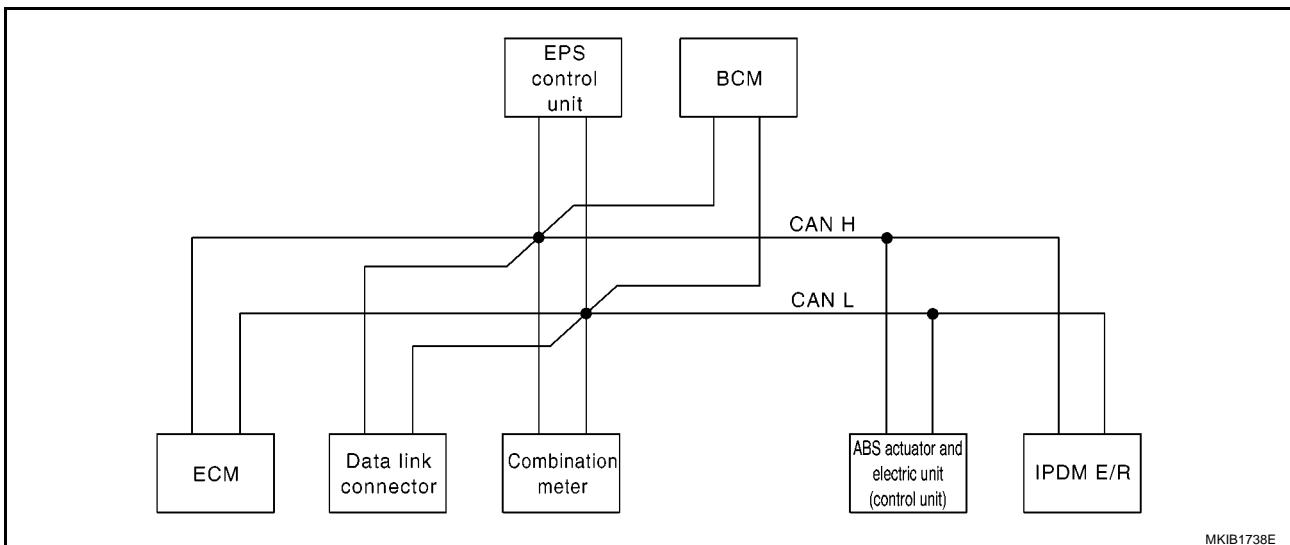
TYPE 3/TYPE 4/TYPE 5/TYPE 6

System diagram

- Type 3/Type 5



- Type 4/Type 6



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina- tion meter.	Intelligent Key unit	EPS con- trol unit	BCM	ABS actu- ator and electric unit (con- trol unit)	IPDM E/R
Engine speed signal	T	R					
Engine coolant temperature signal	T	R					
Fuel consumption monitor signal	T	R					
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R
Low beam request signal					T		R

POWER DOOR LOCK — SUPER LOCK —

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Low beam status signal	R						T
High beam request signal		R			T		R
High beam status signal	R						T
Day time light request signal					T		R
Vehicle speed signal	R	R		R		T	
	R	T	R	R	R		
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
Rear window defogger control signal	R						T
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
A/C switch signal	R				T		
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
R range signal					R		T
Retractable hard top warning lamp signal*		R			T		

*: C+C only

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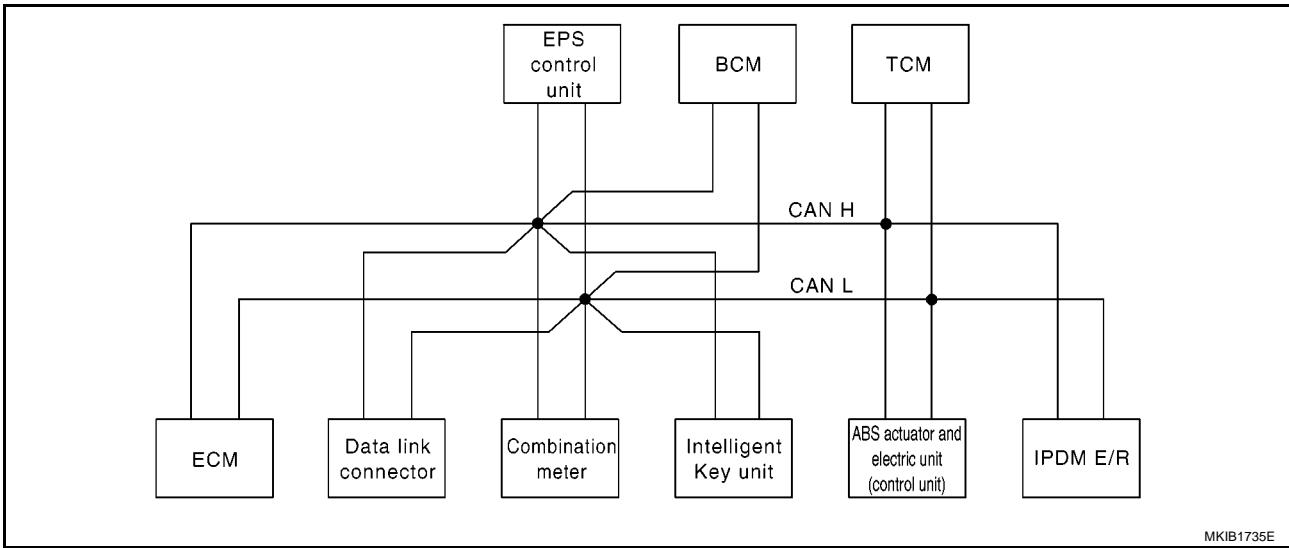
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POWER DOOR LOCK — SUPER LOCK —

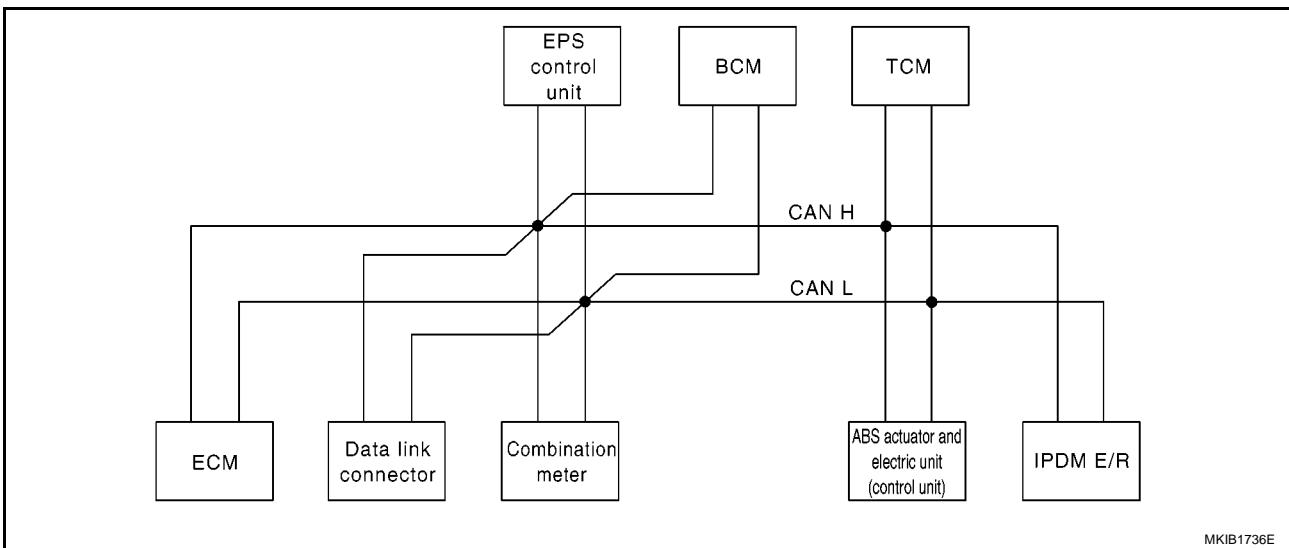
TYPE 7/TYPE 8

System diagram

- Type 7



- Type 8



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/ R
Engine speed signal	T	R				R		
Engine coolant temperature signal	T	R						
A/T self-diagnosis signal	R						T	
Output shaft revolution signal	R						T	
Accelerator pedal position signal	T					R	R	
Closed throttle position signal	T						R	
Wide open throttle position signal	T						R	
Overdrive control switch signal		T					R	
A/T position indicator signal		R					T	

POWER DOOR LOCK — SUPER LOCK —

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
A/T shift schedule change demand signal						T	R	
Stop lamp switch signal		T					R	
O/D OFF indicator lamp signal		R					T	
Engine and A/T integrated control signal	T						R	
	R						T	
Fuel consumption monitor signal	T	R						
Oil pressure switch signal		R						T
A/C compressor request signal	T							R
Heater fan switch signal	R				T			
Cooling fan speed request signal	T							R
Position lights request signal		R			T			R
Low beam request signal					T			R
Low beam status signal	R							T
High beam request signal		R			T			R
High beam status signal	R							T
Day time light request signal					T			R
Vehicle speed signal	R	R		R		T		
	R	T	R	R	R			
Sleep/wake up signal		R	R		T			R
Door switch signal		R	R		T			R
Turn indicator signal		R			T			
Buzzer output signal		R			T			
		R	T					
MI signal	T	R						
Front wiper request signal					T			R
Front wiper stop position signal					R			T
Rear window defogger switch signal					T			R
Rear window defogger control signal	R							T
EPS warning lamp signal		R		T				
ABS warning lamp signal		R				T		
ESP warning lamp signal		R				T		
ESP OFF indicator signal		R				T		
SLIP indicator lamp signal		R				T		
Steering angle signal				T		R		
Brake warning lamp signal		R				T		
Back-up lamp signal				R	T			
Front fog lamp request signal		R			T			R
Rear fog lamp status signal		R			T			
Headlamp washer request signal					T			R
Door lock/unlock request signal			T		R			

POWER DOOR LOCK — SUPER LOCK —

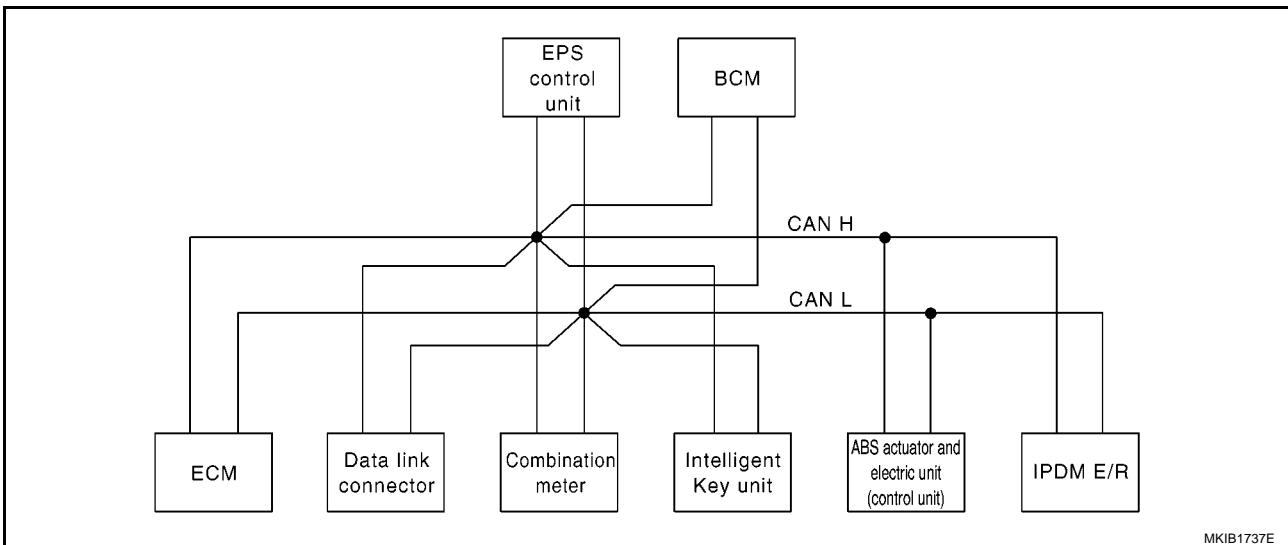
Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
Door lock/unlock status signal			R		T			
KEY indicator signal		R	T					
LOCK indicator signal		R	T					
Engine status signal	T			R				
A/C switch signal	R				T			
A/T torque signal						R	T	
Brake system malfunction signal		T		R				
Parking brake switch signal		T		R				
R range signal					R			T

POWER DOOR LOCK — SUPER LOCK —

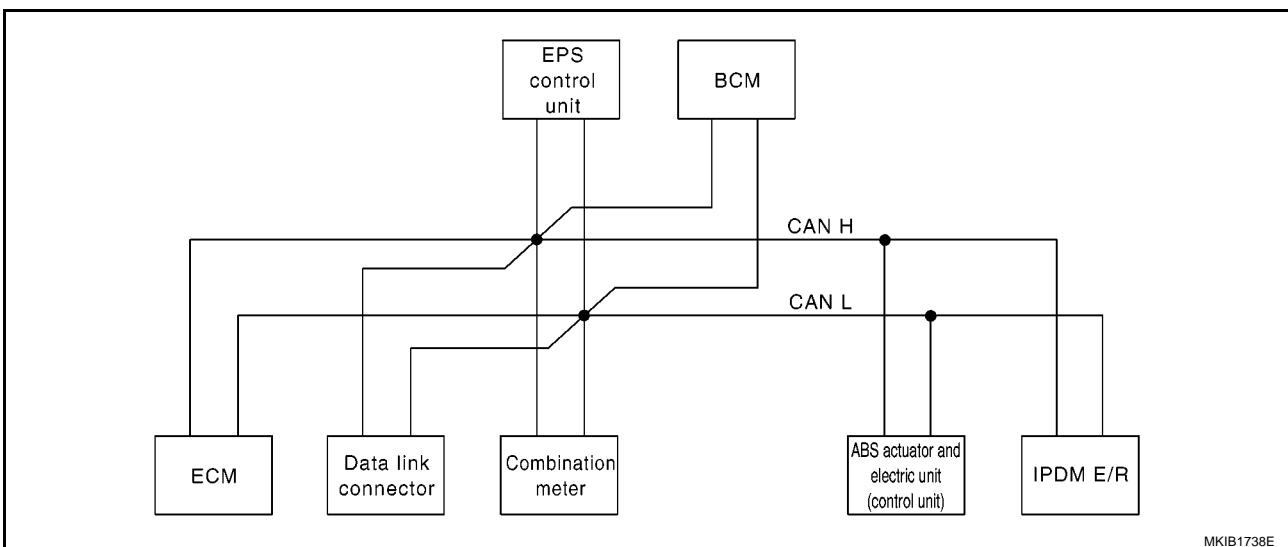
TYPE 9/TYPE 10/TYPE 11/TYPE 12

System diagram

- Type 9/Type 11



- Type 10/Type 12



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Engine speed signal	T	R				R	
Engine coolant temperature signal	T	R					
Fuel consumption monitor signal	T	R					
Accelerator pedal position signal	T					R	
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R

POWER DOOR LOCK — SUPER LOCK —

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Low beam request signal					T		R
Low beam status signal	R						T
High beam request signal		R			T		R
High beam status signal	R						T
Day time light request signal					T		R
Vehicle speed signal	R	R		R		T	
	R	T	R	R	R		
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
Rear window defogger control signal	R						T
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
ESP warning lamp signal		R				T	
ESP OFF indicator signal		R				T	
SLIP indicator lamp signal		R				T	
Steering angle signal				T			R
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
A/C switch signal	R				T		
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
R range signal					R		T
Retractable hard top warning lamp signal*		R			T		

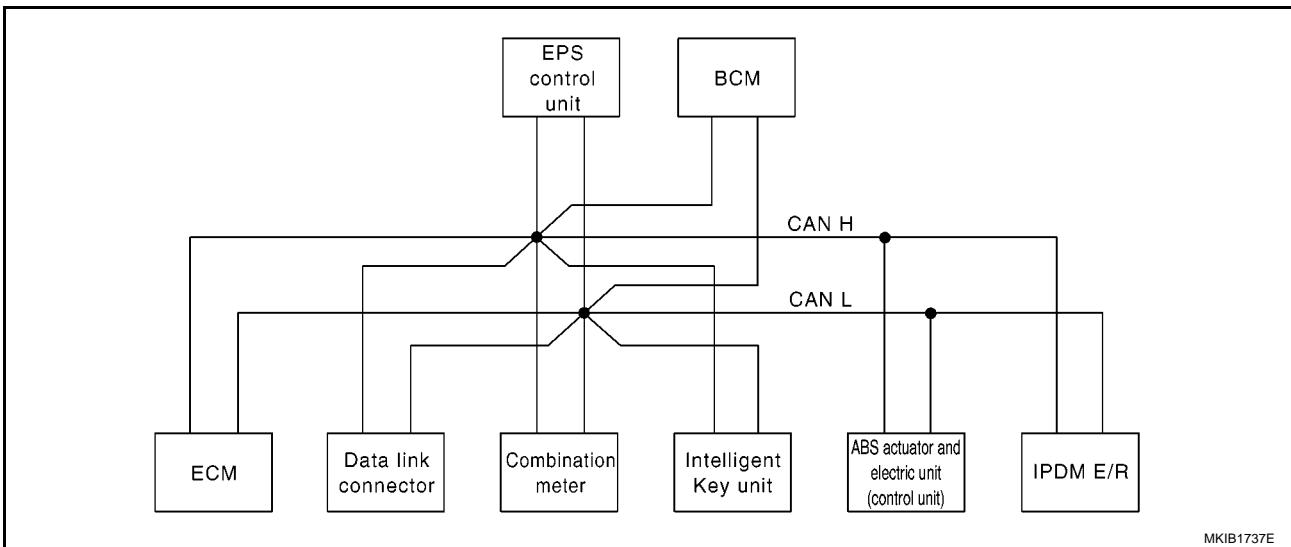
*: C+C only

POWER DOOR LOCK — SUPER LOCK —

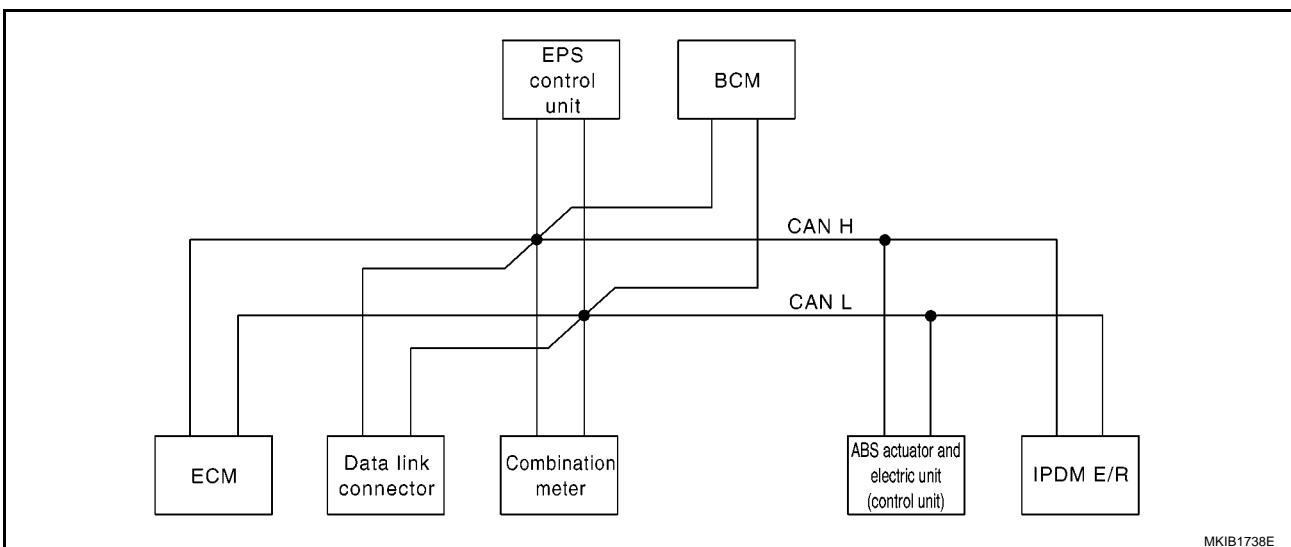
TYPE 13/TYPE 14

System diagram

- Type 13



- Type 14



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POWER DOOR LOCK — SUPER LOCK —

Input/output signal chart

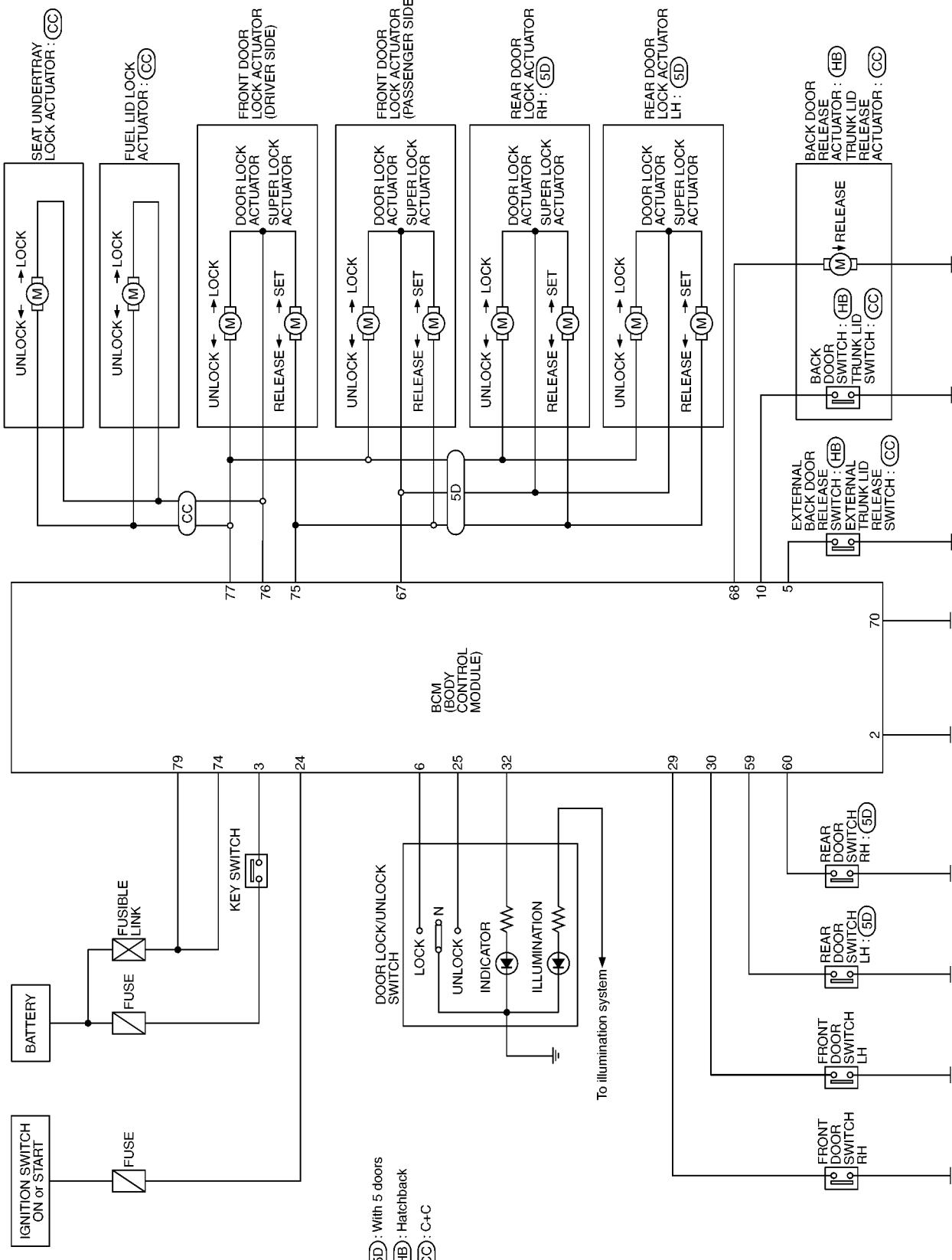
T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Engine speed signal	T	R					
Engine coolant temperature signal	T	R			R		
Fuel consumption monitor signal	T	R					
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R
Low beam request signal					T		R
High beam request signal		R			T		R
Day time light request signal					T		R
Vehicle speed signal	R	R		R	R	T	
	R	T	R	R			
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
Glow indicator signal	T	R					
R range signal					R		T

POWER DOOR LOCK — SUPER LOCK —

Schematic – S/LOCK – (Without Intelligent Key System)

EIS004XQ



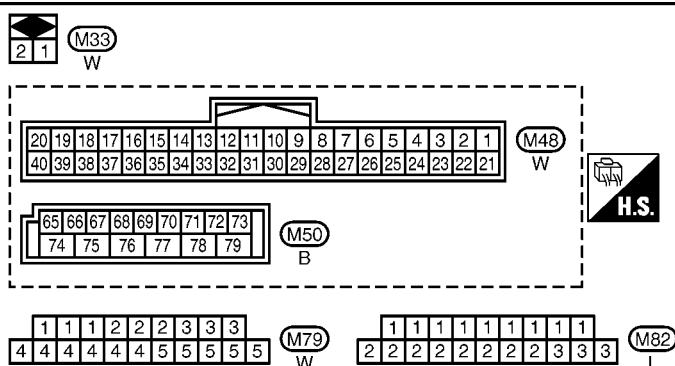
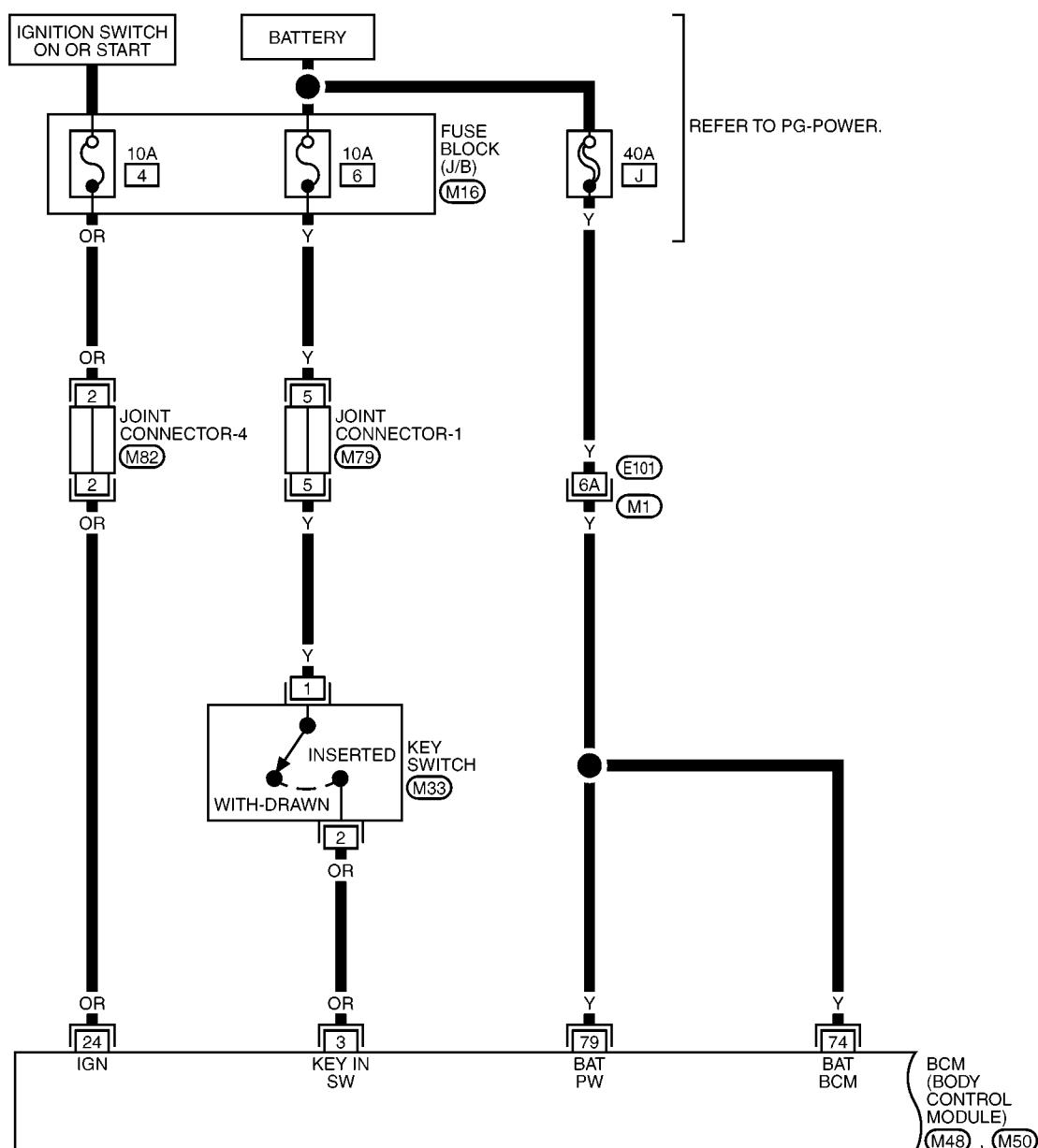
MIWA0613E

POWER DOOR LOCK — SUPER LOCK —

Wiring Diagram — S/LOCK — (Without Intelligent Key System)

EIS004XR

BL-S/LOCK-01

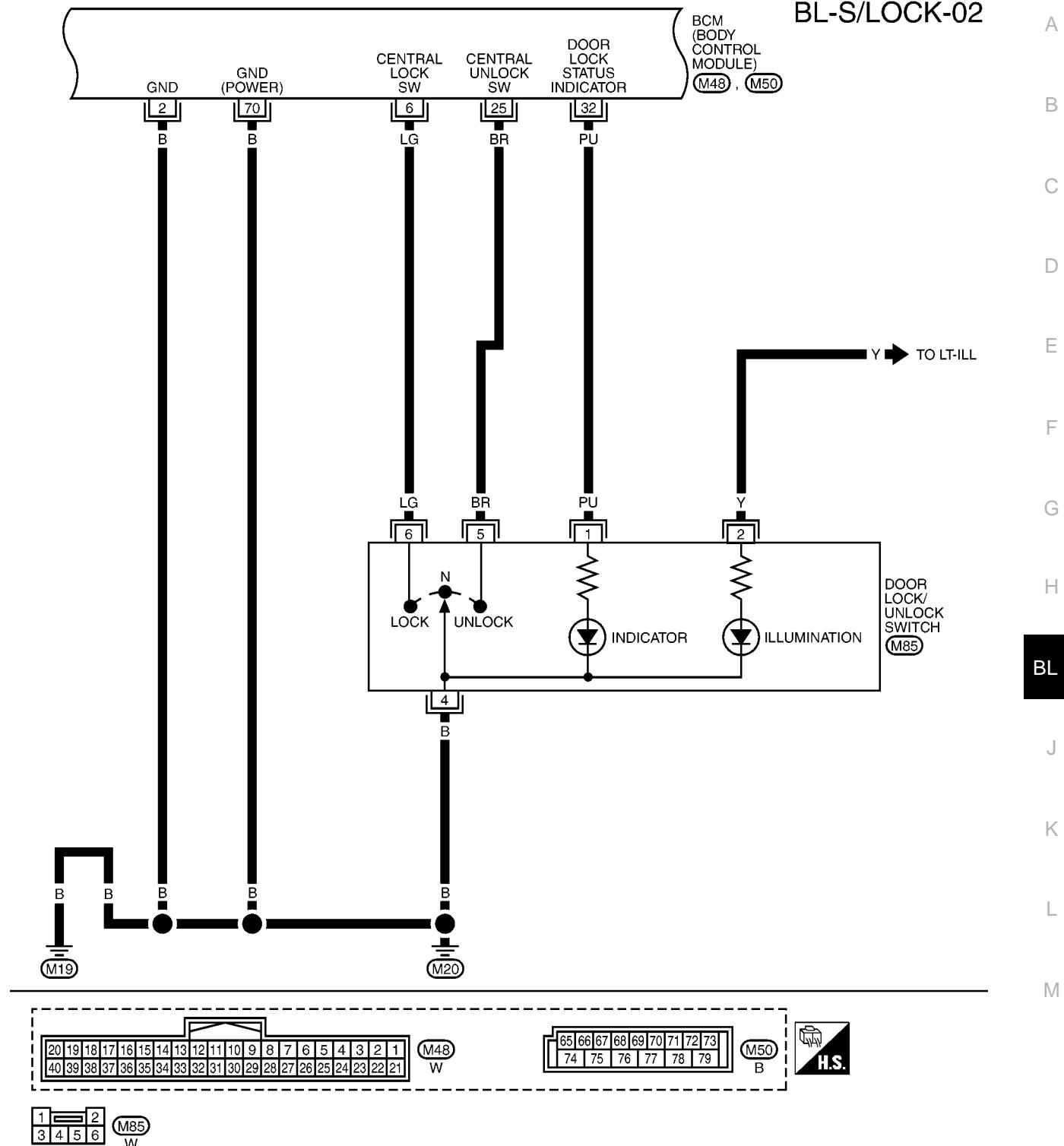


REFER TO THE FOLLOWING.

- (M1) -SUPER MULTIPLE JUNCTION (SMJ)
- (M16) -FUSE BLOCK- JUNCTION BOX (J/B)

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-02

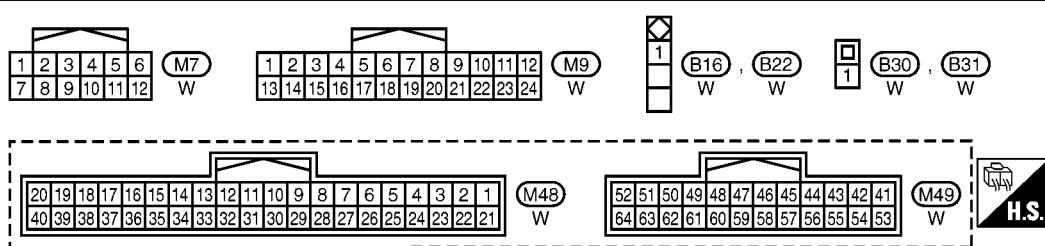
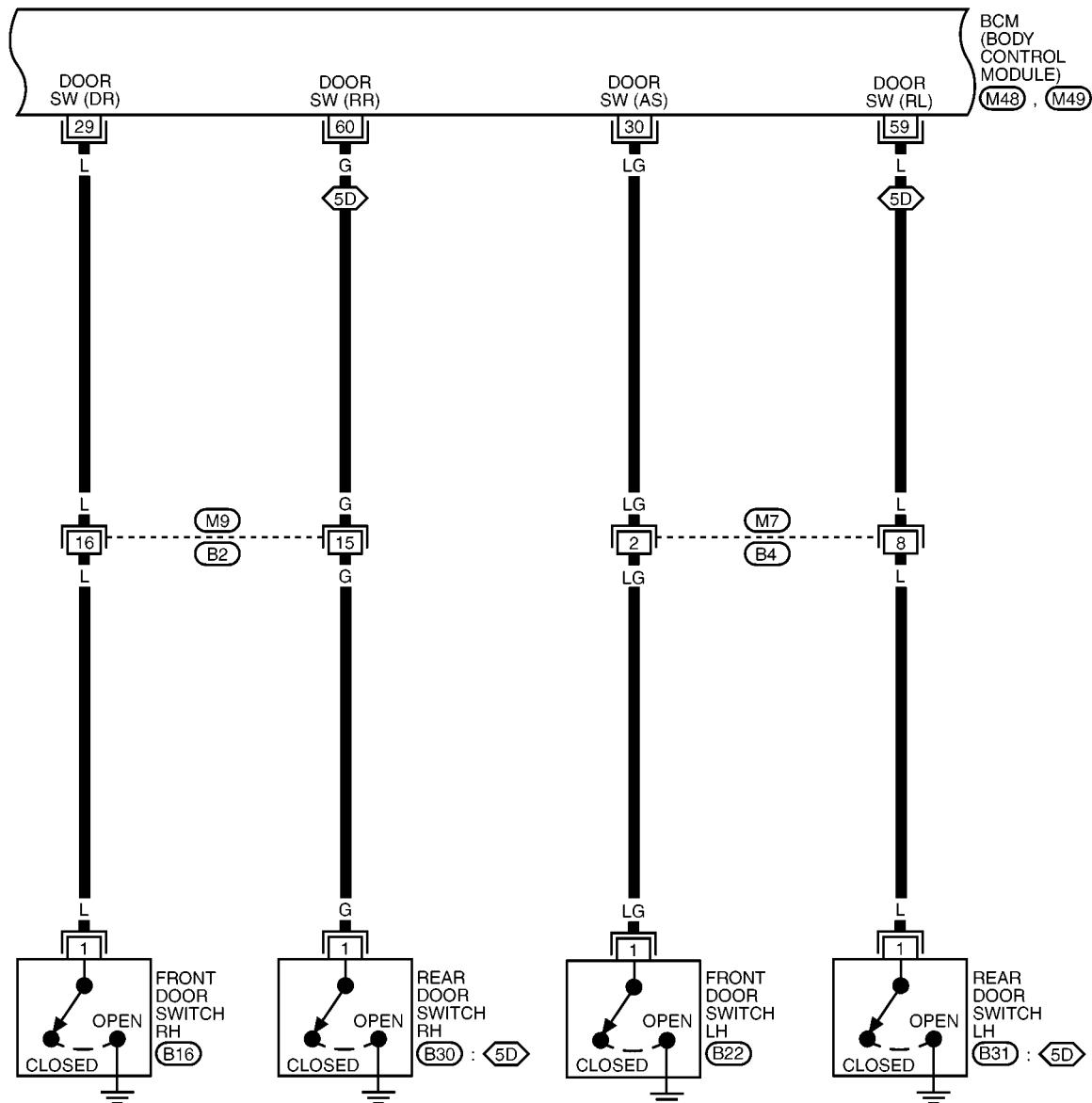


MIWA0614E

POWER DOOR LOCK — SUPER LOCK —

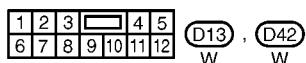
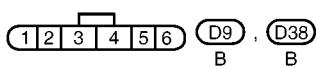
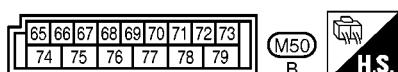
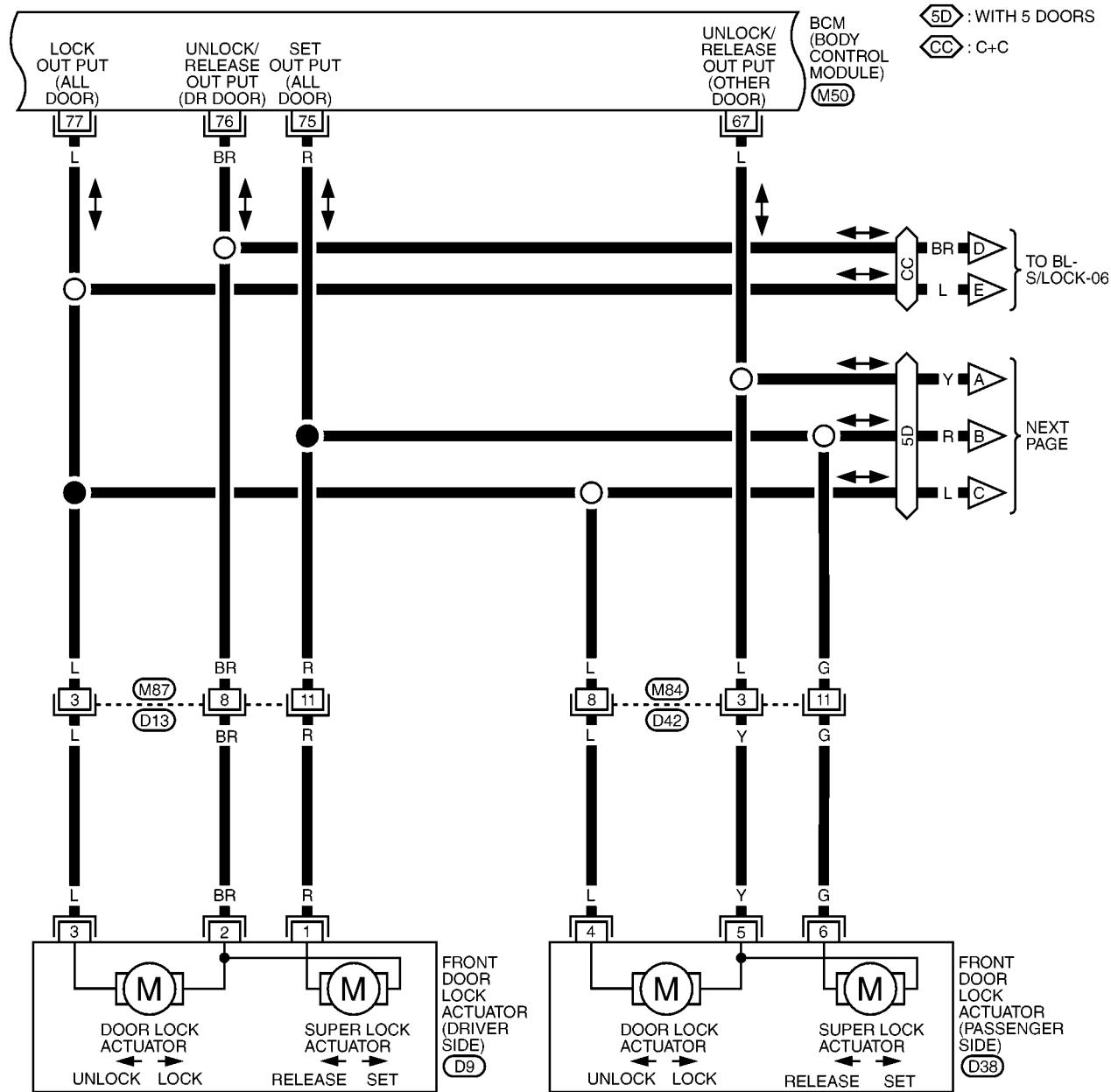
BL-S/LOCK-03

 : WITH 5 DOORS



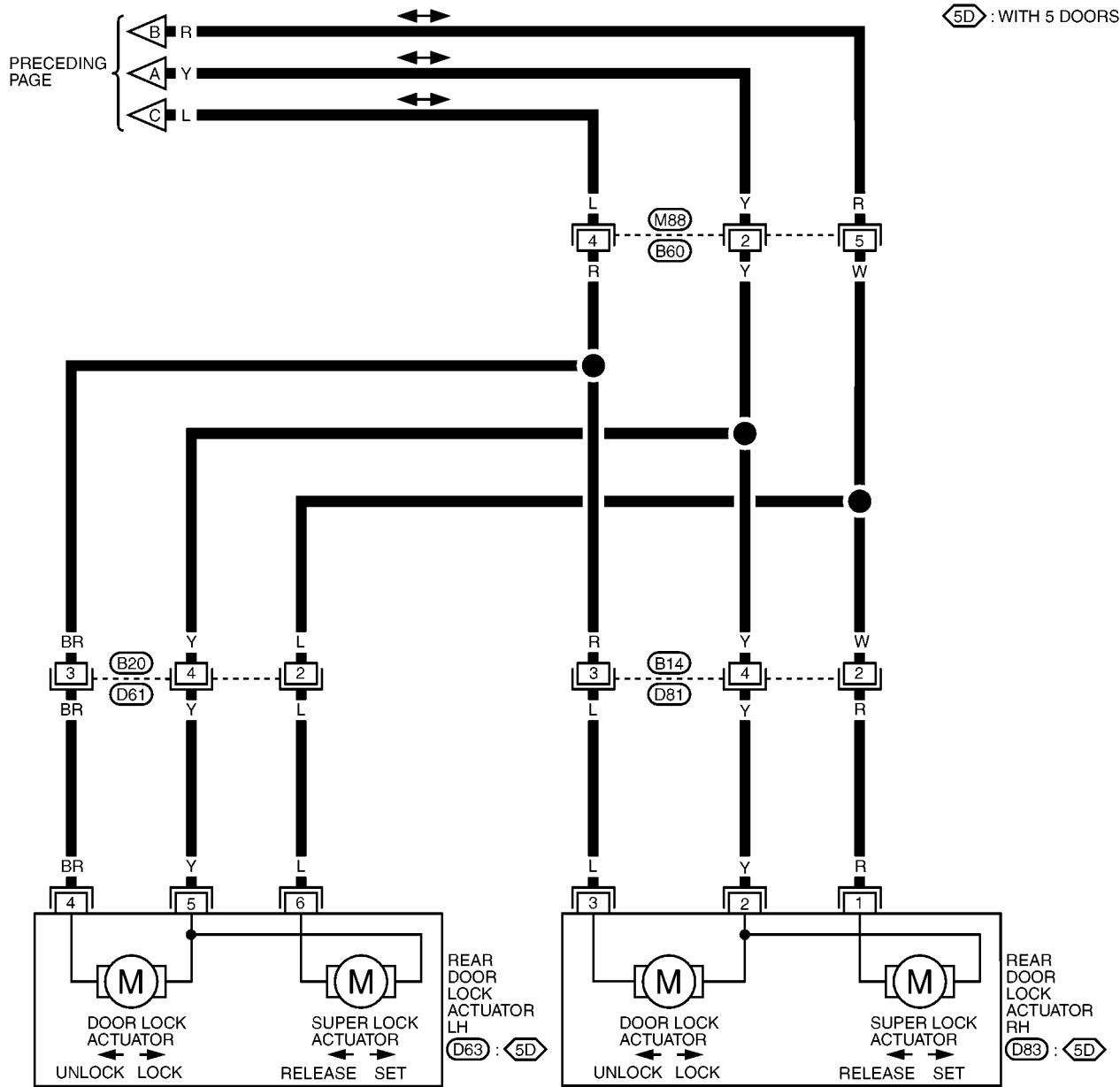
POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-04



POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-05

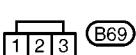
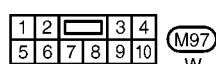
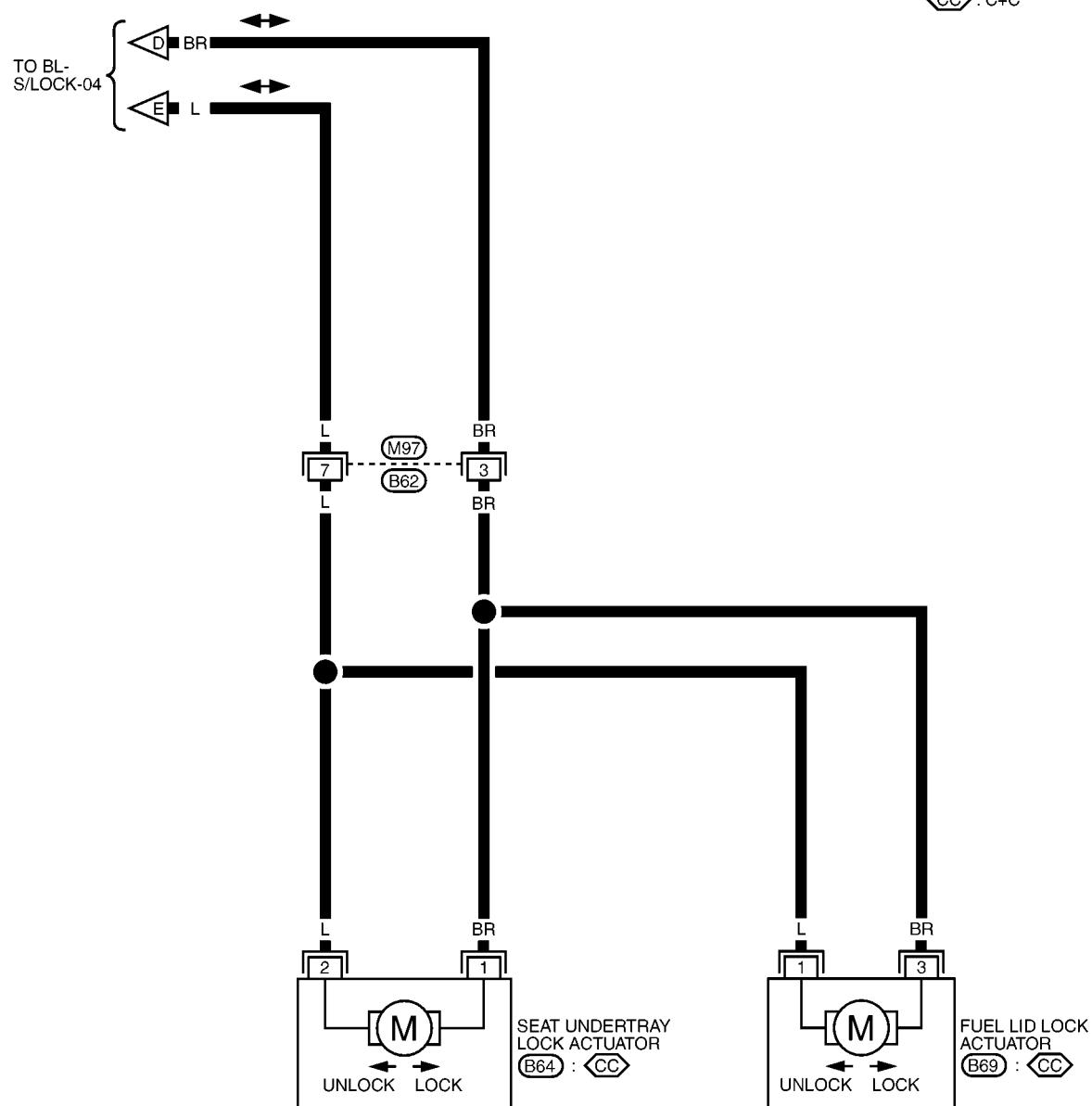


MIWA0280E

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-06

 C+C

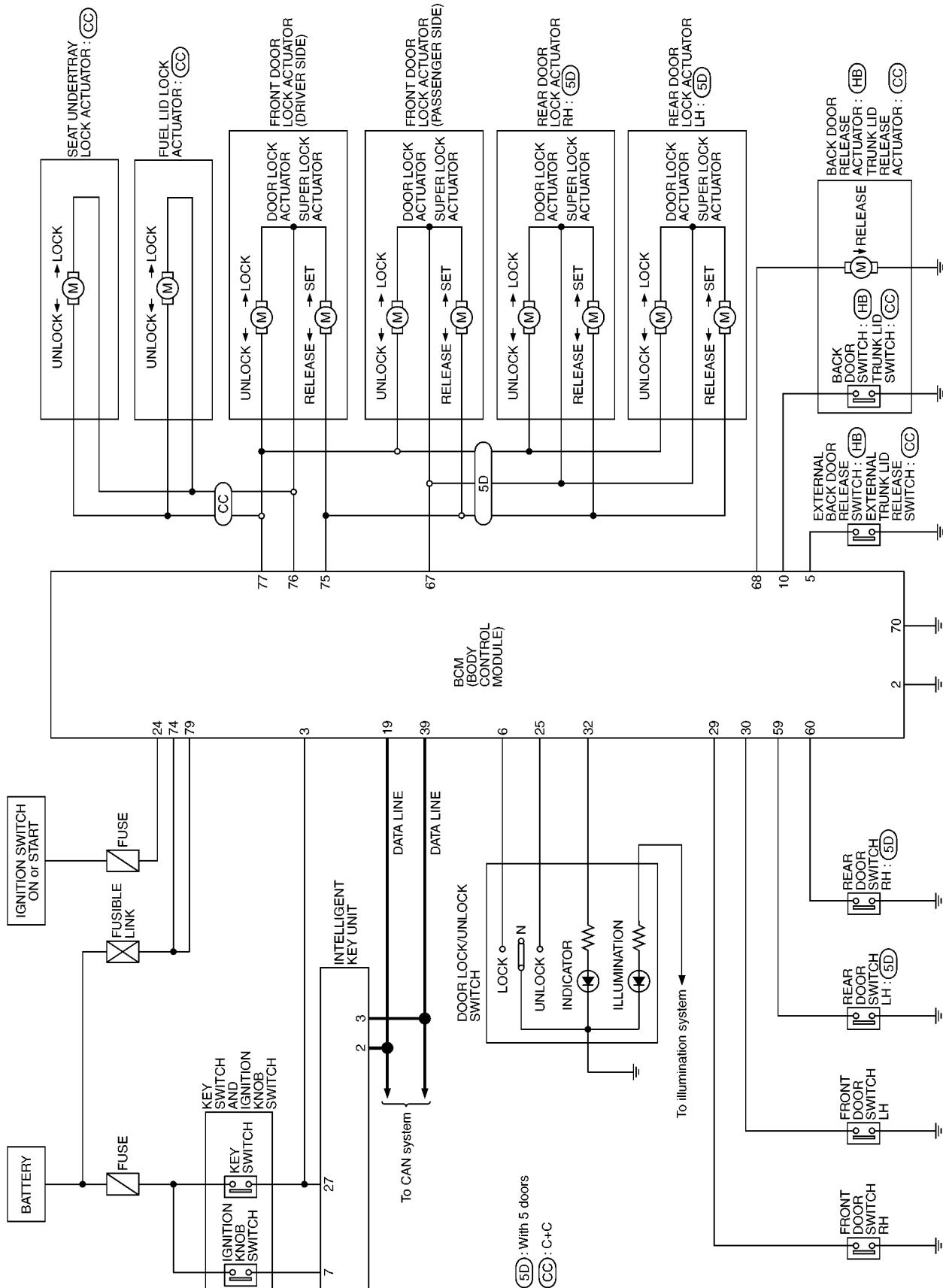


MIWA0616E

POWER DOOR LOCK — SUPER LOCK —

Schematic – S/LOCK – (With Intelligent Key System)

EIS0054Q



MIWA0618E

POWER DOOR LOCK — SUPER LOCK —

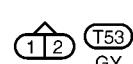
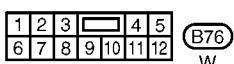
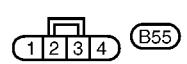
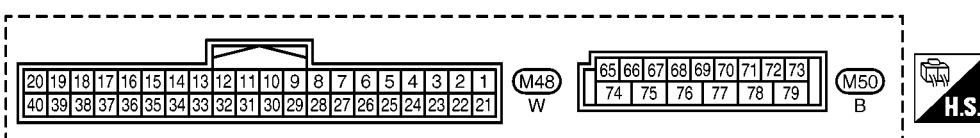
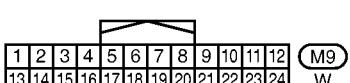
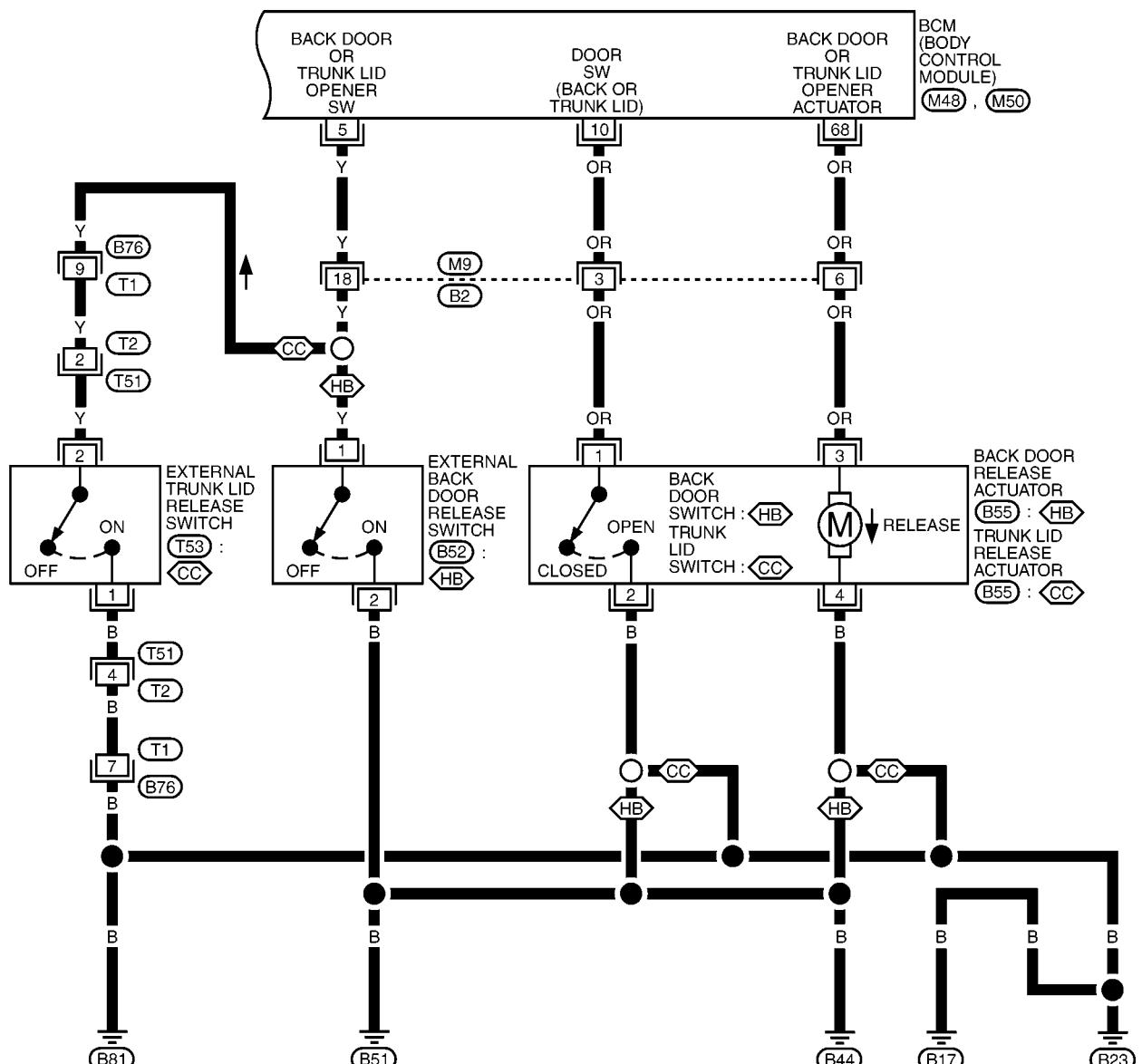
Wiring Diagram — S/LOCK — (With Intelligent Key System)

EIS0054R

BL-S/LOCK-07

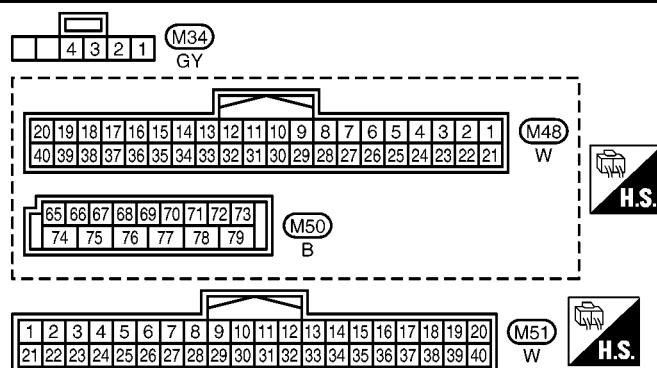
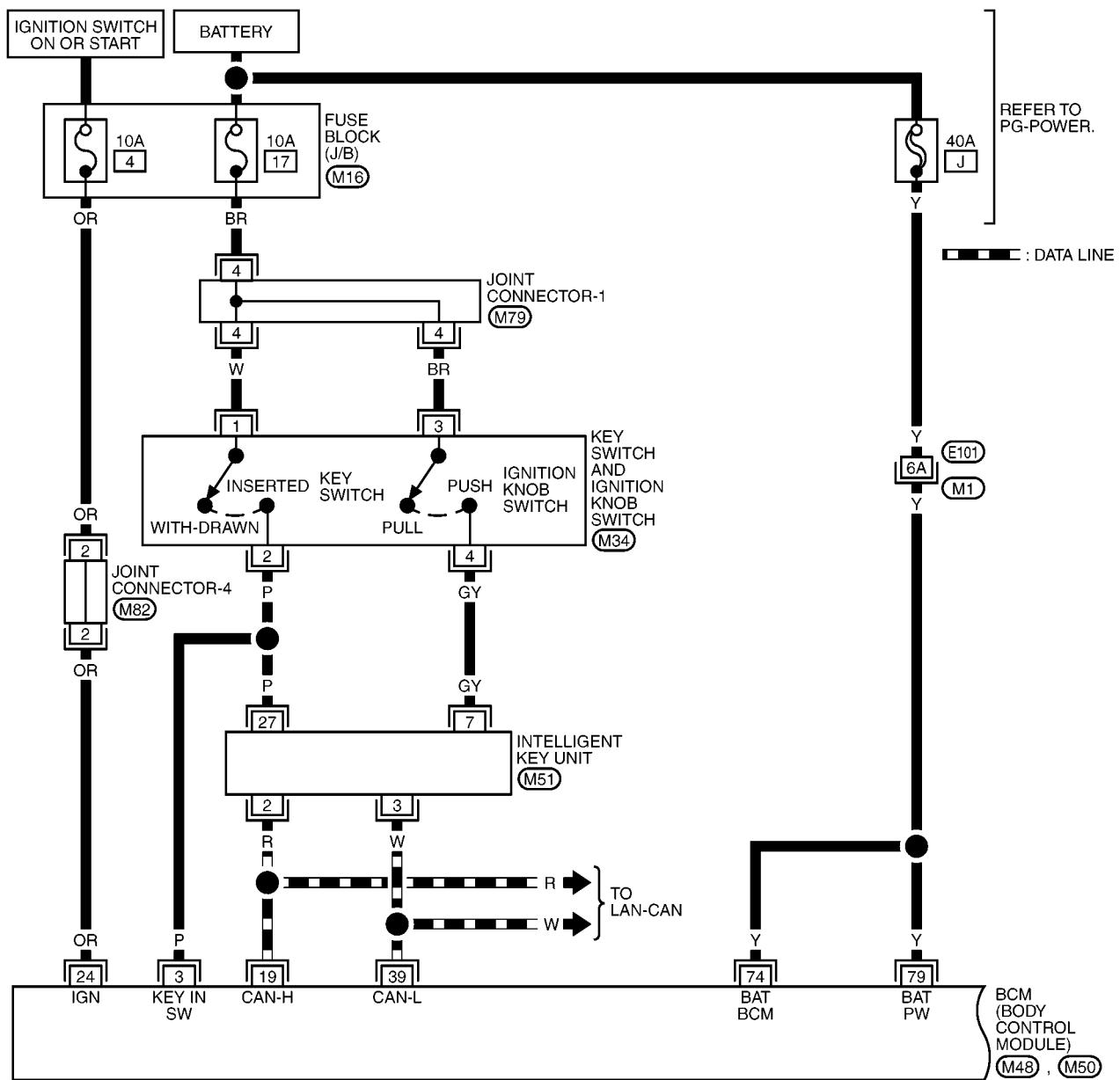
 HB : HATCHBACK

CC ; C+C



POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-08

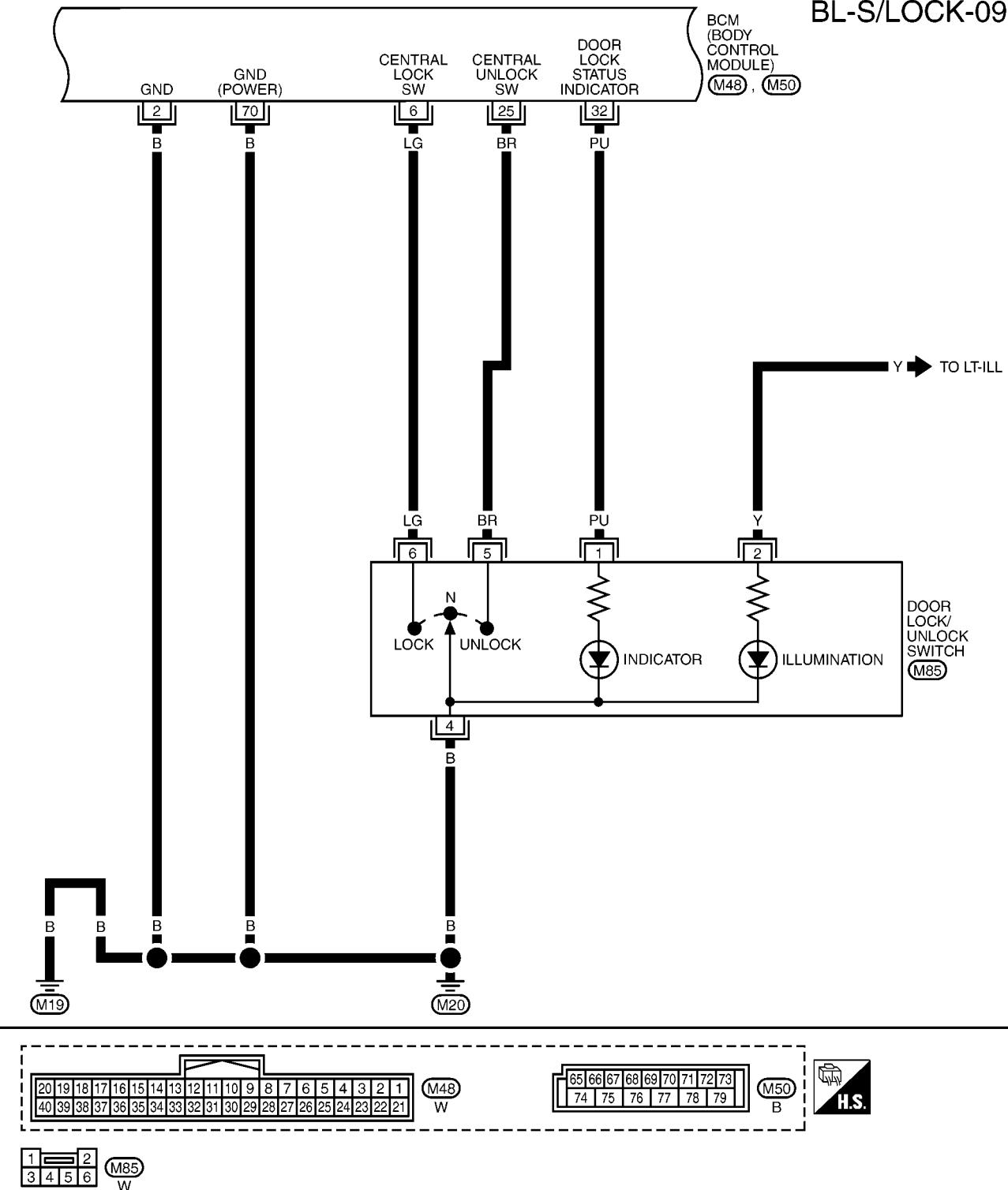


REFER TO THE FOLLOWING.

- (M1) - SUPER MULTIPLE JUNCTION (SMJ)
- (M16) - FUSE BLOCK - JUNCTION BOX (J/B)
- (M79, M82) - JOINT CONNECTOR (J/C)

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-09

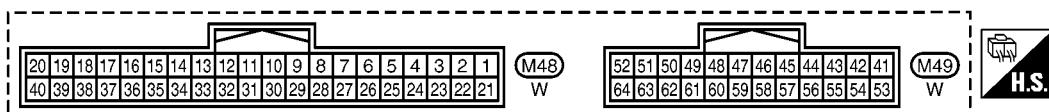
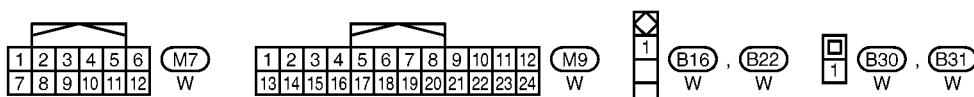
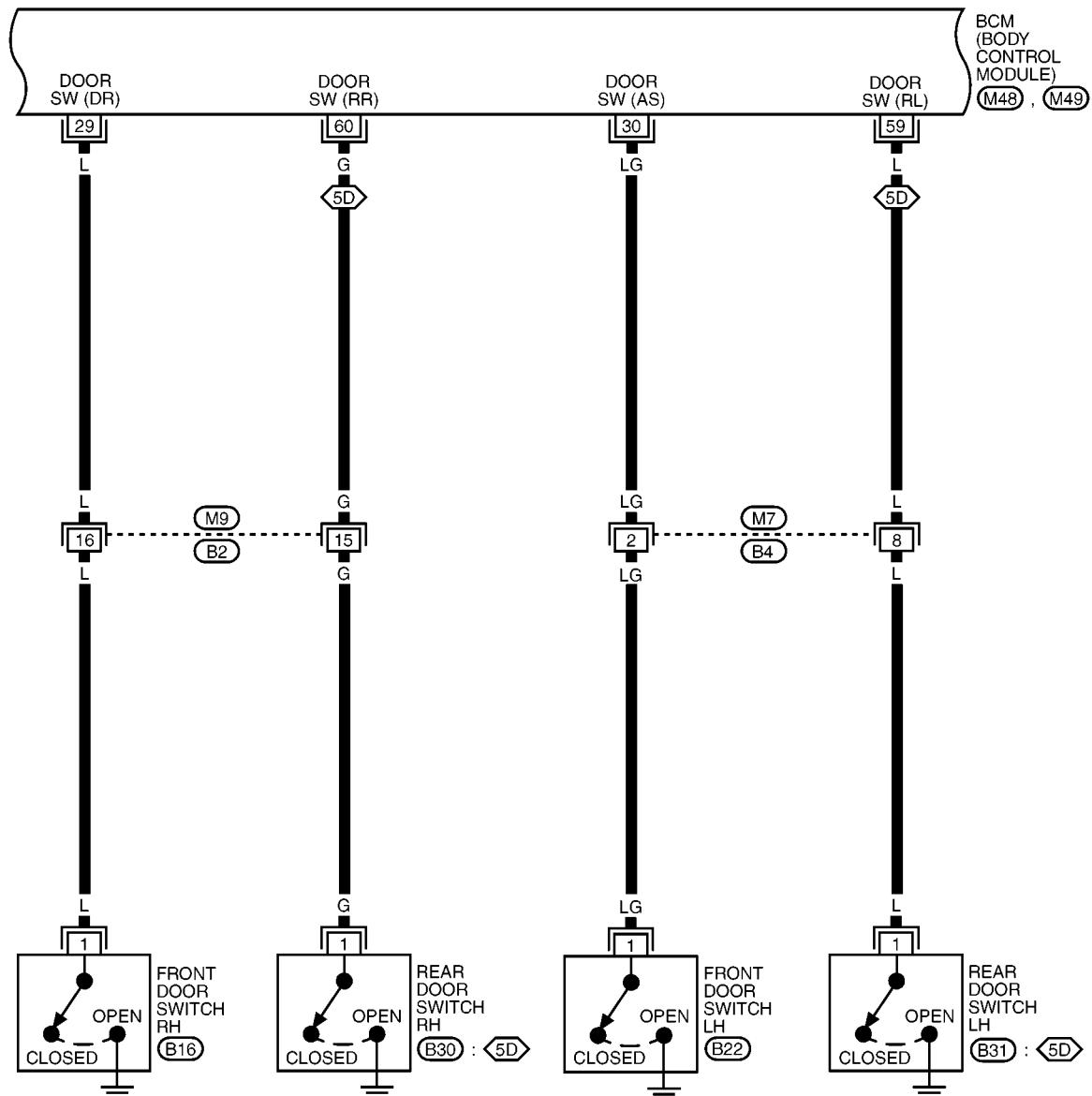


MIWA0620E

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-10

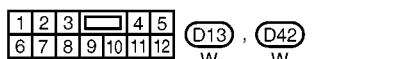
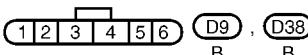
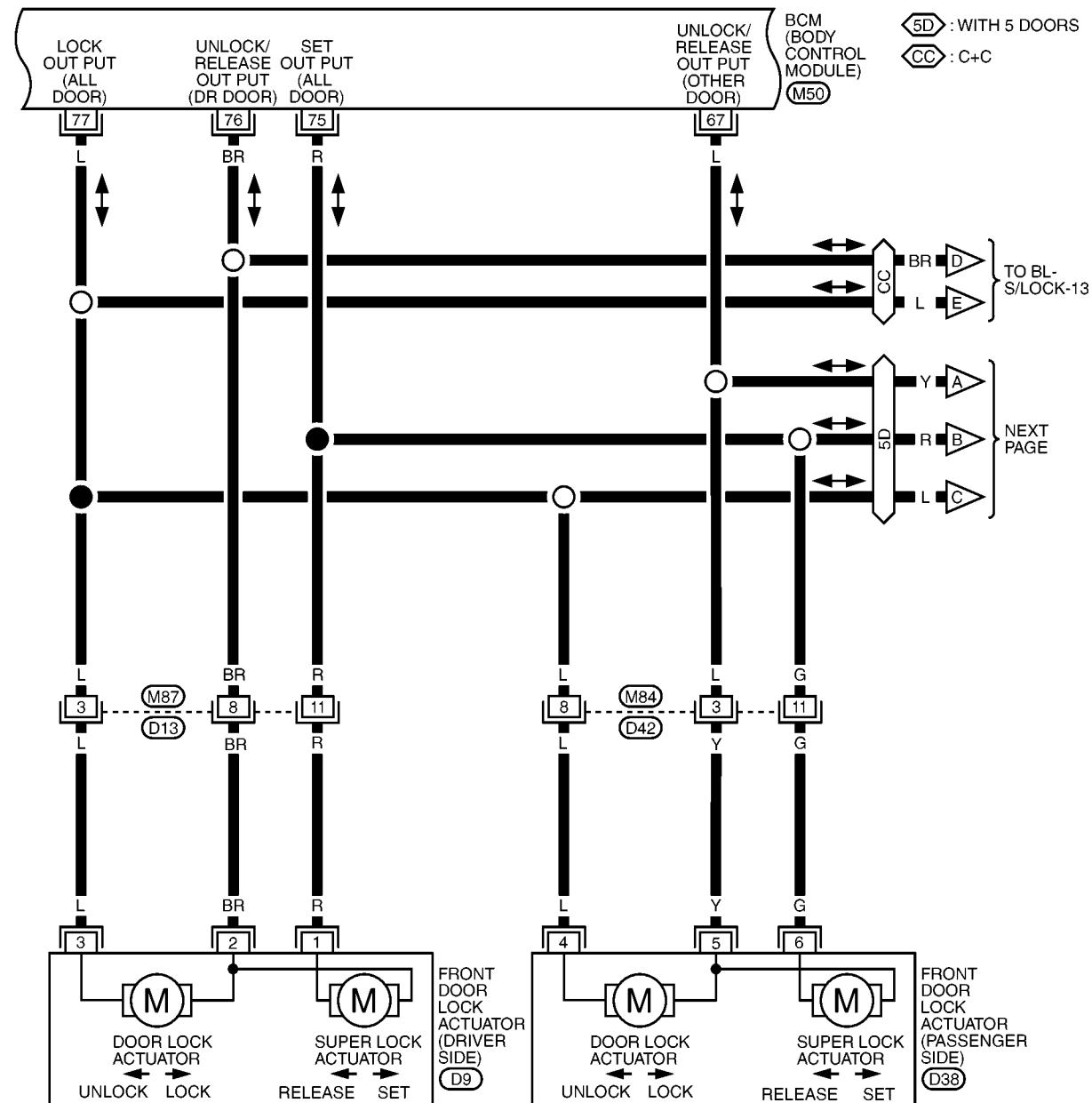
 : WITH 5 DOORS



MIWA0621E

POWER DOOR LOCK — SUPER LOCK —

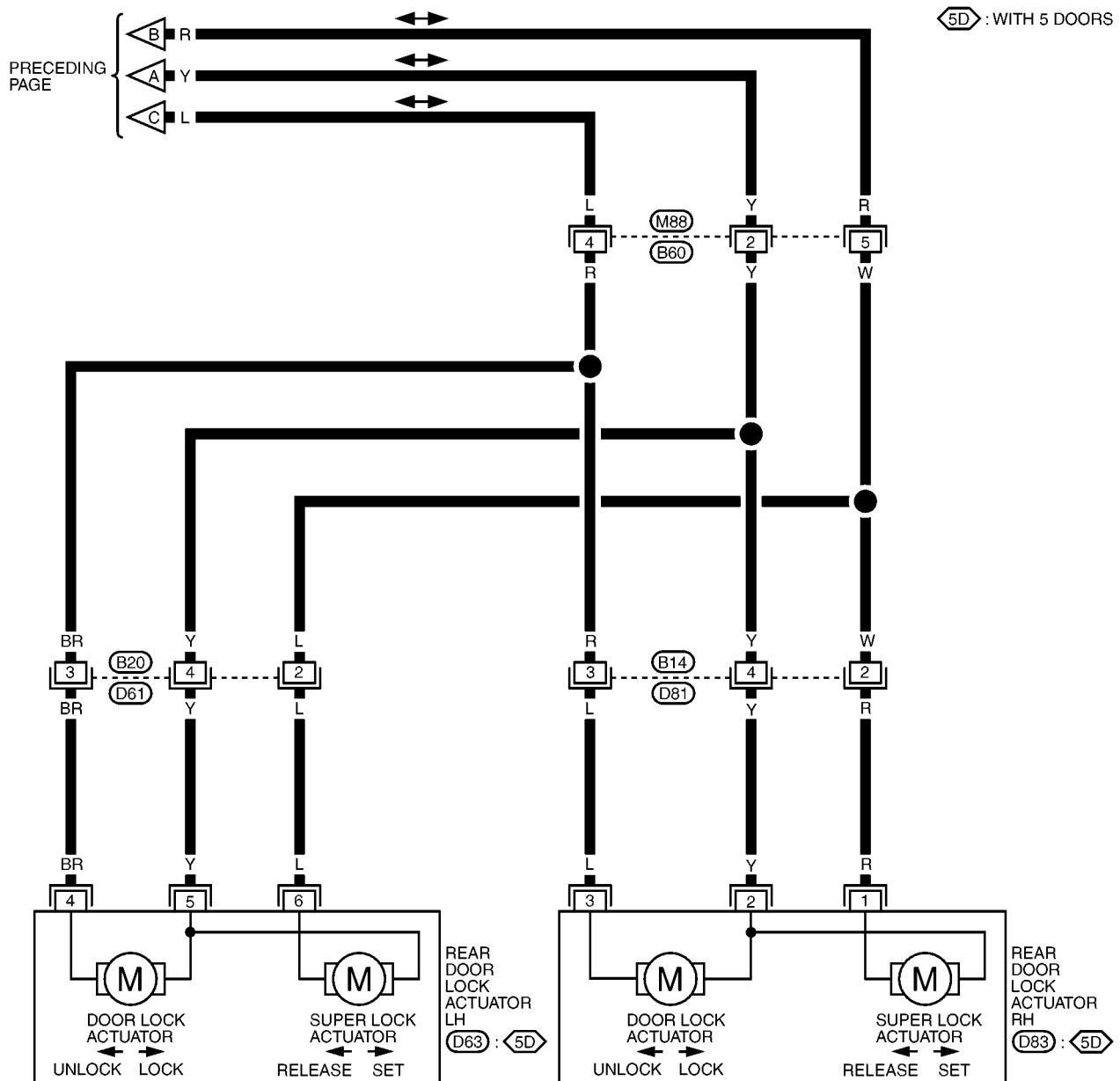
BL-S/LOCK-11



MIWA0622E

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-12



1	2	M88	D61	D81
3	4	5	6	
W	W	W	W	

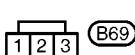
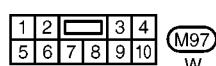
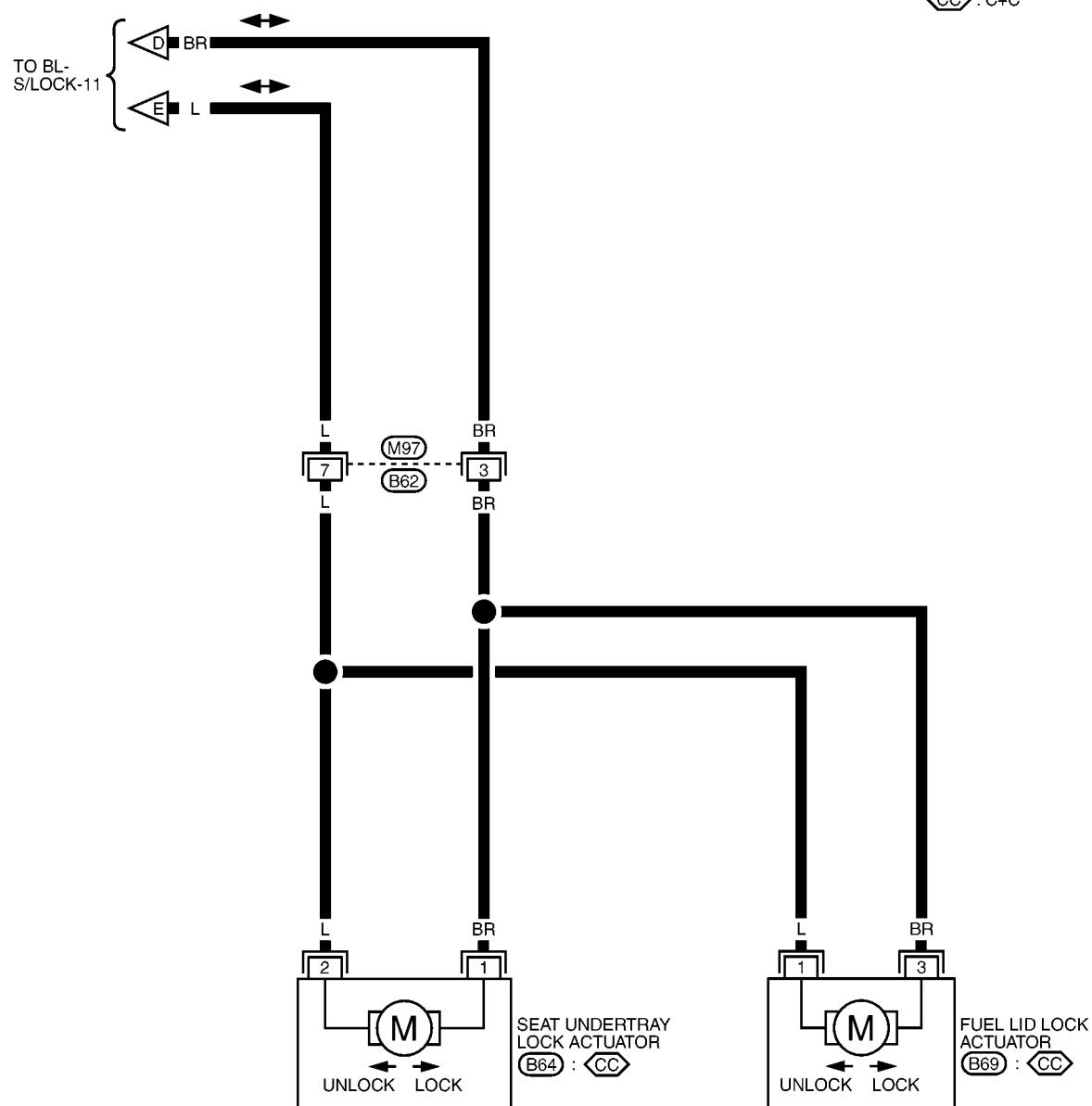
1	2	3	4	5	6	D63	D83
B						B	

MIWA0623E

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-13

 C+C



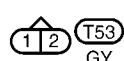
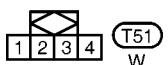
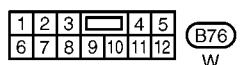
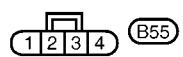
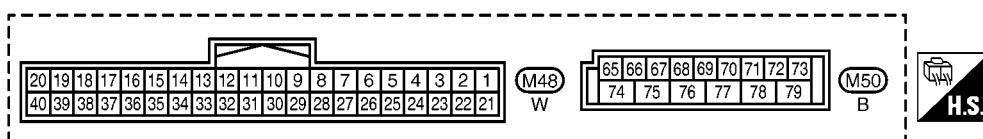
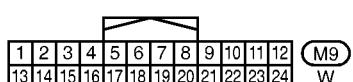
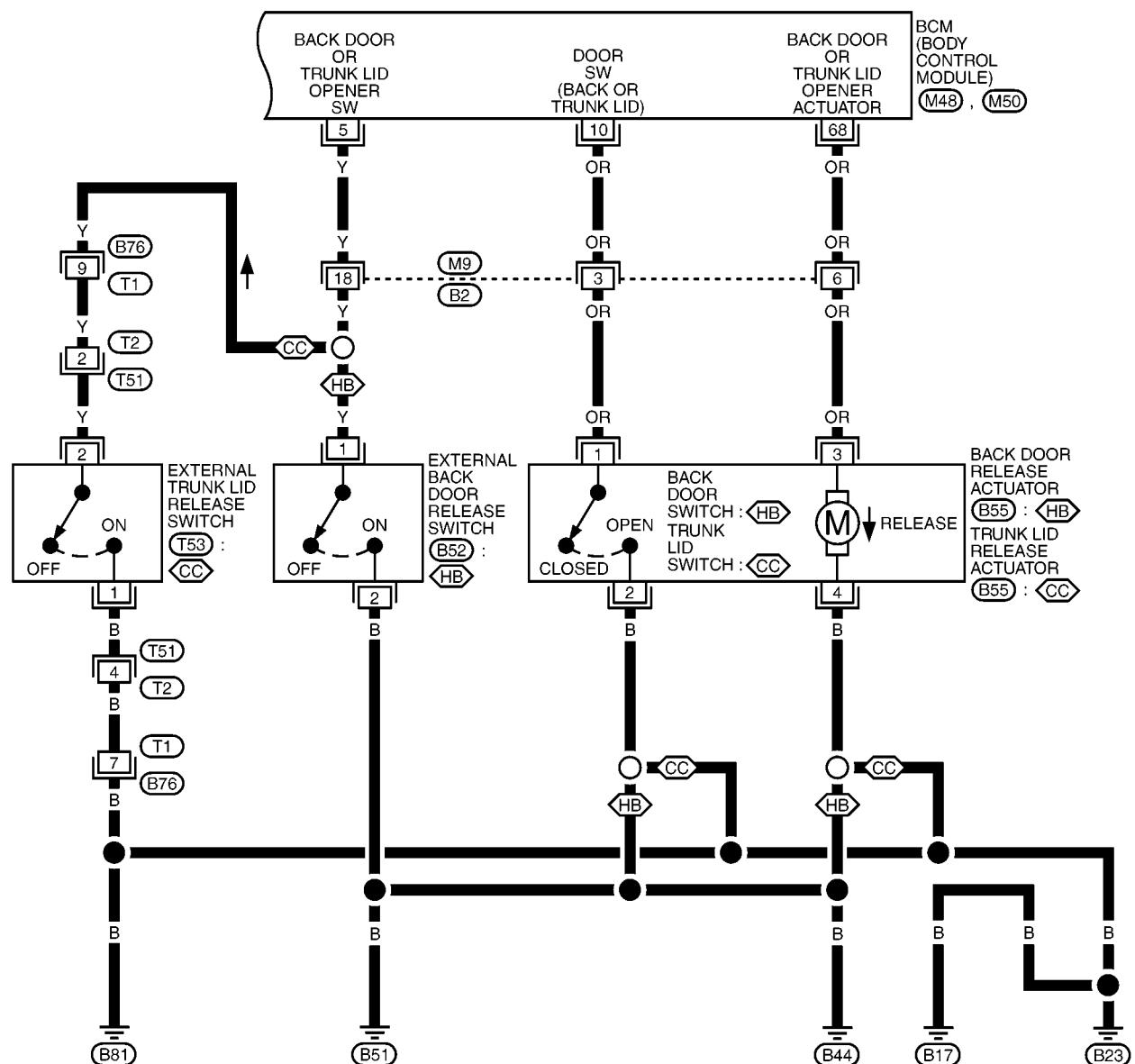
MIWA0624E

POWER DOOR LOCK — SUPER LOCK —

BL-S/LOCK-14

(HB) : HATCHBACK

(CC) : C+C



POWER DOOR LOCK — SUPER LOCK —

Terminal and Reference Value for BCM Unit

EIS004XS

Terminal	Wire color	Item	Condition	Voltage (V) (Approx.)
2	B	Ground	—	0
3	OR (P)	Key switch	Key inserted (ON) → key removed from IGN key cylinder (OFF)	Battery voltage → 0
5	Y	External back door or trunk lid release switch	Release switch open operation	5 → 0
6	LG	Door lock / unlock switch (Lock signal)	Lock operation (ON)	0
			Other than above (OFF)	5
10	OR	Back door or trunk lid switch	Open (ON) → Close (OFF)	0 → 5
19	R	CAN-H	—	—
24	OR	IGN power supply	Ignition switch (ON or START position)	Battery voltage
25	BR	Door lock/unlock switch (Unlock signal)	Unlock operation (ON)	0
			Other than above (OFF)	5
29	L	Front door switch RH	Door open (ON) → close (OFF)	0 → Battery voltage
30	LG	Front door switch LH	Door open (ON) → close (OFF)	0 → Battery voltage
32	PU	Door lock status indicator	Goes OFF → Illuminates (Ignition switch ON and all door closed)	0 → Battery voltage
39	W	CAN-L	—	—
59	L	Rear door switch LH	Door open (ON) → close (OFF)	0 → Battery voltage
60	G	Rear door switch RH	Door open (ON) → close (OFF)	0 → Battery voltage
67	L	Door lock actuator & super lock actuator unlock signal (Passenger and rear LH, RH doors)	Door lock / unlock switch & remote controller unlock operation *	0 → Battery voltage
68	OR	Back door or trunk lid release actuator	Door lock/unlock switch (Trunk or back door release switch) Open operation	Battery voltage → 0
70	B	Ground (Power)	—	0
74	Y	BAT power supply (BCM)	—	Battery voltage
75	R	Super lock actuator lock signal (All doors)	Remote controller lock operation	0 → Battery voltage
76	BR	Door lock actuator & super lock actuator unlock signal (Driver side)	Door lock / unlock switch & remote controller unlock operation *	0 → Battery voltage
77	L	Door lock actuator lock signal (All doors)	Door lock/unlock switch & remote controller lock operation	0 → Battery voltage
79	Y	BAT power supply (PW)	—	Battery voltage

(): With Intelligent Key system models

*: Door lock actuator operation activated by door lock/unlock switch.

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POWER DOOR LOCK — SUPER LOCK —

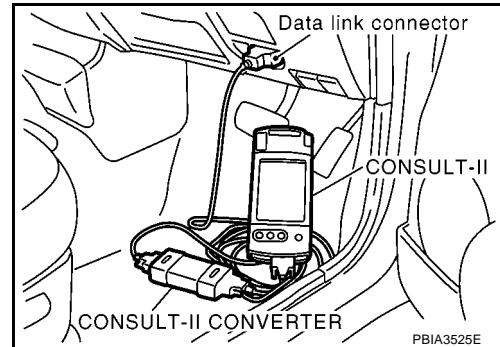
CONSULT-II Inspection Procedure

EIS004XT

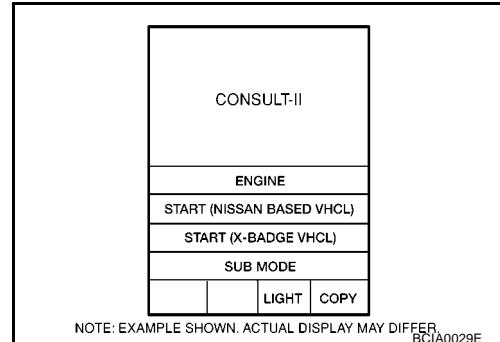
CAUTION:

If CONSULT-II is used with no connector of CONSULT-II CONVERTER, malfunction might be detected in self-diagnosis depending on control which carry out CAN communication.

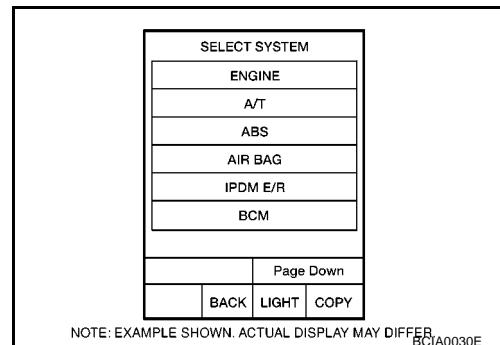
1. Turn ignition switch "OFF".
2. Connect "CONSULT-II" and "CONSULT-II CONVERTER" to the data link connector.



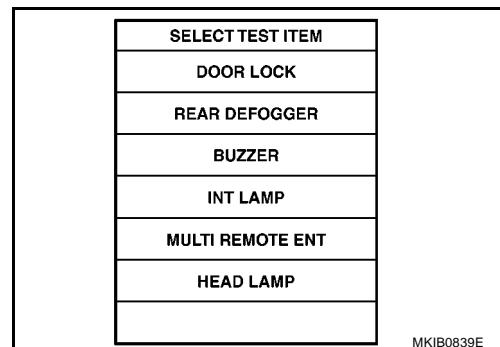
3. Turn ignition switch "ON".
4. Touch "START (NISSAN BASED VHCL)".



5. Touch "BCM".

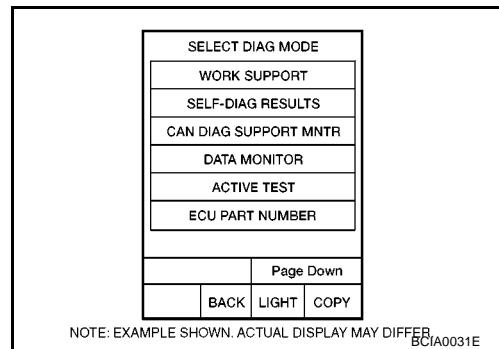


6. Touch "DOOR LOCK".



POWER DOOR LOCK — SUPER LOCK —

7. Select diagnosis mode.
 “WORK SUPPORT”, “DATA MONITOR” and “ACTIVE TEST” are available.



NOTE: EXAMPLE SHOWN. ACTUAL DISPLAY MAY DIFFER
BCIA0031E

EIS004XU

CONSULT-II Application Items

WORK SUPPORT

A
B
C
D
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G
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M

Supported Item	Description
SECURITY DOOR LOCK SET	Anti-hijack function mode can be changed in this mode.
AUTO LOCK SET	Auto re-locking function mode can be changed in this mode.

Security Door Lock Set

	ON	OFF
Anti hijack function	Activation	Deactivation

Auto Lock Set

	MODE1	MODE2	MODE3	MODE4	MODE5	MODE6*	MODE7*	MODE8*
Auto locking function	1 minute	2 minutes	3 minutes	4 minutes	5 minutes	—	—	—

*: These mode are not supported.

DATA MONITOR

Monitored Item	Description
IGN ON SW	Indicates [ON/OFF] condition of ignition switch.
PUSH SW (*1)	Indicates [ON/OFF] condition ignition knob switch.
KEY IN SW (*2)	Indicates [ON/OFF] condition of key switch.
CDL LOCK SW	Indicates [ON/OFF] condition of lock signal from door lock/ unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of unlock signal from door lock/ unlock switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch (RH).
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch (LH).
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
TRNK OPNR SW	Indicates [ON/OFF] condition of external back door release switch.

*1: Models with Intelligent Key System.

*2: Models without Intelligent Key System.

ACTIVE TEST

Monitored Item	Description
DOOR LOCK	This test is able to check all door lock actuator (except for back door) lock / unlock operation. Actuators lock / unlock when “LOCK” or “UNLOCK” on CONSULT-II screen is touched.
SUPER LOCK	This test is able to check super lock actuator lock / unlock operation. Actuators lock / unlock when “LOCK” or “UNLOCK” on CONSULT-II screen is touched.
DOOR LOCK IND	This test is able to check door lock / unlock switch's illumination.
TRUNK / BACK DOOR	This test is able to check back door release actuator open operation. These actuator open when “OPEN” on CONSUT-II screen is touched.

POWER DOOR LOCK — SUPER LOCK —

Work Flow

EIS00E24

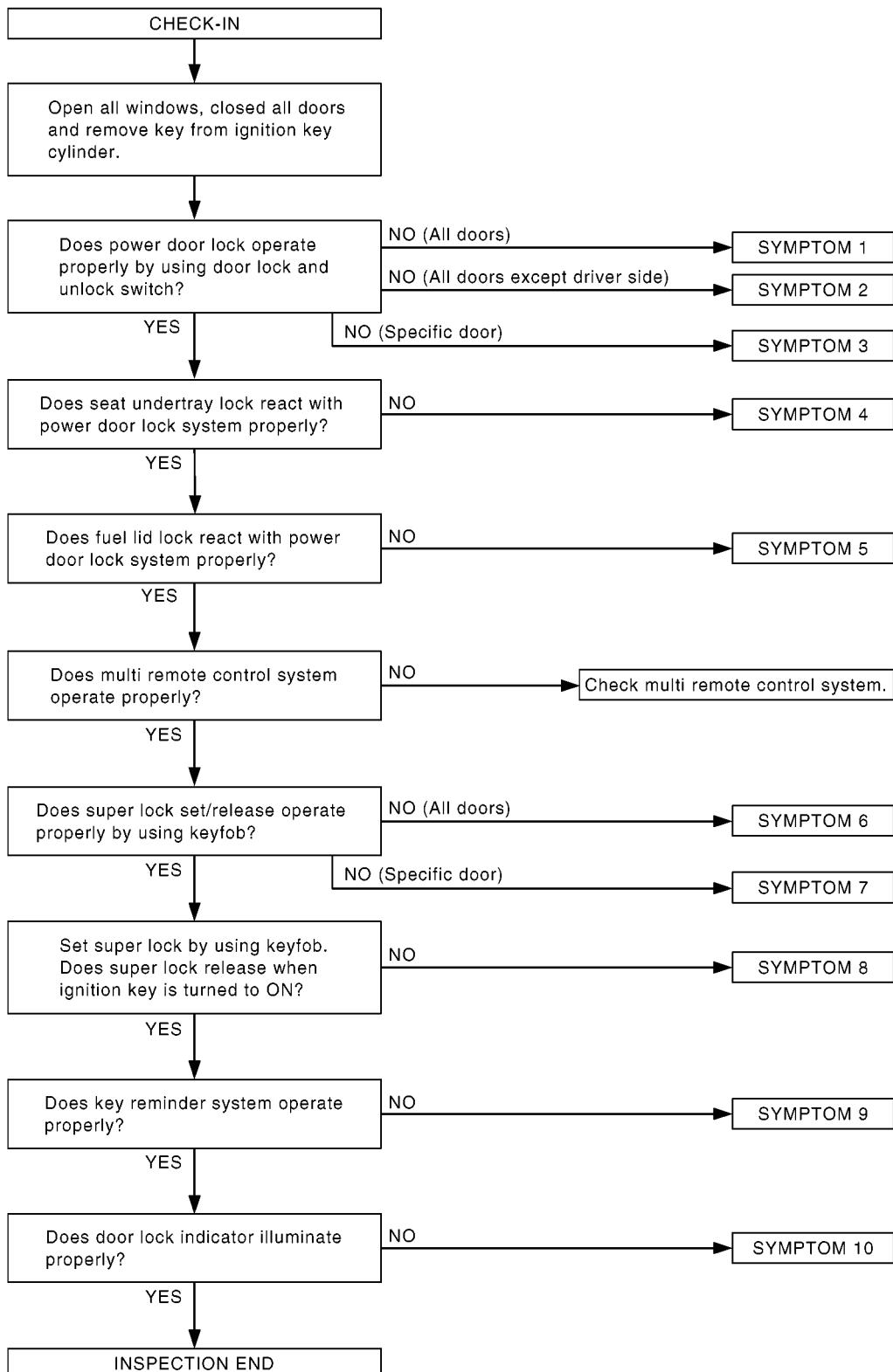
1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to [BL-18, "System Description"](#) .
3. According to the trouble diagnosis, repair or replace the cause of the malfunction. Refer to [BL-51, "TROUBLE DIAGNOSES CHART BY SYMPTOM/WITHOUT INTELLIGENT KEY SYSTEM"](#) or [BL-52, "TROUBLE DIAGNOSES CHART BY SYMPTOM/WITH INTELLIGENT KEY SYSTEM"](#) .
4. Does power door lock system operate normally?
YES: GO TO 5.
NO: GO TO 2.
5. INSPECTION END.

POWER DOOR LOCK — SUPER LOCK —

Trouble Diagnoses PRELIMINARY CHECK/WITHOUT INTELLIGENT KEY SYSTEM

EIS004XV

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MIIB1069E

POWER DOOR LOCK — SUPER LOCK —

SYMPTOM CHART/WITHOUT INTELLIGENT KEY SYSTEM

NOTE:

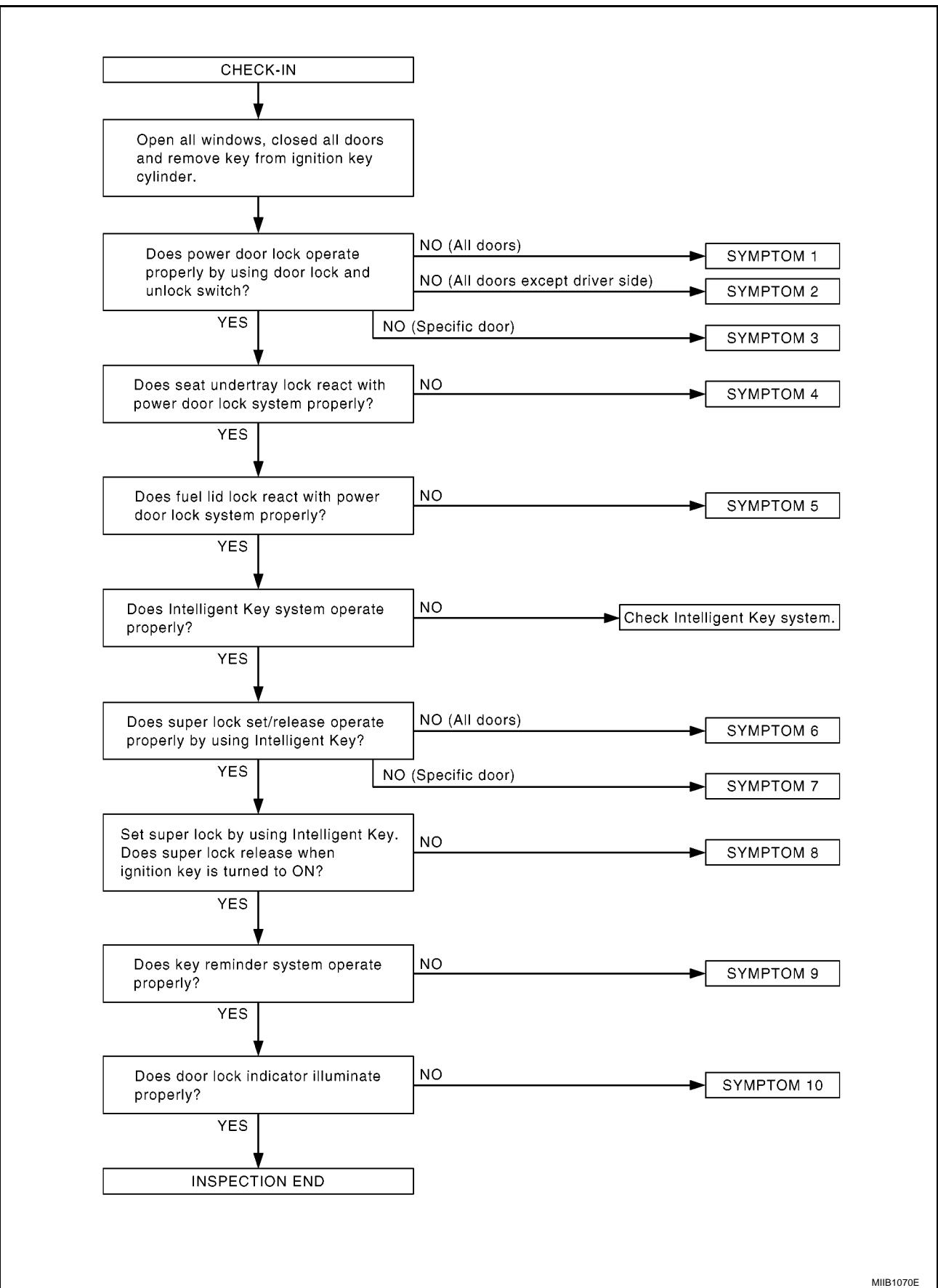
Before starting trouble diagnosis below, perform Preliminary Check [BL-119, "PRELIMINARY CHECK/WITHOUT INTELLIGENT KEY SYSTEM"](#).

Symptom numbers in the symptom chart correspond with those of Preliminary check.

Symptom	Diagnosis/service procedure	Reference page
SYMPTOM 1 Power door lock does not operate by using door lock/unlock switch.	1. Check power supply and ground circuit	BL-123
	2. Check door lock/unlock switch	BL-124
	3. Check door switch (except back door switch)	BL-137
	4. Check front door lock actuator (driver side)	BL-129
SYMPTOM 2 All door lock actuators except driver side does not operate using door lock/unlock switch.	1. Check front door lock actuator (driver side)	BL-130
SYMPTOM 3 Specific door lock actuator does not operate using door lock/unlock switch.	1. Check front door lock actuator (driver side)	BL-129
	2. Check front door lock actuator (passenger side)	BL-130
	3. Check rear door lock actuator LH	BL-131
	4. Check rear door lock actuator RH	BL-132
SYMPTOM 4 Seat undertray lock does not operate with power door lock	1. Check seat undertray lock actuator circuit	BL-152
SYMPTOM 5 Fuel lid lock does not operate with power door lock	1. Check fuel lid lock actuator circuit	BL-153
SYMPTOM 6 Super lock does not operate by using Key fob.	1. Check key switch	BL-125
	2. Check super lock actuator (driver side)	BL-133
SYMPTOM 7 Specific super lock actuator does not operate.	1. Check super lock actuator (driver side)	BL-133
	2. Check super lock actuator (passenger side)	BL-134
	3. Check super lock actuator (rear LH)	BL-135
	4. Check super lock actuator (rear RH)	BL-136
SYMPTOM 8 Super lock cannot be released by ignition switch.	1. Check ignition switch ON circuit	BL-123
SYMPTOM 9 Key reminder system does not operate.	1. Check key switch	BL-125
	2. If above systems are OK, replace BCM.	BCS-30
SYMPTOM 10 Door lock indicator does not illuminate.	1. Check door lock/unlock switch indicator lamp	BL-79
	2. If above systems are OK, replace BCM.	BCS-30

POWER DOOR LOCK — SUPER LOCK —

PRELIMINARY CHECK/WITH INTELLIGENT KEY SYSTEM



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POWER DOOR LOCK — SUPER LOCK —

SYMPTOM CHART/WITH INTELLIGENT KEY SYSTEM

NOTE:

Before starting trouble diagnosis below, perform Preliminary Check [BL-121, "PRELIMINARY CHECK WITH INTELLIGENT KEY SYSTEM"](#).

Symptom numbers in the symptom chart correspond with those of Preliminary check.

Symptom	Diagnosis/service procedure	Reference page
SYMPTOM 1 Power door lock does not operate by using door lock/unlock switch.	1. Power supply and ground circuit check	BL-123
	2. Door lock/unlock switch check	BL-124
	3. Door switch (except back door switch) check	BL-137
	4. Front door lock actuator (driver side) check	BL-133
SYMPTOM 2 All door lock actuators except driver side does not operate using door lock/unlock switch.	1. Front door lock actuator (driver side) check	BL-134
SYMPTOM 3 Specific door lock actuator does not operate using door lock/unlock switch.	1. Front door lock actuator (driver side) check	BL-133
	2. Front door lock actuator (passenger side) check	BL-134
	3. Rear door lock actuator LH check	BL-135
	4. Rear door lock actuator RH check	BL-136
SYMPTOM 4 Seat undertray lock does not operate with power door lock	1. Seat undertray lock actuator circuit check	BL-152
SYMPTOM 5 Fuel lid lock does not operate with power door lock	1. Fuel lid lock actuator circuit check	BL-153
SYMPTOM 6 Super lock does not operate by using Intelligent Key.	1. Key switch and ignition knob switch check	BL-126
	2. Super lock actuator (driver side) check	BL-133
SYMPTOM 7 Specific super lock actuator does not operate.	1. Super lock actuator (driver side) check	BL-133
	2. Super lock actuator (passenger side) check	BL-134
	3. Super lock actuator (rear LH) check	BL-135
	4. Super lock actuator (rear RH) check	BL-136
SYMPTOM 8 Super lock cannot be released by ignition switch.	1. Ignition switch ON circuit check	BL-123
SYMPTOM 9 Key reminder system does not operate.	1. Key switch and ignition switch check	BL-126
	2. If above systems are OK, replace BCM.	BCS-30
SYMPTOM 10 Door lock indicator does not illuminate.	1. Door lock/unlock switch indicator lamp check	BL-79
	2. If above systems are OK, replace BCM.	BCS-30

POWER DOOR LOCK — SUPER LOCK —

Check Power Supply and Ground Circuit

EIS0054S

First perform the “SELF-DIAG RESULTS” in “BCM” with CONSULT-II, then perform the each trouble diagnosis of malfunction system indicated “SELF-DIAG RESULTS” of “BCM”, Refer to [BCS-21, "CONSULT-II Function \(BCM\)"](#).

1. FUSE INSPECTION

- Check 10A fuse [No.4, located in fuse block (J/B)]
- Check 40A fusible link (letter J located in the fuse and fusible link box).

NOTE:

Refer to [BL-80, "Component Parts and Harness Connector Location \(Hatchback\)"](#).

OK or NG

OK >> GO TO 2

NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to [PG-5, "POWER SUPPLY ROUTING"](#).

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Check voltage between BCM connector M48, M50 terminals 24, 79 and ground.

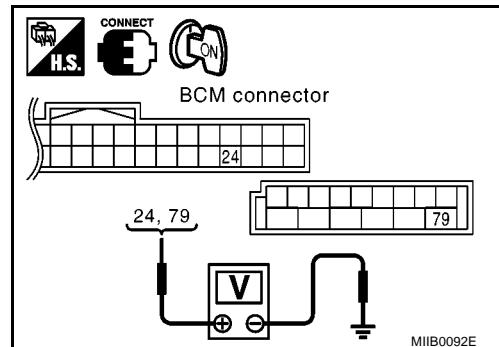
24 (OR) – Ground :Battery voltage.

79 (Y) – Ground :Battery voltage.

OK or NG

OK >> GO TO 3

NG >> Check BCM power supply circuit for open or short.



MIB0092E

3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM connector M48, M50 terminals 2, 70 and ground.

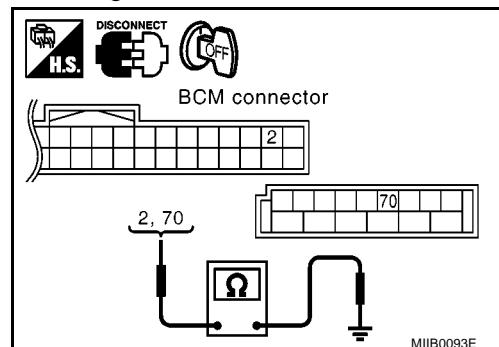
2 (B) – Ground :Continuity should exist.

70 (B) – Ground :Continuity should exist.

OK or NG

OK >> Power supply and ground circuit is OK.

NG >> Check BCM ground circuit for open or short.



MIB0093E

POWER DOOR LOCK — SUPER LOCK —

Check Door Lock / Unlock Switch

EIS004XY

1. CHECK DOOR LOCK / UNLOCK SWITCH SIGNAL

With CONSULT- II

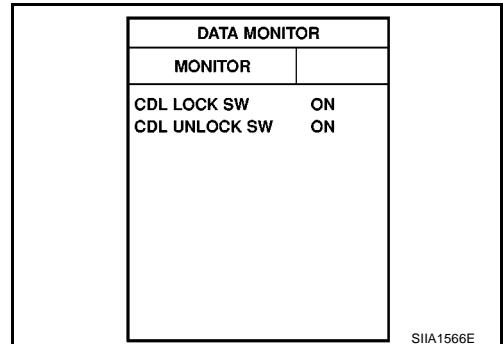
Check door lock / unlock switch input signal ("CDL LOCK SW" "CDL UNLOCK SW") in "DATA MONITOR" mode with CONSULT- II.

When door lock/unlock switch is turned to LOCK:

CDL LOCK SW ⇒ ON

When door lock/unlock switch is turned to UNLOCK:

CDL UNLOCK SW ⇒ ON



Without CONSULT- II

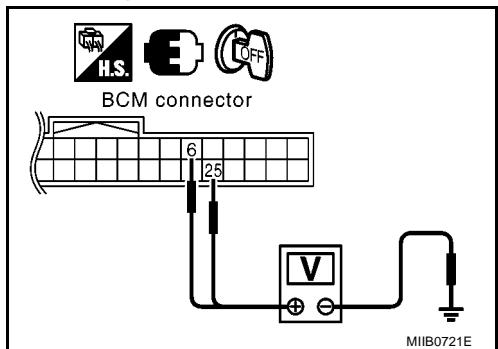
Operate door lock / unlock switch, check voltage between BCM connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)	
	(+)	(-)			
M48	6 (LG)	Ground	Lock	0	
			Neutral / Unlock	5	
	25 (BR)		Unlock	0	
			Neutral / Lock	5	

OK or NG

OK >> Door lock / unlock switch is OK.

NG >> GO TO 2.



2. CHECK DOOR LOCK/UNLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect door lock / unlock switch connector.
3. Check continuity between door lock / unlock switch connector M85 terminals 5, 6 and 4.

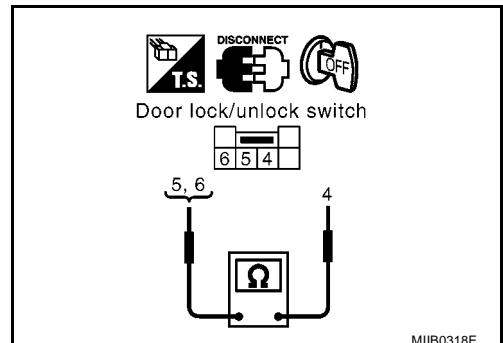
Terminals		Condition	Continuity
5	4	Unlock	YES
		Neutral / Lock	NO
6		Lock	YES
		Neutral / Unlock	NO

OK or NG

OK >> Check the following.

- Ground circuit for door lock / unlock switch
- Harness for open or short between BCM and door lock / unlock switch.

NG >> Replace door lock / unlock switch.



POWER DOOR LOCK — SUPER LOCK —

Check Key Switch /Without Intelligent Key System

EIS00AQ1

1. CHECK KEY SWITCH INPUT SIGNAL

With CONSULT-II

Check key switch input signal "KEY ON SW" in "DATA MONITOR" mode with CONSULT- II.

When key is inserted in ignition key cylinder:

KEY IN SW ⇒ ON

When key is removed from ignition key cylinder:

KEY IN SW ⇒ OFF

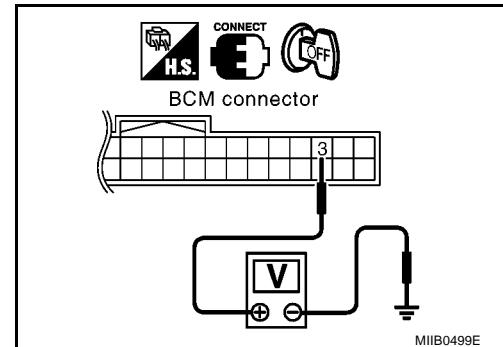
Without CONSULT- II

Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	3 (OR)	Ground	Key is inserted	Battery voltage
			Key is removed	0

OK or NG

OK >> Key switch is OK.
NG >> GO TO 2.



2. CHECK KEY SWITCH (INSERT)

1. Turn ignition switch OFF.
2. Disconnect key switch connector.
3. Check continuity between key switch terminals 1 and 2.

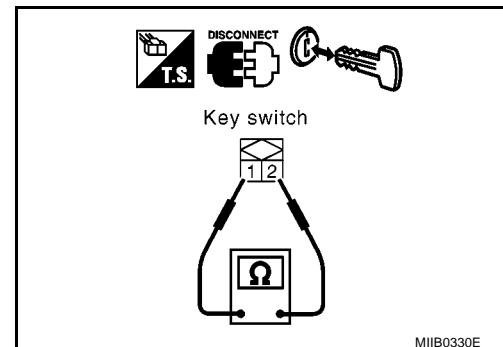
Connector	Terminals		Condition	Continuity
M33	1	2	Key is inserted	YES
			Key is removed	NO

OK or NG?

OK >> Check the following.

- 10A fuse [No. 6, located in fuse block (J/B)].
- Harness for open or short between key switch and fuse.
- Harness for open or short between BCM and key switch.

NG >> Replace key switch.



POWER DOOR LOCK — SUPER LOCK —

Check Key Switch/With Intelligent Key System

EIS00AQ2

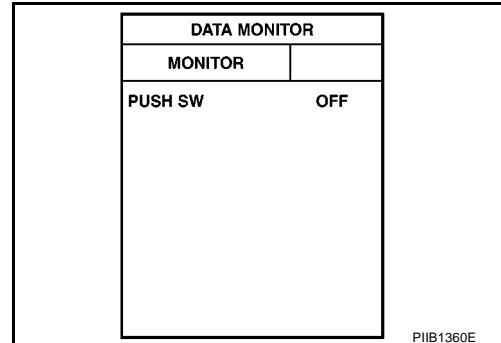
1. KEY SWITCH INSPECTION

With CONSULT-II

Display "PUSH SW" on DATA MONITOR screen, and check if ON-OFF display is linked to ignition knob switch operation.

When ignition knob is pushed : PUSH SW ON

When ignition knob is released : PUSH SW OFF



Without CONSULT-II

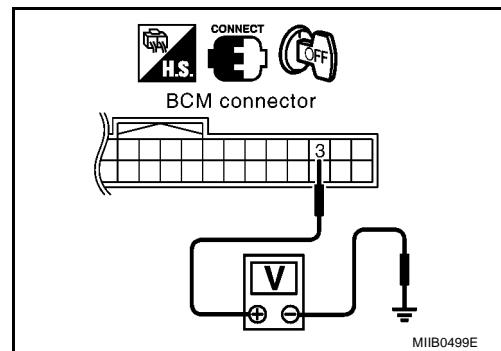
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	3 (OR)	Ground	Key is inserted	Battery voltage
			Key is removed	0

OK or NG

OK >> Key switch is OK.

NG >> GO TO 2.



2. KEY SWITCH POWER SUPPLY CIRCUIT INSPECTION

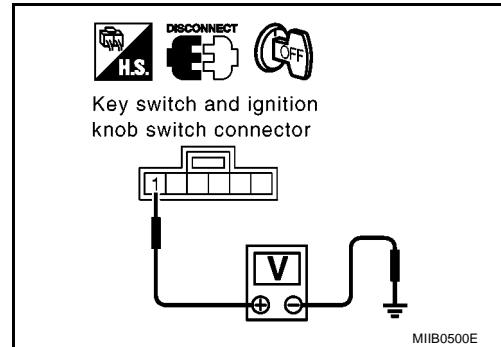
1. Remove mechanical key from ignition knob.
2. Disconnect key switch and ignition knob switch connector.
3. Check voltage between key switch and ignition knob switch connector M34 terminal 1 and ground.

1 (W) - Ground : Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Repair or replace key switch power supply circuit.



POWER DOOR LOCK — SUPER LOCK —

3. KEY SWITCH OPERATION INSPECTION

1. Insert mechanical key into ignition knob.
2. Check continuity between key switch and ignition knob switch connector M34 terminal 1 and 2.

1 - 2

Insert mechanical key into ignition knob.

: Continuity should exist.

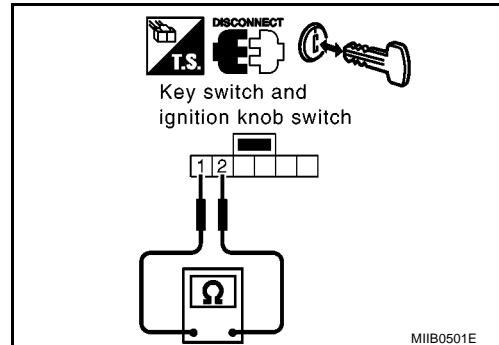
Remove mechanical key from ignition knob.

: Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG >> Replace key switch.



4. KEY SWITCH CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit connector M51 terminal 27 and key switch and ignition knob switch connector M34 terminal 2.

27 (P) - 2 (P) : Continuity should exist.

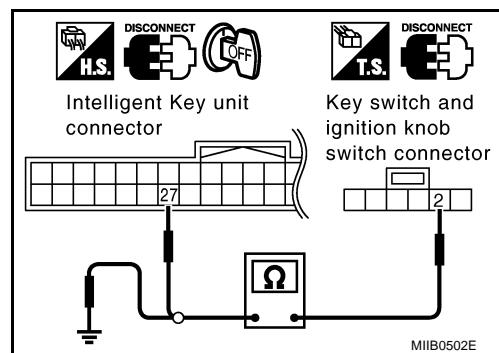
3. Check continuity between key switch connector M34 terminal 2 and ground.

2 (P) - Ground : Continuity should not exist.

OK or NG

OK >> Key switch is OK.

NG >> Repair or replace harness between Intelligent Key unit and key switch and ignition knob switch.



Check Power Door Lock / Unlock Output Signal

EIS00AQ3

1. CHECK POWER DOOR LOCK OUTPUT SIGNAL

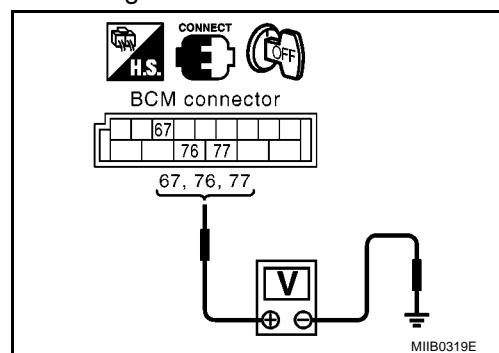
Operate door lock / unlock switch, check voltage between BCM connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M50	67 (L)	Ground	Unlock	0 → Battery voltage → 0
	76 (BR)		Unlock	0 → Battery voltage → 0
	77 (L)		Lock	0 → Battery voltage → 0

OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Replace BCM.



POWER DOOR LOCK — SUPER LOCK —

Check Super Lock Output Signal

EIS00AQ4

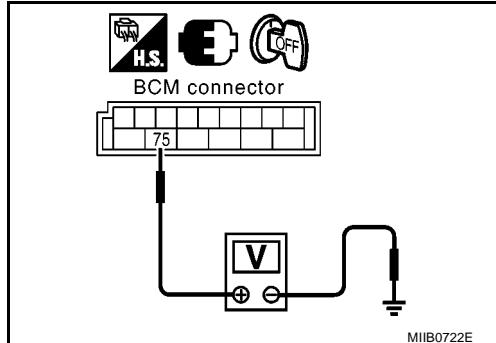
1. CHECK SUPER LOCK OUTPUT SIGNAL

Operate remote controller, check voltage between BCM connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M50	75 (R)	Ground	Lock button is pressed.	0 → Battery voltage → 0

OK or NG

- OK >> Check the condition of the harness and connector.
NG >> Replace BCM.



MIIB0722E

POWER DOOR LOCK — SUPER LOCK —

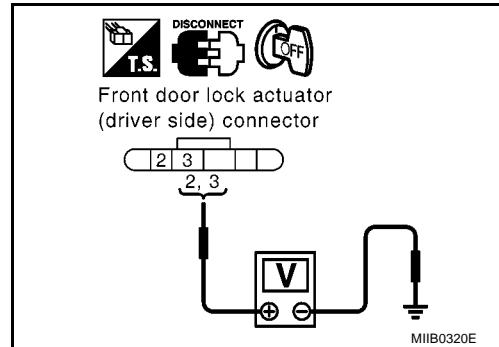
Check Door Lock Actuator DRIVER SIDE

EIS00AQ5

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect front door lock actuator (driver side) connector.
3. Operate door lock / unlock switch, check voltage between front door lock actuator (driver side) connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D9	2 (BR)	Ground	Unlock	0 → Battery voltage → 0
	3 (L)		Lock	0 → Battery voltage → 0



OK or NG

- OK >> Replace front door lock actuator (driver side).
 NG >> GO TO 2.

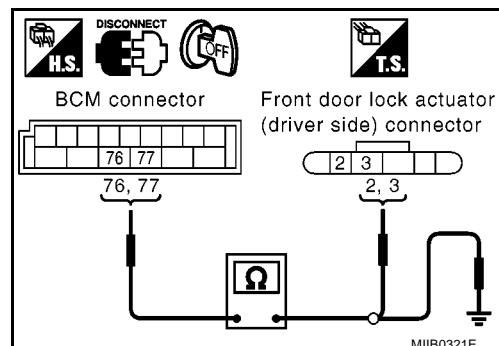
2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminals 76, 77 and front door lock actuator (driver side) connector D9 terminals 2, 3.

76 (BR) – 2 (BR) : Continuity should exist.
77 (L) – 3 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 76, 77 and ground.

76 (BR) – Ground : Continuity should not exist.
77 (L) – Ground : Continuity should not exist.



OK or NG

- OK >> Check the condition of the harness and the connector.
 NG >> Repair or replace harness.

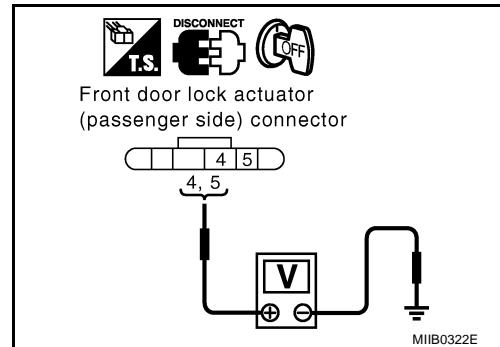
POWER DOOR LOCK — SUPER LOCK —

PASSENGER SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect front door lock actuator (passenger side) connector.
3. Operate door lock / unlock switch, check voltage between front door lock actuator (passenger side) connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D38	4 (L)	Ground	Lock	0 → Battery voltage → 0
	5 (Y)		Unlock	0 → Battery voltage → 0



OK or NG

- OK >> Replace front door lock actuator (passenger side).
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminals 67, 77 and front door lock actuator (passenger side) connector D38 terminals 4, 5.

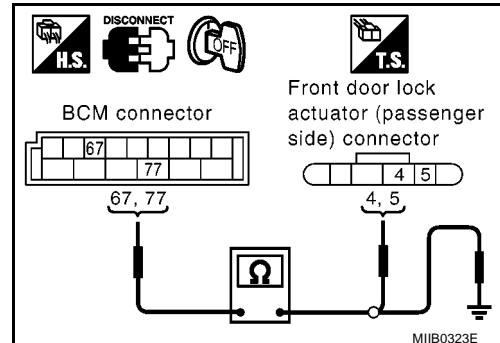
67 (L) – 5 (Y) : Continuity should exist.
77 (L) – 4 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 67, 77 and ground.

67 (L) – Ground : Continuity should not exist.
77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



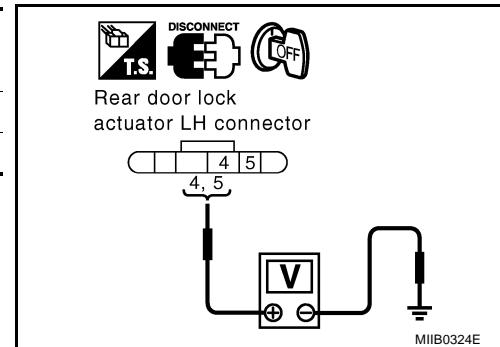
POWER DOOR LOCK — SUPER LOCK —

REAR LH SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator LH connector.
3. Operate door lock / unlock switch, check voltage between rear door lock actuator LH connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D63	4 (BR)	Ground	Lock	0 → Battery voltage → 0
	5 (Y)		Unlock	0 → Battery voltage → 0



OK or NG

- OK >> Replace rear door lock actuator LH.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminals 67, 77 and rear door lock actuator LH connector D63 terminals 4, 5.

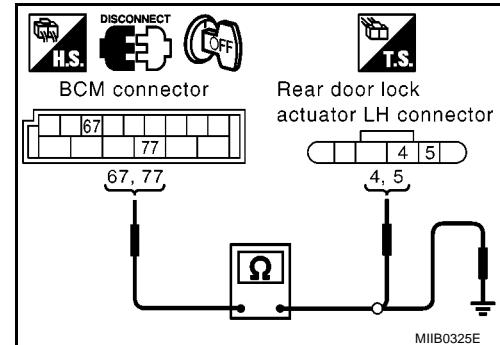
67 (L) – 5 (Y) : Continuity should exist.
77 (L) – 4 (BR) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 67, 77 and ground.

67 (L) – Ground : Continuity should not exist.
77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



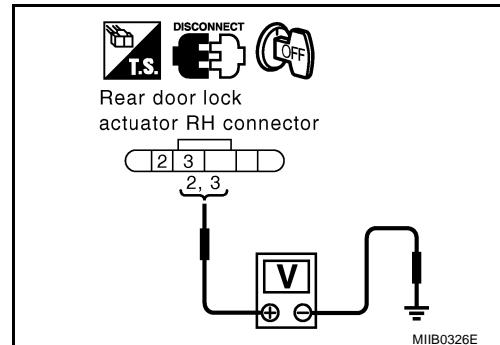
POWER DOOR LOCK — SUPER LOCK —

REAR RH SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator RH connector.
3. Operate door lock / unlock switch, check voltage between rear door lock actuator RH connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D83	2 (Y)	Ground	Unlock	0 → Battery voltage → 0
	3 (L)		Lock	0 → Battery voltage → 0



OK or NG

- OK >> Replace rear door lock actuator RH.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminals 67, 77 and rear door lock actuator RH connector D83 terminals 2, 3.

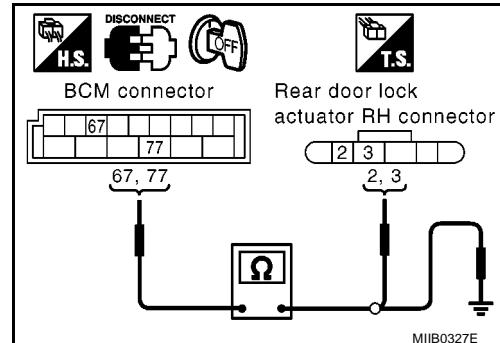
67 (L) – 2 (Y) : Continuity should exist.
77 (L) – 3 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminals 67, 77 and ground.

67 (L) – Ground : Continuity should not exist.
77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

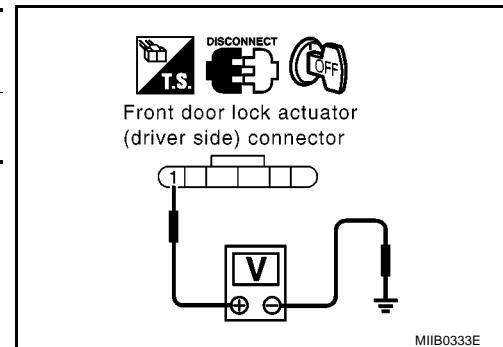
Check Super Lock Actuator DRIVER SIDE

EIS00AQ6

1. CHECK SUPER LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect front door lock actuator (driver side) connector.
3. Operate door lock / unlock switch, check voltage between front door lock actuator (driver side) connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D9	1 (R)	Ground	Lock button is pressed.	0 → Battery voltage → 0



OK or NG

- OK >> Replace front door lock actuator (driver side).
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 75 and front door lock actuator (driver side) connector D9 terminal 1.

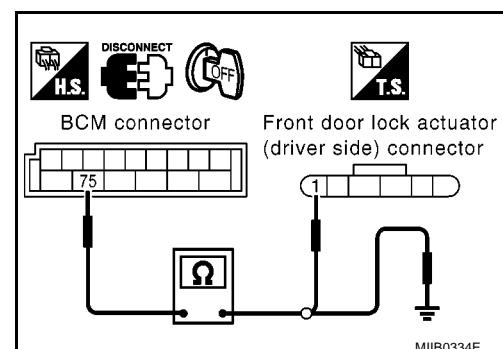
75 (R) – 1 (R) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 75 and ground.

75 (R) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



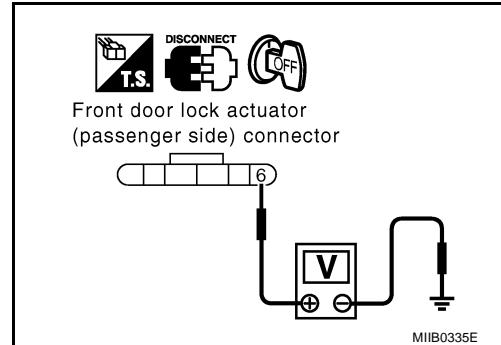
POWER DOOR LOCK — SUPER LOCK —

PASSENGER SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect front door lock actuator (passenger side) connector.
3. Operate remote controller, check voltage between front door lock actuator (passenger side) connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D38	6 (G)	Ground	Lock button is pressed.	0 → Battery voltage → 0



OK or NG

- OK >> Replace front door lock actuator (passenger side).
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 75 and front door lock actuator (passenger side) connector D38 terminal 6.

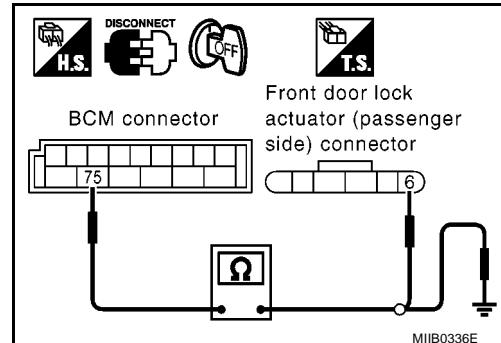
75 (R) – 6 (G) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 75 and ground.

75 (R) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



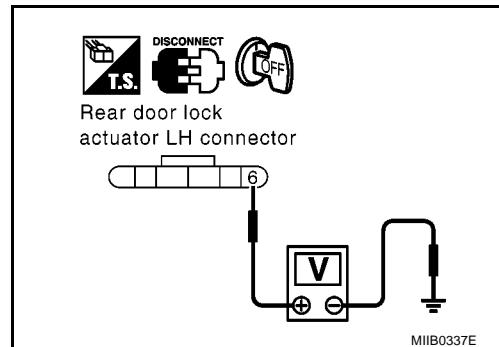
POWER DOOR LOCK — SUPER LOCK —

REAR LH SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator LH connector.
3. Operate remote controller, check voltage between rear door lock actuator LH connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D63	6 (L)	Ground	Lock button is pressed.	0 → Battery voltage → 0



OK or NG

- OK >> Replace rear door lock actuator LH.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 75 and rear door lock actuator LH connector D63 terminal 6.

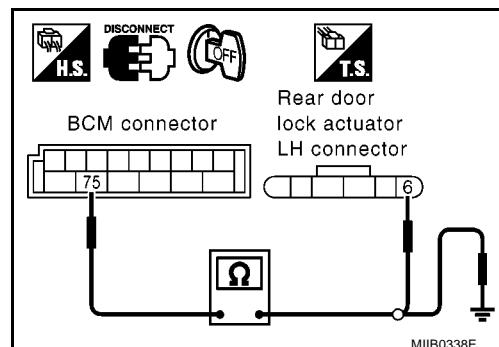
75 (R) – 6 (L) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 75 and ground.

75 (R) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



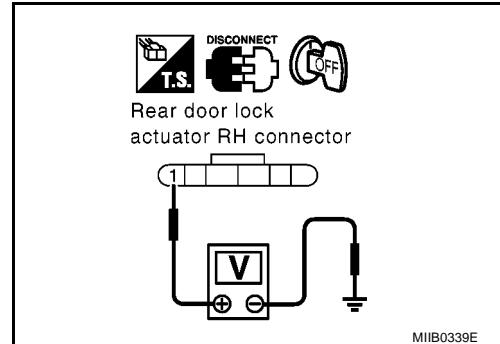
POWER DOOR LOCK — SUPER LOCK —

REAR RH SIDE

1. CHECK DOOR LOCK ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator RH connector.
3. Operate remote controller, check voltage between rear door lock actuator RH connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
D83	1 (R)	Ground	Lock button is pressed.	0 → Battery voltage → 0



OK or NG

- OK >> Replace rear door lock actuator RH.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 75 and rear door lock actuator RH connector D83 terminal 1.

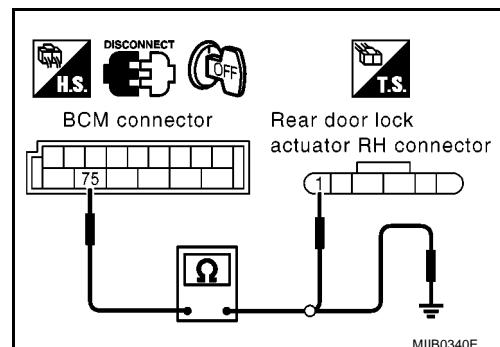
75 (R) – 1 (R) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 75 and ground.

75 (R) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

Check Door Switch DRIVER SIDE

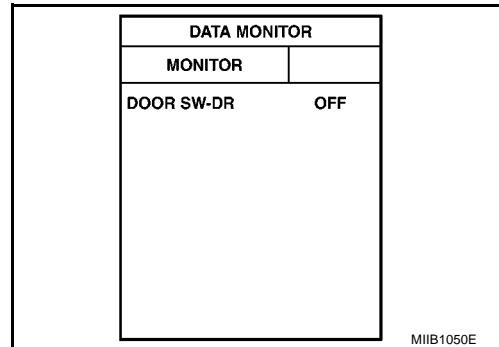
EIS00AQ7

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

Check door switch "DOOR SW-DR" in "DATA MONITOR" mode with CONSULT- II.

Monitor item	Condition	
DOOR SW-DR	OPEN	: ON
	CLOSE	: OFF



MIIIB1050E

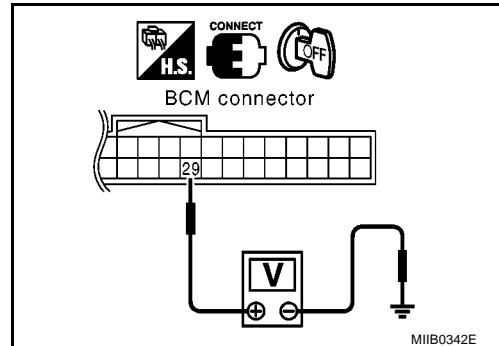
Without CONSULT- II

Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	29 (L)	Ground	OPEN	0
			CLOSE	Battery voltage

OK or NG

- OK >> Front door switch RH is OK.
NG >> GO TO 2.



MIIIB0342E

2. CHECK HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect BCM and front door switch RH connector.
- Check continuity between BCM connector M48 terminal 29 and front door switch RH connector B16 terminal 1.

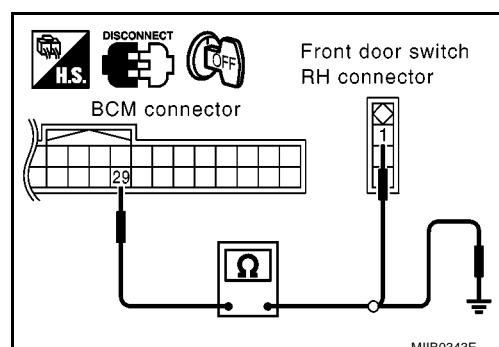
29 (L) – 1 (L) : Continuity should exist.

- Check continuity between BCM connector M48 terminal 29 and ground.

29 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
NG >> Repair or replace harness.



MIIIB0343E

POWER DOOR LOCK — SUPER LOCK —

3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground part of door switch.

Connector	Terminal	Condition	Continuity
B16	1	Body ground part of door switch	Pushed NO
		Released	YES

OK or NG

- OK >> GO TO 4.
NG >> Replace door switch.



Door switch



PIIA3351E

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 29 and ground.

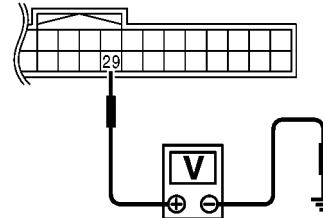
29 (L) – Ground : Battery voltage

OK or NG

- OK >> Check door switch ground condition.
NG >> Replace BCM.



BCM connector



MIIB0342E

POWER DOOR LOCK — SUPER LOCK —

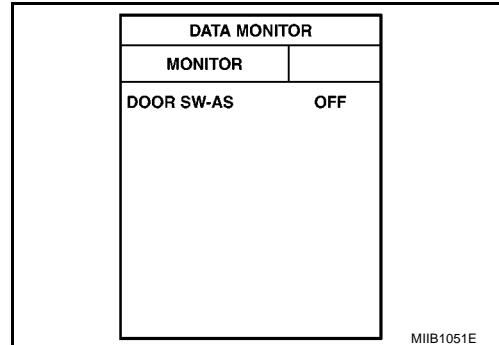
PASSENGER SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

Check door switch "DOOR SW-AS" in "DATA MONITOR" mode with CONSULT- II.

Monitor item	Condition	
DOOR SW-AS	OPEN	: ON
	CLOSE	: OFF



Without CONSULT- II

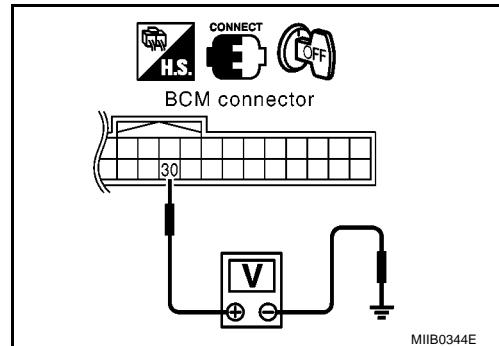
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	30 (LG)	Ground	OPEN	0
			CLOSE	Battery voltage

OK or NG

OK >> Front door switch LH is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and front door switch LH connector.
3. Check continuity between BCM connector M48 terminal 30 and front door switch LH connector B22 terminal 1.

30 (LG) – 1 (LG) : Continuity should exist.

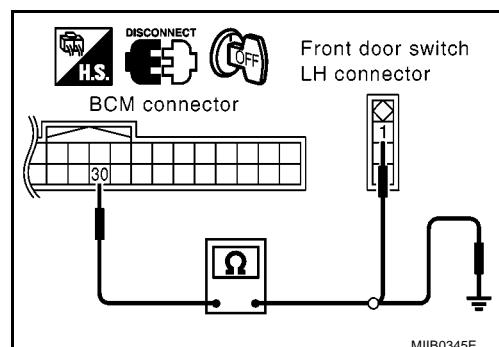
4. Check continuity between BCM connector M48 terminal 30 and ground.

30 (LG) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground part of door switch.

Connector	Terminal	Condition	Continuity
B22	1	Body ground part of door switch	Pushed Released
			NO YES

OK or NG

OK >> GO TO 4.

NG >> Replace door switch.



Door switch



PIIA3351E

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 30 and ground.

30 (LG) – Ground : Battery voltage

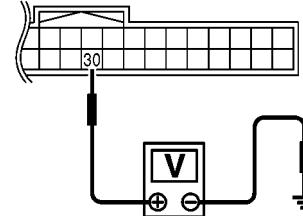
OK or NG

OK >> Check door switch ground condition.

NG >> Replace BCM.



BCM connector



MIIB0344E

POWER DOOR LOCK — SUPER LOCK —

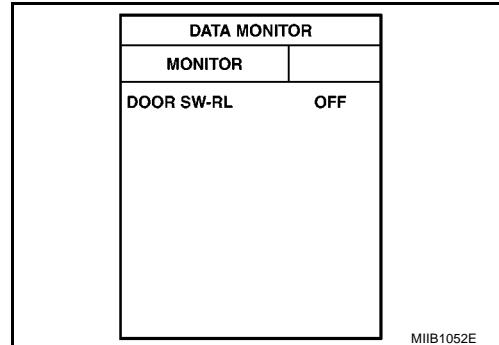
REAR LH SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

Check door switch "DOOR SW-RL" in "DATA MONITOR" mode with CONSULT- II.

Monitor item	Condition	
DOOR SW-RL	OPEN	: ON
	CLOSE	: OFF



Without CONSULT- II

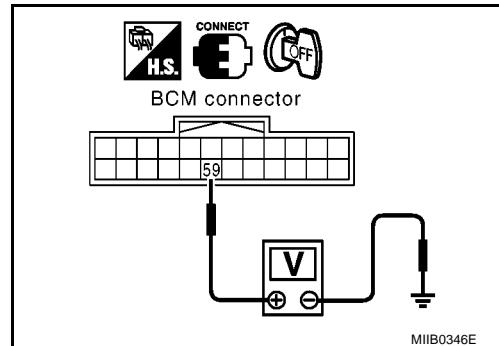
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M49	59 (L)	Ground	OPEN	0
			CLOSE	Battery voltage

OK or NG

OK >> Rear door switch LH is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door switch LH connector.
3. Check continuity between BCM connector M49 terminal 59 and rear door switch LH connector B31 terminal 1.

59 (L) – 1 (L) : Continuity should exist.

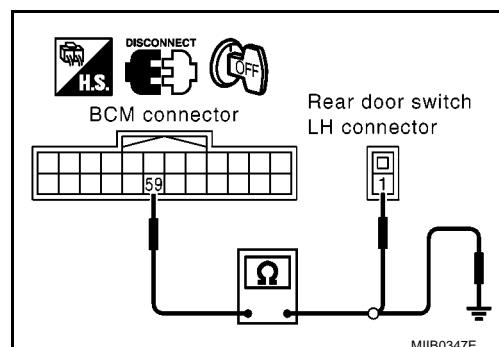
4. Check continuity between BCM connector M49 terminal 59 and ground.

59 (L) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

3. CHECK DOOR SWITCH

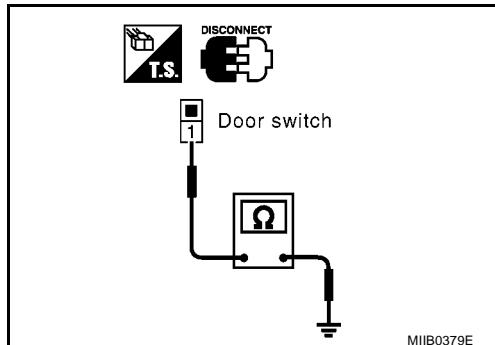
Check continuity between door switch terminal 1 and body ground of door switch.

Connector	Terminal	Condition	Continuity
B31	1	Body ground part of door switch	Pushed NO
		Released	YES

OK or NG

OK >> GO TO 4.

NG >> Replace door switch.



4. CHECK BCM OUTPUT SIGNAL

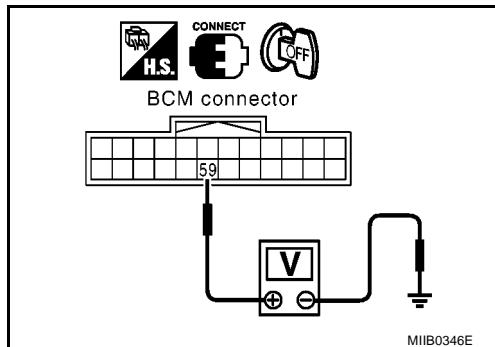
1. Connect BCM connector.
2. Check voltage between BCM connector M49 terminal 59 and ground.

59 (L) – Ground : Battery voltage

OK or NG

OK >> Check door switch ground condition.

NG >> Replace BCM.



POWER DOOR LOCK — SUPER LOCK —

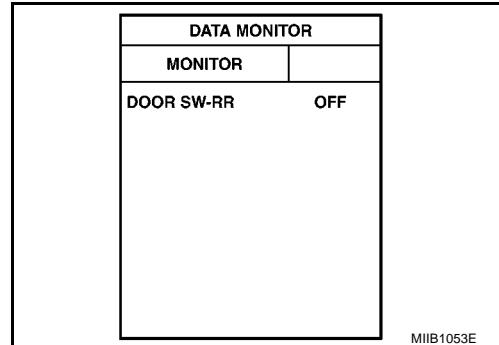
REAR RH SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

With CONSULT- II

Check door switch "DOOR SW-RR" in "DATA MONITOR" mode with CONSULT- II.

Monitor item	Condition	
DOOR SW-RR	OPEN	: ON
	CLOSE	: OFF



Without CONSULT- II

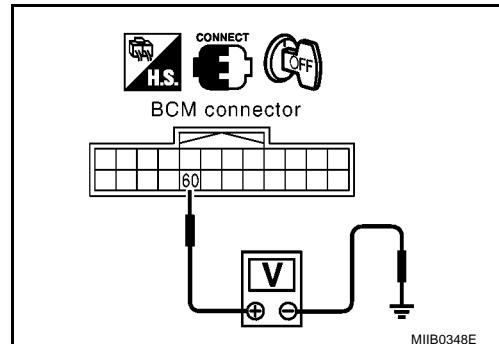
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M49	60 (G)	Ground	OPEN	0
			CLOSE	Battery voltage

OK or NG

OK >> Rear door switch RH is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and rear door switch RH connector.
3. Check continuity between BCM connector M49 terminal 60 and rear door switch RH connector B30 terminal 1.

60 (G) – 1 (G) : Continuity should exist.

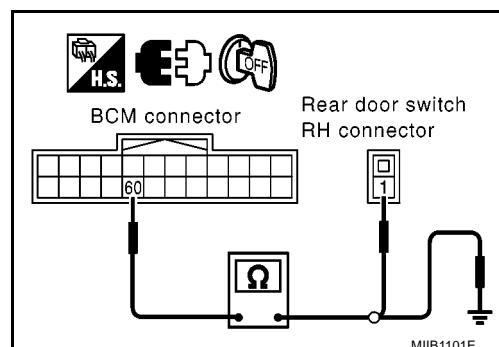
4. Check continuity between BCM connector M49 terminal 60 and ground.

60 (G) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

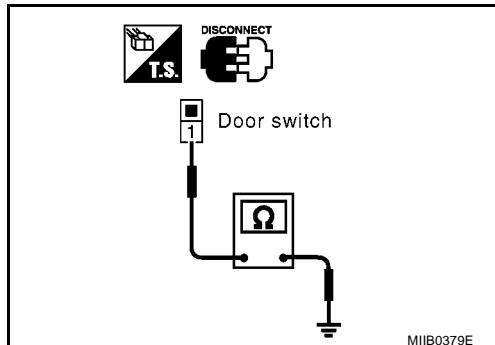
3. CHECK DOOR SWITCH

Check continuity between door switch terminal 1 and body ground of door switch.

Connector	Terminal	Condition	Continuity
B30	1	Body ground part of door switch	Pushed NO
			Released YES

OK or NG

- OK >> GO TO 4.
NG >> Replace door switch.



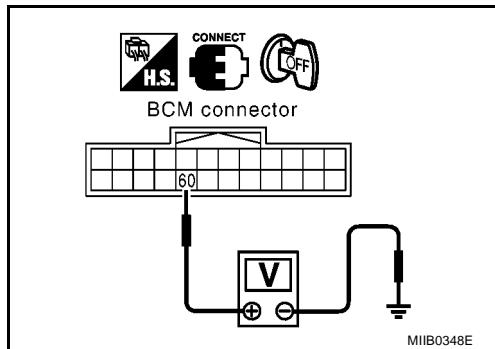
4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M49 terminal 60 and ground.

60 (G) – Ground : Battery voltage

OK or NG

- OK >> Check door switch ground condition.
NG >> Replace BCM.



POWER DOOR LOCK — SUPER LOCK —

Check External Back Door Release Switch (Hatchback)

EIS00AQ8

1. CHECK EXTERNAL BACK DOOR RELEASE SWITCH INPUT SIGNAL

With CONSULT- II

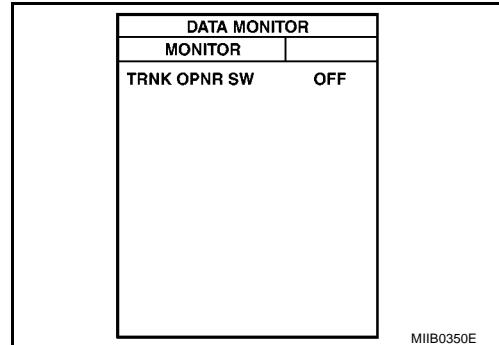
Check external back door release switch "TRNK OPNR SW" in "DATA MONITOR" mode with CONSULT- II.

External back door release switch is pushed

TRNK OPNR SW : ON

External back door release switch is released

TRNK OPNR SW : OFF



Without CONSULT- II

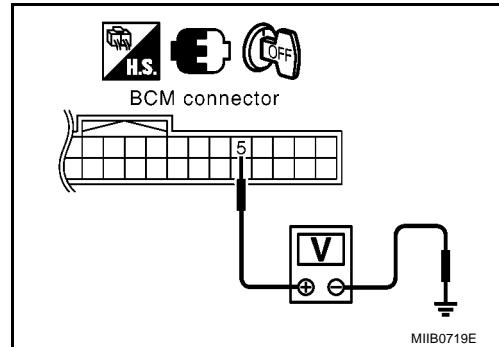
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	5 (Y)	Ground	Pushed	0
			Released	5

OK or NG

OK >> External back door release switch is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and external back door release switch connector.
3. Check continuity between BCM connector M48 terminal 5 and external back door release switch connector B52 terminal 1.

5 (Y) – 1 (Y) : Continuity should exist.

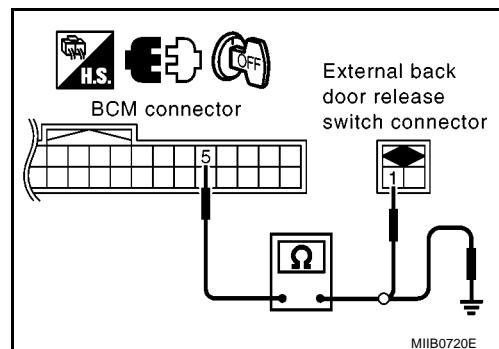
4. Check continuity between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

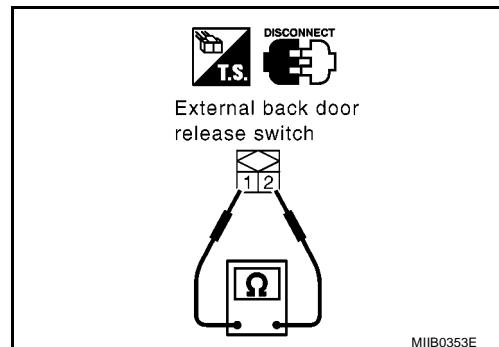
3. CHECK EXTERNAL BACK DOOR RELEASE SWITCH

Check continuity between external back door release switch terminals 1 and 2.

Connector	Terminals		Condition	Continuity
B52	1	2	Pushed	YES
			Released	NO

OK or NG

- OK >> GO TO 4.
NG >> Replace external back door release switch.



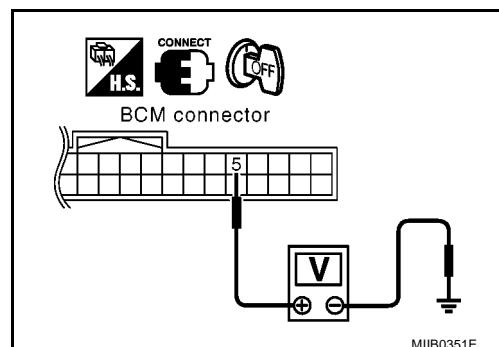
4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Approx. 5V

OK or NG

- OK >> Check the condition of the harness and the connector.
NG >> Replace BCM.



POWER DOOR LOCK — SUPER LOCK —

Check Back Door Release Actuator

EIS00AQ9

1. CHECK BCM OUTPUT SIGNAL

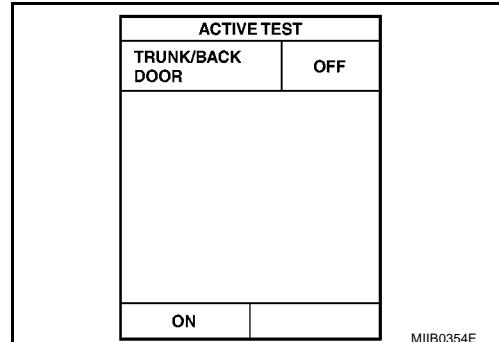
Check back door release output signal

Perform ("TRUNK/BACK DOOR") in "ACTIVE TEST" mode with CONSULT-II.

When "ACTIVE TEST" is executed, does the back door open?

OK or NG

OK >> Back door release output is OK.
NG >> GO TO 2.



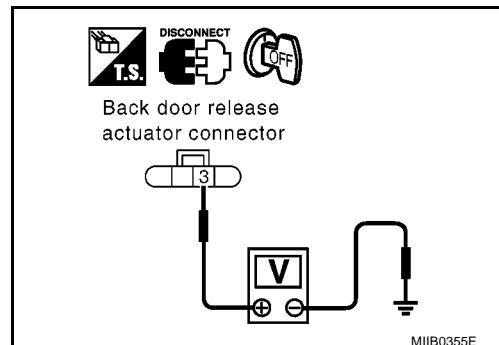
2. CHECK BACK DOOR RELEASE ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect back door release actuator connector.
3. Operate external back door release switch, check voltage between back door release actuator connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B55	3 (OR)	Ground	Pushed	0 → Battery voltage → 0

OK or NG

OK >> GO TO 4.
NG >> GO TO 3.



3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 68 and back door release actuator connector B55 terminal 3.

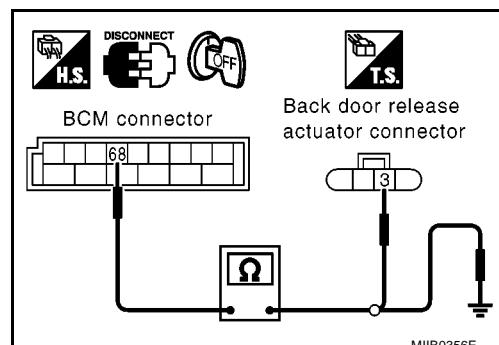
68 (OR) – 3 (OR) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 68 and ground.

68 (OR) – Ground : Continuity should not exist.

OK or NG

OK >> Replace BCM.
NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

4. CHECK GROUND CIRCUIT

Check continuity between back door release actuator connector B55 terminal 4 and ground.

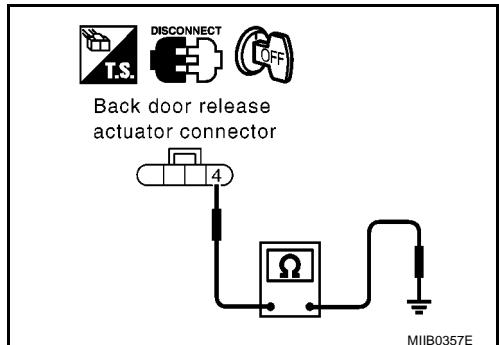
4 (B) – Ground

: Continuity should exist.

OK or NG

OK >> Replace back door release actuator.

NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

Check External Trunk Lid Release Switch (C+C)

EIS00E1Y

1. CHECK EXTERNAL TRUNK LID RELEASE SWITCH INPUT SIGNAL

With CONSULT- II

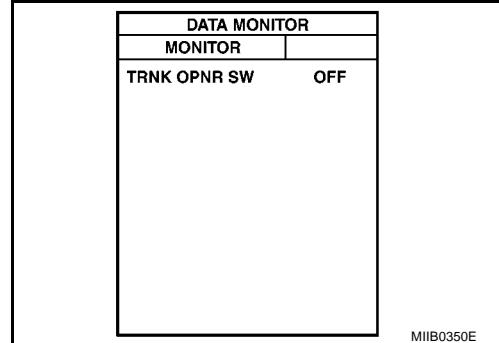
Check external trunk lid release switch "TRNK OPNR SW" in "DATA MONITOR" mode with CONSULT- II.

External trunk lid release switch is pushed

TRNK OPNR SW : ON

External trunk lid release switch is released

TRNK OPNR SW : OFF



Without CONSULT- II

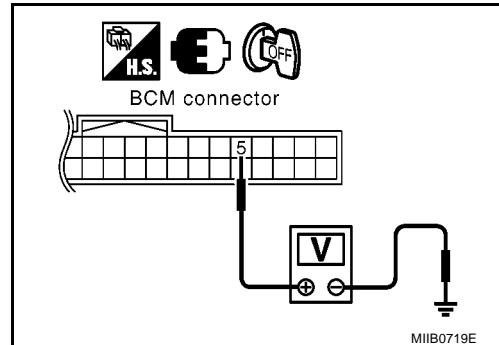
Check voltage between BCM connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M48	5 (Y)	Ground	Pushed	0
			Released	5

OK or NG

OK >> External trunk lid release switch is OK.

NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and external trunk lid release switch connector.
3. Check continuity between BCM connector M48 terminal 5 and external trunk lid release switch connector T53 terminal 2.

5 (Y) – 2 (Y) : Continuity should exist.

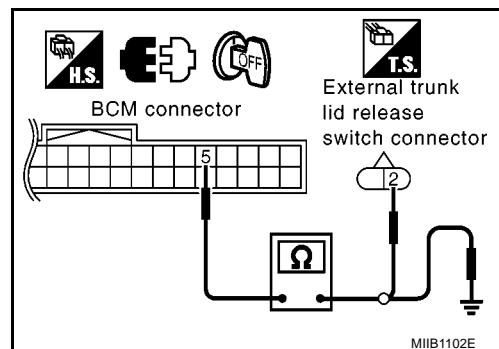
4. Check continuity between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

3. CHECK EXTERNAL TRUNK LID RELEASE SWITCH

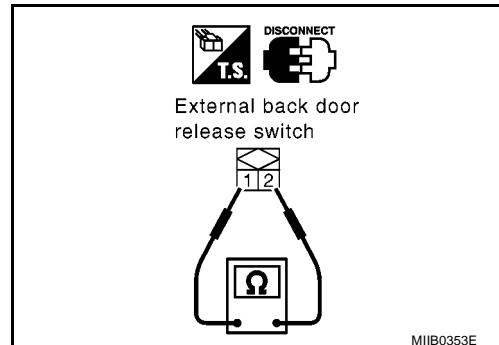
Check continuity between external trunk lid release switch terminals 1 and 2.

Connector	Terminals		Condition	Continuity
T51	2	1	Pushed	YES
			Released	NO

OK or NG

OK >> GO TO 4.

NG >> Replace external trunk lid release switch.



4. CHECK BCM OUTPUT SIGNAL

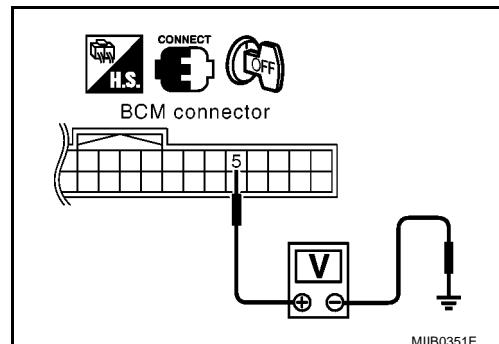
1. Connect BCM connector.
2. Check voltage between BCM connector M48 terminal 5 and ground.

5 (Y) – Ground : Approx. 5V

OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Replace BCM.



POWER DOOR LOCK — SUPER LOCK —

Check Trunk Lid Release Actuator

EIS00E12

1. CHECK BCM OUTPUT SIGNAL

Check trunk lid release output signal

Perform ("TRUNK/BACK DOOR") in "ACTIVE TEST" mode with CONSULT-II.

When "ACTIVE TEST" is executed, does the trunk lid open?

OK or NG

OK >> Trunk lid release output is OK.
NG >> GO TO 2.

ACTIVE TEST	
TRUNK/BACK DOOR	OFF
ON	

MIIIB0354E

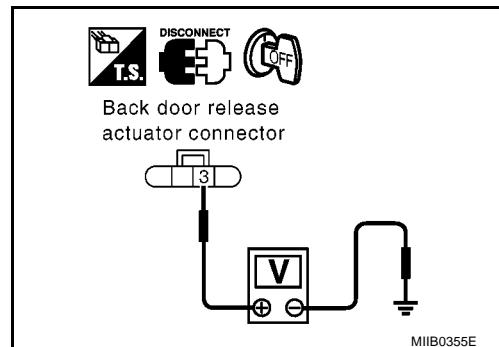
2. CHECK TRUNK LID RELEASE ACTUATOR

1. Turn ignition switch OFF.
2. Disconnect trunk lid release actuator connector.
3. Operate external trunk lid release switch, check voltage between trunk lid release actuator connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B55	3 (OR)	Ground	Pushed	0 → Battery voltage → 0

OK or NG

OK >> GO TO 4.
NG >> GO TO 3.



3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 68 and trunk lid release actuator connector B55 terminal 3.

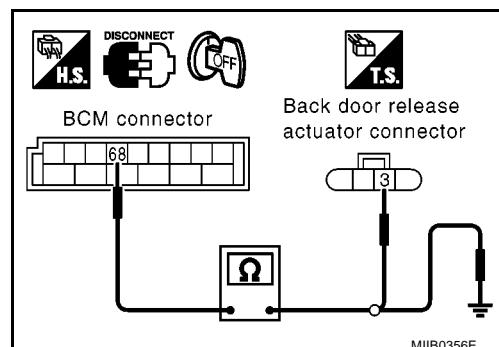
68 (OR) – 3 (OR) : Continuity should exist.

3. Check continuity between BCM connector M50 terminal 68 and ground.

68 (OR) – Ground : Continuity should not exist.

OK or NG

OK >> Replace BCM.
NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

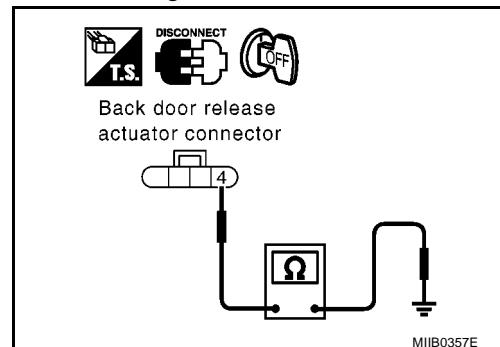
4. CHECK GROUND CIRCUIT

Check continuity between trunk lid release actuator connector B55 terminal 4 and ground.

4 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Replace trunk lid release actuator.
- NG >> Repair or replace harness.



Check Seat Undertray Lock Actuator (C+C)

EIS00E25

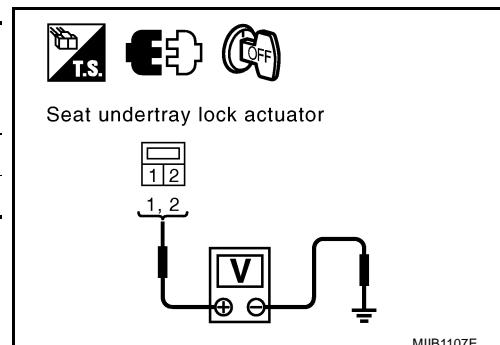
1. CHECK SEAT UNDERTRAY LOCK ACTUATOR CIRCUIT (C+C)

1. Turn ignition switch OFF.
2. Disconnect seat undertray lock actuator connector.
3. Operate seat undertray lock actuator, check voltage between seat undertray lock actuator connector B63 and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B63	1 (BR)	Ground	Unlock	0 → Battery voltage → 0
	2 (L)		Lock	0 → Battery voltage → 0

OK or NG

- OK >> Replace seat undertray lock actuator.
- NG >> GO TO 2.



2. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M50 terminal 76, 77 and seat undertray lock actuator connector B63 terminals 1, 2.

76 (BR) – 1 (BR) : Continuity should exist.

77 (L) – 2 (L) : Continuity should exist.

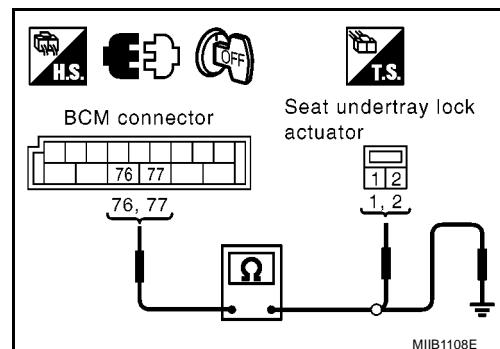
3. Check continuity between BCM connector M50 terminal 76, 77 and ground.

76 (BR) – Ground : Continuity should not exist.

77 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> Check condition of the harness and the connector.
- NG >> Repair or replace harness.



POWER DOOR LOCK — SUPER LOCK —

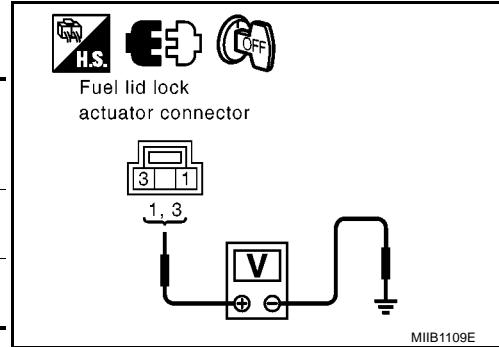
Check Fuel Lid Lock Actuator (C+C)

EIS00E26

1. CHECK FUEL LID LOCK ACTUATOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect fuel lid lock actuator connector.
3. Check voltage between fuel lid lock actuator harness connector B69 terminal 1, 3 and ground.

Con- nector	Terminal (wire color)		Condition	Voltage [V] (Approx.)
	(+)	(-)		
B69	1 (L)	Ground	Door lock and unlock switch is turned to "LOCK".	0 → Battery voltage → 0
	3 (BR)		Door lock and unlock switch is turned to "UNLOCK".	0 → Battery voltage → 0



OK >> GO TO 2.

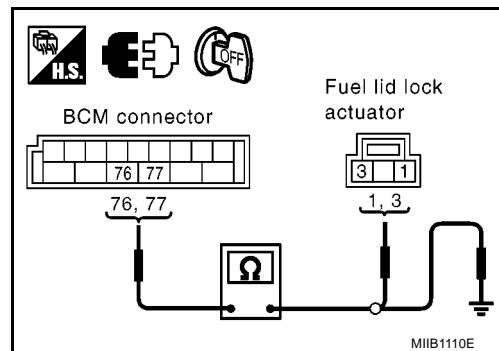
NG >> Replace fuel lid lock actuator.

2. CHECK FUEL LID LOCK ACTUATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check continuity between BCM harness connector M50 terminal 76, 77 and fuel lid lock actuator connector B69 terminal 1, 3.
 - 76 (BR) – 3 (BR)** : Continuity should exist.
 - 77 (L) – 1 (L)** : Continuity should exist.
4. Check continuity between BCM harness connector and ground.
 - 76 (BR) – Ground** : Continuity should not exist.
 - 77 (L) – Ground** : Continuity should not exist.

OK >> Fuel lid lock actuator is OK.

NG >> Repair or replace harness.



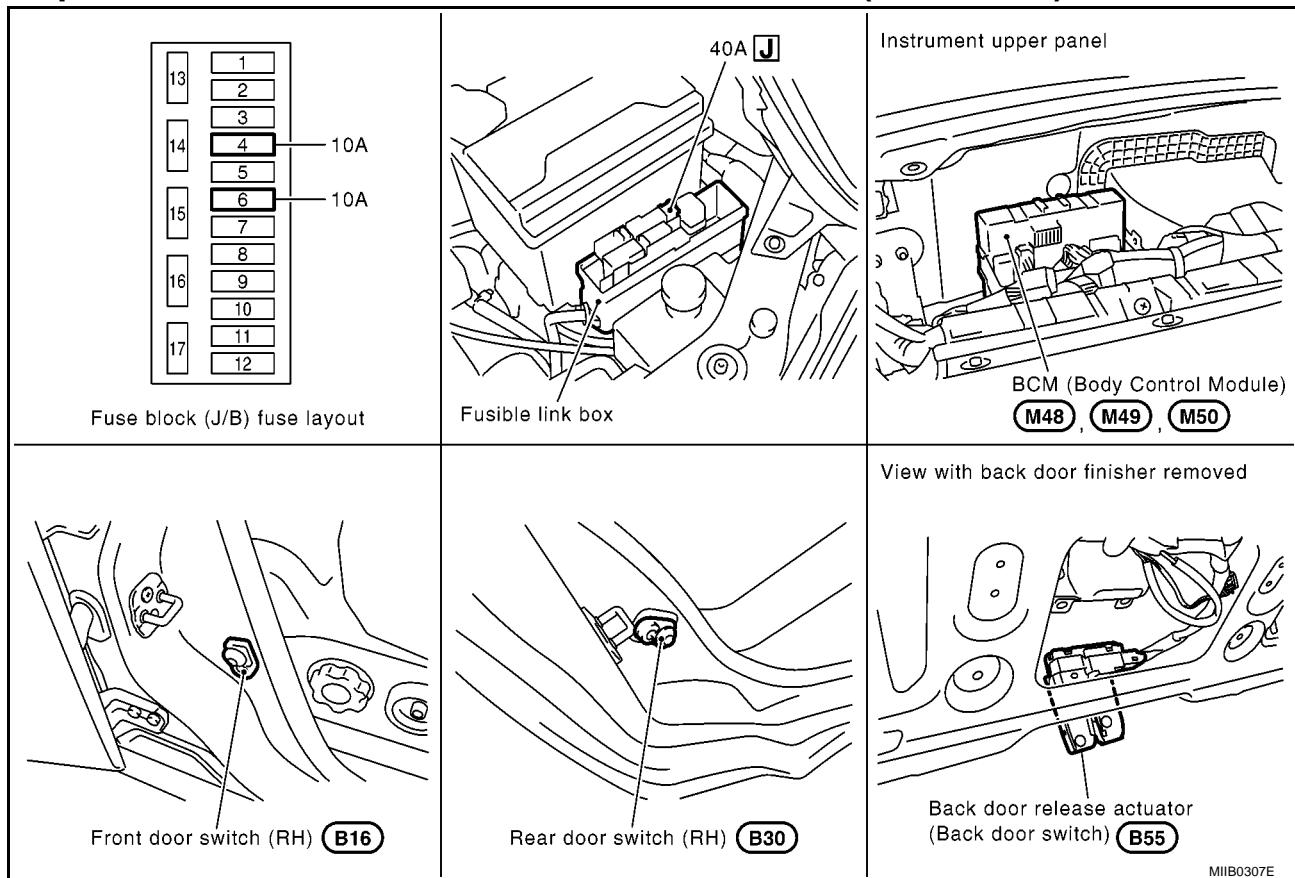
MULTI-REMOTE CONTROL SYSTEM

MULTI-REMOTE CONTROL SYSTEM

PFP:28596

Component Parts and Harness Connector Location (Hatchback)

EIS004Y9



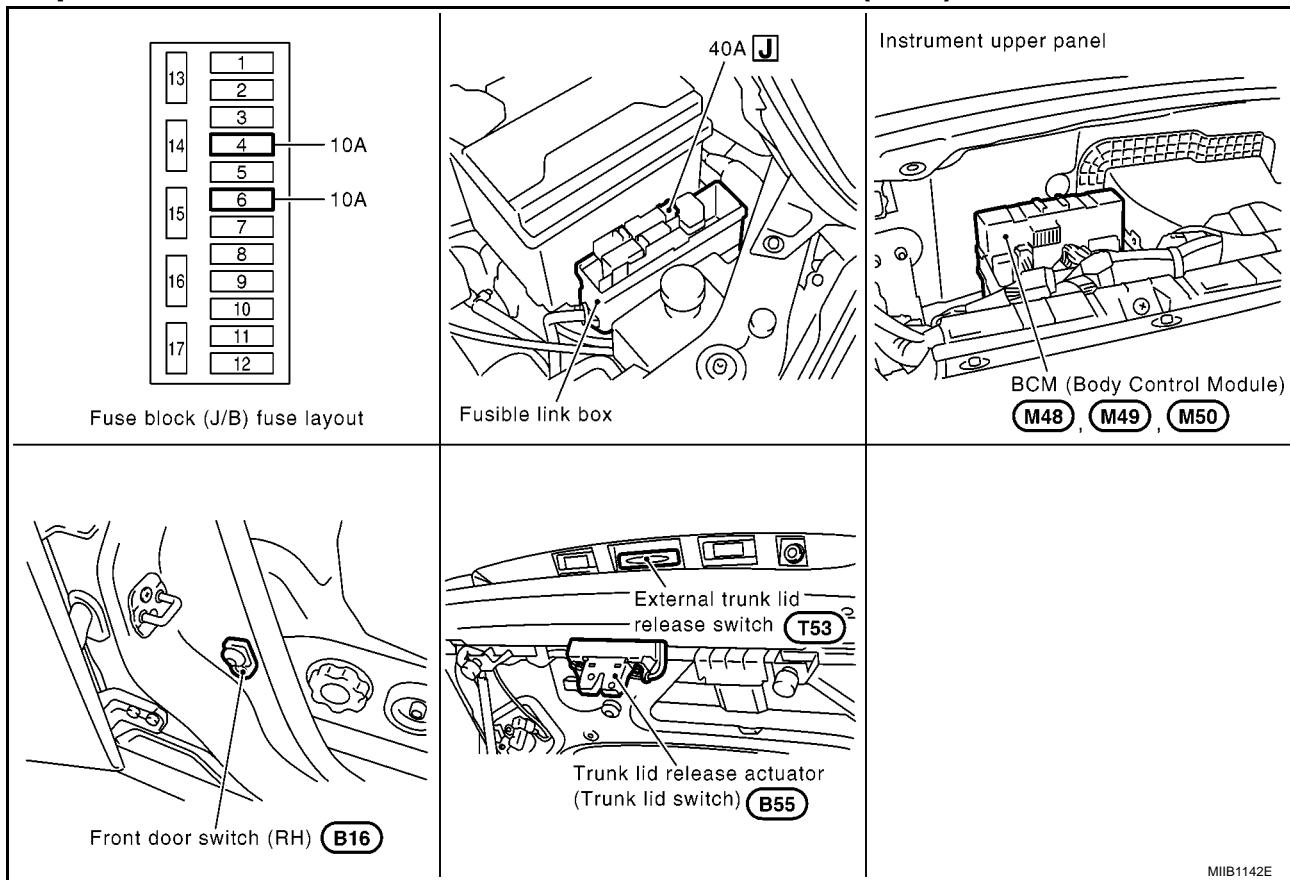
MIIIB0307E

MULTI-REMOTE CONTROL SYSTEM

Component Parts and Harness Connector Location (C+C)

EIS00E2Q

A
B
C
D
E
F
G
H
BL
J
K
L
M



MULTI-REMOTE CONTROL SYSTEM

System Description

INPUTS

EIS004YA

Power is supplied at all times

- through 40A fusible link (letter J , located in the fusible link box)
- to BCM terminals 74 and 79.
- through 10A fuse [No. 6, located in the fuse block (J/B)]
- to key switch terminal 1.

When the key switch is ON (Ignition key is inserted in ignition key cylinder), power is supplied

- through key switch terminal 2
- to BCM terminal 3.

When the ignition switch is ON or START, power is supplied

- through 10A fuse [No. 4, located in the fuse block (J/B)]
- to BCM terminal 24.

Ground is supplied

- through BCM terminals 2 and 70
- to body grounds M19 and M20.

When the front door switch LH (LHD Models) or RH (RHD Models) is ON (door is open), ground supplied

- through BCM terminal 29
- through front door switch LH (LHD Models) or RH (RHD Models) terminal 1
- to front door switch LH (LHD Models) or RH (RHD Models) case ground.

When the front door switch RH (LHD Models) or LH (RHD Models) is ON (door is open), ground supplied

- through BCM terminal 30
- through front door switch RH (LHD Models) or LH (RHD Models) terminal 1
- to front door switch RH (LHD Models) or LH (RHD Models) case ground.

When the rear door switch LH is ON (door is open), ground is supplied

- through BCM terminal 59
- through rear door switch LH terminal 1
- to rear door switch LH case ground.

When the rear door switch RH is ON (door is open), ground is supplied

- through BCM terminal 60
- through rear door switch RH terminal 1
- to rear door switch RH case ground.

When the back door/trunk lid switch is ON (back door/trunk lid is open), ground is supplied

- through BCM terminal 10
- through back door switch terminals 1 and 2
- to body grounds B44 and B51. (Hatchback)
- to body grounds B17, B23 and B18. (C+C)

Remote controller signal is inputted to BCM (The antenna of the system is combined with BCM).

OUTLINE

Power Door Lock Operation

UNLOCK LINK FUNCTION

When this function is activated, if the car is locked by door lock/unlock switch, opening the driver or passenger side door from the inside handle will override the lock state and unlock the whole car.

(This function will be deactivate if anti-hijack function is activated.)

Selectable Function

	Door Lock/unlock switch
How to change setting	Press unlock for more than 4 seconds
Contents	Unlock link activate/deactivate
How to confirm	Buzzer should sound for 0.2 seconds

MULTI-REMOTE CONTROL SYSTEM

AUTO RE-LOCK FUNCTION

The BCM is equipped with an auto re-lock function, when no further user action occurs after an full or partial unlock, the doors will automatically re-lock after 2 minutes (default value). The auto re-lock function will not be activated under the following states.

- Key switch is ON
- Mechanical key is inserted
- Any door is opened

NOTE:

the 2 minutes timer of auto re-lock will be reset if unlock button from the key fob is pressed.

ANTI-HIJACK FUNCTION

With the anti-hijack function enabled, the first unlock request send from key fob will partially unlock only the driver side door (released super lock if equipped). Then if a second unlock signal is send from the first, then all remaining doors will be unlocked.

HOW TO CHANGE DOOR LOCK FUNCTION MODE

With CONSULT-II

Door lock function can be changed using "SECURITY DOOR LOCK SET" mode in "WORK SUPPORT" of "DOOR LOCK".

Refer to [BL-50, "WORK SUPPORT"](#).

Without CONSULT-II

Press and hold the UNLOCK and LOCK button on remote controller for more than 4 second will switch the Anti-Hijack mode to ON or OFF.

Answer Back

When the doors are locked or unlocked by remote controller, supply power to hazard warning lamp flashes as follows

- LOCK operation: Flash once
- UNLOCK operation: Flash twice

Answer back mode can be changed using "HAZARD LAMP SET" mode in "WORK SUPPORT" of "FLASHER". Refer to [LT-162, "WORK SUPPORT"](#).

Remote Controller ID Code Entry

A maximum of four remote controller can be entered.

Dedicated remote controller ID registration procedure is not required.

Remote controller ID registration must be completed in conjunction with immobilizer transponder ID registration.

A

B

C

D

E

F

G

H

BL

J

K

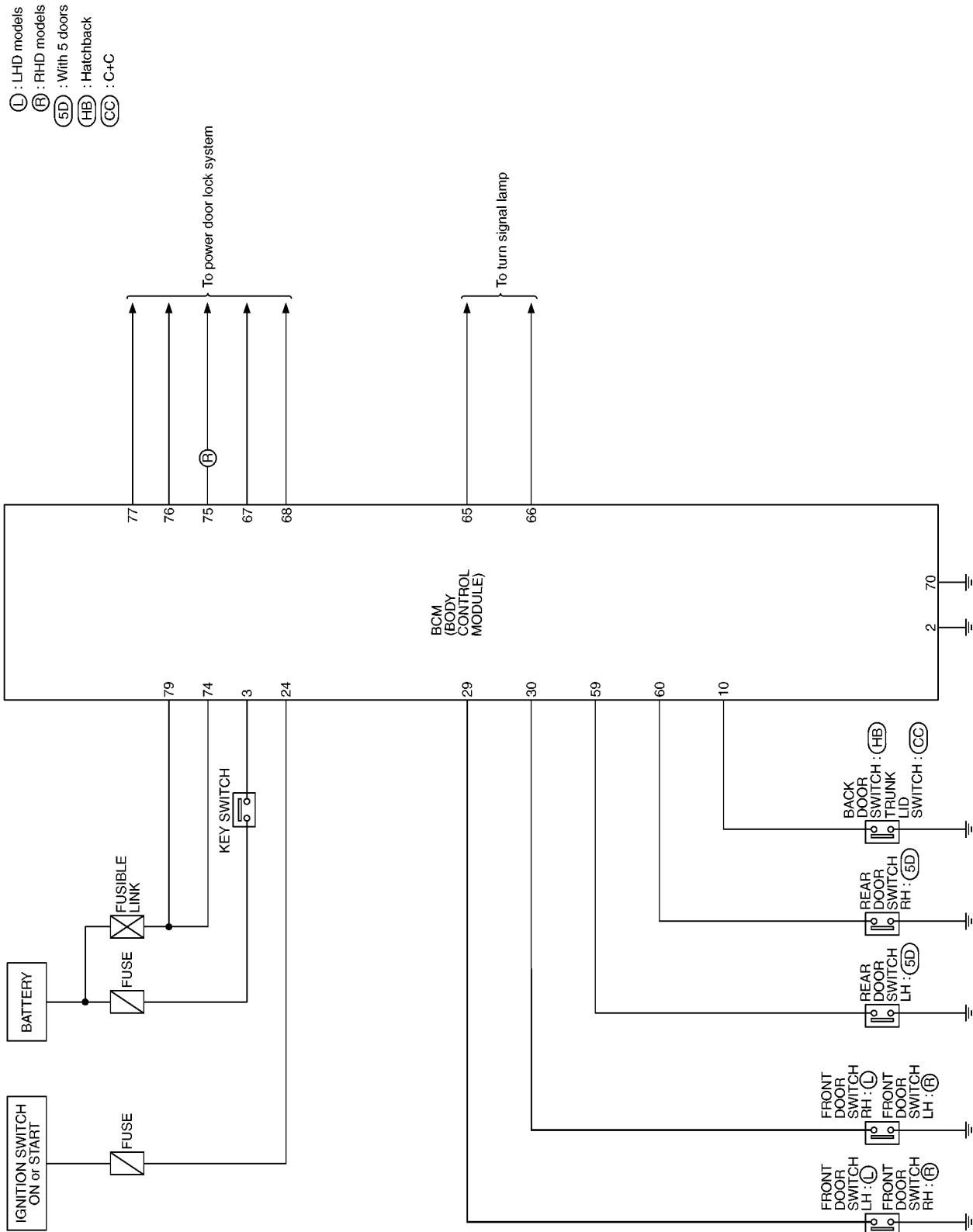
L

M

MULTI-REMOTE CONTROL SYSTEM

Schematic

EIS004YB



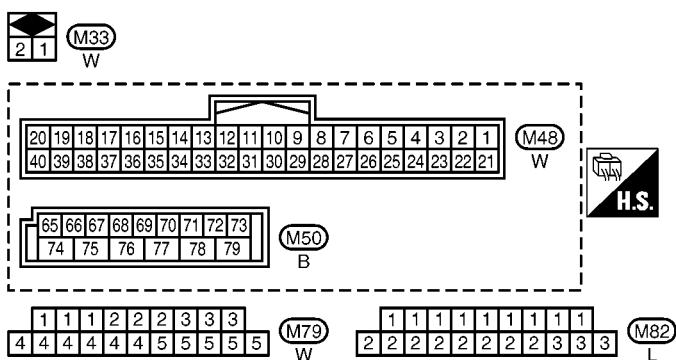
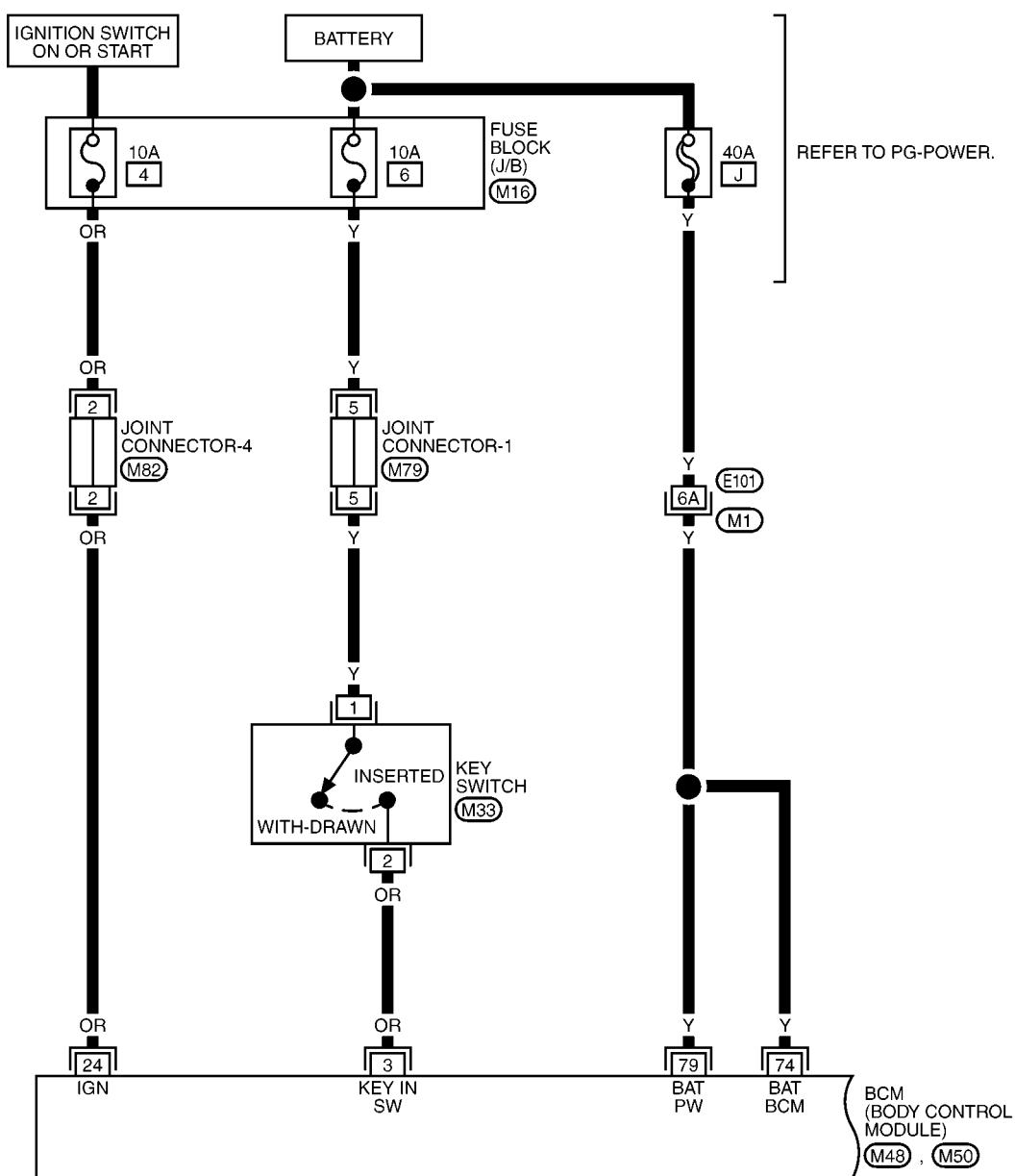
MIWA0663E

MULTI-REMOTE CONTROL SYSTEM

Wiring Diagram — MULTI —

EIS004YC

BL-MULTI-01



REFER TO THE FOLLOWING.

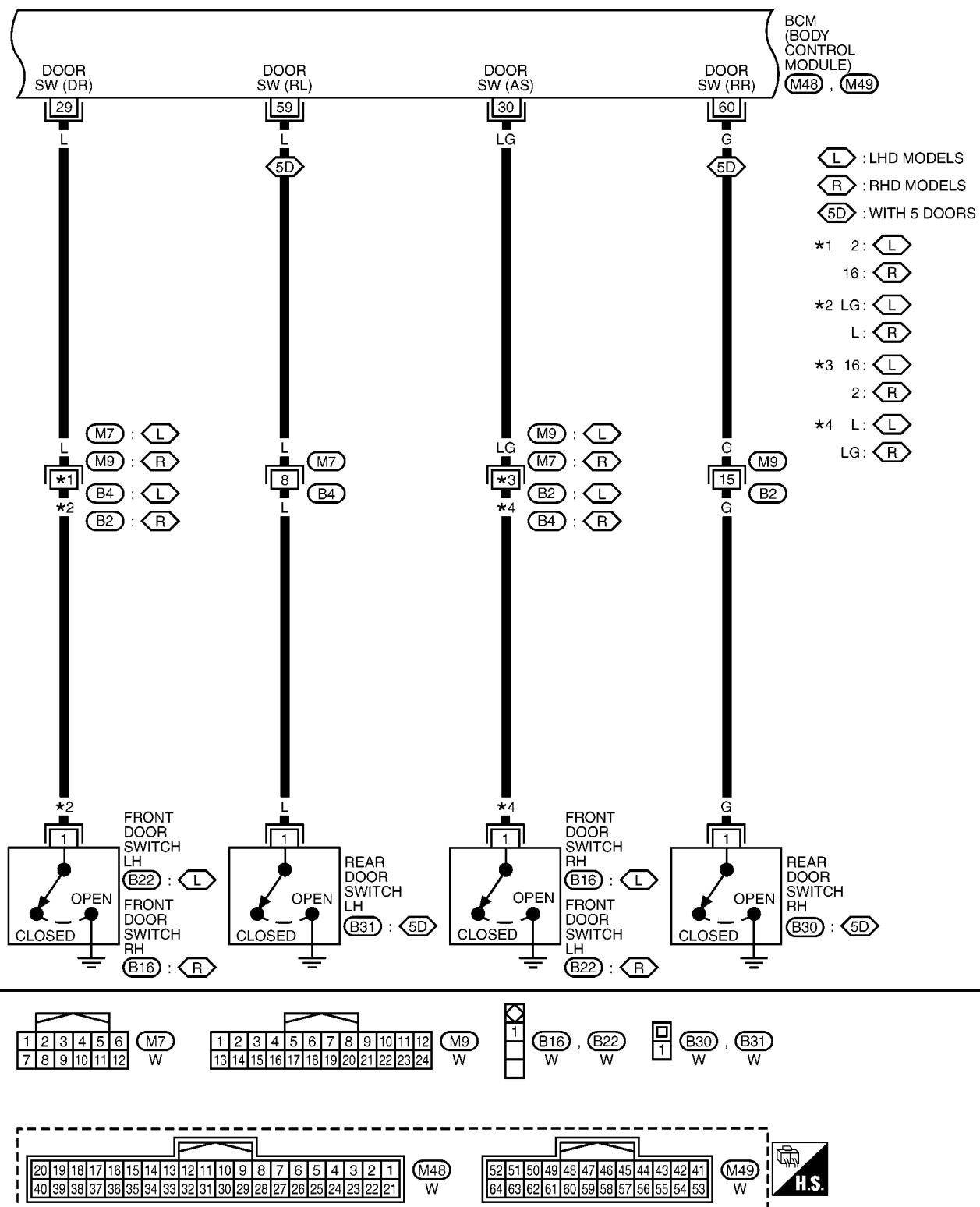
(M1) -SUPER MULTIPLE JUNCTION (SMJ)

(M16) -FUSE BLOCK- JUNCTION BOX (J/B)

MIWA0414E

MULTI-REMOTE CONTROL SYSTEM

BL-MULTI-02

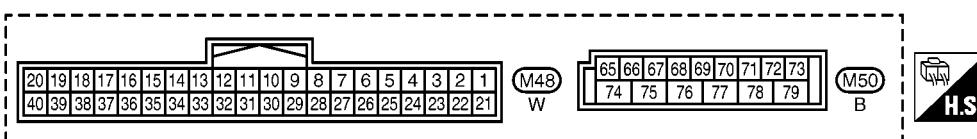
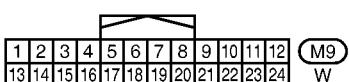
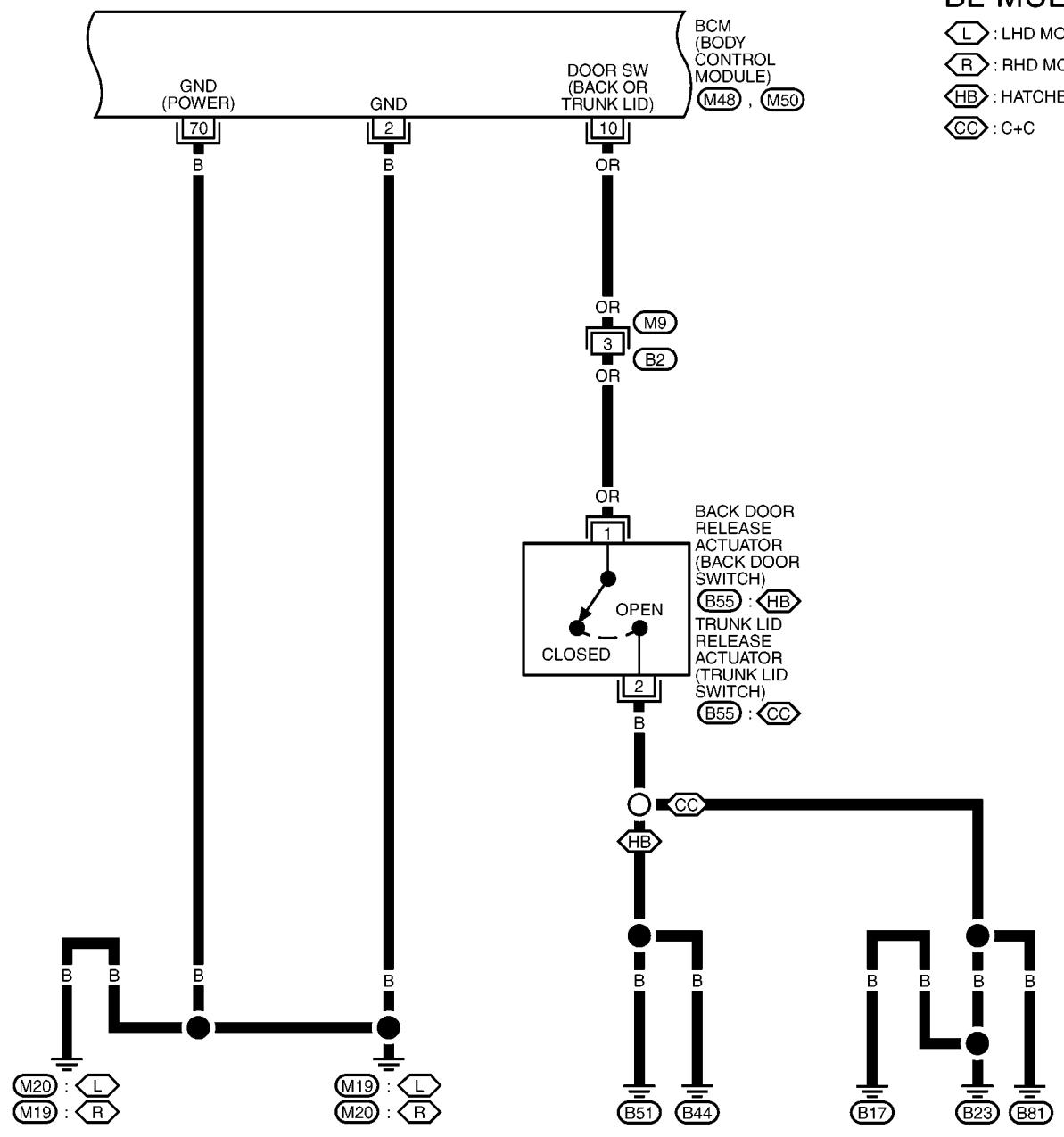


MKWA0890E

MULTI-REMOTE CONTROL SYSTEM

BL-MULTI-03

- (L) : LHD MODELS
- (R) : RHD MODELS
- (HB) : HATCHBACK
- (CC) : C+C

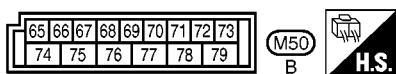
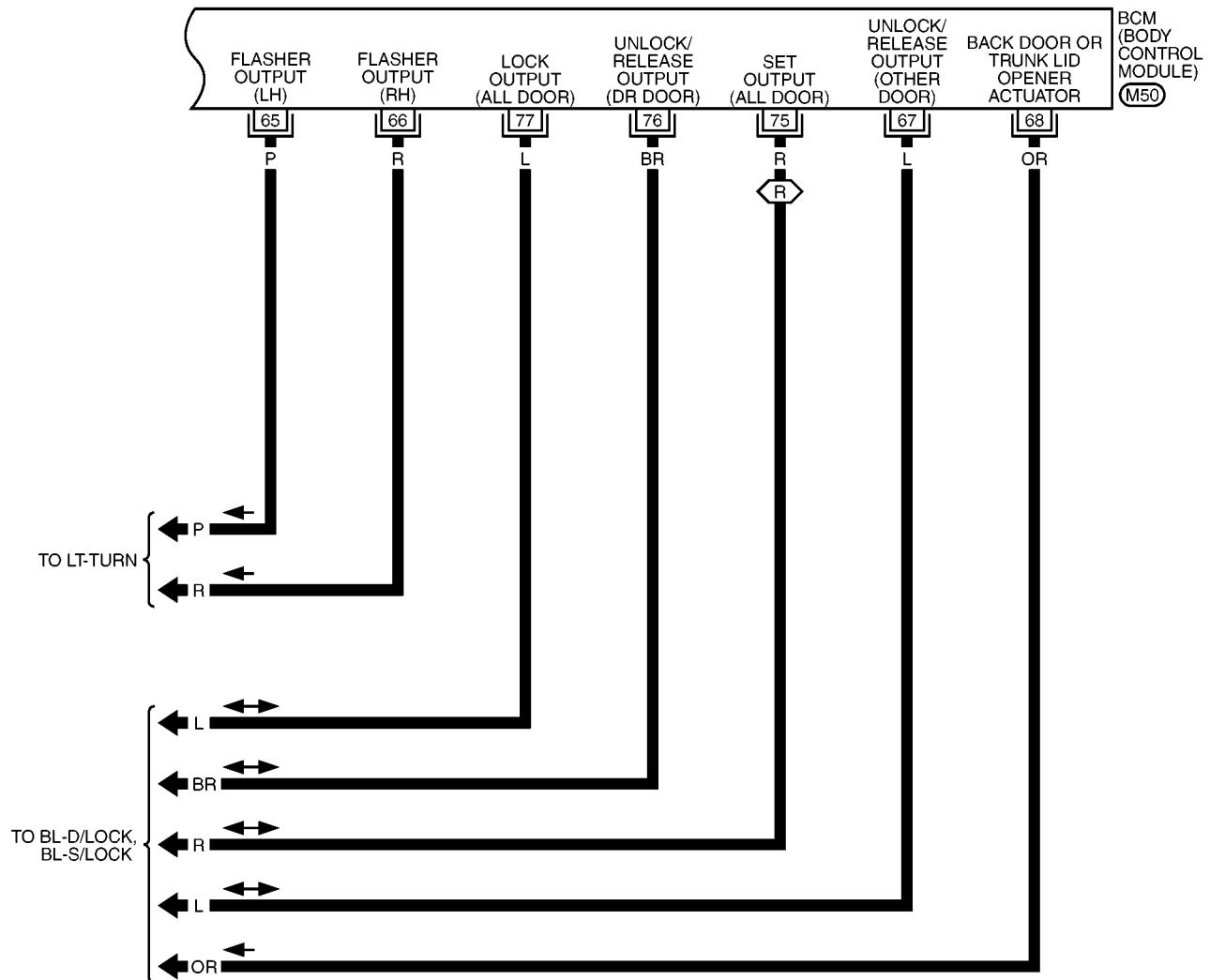


MIWA0626E

MULTI-REMOTE CONTROL SYSTEM

BL-MULTI-04

 : RHD MODELS

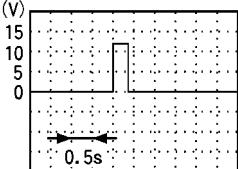
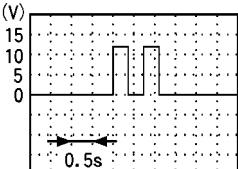
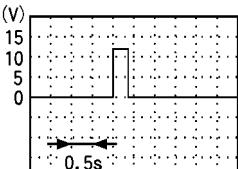
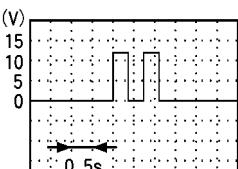


MIWA0627E

MULTI-REMOTE CONTROL SYSTEM

Terminal and Reference Value for BCM

EIS004YD

TER-MINAL	WIRE COLOR	ITEM	CONDITION	Voltage [V] (Approx.)
2	B	Ground	—	0
3	OR	Key switch	Key is removed from IGN key cylinder (OFF) → Key is inserted in IGN key cylinder (ON)	0 → Battery voltage
10	OR	Back door or trunk lid switch	Back door or trunk lid open (ON) → Back door or trunk lid close (OFF)	0 → Battery voltage
24	OR	IGN power supply	Ignition switch is in ON or START position	Battery voltage
29	L	Front door switch LH (LHD models)	Door open (ON) → Door close (OFF)	0 → Battery voltage
		Front door switch RH (RHD models)		
30	LG	Front door switch RH (LHD models)	Door open (ON) → Door close (OFF)	0 → Battery voltage
		Front door switch LH (RHD models)		
59	L	Rear door switch LH	Door open (ON) → Door close (OFF)	0 → Battery voltage
60	G	Rear door switch RH	Door open (ON) → Door close (OFF)	0 → Battery voltage
65	P	Answer back (Turn signal lamp LH)	When door lock operated using remote controller* ¹	 PIIA2486J
			When door unlock operated using remote controller* ¹	 PIIA2487J
66	R	Answer back (Turn signal lamp RH)	When door lock operated using remote controller* ¹	 PIIA2486J
			When door unlock operated using remote controller* ¹	 PIIA2487J
67	L	All door lock actuator unlock (Except driver side)	Door lock/unlock switch UNLOCK operation	0 → Battery voltage
68	OR	Back door or trunk lid opener actuator	Power window main switch (Back door or trunk lid release switch) OPEN operation	Battery voltage → 0
70	B	Ground	—	0

MULTI-REMOTE CONTROL SYSTEM

TER-MINAL	WIRE COLOR	ITEM	CONDITION	Voltage [V] (Approx.)
74	Y	BAT power supply (fusible link) (BCM)	—	Battery voltage
75 ^{*2}	R	Super lock set output (All door)	Super lock operation (Set)	0 → Battery voltage
76	BR	Door lock actuator unlock (Driver side)	Door lock/unlock switch Unlock operation	0 → Battery voltage
77	L	Door lock actuator lock (ALL Door)	Door lock/unlock switch LOCK operation	0 → Battery voltage
79	Y	BAT power supply (fusible link) (Power window)	—	Battery voltage

*¹ : In the state that answer back operates

*² : Only the model equipped with super lock system (RHD Models)

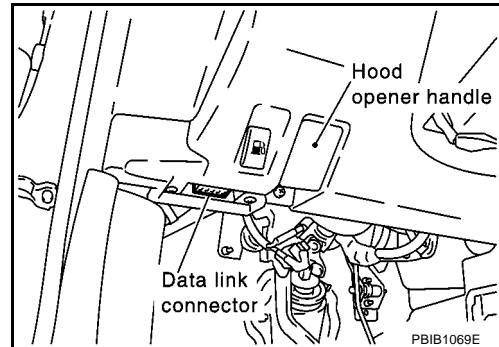
CONSULT-II Inspection Procedure

EIS004YE

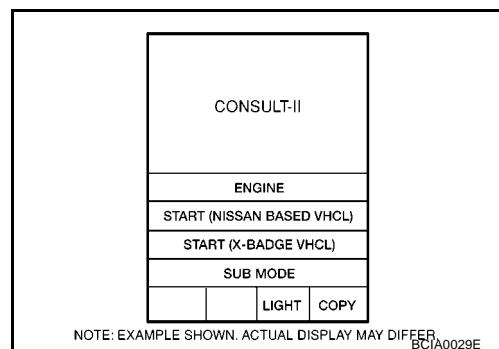
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

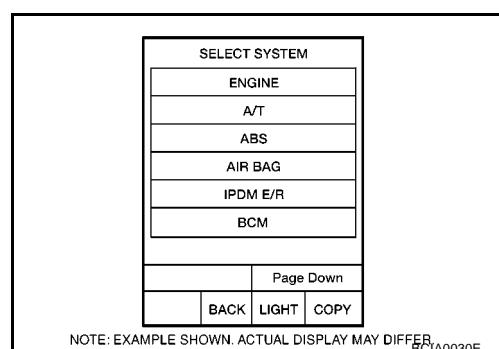
1. Turn ignition switch "OFF".
2. Connect "CONSULT-II" and "CONSULT-II CONVERTER" to the data link connector.



3. Turn ignition switch "ON".
4. Touch "START(NISSAN BASED VHCL)".

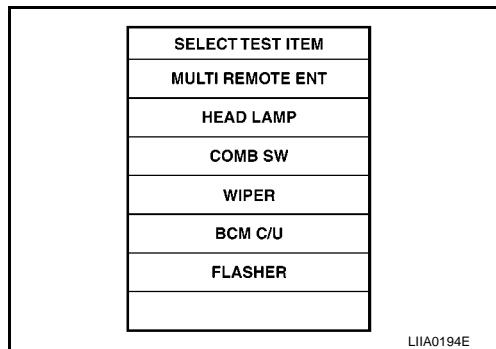


5. Touch "BCM".
- If "BCM" is not indicated, Refer to [GI-36, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).

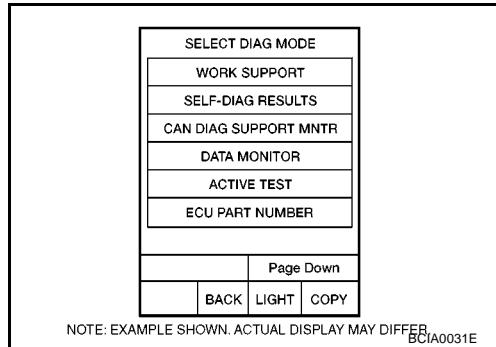


MULTI-REMOTE CONTROL SYSTEM

6. Touch "MULTI REMOTE ENT".



7. Select diagnosis mode.
"DATA MONITOR" is available.



CONSULT-II Application Items DATA MONITOR

EIS004YF

A
B
C
D
E
F
G
H

BL
J

K
L
M

Monitored Item	Description
MEMORY 1	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 2	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 3	Indicates [ON/OFF] condition of remote controller ID code registration.
MEMORY 4	Indicates [ON/OFF] condition of remote controller ID code registration.

Work Flow

EIS0055G

1. Check the trouble symptom and customer's requests.
2. Understand outline of system. Refer to [BL-156, "System Description"](#).
3. Confirm that power door lock system operates normally.
Refer to [BL-16, "POWER DOOR LOCK SYSTEM"](#).
4. Refer to trouble diagnosis chart by symptom, repair or replace any malfunctioning parts.
5. INSPECTION END

MULTI-REMOTE CONTROL SYSTEM

Trouble Diagnosis Chart by Symptom

EIS004YG

First perform the "SELF-DIAG RESULTS" in "BCM" with CONSULT-II, when perform the each trouble diagnosis. Refer to [BCS-30, "CAN Communication Inspection With CONSULT-II \(Self-Diagnosis\)"](#).

NOTE:

- Always check "Work Flow" before troubleshooting. Refer to [BL-165, "Work Flow"](#).
- Always check remote controller battery before replacing remote controller.

Symptom	Diagnoses/service procedure	Reference page
All function of multi-remote control system do not operate.	1. Remote controller check (Reproduce the malfunction using a specific remote controller.)	BL-167
	2. Replace remote controller.	BL-157
	3. Replace BCM.	BCS-30
Door lock or unlock does not function with remote controller. (Power door lock system is "OK")	1. Remote controller check	BL-167
	2. Key switch check	BL-173
	3. Replace remote controller.	
	NOTE: If the result of remote controller function check with CONSULT-II is OK, remote controller is not malfunctioning.	BL-157
Answer back does not activate properly when pressing lock or unlock button of remote controller.	4. Replace BCM.	BCS-30
	1. Check answer back mode.* *: Answer back mode can be changed. First check the hazard reminder setting.	LT-162
	2. Hazard reminder check	BL-174
Auto door lock operation does not activate properly. (All other remote keyless entry system function is "OK".)	3. Replace BCM.	BCS-30
	1. Check auto door lock operation mode.* *: Auto door lock operation can be changed. First check the auto door lock operation setting.	BL-50
	2. Door switch check	BL-167
	3. Replace BCM.	BCS-30

MULTI-REMOTE CONTROL SYSTEM

Remote controller Check

EIS004YH

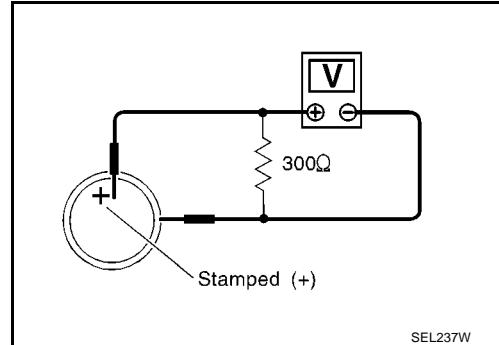
1. CHECK REMOTE CONTROLLER BATTERY

Remove battery and measure voltage across battery positive and negative terminals, (+) and (-).

Battery voltage : 2.5V – 3.0V

NOTE:

Remote controller does not function if battery is not set correctly.



SEL237W

OK or NG

OK >> Replace remote controller.

NG >> Replace battery. Refer to [BL-175, "Remote Controller Battery Replacement"](#).

Door Switch Check

EIS0054Y

DOOR SWITCH DRIVER SIDE

1. CHECK DOOR SWITCH INPUT SIGNAL

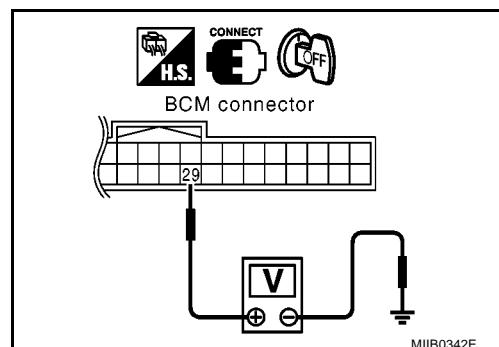
1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 29 and ground.

Terminal		Driver door condition	Voltage (V) Approx.
(+)	(-)		
29 (L)	Ground	Closed	5
		Open	0

OK or NG

OK >> Door switch circuit is OK.

NG >> GO TO 2.



MIIIB0342E

2. CHECK DOOR SWITCH HARNESS

1. Check continuity between BCM connector M48 terminal 29 and driver door switch connector B22(LHD Models) or B16 (RHD Models) terminal 1.

Terminal		Continuity
LHD Models	29 (L) - 1 (LG)	Yes
RHD Models	29 (L) - 1 (L)	

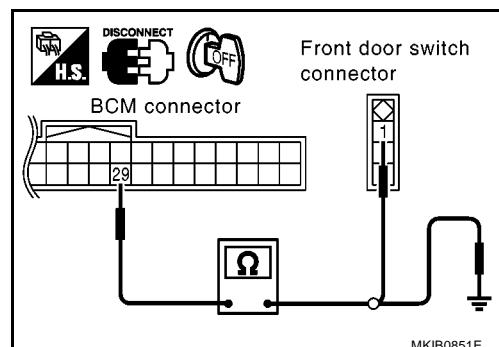
2. Check continuity between BCM connector M48 terminal 29 and ground.

29 (L) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.



MKIB0851E

MULTI-REMOTE CONTROL SYSTEM

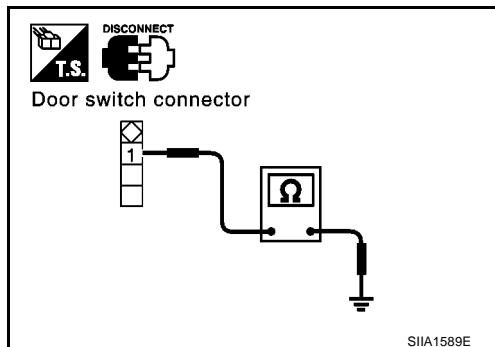
3. CHECK DOOR SWITCH

Check continuity between driver door switch terminal 1 and ground part of door switch.

Terminal	Driver door switch condition	Continuity
1 - Ground part of door switch	Pushed	No
	Released	Yes

OK or NG

- OK >> Check driver door switch ground condition.
 NG >> Replace driver door switch.



DOOR SWITCH PASSENGER SIDE

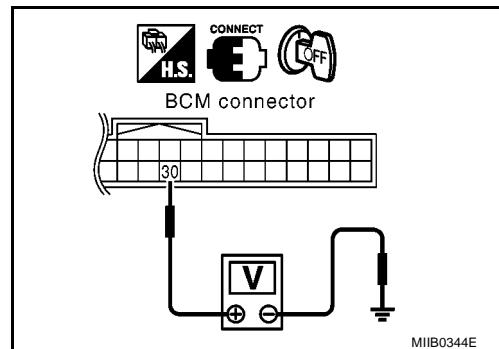
1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 30 and ground.

Terminal		Passenger door condition	Voltage (V) Approx.
(+)	(-)		
30 (LG)	Ground	Closed	5
		Open	0

OK or NG

- OK >> Door switch circuit is OK.
 NG >> GO TO 2



2. CHECK DOOR SWITCH HARNESS

1. Check continuity between BCM connector M48 terminal 30 and passenger door switch connector B16(LHD Models) or B22(RHD Models) terminal 1.

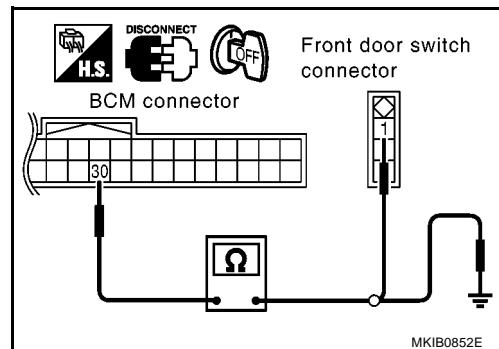
Terminal	Continuity
LHD Models 30 (LG) - 1 (L)	Yes
RHD Models 30 (LG) - 1 (LG)	

2. Check continuity between BCM connector M48 terminal 30 and ground.

30 (LG) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness.



MULTI-REMOTE CONTROL SYSTEM

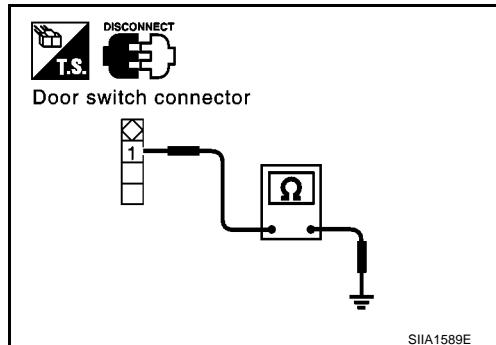
3. CHECK DOOR SWITCH

Check continuity between passenger door switch terminal 1 and ground part of door switch.

Terminal	Passenger door switch condition	Continuity
1 - Ground part of door switch	Pushed	No
	Released	Yes

OK or NG

- OK >> Check passenger door switch ground condition.
 NG >> Replace passenger door switch.



DOOR SWITCH REAR LH

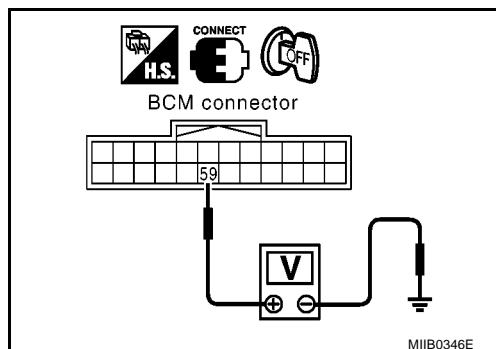
1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M49 terminal 59 and ground.

Terminal		Rear door LH condition	Voltage (V) Approx.
(+)	(-)		
59 (L)	Ground	Closed	5
		Open	0

OK or NG

- OK >> Door switch circuit is OK.
 NG >> GO TO 2



2. CHECK DOOR SWITCH HARNESS

1. Check continuity between BCM connector M49 terminal 59 and rear door switch LH connector B31 terminal 1.

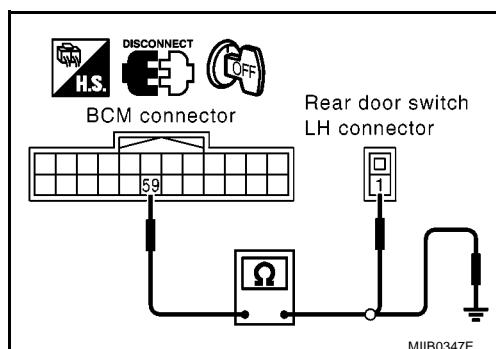
59 (L) – 1 (L) : Continuity should exist.

2. Check continuity between BCM connector M49 terminal 59 and ground

59 (L) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness.



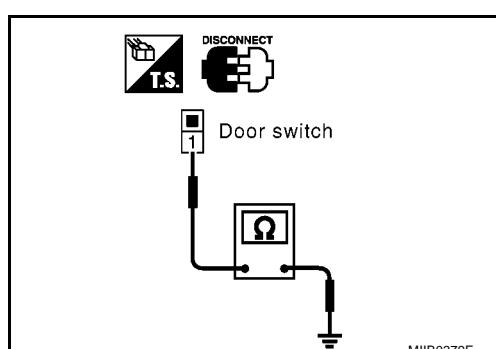
3. CHECK DOOR SWITCH

Check continuity between rear door switch LH terminal 1 and ground part of door switch.

Terminal	Rear door switch LH condition	Continuity
1 - Ground part of door switch	Pushed	No
	Released	Yes

OK or NG

- OK >> Check rear door switch LH ground condition.
 NG >> Replace rear door switch LH.



MULTI-REMOTE CONTROL SYSTEM

DOOR SWITCH REAR RH

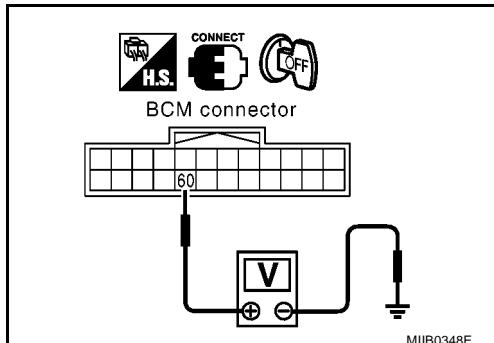
1. CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M49 terminal 60 and ground.

Terminal		Rear door RH condition	Voltage (V) Approx.
(+)	(-)		
60 (G)	Ground	Closed	5
		Open	0

OK or NG

OK >> Door switch circuit is OK.
NG >> GO TO 2



2. CHECK DOOR SWITCH HARNESS

1. Check continuity between BCM connector M49 terminal 60 and rear door switch LH connector B31 terminal 1.

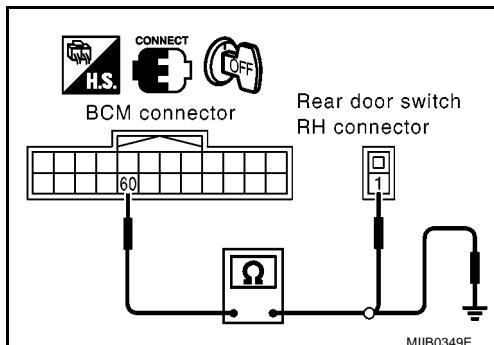
60 (G) – 1 (G) : Continuity should exist.

2. Check continuity between BCM connector M49 terminal 60 and ground

60 (G) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness.



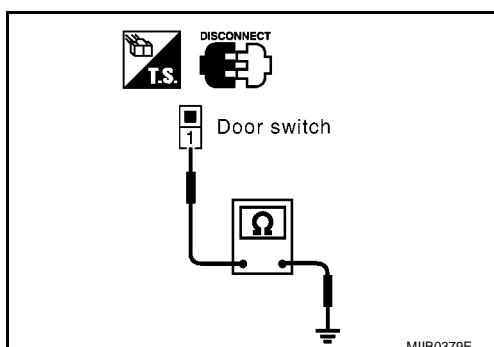
3. CHECK DOOR SWITCH

Check continuity between rear door switch RH terminal 1 and ground part of door switch.

Terminal	Rear door switch RH condition	Continuity
1 - Ground part of door switch	Pushed	No
	Released	Yes

OK or NG

OK >> Check rear door switch RH ground condition.
NG >> Replace rear door switch RH.



MULTI-REMOTE CONTROL SYSTEM

BACK DOOR SWITCH (HATCHBACK)

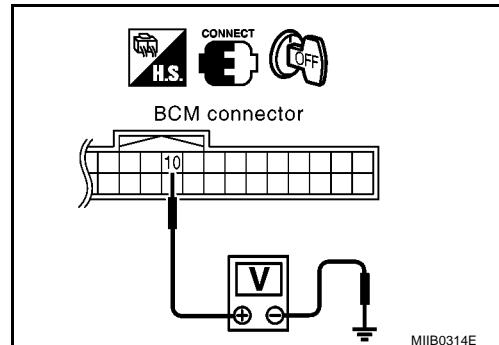
1. CHECK BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 10 and ground.

Terminal		Back door condition	Voltage (V) Approx.
(+)	(-)		
10 (OR)	Ground	Closed	5
		Open	0

OK or NG

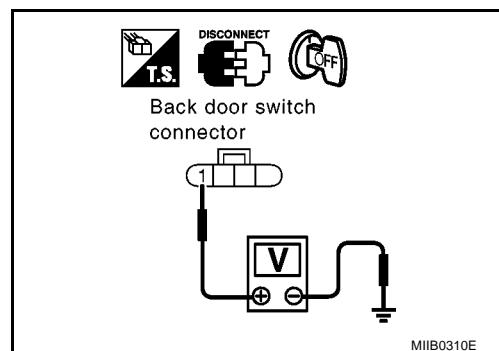
- OK >> Back door switch circuit is OK.
 NG >> GO TO 2



2. CHECK BACK DOOR SWITCH HARNESS

1. Disconnect back door switch connector.
2. Check voltage between back door switch connector B55 terminal 1 and ground. (Check harness for open.)

1 (OR) – Ground : Battery voltage

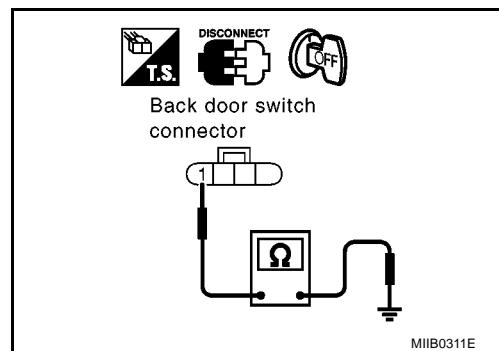


3. Disconnect BCM connector.
4. Check continuity between back door switch connector B55 terminal 1 and ground. (Check harness for short.)

1 (OR) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness.



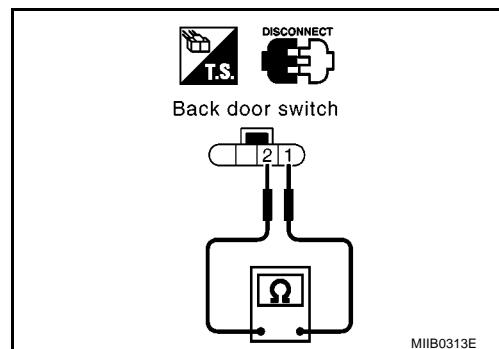
3. CHECK BACK DOOR SWITCH

Check continuity between back door switch terminal 1 and 2.

Terminal	Rear door condition	Continuity
1 - 2	Closed	No
	Opened	Yes

OK or NG

- OK >> GO TO 4.
 NG >> Replace back door release actuator (back door switch).



MULTI-REMOTE CONTROL SYSTEM

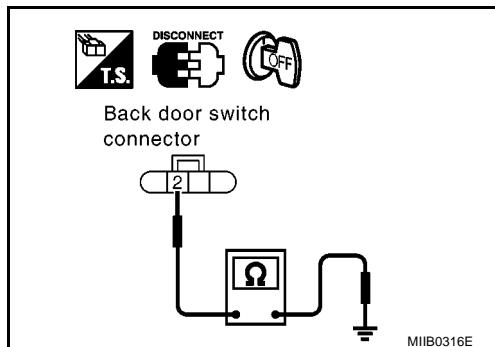
4. CHECK BACK DOOR SWITCH GROUND HARNESS

Check continuity between back door switch connector B55 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check harness connection.
- NG >> Replace back door switch.



TRUNK LID SWITCH (C+C)

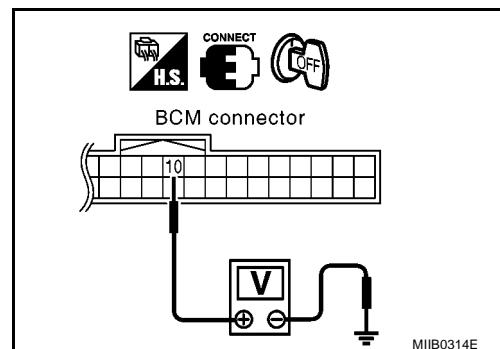
1. CHECK TRUNK LID SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 10 and ground.

Terminal		Back door condition	Voltage (V) Approx.
(+)	(-)		
10 (OR)	Ground	Closed	5
		Open	0

OK or NG

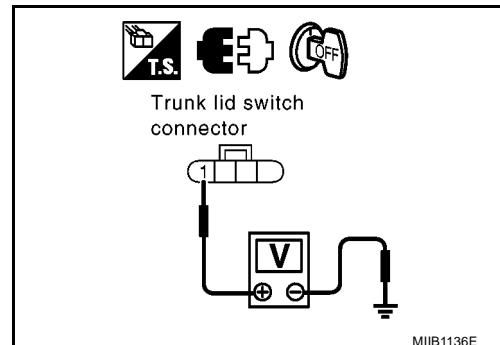
- OK >> Trunk lid switch circuit is OK.
- NG >> GO TO 2



2. CHECK TRUNK LID SWITCH HARNESS

1. Disconnect trunk lid switch connector.
2. Check voltage between trunk lid switch connector B55 terminal 1 and ground. (Check harness for open.)

1 (OR) – Ground : Battery voltage

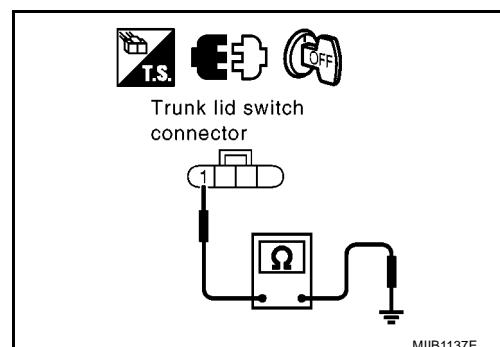


3. Disconnect BCM connector.
4. Check continuity between trunk lid switch connector B55 terminal 1 and ground. (Check harness for short.)

1 (OR) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace harness.



MULTI-REMOTE CONTROL SYSTEM

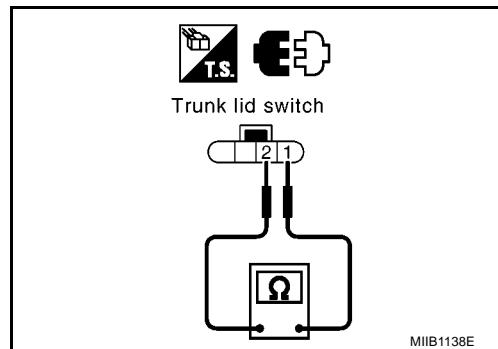
3. CHECK TRUNK LID SWITCH

Check continuity between trunk lid switch terminal 1 and 2.

Terminal	Rear door condition	Continuity
1 - 2	Closed	No
	Opened	Yes

OK or NG

- OK >> GO TO 4.
 NG >> Replace trunk lid release actuator (trunk lid switch).



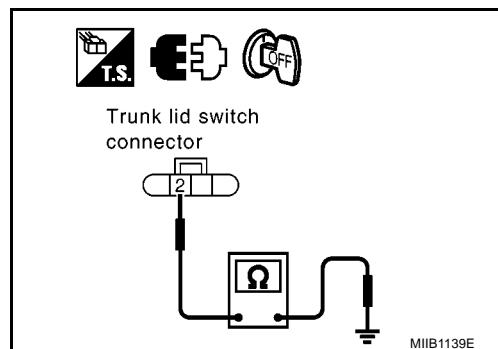
4. CHECK TRUNK LID SWITCH GROUND HARNESS

Check continuity between trunk lid switch connector B55 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check harness connection.
 NG >> Replace trunk lid switch.



Key Switch Check

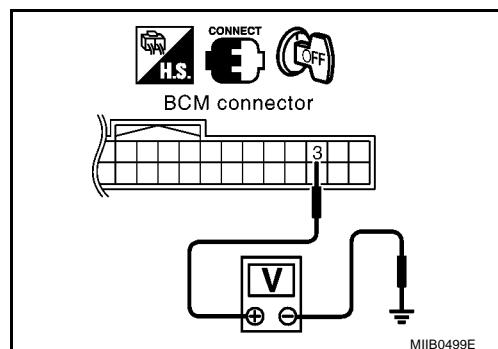
1. CHECK KEY SWITCH INPUT SIGNAL

Check voltage between BCM connector M48 terminal 3 and ground.

Terminals		Key switch condition	Voltage (V) Approx.
(+)	(-)		
3 (OR)	Ground	Key is inserted in IGN key cylinder (key switch is "ON".)	Battery voltage
		Key is removed from IGN key cylinder (Key switch is "OFF".)	0

OK or NG

- OK >> Key switch circuit is OK.
 NG >> GO TO 2



MULTI-REMOTE CONTROL SYSTEM

2. CHECK KEY SWITCH (INSERT)

1. Disconnect key switch connector.
2. Check continuity between key switch terminals 1 and 2.

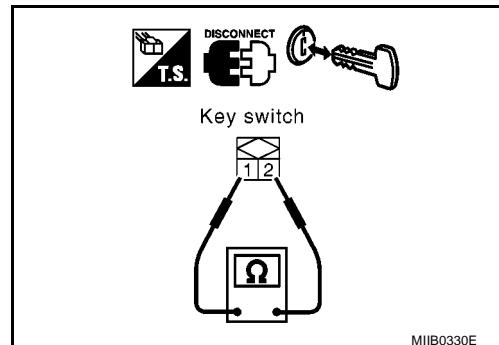
Terminals	Key switch condition	Continuity
1 – 2	Key is inserted in IGN key cylinder (Key switch is "ON".)	Yes
	Key is removed from IGN key cylinder (Key switch is "OFF".)	No

OK or NG

OK >> Check the following.

- 10A fuse [No. 6, located in fuse block (J/B)]
- Harness for open or short between key switch and fuse
- Harness for open or short between BCM and key switch

NG >> Replace key switch.



Hazard Reminder Check

EIS004YL

1. CHECK HAZARD WARNING LAMP

Check if hazard warning lamp flashes with hazard switch.

Does hazard warning lamp operate?

Yes >> GO TO 2

No >> Check hazard warning lamp circuit. Refer to [LT-141, "TURN SIGNAL AND HAZARD WARNING LAMPS"](#).

2. CHECK HAZARD REMINDER OPERATION

Check the following at when push the remote controller switch.

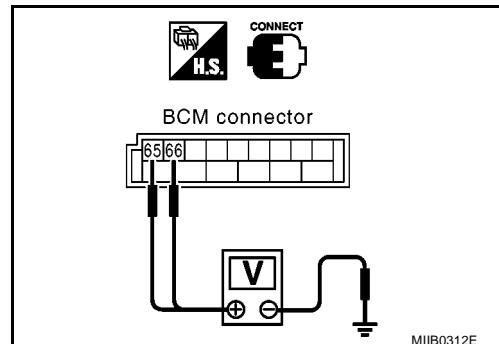
Check voltage between smart entrance control unit harness connector M43 terminal 65, 66 and ground.

Remote controller	Voltage (V) Approx.
Pushing LOCK button	<p>(V)</p> <p>PIIA2486J</p>
Pushing UNLOCK button	<p>(V)</p> <p>PIIA2487J</p>

OK or NG

OK >> Check harness for open between BCM and hazard switch.

NG >> Check harness for short between BCM and hazard switch. If check result is "OK", replace BCM. If check result is "NG", repair or replace harness.



MULTI-REMOTE CONTROL SYSTEM

Remote Controller Battery Replacement

EIS004YN

1. Remove installation screw on the rear of remote controller.
2. Place the key with the lower case facing up. Set a screwdriver wrapped with tape into section A of the lower case and separate the lower case from the upper case.
3. When replacing the circuit board assembly, remove circuit board assembly from the upper case.
(Circuit board assembly: Switch rubber + Board surface)
4. When replacing the battery
Remove battery from the lower case and replace it.

Battery replacement : Coin-type lithium battery (CR1620)

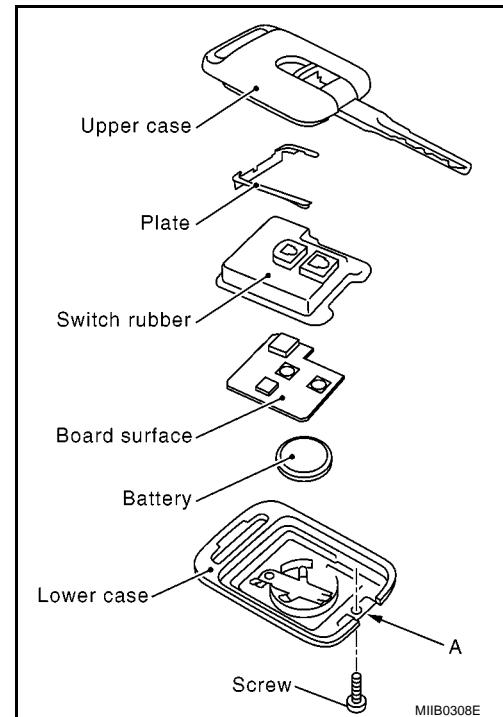
CAUTION:

When replacing battery, be sure to keep dirt, grease and other foreign materials off the electrode contact area.

5. After replacement, fit the lower and upper cases together, part and tighten with the screw.

CAUTION:

After replacing the battery, be sure to check that door locking operates normally using the remote controller.



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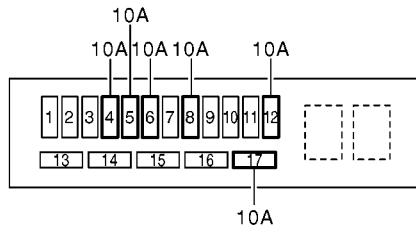
INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM

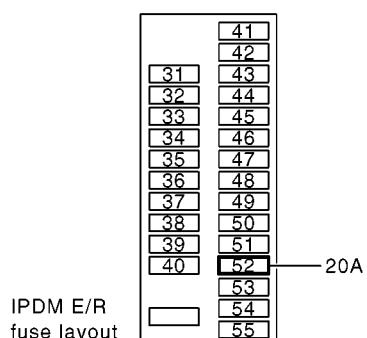
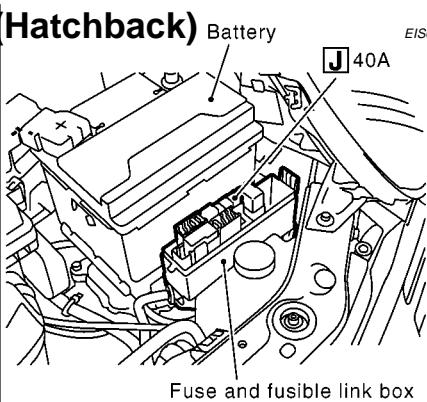
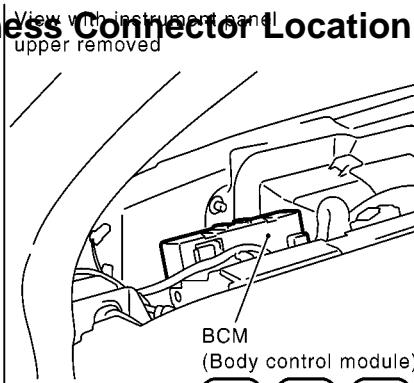
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Component Parts and Harness Connector Location (Hatchback)

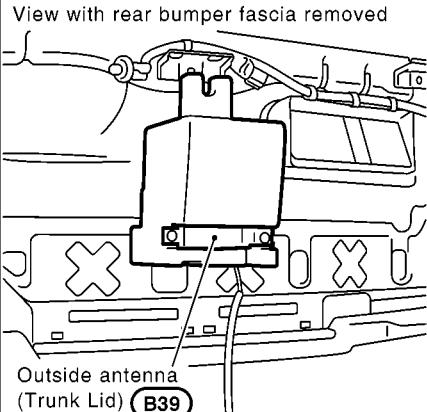
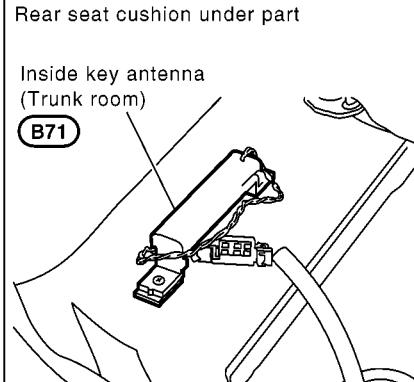
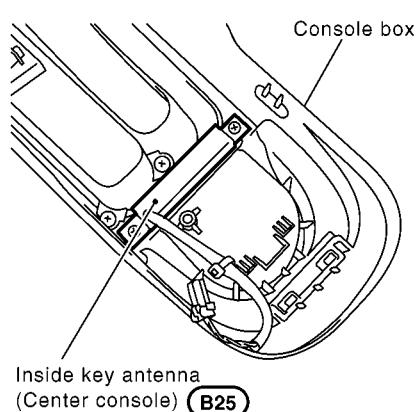
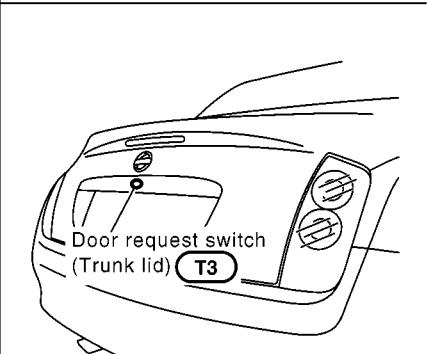
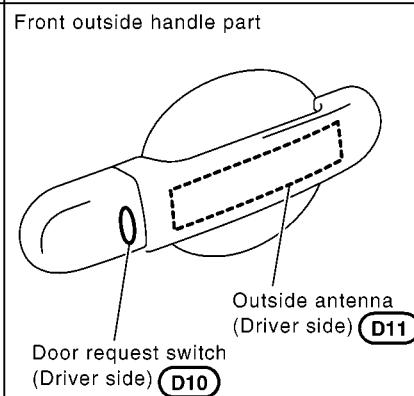
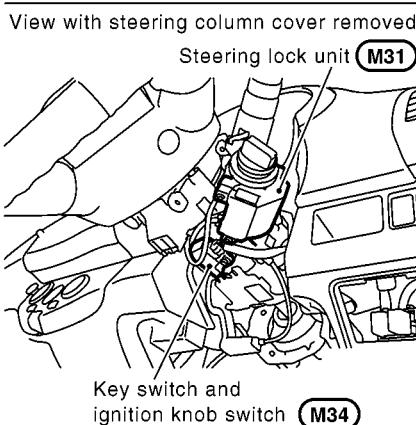
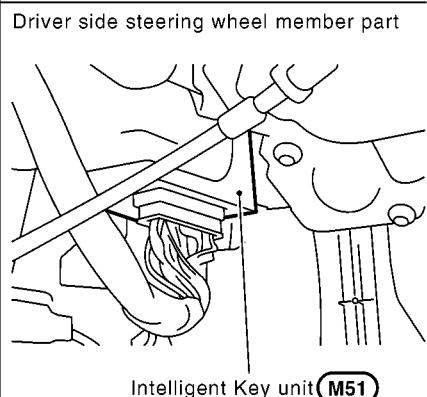
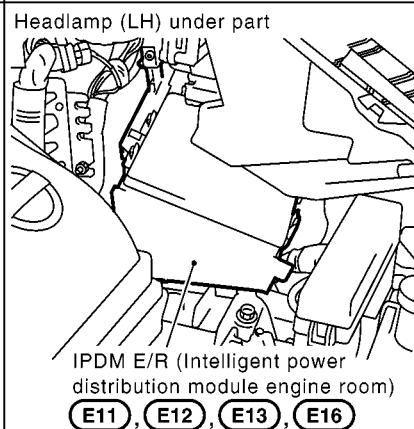
EIS00563



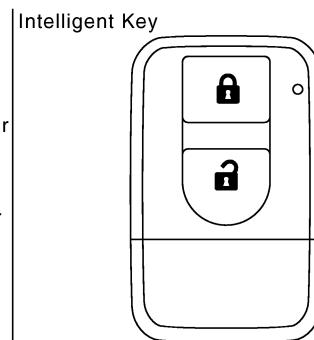
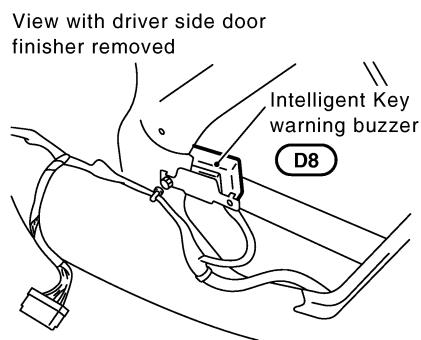
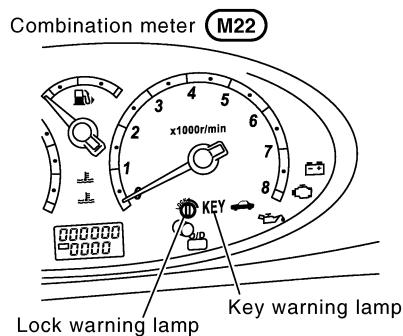
Fuse block (J/B) fuse layout



IPDM E/R fuse layout



INTELLIGENT KEY SYSTEM



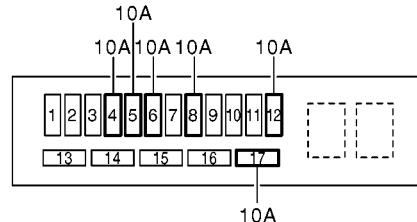
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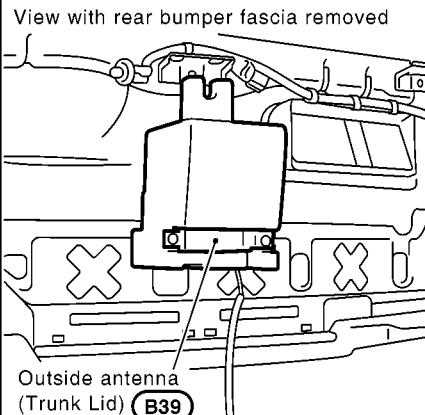
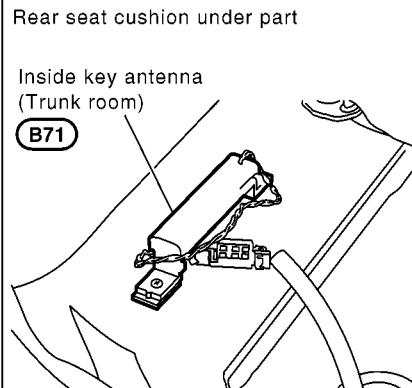
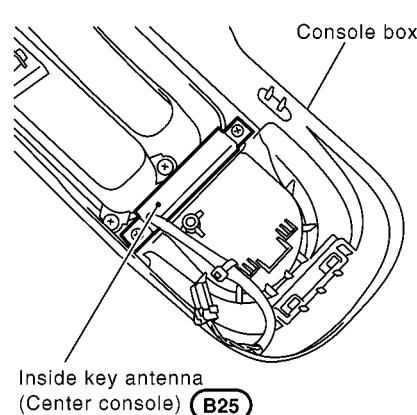
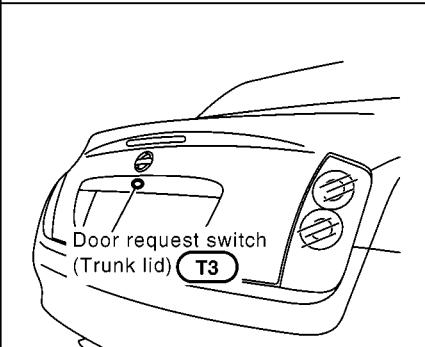
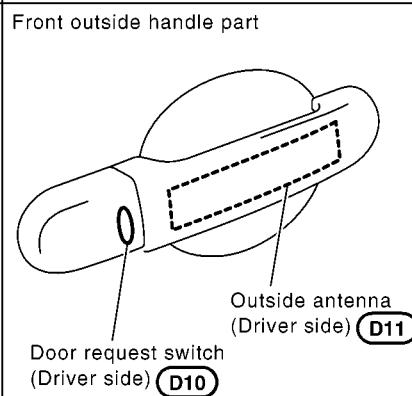
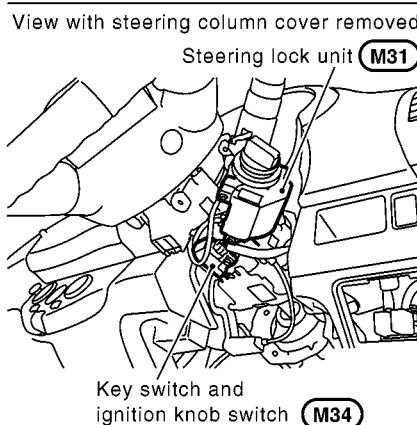
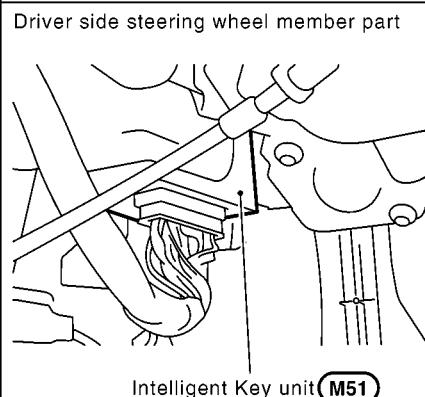
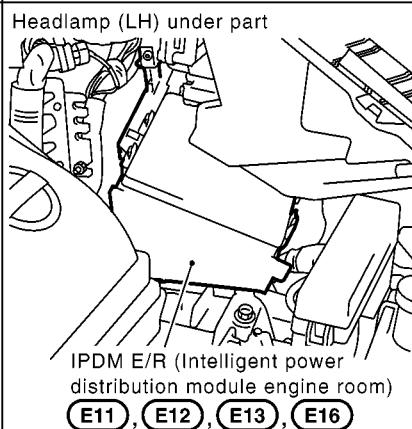
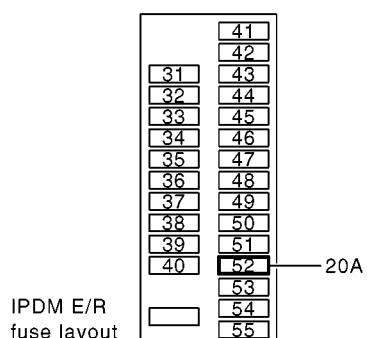
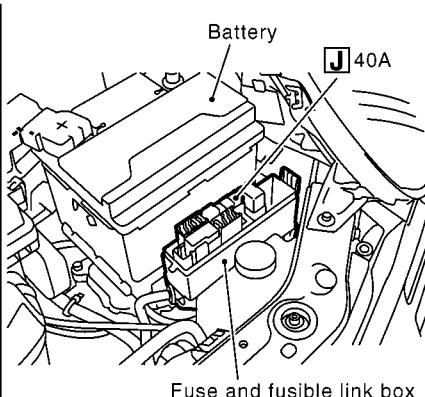
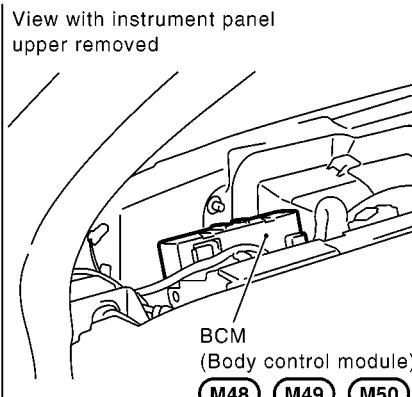
INTELLIGENT KEY SYSTEM

Component Parts and Harness Connector Location (C+C)

EIS00E2R

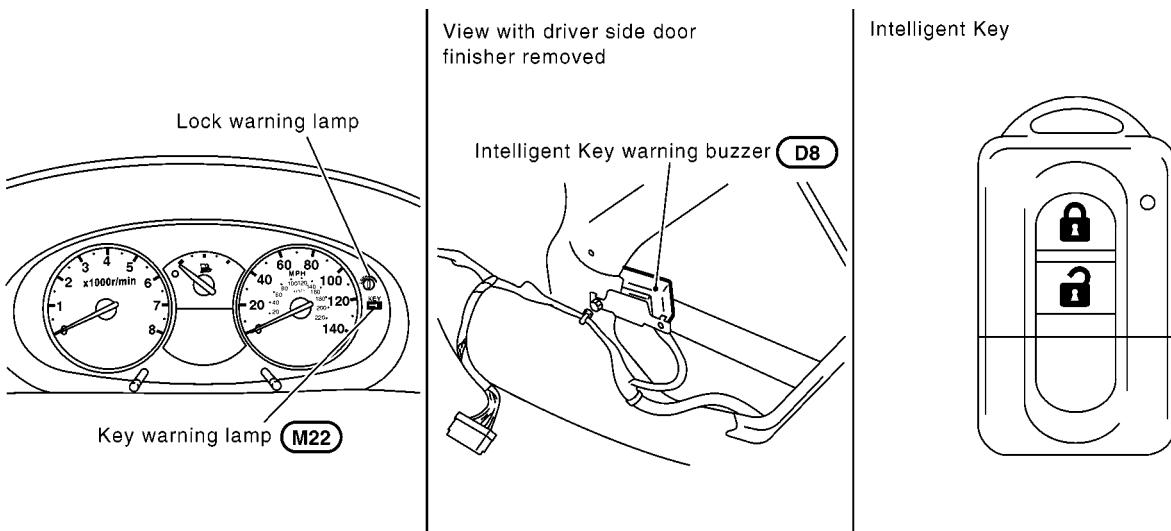


Fuse block (J/B) fuse layout



MIIIB1355E

INTELLIGENT KEY SYSTEM



MIIB1145E

EIS004MH

System Description

- The Intelligent Key system is a system that makes it possible to lock and unlock the door locks (door lock function) and start the engine (engine start function) by carrying the Intelligent Key, which operates based on the results of electrical key-ID verification using two-way communications between the Intelligent Key and the vehicle.
- Operation of the remote control buttons on the Intelligent Key also provides the same functions as the remote control entry system. (Remote control entry functions)
- As an ignition key warning function, when a door lock is locked or unlocked with door request switch or Intelligent Key button operation, the hazard lamps flashes and sound the Intelligent Key buzzer.
- Even if the vehicle or Intelligent Key battery runs out, the door locks can be locked and unlocked and the engine can be initiated by the mechanical key built-in the Intelligent Key.
- If Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It has been made possible to diagnose the system, change the function setting and register Intelligent Key with the CONSULT-II.

DOOR LOCK FUNCTION

Operation Description

- When the driver door, passenger door, or back door request switch is pressed, Intelligent Key unit sends a request signal from the transmission antenna corresponding to the pressed door request switch, key-ID verification is performed using two-way communication with Intelligent Key, and if ID is successfully verified, a door lock/unlock request signal is sent to BCM (Body Control Module) through CAN communication to lock/unlock the door lock.
- With the locking operation of door request switch, door lock actuators of all doors will be locked.

Driver side door request switch operation

- When door request switch (driver side) is pressed, driver side door lock actuator will be unlocked.
- When door request switch (driver side) is pressed for the second time, within 5 seconds after the first the remaining doors will be unlock.
- Unlock mode can be changed using "WORK SUPPORT" mode in "DOOR LOCK-UNLOCK SET". Refer to [BL-213, "CONSULT-II Function \(INTELLIGENT KEY\)"](#).

Passenger side door request switch operation

- When door request switch (passenger side) is pressed, passenger side door will be unlocked.
- When door request switch (passenger side) is pressed for the second time, with in 5 seconds after the first operation, the remaining doors will be unlock.
- Unlock mode can be changed using "WORK SUPPORT" mode in "DOOR LOCK-UNLOCK SET". Refer to [BL-213, "CONSULT-II Function \(INTELLIGENT KEY\)"](#).

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INTELLIGENT KEY SYSTEM

Operation Condition

Request switch operation	Operating conditions (When all the conditions below are met)
Door request switch (driver side)	<ul style="list-style-type: none">● All doors closed (door switch: OFF)
Door request switch (passenger side)	<ul style="list-style-type: none">● Key switch OFF (key removed)
Door request switch (back door)	<ul style="list-style-type: none">● Ignition knob switch: OFF (ignition knob switch not pressed)● The Intelligent Key is in the antenna detection area for the door for which the door request switch was operated.

Operation Range

The antenna detection area for each door is about 80 cm (31.50 in) from the handle of each door (driver door, passenger door and back door). However, this operating range may differ by the ambient conditions.

Auto Door Lock Function

When the door request switches are pressed and doors are locked or unlocked once, during this state, door lock will re-lock automatically unless the following conditions are met.

- Mechanical key is inserted into ignition knob.
- Ignition knob is pressed.
- Any of the doors is opened.
- Intelligent Key button is operated within 30 seconds.

Key Reminder Function

As an operation confirmation, when the doors are lock or unlock by using door request switch or Intelligent Key, hazard lamps flashes and Intelligent Key warning buzzer sounds.

Vehicle operation	Hazard lamp	Intelligent Key warning buzzer
Door unlock operation	Twice	Twice
Door lock operation	Once	Once

Intelligent Key Lock-in Prevention Function

When Intelligent Key is within the vehicle, a door is open or doors are locked using door lock and unlock switch, driver door lock knob or door request switch, Intelligent Key unit sends door unlock request signal to BCM via CAN communication to unlock all doors to prevent Intelligent Key from being locking in vehicle.

CAUTION:

The functions mentioned above are operable when the Intelligent Key is inside the vehicle. However, there may be times that the Intelligent Key cannot be detected in some blind spot of the inside key antennas. Thus engine start function system might not response when the Intelligent Key is placed on the instrument panel, rear parcel shelf or in the glove box. Furthermore, by placing the Intelligent Key in the door pocket and opening the door may interrupt the communication between the Intelligent Key and the antennas.

REMOTE CONTROL ENTRY FUNCTIONS

Door Lock Function

- Operating the button on the Intelligent Key sends the Intelligent Key-ID signals to the Intelligent Key unit. Intelligent Key unit conducts a verification of the received key-ID, and if the verification is accepted, a door lock or door unlock request signal is sent to BCM via CAN communication to lock/unlock the door lock.
- When door lock/unlock is performed using Intelligent Key button operation, confirmation is conducted by making hazard lamps flashes and Intelligent Key warning buzzer sounds.

OPERATION CONDITION

Intelligent Key operation	Operation condition
Door lock operation	<ul style="list-style-type: none">● All doors closed● Key switch OFF (key removed)● Ignition knob switch: OFF (ignition knob not pressed)
Door unlock operation	<ul style="list-style-type: none">● Key switch OFF (key removed)● Ignition knob switch: OFF (ignition knob not pressed)

INTELLIGENT KEY SYSTEM

MT vehicle Key Interlock function

In case of a MT vehicle is in motion and ignition knob is turned into lock position, steering lock unit pose a risk by activating the steering lock actuator. The key interlock function is designed to override the steering lock system and prevent situation mention above to occur.

LOCK condition

When the following condition had been fulfilled and then key interlock solenoid will be locked. (Steering lock inactive)

- When ignition switch is in ON position and engine revolution speed went above 500rpm. (1 second delay)

UNLOCK condition

When any of the following conditions had been fulfilled and then key interlock solenoid will be unlocked (Steering lock active)

- When vehicle speed is below 4 km/h and the ignition switch is turned from ON to OFF (1 second delay)
- When vehicle speed is over 4 km/h but less than 10 km/h and ignition switch is turned from ON to OFF. (3 seconds delay)

Map Lamp And Keyhole Illumination Function

When the following conditions is met:

- Condition of map lamp switch is DOOR position
- Door switch OFF (when all the doors are closed)

Remote keyless entry system turns on interior lamp (for 30 seconds) once input of UNLOCK signal from Intelligent Key is received.

For detailed description, refer to [LT-223, "INTERIOR ROOM LAMP"](#).

ENGINE STARTUP FUNCTION

Operation Description

- When ignition knob is pressed, Intelligent Key unit sends request signal from inside key antenna, key-ID verification is conducted with Intelligent Key using two-way communication, and if verification is successful, an ignition rotation prohibition latch release signal is sent to steering lock unit and releases ignition knob rotation prohibition latch. (Ignition knob can now be turned)

NOTE:

When it becomes impossible to rotate the ignition knob, "KEY" warning lamp in combination meter lights up red.

- When key-ID verification is successful and ignition knob switch is in the ON state, Intelligent Key unit uses CAN communication to send engine start permission signal to BCM.
- When BCM receives engine start permission signal, it uses CAN communication to sent starter request signal to IPDM E/R so that the engine will start when ignition knob is rotated to START position.

Operation Range

Engine can be started when Intelligent Key is in side the vehicle. However, sometimes engine might not start when Intelligent Key is on instrument panel, rear parcel shelf, or in glove box.

NOTE:

Luggage room is not within the operation range, but sometimes it is possible to start the engine from there.

Active Check Function

Confirm whether or not ignition knob can be rotated by checking the color of warning lamp in combination meter.

Condition	Operation
Ignition knob rotation possible	"KEY" warning lamp in combination meter is lit up green.
Ignition knob rotation not possible	"KEY" warning lamp in combination meter is lit up red.

WARNING AND ALARM FUNCTION

Operation Description

Warnings and alarms shown as follows and are given to the user as warning notice when using the combinations of Intelligent Key warning buzzer (driver door), inside vehicle buzzer (in combination meter), and warning lamps "KEY" and "LOCK".

INTELLIGENT KEY SYSTEM

- Ignition switch return forgotten warning
With the ignition in OFF or ACC position, if the driver door is opened, this warning is issued.
- Key left in ignition warning (when mechanical key is used)
While the mechanical key in the ignition knob and the ignition switch is in the OFF, ACC, or LOCK position, if the driver door is opened, this warning is issued.
- Ignition switch OFF position warning (driver side door buzzer: when door closed)
This warning is issued when the user forgets to return the ignition knob to the LOCK position.
- Ignition switch OFF position warning (E/G room buzzer: when door opened/closed)
This warning is issued when the user leaving the car without returning the ignition knob to the LOCK position.
- This warning is issued if the Intelligent Key is taken outside the car while the engine is running. (when door open → closed)
- This warning is issued if the Intelligent Key is taken outside the car through a window while the engine is running. (from window)
- Intelligent Key low battery warning
This warning is issued when it detects that the battery in the Intelligent Key is running low.

Operation Condition

Warning and alarm names	Operating conditions (when all the conditions below are met)
Ignition knob return forgotten warning	<ul style="list-style-type: none">● The ignition switch is in the ACC, OFF, or LOCK position (knob pressed)● The driver door is opened.
Ignition key warning (When mechanical key used)	<ul style="list-style-type: none">● The mechanical key is inserted in the ignition knob (key switch: ON)● The ignition switch is in the ACC, OFF, or LOCK position.● The driver door opened.
Ignition knob OFF position warning (driver side door buzzer: when door closed)	<ul style="list-style-type: none">● The ignition switch is in the OFF or LOCK position (knob pressed)● In the above state, when the ACC switch is switched from ON to OFF and 1 second passes. (However, this warning is not issued if the mechanical key is inserted in the ignition knob.)
Ignition knob OFF position warning (E/G room buzzer: when door opened/closed)	<ul style="list-style-type: none">● The ignition switch is in the OFF or LOCK position (knob pressed)● In the above state, when the ACC switch is changed from ON to OFF and 1 second passes. (However, this warning is not issued if the mechanical key is inserted in the ignition knob.)● Driver door open → closed
Warning for Intelligent Key taken outside the car (when door open → closed)	<p>When Any of the Following Conditions Are Met</p> <ul style="list-style-type: none">● When the ignition knob is pressed in so that it can be rotated (or has been rotated), if any of the doors has been opened, when all the doors are closed, the Intelligent Key unit compares the key-ID with the Intelligent Key using the inside key antenna (center console), if the results of the comparison are NG (the Intelligent Key is not found)● When the ignition knob is pressed and rotated (or has been rotated), if any of the doors is open, the Intelligent Key unit compares the key-ID with that of the Intelligent Key every 5 seconds using the inside key antenna (center console), if the results of the comparison are NG (the Intelligent Key is not found) <p>NOTE: However, this warning is not issued if the mechanical key is inserted in the ignition knob.</p>
Warning for Intelligent Key taken out from the window	When the ignition knob is pressed in so that it can be rotated (or has been rotated), if the vehicle speed is no greater than 5 km per hour, the Intelligent Key unit compares the key-ID with that of the Intelligent Key every 30 seconds using the inside key antenna (center console), if the results of the comparison are NG (the Intelligent Key is not found) Note: The default setting for this function is OFF.

INTELLIGENT KEY SYSTEM

Warning and alarm names	Operating conditions (when all the conditions below are met)
<p>Door lock non-operation warning</p>	<p>When any of the following conditions are met</p> <p>Intelligent Key Lock-in Prevention Warning</p> <ul style="list-style-type: none"> When the Intelligent Key is inside the car and the ignition knob is not pressed, when an attempt is made to lock a door lock with a door request switch. <p>NOTE: This warning is issued even if the Intelligent Key is not in the door antenna detection area corresponding to the door request switch was operated.</p> <p>Knob Return Forgotten Warning</p> <ul style="list-style-type: none"> When the ignition knob is pressed, when an attempt is made to lock a door lock with a door request switch. <p>NOTE: This warning is only issued if the Intelligent Key is in the door antenna detection area corresponding to the door request switch was operated.</p> <p>Door Ajar Alarm</p> <ul style="list-style-type: none"> When any of the doors is open, when an attempt is made to lock a door with a door request switch. <p>NOTE: This warning is only issued if the Intelligent Key is in the door antenna detection area corresponding to the specific door request switch was operated.</p>
Intelligent Key low battery pre-warning	This warning is issued when the battery of the Intelligent Key is running low.

Warning Procedure

Warning and alarm names	Buzzer		Warning lamp	
	Inside car	Outside car	"KEY"	"LOCK"
Ignition switch return forgotten warning	Buzzer: Continuous	—	—	—
Ignition key warning (When mechanical key is used)	Buzzer: Continuous	—	—	—
Ignition switch OFF position warning (for inside car: when door closed)	Buzzer (twice)	—	—	Illuminate
Ignition switch OFF position warning (for outside car: when door opened → closed)	—	Buzzer (3 seconds)	—	Illuminate
Warning for removal of Intelligent Key to outside the car (when door open → closed)	—	Buzzer (3 seconds)	Red illuminate	—
Warning for removal of Intelligent Key to outside the car (from window)	Buzzer (3 seconds)	—	Red illuminate	—
Door lock non-operation warning	—	Buzzer (2 seconds)	—	—
Intelligent Key low battery pre-warning	—	—	Green illuminate (30 seconds after ignition switch comes ON)	—

INTELLIGENT KEY SYSTEM

CHANGE SETTINGS FUNCTION

The settings for each function can be changed with the CONSULT-II or Intelligent Key.

Changing Anti-Hijack Function Settings With the Intelligent Key

Intelligent Key remote controller button and door request switch operations change the Anti-hijack function settings (enabled/disabled).

Settings Change Procedure

1. Hold down both the LOCK and UNLOCK remote control buttons on the Intelligent Key at the same time for at least 10 seconds (The yardstick is that the Intelligent Key LED flashes 20 times.)
2. Within 3 seconds of releasing the Intelligent Key remote controller buttons, press the driver door request switch for once.
3. The KEY indicator in combination meter lights up for 3 seconds (Anti-hijack: enabled → disabled: lights up red, Anti-hijack: disabled → enabled: flashes green). This completes the setting procedure.

Changing Settings Using CONSULT-II

The settings for the Intelligent Key system functions can be changed using CONSULT-II (WORK SUPPORT).

NOTE:

Once a function setting is changed, it will remain effective even if the battery is disconnected.

INTELLIGENT KEY REGISTRATION

Intelligent Key-ID registration is executed using the CONSULT-II. Up to 4 Intelligent Key can be registered.

CAUTION:

- After a new Intelligent Key-ID is registered, be sure to check the function.
- When registering an additional Intelligent Key-ID, remove any registered Intelligent Keys out of the vehicle before starting.

CONSULT-II can be used to check and delete Intelligent Key-IDs.

For future information, see the CONSULT-II Operation Manual NATS.

STEERING LOCK UNIT REGISTRATION

Steering Lock Unit ID Registration

CAUTION:

The method for registering a steering lock unit ID depends on the status of the steering lock unit and Intelligent Key unit (new or old unit).

After the registration procedures are completed

- Press and rotate the ignition knob while the registered Intelligent Key is within the vehicle to confirm the registration procedure.
- Press and rotate the ignition knob while the registered Intelligent Key is removed from the vehicle to confirm the registration procedure.

For future information, see the CONSULT-II Operation Manual NATS.

INTELLIGENT KEY SYSTEM

CAN Communication SYSTEM DESCRIPTION

EIS00DXY

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

EIS00E6Z

Body type	3door/5door	3door/5door/C+C	3door/5door	3door/5door/C+C	3door/5door
Axle	2WD				
Engine	CR12DE/CR14DE	HR16DE	CR12DE/CR14DE	HR16DE	K9K
Handle	LHD/RHD				
Brake control	ABS			ESP	
Transmission	A/T	M/T	A/T	M/T	
Intelligent Key system	×	×	×	×	×

CAN communication unit

ECM	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Data link connector	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Combination meter	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Intelligent Key unit	×		×		×		×		×		×		×	
EPS control unit	×	×	×	×	×	×	×	×	×	×	×	×	×	×
BCM	×	×	×	×	×	×	×	×	×	×	×	×	×	×
ABS actuator and electric unit (control unit)	×	×	×	×	×	×	×	×	×	×	×	×	×	×
TCM	×	×					×	×						
IPDM E/R	×	×	×	×	×	×	×	×	×	×	×	×	×	×
CAN communication type	<u>BL-186. "TYPE 1/ TYPE 2"</u>		<u>BL-189. "TYPE 3/TYPE 4/ TYPE 5/TYPE 6"</u>				<u>BL-191. "TYPE 7/ TYPE 8"</u>		<u>BL-194. "TYPE 9/TYPE 10/ TYPE 11/TYPE 12"</u>			<u>BL-196. "TYPE 13/ TYPE 14"</u>		

×: Applicable

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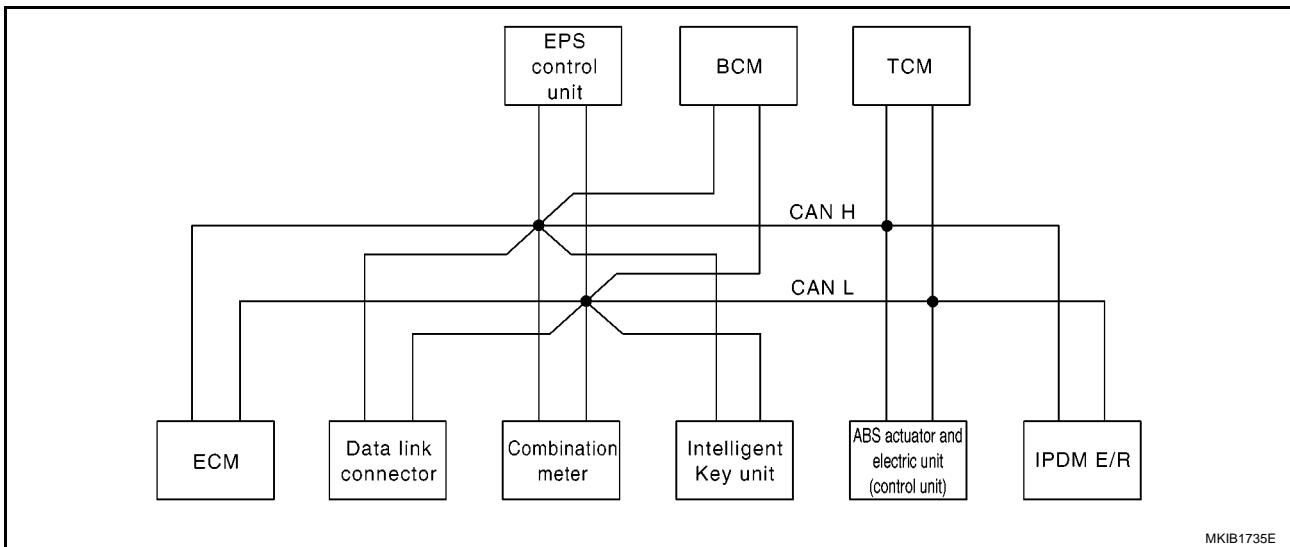
M

INTELLIGENT KEY SYSTEM

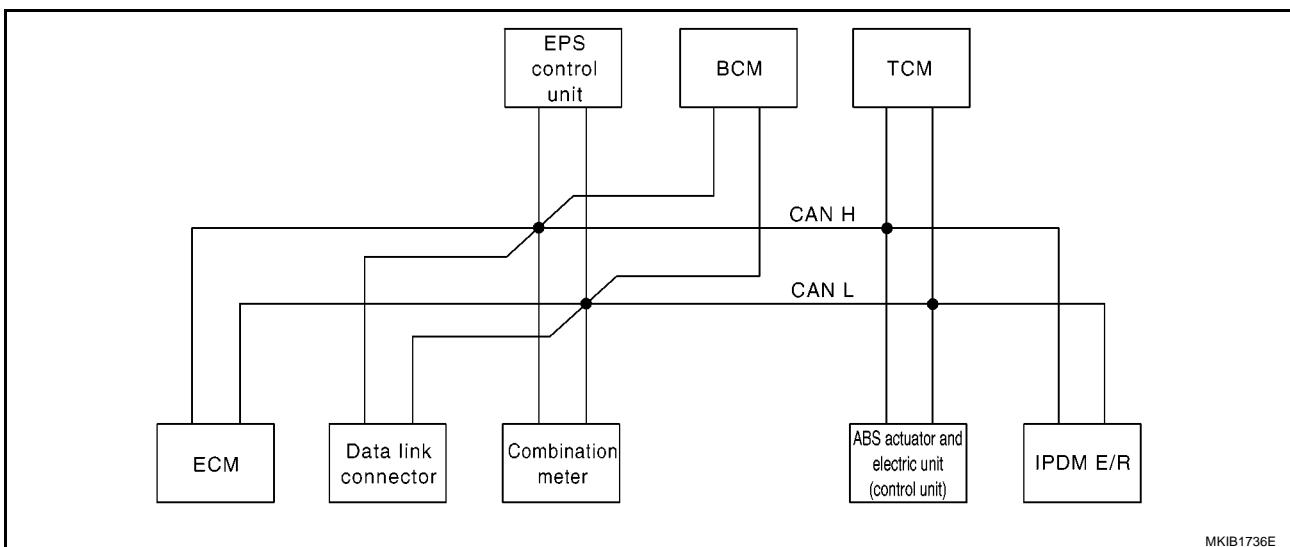
TYPE 1/TYPE 2

System diagram

- Type 1



- Type 2



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actu-ator and electric unit (control unit)	TCM	IPDM E/R
Engine speed signal	T	R						
Engine coolant temperature signal	T	R						
A/T self-diagnosis signal	R						T	
Output shaft revolution signal	R						T	
Accelerator pedal position signal	T						R	
Closed throttle position signal	T						R	
Wide open throttle position signal	T						R	
Overdrive control switch signal		T					R	

INTELLIGENT KEY SYSTEM

Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actua-tor and electric unit (control unit)	TCM	IPDM E/R
A/T position indicator signal		R					T	
Stop lamp switch signal		T					R	
O/D OFF indicator signal		R					T	
Engine and A/T integrated control signal	T						R	
	R						T	
Fuel consumption monitor signal	T	R						
Oil pressure switch signal		R						T
A/C compressor request signal	T							R
Heater fan switch signal	R				T			
Cooling fan speed request signal	T							R
Position lights request signal		R			T			R
Low beam request signal					T			R
Low beam status signal	R							T
High beam request signal		R			T			R
High beam status signal	R							T
Day time light request signal					T			R
Vehicle speed signal	R	R		R		T		
	R	T	R	R	R			
Sleep/wake up signal		R	R		T			R
Door switch signal		R	R		T			R
Turn indicator signal		R			T			
Buzzer output signal		R			T			
		R	T					
MI signal	T	R						
Front wiper request signal					T			R
Front wiper stop position signal					R			T
Rear window defogger switch signal					T			R
Rear window defogger control signal	R							T
EPS warning lamp signal		R		T				
ABS warning lamp signal		R				T		
Brake warning lamp signal		R				T		
Back-up lamp signal				R	T			
Front fog lamp request signal		R			T			R
Rear fog lamp status signal		R			T			
Headlamp washer request signal					T			R
Door lock/unlock request signal			T		R			
Door lock/unlock status signal			R		T			
KEY indicator signal		R	T					
LOCK indicator signal		R	T					
Engine status signal	T			R				

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INTELLIGENT KEY SYSTEM

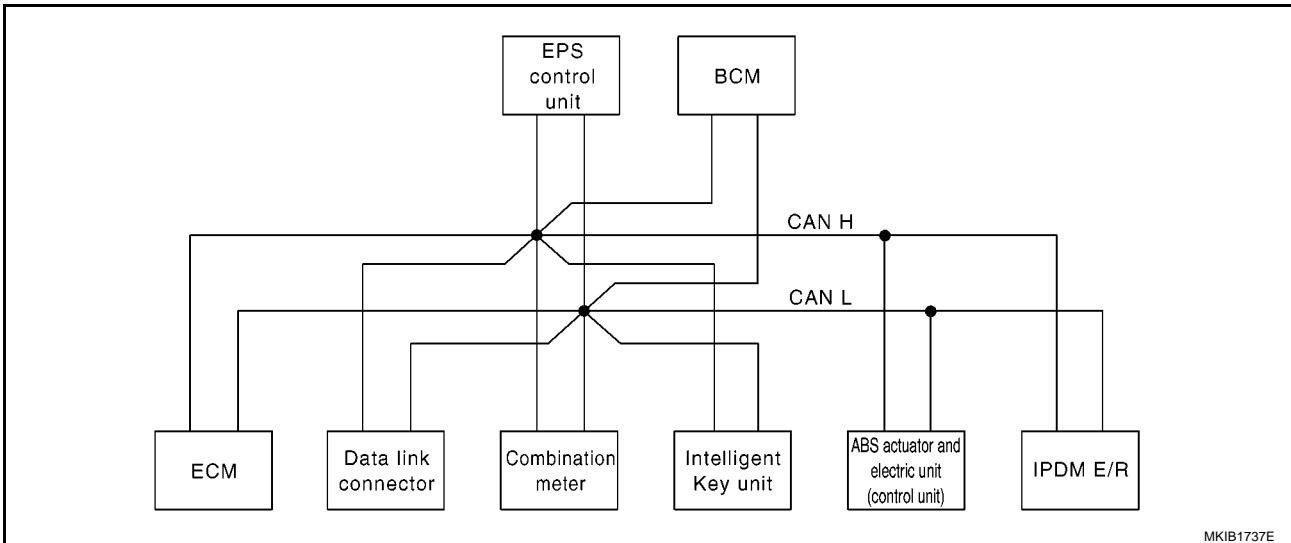
Signals	ECM	Combi-nation meter.	Intelli-gent Key unit	EPS control unit	BCM	ABS actua-tor and electric unit (control unit)	TCM	IPDM E/R
A/C switch signal	R				T			
Brake system malfunction signal		T		R				
Parking brake switch signal		T		R				
R range signal					R			T

INTELLIGENT KEY SYSTEM

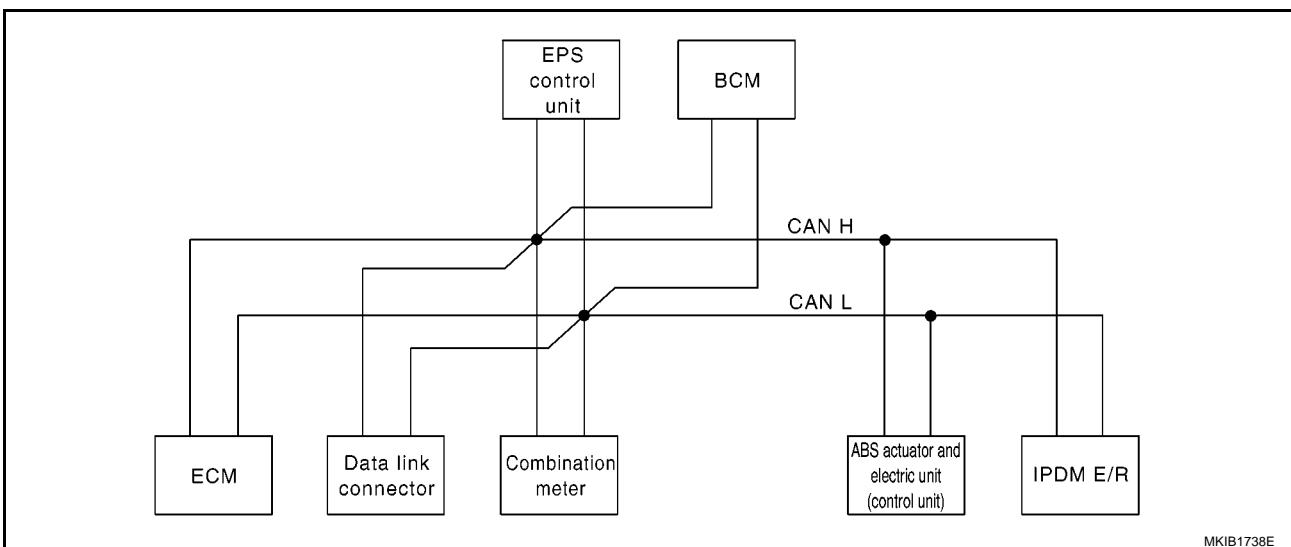
TYPE 3/TYPE 4/TYPE 5/TYPE 6

System diagram

- Type 3/Type 5



- Type 4/Type 6



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Engine speed signal	T	R					
Engine coolant temperature signal	T	R					
Fuel consumption monitor signal	T	R					
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R
Low beam request signal					T		R

INTELLIGENT KEY SYSTEM

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Low beam status signal	R						T
High beam request signal		R			T		R
High beam status signal	R						T
Day time light request signal					T		R
Vehicle speed signal	R	R		R		T	
	R	T	R	R	R		
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
Rear window defogger control signal	R						T
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
A/C switch signal	R				T		
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
R range signal					R		T
Retractable hard top warning lamp signal*		R			T		

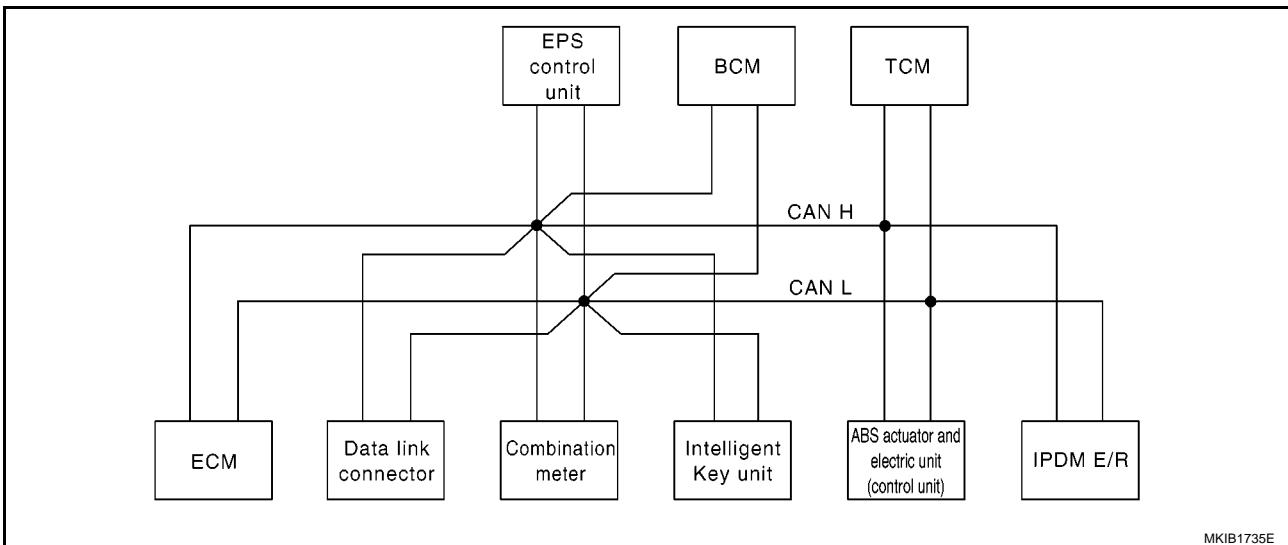
*: C+C only

INTELLIGENT KEY SYSTEM

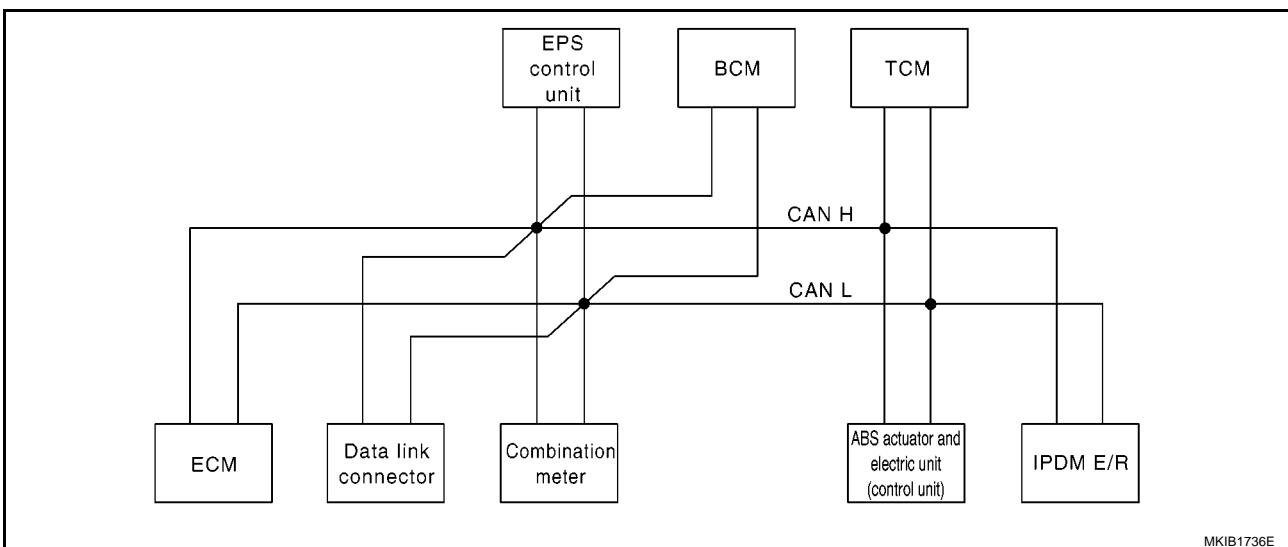
TYPE 7/TYPE 8

System diagram

- Type 7



- Type 8



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
Engine speed signal	T	R				R		
Engine coolant temperature signal	T	R						
A/T self-diagnosis signal	R						T	
Output shaft revolution signal	R						T	
Accelerator pedal position signal	T					R	R	
Closed throttle position signal	T						R	
Wide open throttle position signal	T						R	
Overdrive control switch signal		T					R	
A/T position indicator signal		R					T	

INTELLIGENT KEY SYSTEM

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
A/T shift schedule change demand signal						T	R	
Stop lamp switch signal		T					R	
O/D OFF indicator lamp signal		R					T	
Engine and A/T integrated control signal	T						R	
	R						T	
Fuel consumption monitor signal	T	R						
Oil pressure switch signal		R						T
A/C compressor request signal	T							R
Heater fan switch signal	R				T			
Cooling fan speed request signal	T							R
Position lights request signal		R			T			R
Low beam request signal					T			R
Low beam status signal	R							T
High beam request signal		R			T			R
High beam status signal	R							T
Day time light request signal					T			R
Vehicle speed signal	R	R		R		T		
	R	T	R	R	R			
Sleep/wake up signal		R	R		T			R
Door switch signal		R	R		T			R
Turn indicator signal		R			T			
Buzzer output signal		R			T			
		R	T					
MI signal	T	R						
Front wiper request signal					T			R
Front wiper stop position signal					R			T
Rear window defogger switch signal					T			R
Rear window defogger control signal	R							T
EPS warning lamp signal		R		T				
ABS warning lamp signal		R				T		
ESP warning lamp signal		R				T		
ESP OFF indicator signal		R				T		
SLIP indicator lamp signal		R				T		
Steering angle signal				T		R		
Brake warning lamp signal		R				T		
Back-up lamp signal				R	T			
Front fog lamp request signal		R			T			R
Rear fog lamp status signal		R			T			
Headlamp washer request signal					T			R
Door lock/unlock request signal			T		R			

INTELLIGENT KEY SYSTEM

Signals	ECM	Combina-tion meter.	Intelli-gent Key unit	EPS con-trol unit	BCM	ABS actuator and elec-tric unit (control unit)	TCM	IPDM E/R
Door lock/unlock status signal			R		T			
KEY indicator signal		R	T					
LOCK indicator signal		R	T					
Engine status signal	T			R				
A/C switch signal	R				T			
A/T torque signal						R	T	
Brake system malfunction signal		T		R				
Parking brake switch signal		T		R				
R range signal					R			T

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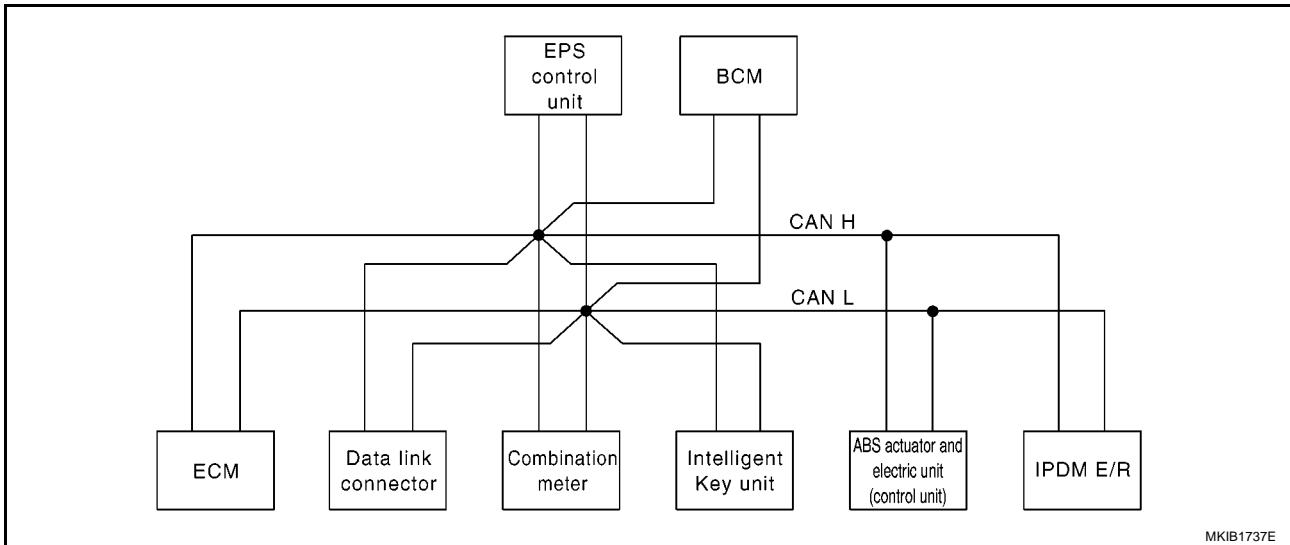
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INTELLIGENT KEY SYSTEM

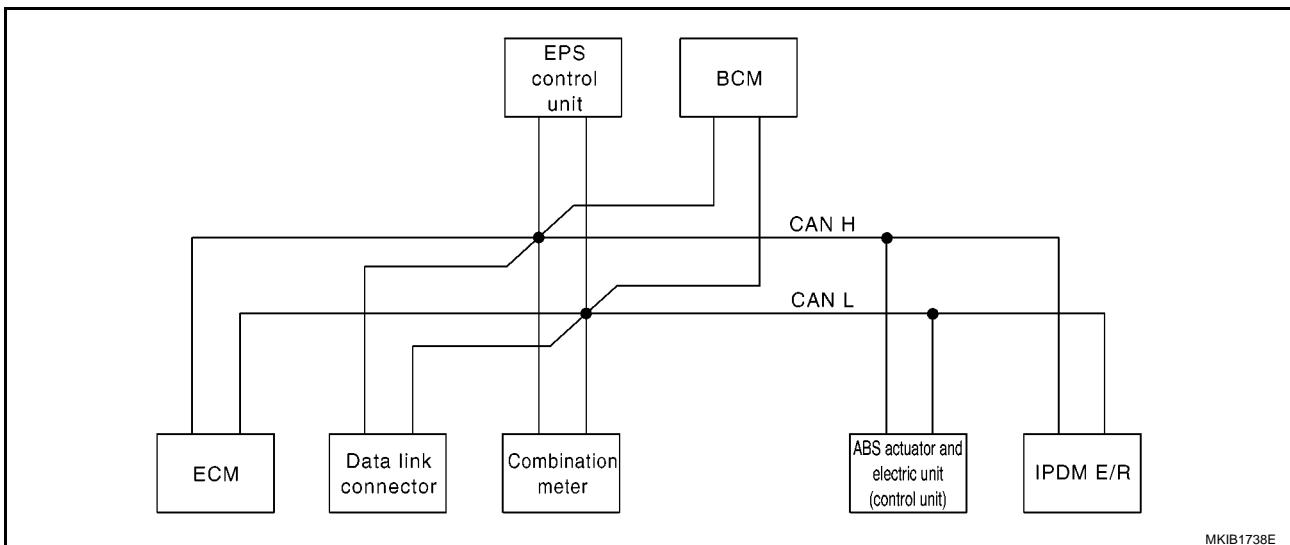
TYPE 9/TYPE 10/TYPE 11/TYPE 12

System diagram

- Type 9/Type 11



- Type 10/Type 12



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina- tion meter.	Intelligent Key unit	EPS con- trol unit	BCM	ABS actu- ator and electric unit (con- trol unit)	IPDM E/R
Engine speed signal	T	R					R
Engine coolant temperature signal	T	R					
Fuel consumption monitor signal	T	R					
Accelerator pedal position signal	T						R
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R

INTELLIGENT KEY SYSTEM

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Low beam request signal					T		R
Low beam status signal	R						T
High beam request signal		R			T		R
High beam status signal	R						T
Day time light request signal					T		R
Vehicle speed signal	R	R		R		T	
	R	T	R	R	R		
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
Rear window defogger control signal	R						T
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
ESP warning lamp signal		R				T	
ESP OFF indicator signal		R				T	
SLIP indicator lamp signal		R				T	
Steering angle signal				T		R	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
A/C switch signal	R				T		
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
R range signal					R		T
Retractable hard top warning lamp signal*		R			T		

*: C+C only

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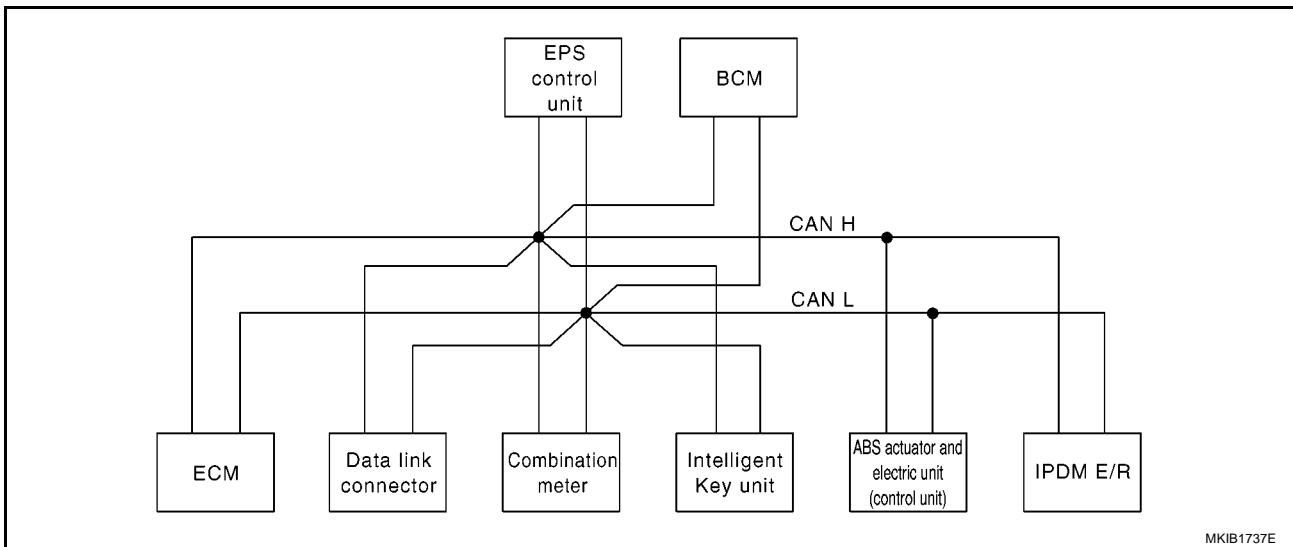
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INTELLIGENT KEY SYSTEM

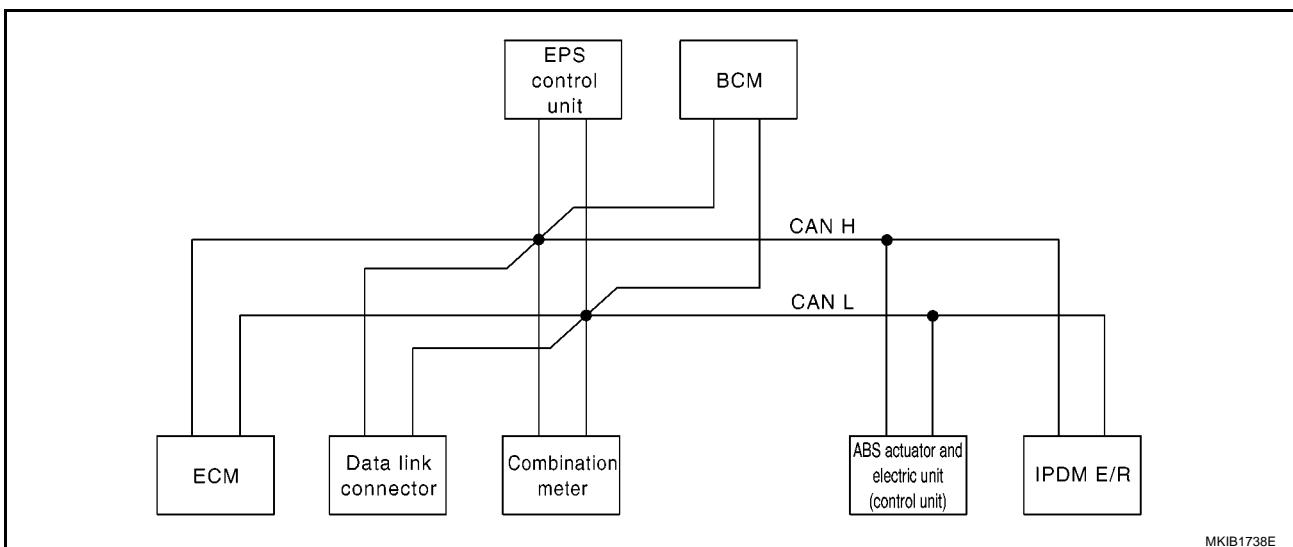
TYPE 13/TYPE 14

System diagram

- Type 13



- Type 14



INTELLIGENT KEY SYSTEM

Input/output signal chart

T: Transmit R: Receive

Signals	ECM	Combina-tion meter.	Intelligent Key unit	EPS con-trol unit	BCM	ABS actu-ator and electric unit (con-trol unit)	IPDM E/R
Engine speed signal	T	R					
Engine coolant temperature signal	T	R			R		
Fuel consumption monitor signal	T	R					
Oil pressure switch signal		R					T
A/C compressor request signal	T						R
Heater fan switch signal	R				T		
Cooling fan speed request signal	T						R
Position lights request signal		R			T		R
Low beam request signal					T		R
High beam request signal		R			T		R
Day time light request signal					T		R
Vehicle speed signal	R	R		R	R	T	
	R	T	R	R			
Sleep/wake up signal		R	R		T		R
Door switch signal		R	R		T		R
Turn indicator signal		R			T		
Buzzer output signal		R			T		
		R	T				
MI signal	T	R					
Front wiper request signal					T		R
Front wiper stop position signal					R		T
Rear window defogger switch signal					T		R
EPS warning indicator signal		R		T			
ABS warning lamp signal		R				T	
Brake warning lamp signal		R				T	
Back-up lamp signal				R	T		
Front fog lamp request signal		R			T		R
Rear fog lamp status signal		R			T		
Headlamp washer request signal					T		R
Door lock/unlock request signal			T		R		
Door lock/unlock status signal			R		T		
KEY indicator signal		R	T				
LOCK indicator signal		R	T				
Engine status signal	T			R			
Brake system malfunction signal		T		R			
Parking brake switch signal		T		R			
Glow indicator signal	T	R					
R range signal					R		T

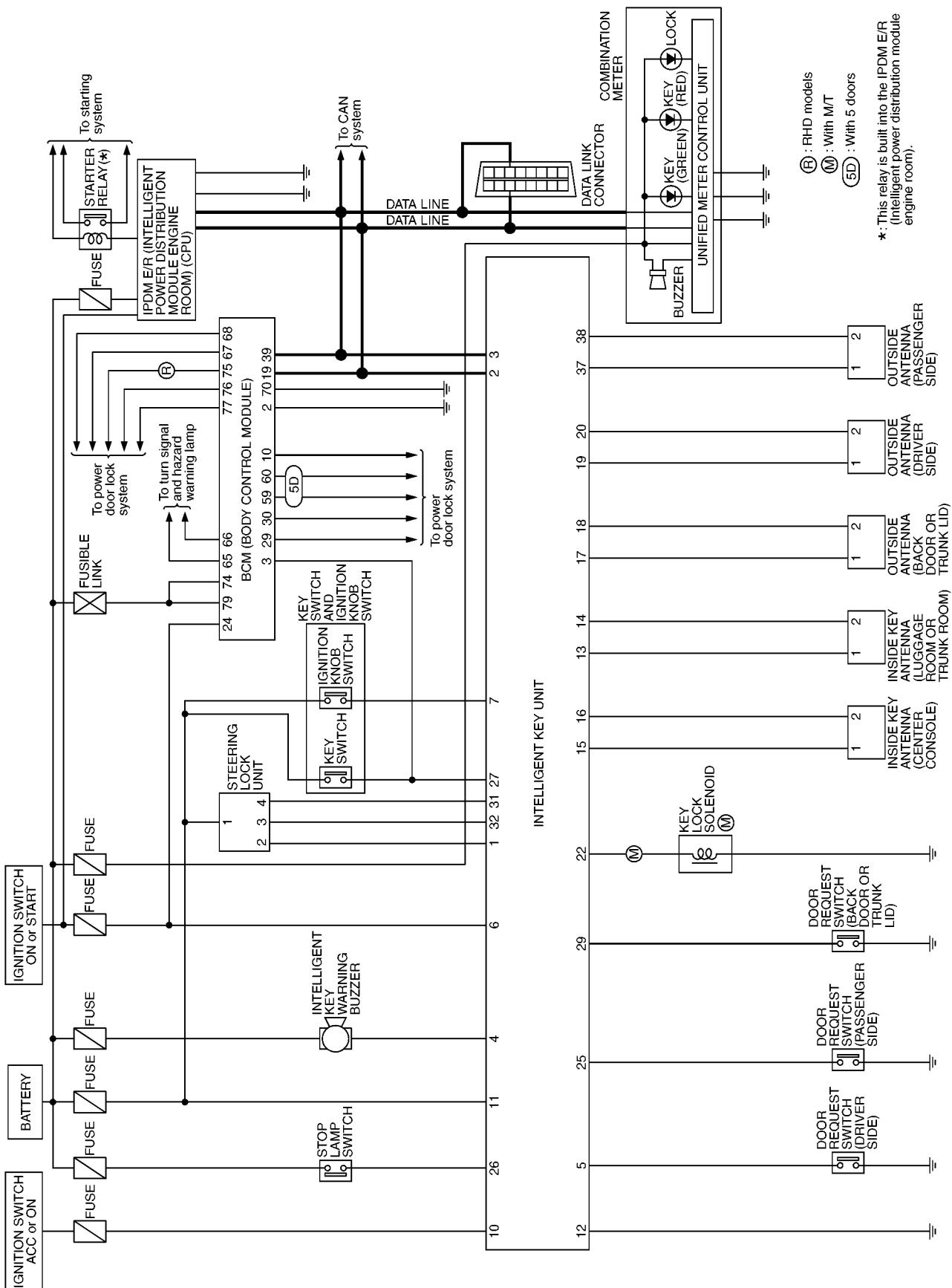
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INTELLIGENT KEY SYSTEM

Schematic —I/KEY—

EIS004MK



MIWA0628E

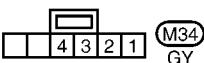
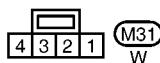
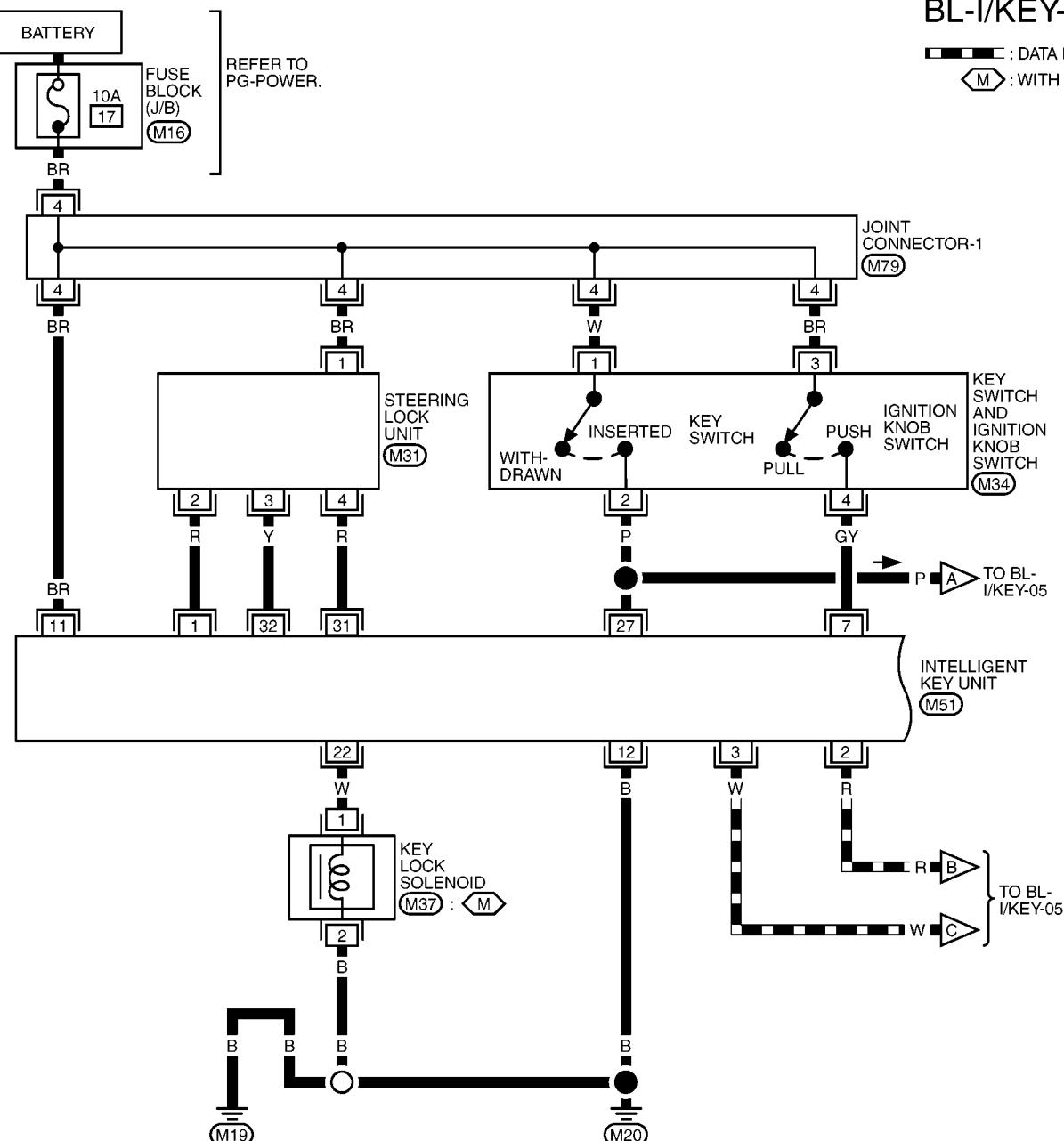
INTELLIGENT KEY SYSTEM

Wiring Diagram — I/KEY—

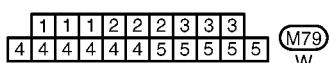
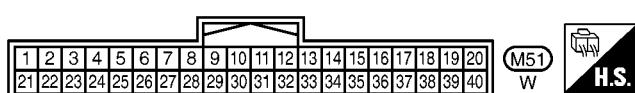
EIS004YP

BL-I/KEY-01

— : DATA LINE
M : WITH M/T

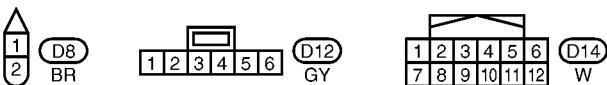
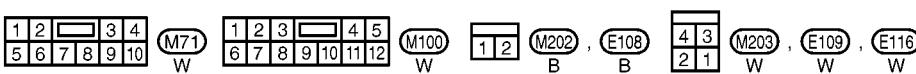
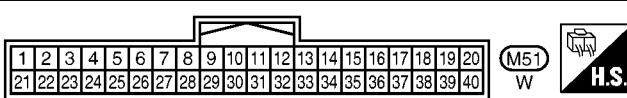
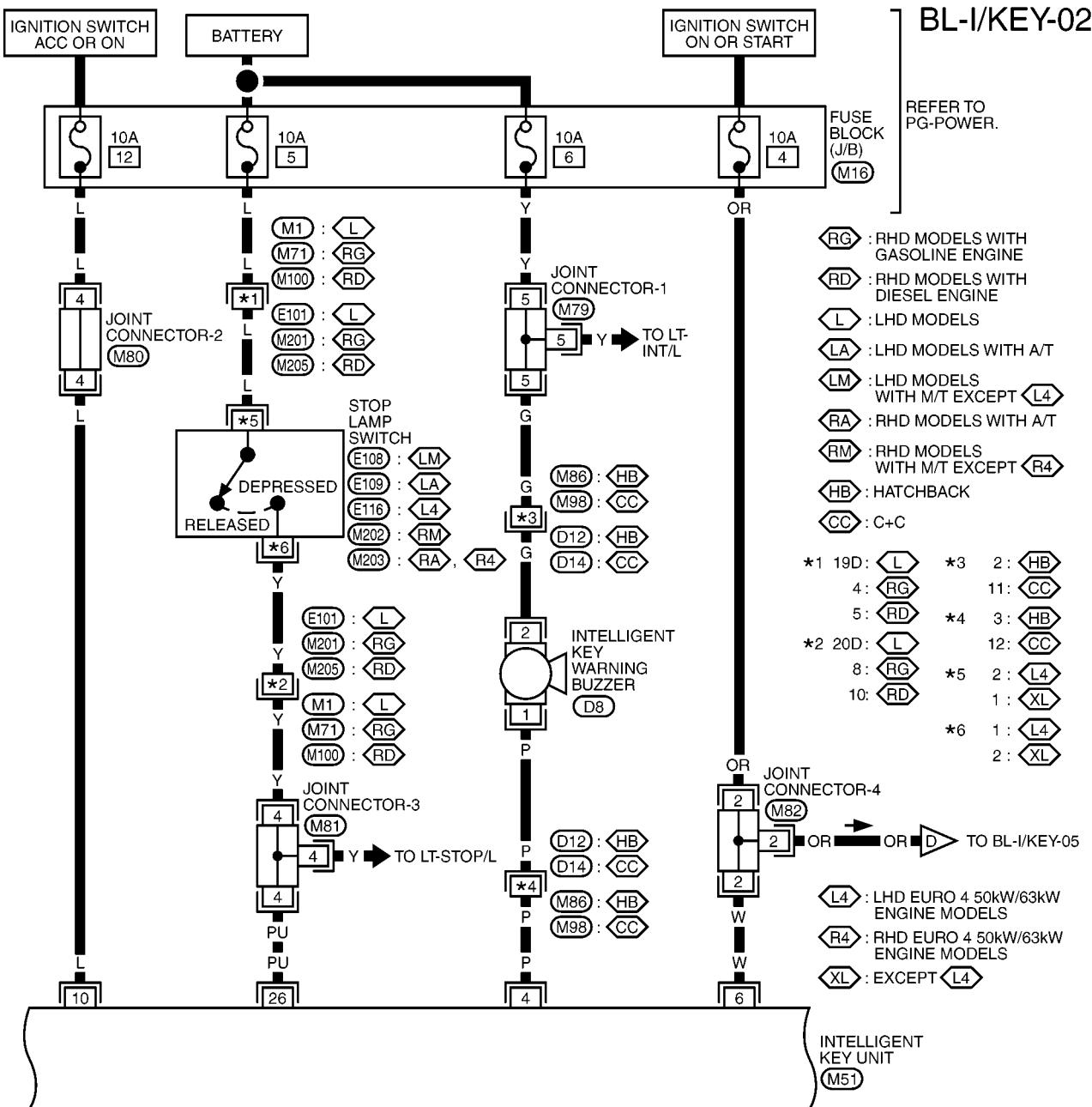


REFER TO THE FOLLOWING.
(M16) - FUSE BLOCK -
 JUNCTION BOX (J/B)



MIWA0664E

INTELLIGENT KEY SYSTEM



REFER TO THE FOLLOWING.

- (M1) - SUPER MULTIPLE JUNCTION (SMJ)
- (M16) - FUSE BLOCK - JUNCTION BOX (J/B)
- (M79, M80, M81, M82) - JOINT CONNECTOR (J/C)

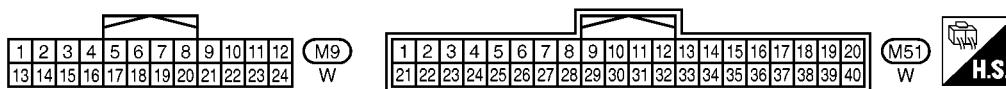
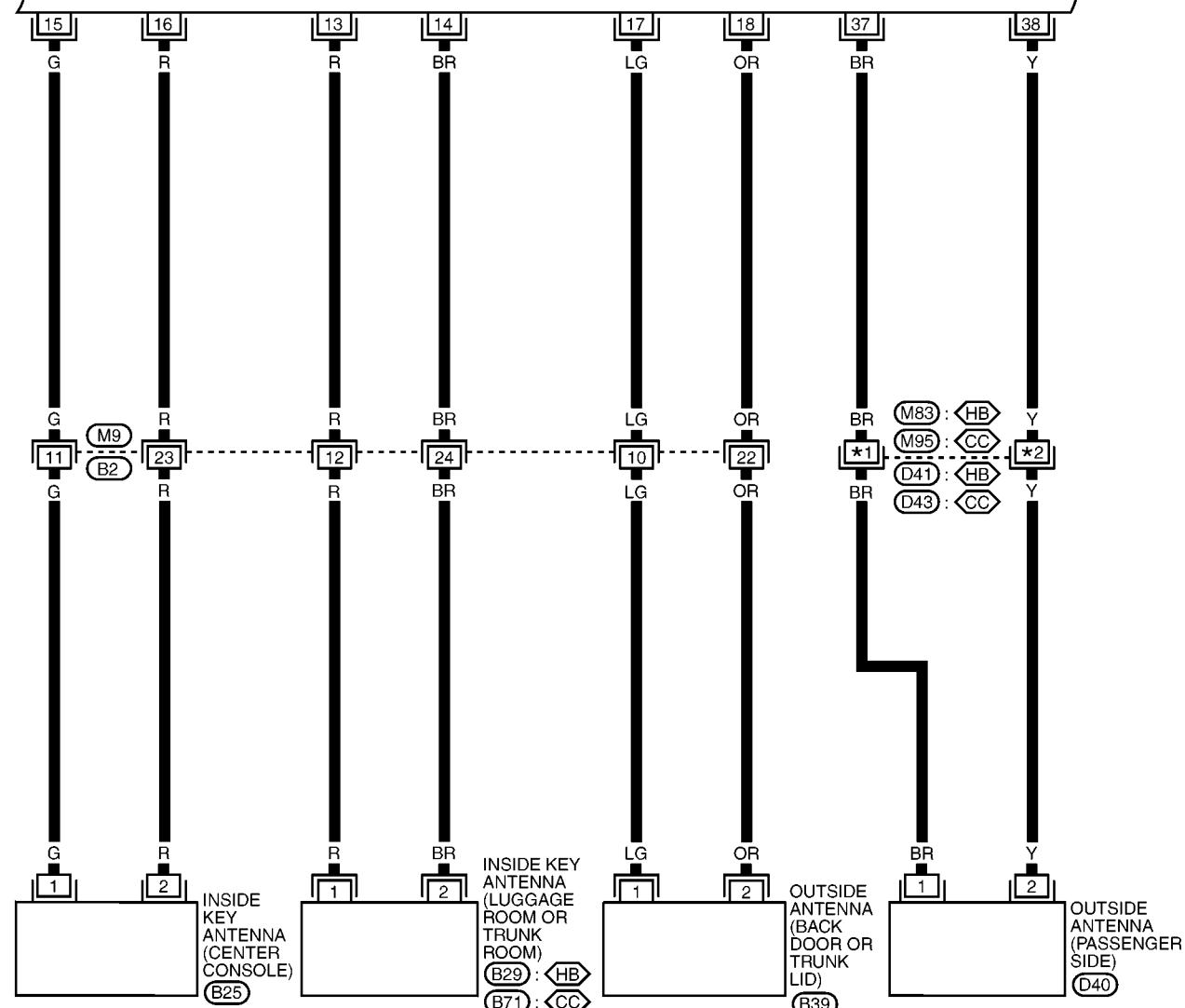
INTELLIGENT KEY SYSTEM

BL-I/KEY-03

HB : HATCHBACK
CC : C+C

*1 5: HB *2 4: HB
6: CC 5: CC

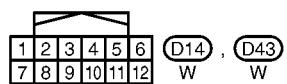
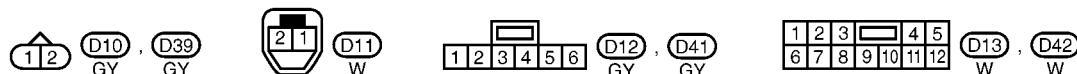
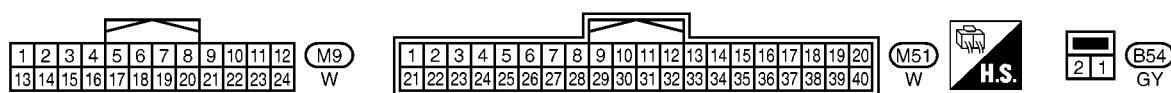
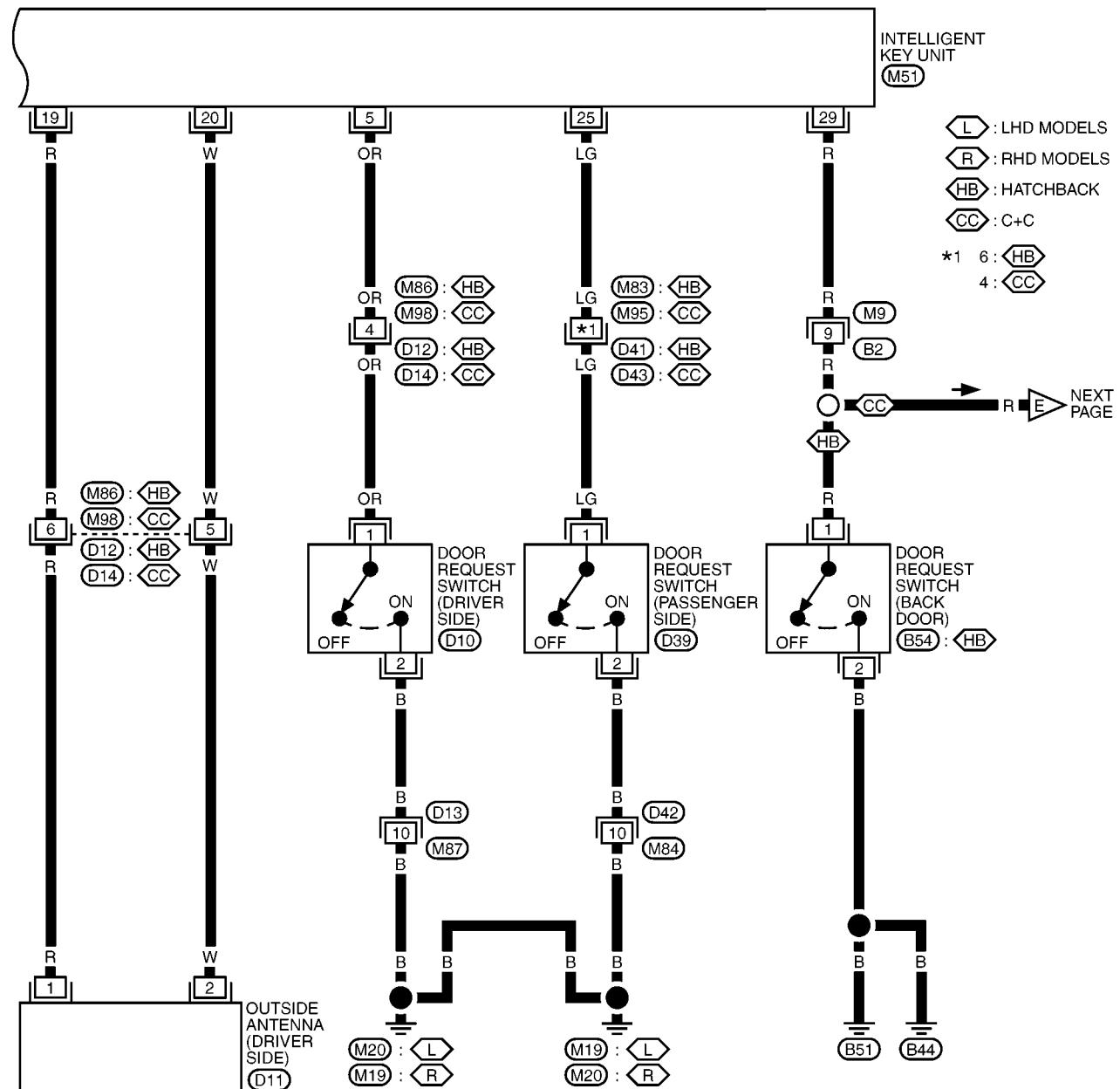
INTELLIGENT
KEY UNIT
(M51)



MIWA0630E

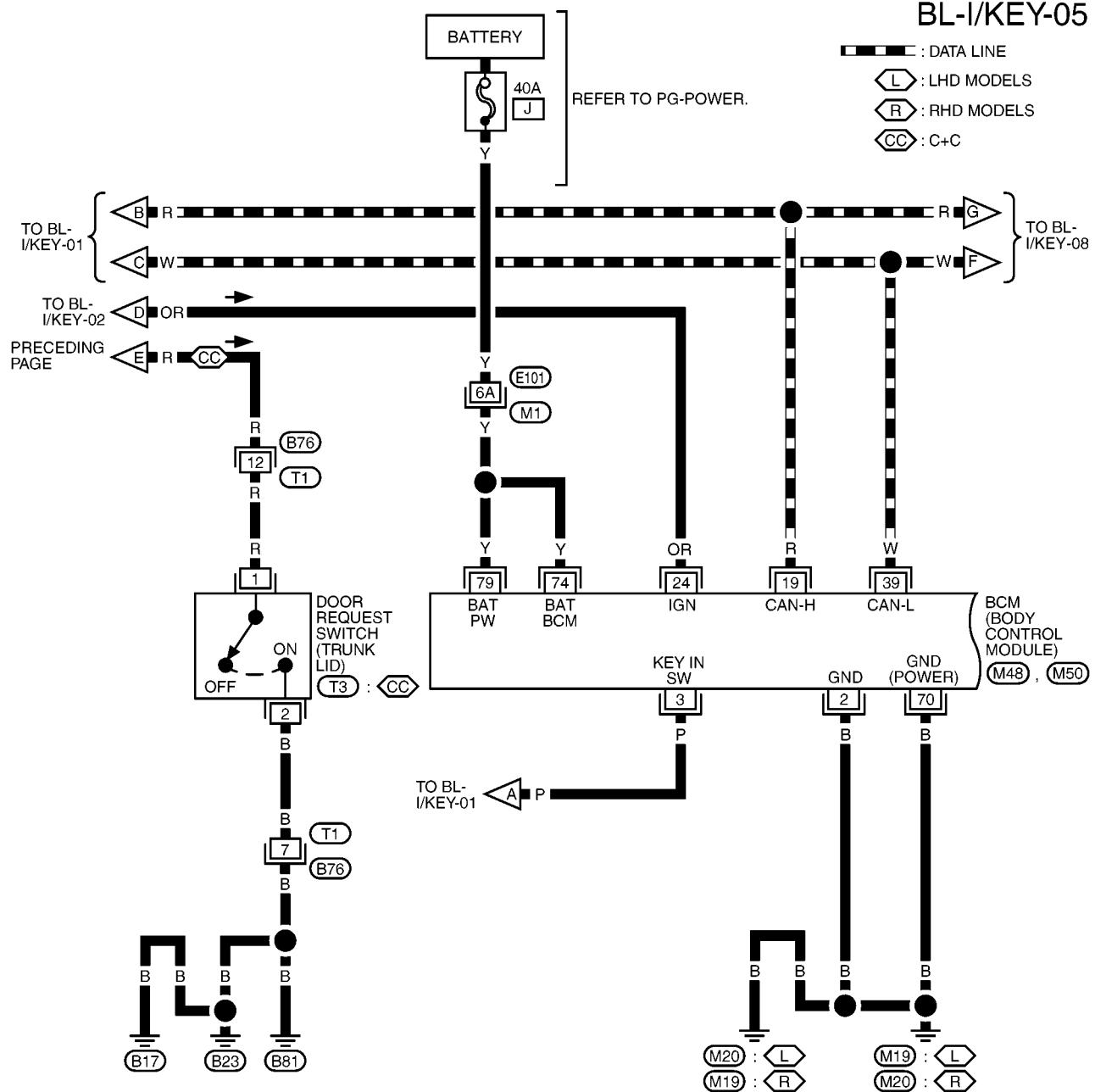
INTELLIGENT KEY SYSTEM

BL-I/KEY-04



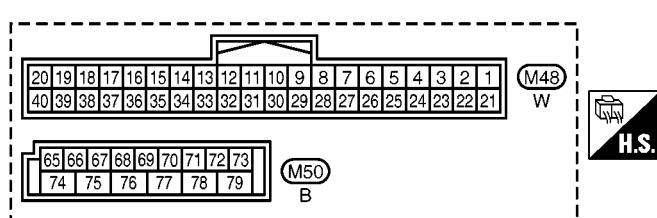
INTELLIGENT KEY SYSTEM

BL-I/KEY-05



REFER TO THE FOLLOWING.

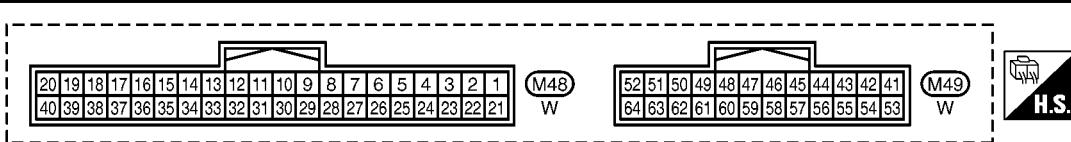
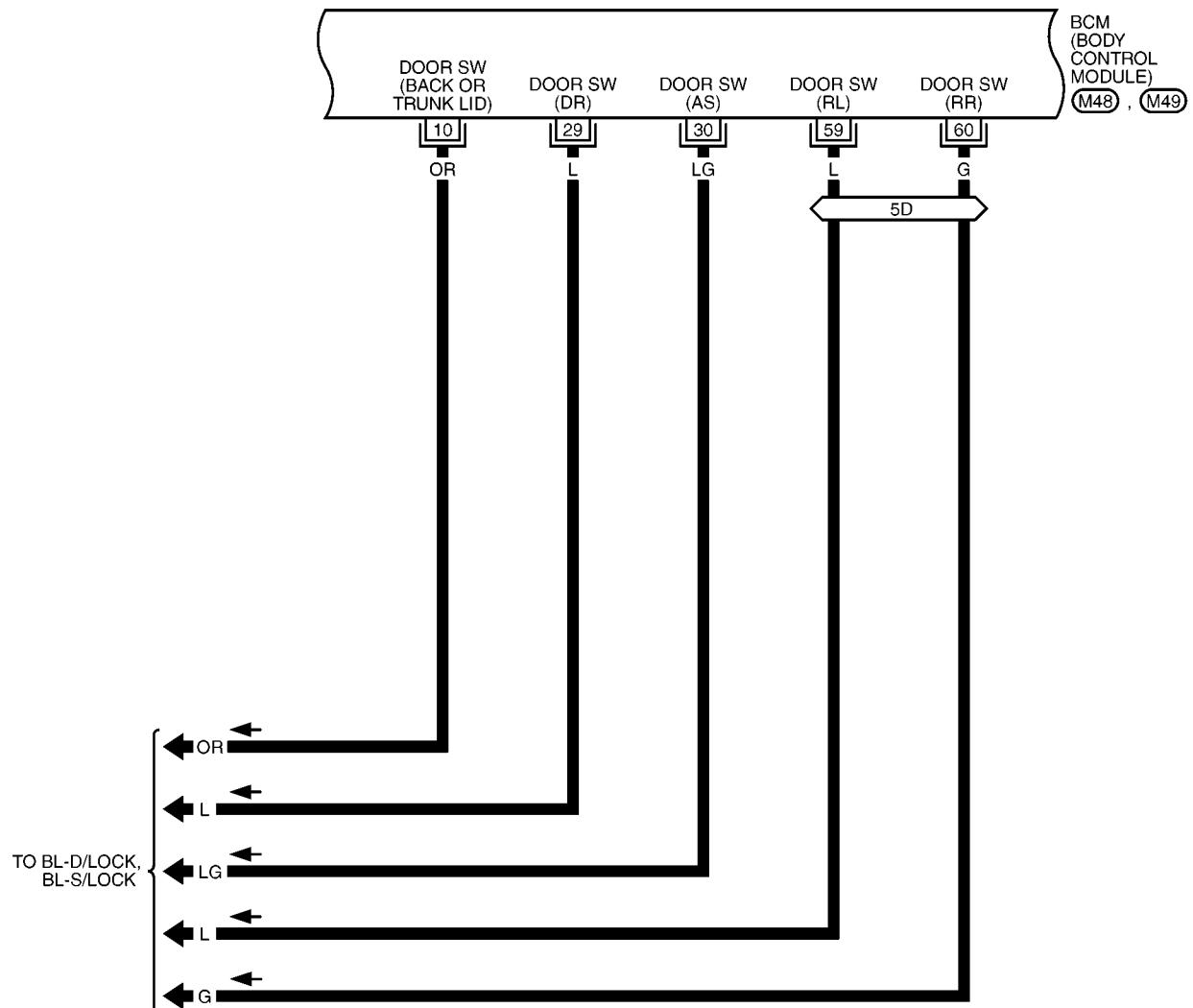
(M1) - SUPER MULTIPLE JUNCTION (SMJ)



INTELLIGENT KEY SYSTEM

BL-I/KEY-06

 : WITH 5 DOORS

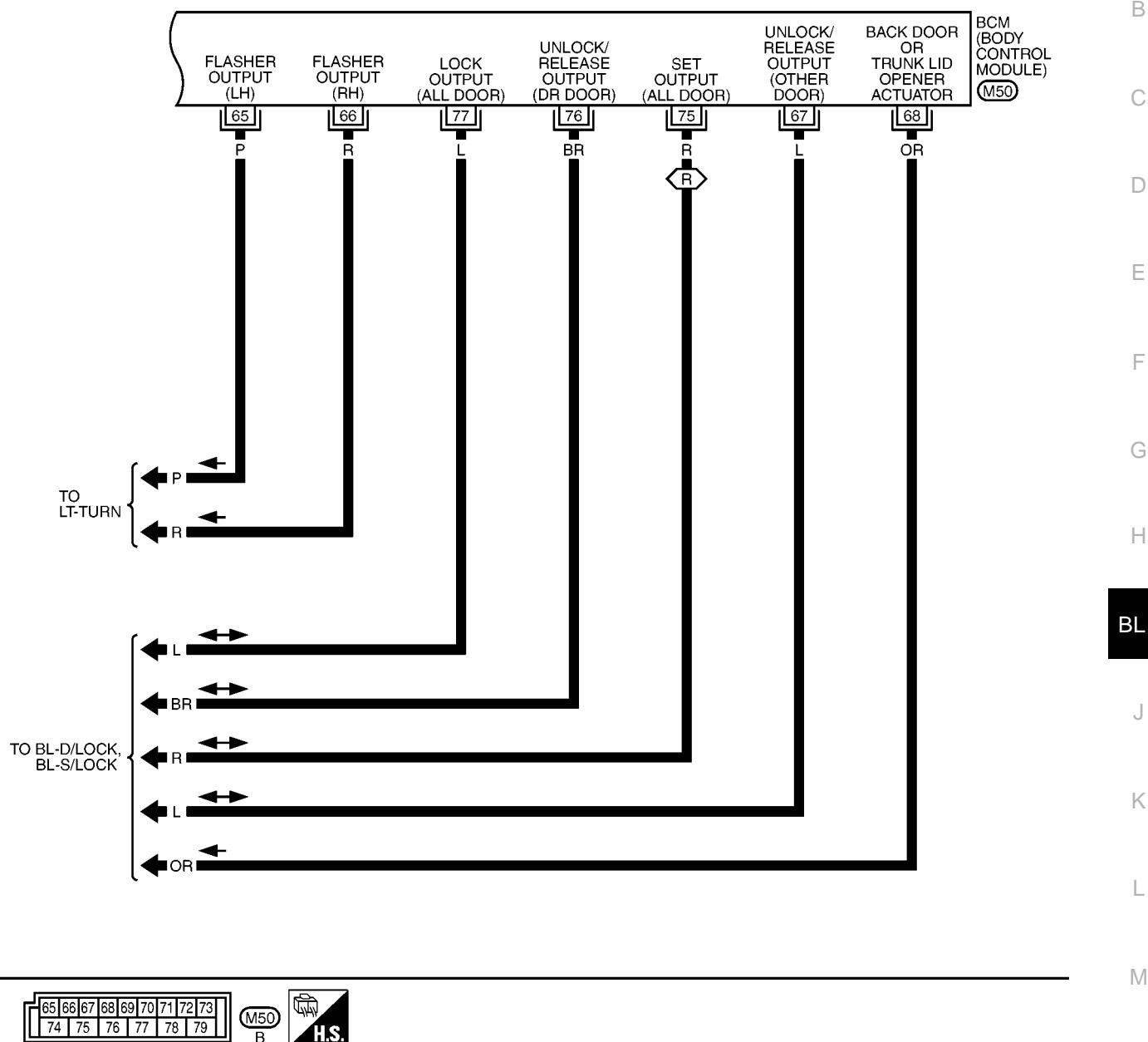


MIWA0633E

INTELLIGENT KEY SYSTEM

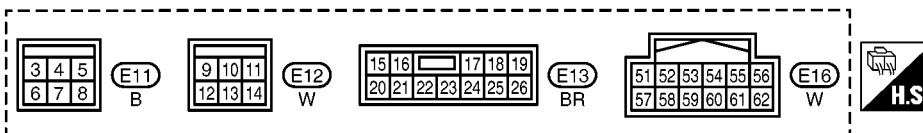
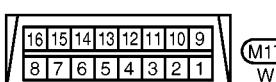
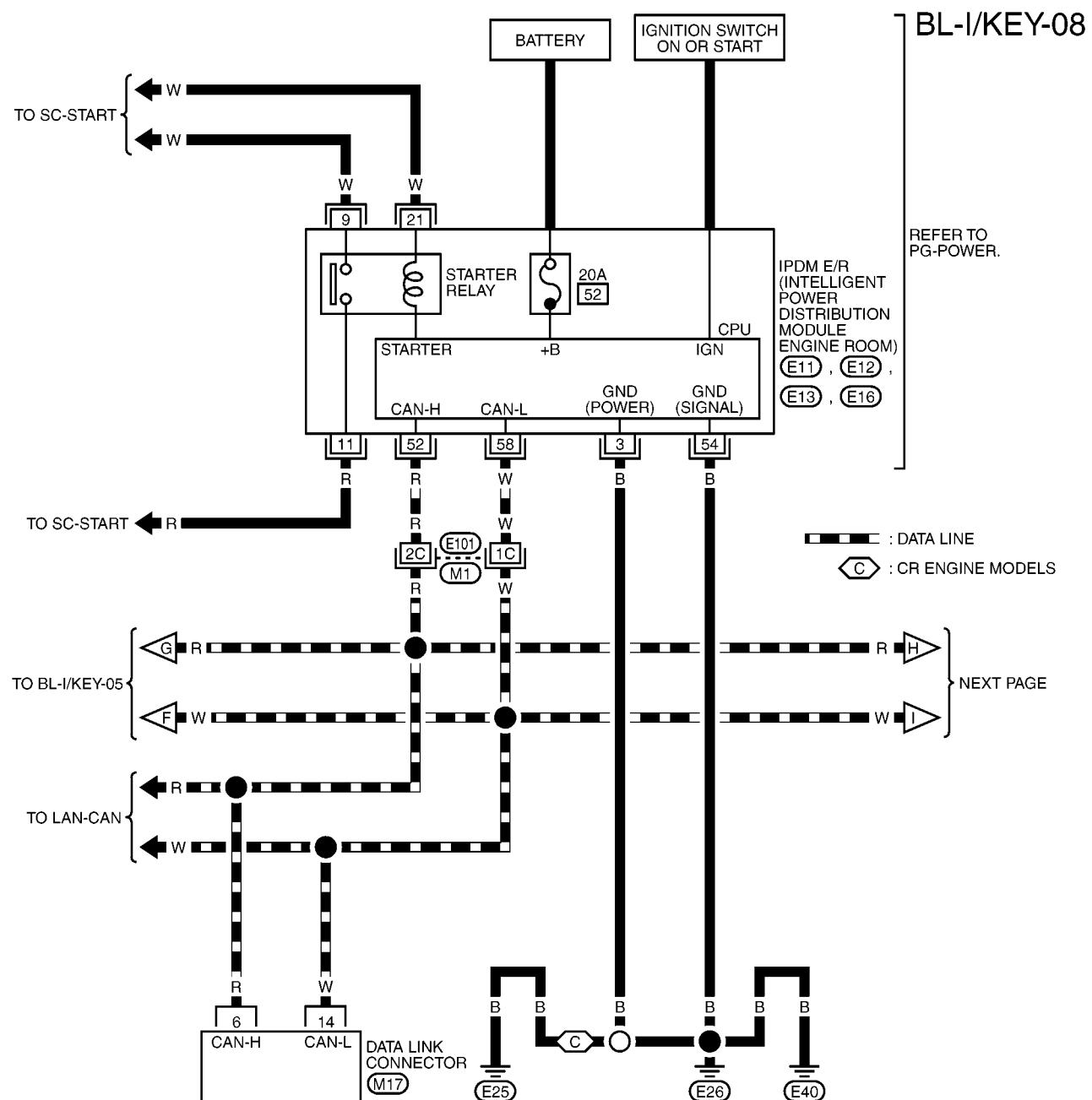
BL-I/KEY-07

 : RHD MODELS



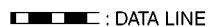
MIWA0634E

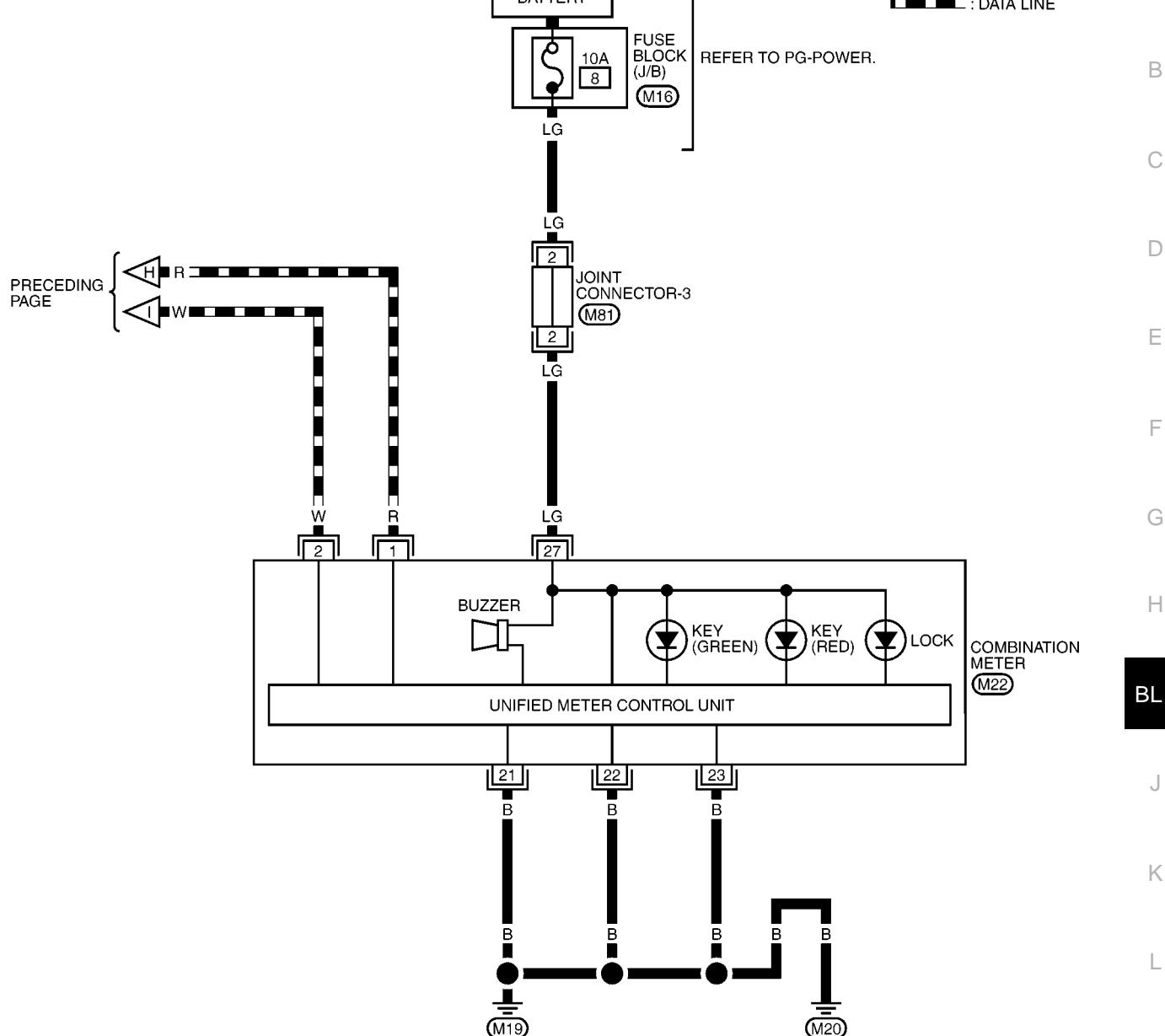
INTELLIGENT KEY SYSTEM



INTELLIGENT KEY SYSTEM

BL-I/KEY-09

 : DATA LINE



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

(M22) W

1	1	1	1	2	2	2	2	2	2
3	3	3	3	4	4	4	4	4	4

(M81) L

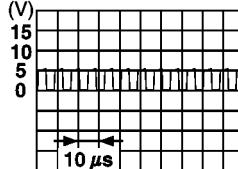
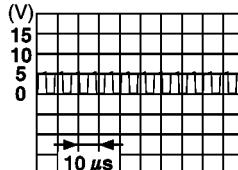
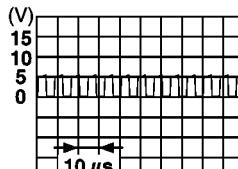
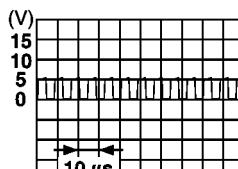
REFER TO THE FOLLOWING.

(M16) - FUSE BLOCK -
JUNCTION BOX (J/B)

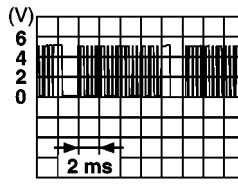
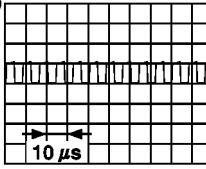
INTELLIGENT KEY SYSTEM

Terminals and Reference Value for INTELLIGENT KEY UNIT

EIS004ML

Terminal	Wire color	ITEM	Measuring condition		Voltage [V] (Approx.)
			Ignition knob position	Operation or conditions	
1	R	Steering lock unit power supply	LOCK	—	5
2	R	CAN-H	—	—	—
3	W	CAN-L	—	—	—
4	P	Intelligent Key warning buzzer	LOCK	Operate remote controller button or door request switch. Buzzer OFF Sound buzzer	Battery voltage 0
5	OR	Door request switch (driver side)	—	Door request switch operation: Press (ON). Other than the above (OFF)	0 5
6	W	Ignition power supply	ON	—	Battery voltage
7	GY	Ignition knob switch	—	Press ignition knob. Return ignition knob to LOCK position.	Battery voltage 0
10	L	ACC power supply	ACC	—	Battery voltage
11	BR	Battery power supply	—	—	Battery voltage
12	B	GND	—	—	0
13	R	Inside key antenna (+) (Luggage room or trunk room)	LOCK	Any door open → all doors shut (Door switch: ON → OFF)	(V)  SIIA1910J
14	BR	Inside key antenna (-) (Luggage room or trunk room)			
15	G	Inside key antenna (+) (Center console)	LOCK	Any door open → Close (Door switch: ON → OFF) Ignition knob switch: ON (press ignition knob.)	(V)  SIIA1910J
16	R	Inside key antenna (-) (Center console)			
17	LG	Out side antenna (+)	LOCK	Back door request switch operation (Switch: ON)	(V)  SIIA1910J
18	OR	Back door or trunk lid antenna (-)			
19	R	Outside antenna (driver side) (+)	LOCK	Driver door request signal operation (Switch: ON)	(V)  SIIA1910J
20	W	Outside antenna (driver side) (-)			
25	LG	Door request switch (passenger side)	—	Door request switch operation: Press (ON) Other than the above (OFF)	0 5

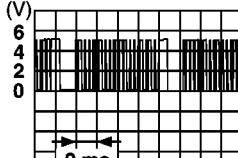
INTELLIGENT KEY SYSTEM

Ter- minal	Wire color	ITEM	Measuring condition		Voltage [V] (Approx.)	
			Ignition knob position	Operation or conditions		
26	PU	Stop lamp switch	—	Brake pedal depressed (ON)	5	
				Brake pedal not depressed (OFF)	0	
27	P	Key switch	LOCK	Insert mechanical key into ignition key cylinder.	Battery voltage	
				Remove mechanical key from ignition key cylinder.	0	
29	R	Door request switch (back door)	—	Back door request switch operation: Press (ON)	0	D
				Other than the above (OFF)	5	E
31	R	Steering lock unit ground	—	—	0	F
32	Y	Steering lock unit communication signal	LOCK	Press ignition knob with Intelligent Key inside vehicle.	 SIIA1911J	
				Other than the above	5	
37	BR	Outside antenna (passenger side) (+)	LOCK	Passenger door request switch operation (Switch: ON)	 SIIA1910J	
38	Y	Outside antenna (passenger side) (-)				

INTELLIGENT KEY SYSTEM

Terminals and Reference Value for Steering Lock unit

EIS004MM

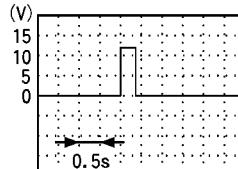
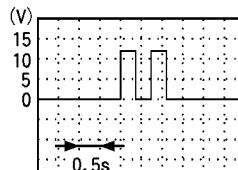
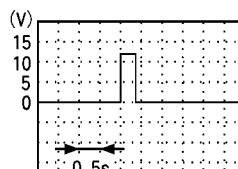
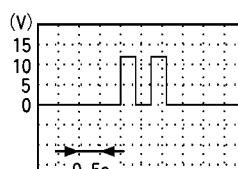
Terminal	Wire color	ITEM	Measuring condition		Voltage [V] (Approx.)
			Ignition knob position	Operation or conditions	
1	BR	Battery power supply	LOCK	—	Battery voltage
2	R	Steering lock unit power supply	LOCK	—	5
3	Y	Steering lock unit communication signal	LOCK	Press ignition knob with Intelligent Key inside vehicle.	 SIIA1911J
				Other than the above	
4	R	Steering lock unit ground	—	—	0

Terminal and Reference Value for BCM

EIS00569

Terminal	Wire color	ITEM	Measuring condition	Voltage [V] (Approx.)
2	B	Ground	—	0
3	P	Key switch	Mechanical key is removed from ignition knob (OFF) → Mechanical key is inserted in ignition knob (ON)	0 → Battery voltage
10	OR	Back door or trunk lid switch	Back door or trunk lid open (ON) → Back door or trunk lid close (OFF)	0 → Battery voltage
19	R	CAN-H	—	—
24	OR	IGN power supply	Ignition knob ON or START position	Battery voltage
29	L	Front door switch LH (LHD models)	Door open (ON) → Door close (OFF)	0 → Battery voltage
		Front door switch RH (RHD models)		
30	LG	Front door switch RH (LHD models)	Door open (ON) → Door close (OFF)	0 → Battery voltage
		Front door switch LH (RHD models)		
39	W	CAN-L	—	—
59	L	Rear door switch LH	Door open (ON) → Door close (OFF)	0 → Battery voltage
60	G	Rear door switch RH	Door open (ON) → Door close (OFF)	0 → Battery voltage

INTELLIGENT KEY SYSTEM

Terminal	Wire color	ITEM	Measuring condition	Voltage [V] (Approx.)
65	P	Answer back (Turn signal lamp LH)	When door lock operated using remote controller* ¹	 PIIA2486J
			When door unlock operated using remote controller* ¹	 PIIA2487J
66	R	Answer back (Turn signal lamp RH)	When door lock operated using remote controller* ¹	 PIIA2486J
			When door unlock operated using remote controller* ¹	 PIIA2487J
67	L	Door lock actuator unlock (ALL Door) (Except driver side)	Door lock/unlock switch UNLOCK operation	0 → Battery voltage
68	OR	Back door opener actuator	Power window main switch (Back door release switch) OPEN operation	Battery voltage → 0
70	B	Ground	—	0
74	Y	BAT power supply (fusible link) (BCM)	—	Battery voltage
75* ²	R	Super lock set output (All door)	Super lock operation (Set)	0 → Battery voltage
76	BR	Door lock actuator unlock (Driver side)	Door lock/unlock switch Unlock operation	0 → Battery voltage
77	L	Door lock actuator lock (ALL Door)	Door lock/unlock switch LOCK operation	0 → Battery voltage
79	Y	BAT power supply (fusible link) (Power window)	—	Battery voltage

*¹ : In the state that answer back operates

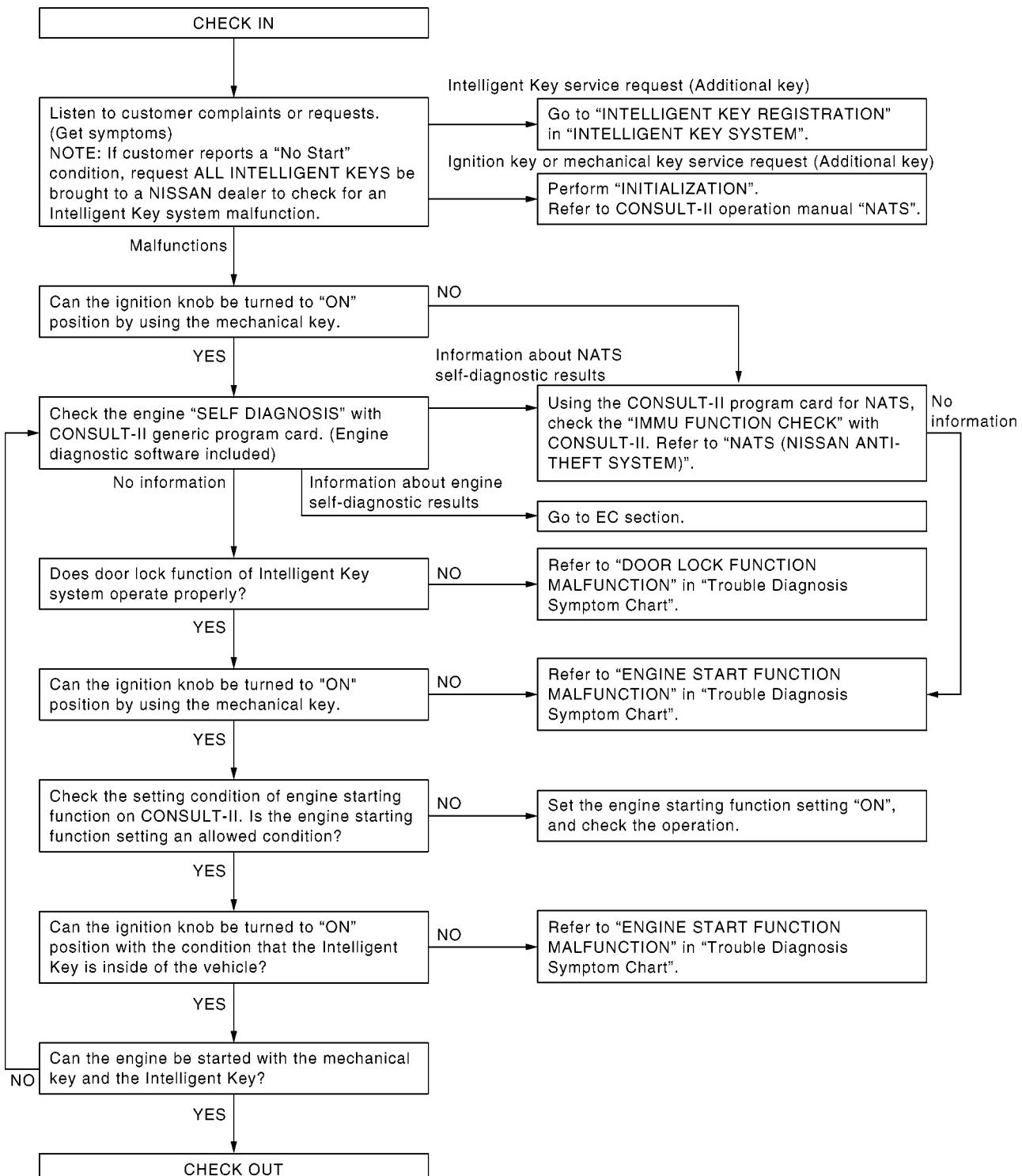
*² : Only the model equipped with super lock system (RHD Models)

A
B
C
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M

INTELLIGENT KEY SYSTEM

Diagnosis Procedure WORK FLOW

EIS004MN



MIIIB0488E

INTELLIGENT KEY SYSTEM

CONSULT-II Function (INTELLIGENT KEY)

EIS004MP

- CONSULT-II has display and inspection functions for work support, self-diagnosis, data monitor, and control unit part number by combining data reception and command transmission via communication lines from the Intelligent Key unit.

Diagnosed part	Inspection Item, Diagnosis Mode	Description
Intelligent Key	WORK SUPPORT	<ul style="list-style-type: none"> Performs Intelligent Key-ID registration, check, and deletion. Performs steering lock unit ID registration. Changes settings for each function (ON/OFF).
	SELF-DIAG RESULTS	Intelligent Key unit performs CAN communication diagnosis.
	DATA MONITOR	Displays Intelligent Key unit input data in real time.
	CAN DIAG SUPPORT MNTR	The results of transmit/receive diagnosis of CAN communication can be read.
	ACTIVE TEST	Sends drive signals door lock actuator, buzzer or combination meter to perform operation check.
	ECC PART NUMBER	Displays Intelligent Key unit part No.

CONSULT-II Inspection Procedure

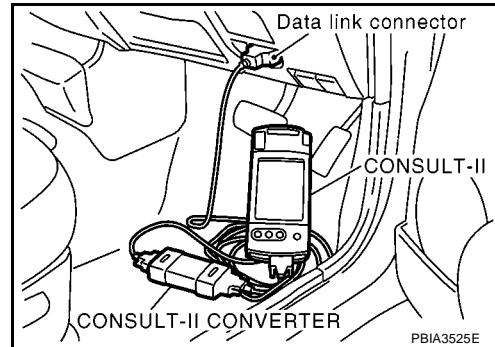
EIS00564

BASIC OPERATION

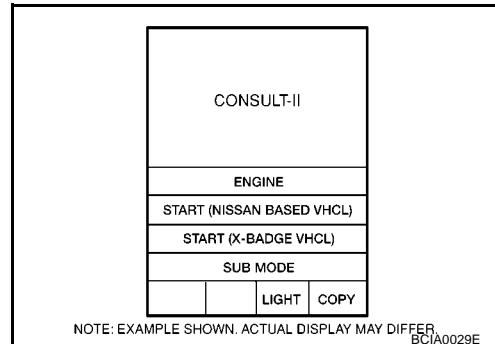
- Turn ignition knob to LOCK position.
- Connect CONSULT-II CONVERTER and CONSULT-II to data link connector.

CAUTION:

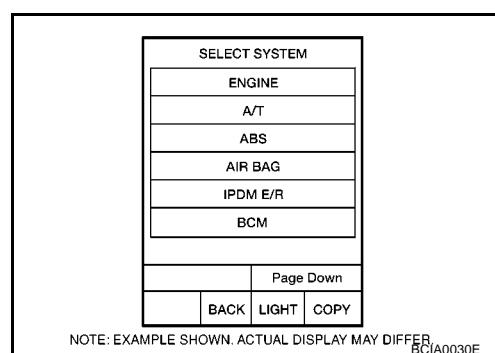
When CONSULT-II is used without connecting CONSULT-II CONVERTER, a malfunction may be detected by self-diagnosis in control modules that use CAN Communication.



- Use mechanical key to turn ignition switch to ON.
- Touch "START (NISSAN BASED VHCL)".

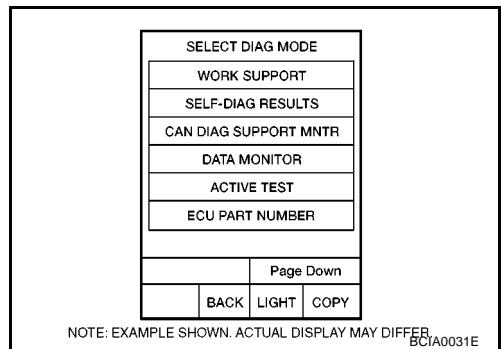


- Touch "INTELLIGENT KEY" on "SELECT SYSTEM" screen.
- If "INTELLIGENT KEY" is not indicated, go to [GI-36, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



INTELLIGENT KEY SYSTEM

6. Select diagnosis mode. "WORK SUPPORT", "SELF-DIAG RESULTS", "DATA MONITOR", "CAN DIAG SUPPRT MNTR", "ACTIVE TEST" and "ECU PART NUMBER" are available.



CONSULT-II Application Items **SELF-DIAGNOSTIC RESULTS**

EIS00565

In the Intelligent Key unit, the CONSULT-II self-diagnostic results can be used to check for malfunctions in CAN communications.

DATA MONITOR

MAIN SIGNALS Display Item

Monitor item [OPERATION]	Description
PUSH SW [ON/OFF]	Displays status (Ignition knob switch ON/ignition knob switch OFF) as judged from ignition knob switch signal.
KEY ROT SW [ON/OFF]	Displays status (Ignition switch ON position: ON/Ignition switch OFF position: OFF) as judged from key rotation detection switch signal.
KEY SW [ON/OFF]	Displays status (Key inserted: ON/Key removed: OFF) as judged by key switch.
DR REQ SW [ON/OFF]	Displays status (Operable: ON/Non-operable: OFF) as judged from door request switch (driver side) signal.
AS REQ SW [ON/OFF]	Displays status (Operable: ON/Non-operable: OFF) as judged from door request switch (passenger side) signal.
BD/TR REQ SW [ON/OFF]	Displays status (Operable: ON/Non-operable: OFF) as judged from door request switch (back door) signal.
IGN SW [ON/OFF]	Displays status (Ignition knob ON position: ON/Ignition knob OFF position: OFF) as judged from ignition switch signal.
ACC SW [ON/OFF]	Displays status (Ignition switch ACC position: ON/Ignition switch OFF position: OFF) as judged from ignition switch signal.
STOP LAMP SW [ON/OFF]	Displays status (Brake pedal depress: ON/brake pedal not depress: OFF) as judged from stop lamp switch signal.
DOOR LOCK SIG* [ON/OFF]	Indicates condition of door lock signal from Intelligent Key remote controller button.
DOOR UNLOCK SIG* [ON/OFF]	Indicates condition of door unlock signal from Intelligent Key remote controller button.
DOOR SW DR* [OPEN/CLOSE]	Indicates condition of front door switch of driver side from BCM via CAN communication line.
DOOR SW AS* [OPEN/CLOSE]	Indicates condition of front door switch of passenger side from BCM via CAN communication line.
DOOR SW RR* [OPEN/CLOSE]	Indicates condition of rear door switch of RH side from BCM via CAN communication line.
DOOR SW RL* [OPEN/CLOSE]	Indicates condition of rear door switch of LH side from BCM via CAN communication line.
DOOR BK SW* [OPEN/CLOSE]	Indicates condition of back door switch from BCM via CAN communication line.
VEHICLE SPEED* [OPEN/CLOSE]	Indicates [km/h] condition of vehicle speed.

*: Select "SELECTION FROM MANU".

INTELLIGENT KEY SYSTEM

ACTIVE TEST

Monitor item	Description
DOOR LOCK/UNLOCK	This test is able to check all door lock actuators lock operation. These actuators lock when "ON" on CONSULT-II screen is touched.
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation. The buzzer will be activated on when "ON" on CONSULT-II screen is touched.
INSLDE BUZZER	This test is able to check buzzer (built in combination meter) operation. The buzzer will be activated on when "ON" on CONSULT-II screen is touched.
INDICATOR	This test is able to check warning lamp operation. The lamp will be turned on when "ON" on CONSULT-II screen is touched.

WORK SUPPORT

Monitor item	Description
INTELLI KEY WARNING	The condition of warning system can be changed.
LOW BATTERY WARNING	The condition of low battery warning system can be changed.
INTELLI KEY FUNCTION	The all of Intelligent Key system functions can be changed.
SELSELECTIVE UNLOCK	The condition of select unlock function can be changed.
ANTIKEY LOCK IN	The condition of Intelligent Key lock-in prevention function can be changed.
FLASH WITH REMOTE AND KEY	The condition of ignition key warning function can be changed.
ANSWER BACK WITH I-KEY LOCK	The condition of ignition key warning function (LOCK) can be changed.
ANSWER BAKE WITH I-KEY UNLOCK	The condition of ignition key warning function (UNLOCK) can be changed.
AUTO RELOCK TIMER	Auto locking function mode can be changed in this mode. The function mode will be changed when.
ENG START BY I-KEY	The condition of engine start function can be changed.
LOCK/UNLOCK BY I-KEY	The condition of door lock function can be changed.
FOR TAKE OUT WARN TRIGGER	The condition of Intelligent Key take out warn trigger can be changed.

INTELLIGENT KEY SYSTEM

List of Operation Related Parts

EIS004MQ

Parts marked with × are the parts related to operation.

	Intelligent Key key switch	Ignition knob switch	ACC switch	Ignition switch	Door switch	Door request switch	Inside key antenna	Door antenna	Intelligent Key unit	CAN system	BCM	Combination meter	Stop lamp switch
Will not operate if there is a malfunction in the area where there is a ×.													
Door lock/unlock operation using Intelligent Key remote controller button operation	×	×	×		×				×	×	×	×	
Door lock/unlock operation using door request switch operation	×	×	×		×	×	×	×	×	×	×	×	
Door lock/unlock operation using mechanical key												×	
Ignition knob rotation permission using Intelligent Key	×	×	×				×		×			×	
Engine start using Intelligent Key	×			×			×		×	×	×	×	×
Engine start using mechanical key				×	×					×	×	×	×
Ignition switch return forgotten warning			×	×	×	×			×		×	×	
Ignition key warning (when using mechanical key)		×								×	×	×	
Ignition switch OFF position warning (for inside car: when door closed)			×	×	×				×	×			×
Ignition switch OFF position warning (for outside car: when door opened/closed)	×		×	×	×	×			×	×	×		
Warning for removal of Intelligent Key to outside the car (when door open/closed)	×		×			×	×		×	×	×	×	×
Warning for removal of Intelligent Key to outside the car (from window)	×		×			×	×		×	×			×
Door lock non-operation warning	×		×		×	×	×		×	×	×	×	
Intelligent key low battery warning	×			×					×	×			×

INTELLIGENT KEY SYSTEM

Trouble Diagnosis Symptom Chart ALL FUNCTIONS OF THE INTELLIGENT KEY ARE NOT OPERATING

EIS004MR

Symptom	Diagnoses service procedure	Refer to page
"KEY" and "LOCK" warning lamps in combination meter does not light up at all.	<ol style="list-style-type: none"> 1. Check Intelligent Key unit power supply and ground circuit 2. Check CAN communication 3. Replace Intelligent Key unit. 	BL-220 BL-220 BL-231
"KEY" and "LOCK" warning lamps in combination meter turn on, but doors cannot be locked/unlocked or the engine starter using Intelligent Key.	<ol style="list-style-type: none"> 1. Use CONSULT-II to check if the Intelligent Key has been registered. 2. Use CONSULT-II setting change function to check if Intelligent Key system has been cancelled. 3. Intelligent Key inspection 4. Replace Intelligent Key unit. 	BL-184 BL-184 BL-231 BL-231

REMOTE CONTROL ENTRY FUNCTION MALFUNCTION

Symptom	Diagnoses service procedure	Refer to page
Door lock/unlock does not operate (other functions normal) when Intelligent Key remote controller button is operated.	<ol style="list-style-type: none"> 1. Intelligent Key inspection 2. Check key switch 3. Check ignition knob switch 4. Check door switch 5. Replace Intelligent Key unit. 	BL-231 BL-220 BL-222 BL-167 BL-231

DOOR LOCK FUNCTION MALFUNCTION

Before conducting the diagnosis in the following table, check all power door lock system function. Refer to [BL-16, "POWER DOOR LOCK SYSTEM"](#).

Symptom	Diagnoses service procedure	Refer to page
Door lock/unlock does not operate when door request switch operation is used (operates when Intelligent Key remote controller button is operated).	<ol style="list-style-type: none"> 1. Check door request switch 2. Check outside antenna 3. Intelligent Key inspection 4. Replace Intelligent Key unit. 	BL-223 BL-226 BL-231 BL-231
Door lock/unlock do not operate using door request switch and Intelligent Key remote controller button operation (power door lock system is normal).	<ol style="list-style-type: none"> 1. Check door switch 2. Check key switch 3. Check ignition knob switch 4. Replace Intelligent Key unit. 	BL-167 BL-220 BL-222 BL-231
Hazard lamps do not flash during door lock operation using door request switch and Intelligent Key remote controller button operation. (Turn signal lamp operation is normal.)	Replace Intelligent Key unit.	BL-231
Hazard lamps do not flash during door lock operation using door request switch and Intelligent Key remote controller button operation. (Turn signal lamps do not operate.)	Conduct turn signal lamp inspection.	LT-141
Intelligent Key warning buzzer does not sound during door lock/unlock operation using Intelligent Key (regardless of whether Intelligent Key remote controller button or request switch operation is used).	<ol style="list-style-type: none"> 1. Check if the operation confirmation Intelligent Key warning buzzer was cancelled by the CONSULT-II settings change function. 2. Check Intelligent Key warning buzzer 3. Replace Intelligent Key unit. 	BL-184 BL-225 BL-231
Door lock/unlock operation confirmation Intelligent Key warning buzzer sounds, but door lock actuator does not operate. (And hazard lamps do not flash.)	<ol style="list-style-type: none"> 1. Check CAN communication 2. Replace Intelligent Key unit. 	BL-220 BL-231

INTELLIGENT KEY SYSTEM

ENGINE START FUNCTION MALFUNCTION

Intelligent Key Operation Inspection

Symptom	Diagnoses service procedure	Refer to page
This lights up KEY warning lamp on combination meter in red when ignition knob is pressed. (door lock functions normal)	1. Intelligent Key inspection. 2. Check inside key antenna 3. Replace Intelligent Key unit.	BL-231 BL-227 BL-231
This lights up KEY warning lamp on combination meter in green when ignition knob is pressed.	1. Ignition knob switch system 2. Steering lock unit system 3. Intelligent Key unit power supply and ground circuit system 4. Replace Intelligent Key unit.	BL-222 BL-228 BL-220 BL-231
Ignition knob turns even without both Intelligent Key and mechanical key.	Replace steering lock unit.	—
Security indicator will still flash even when ignition knob is pressed.	1. Check key switch 2. Replace Intelligent Key unit.	BL-220 BL-231
Security indicator does not flash with ignition knob released at LOCK position. (push switch OFF)	1. CAN communication system 2. Ignition knob switch system 3. Intelligent Key unit power supply and ground circuit system 4. Inspect combination meter (warning lamp).	BL-220 BL-222 BL-220 BL-296

Mechanical Key Operation Inspection

Symptom	Diagnoses service procedure	Refer to page
Security indicator remains flashing with mechanical key inserted.	1. Check key switch. 2. Replace Intelligent Key unit.	BL-220 BL-231
KEY indicator and security indicator does not flashing with mechanical key inserted.	1. Check stop lamp switch 2. Replace Intelligent Key unit	BL-230 BL-231

WARNING CHIME FUNCTION MALFUNCTION

Before conducting the diagnosis in the following table, check "key reminder function" with power door lock system.

Symptom	Diagnoses service procedure	Refer to page
Ignition knob OFF position warning chime (for inside vehicle) does not sound. (Ignition key warning chime operates)	1. Check CAN communication 2. Check ignition knob switch 3. Check key switch 4. Replace Intelligent Key unit.	BL-220 BL-222 BL-220 BL-231
Ignition key warning chime is inoperative. (When mechanical key used)	1. Check CAN communication 2. Check key switch 3. Check door switch 4. Inspect combination meter (warning). 5. Replace Intelligent Key unit	BL-220 BL-220 BL-167 DI-26 BL-231

INTELLIGENT KEY SYSTEM

Symptom	Diagnoses service procedure	Refer to page
Ignition knob OFF position warning chime (for outside vehicle: after door open/closed) does not sound.	1. Check CAN communication 2. Check ignition knob switch 3. Check door switch system 4. Check Intelligent Key warning buzzer 5. Replace Intelligent Key unit.	BL-220 BL-222 BL-167 BL-225 BL-231
Intelligent Key take out warning chime (when door open/closed) does not sound.	1. Check CAN communication 2. Intelligent Key inspection 3. Check ignition knob switch 4. Check door switch system 5. Check Intelligent Key warning buzzer 6. Replace Intelligent Key unit.	BL-220 BL-231 BL-222 BL-167 BL-225 BL-231
Intelligent Key take out warning chime (when door opened/closed) sounds even though Intelligent Key is in vehicle.	1. Check inside key antenna 2. Intelligent Key inspection 3. Replace Intelligent Key unit.	BL-227 BL-231 BL-231
Intelligent Key take out warning chime (through window) does not sound	1. Check if Intelligent Key removal warning (take out from window) was canceled by CONSULT-II settings change function. 2. Check CAN communication 3. Intelligent Key inspection 4. Check ignition knob switch 5. Replace Intelligent Key unit.	BL-184 BL-220 BL-231 BL-222 BL-231
Intelligent Key take out warning chime (through window) sounds even though Intelligent Key is in vehicle.	1. Check inside key antenna 2. Intelligent Key inspection 3. Replace Intelligent Key unit.	BL-227 BL-231 BL-231
Intelligent Key warning chime does not sound		
1. Intelligent Key inspection 2. Check door request switch 3. Check inside key antenna 4. Check Intelligent Key warning buzzer 5. Replace Intelligent Key unit.		
Ignition knob OFF position warning chime does not sound		
1. Intelligent Key inspection 2. Check door request switch 3. Check outside antenna 4. Check Intelligent Key warning buzzer 5. Check ignition knob switch 6. Replace Intelligent Key unit.		
Door ajar alarm		
1. Check CAN communications 2. Check door request switch 3. Check outside antenna 4. Check Intelligent Key warning buzzer 5. Check door switch 6. Intelligent Key inspection 7. Replace Intelligent Key unit.		

INTELLIGENT KEY SYSTEM

Check CAN Communication System

EIS004MS

Go to [LAN-5, "Precautions When Using CONSULT-II"](#).

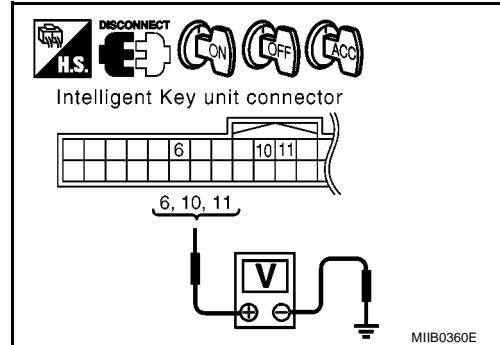
Check Intelligent Key Unit Power Supply and Ground Circuit

EIS004MT

1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition knob OFF position.
2. Disconnect Intelligent Key unit connector M51 and measure the connector terminal (+) and ground (-) shown in the following table.

Terminal (wire color)	Signal Designa- tion	Ignition switch	Standard voltage (V)
6 (W)	Ignition power supply	ON	Battery voltage
10 (L)	ACC power sup- ply	ACC	Battery voltage
11 (BR)	Battery power supply	OFF	Battery voltage



MIIB0360E

OK or NG

OK >> GO TO 2.

NG >> Repair or replace Intelligent Key power supply circuit.

2. CHECK GROUND CIRCUIT

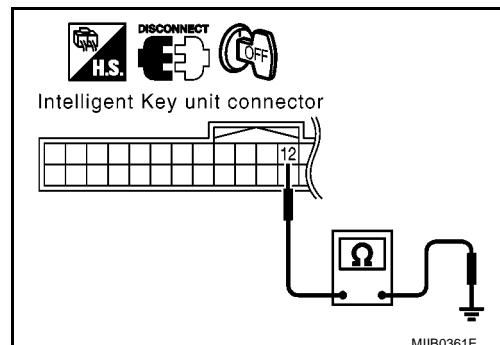
Check continuity between Intelligent Key unit connector M51 terminal 12 and ground.

12 (B) - Ground : Continuity should exist.

OK or NG

OK >> Power supply and ground circuits are normal.

NG >> Repair or replace the Intelligent Key unit ground circuit.



MIIB0361E

Check Key Switch

EIS004MV

1. KEY SWITCH INSPECTION

With CONSULT-II

Display "KEY SW" on DATA MONITOR screen, and check if ON-OFF display is linked to insertion of mechanical key in ignition knob.

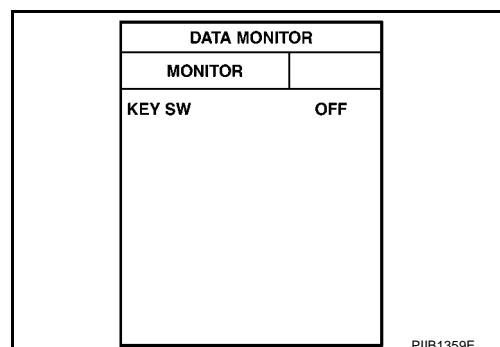
When key is inserted in ignition knob : ON

When key is removed in ignition knob : OFF

OK or NG

OK >> Key switch is OK.

NG >> GO TO 2.



PIIB1359E

INTELLIGENT KEY SYSTEM

2. KEY SWITCH POWER SUPPLY CIRCUIT INSPECTION

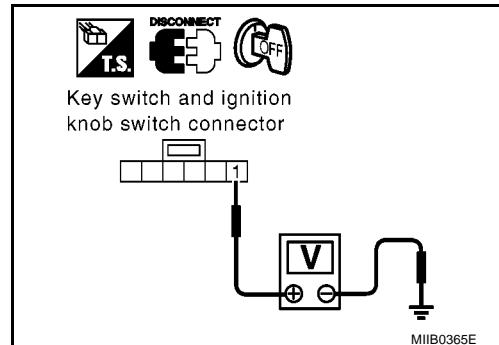
1. Remove mechanical key from ignition knob.
2. Disconnect key switch and ignition knob switch connector.
3. Check voltage between key switch and ignition knob switch connector M34 terminal 1 and ground.

1 (W) - Ground : Approx. 12V

OK or NG

OK >> GO TO 3.

NG >> Repair or replace key switch power supply circuit.



3. KEY SWITCH OPERATION INSPECTION

1. Insert mechanical key into ignition knob.
2. Check continuity between key switch and ignition knob switch connector M34 terminal 1 and 2.

1 - 2

Insert mechanical key into ignition knob.

: Continuity should exist.

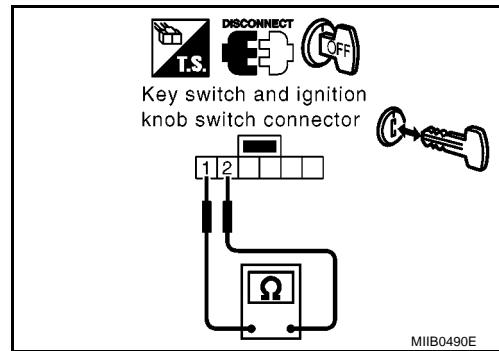
Remove mechanical key from ignition knob.

: Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG >> Replace key switch.



4. KEY SWITCH CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit connector M51 terminal 27 and key switch and ignition knob switch connector M34 terminal 2.

27 (P) - 2 (P) : Continuity should exist.

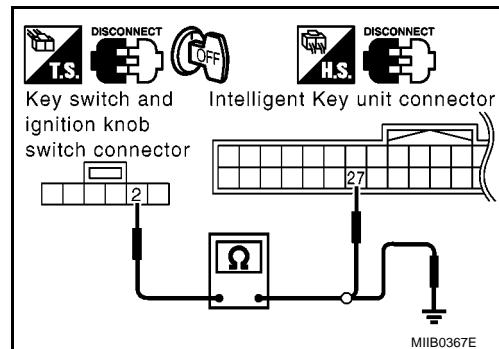
3. Check continuity between key switch connector M34 terminal 2 and ground.

2 (P) - Ground : Continuity should exist.

OK or NG

OK >> Key switch is OK.

NG >> Repair or replace harness between Intelligent Key unit and key switch and ignition knob switch.



INTELLIGENT KEY SYSTEM

Check Ignition Knob Switch

EIS004MX

1. IGNITION KNOB SWITCH INSPECTION

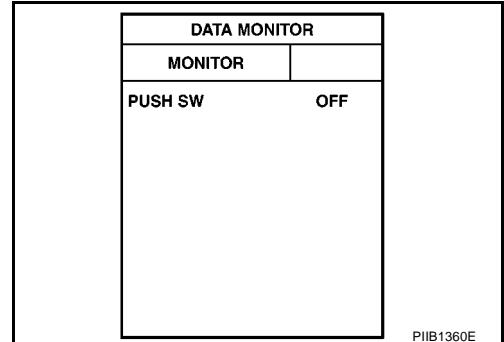
With CONSULT-II

Display "PUSH SW" on DATA MONITOR screen, and check if ON/OFF display is linked to ignition knob operation.

- Press ignition knob. : ON
Return ignition knob (remove hands). : OFF

OK or NG

- OK >> Ignition knob switch is OK.
NG >> GO TO 2.



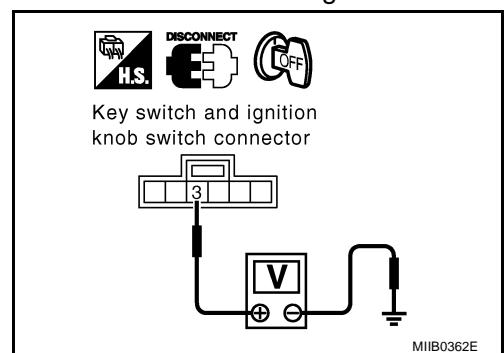
2. IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT INSPECTION

- Turn ignition knob LOCK position.
- Disconnect key switch and ignition knob switch connector.
- Check voltage between key switch and ignition knob switch connector M34 terminal 3 and ground.

- 3 (BR) - Ground : Approx. 12V

OK or NG

- OK >> GO TO 3.
NG >> Repair or replace key switch and ignition knob switch power supply circuit.



3. IGNITION KNOB SWITCH OPERATION INSPECTION

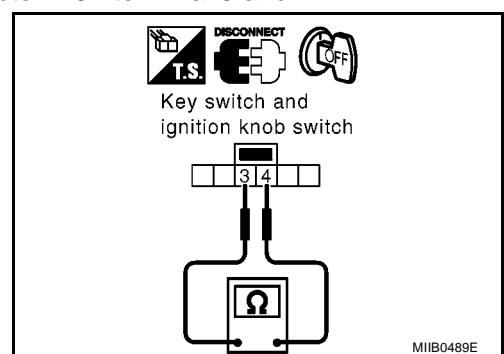
Check continuity between key switch and ignition knob switch connector M34 terminal 3 and 4.

3-4

- Press ignition knob. : Continuity should exist.
Return ignition knob (remove hands). : Continuity should not exist.

OK or NG

- OK >> GO TO 4.
NG >> Replace key switch and ignition knob switch.



INTELLIGENT KEY SYSTEM

4. IGNITION KNOB SWITCH CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit connector M51 terminal 7 and key switch and ignition knob switch connector M34 terminal 4.

7 (GY) - 4 (GY) : Continuity should exist.

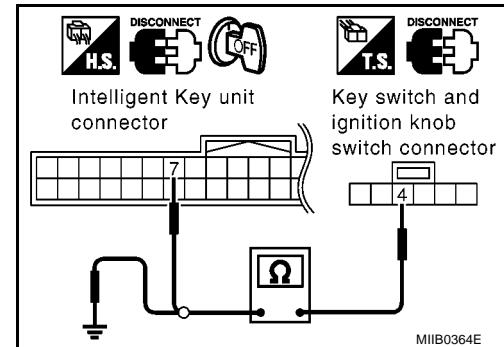
3. Check continuity between key switch and ignition knob switch connector terminal 4 and ground.

4 (GY) - Ground : Continuity should not exist.

OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair or replace harness between Intelligent Key unit and key switch and ignition knob switch.



MIIIB0364E

Check Door Request Switch

1. DOOR REQUEST SWITCH INSPECTION

With CONSULT-II

Display "DR REQ SW" (driver door), "AS REQ SW" (passenger door) and "BD/TR REQ SW" (back door) on DATA MONITOR screen, and check if ON-OFF display is linked to door request switch operation.

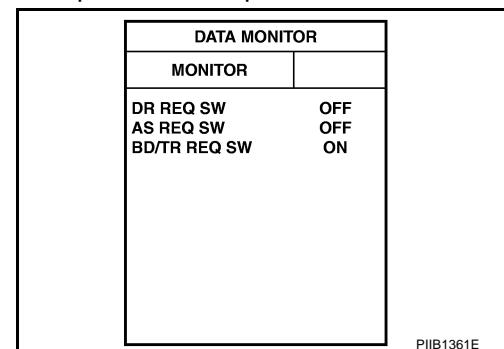
Press door request switch. : ON

Release door request switch. : OFF

OK or NG

OK >> Door request switch is OK.

NG >> GO TO 2.



PIIB1361E

A
B
C
D
E
F
G
H
BL
J
K
L
M

2. DOOR REQUEST SWITCH SIGNAL INSPECTION

1. Turn ignition knob LOCK position.
2. Disconnect door request switch connector.
3. Check voltage between door request switch connector D10 (driver door), D39 (passenger door), B54 (back door) terminal 1 and ground.

Driver 1 (OR) - Ground : Approx. 5V

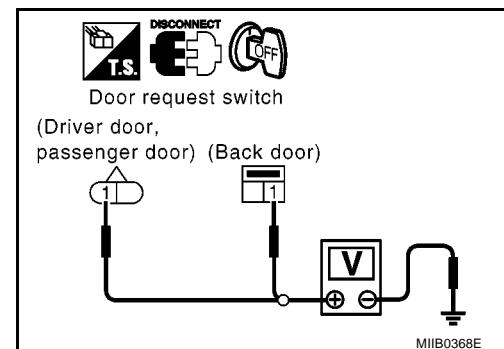
Passenger 1 (LG) - Ground : Approx. 5V

Back door 1 (R) - Ground : Approx. 5V

OK or NG

OK >> GO TO 3.

NG >> GO TO 5.



MIIIB0368E

INTELLIGENT KEY SYSTEM

3. DOOR REQUEST SWITCH OPERATION INSPECTION

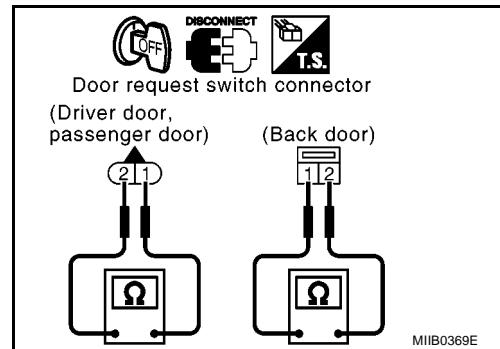
Check continuity between door request switch connector D10 (driver door), D39 (passenger door), B54 (back door) terminal 1 and 2.

1 - 2

- Press door request switch.** : Continuity should exist.
Return door request switch. : Continuity should not exist.

OK or NG

- OK >> GO TO 4.
NG >> Replace door request switch.



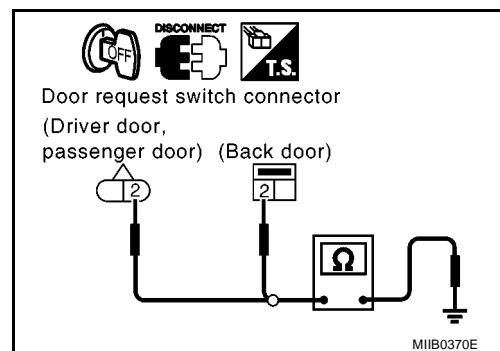
4. DOOR REQUEST SWITCH GROUND CIRCUIT INSPECTION

Check continuity between door request switch connector 2 and ground.

2 (B) - Ground : Continuity should exist.

OK or NG

- OK >> GO TO 5.
NG >> Repair or replace door request switch ground circuit.



5. DOOR REQUEST SWITCH CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit connector M51 terminals 5 (driver door), 25 (passenger door), and 29 (back door) and door request switch connector D10 (driver door), D39 (passenger door), B54 (back door) terminal 1.

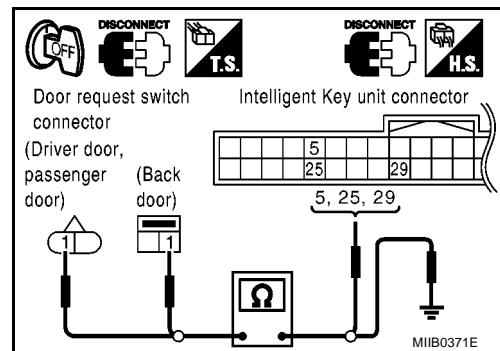
Driver 5 (OR) - 1 (OR) : Continuity should exist.
Passenger 25 (LG) - 1 (LG) : Continuity should exist.
Back door 29 (R) - 1 (R) : Continuity should exist.

3. Check continuity between door request switch connector D10 (driver door), D39 (passenger door), B54 (back door) terminal 1 and ground.

1 - Ground : Continuity should not exist.

OK or NG

- OK >> Replace Intelligent Key unit.
NG >> Repair or replace harness between Intelligent Key unit and door request switch.



INTELLIGENT KEY SYSTEM

Check Intelligent Key Warning Buzzer

EIS004N1

1. INTELLIGENT KEY WARNING BUZZER POWER SUPPLY CIRCUIT INSPECTION

1. Turn ignition knob LOCK position.
2. Remove Intelligent Key warning buzzer connector.
3. Check voltage between Intelligent Key warning buzzer connector D8 terminal 2 and ground.

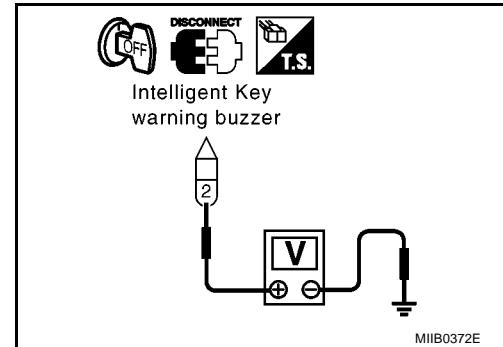
2 (G) - Ground

: Approx. 12V

OK or NG

OK >> GO TO 2.

NG >> Repair or replace Intelligent Key warning buzzer power supply circuit.



2. INTELLIGENT KEY WARNING BUZZER CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit connector M51 terminal 4 and Intelligent Key warning buzzer connector D8 terminal 1.

4 (P) - 1 (P)

: Continuity should exist.

3. Check continuity between Intelligent Key warning buzzer connector D8 terminal 1 and ground.

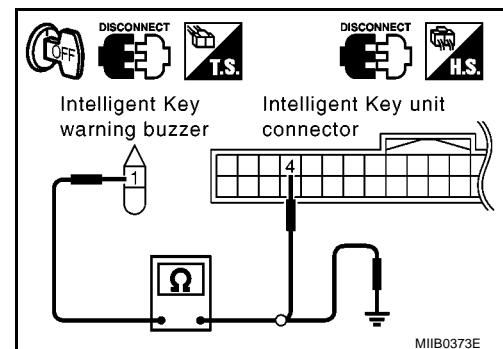
1 (P) - Ground

: Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between Intelligent Key warning buzzer and Intelligent Key unit.



3. INTELLIGENT KEY WARNING BUZZER OPERATION INSPECTION

Connect battery power supply to Intelligent Key warning buzzer connector D8 terminals 1 and 2, and check the operation.

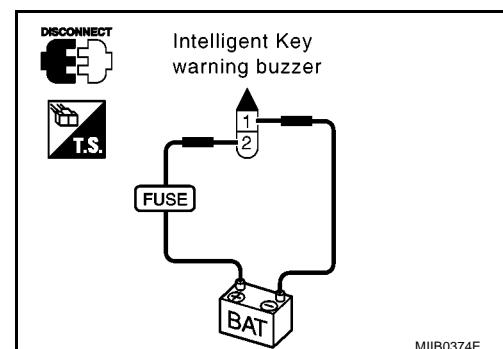
2 (BAT+) - 1 (BAT-)

: Buzzer should sounds

OK or NG

OK >> Intelligent Key warning buzzer is OK.

NG >> Replace Intelligent Key warning buzzer



INTELLIGENT KEY SYSTEM

Check Outside Antenna

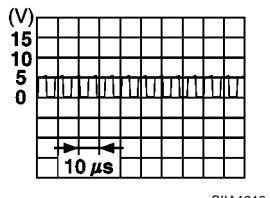
EIS004N2

1. OUTSIDE ANTENNA POWER SUPPLY INSPECTION

Operate each door request switch (push), and use an oscilloscope to check voltage waveform of harness between Intelligent Key unit connector M51 terminals 17 (back door), 19 (driver door), and 37 (passenger door) and ground.

Push each door request switch.

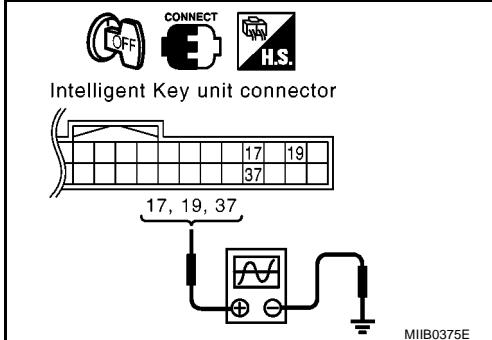
Back door:
17 (LG) - Ground



SIIA1910J

Driver:
19 (R) - Ground

Passenger:
37 (BR) - Ground



OK or NG

OK >> Outside antenna circuit is OK.
NG >> GO TO 2.

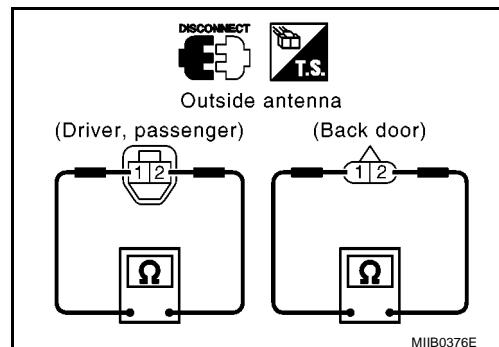
2. OUTSIDE ANTENNA OPERATION INSPECTION

1. Disconnect each door antenna connector.
2. Check continuity between each door antenna connector D11 (driver door), B39 (back door), D40 (passenger door) terminals 1 and 2.

1 - 2 : Continuity should exist.

OK or NG

OK >> GO TO 3.
NG >> Replace outside antenna.



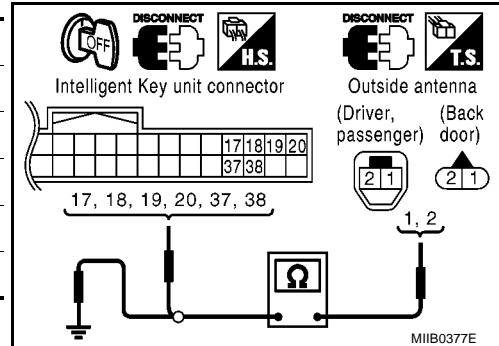
INTELLIGENT KEY SYSTEM

3. OUTSIDE ANTENNA CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit connector.
2. Check continuity between each outside antenna connector D11 (driver door), B39 (back door), D40 (passenger door) terminals 1 and 2 and Intelligent Key unit connector M51 terminals 17, 18, 19, 20, 37, and 38.

Back door	1 (LG) - 17 (LG): Continuity should exist.
	2 (OR) - 18 (OR): Continuity should exist.
Driver door	1 (R) - 19 (R): Continuity should exist.
	2 (W) - 20 (W): Continuity should exist.
Passenger door	1 (BR) - 37 (BR): Continuity should exist.
	2 (Y) - 38 (Y): Continuity should exist.

3. Check continuity between each door antenna connector terminals 1 and 2 and ground.



- 1 - Ground** : Continuity should not exist.
2 - Ground : Continuity should not exist.

OK or NG

- OK >> Replace Intelligent Key unit.
 NG >> Replace harness between door antenna and Intelligent Key unit.

Check Inside Key Antenna

EIS004N3

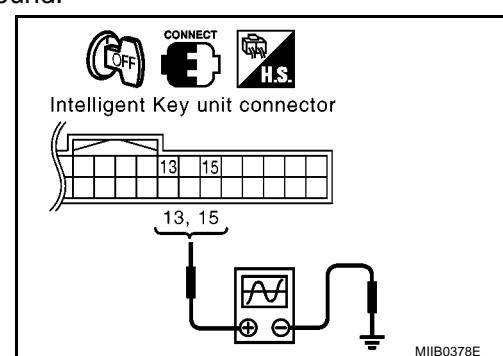
1. INSIDE KEY ANTENNA POWER SUPPLY CIRCUIT INSPECTION

Operate ignition knob and use an oscilloscope to check voltage waveform between Intelligent Key unit connector M51 terminals 13 (luggage room), 15 (center console) and ground.

Press ignition knob.	
luggage room: 13 (R) - Ground	
Center console: 15 (G) - Ground	

OK or NG

- OK >> Inside key antenna circuit is OK.
 NG >> GO TO 2.



INTELLIGENT KEY SYSTEM

2. INSIDE KEY ANTENNA OPERATION INSPECTION

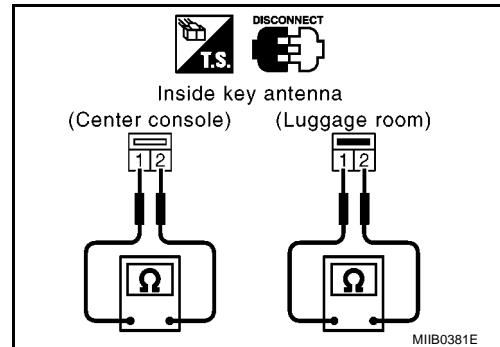
1. Disconnect inside key antenna connector.
2. Check continuity between inside key antenna connector B25 (center console), B29 (luggage room) terminals 1 and 2.

1 - 2 : Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Replace malfunctioning inside key antenna.



3. INSIDE KEY ANTENNA INSPECTION

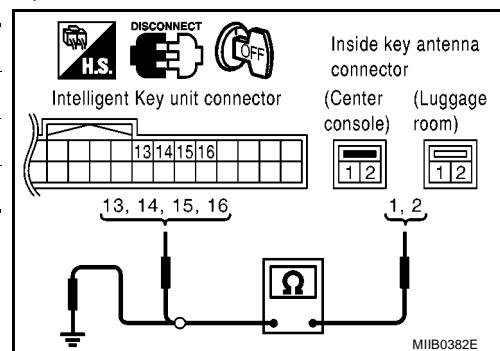
1. Disconnect Intelligent Key unit connector.
2. Check continuity between inside key antenna connector B25 (center console), B29 (luggage room) terminals 1 and 2 and Intelligent Key unit connector terminals 13, 14, 15, and 16.

Inside key antenna (luggage room)	1 (R) - 13 (R): Continuity should exist. 2 (BR) - 14 (BR): Continuity should exist.
Inside key antenna (center console)	1 (G) - 15 (G): Continuity should exist. 2 (R) - 16 (R): Continuity should exist.

3. Check continuity between inside key antenna connector B25 (center console), B29 (luggage room) terminals 1 and 2 and ground.

1 (G or R) - Ground : Continuity should not exist.

2 (R or BR) - Ground : Continuity should not exist.



OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair or replace harness between inside key antenna and Intelligent Key unit.

Check Steering Lock Unit

EIS004N4

1. STEERING LOCK UNIT POWER SUPPLY INSPECTION

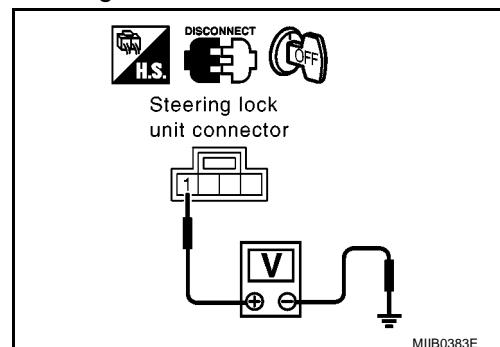
1. Turn ignition knob LOCK position.
2. Disconnect steering lock unit connector.
3. Check voltage between steering lock unit connector M31 terminal 1 and ground.

1 (BR) - Ground : Approx. 12V

OK or NG

OK >> GO TO 2.

NG >> Repair or replace steering lock unit power supply circuit.



INTELLIGENT KEY SYSTEM

2. STEERING LOCK UNIT GROUND CIRCUIT INSPECTION

Check continuity between steering lock unit connector M31 terminal 4 and ground.

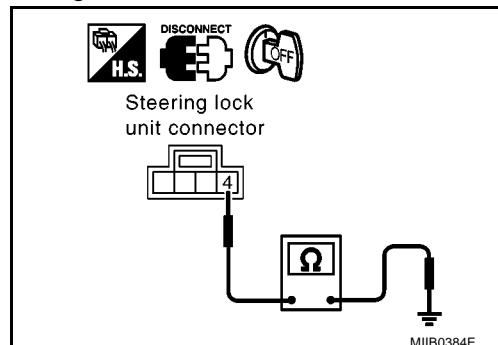
4 (R) - Ground

: Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> GO TO 4.

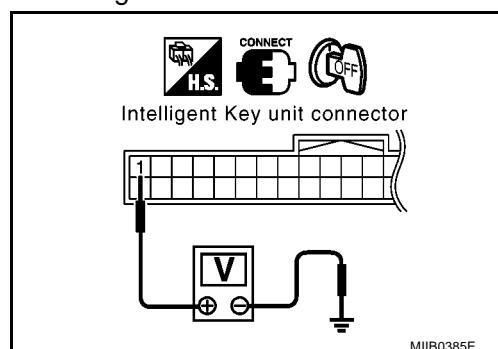


3. STEERING LOCK COMMUNICATION CIRCUIT INSPECTION

1. Connect steering lock unit connector.
2. Check voltage between Intelligent Key unit connector M51 terminal 1 and ground.

1 (R) - Ground

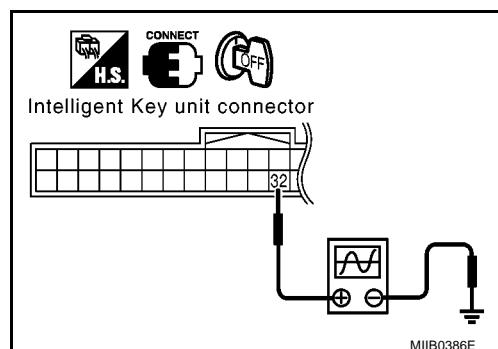
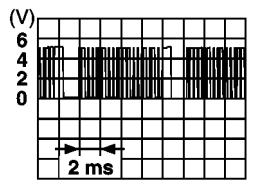
: Approx. 5V



3. Immediately after operating (pushing) ignition knob, use an oscilloscope to check voltage waveform between Intelligent Key unit connector M51 terminal 32 and ground.

Immediately after ignition knob operation (pushing).

32 (Y) - Ground



OK or NG

OK >> GO TO 4.

NG >> Replace Intelligent Key unit.

INTELLIGENT KEY SYSTEM

4. STEERING LOCK UNIT COMMUNICATION CIRCUIT INSPECTION

1. Disconnect Intelligent Key unit and steering lock unit connectors.
2. Check continuity between Intelligent Key unit connector M51 terminals 1, 31, and 32 and steering lock unit connector M31 terminals 2, 3, and 4.

1 (R) - 2 (R) : Continuity should exist.

31 (R) - 4 (R) : Continuity should exist.

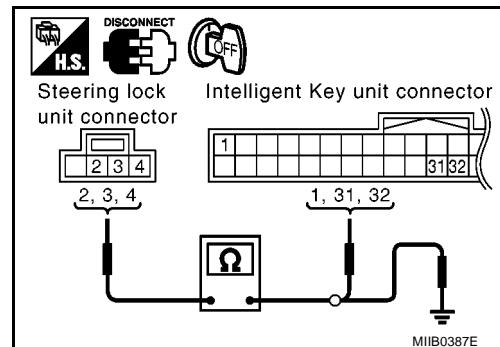
32 (Y) - 3 (Y) : Continuity should exist.

3. Check continuity between steering lock unit connector M31 terminals 2, 3, 4 and ground.

2 (R) - Ground : Continuity should not exist.

3 (Y) - Ground : Continuity should not exist.

4 (R) - Ground : Continuity should not exist.



OK >> Replace steering lock unit.

● After replacing steering lock unit, Refer to [BL-184, "STEERING LOCK UNIT REGISTRATION"](#).

NG >> Repair or replace harness between steering lock unit and Intelligent Key unit.

Check Stop Lamp Switch

EIS0055H

1. STOP LAMP SWITCH POWER SUPPLY CIRCUIT INSPECTION

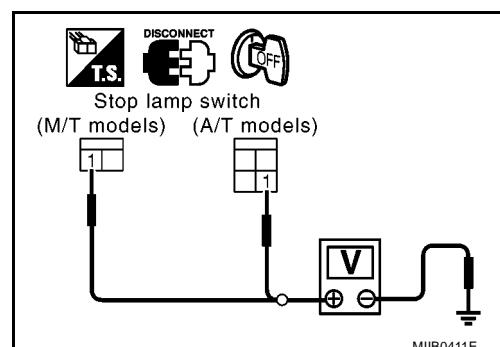
1. Check stop lamp switch connector.
2. Check voltage between stop lamp switch connector E108 (LHD models with M/T), E109 (LHD models with A/T), M202 (RHD models with M/T), M203 (RHD models with A/T) terminal 1 and ground.

1 and ground : Approx. 12V

OK or NG

OK >> GO TO 2.

NG >> Repair or replace harness between Intelligent Key unit and stop lamp switch.



Check continuity between stop lamp switch connector E108 (LHD models with M/T), E109 (LHD models with A/T), M202 (RHD models with M/T), M203 (RHD models with A/T) terminal 1 and 2.

1 - 2

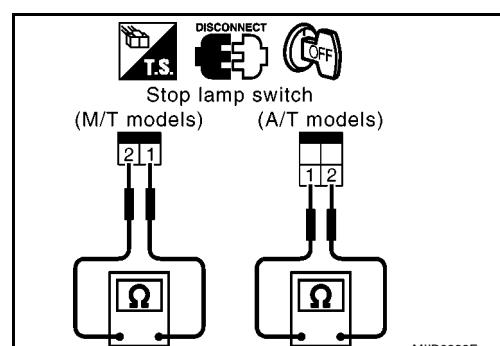
Brake pedal depressed : Continuity should exist.

Brake pedal not depressed : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Replace stop lamp switch.



INTELLIGENT KEY SYSTEM

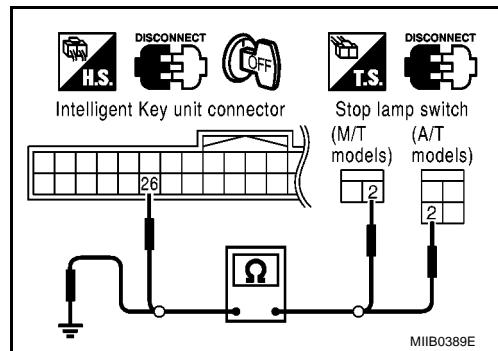
3. STOP LAMP SWITCH GROUND CIRCUIT INSPECTION

1. Check continuity between stop lamp switch connector E108 (LHD models with M/T), E109 (LHD models with A/T), M202 (RHD models with M/T), M203 (RHD models with A/T) terminal 2 and Intelligent Key unit connector M51 terminal 26.

2 (Y) - 26 (PU) : Continuity should exist.

2. Check continuity between stop lamp switch connector E108 (LHD models with M/T), E109 (LHD models with A/T), M202 (RHD models with M/T), M203 (RHD models with A/T) terminal 2 and ground.

2 (Y) - Ground : Continuity should not exist.



OK or NG

OK >> Stop lamp switch is OK.

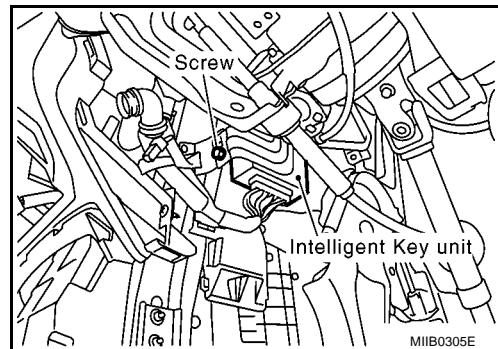
NG >> Repair or replace harness.

Removal and Installation of Intelligent key unit

EIS0055J

REMOVAL

1. Remove the instrument lower driver panel. Refer to [IP-5, "Removal and Installation"](#).
2. Disconnect the Intelligent Key unit connector, remove the screw and Intelligent Key unit.



INSTALLATION

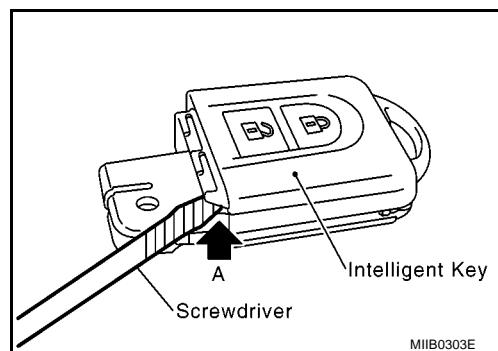
Install in the reverse order of removal.

Intelligent Key Inspection

EIS004N5

INTELLIGENT KEY DISASSEMBLY AND ASSEMBLY

1. Remove Intelligent Key cover.
2. Insert a thin screwdriver wrapped with tape into Area A and then separate lower and upper cases while twisting screwdriver.



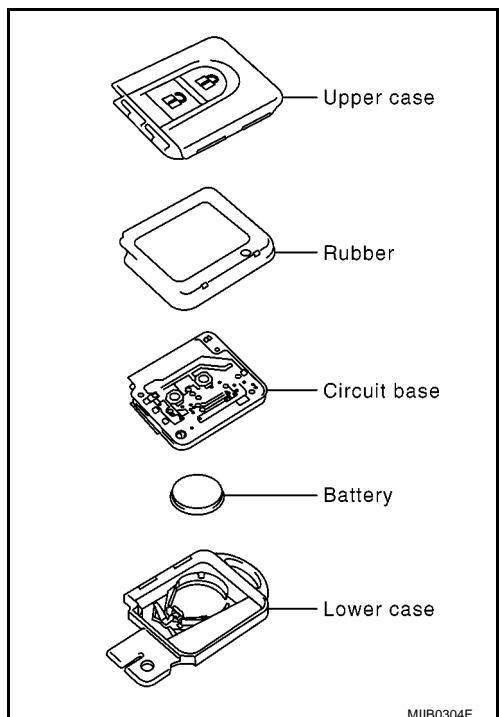
INTELLIGENT KEY SYSTEM

3. When replacing the circuit board or rubber
 - Remove the circuit board assembly from the upper case.
(Substrate assembly: circuit board + rubber)
 - Gently press the rubber and remove the circuit board.

CAUTION:
Be careful not to touch the printed circuits directly.
 4. When replacing the battery
 - Remove the battery from the lower case and replace it.

Battery replacement : Coin-shaped lithium battery 3V (CR2032)

CAUTION:
When replacing battery, be sure to keep dirt, grease, and other foreign materials off the electrode contact area.
 5. After replacement, assemble the upper and lower cases by engaging the hooks on their circumference while being careful not to pinch the rubber, etc.
- CAUTION:**
After replacing the battery, check to make sure all Intelligent Key functions work normally.

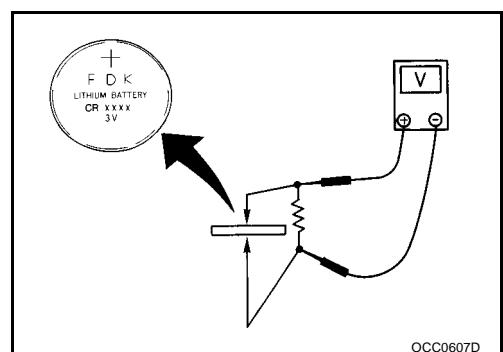


MIIIB0304E

REMOTE CONTROLLER BATTERY INSPECTION

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA.

Standard : Approx. 2.5V - 3.0V



OCC0607D

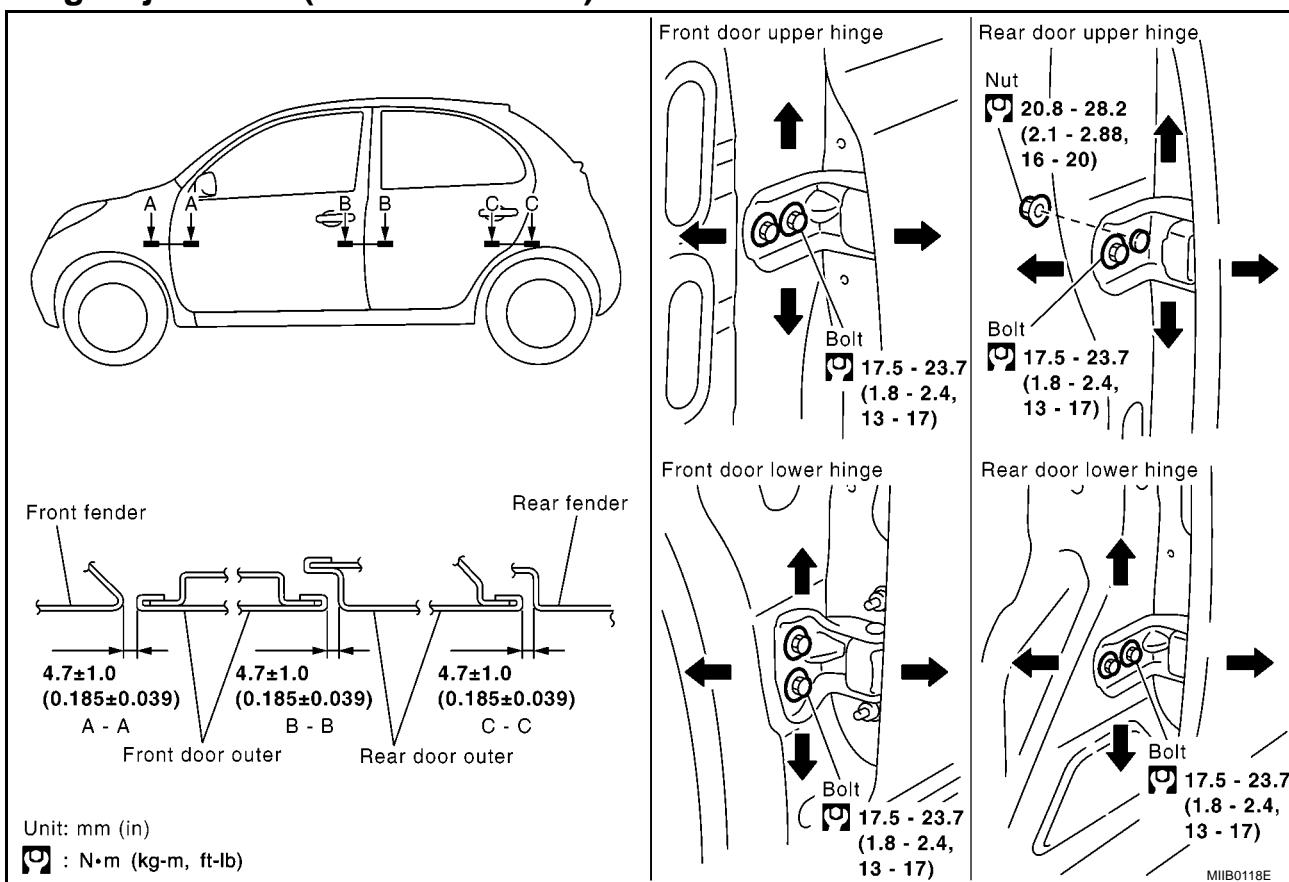
DOOR

DOOR

PFP:80100

Fitting Adjustment (5-Door Vehicles)

EIS004N6



FRONT DOOR

Longitudinal Gap and Front End Height Difference Adjustment

1. Remove front fender. Refer to [BL-15, "Removal and Installation"](#).
2. Loosen the hinge bolts on body, then lift the rear end of front door to adjust the clearance and surface difference properly.

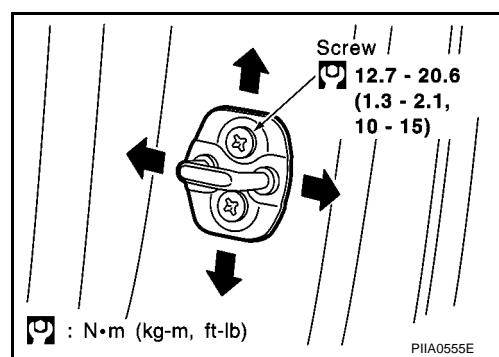
REAR DOOR

Longitudinal Gap and Front End Height Difference Adjustment

1. Remove center pillar upper garnish and center pillar lower garnish. Refer to [EI-25, "Removal and Installation \(5-Door\)"](#).
2. Working from inside and outside vehicle, loosen bolts and nuts, and then open rear door, and adjust while raising rear door by rear edge.

STRIKER ADJUSTMENT

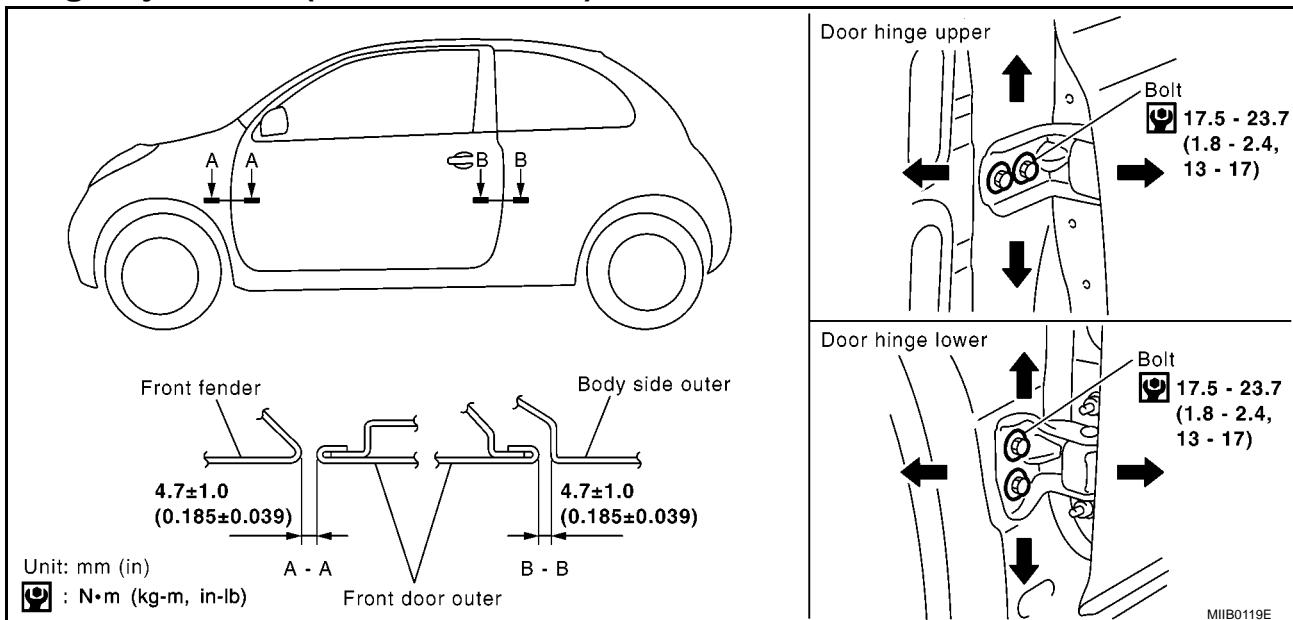
Adjust the striker so that it becomes parallel with the lock inserting direction.



DOOR

Fitting Adjustment (3-Door Vehicles)

EIS004N7



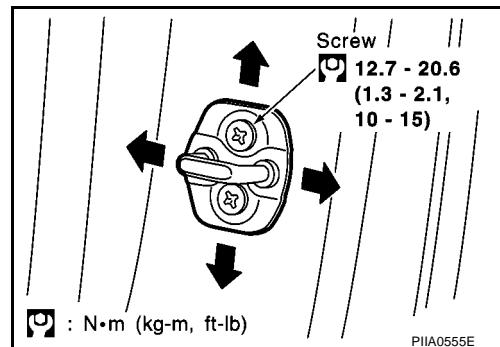
FRONT DOOR

Longitudinal Gap and Front End Height Difference Adjustment

1. Remove front fender. Refer to [BL-15, "Removal and Installation"](#).
2. Loosen the hinge bolts on body, then lift the rear end of front door to adjust the clearance and surface difference properly.

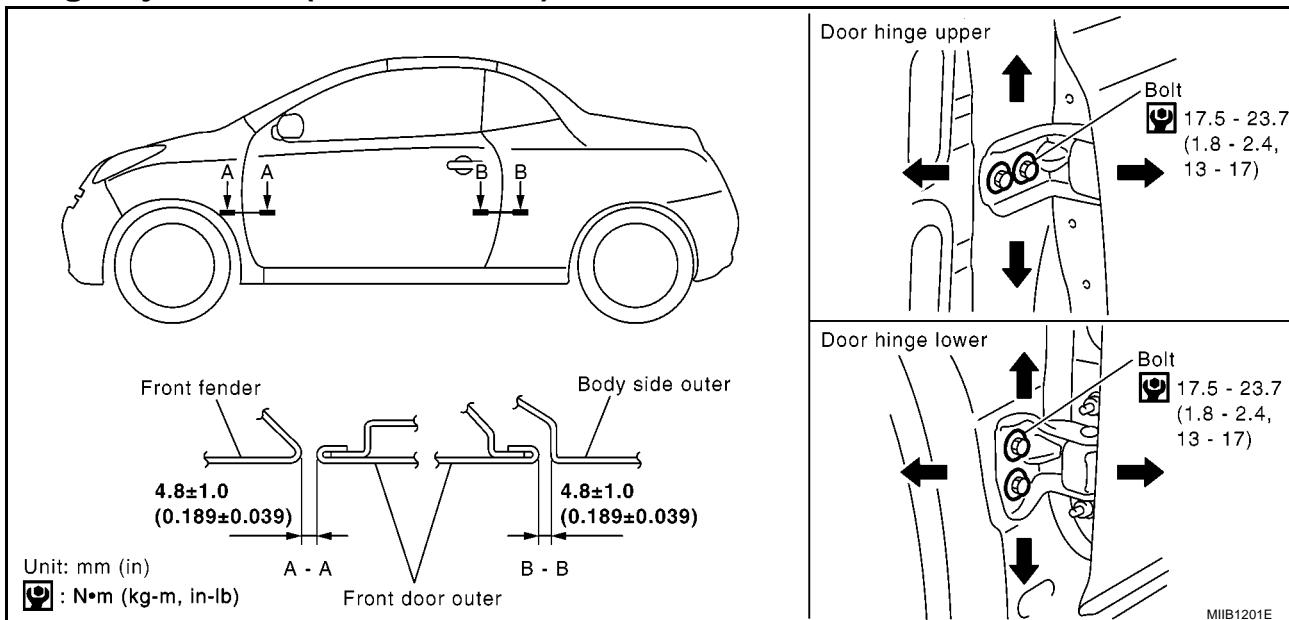
STRIKER ADJUSTMENT

Adjust the striker so that it becomes parallel with the lock inserting direction.



Fitting Adjustment (C+C Vehicles)

EIS00E67



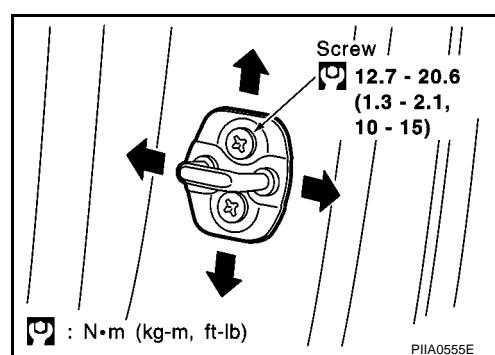
FRONT DOOR

Longitudinal Gap and Front End Height Difference Adjustment

1. Remove front fender. Refer to [BL-15, "Removal and Installation"](#).
2. Loosen the hinge bolts on body, then lift the rear end of front door to adjust the clearance and surface difference properly.

STRIKER ADJUSTMENT

Adjust the striker so that it becomes parallel with the lock inserting direction.



Removal and Installation

EIS004N8

CAUTION:

- During removal and installation of the door assembly, use a jack to support the door. Place a shop cloth or other suitable material onto the jack plate to protect the door and body from damage.
- After removal and installation of the door assembly, always adjust the fit.
- Check hinge rotating part for poor lubrication. If necessary, apply "Body Grease".

FRONT DOOR

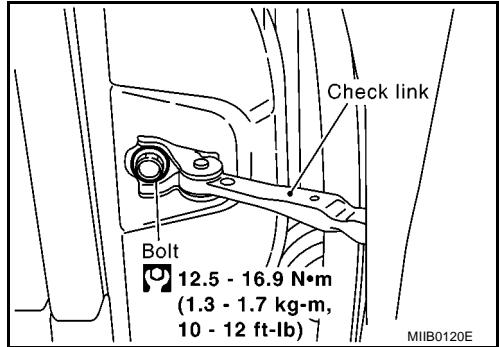
1. Remove front door finisher. Refer to [EI-20, "Removal and Installation"](#).
2. Remove door window. Refer to [GW-74, "Removal and Installation"](#).
3. Remove connectors and harness clamps in front door, and then pull out harness from front door.

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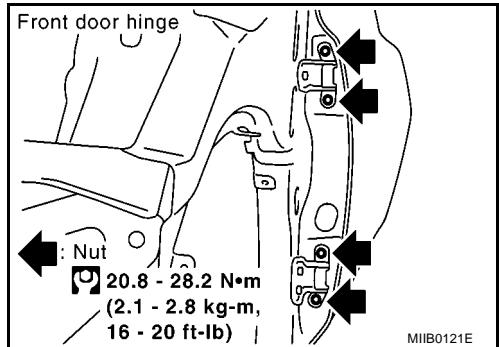
BL

DOOR

4. Remove check link bolts.

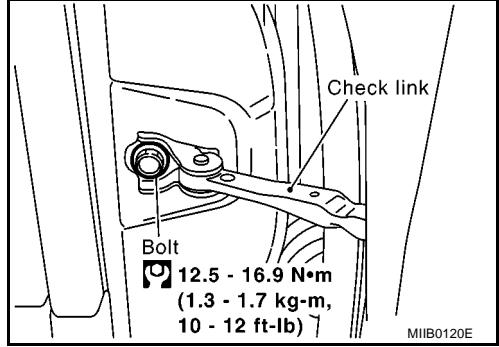


5. Remove hinge nuts on the door and then the door assembly.
Install in the reverse order of removal.

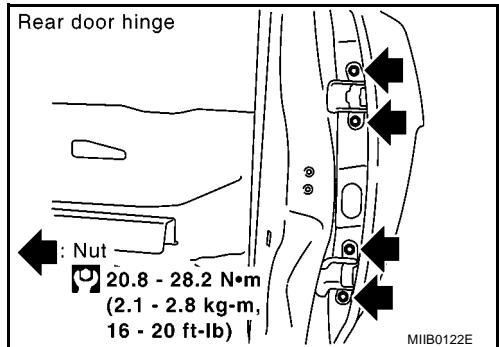


REAR DOOR

1. Remove rear door finisher. Refer to [EI-20, "Removal and Installation"](#).
2. Remove door window. Refer to [GW-77, "Removal and Installation"](#).
3. Remove connectors and harness clamps from rear door and then pull out harness from rear door.
4. Remove check link bolts.



5. Remove hinge nuts on the door and then the door assembly.
Install in the reverse order of removal.



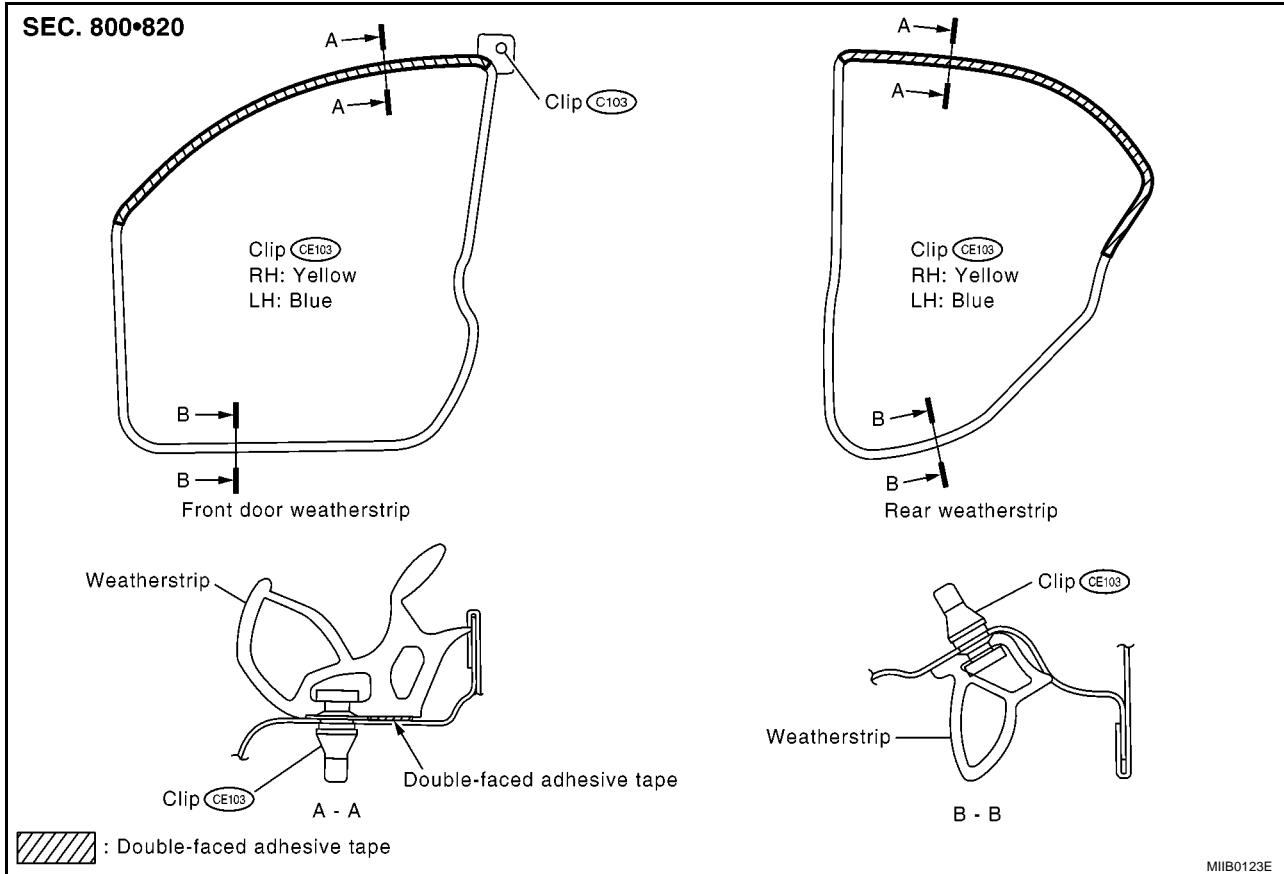
DOOR

Door Weatherstrip 5 DOORS

EIS004N9

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BL



MIIB0123E

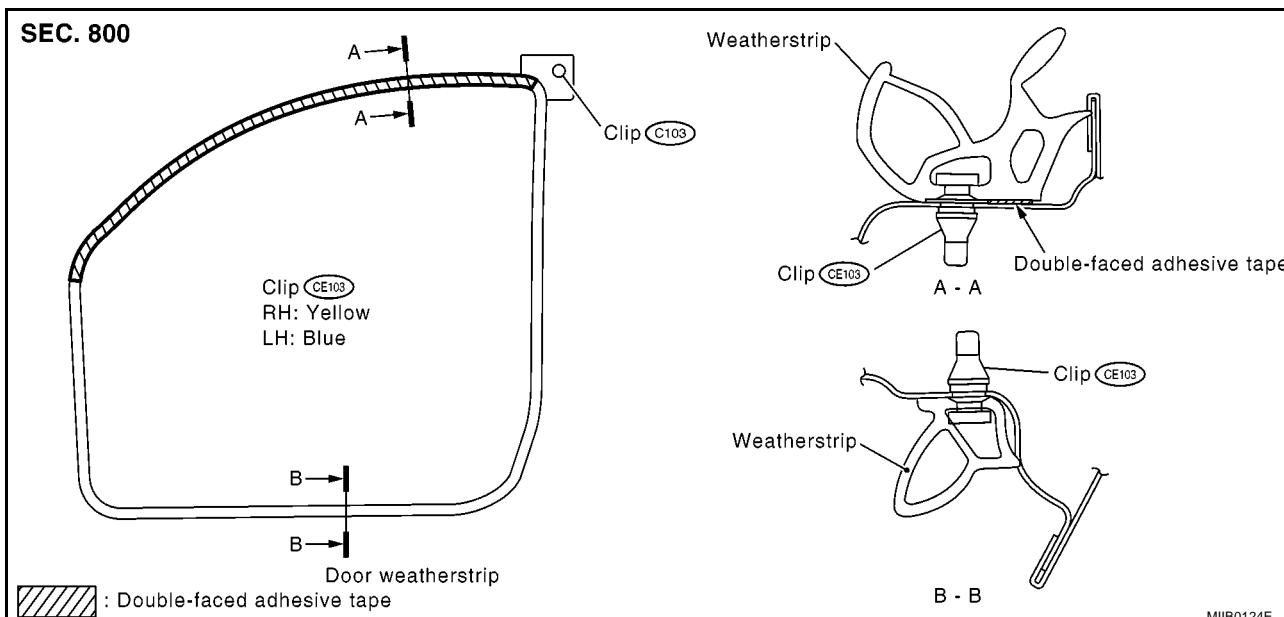
Double-sided tape (0.8 mm thick, 7 mm wide)

: Product equivalent to Sumitomo 3M No. 5561

CAUTION:

During removal, if peeling off the double-sided tape is difficult, apply remover (product equivalent to Sumitomo 3M Cleaner 30) and then remove the double-sided tape. When using remover, keep it way from open flame and work in a sufficiently ventilated area.

3 DOORS



MIIB0124E

Double-sided tape (0.8 mm thick, 7 mm wide)

: Product equivalent to Sumitomo 3M No. 5561

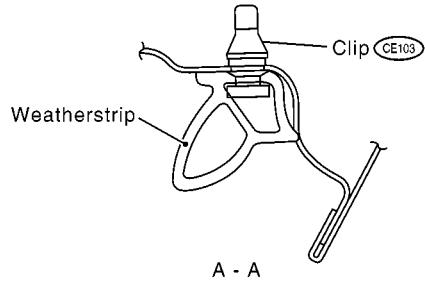
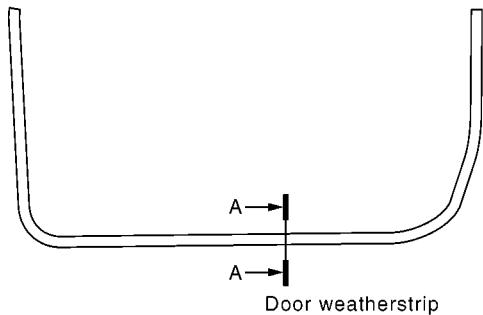
DOOR

CAUTION:

During removal, if peeling off the double-sided tape is difficult, apply remover (product equivalent to Sumitomo 3M Cleaner 30) and then remove the double-sided tape. When using remover, keep it way from open flame and work in a sufficiently ventilated area.

C+C

SEC. 800



MIIIB1215E

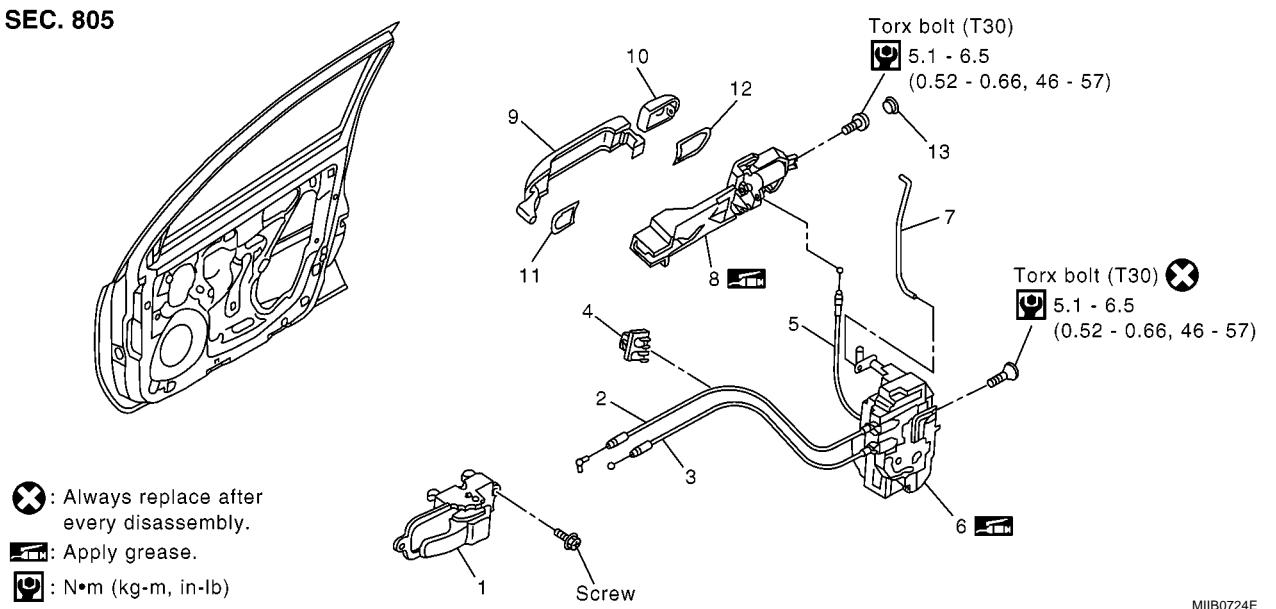
FRONT DOOR LOCK

FRONT DOOR LOCK Component Parts Location

PFP:80502

EIS004NA

SEC. 805



1. Inside handle
2. Lock knob cable
3. Inside handle cable
4. Holder
5. Outside handle cable
6. Door lock assembly
7. Key cylinder connecting rod
8. Outside handle bracket
9. Outside handle
10. *Door key cylinder assembly
11. Front gasket
12. Rear gasket
13. Grommet

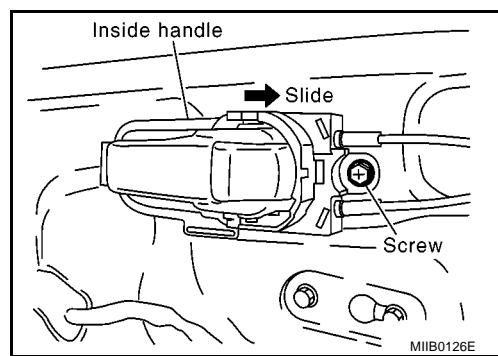
*: Outside handle escutcheon for vehicles with passenger door key cylinders.

Removal and Installation

REMOVAL

EIS004NB

1. Remove front door finisher. Refer to [EI-20, "Removal and Installation"](#) .
2. Fully close front door window.
3. Remove front door lower sash (rear). Refer to [GW-74, "Removal and Installation"](#) .
4. Remove inside handle cable and lock knob cable from holder.
5. Remove inside handle screws, slide handle toward rear of vehicle, disengage handle from door panel, and remove inside handle.



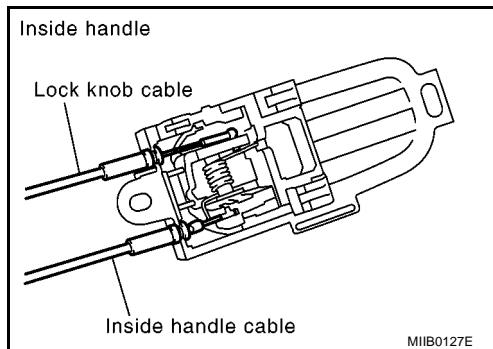
MIIIB0126E

FRONT DOOR LOCK

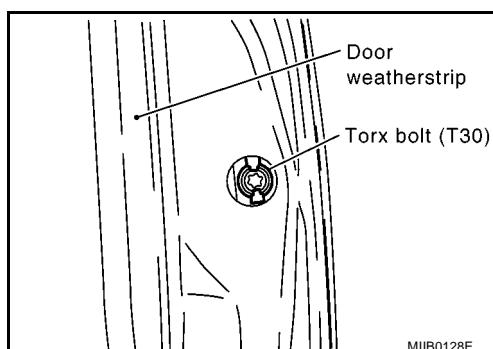
6. Disconnect inside handle cable and lock knob cable from inside handle.

CAUTION:

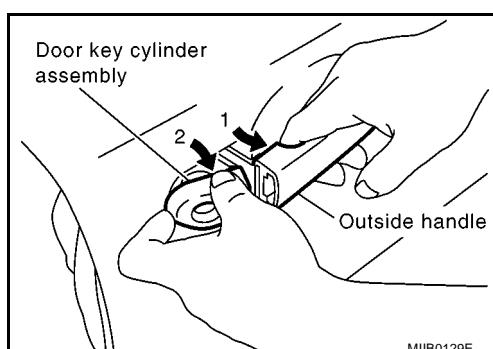
During removal and installation, work so as not to bend the ends of the lock knob cable and inside handle cable.



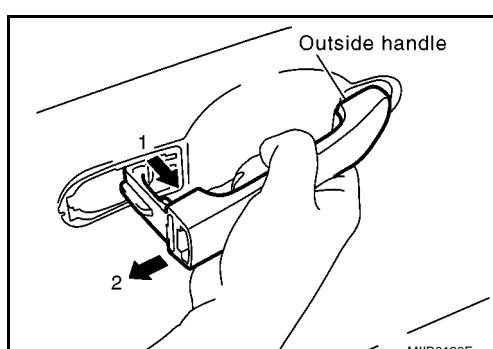
7. Remove door side grommets, and then remove door key cylinder assembly (escutcheon) bolts (Torx T30) from the grommet holes.
 8. Remove key cylinder connecting rod (key cylinder side).: If there is no door key cylinder, GO TO 9.
 9. Disconnect door antenna and door request switch connector and remove harness clamp. (Vehicle with intelligent key systems only)



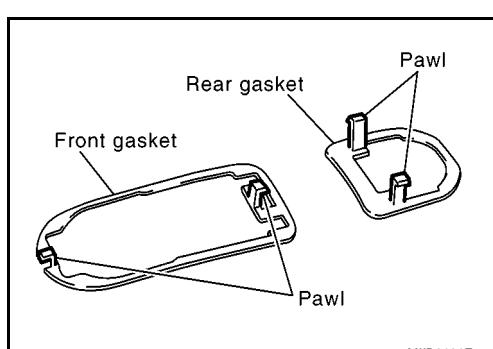
10. Remove door cylinder assembly while pulling outside handle forward.



11. Pull outside door handle forward and then slide it toward vehicle rear to remove.

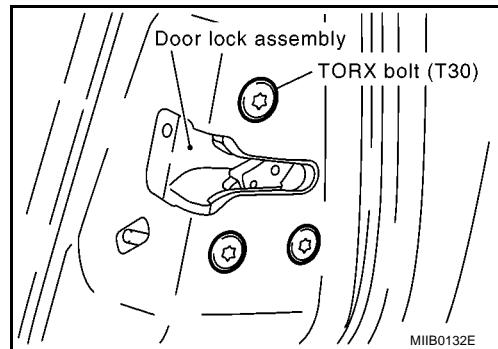


12. Remove front and rear gaskets.



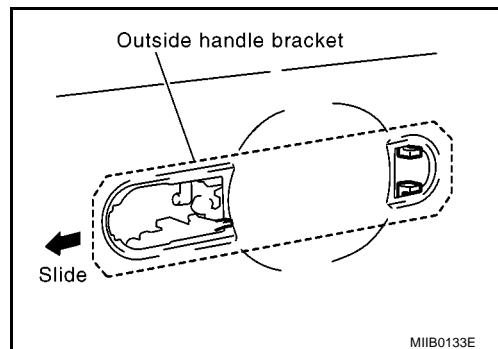
FRONT DOOR LOCK

13. Remove door lock assembly bolts (Torx T30).

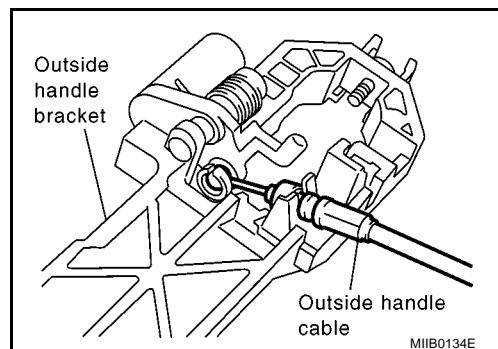


14. Slide outside handle bracket toward rear of vehicle, and then remove outside handle bracket and door lock assembly.

15. Disconnect door lock assembly connector.



16. Disconnect outside handle cable from outside handle bracket.



Install in the reverse order of removal.

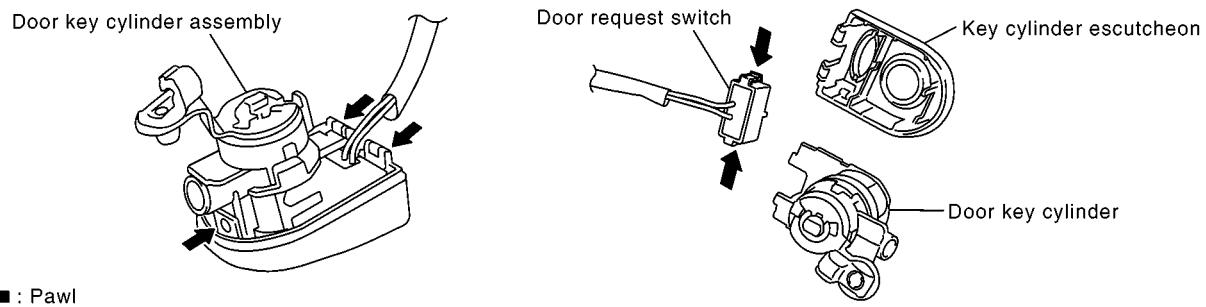
CAUTION:

- Before installing door lock assembly, apply "anti-corrosion wax M-97 super" onto mounting seat on the body.
- Install each rod by rotating the rod holder until it engages with a tactile feel.

FRONT DOOR LOCK

Disassembly and Assembly DOOR KEY CYLINDER ASSEMBLY

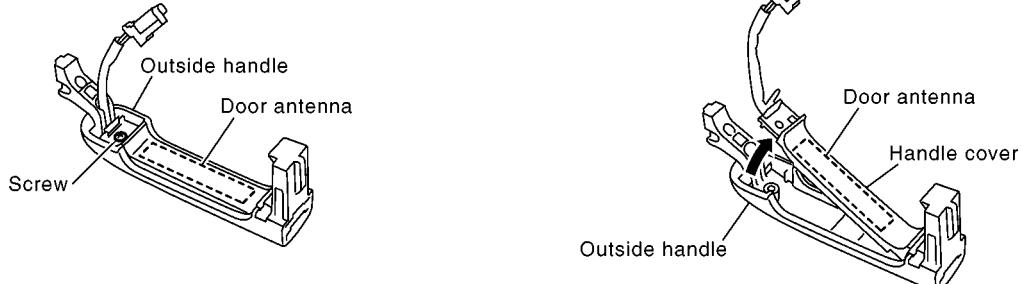
EIS004NC



MIIIB0135E

1. Remove key cylinder escutcheon engagement (3 locations), and then remove door key cylinder.
2. Remove hook (2 locations) engagements, and then remove door request switch from key cylinder escutcheon. (Vehicles with intelligent key systems only)

OUTSIDE HANDLE



MIIIB0136E

1. Remove handle cover screws.
2. Remove handle cover, and then remove door antenna. (Vehicles with intelligent key systems only)

REAR DOOR LOCK

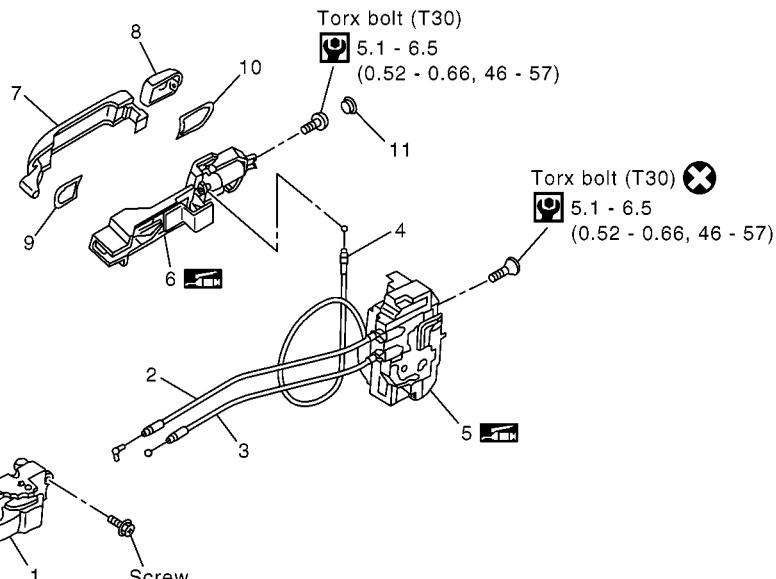
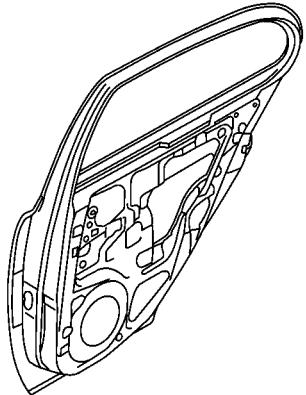
REAR DOOR LOCK

PFP:82502

Component Parts Location

EIS004ND

SEC. 825



: Always replace after every disassembly.

: Apply grease.

: N·m (kg-m, in-lb)

MIB0725E

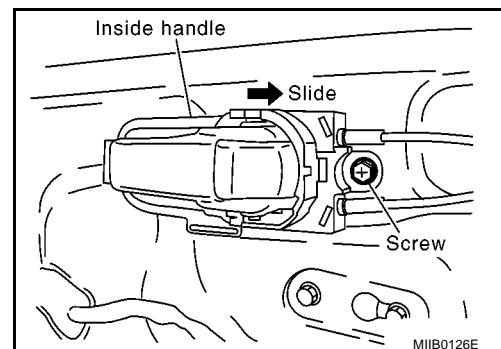
1. Inside handle
2. Lock knob cable
3. Inside handle cable
4. Outside handle cable
5. Door lock assembly
6. Outside handle bracket
7. Outside handle
8. Outside handle escutcheon
9. Front gasket
10. Rear gasket
11. Grommet

Removal and Installation

EIS004NE

REMOVAL

1. Remove rear door finisher. Refer to [EI-20, "Removal and Installation"](#).
2. Remove partition sash. Refer to [GW-77, "Removal and Installation"](#).
3. Support door glass while lifting it up to the door window completely closed position.
4. Remove inside handle bolts, slide handle toward rear of vehicle, remove engagement with door panel, and remove inside handle.

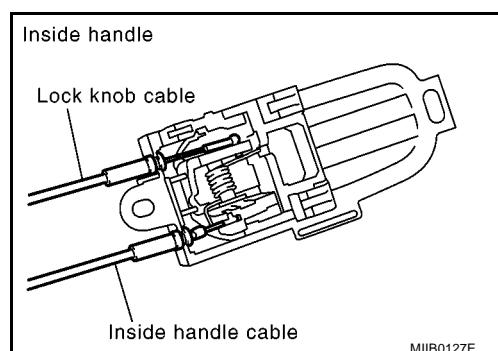


MIB0126E

5. Disconnect inside handle cable and lock knob cable from inside handle.

CAUTION:

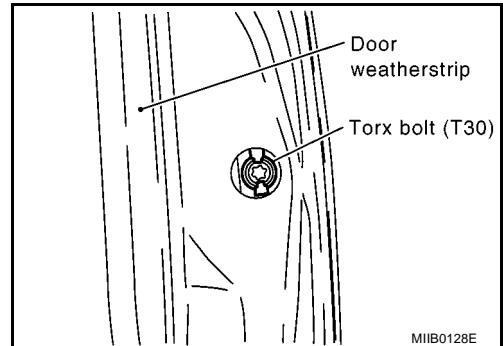
During removal and installation, work so as not to bend the ends of the lock knob cable and inside handle cable.



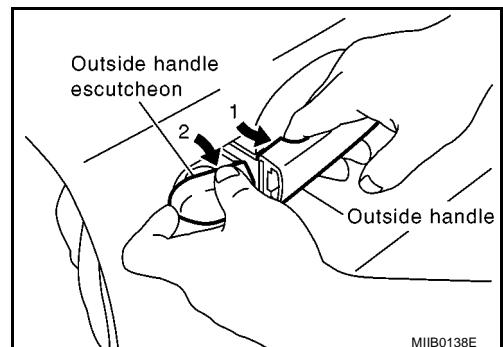
MIB0127E

REAR DOOR LOCK

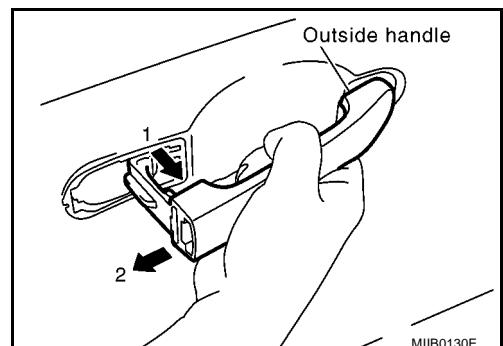
6. Remove door side grommets, and then remove outside handle escutcheon screws (Torx T30) from grommet holes.



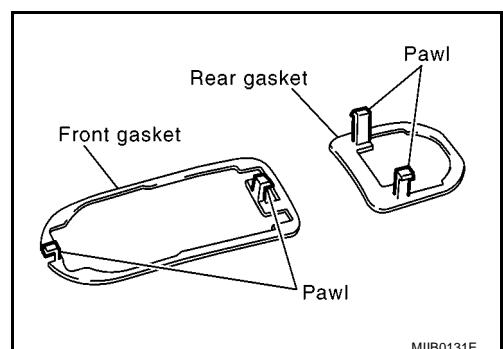
7. Pull outside handle forward while removing outside handle escutcheon.



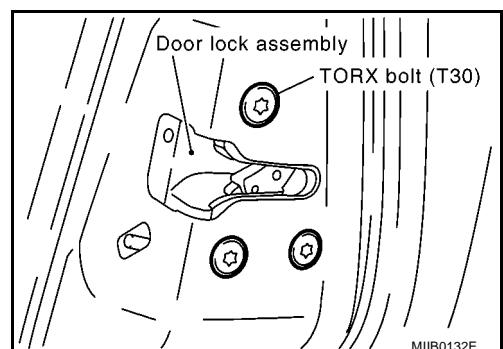
8. Pull outside door handle forward and then slide it toward vehicle rear to remove.



9. Remove front and rear gaskets.

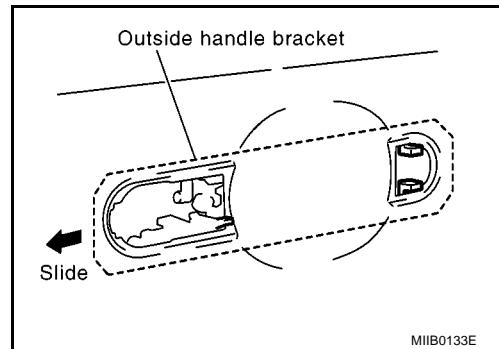


10. Remove door lock assembly screws (Torx T30).

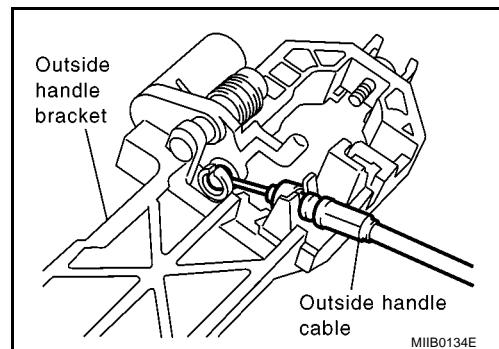


REAR DOOR LOCK

11. Slide outside handle bracket toward rear of vehicle, and then remove outside handle bracket and door lock assembly.
12. Disconnect door lock assembly connector.



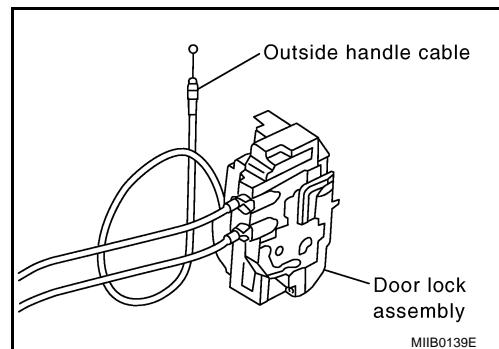
13. Disconnect outside handle cable from outside handle bracket.



Install in the reverse order of removal.

CAUTION:

- Before installing door lock assembly, apply "anti-corrosion wax M-97 super" onto mounting seat on the body.
- When installing door lock assembly, be careful when rotating the outside handle cable as shown in the figure.
- Place the outside handle bracket cable on the outside of door lock assembly before installing.



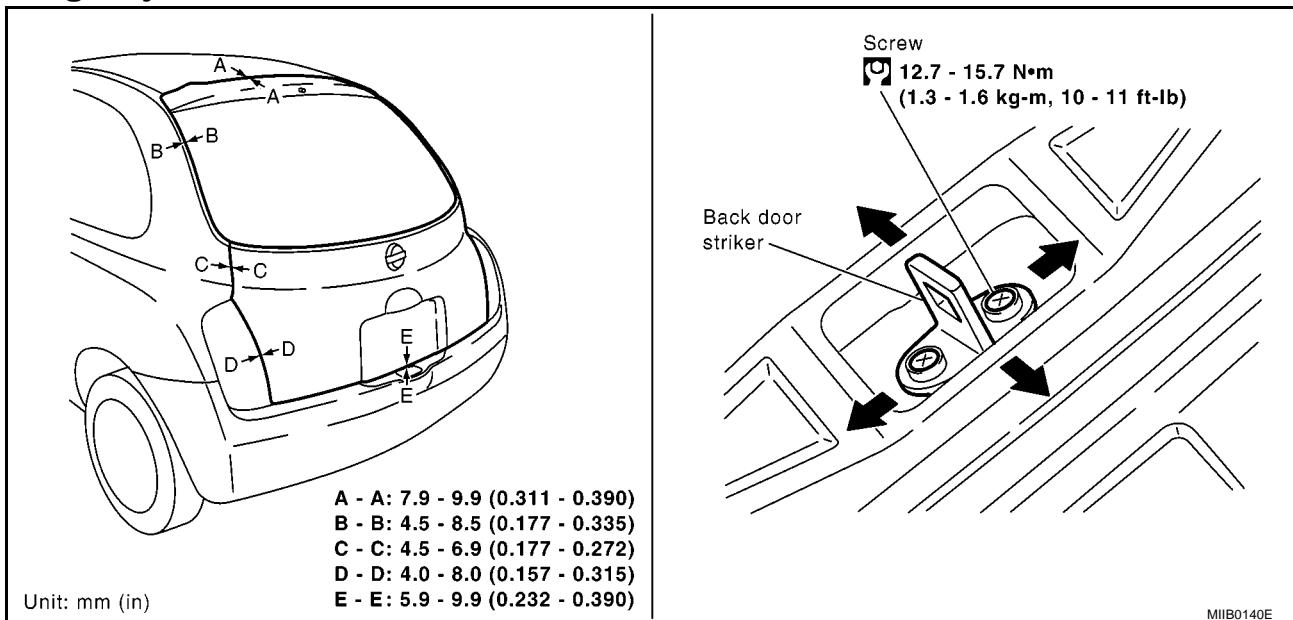
BACK DOOR

BACK DOOR

PFP:90100

Fitting Adjustment

EIS004NF



VERTICAL/LATERAL CLEARANCE (SURFACE DIFFERENCE) ADJUSTMENT

1. Remove luggage rear plate. Refer to [EI-40, "Removal and Installation"](#).
2. Loosen back door striker screws.
3. Use a rubber hammer, etc., to strike back door striker to make the gap on the right and left and with the rear bumper even, and then tighten striker screws to specified torque.

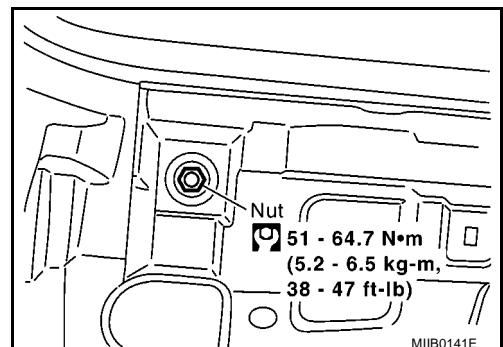
CAUTION:

Adjust gap between back door and other areas to attain the right and left dimensional difference shown below.

Back door glass (B) - Body side outer (B)	: 2.0 mm or less
Back door outer (C) - Body side outer (C)	: 1.5 mm or less
Back door outer (D) - Rear combination lamp (D)	: 2.0 mm or less

4. If following the steps above does not result in fine adjustment, remove headliner and loosen the hinge nuts on vehicle for further adjustment.

For removing headliner, refer to [EI-33, "Removal and Installation"](#).



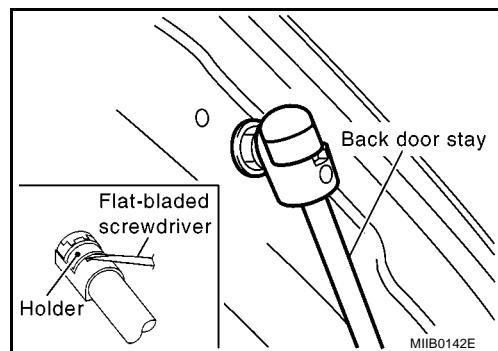
Back Door Assembly REMOVAL

EIS004NG

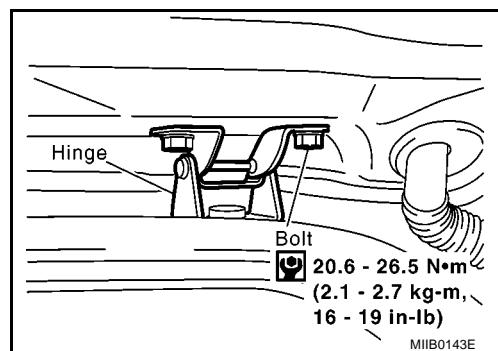
1. Remove back door finisher. Refer to [EI-22, "Removal and Installation"](#).
2. Disconnect connectors in back door and unclamp harness. Pull out harness from back door.

BACK DOOR

3. After supporting the back door lock to keep it from falling, use a screwdriver, etc., to remove the back door stay (glass stay) door side hooks, and then pull out back door stay from stud pole.

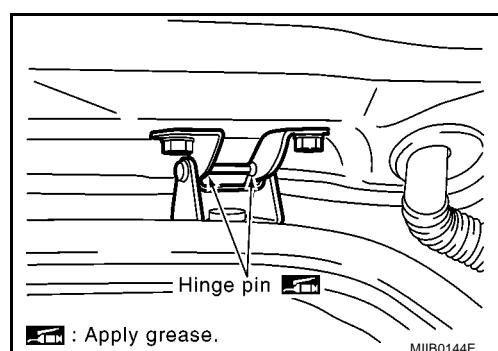


4. Remove back door hinge bolts, and then remove back door assembly.



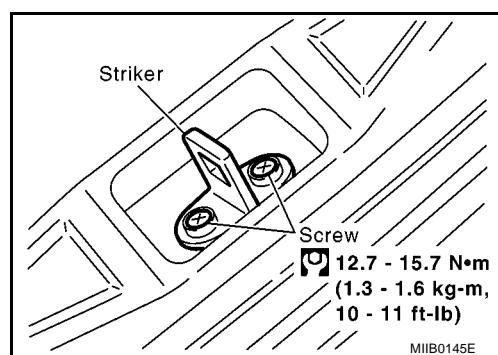
INSPECTION

1. Check hinges for the following:
 - Unusual noise or door closing and opening effort
 - Component wear or damage
2. Apply body grease to the rotating part of the hinge.



Back Door Striker REMOVAL

1. Remove luggage rear plate. Refer to [EI-40, "Removal and Installation"](#).
2. Remove screws and back door striker.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

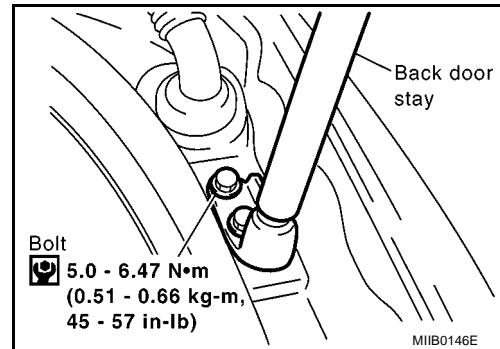
- After finishing work, confirm proper operation.
- After finishing work, adjust fitting. Refer to [BL-246, "Fitting Adjustment"](#).

BACK DOOR

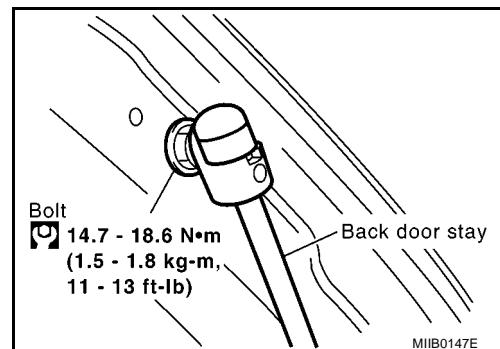
Back Door Stay Assembly REMOVAL

EIS004NI

1. Support back door lock to prevent it from falling.
2. Remove back door stay assembly (gas stay) vehicle side bracket bolts.



3. Remove back door stud balls, and then remove back door stay assembly from back door.



INSTALLATION

Install in the reverse order of removal.

CAUTION:

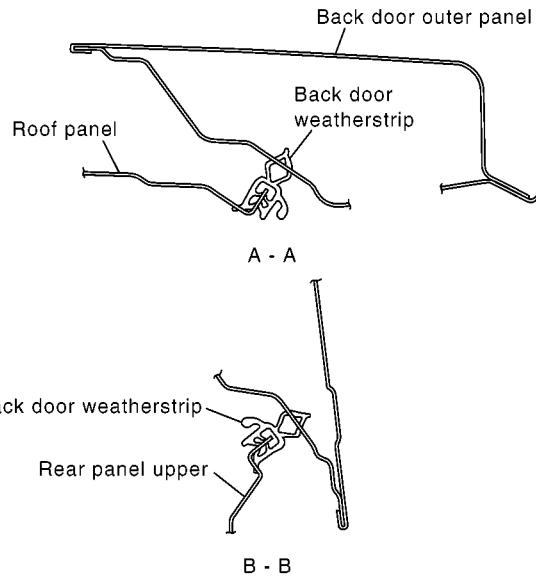
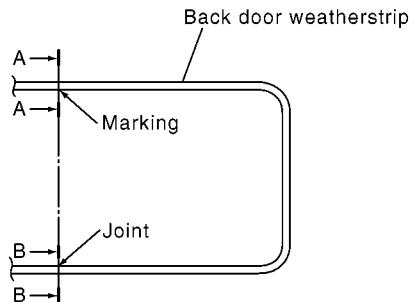
- After finishing work, confirm proper operation.

BACK DOOR

Removal and Installation of Back Door Weatherstrip

EIS004NJ

SEC. 900



MIIIB0148E

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REMOVAL

Pull up and remove engagement with body from weatherstrip joint.

CAUTION:

After removal, do not pull strongly on the weatherstrip.

INSTALLATION

Install in the reverse order of removal.

- Working from the upper section, align weatherstrip mark with vehicle center position mark and install weatherstrip onto the back door.
- For the lower section, align the weatherstrip seam with center of the striker.
- After finishing work, pull weatherstrip lightly to check for looseness.
- Make sure the weatherstrip is fit tightly at each corner and luggage rear plate.

BACK DOOR LOCK

BACK DOOR LOCK

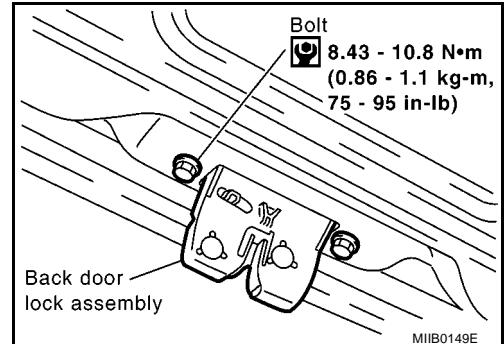
PFP:90504

Removal and Installation BACK DOOR LOCK ASSEMBLY

EIS004NK

Removal

1. Remove back door finisher. Refer to [EI-22, "Removal and Installation"](#) .
2. Disconnect back door lock assembly connector.
3. Remove bolts to remove back door lock assembly from inside back door panel.



Installation

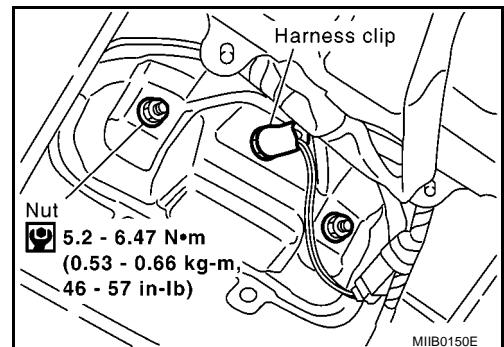
Install in the reverse order of removal.

- If greasing condition in each sliding section on back door assembly is poor, apply "BODY GREASE".
- After finishing work, confirm proper operation.

BACK DOOR HANDLE ASSEMBLY

Removal

1. Remove back door finisher. Refer to [EI-22, "Removal and Installation"](#) .
2. Remove back door request switch (vehicles with intelligent key systems) and back door open switch harness fastening clips and connectors.
3. Remove back door handle assembly nuts, and then remove back door handle assembly.



Installation

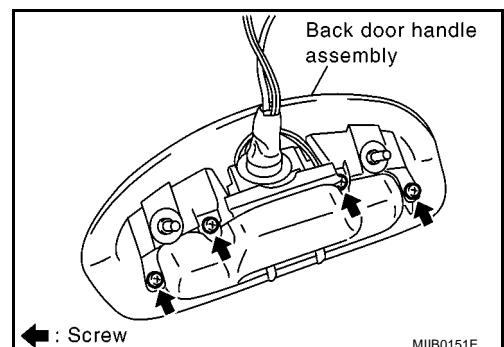
Install in the reverse order of removal.

CAUTION:

After finishing work, confirm proper operation.

Disassembly and Assembly

Remove screws, and then remove back door request switch (vehicles with intelligent key systems) and back door open switch.



TRUNK LID

TRUNK LID

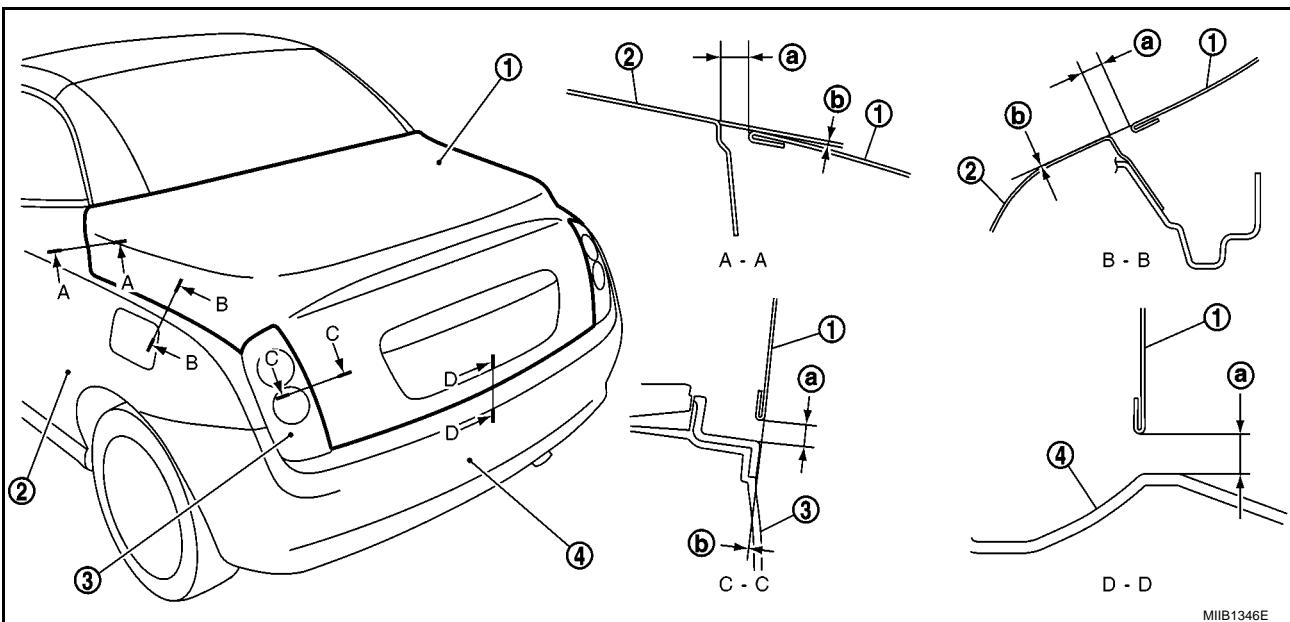
PFP:H4300

Clearance

EIS00E5Z

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MIB1346E

1. Trunk lid assembly

2. Rear fender

3. Rear combination lamp

4. Rear bumper fascia

STANDARD CLEARANCE FOR EACH PART

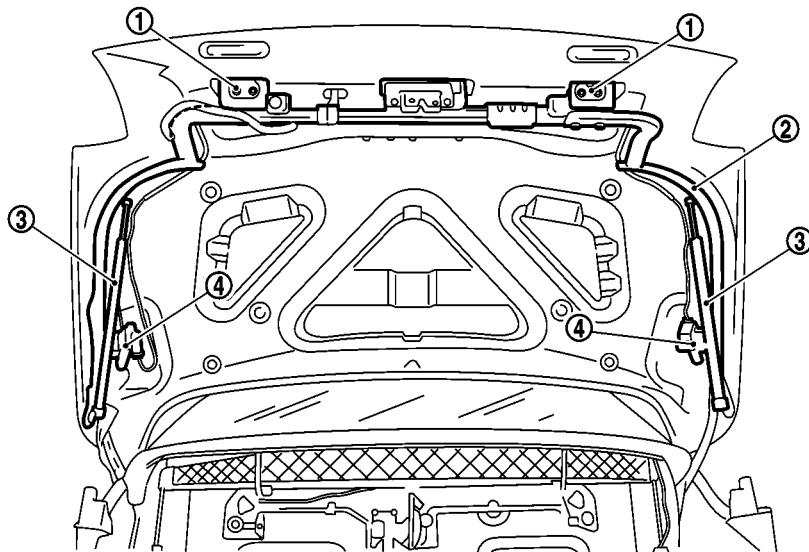
Parts		Standard
A - A	a	4.5 - 7.5 (0.18 - 0.30)
	b	-0.4 - 2.0 (-0.02 - 0.08)
B - B	a	3.5 - 6.5 (0.14 - 0.26)
	b	-1.2 - 1.2 (-0.05 - 0.05)
C - C	a	4.5 - 7.9 (0.18 - 0.31)
	b	-1.2 - 1.8 (0.05 - 0.07)
D - D	a	8.2 - 11.8 (0.32 - 0.46)

* Unit: mm (in)

TRUNK LID

Removal and Installation of Trunk Lid Assembly

EIS00E60



MIIB1268E

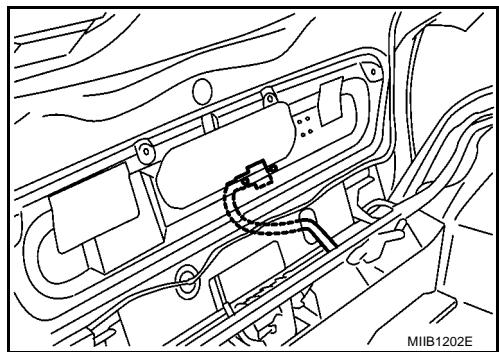
1. Trunk lid assembly
2. Trunk lid hinge
3. Trunk lid cylinder (LH/RH)
4. Trunk lid side latch (LH/RH)

CAUTION:

- After installing, check operation.
- 2 workers are required for the installation of the trunk lid.

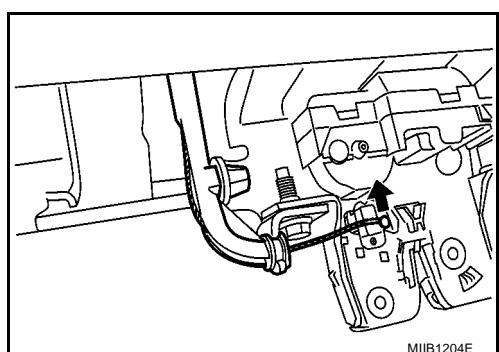
REMOVAL

1. Remove trunk lid trim. Refer to [EI-23, "TRUNK LID TRIM"](#).
2. Disconnect the connectors in the trunk lid, and remove the harness clamps to pull the harness out of the trunk lid.



MIIB1202E

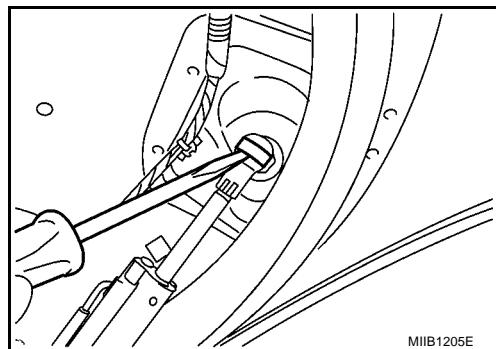
3. Remove the trunk lid lock wire.



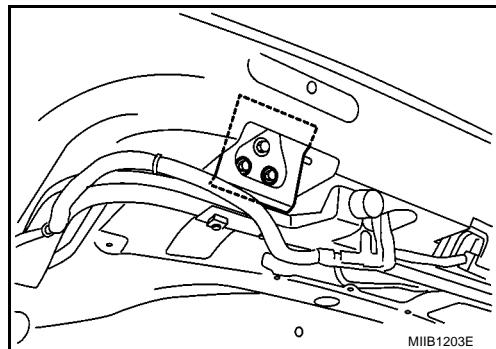
MIIB1204E

TRUNK LID

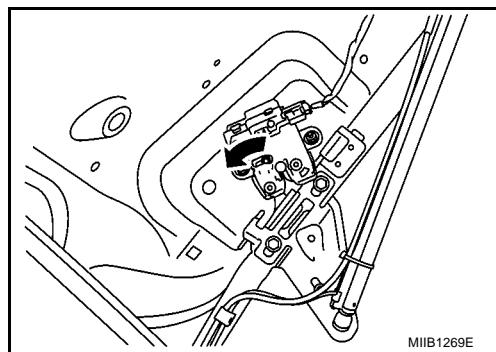
4. Insert flat-bladed screwdriver into the gap and remove upper holder.



5. Remove the mounting bolts.



6. Release the trunk lid side latch (LH/RH) before removing the trunk lid assembly.



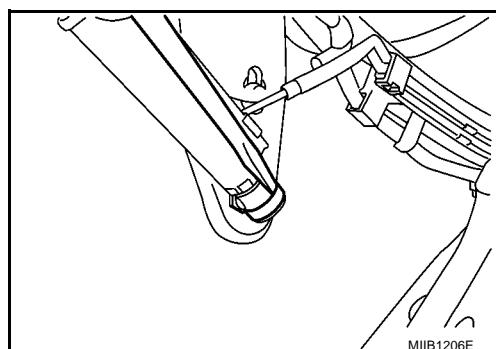
INSTALLATION

Install in the reverse order of removal.

Removal and Installation of Trunk Lid Subframe Assembly REMOVAL

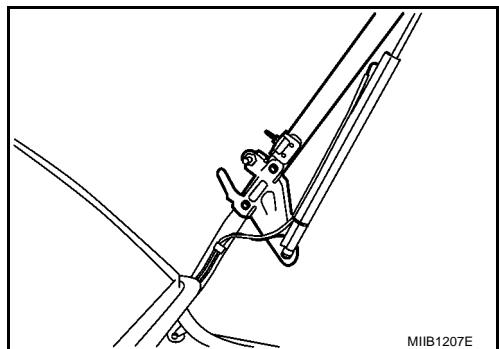
EIS00E61

1. Insert flat-bladed screwdriver into the gap and remove holder, and then remove trunk lid cylinder.



TRUNK LID

2. Remove the mounting bolts, and then remove trunk lid subframe assembly.



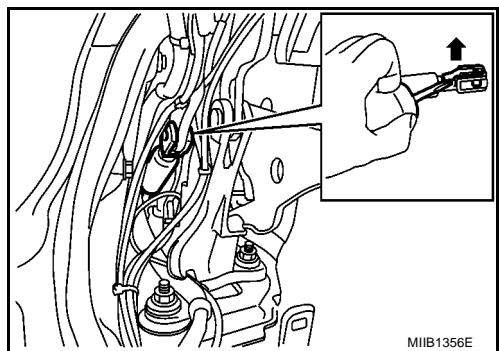
INSTALLATION

1. Install in the reverse order of removal.
2. After installing, check the operation.

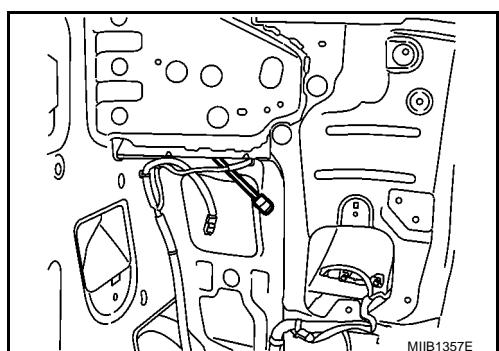
Removal and Installation of Trunk Lid Stay

REMOVAL

1. Screwdriver into the gap and remove trunk lid stay holder (upper side).



2. Remove the rear side finisher. Refer to [EI-28, "Removal and Installation \(C+C\)"](#).
3. Screwdriver into the gap and remove trunk lid stay holder (lower side).



INSTALLATION

1. Install in the reverse order of removal.
2. After installing, check the operation.

Removal and Installation of Trunk Lid Side Latch (LH/RH)

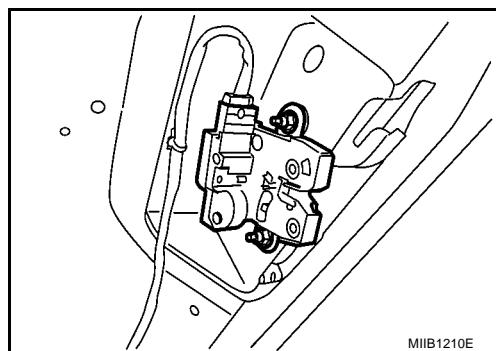
REMOVAL

1. Remove the trunk lid trim. Refer to [EI-23, "TRUNK LID TRIM"](#).
2. Disconnect harness connector.

EIS00E62

TRUNK LID

-
3. Remove the mounting bolts, and remove the trunk lid side latch (LH/RH).



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INSTALLATION

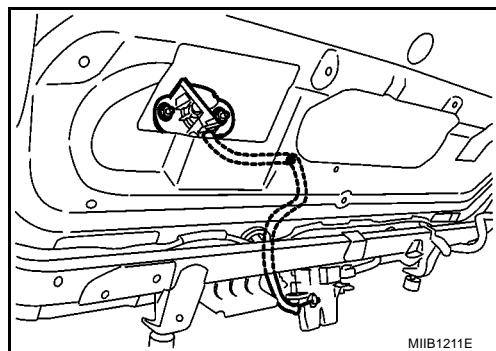
1. Install in the reverse order of removal.
2. After installing, check the operation.

Removal and Installation of Trunk Lid Lock

EIS00E66

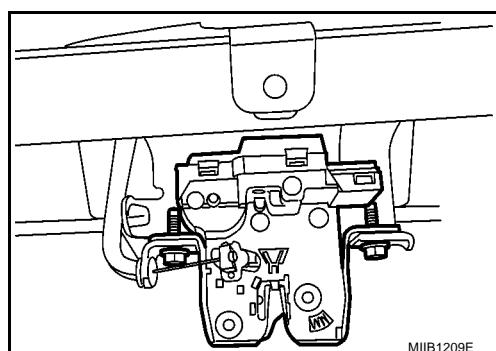
REMOVAL

1. Remove the trunk lid trim.
2. Remove trunk lid lock wire.



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3. Disconnect harness conector.
4. Remove the mounting bolts, and then remove the trunk lid lock.



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INSTALLATION

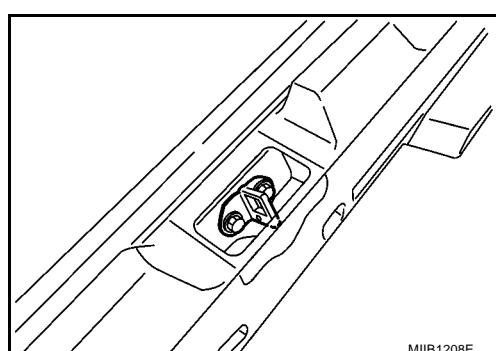
Install in the reverse order of removal.

Removal and Installation of Trunk Lid Striker

EIS00E63

REMOVAL

Remove the mounting bolts, and remove the trunk lid striker .



L

TRUNK LID

INSTALLATION

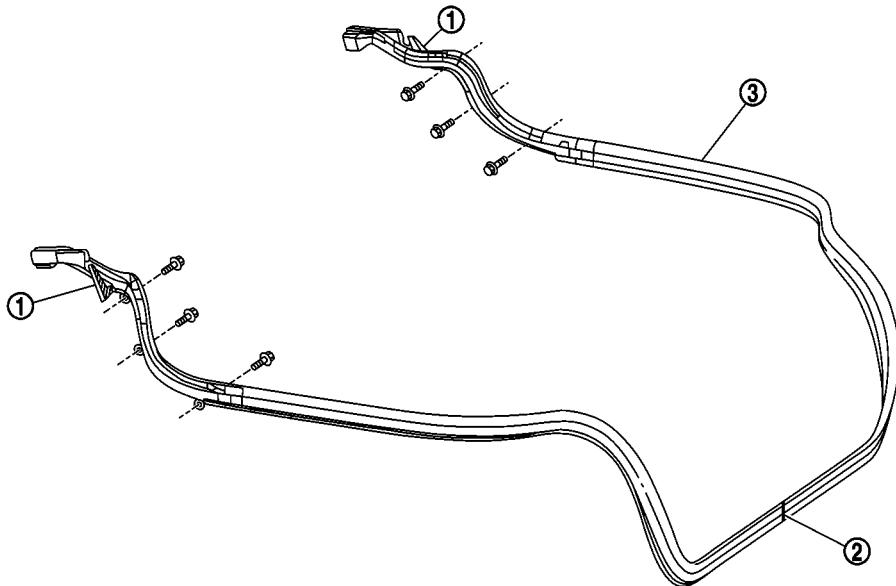
1. Install in the reverse order of removal.
2. After installing, check the operation.

TRUNK LID

Removal and Installation of Trunk Lid Weatherstrip

EIS00E64

SEC. 843



MIB1212E

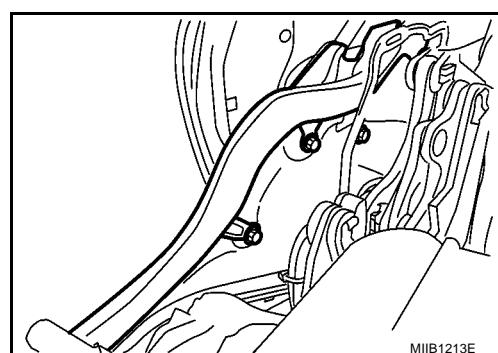
1. Doble-faced adhesive tape

2. Marking (white)

3. Trunk lid weatherstrip

REMOVAL

1. Fully open the roof assembly.
2. Remove rear side finisher. Refer to [EI-28, "Removal and Installation \(C+C\)"](#).
3. Remove mounting bolts.



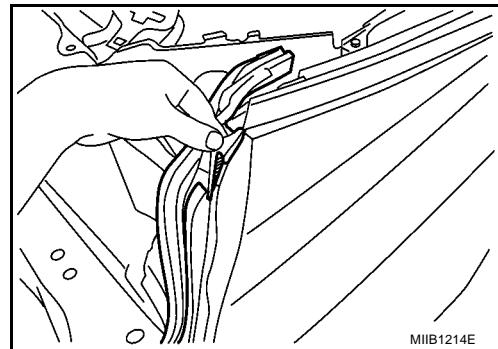
MIB1213E

4. Remove double-faced adhesive tape.

5. Remove trunk lid weatherstrip.

CAUTION:

After removal, do not pull strongly on the weatherstrip.



MIB1214E

INSTALLATION

1. Working from the lower section, align the weatherstrip seam with center of the striker and weatherstrip onto the vehicle.
2. After installation, pull the weatherstrip gently to ensure that there is no loose section.

NOTE:

Make sure the weatherstrip is fit tightly at each corner and back door rear plate.

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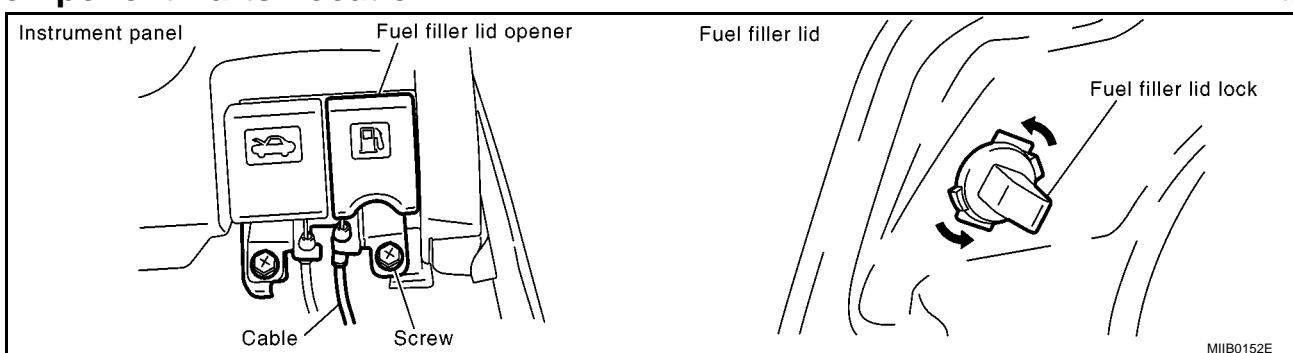
FUEL FILLER LID OPENER

FUEL FILLER LID OPENER

PFP:78820

Component Parts Location

EIS004NL



MIIIB0152E

THEFT WARNING SYSTEM

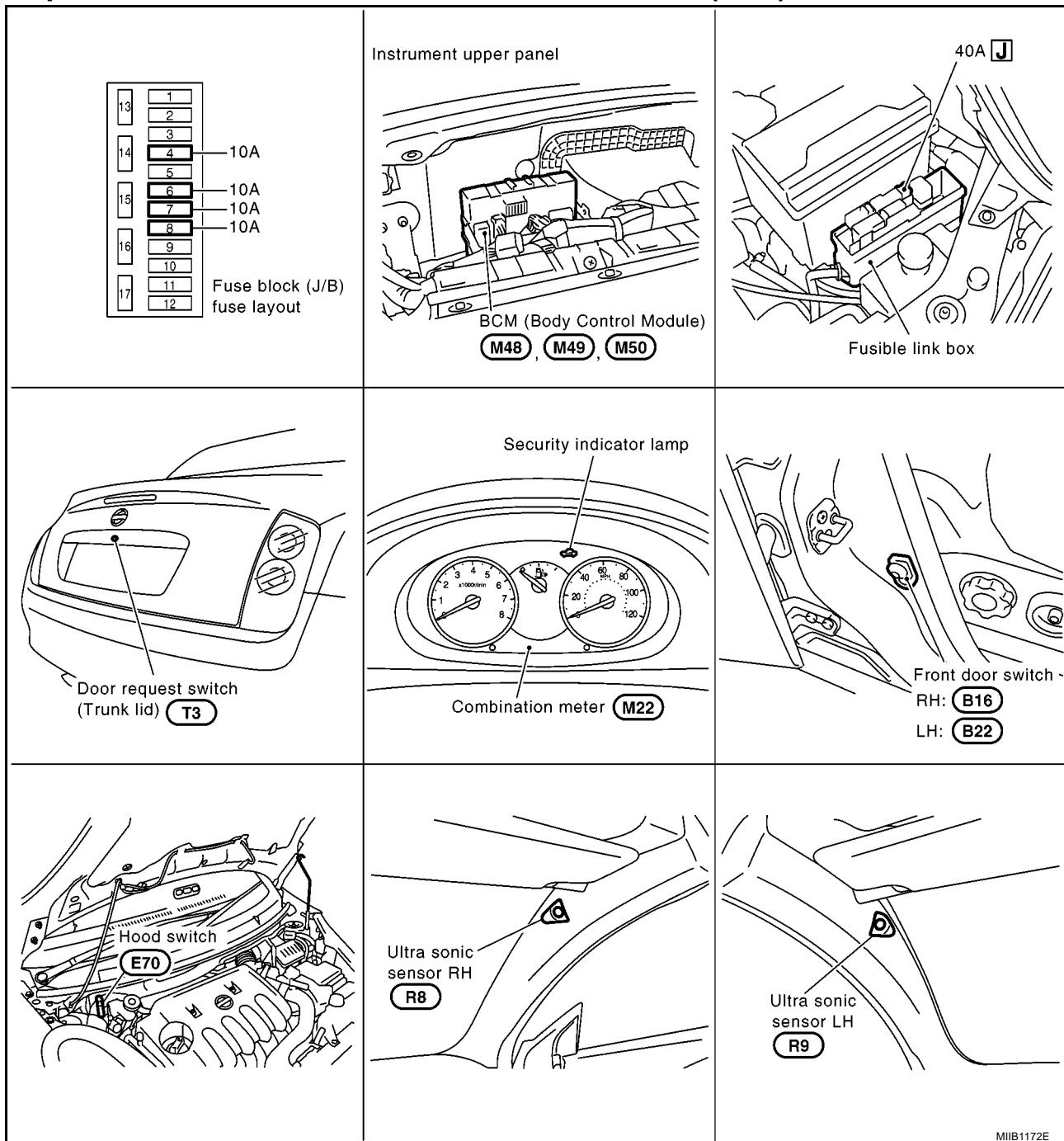
THEFT WARNING SYSTEM

PFP:25362

Component Parts and Harness Connector Location (C+C)

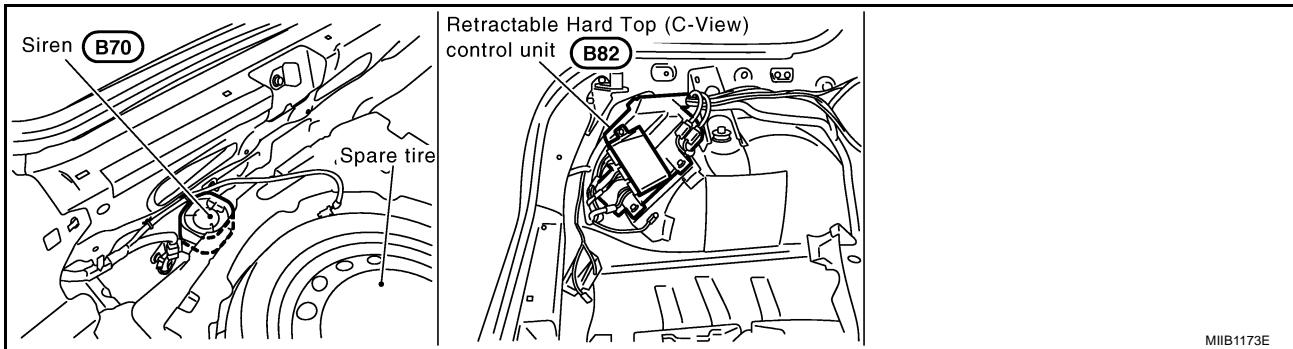
EIS00E52

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MIB1172E

THEFT WARNING SYSTEM



MIIB1173E

System Description

EIS00E53

DESCRIPTION

Setting the Theft Warning System

Initial condition

- Ignition switch is in OFF position.

Disarmed phase

- When the vehicle is being driven or when doors are open, the theft warning system is set in the disarmed phase on the assumption that the owner is inside or near the vehicle.

Armed phase

- The system automatically shifts into the “armed” phase once a lock operation is performed.

Deactivating the theft warning system

When one of the following operations is performed, the armed phase is canceled.

1. Unlock the doors with the keyfob.
2. Unlock the doors with the Intelligent Key remote control button or request switch.
3. Ignition switch goes ON with transponder ID verified.

Activating the Alarm Operation of The Theft Warning System

Make sure the system is in the armed phase.

When the following operation 1, 2, 3 or 4 is performed, the system sounds the siren control unit or horn and flashes the turn signal lamps for about 30 seconds.

1. Engine hood, trunk lid or any doors is opened before unlocking door with keyfob, Intelligent Key remote control button or request switch.
2. A door is unlocked without using the keyfob, Intelligent Key remote control button or request switch.
3. The ultra sonic sensor is triggered.
4. Disconnecting and connecting the battery connector before canceling armed phase.

NOTE: Alarm will be triggered off even if the doors is unlocked with the mechanical key.

(Disarming the theft warning system with the mechanical key through the ignition key cylinder)

ULTRA SONIC SENSOR (C+C)

The ultra sonic sensors consist of two separate units, a transmitter on the left and a receiver on the right mounted on both of the A-pillars. The LH transmitter sensor sends an ultrasonic pulse of sound, and the RH receiver sensor receives the returning echo pulse.

Turning the ignition knob from ON to OFF for three times within 7 seconds will cancel the ultra sonic sensor function for one alarm setting.

NOTE: The ultra sonic sensor will be deactivated automatically if the roof is opened.

THEFT WARNING SYSTEM

POWER SUPPLY AND GROUND CIRCUIT

Power is supplied at all times

- through 40A fusible link (letter J, located in the fusible link box)
- to BCM terminal 74 and 79
- through 10A fuse [No.7, located in the fuse box (J/B)]
- to BCM terminal 22
- through 10A fuse [No.8, located in the fuse box (J/B)]
- to combination meter terminals 27 and 13
- to BCM terminal 47
- through 10A fuse [No.6, located in the fuse block (J/B)]
- to siren control unit terminal 2
- through 10A [No.4, located in the fuse block (J/B)]
- to siren control unit terminal 1.

With the ignition key switch is in the ON or START position

- through 10A fuse [No.4, located in the fuse box (J/B)]
- to Intelligent Key unit terminal 6.

Ground is supplied

- to siren control unit terminal 7
- through hood switch terminal 1 and 2
- through body ground E25, E26 and E40
- to siren control unit terminal 4
- through body ground B17, B23 and B81
- to BCM terminals 2 and 70
- through body ground M19 and M20
- to Intelligent Key unit terminal 12
- through body ground M19 and 20.

With the door switch is open

- to BCM terminals 29 and 30
- through door switches terminal 1 and case ground
- to BCM terminal 10
- through trunk lid switch terminals 1 and 2
- through body ground B17, B23 and B81.

THEFT WARNING SYSTEM

INITIAL CONDITION TO ACTIVATE THE SYSTEM

The operation of the theft warning system is controlled by the engine hood, doors and trunk lid.
To activate the theft warning system, BCM must receive signals indicating the doors are closed and locked.
When a door is open, BCM terminal 29, 30 receives a ground signal from each door switch.
When the trunk lid is open, BCM terminal 10 receives a ground signal from trunk lid switch trunk lid opener switch.
When the engine hood is open, siren control unit terminal 7 receives a ground signal

THEFT WARNING SYSTEM ALARM OPERATION

The vehicle security system is triggered by the following conditions during armed phase.

- opening a door
- opening the trunk lid
- opening the hood
- triggering the ultra sonic sensor
- detection of battery disconnect and connect.

When BCM receives a ground signal at terminals 29, 30 (door switch), 10 (trunk lid switch), or siren control unit receives a ground signal at terminal 7 (hood switch).

When the vehicle security system is triggered, siren control unit or horn is activated.

The alarm automatically turns off after 30 seconds, but will reactivate if the vehicle is tampered with again.

THEFT WARNING SYSTEM DEACTIVATION

To deactivate the theft warning system, a door must be unlocked with keyfob, Intelligent Key remote control button or request switch.

When the BCM receives either one of these signals or unlock signal from keyfob, Intelligent Key remote control button or request switch, the theft warning system is deactivated. (Disarmed phase)

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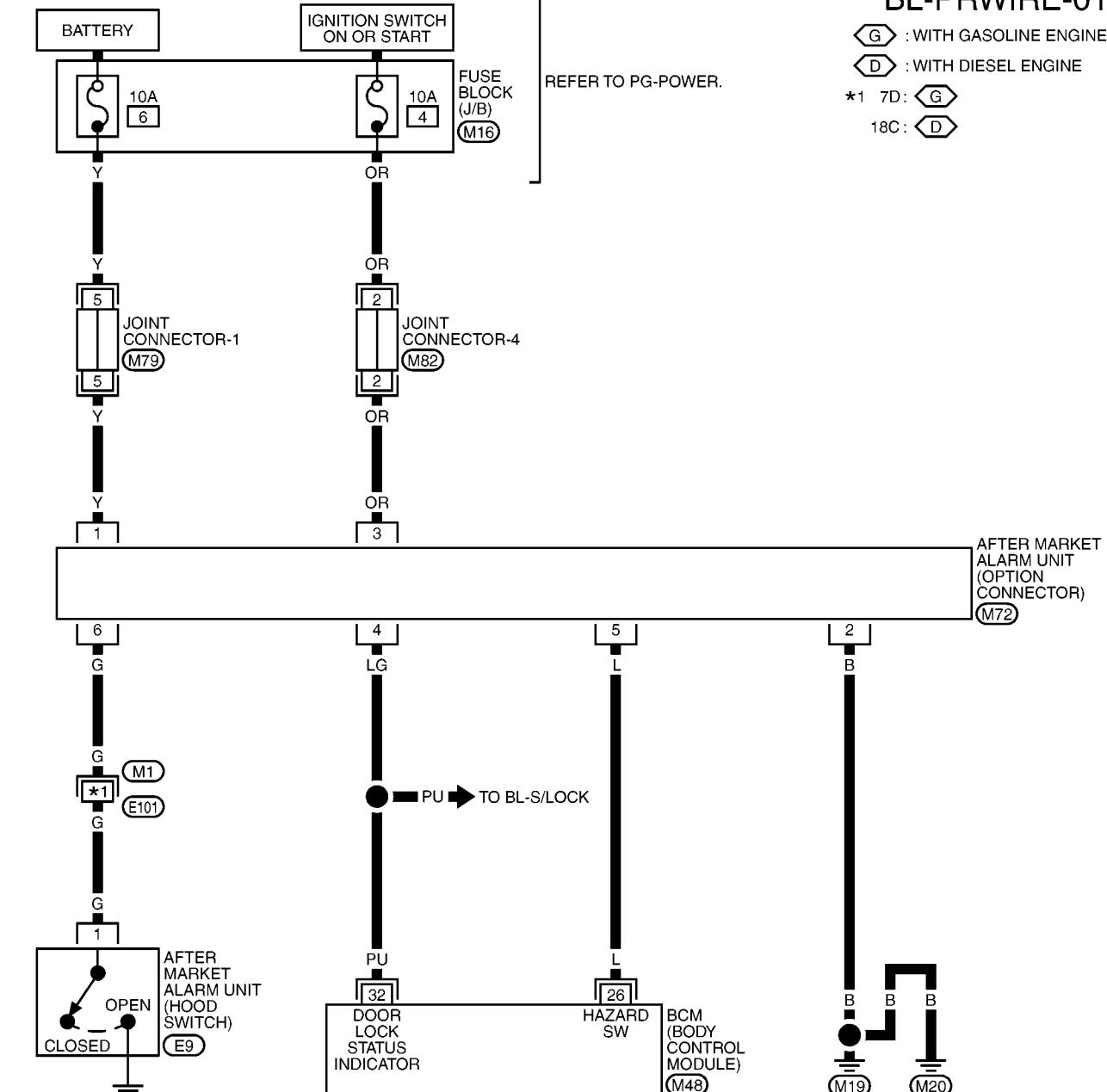
THEFT WARNING SYSTEM

Wiring Diagram — THEFT —/PRWIRE (Hatchback)

EIS00E65

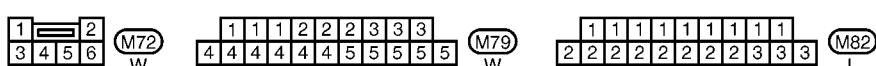
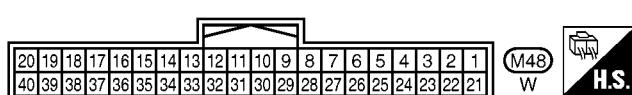
BL-PRWIRE-01

- (G) : WITH GASOLINE ENGINE
- (D) : WITH DIESEL ENGINE
- *1 7D: (G)
18C: (D)



REFER TO THE FOLLOWING.

- (M1) -SUPER MULTIPLE JUNCTION (SMJ)
- (M16) -FUSE BLOCK- JUNCTION BOX (J/B)

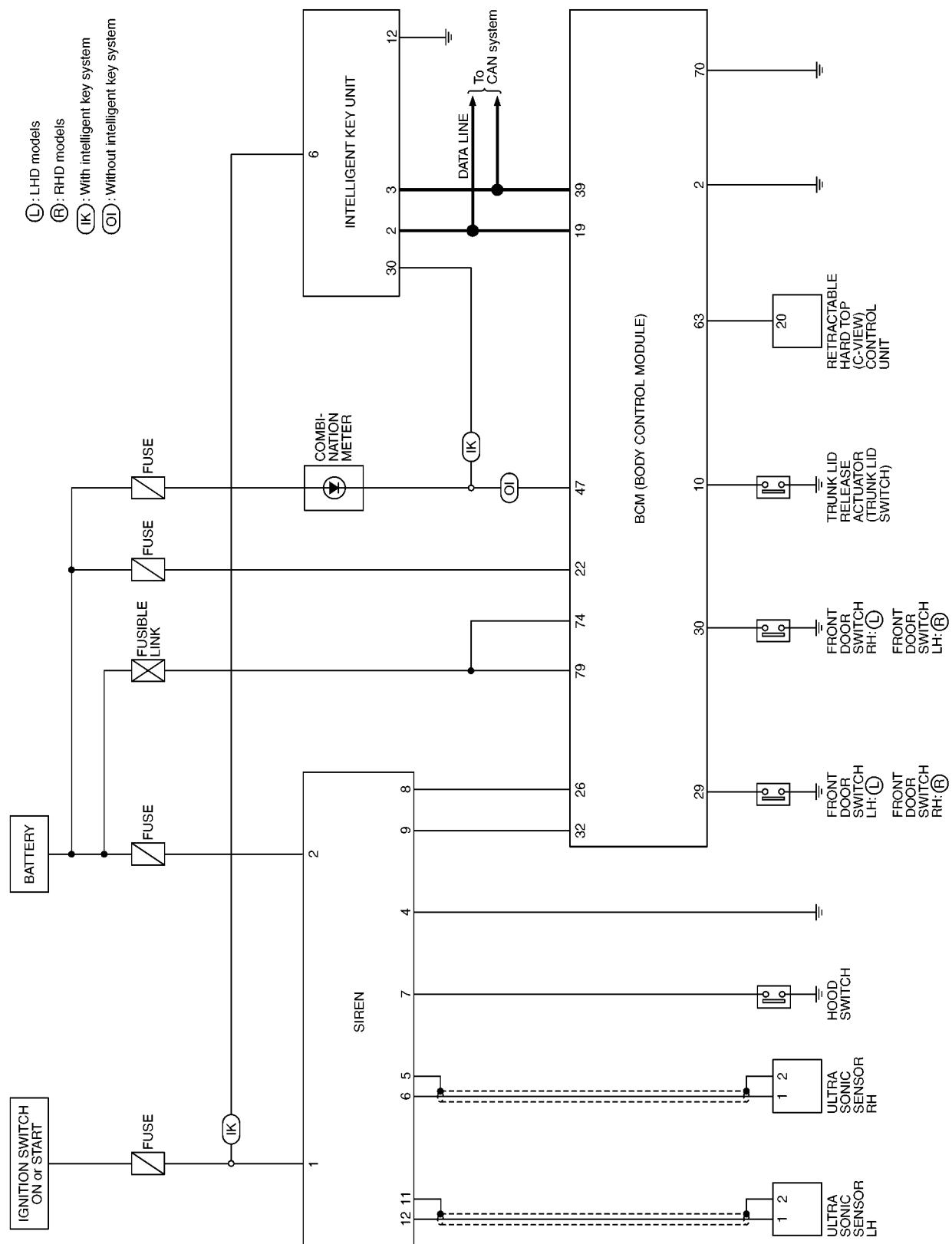


MKWA1797E

THEFT WARNING SYSTEM

Schematic (C+C)

EIS00E55



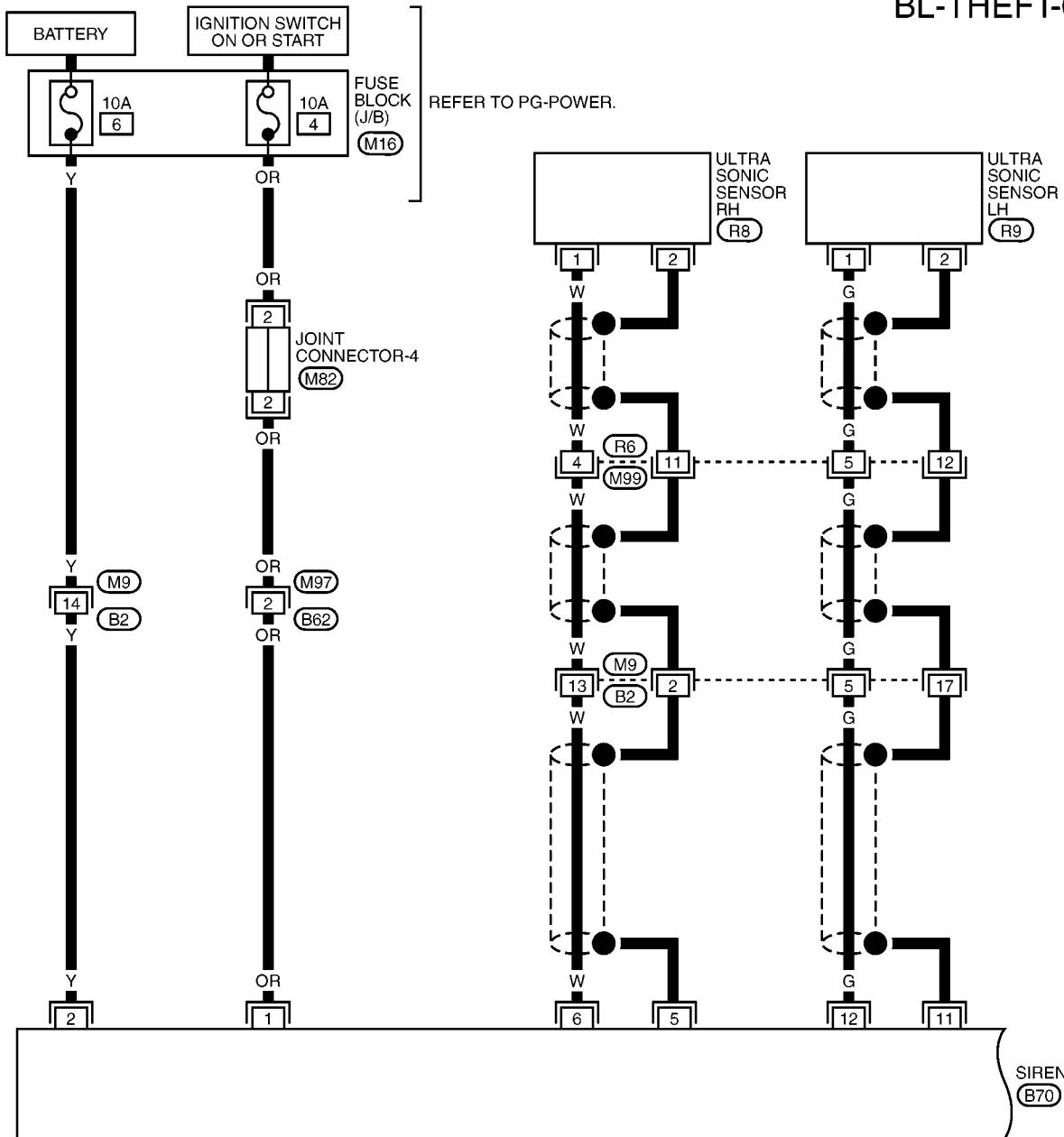
MIWA0665E

THEFT WARNING SYSTEM

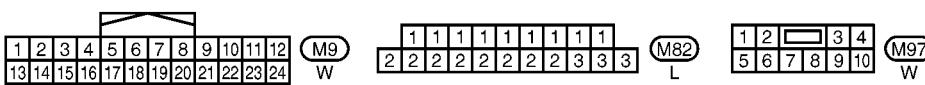
Wiring Diagram —THEFT—(C+C)

EIS00E56

BL-THEFT-01



REFER TO THE FOLLOWING.
 (M16) - FUSE BLOCK -
 JUNCTION BOX (J/B)

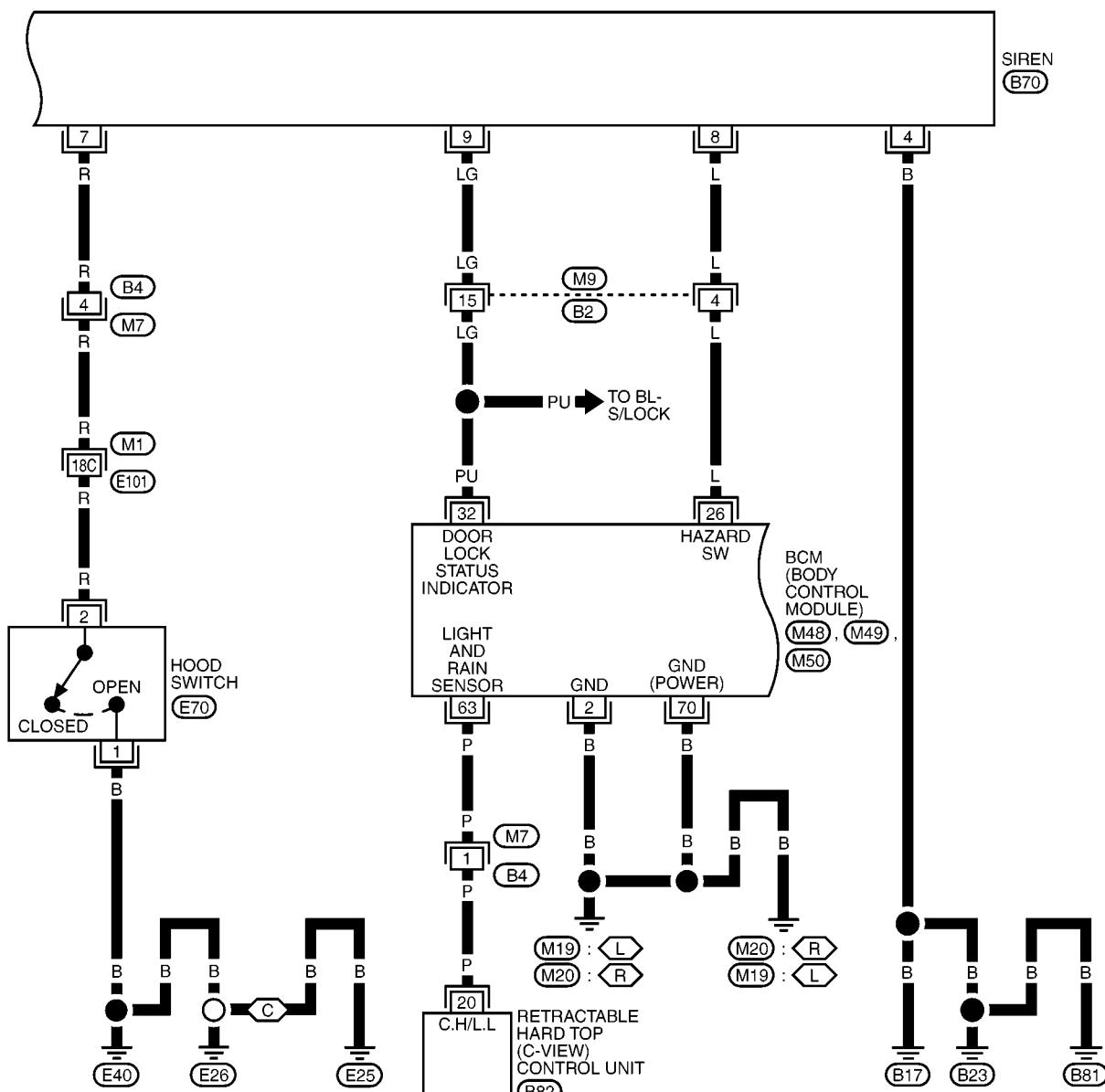


MIWA0637E

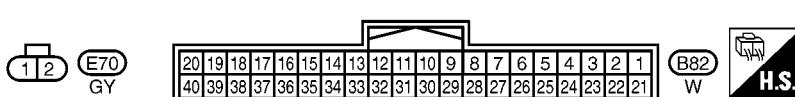
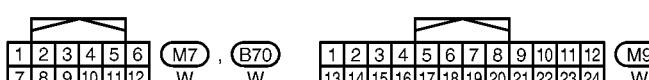
THEFT WARNING SYSTEM

BL-THEFT-02

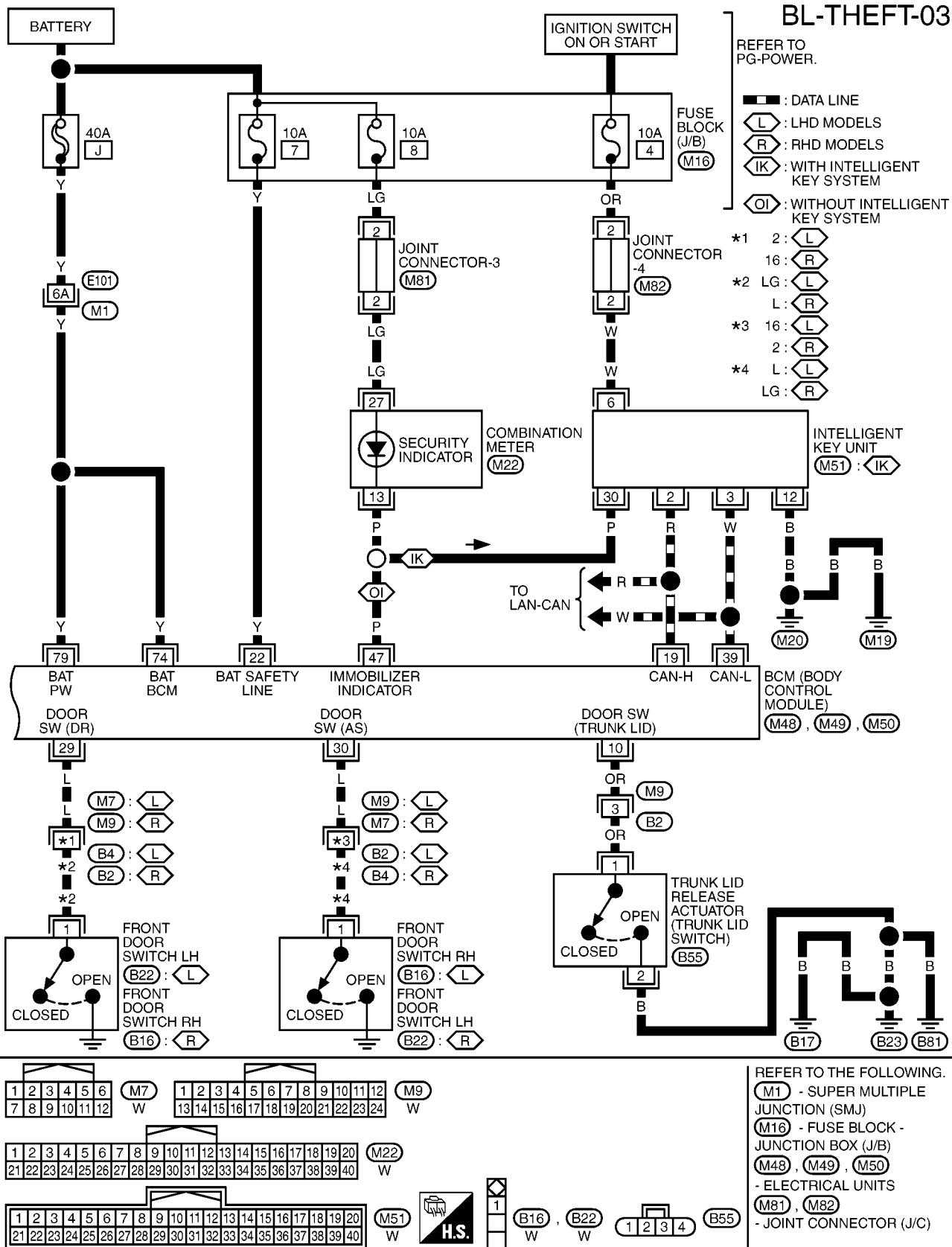
(C) : CR ENGINE MODELS



REFER TO THE FOLLOWING.
 (M1) - SUPER MULTIPLE
 JUNCTION (SMJ)
 (M48), (M49), (M50)
 - ELECTRICAL UNITS



THEFT WARNING SYSTEM

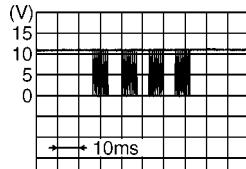


MIWA0666E

THEFT WARNING SYSTEM

Terminals and Reference Value for BCM

EIS00E58

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
2	B	Ground	—	0
10	OR	Trunk lid	Open (ON) → Close (OFF)	0 → 5
19	R	CAN-H	—	—
22	Y	BAT power supply (BCM)	—	Battery voltage
			Activated	Battery voltage
26	L	Hazard switch	Deactivated	 MIIIB0865E
29	L	Front door switch (AS)	Door open (ON) → Close (OFF)	0 → Battery voltage
30	L	Front door switch (DR)	Door open (ON) → Close (OFF)	0 → Battery voltage
32	PU	Door lock status indicator	Goes OFF → Illuminates (Ignition switch ON and all door closed)	0 → Battery voltage
39	w	CAN-L	—	—
47	P	Immobilizer indicator	Goes OFF → Illuminates (Every 2.4 seconds)	Battery voltage → 0
63	P	K line	—	—
70	B	Ground (Power)	—	0
74	Y	BAT power supply (BCM)	—	Battery voltage
79	Y	BAT power supply (PW)	—	Battery voltage

CONSULT-II Function (BCM)

EIS00E5A

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

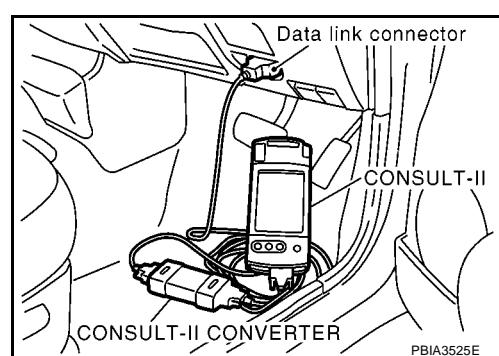
BCM diagnosis part	Diagnostic mode	Description
THEFT ALM	WORK SUPPORT	Supports inspections and adjustments. Commands are transmitted to the BCM for setting the status suitable for required operation, input/output signals are received from the BCM and received data is displayed.

CONSULT-II INSPECTION PROCEDURE

CAUTION:

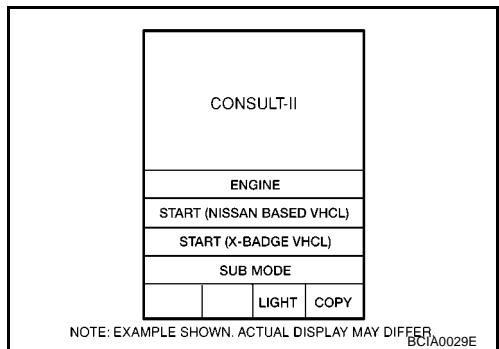
If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Turn ignition switch OFF.
2. Connect CONSULT-II and CONSULT-II CONVERTER to the data link connector.

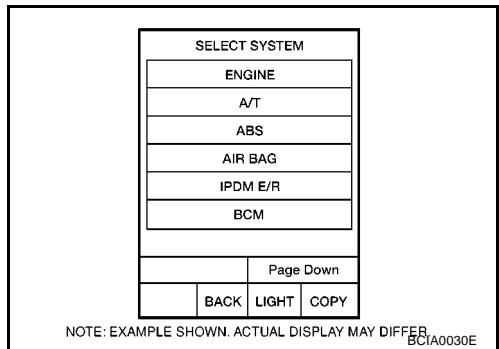


THEFT WARNING SYSTEM

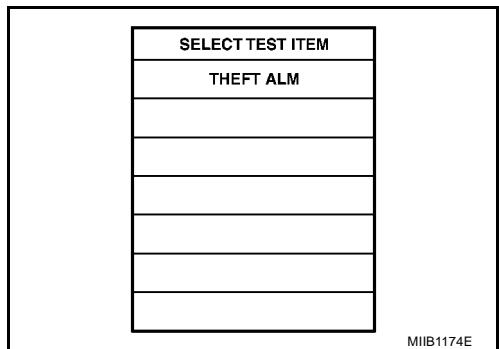
3. Turn ignition switch ON.
4. Touch "START (NISSAN BASED VHCL)".



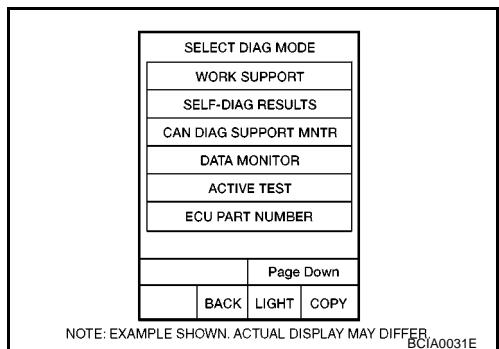
5. Touch "BCM".
If "BCM" is not indicated, refer to [GI-36, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



6. Touch "THEFT ALM" on the "SELECT TEST ITEM" screen.



7. Select diagnosis mode.
"WORK SUPPORT".



CONSULT-II APPLICATION ITEM

Work Support

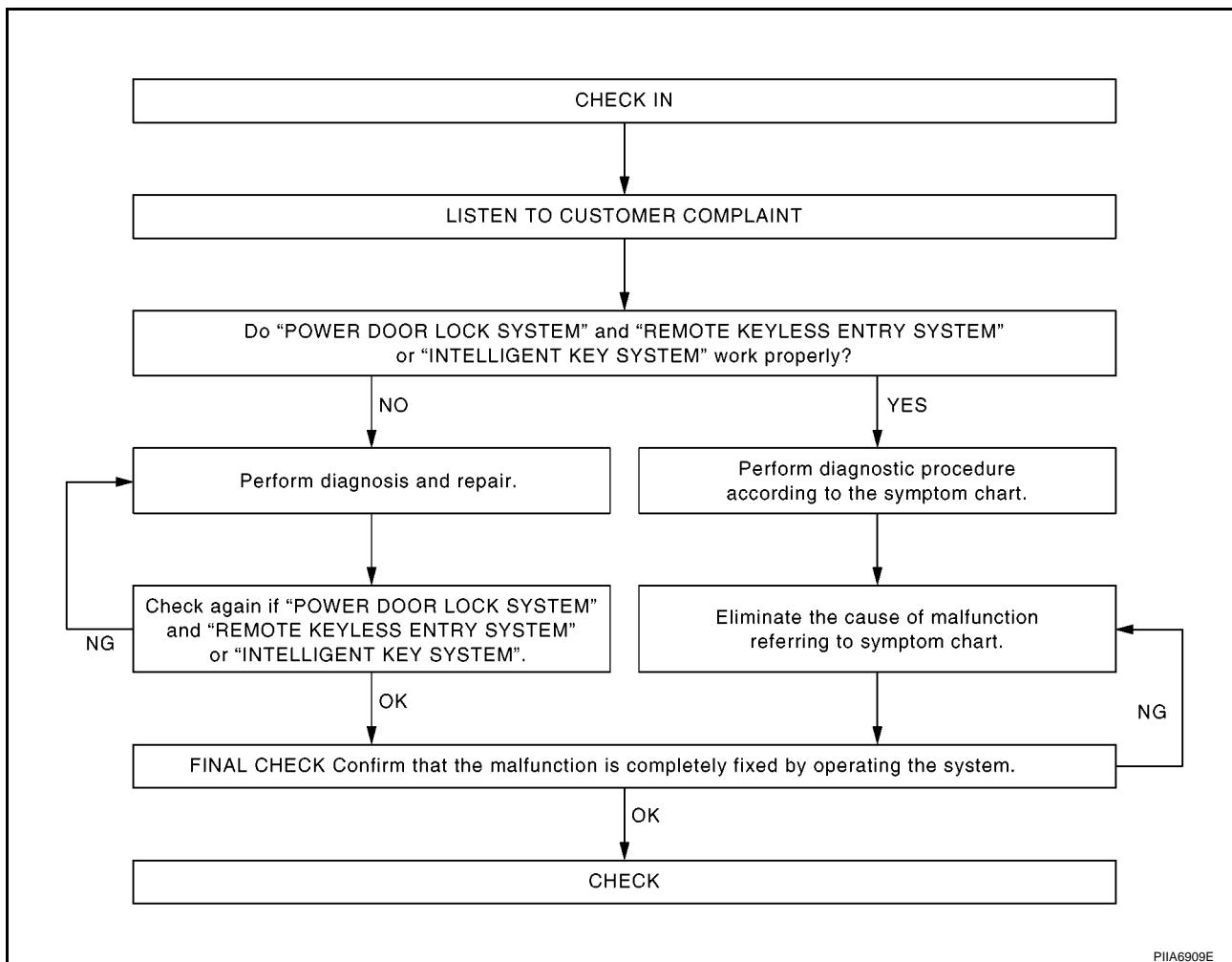
Test Item	Description
SECURITY ALARM SET	This mode can confirm and change theft warning alarm ON-OFF setting.

THEFT WARNING SYSTEM

Trouble Diagnosis WORK FLOW

EIS00E5B

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PIIA6909E

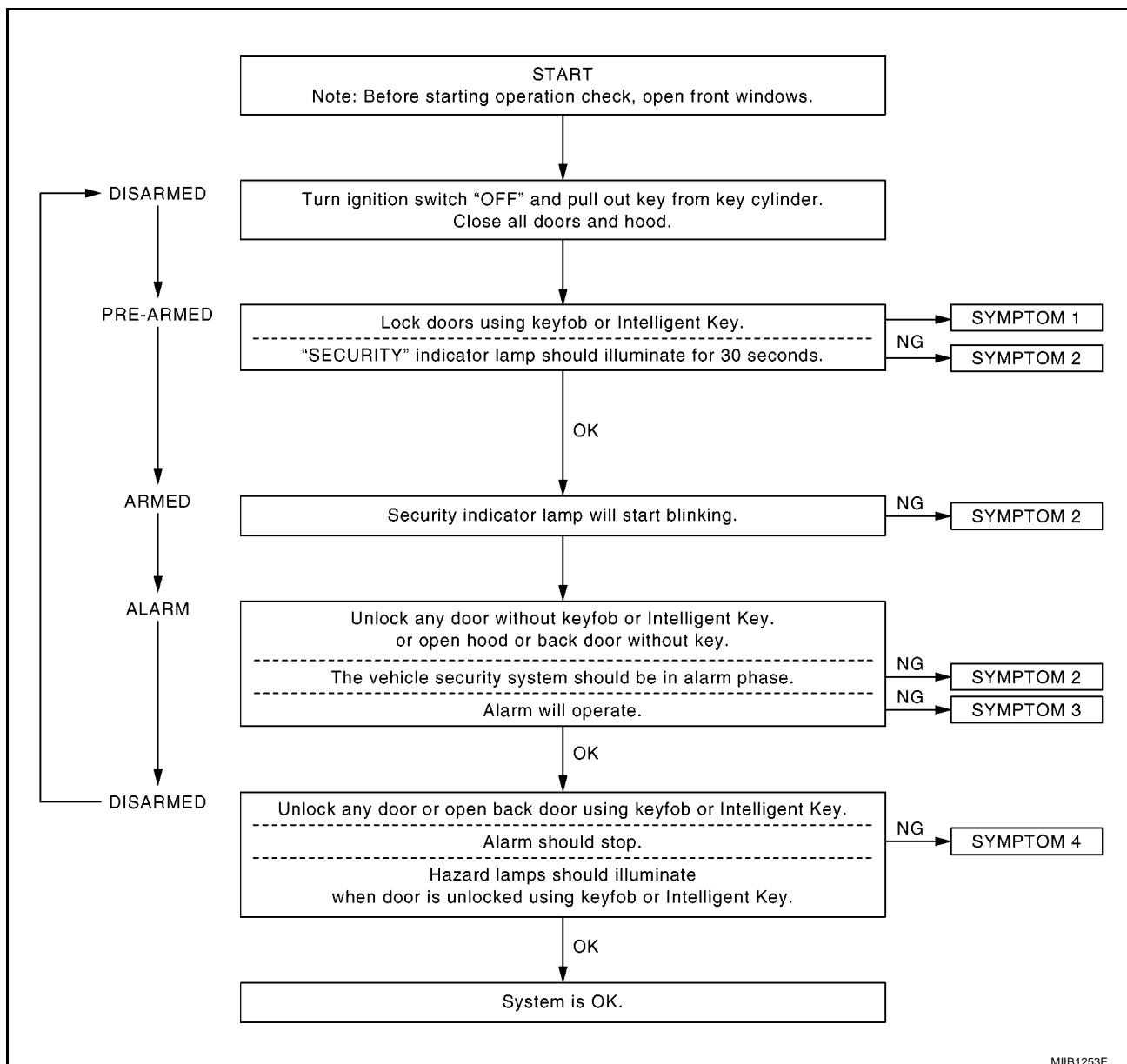
- “POWER DOOR LOCK SYSTEM” diagnosis refer to , [BL-16, "POWER DOOR LOCK SYSTEM"](#)[BL-80, "POWER DOOR LOCK — SUPER LOCK —"](#)
- “MULTI-REMOTE CONTROL SYSTEM” diagnosis refer to [BL-154, "MULTI-REMOTE CONTROL SYSTEM"](#).
- “INTELLIGENT KEY SYSTEM” diagnosis refer to [BL-176, "INTELLIGENT KEY SYSTEM"](#) .

THEFT WARNING SYSTEM

Preliminary Check

EIS00E5C

The system operation is canceled by turning ignition switch to ON at any step between START and ARMED in the following flow chart.



After performing preliminary check, go to symptom chart. Refer to [BL-273, "Symptom Chart"](#)

THEFT WARNING SYSTEM

Symptom Chart

EIS00E5D

Procedure		Diagnostic procedure	Refer to page
	Symptom		
1	Theft warning system cannot be set by	Door switch	Diagnostic Procedure 1 (Check door, hood and trunk lid switches) BL-274
		Key fob	Check BCM. BCS-3
		Intelligent Key	Check Intelligent Key. BL-176
		—	If the above systems are "OK", replace BCM. BCS-30
*1 Theft warning system does not alarm when	Any door is opened.		Diagnostic Procedure 1 (Check door, hood and trunk lid switches) BL-274
			If the above systems are "OK", replace BCM. BCS-30
2	Security indicator does not turn "ON".		Diagnostic Procedure 2 (Check security indicator lamp) without Intelligent Key BL-278
			Diagnostic Procedure 2 (Check security indicator) with Intelligent Key BL-278
			If the above systems are "OK", replace BCM. BCS-30
3	Theft warning alarm does not activate.	Horn alarm	Check horn function. BL-282
			If the above systems are "OK", replace BCM. BCS-30
	Siren control unit alarm		Diagnostic Procedure 3 (Check siren control unit alarm) BL-281
			If the above systems are "OK", replace BCM. BCS-30
4	Theft warning system cannot be canceled by	Key fob	Check multi remote control system. BL-154
			If the above systems are "OK", replace BCM. BCS-30
	Intelligent Key		Check Intelligent Key BL-176
			If the above systems are "OK", replace BCM. BCS-30

*1: Make sure the system is in the armed phase.

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THEFT WARNING SYSTEM

Diagnostic Procedure 1 CHECK DOOR SWITCH

EIS00E5E

1. CHECK DOOR SWITCH INPUT SIGNAL

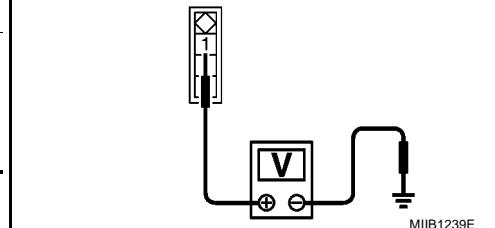
Check voltage between each door switch connector and ground.

Item	Connector	Wire color	Terminals		Door condition	Voltage [V] (Approx.)
			(+)	(-)		
Driver side	B22 (B16)	LG (L)	1	Ground	CLOSE ↓ OPEN	Battery voltage ↓ 0
Passenger side	B16 (B22)	L (LG)				

(): RHD model



Door switch connector



OK or NG

- OK >> Door switch circuit is OK.
NG >> GO TO 2.

2. CHECK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect door switch connector.
3. Check continuity between door switch terminal 1 and ground part of door switch.

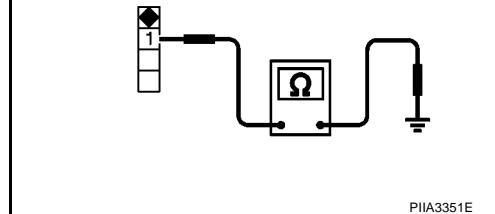
Terminal		Door switch condition	Continuity
1	Ground part of door switch	Pushed	No
		Released	Yes

OK or NG

- OK >> GO TO 3.
NG >> Replace door switch.



Door switch



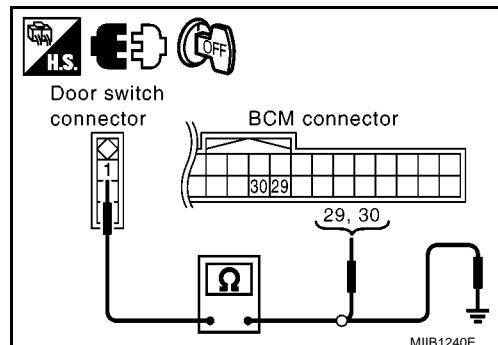
THEFT WARNING SYSTEM

3. CHECK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between door switch connector B16, B22 terminals 1 and BCM connector M48 terminals 29 and 30.

Item	Connector	Wire color	Terminals		Door condition	Continuity
			(+)	(-)		
Driver side	B22 (B16)	LG (L)	1	29	CLOSE to OPEN	Continuity should exist.
Passenger side	B16 (B22)	L (LG)	1	30		

(): RHD models



3. Check continuity between door switch connector B16, B22 terminal 1 and ground.

Item	Connector	Wire color	Terminals		Door condition	Continuity
			(+)	(-)		
Driver side	B22 (B16)	LG (L)	1		Ground	CLOSE to OPEN
Passenger side	B16 (B22)	L (LG)	1			Continuity should not exist.

(): RHD models

OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

4. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between each door switch connector B16, B22 terminal 1 and ground.

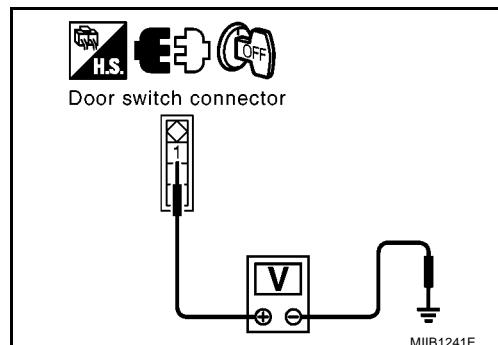
Item	Connector	Wire color	Terminals		Door condition	Voltage [V] (Approx.)
			(+)	(-)		
Driver side	B22 (B16)	LG (L)	1		CLOSE to OPEN	Battery voltage
Passenger side	B16 (B22)	L (LG)	1	Ground		

(): RHD models

OK or NG

OK >> Check harness condition or door switch installation condition.

NG >> Replace BCM.



THEFT WARNING SYSTEM

TRUNK LID SWITCH

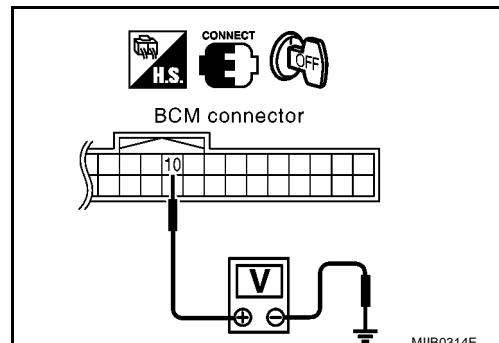
1. CHECK TRUNK LID SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between BCM connector M48 terminal 10 and ground.

Terminal		Back door condition	Voltage (V) Approx.
(+)	(-)		
10 (OR)	Ground	Closed	5
		Open	0

OK or NG

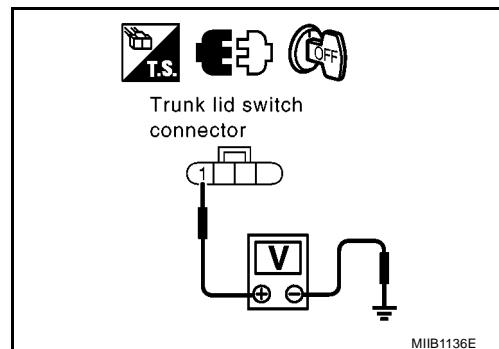
OK >> Trunk lid switch circuit is OK.
 NG >> GO TO 2



2. CHECK TRUNK LID SWITCH HARNESS

1. Disconnect trunk lid switch connector.
2. Check voltage between trunk lid switch connector B55 terminal 1 and ground. (Check harness for open.)

1 (OR) – Ground : Battery voltage

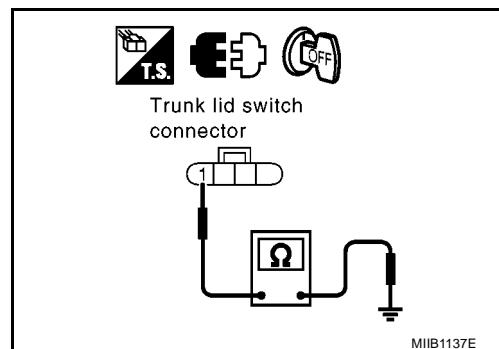


3. Disconnect BCM connector.
4. Check continuity between trunk lid switch connector B55 terminal 1 and ground. (Check harness for short.)

1 (OR) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.
 NG >> Repair or replace harness.



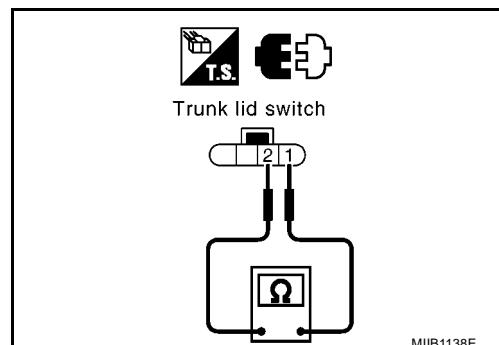
3. CHECK TRUNK LID SWITCH

Check continuity between trunk lid switch terminal 1 and 2.

Terminal	Rear door condition	Continuity
1 - 2	Closed	No
	Opened	Yes

OK or NG

OK >> GO TO 4.
 NG >> Replace trunk lid release actuator (trunk lid switch).



THEFT WARNING SYSTEM

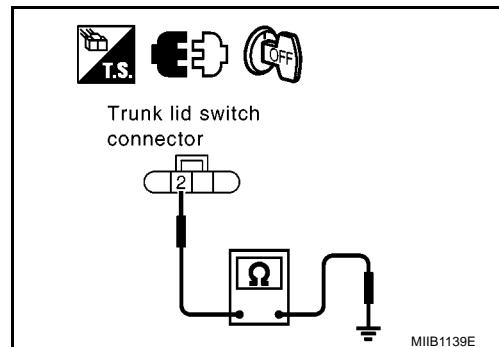
4. CHECK TRUNK LID SWITCH GROUND HARNESS

Check continuity between trunk lid switch connector B55 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check harness connection.
- NG >> Replace trunk lid switch.

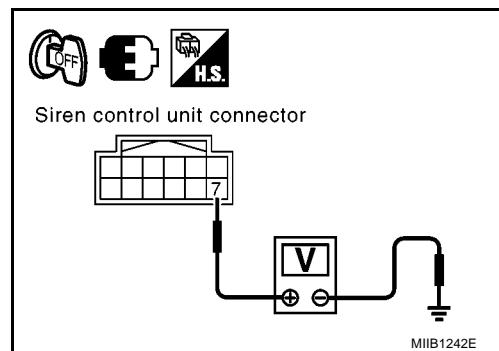


CHECK HOOD SWITCH

1. CHECK HOOD SWITCH INPUT SIGNAL

Check voltage between siren control unit connector and ground.

Item	Connector	Terminal		Door condition	Voltage [V] (Approx.)
		(+)	(-)		
Siren control unit	B70	7 (R)	Ground	CLOSE ↓ OPEN	Battery voltage ↓ 0



OK or NG

- OK >> Hood switch circuit is OK.
- NG >> GO TO 2.

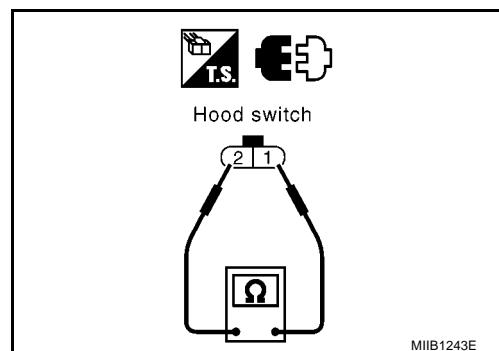
2. CHECK HOOD SWITCH

1. Turn ignition switch OFF.
2. Disconnect hood switch connector.
3. Check continuity between hood switch terminal 1 and 2.

Terminals		Hood switch condition	Continuity
1	2	Pressed	No
		Released	Yes

OK or NG

- OK >> GO TO 3.
- NG >> Replace hood switch.



THEFT WARNING SYSTEM

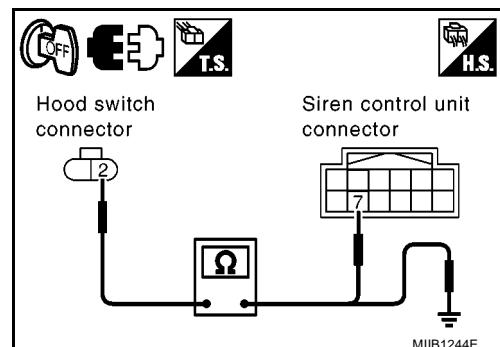
3. CHECK HOOD SWITCH CIRCUIT

1. Disconnect siren control unit connector.
2. Check continuity between hood switch connector E70 terminal 2 and siren control unit connector B70 terminal 7.

2 (R) – 7 (R) : Continuity should exist.

3. Check continuity between hood switch connector E70 terminal 2 and ground.

2 (R) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

4. CHECK GROUND CIRCUIT

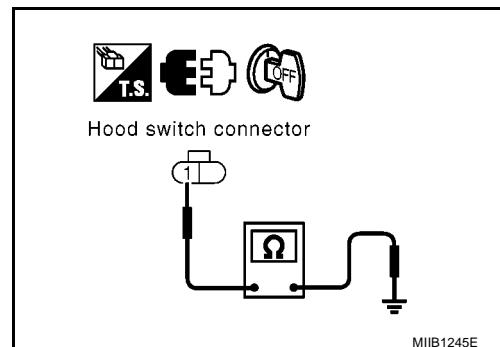
Check continuity between hood switch connector E70 terminal 1 and ground.

1 (B) – Ground : Continuity should exist.

OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness.



5. CHECK SIREN CONTROL UNIT OUTPUT SIGNAL

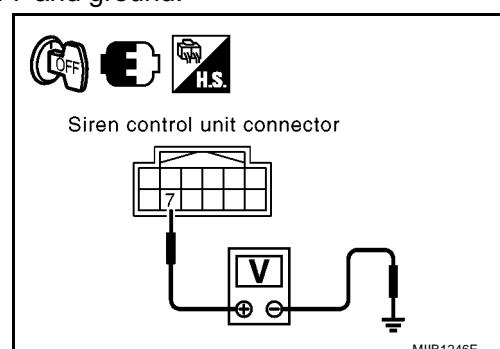
1. Connect siren control unit connector.
2. Check voltage between siren control unit connector B70 terminal 7 and ground.

7 (R) – Ground : Battery voltage

OK or NG

OK >> Check harness condition.

NG >> Replace siren control unit.



Diagnostic Procedure 2

EIS00E68

MODELS WITHOUT INTELLIGENT KEY SYSTEM
“Security indicator does not light up”

1. CHECK FUSE

Check 10A fuse [No. 8, located in the fuse block (J/B)]

OK or NG

OK >> GO TO 2.

NG >> Replace fuse.

THEFT WARNING SYSTEM

2. CHECK SECURITY INDICATOR LAMP

1. Install 10A fuse.
2. Start engine and turn ignition switch OFF.
3. Check if the security indicator lamp lights up.

Security indicator lamp should light up.

OK or NG

OK >> Inspection END.
NG >> GO TO 3.

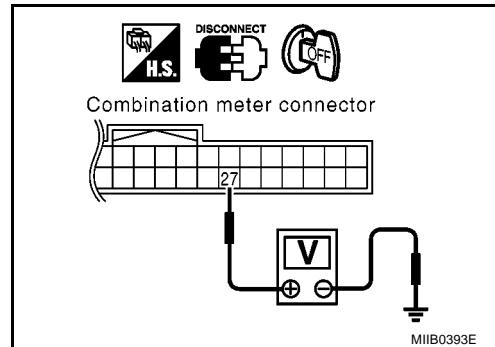
3. CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

1. Disconnect combination meter (security indicator lamp) connector.
2. Check voltage between security indicator lamp connector M22 terminal 27 and ground.

27 (LG)- Ground: Battery voltage

OK or NG

OK >> GO TO 4.
NG >> Check harness for open or short between fuse and security indicator lamp.



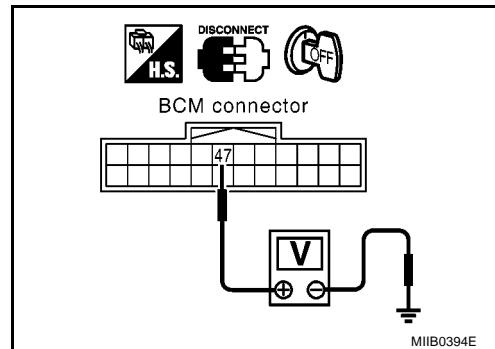
4. CHECK BCM FUNCTION

1. Connect combination meter (security indicator lamp) connector.
2. Disconnect BCM connector.
3. Check voltage between BCM connector M49 terminal 47 and ground.

47 (P)- Ground: Battery voltage

OK or NG

OK >> BCM is malfunctioning.
● Replace BCM
NG >> perform the following operation.
● Harness for open or short between security indicator lamp and BCM.
● Indicator lamp condition



MODELS WITH INTELLIGENT KEY SYSTEM

“Security indicator does not light up”

1. CHECK FUSE

Check 10A fuse [No. 8, located in the fuse block (J/B)]

OK or NG

OK >> GO TO 2.
NG >> Replace fuse.

THEFT WARNING SYSTEM

2. CHECK SECURITY INDICATOR LAMP

1. Install 10A fuse.
2. Start engine and turn ignition knob OFF.
3. Check if the security indicator lamp lights up.

Security indicator lamp should light up.

OK or NG

OK >> Inspection END.
NG >> GO TO 3.

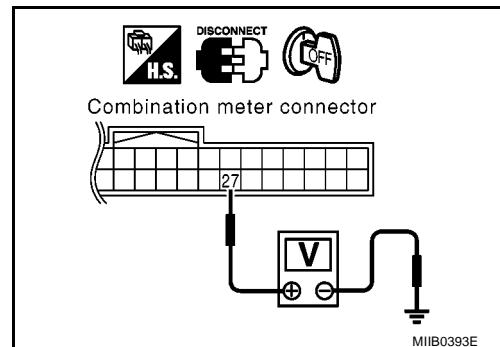
3. CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

1. Disconnect combination meter (security indicator lamp) connector.
2. Check voltage between security indicator lamp connector M22 terminal 27 and ground.

27 (LG)- Ground: Battery voltage

OK or NG

OK >> GO TO 4.
NG >> Check harness for open or short between fuse and security indicator lamp.



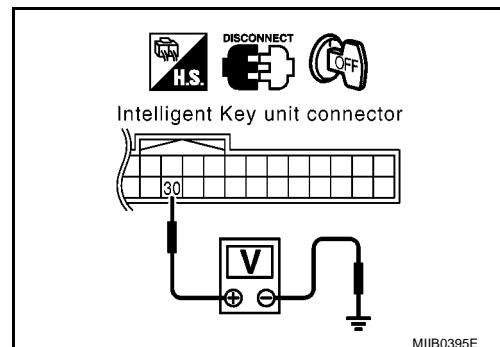
4. CHECK INTELLIGENT KEY UNIT FUNCTION

1. Connect combination meter (security indicator lamp) connector.
2. Disconnect Intelligent Key unit connector M51.
3. Check voltage between Intelligent Key unit connector M51 terminal 30 and ground.

30 (P)- Ground: Battery voltage

OK or NG

OK >> Intelligent Key is malfunctioning.
 ● Replace Intelligent Key unit.
NG >> Check the following.
 ● Harness for open or short between security indicator lamp and Intelligent Key unit.
 ● Indicator lamp condition



THEFT WARNING SYSTEM

Diagnostic Procedure 3

EIS00E5G

1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect siren control unit connector.
3. Check voltage between siren control unit connector B70 terminal 2 and ground.

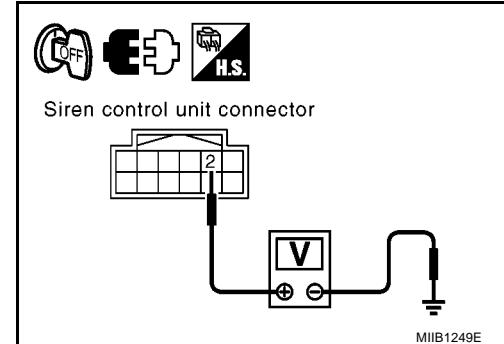
2 (Y) – Ground : Battery voltage

OK or NG

OK >> GO TO 2.

NG >> Check the following.

- 10A fuse [No. 6, located in fuse block (J/B)]
- Harness for open or short between siren control unit and fuse.



2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch ON.
2. Disconnect siren control unit connector.
3. Check voltage between siren control unit connector B70 terminal 1 and ground.

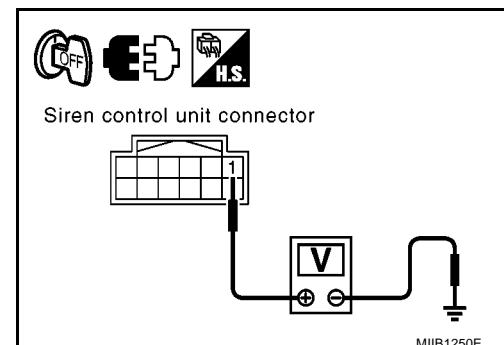
1 (Y) – Ground : Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Check the following.

- 10A fuse [No. 4, located in fuse block (J/B)]
- Harness for open or short between siren control unit and fuse.



3. CHECK GROUND CIRCUIT

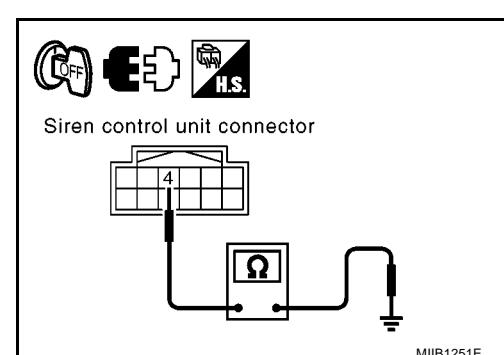
Check continuity between siren control unit connector B70 terminal 4 and ground.

4 (B) – Ground : Continuity should exist.

OK or NG

OK >> GO TO 4.

NG >> Repair or replace siren control unit ground circuit.



THEFT WARNING SYSTEM

4. CHECK HARNESS CONTINUITY

- Check continuity between siren control unit connector B70 terminals 8, 9 and BCM connector M48 terminals 26, 32.

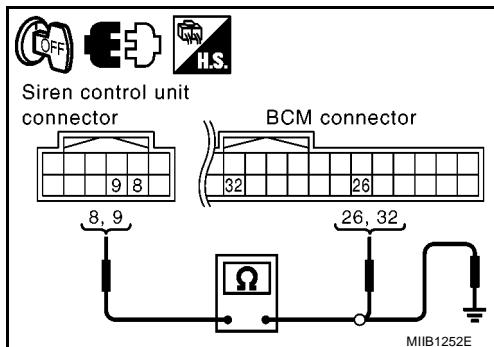
8 (L) – 26 (L) : Continuity should exist.
9 (LG) – 32 (PU) : Continuity should exist.

- Check continuity between siren control unit connector B70 terminals 8, 9 and ground.

8 (L) – Ground : Continuity should not exist.
9 (LG) – Ground : Continuity should not exist.

OK or NG

OK >> Check harness condition.
NG >> Repair or replace siren control unit ground circuit.



Diagnostic Procedure 4

EIS00E5H

THEFT WARNING HORN ALARM CHECK

1. CHECK HORN OPERATION

Check if horn sounds with horn switch.

Does horn operate?

Yes >> Check harness for open or short between BCM.
No >> Replace siren BCM.

Diagnostic Procedure 5

EIS00E5I

THEFT WARNING TURN SIGNAL LAMP ALARM CHECK

1. CHECK THEFT WARNING TURN SIGNAL LAMP ALARM OPERATION

Check if turn signal lamps operate with combination switch and hazard switch.

Does signal lamps turns on when turning switch ON?

Yes >> Turn signal lamps alarm is OK.
No >> Check turn signal lamps system. Refer to [LT-141, "TURN SIGNAL AND HAZARD WARNING LAMPS"](#)

NATS (NISSAN ANTI-THEFT SYSTEM)

NATS (NISSAN ANTI-THEFT SYSTEM)

PFP:28591

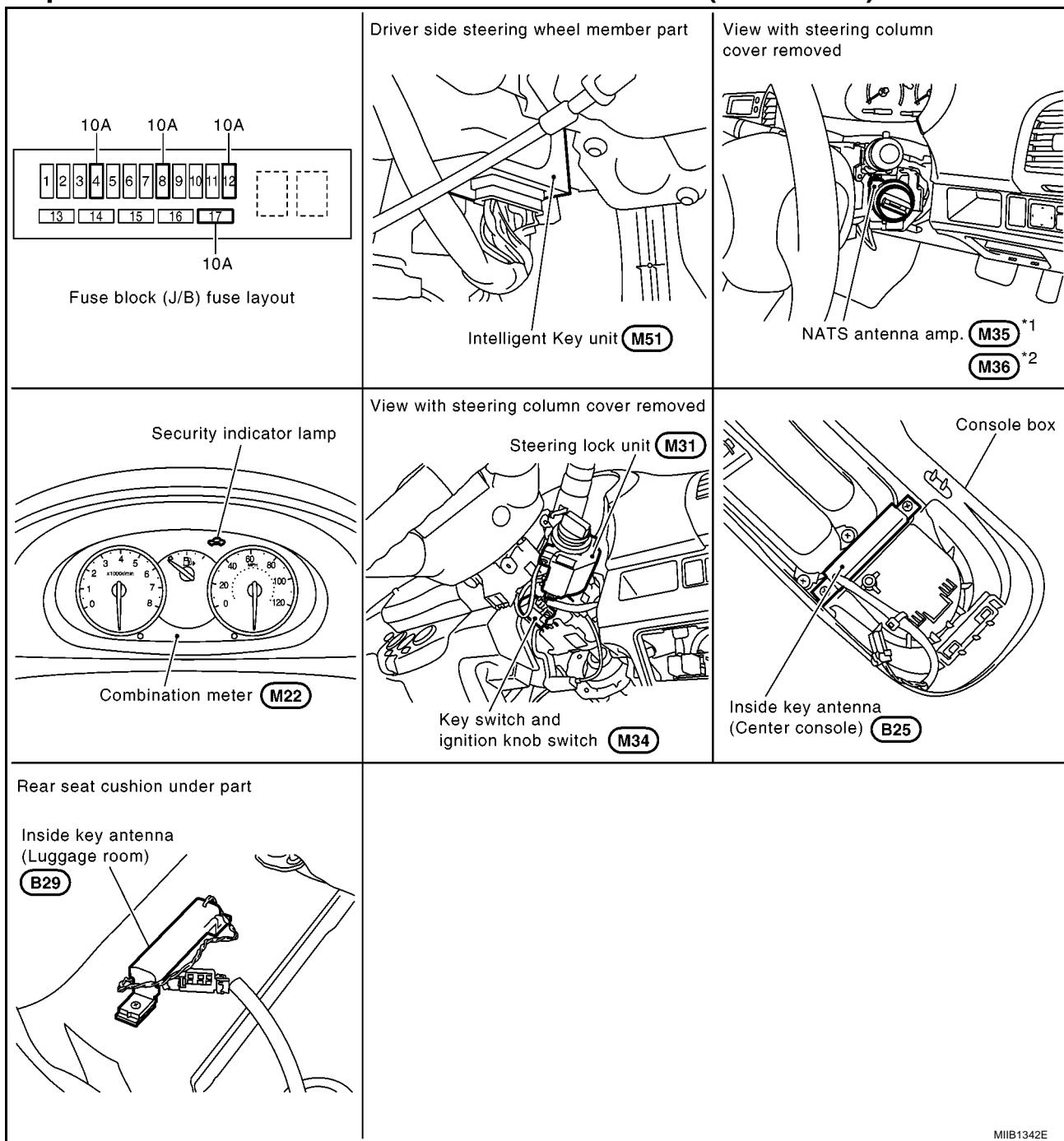
Component Parts and Harness Connector Location (Hatchback)

EIS004Q1

A
B
C
D
E
F
G
H

BL

J
K
L
M



MIIB1342E

*¹ :With Intelligent Key

*² :Without Intelligent Key

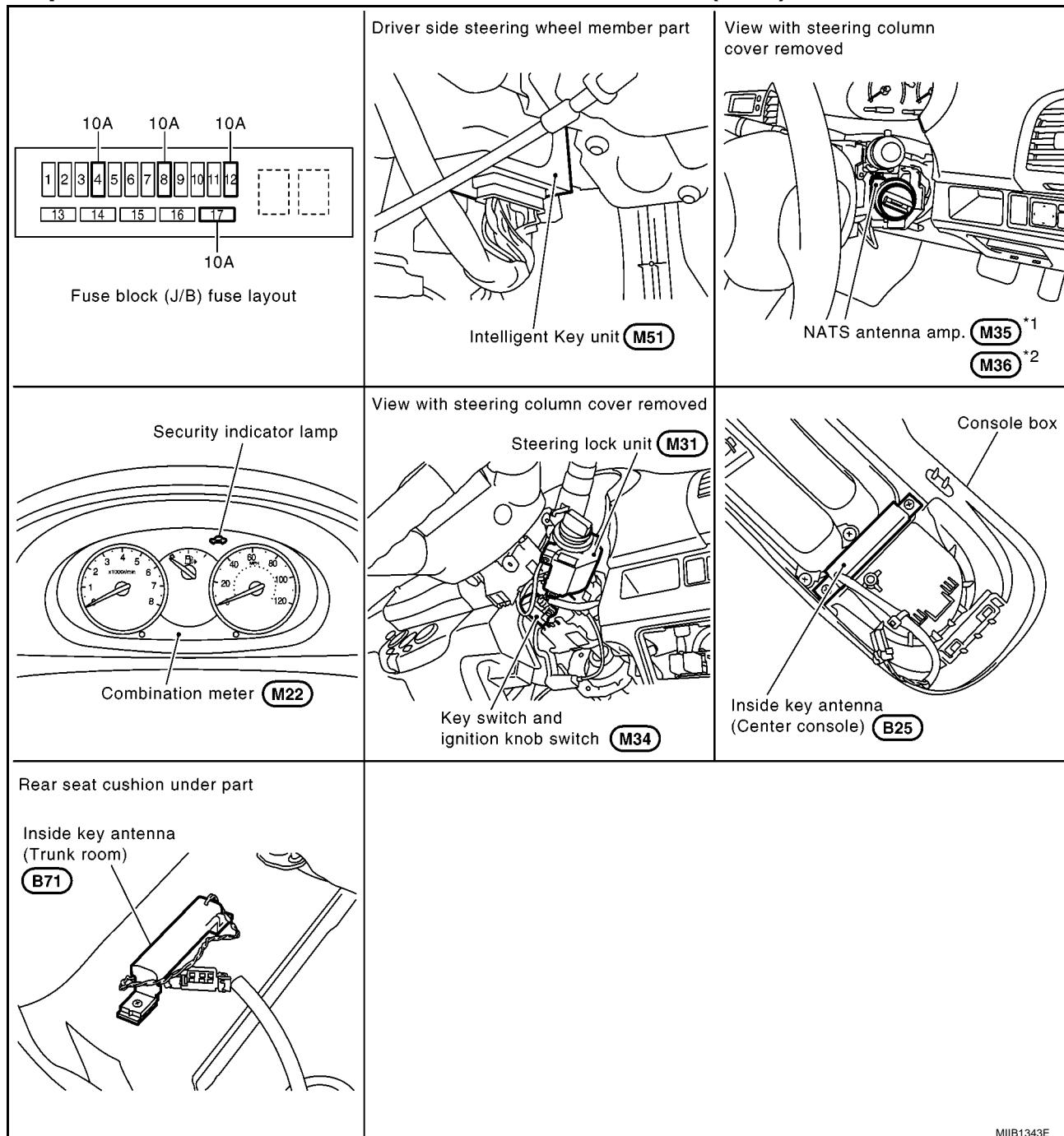
NOTE:

If customer reports a "NO START" condition, request ALL ignition key (without Intelligent Key system) or mechanical key (with Intelligent Key system) to be brought to the dealer to check for a NATS malfunction.

NATS (NISSAN ANTI-THEFT SYSTEM)

Component Parts and Harness Connector Location (C+C)

EIS00E2S



MIIIB1343E

^{*1} :With Intelligent Key

^{*2} :Without Intelligent Key

NOTE:

If customer reports a "NO START" condition, request ALL ignition key (without Intelligent Key system) or mechanical key (with Intelligent Key system) to be brought to the dealer to check for a NATS malfunction.

System Description OPERATING DESCRIPTION

EIS004Q2

NATS (Nissan Anti-Theft System) has the following functions:

- NATS shows a higher anti-theft performance at preventing engine to be initiated by an unregistered key. (Registered key: Ignition key, mechanical key, Intelligent Key)

NATS (NISSAN ANTI-THEFT SYSTEM)

- Only a key with key ID registered in BCM (without Intelligent Key system) or Intelligent Key unit (with Intelligent Key system) and ECM can start engine, it has a higher protection against auto thefts that duplicates keys.
- If a malfunction has been detected, security indicator will keep illuminates when ignition switch is in ON position.
- Intelligent Key can be registered up to 5 keys (Including the standard key) on request from the owner.
- During trouble diagnosis or when the following parts have been replaced, and if ignition key or mechanical key is added, registration* is required.
*: All keys kept by the owner of the vehicle should be registered with ignition key or mechanical key.
- ECM
- BCM (without Intelligent Key system)
- Intelligent Key unit (with Intelligent Key system)
- Ignition key (without Intelligent Key system)
- Mechanical key (with Intelligent Key system)
- NATS trouble diagnoses, system initialization and additional registration of other ignition key or mechanical key IDs must be carried out using CONSULT-II hardware and CONSULT-II NATS software. When NATS initialization has been completed, the ID of the inserted ignition key or mechanical key is automatically registered. Then, if necessary, additional registration of other ignition key or mechanical key IDs can be carried out. Regarding the procedures of NATS initialization and ignition key or mechanical key ID registration, refer to CONSULT-II operation manual, NATS.

SECURITY INDICATOR

- Fore warns that the vehicle is equipped with NATS (Nissan Anti-Theft System).
- Vehicles without Intelligent Key system, security indicator will not blink while the ignition knob is in ON or START state.
- Vehicles with Intelligent Key system, security indicator blinks constantly when the mechanical key is removed from the ignition key cylinder.

NOTE:

Because security indicator is highly efficient, the battery is barely affected.

Condition of Security Indicator (Normal)

WITHOUT INTELLIGENT KEY SYSTEM

Security indicator condition	Ignition key	Ignition key state			
		ON position	ACC position	OFF position (Key inserted.)	OFF position (Key removed.)
	Unregistered key	ON	Flashing	Flashing	Flashing

WITH INTELLIGENT KEY SYSTEM

Security indicator condition	Ignition key	Key condition			
		Ignition knob pressed	Ignition knob released	Key inserted	Key removed
	Mechanical key	×	×	OFF	Flashing

NATS (NISSAN ANTI-THEFT SYSTEM)

System Composition

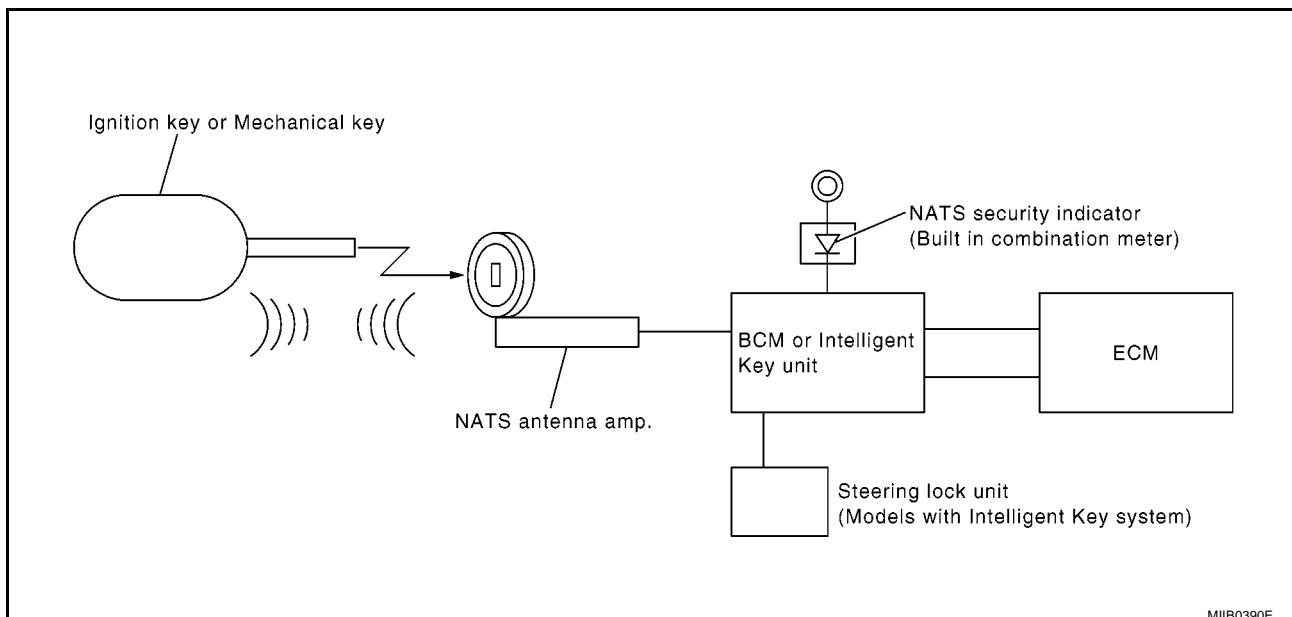
EIS004Q3

The function of the NATS consists of the following:

- Ignition key (without Intelligent Key system)
- Mechanical key (with Intelligent Key system)
- NATS antenna amp.
- Steering lock unit. (with Intelligent Key system)
- BCM (without Intelligent Key system)
- Intelligent Key unit (with Intelligent Key system)
- Engine control module (ECM)
- Security indicator (built-in combination meter)

NOTE:

The communication between ECM and BCM/Intelligent Key unit uses the CAN communication system.



MIIIB0390E

ECM Re-communicating Function

EIS004Q4

Performing following procedure can automatically perform re-communication of ECM and BCM or Intelligent Key unit, but only when the ECM has been replaced with a new one (*1).

*1: New one means a virgin ECM which has never been energized on-board.

(In this step, initialization procedure by CONSULT-II is not necessary)

NOTE:

- When registering new Key IDs or replacing the ECM other than brand new, refer to CONSULT-II Operation Manual NATS.
- If multiple keys are attached to the key holder, separate them before work.
- Distinguish keys with unregistered key ID from those with registered ID.

1. Install ECM.

2. Using a registered key (*2), turn ignition switch to "ON".

*2: To perform this step, use the key that has been used before performing ECM replacement.

3. Maintain ignition switch in "ON" position for at least 5 seconds.

4. Turn ignition switch to "OFF".

5. Start engine.

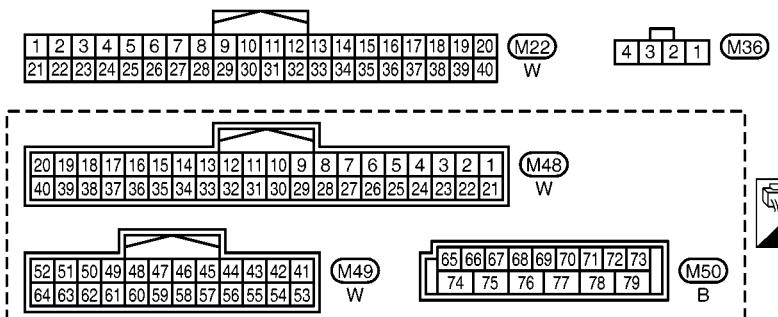
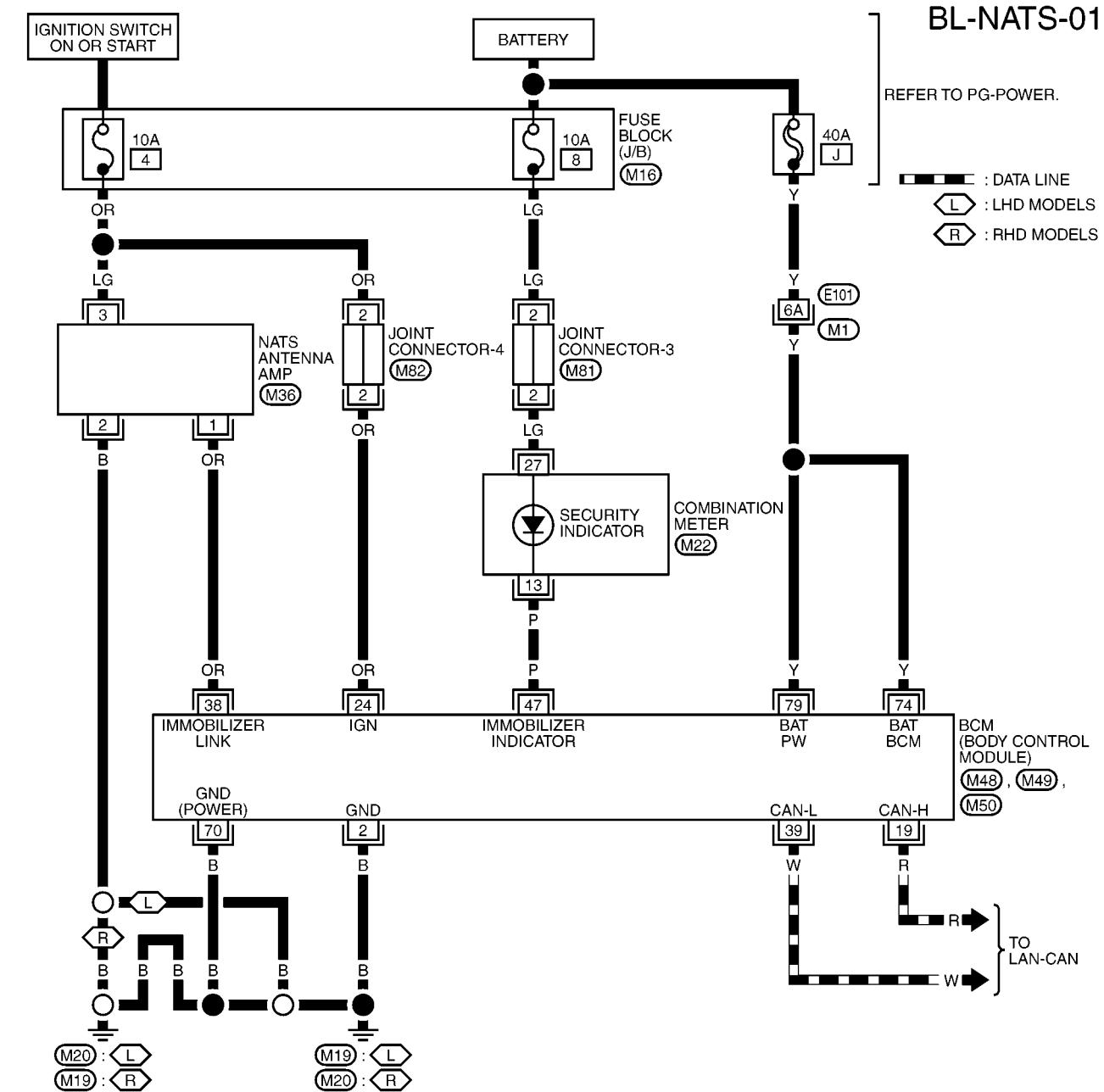
If engine can be started, procedure is completed.

If engine cannot be started, refer to CONSULT-II Operation Manual NATS and initialize control unit.

NATS (NISSAN ANTI-THEFT SYSTEM)

Wiring Diagram —NATS— WITHOUT INTELLIGENT KEY SYSTEM

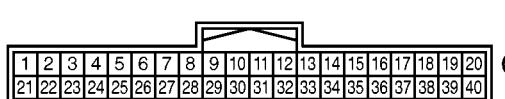
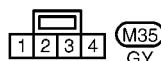
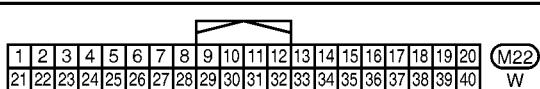
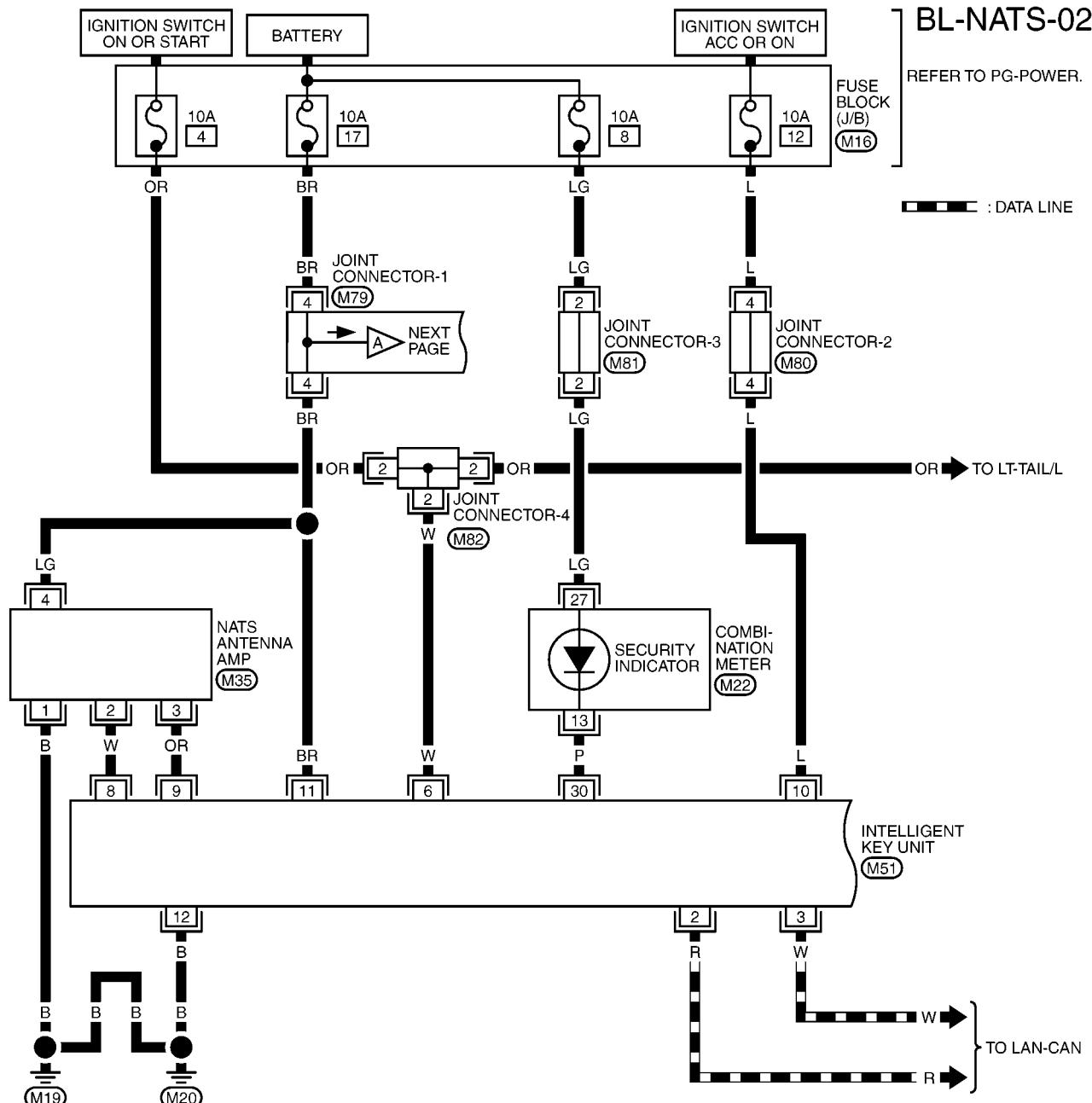
EIS004Q6



REFER TO THE FOLLOWING.
M1 - SUPER MULTIPLE
JUNCTION (SMJ)
M16 - FUSE BLOCK -
JUNCTION BOX (J/B)
M81, M82 - JOINT
CONNECTOR (J/C)

NATS (NISSAN ANTI-THEFT SYSTEM)

WITH INTELLIGENT KEY SYSTEM



REFER TO THE FOLLOWING.

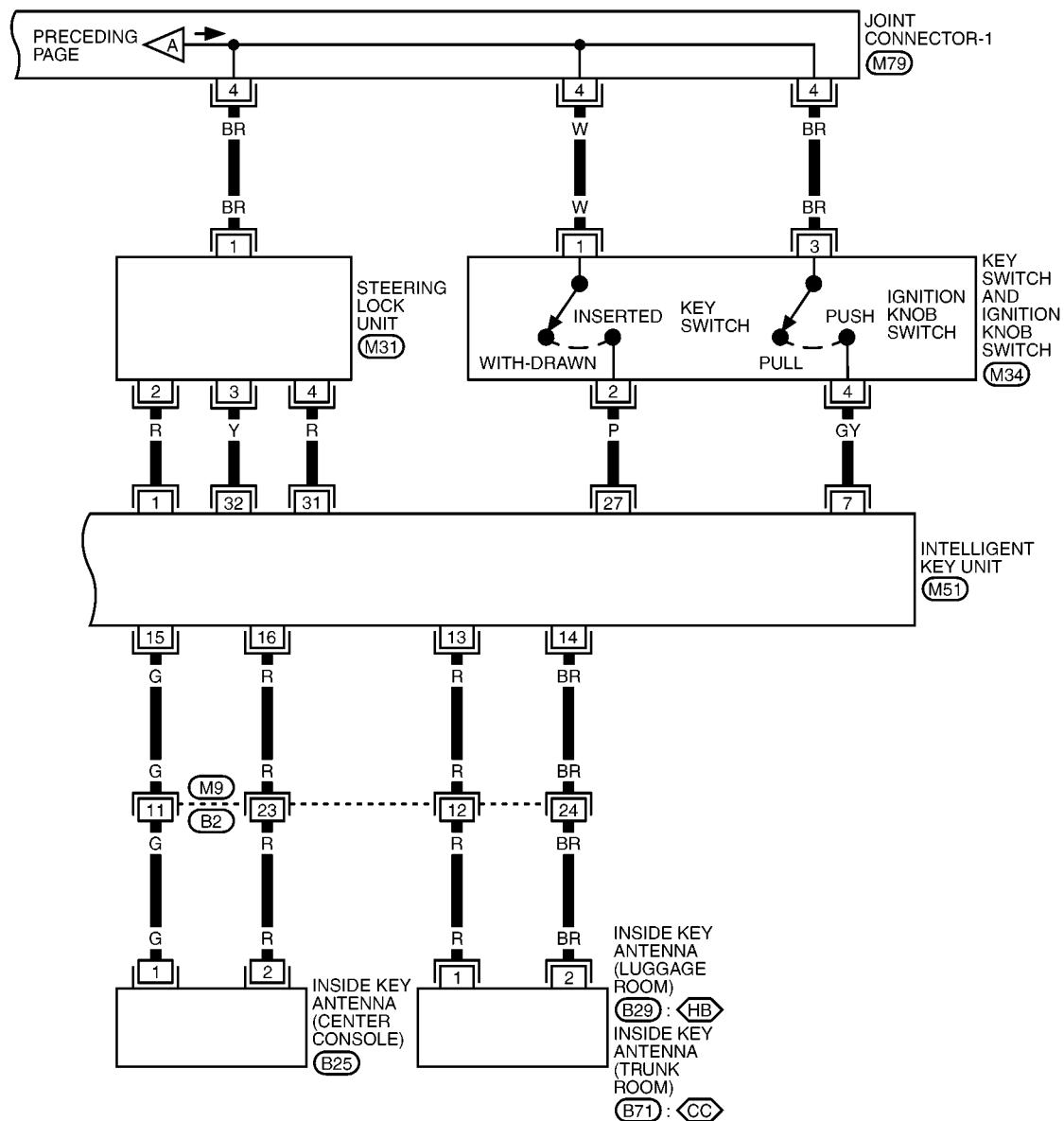
- REF ID: M16** - FUSE BLOCK-JUNCTION BOX (J/B)
- REF ID: M79, M80, M81, M82** - JOINT CONNECTOR (J/C)

NATS (NISSAN ANTI-THEFT SYSTEM)

BL-NATS-03

: HATCHBACK

: C+C

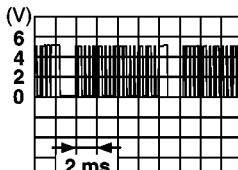


MIWA0640E

NATS (NISSAN ANTI-THEFT SYSTEM)

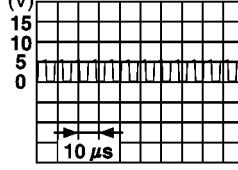
Terminals and Reference Value for Steering Lock Unit/with Intelligent Key System

EIS004Q7

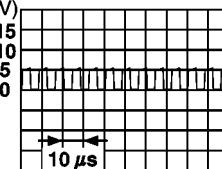
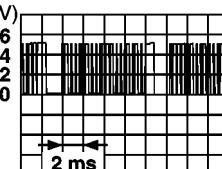
Terminal	Wire color	Signal Designation	Measuring condition		Voltage [V] (Approx.)
			Ignition knob position	Operation or conditions	
1	BR	Battery power supply	LOCK	—	Battery voltage
2	R	Steering wheel lock unit power supply	LOCK	—	5
3	Y	Steering wheel lock unit communication signal	LOCK	Press ignition knob with Intelligent Key inside vehicle.	 SIIA1911J
				Other than the above	
4	R	Steering wheel lock unit ground	—	—	0

Terminals and Reference Value for Intelligent Key Unit/with Intelligent Key System

EIS004Q8

Terminal	Wire color	Signal designation	Measuring condition		Voltage [V] (Approx.)
			Ignition knob position	Operation or conditions	
1	R	Steering wheel lock unit power supply	LOCK	—	5
2	R	CAN communication H	—	—	—
3	W	CAN communication L	—	—	—
6	W	Ignition power supply	ON	—	Battery voltage
7	GY	Ignition knob switch	—	Press ignition knob.	Battery voltage
				Return ignition knob to LOCK position.	0
8	W	NATS antenna amp.	—	Ignition knob OFF → ON position	Right after turning ignition switch "ON" pointer tester
9	OR	NATS antenna amp.	—	Ignition knob OFF → ON position	Right after turning ignition switch to ON position pointer of tester should move
10	L	ACC power supply	ACC	—	Battery voltage
11	BR	Battery power supply	—	—	Battery voltage
12	B	GND	—	—	0
13	R	Inside key antenna (+) (Luggage room)	LOCK	Any door open → all doors shut (Door switch: ON → OFF)	 SIIA1910J
14	BR	Inside key antenna (-) (Luggage room)			

NATS (NISSAN ANTI-THEFT SYSTEM)

Ter-minal	Wire color	Signal designation	Measuring condition		Voltage [V] (Approx.)
			Ignition knob position	Operation or conditions	
15	G	Inside key antenna (+) signal (Center console)	LOCK	Any door open → Close (Door switch: ON → OFF) Ignition knob switch: ON (press ignition knob.)	(V)  SIIA1910J
16	R	Inside key antenna (-) signal (Center console)			
27	P	Key switch signal	LOCK	Insert mechanical key into ignition key cylinder.	Battery voltage
				Remove mechanical key from ignition key cylinder.	0
30	P	Security indicator lamp	LOCK	Goes OFF → illuminates (Every 2.4 seconds)	Battery voltage → 0
31	R	Steering wheel lock unit ground	—	—	0
32	Y	Steering wheel lock unit communication signal	LOCK	Press ignition knob with Intelligent Key inside vehicle. Other than the above	(V)  SIIA1911J 5

Terminals and Reference Value for BCM/without Intelligent Key System

EIS004YO

Ter-minal	Wire color	Signal designation	Measuring condition		Voltage [V] (Approx.)
			Ignition switch position	Operation or conditions	
2	B	GND	—	—	0
19	R	CAN communication H	—	—	—
24	OR	Ignition power supply	ON	—	Battery voltage
38	OR	NATS antenna amp.	—	Ignition knob OFF → ON position	Right after turning ignition switch to ON position pointer of tester should move
39	W	CAN communication L	—	—	—
47	P	Security indicator lamp	OFF	Goes OFF → illuminates (Every 2.4 seconds)	Battery voltage → 0
70	B	GND	—	—	0
74	Y	Battery power supply	—	—	Battery voltage
79	Y	Battery power supply	—	—	Battery voltage

NATS (NISSAN ANTI-THEFT SYSTEM)

CONSULT-II

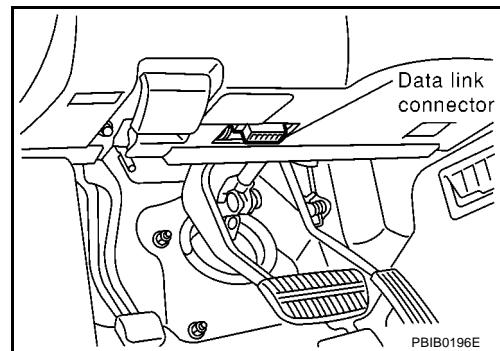
CONSULT-II INSPECTION PROCEDURE

EIS004Q9

1. Turn ignition switch OFF.
2. Insert NATS program card into CONSULT-II.

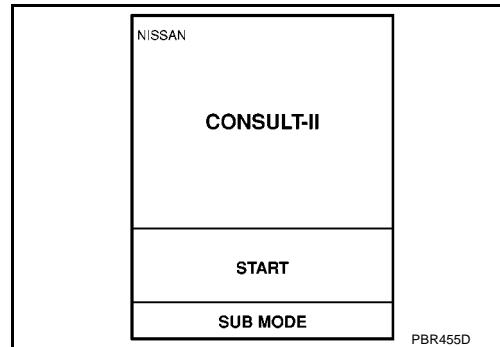
Program card : NATS (AEN02C)

3. Connect CONSULT-II and "CONSULT-II CONVERTER" to data link connector.



PBIB0196E

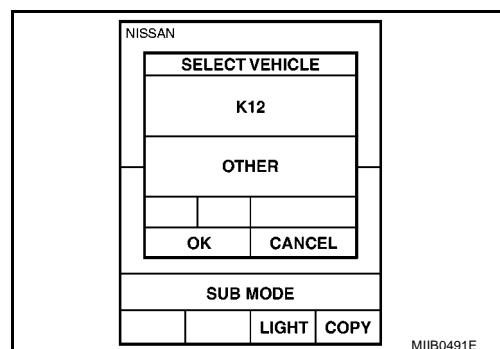
4. Turn ignition switch ON position.
5. Touch "START".



PBR455D

6. Select "K12"
7. Perform each diagnostic test mode according to each service procedure.

For further information, see the CONSULT-II Operation Manual, NATS.



MIIIB0491E

CONSULT-II DIAGNOSTIC TEST MODE FUNCTION

CONSULT-II DIAGNOSTIC TEST MODE	Description
IMMU INITIALIZE	When replacing any of the following three components, C/U initialization is necessary. [Ignition key or mechanical key/BCM or Intelligent Key unit]
IMMU FUNCTION CHECK	Detected items (screen terms) are as shown in the chart.

NOTE:

When any initialization is performed, all ID numbers previously registered will be erased and all ignition keys or mechanical key must be register again. The engine cannot be started with an unregistered key. The system will show "DIFFERENCE OF KEY" as a IMMU FUNCTION CHECK on the CONSULT-II screen.

NATS (NISSAN ANTI-THEFT SYSTEM)

CHECK RESULT ITEM CHART FOR NATS IMMU FUNCTION

Detected items (Screen terms)	Description
UNREGISTERED BCM*	ID is not registered in BCM
CHAIN OF IMMU-KEY	NATS IMMU cannot receive the key ID signal.
DIFFERENCE OF KEY	BCM or Intelligent Key unit receive the key ID signal but the result of ID verification between key ID and BCM or Intelligent Key is NG
CHAIN OF IPDM-IMMU*	The communication with IPDM E/R.
ID DISCORD IPDM-IMMU	BCM or Intelligent Key unit receive from IPDM E/R signal but the result of ID verification is NG.
CHAIN OF METER-IMMU*	The communication with combination meter.
ID DISCORD METER-IMMU	BCM or Intelligent Key unit receive from combination meter ID signal but the result of ID verification is NG.
CHAIN OF EPS-IMMU*	The communication with EPS is malfunction.
ID DISCORD EPS-IMMU	BCM or Intelligent Key unit receive from EPS ID signal but the result of ID verification is NG.
UNREGISTERED ECM	ID is not registered in ECM.
ID DISCORD ECM-IMMU	The result of ID verification between BCM and ECM is NG. System initialization is required.

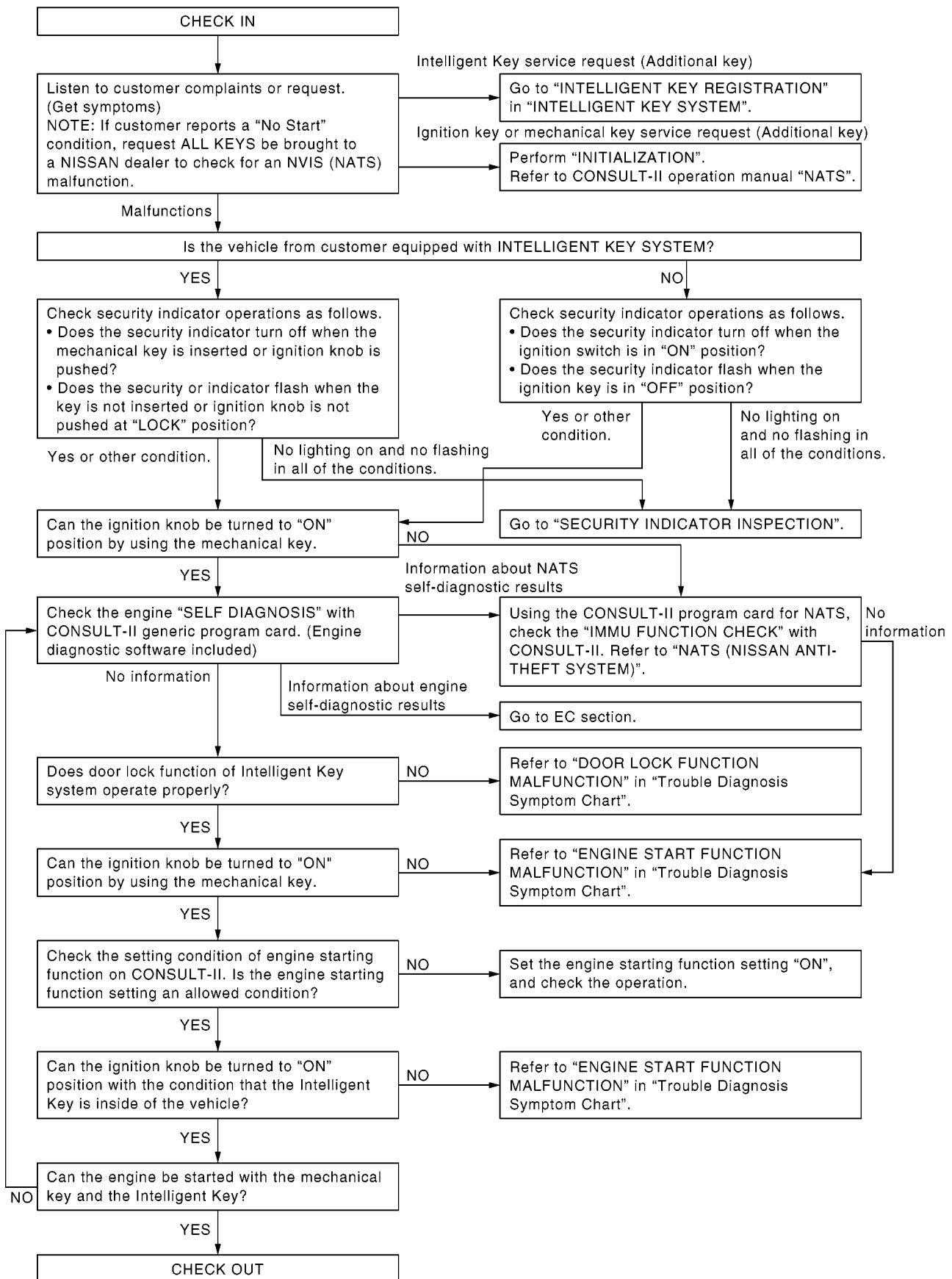
*: Applied for models without Intelligent Key system.

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NATS (NISSAN ANTI-THEFT SYSTEM)

Diagnosis Procedure WORK FLOW

EIS00D37



MIIIB0492E

NATS (NISSAN ANTI-THEFT SYSTEM)

Trouble Diagnosis Symptom Chart MODELS WITHOUT INTELLIGENT KEY SYSTEM

EIS004QB

NOTE:

Perform "Diagnostic Procedure 7", when "P1610" is displayed by the "SELF-DIAG RESULTS" of the ENGINE. Refer to "CONSULT-II Operation Manual NATS".

SYMPTOM	Displayed "IMMU FUNCTION CHECK" results on CONSULT-II screen.	Diagnoses service procedure	DIAGNOSTIC PROCEDURE
● Security indicator lighting up* ● Engine hard to start	UNREGISTERED BCM	Replace BCM	Refer to BL-297, "Diagnostic Procedure 1" .
	CHAIN OF IMMU-KEY	1. Check the following parts ● Open or short circuit between BCM and NATS antenna amp. ● Malfunction of key ID chip ● NATS antenna amp. 2. If the above system are "OK", replace BCM	Refer to BL-297, "Diagnostic Procedure 2" .
	DIFFERENCE OF KEY	1. Perform registration key 2. If the above system is "OK", replace BCM	Refer to BL-301, "Diagnostic Procedure 3" . Refer to BCS-30, "Removal and Installation of BCM" .
	CHAIN OF IPDM-IMMU	1. Check CAN communication system 2. If CAN communication is "OK", replace IPDM E/R	Refer to BCS-30, "CAN Communication Inspection With CONSULT-II (Self-Diagnosis)" . Refer to PG-53, "Removal and Installation of IPDM E/R" .
	ID DISCORD IPDM-IMMU	Replace IPDM E/R	Refer to PG-53, "Removal and Installation of IPDM E/R" .
	CHAIN OF METER-IMMU	1. Check CAN communication system 2. If CAN communication is "OK", replace combination meter	Refer to BCS-30, "CAN Communication Inspection With CONSULT-II (Self-Diagnosis)" . Refer to DI-36, "Removal and Installation for Combination Meter" .
	ID DISCORD METER-IMMU	Replace combination meter	Refer to DI-36, "Removal and Installation for Combination Meter" .
	CHAIN OF EPS-IMMU	1. Check CAN communication system 2. If CAN communication is "OK", replace EPS	Refer to BCS-30, "CAN Communication Inspection With CONSULT-II (Self-Diagnosis)" . Refer to BCS-30, "CAN Communication Inspection With CONSULT-II (Self-Diagnosis)" .
	ID DISCORD EPS-IMMU	Replace EPS	Refer to PS-7, "STEERING COLUMN" .
	UNREGISTERED ECM	Replace ECM	Refer to BL-301, "Diagnostic Procedure 4" .
	ID DISCORD ECM-IMMU	Replace ECM	Refer to BL-302, "Diagnostic Procedure 5" .

*: When NATS detects trouble, the security indicator lights up while ignition key is in the "ON" position.

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NATS (NISSAN ANTI-THEFT SYSTEM)

MODELS WITH INTELLIGENT KEY SYSTEM

NOTE:

Perform "Diagnostic Procedure 7", when "P1610" is displayed by the "SELF-DIAG RESULTS" of the ENGINE. Refer to "CONSULT-II Operation Manual NATS".

SYMPTOM	Displayed "IMMU FUNCTION CHECK" results on CONSULT-II screen.	Diagnoses service procedure	DIAGNOSTIC PROCEDURE
<ul style="list-style-type: none"> ● Security indicator lighting up* ● Engine hard to start 	CHAIN OF IMMU-KEY	1. Check the following parts ● Open or short circuit between BCM and NATS antenna amp. ● Malfunction of key ID chip ● NATS antenna amp.	Refer to BL-297, "Diagnostic Procedure 2" .
		2. If the above system are "OK", replace Intelligent Key unit	Refer to BL-231, "Removal and Installation of Intelligent key unit" .
	DIFFERENCE OF KEY	1. Perform key registration 2. If the above system is "OK", replace Intelligent Key unit	Refer to BL-301, "Diagnostic Procedure 3" . Refer to BL-231, "Removal and Installation of Intelligent key unit" .
	ID DISCORD IPDM-IMMU	1. Check CAN communication system 2. If CAN communication system is "OK", replace IPDM E/R	Refer to BL-220, "Check CAN Communication System" . Refer to PG-53, "Removal and Installation of IPDM E/R" .
	ID DISCORD METER-IMMU	1. Check CAN communication system 2. If CAN communication system is "OK", replace combination meter	Refer to BL-220, "Check CAN Communication System" . Refer to DI-36, "Removal and Installation for Combination Meter" .
	ID DISCORD EPS-IMMU	1. Check CAN communication system 2. If CAN communication system is "OK", replace EPS	Refer to BL-220, "Check CAN Communication System" . Refer to PS-7, "STEERING COLUMN" .
	ID DISCORD ECM-IMMU	Replace ECM	Refer to BL-302, "Diagnostic Procedure 5" .

*: When NATS detects trouble, the security indicator lights up while mechanical key is inserted.

Security Indicator Inspection

EIS004QC

SYMPTOM	SYSTEM (Malfunctioning part or mode)	DIAGNOSTIC PROCEDURE
Security indicator does not operate*	Security indicator	Refer to BL-302, "Diagnostic Procedure 6" .
	Open circuit between Fuse and NATS IMMU (BCM or Intelligent Key unit)	
	Continuation of initialization mode	
	BCM (without Intelligent Key system)	
	Intelligent Key unit (with Intelligent Key system)	

*: CONSULT-II "IMMU FUNCTION CHECK" results display screen "no malfunction is detected".

Diagnostic Procedure 1

EIS004QE

IMMU FUNCTION CHECK results:

“UNREGISTERD BCM” displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm “IMMU FUNCTION CHECK” results “UNREGISTERD BCM” displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

YES >> ● BCM is malfunctioning.

- Replace BCM.
- Perform initialization with CONSULT-II.
 - For initialization, refer to “CONSULT-II Operation Manual NATS”.

NO >> GO TO [BL-295, "Trouble Diagnosis Symptom Chart"](#).

Diagnostic Procedure 2

EIS004QF

MODELS WITHOUT INTELLIGENT KEY SYSTEM

IMMU FUNCTION CHECK results:

“CHAIN OF IMMU-KEY” displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm “IMMU FUNCTION CHECK” results “CHAIN OF IMMU-KEY” displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

Yes >> GO TO 2.

No >> GO TO [BL-295, "Trouble Diagnosis Symptom Chart"](#).

2. CHECK NATS ANTENNA AMP. INSTALLATION

Check NATS antenna amp. installation. Refer to [BL-305, "Removal and Installation NATS Antenna Amp."](#).

OK or NG

OK >> GO TO 3.

NG >> Reinstall NATS antenna amp. correctly.

3. CHECK IGNITION KEY ID CHIP

Start engine with another registered ignition key.

Does the engine start?

Yes >> ● Ignition key ID chip is malfunctioning.

- Replace the ignition key.
- Perform initialization with CONSULT-II.
 - For initialization, refer to “CONSULT-II Operation Manual NATS”.

No >> GO TO 4.

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NATS (NISSAN ANTI-THEFT SYSTEM)

4. CHECK POWER SUPPLY FOR NATS ANTENNA AMP.

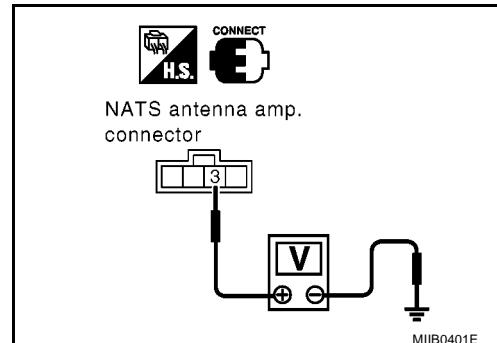
1. Turn ignition switch "ON".
2. Check voltage between NATS antenna amp. connector M36 terminal 3 (LG) and ground with CONSULT-II or tester.

3 (LG) - Ground: Battery voltage

OK or NG

OK >> GO TO 5.

NG >> Check harness for open or short between NATS antenna amp. and fuse.



5. CHECK NATS ANTENNA AMP. SIGNAL LINE

Check voltage between NATS antenna amp. connector M36 terminal 1 (OR) and ground with analogue tester.

Before turning ignition switch "ON"

Voltage: 0V

Just after turning ignition switch "ON"

: Pointer of tester should move.

OK or NG

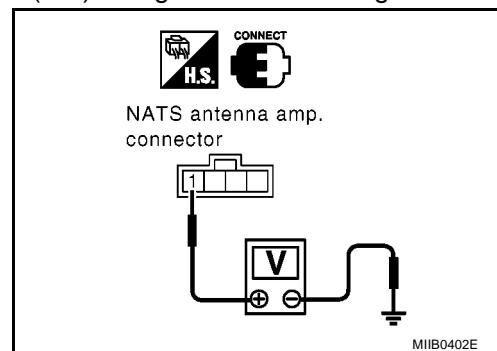
OK >> GO TO 6.

NG >> ● Check harness for open or short between NATS antenna amp. and BCM.

NOTE:

If harness is OK, replace new* BCM, perform initialization with CONSULT-II. For initialization, refer to "CONSULT-II Operation Manual NATS".

*: New one means virgin control unit that has never been energized on-board.



6. CHECK NATS ANTENNA AMP. GROUND LINE CIRCUIT

1. Turn ignition switch "OFF".
2. Check continuity between NATS antenna amp. connector M36 terminal 2 (B) and ground.

2 (B) - Ground: Continuity should exist.

OK or NG

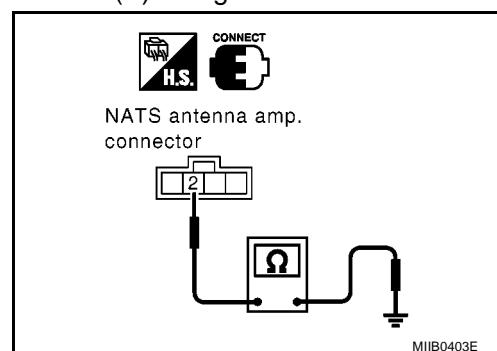
OK >> NATS antenna amp. is malfunctioning.

NG >> ● Check harness for open or short between NATS antenna amp. and ground.

NOTE:

If harness is OK, replace new* BCM, perform initialization with CONSULT-II. For initialization, refer to "CONSULT-II Operation Manual NATS".

*: New one means virgin control unit that has never been energized on-board.



NATS (NISSAN ANTI-THEFT SYSTEM)

MODELS WITH INTELLIGENT KEY SYSTEM

IMMU FUNCTION CHECK results:

“CHAIN OF IMMU-KEY” displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm “IMMU FUNCTION CHECK” results “CHAIN OF IMMU-KEY” displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

Yes >> GO TO 2.

No >> GO TO [BL-295, "Trouble Diagnosis Symptom Chart"](#).

2. CHECK NATS ANTENNA AMP. INSTALLATION

Check NATS antenna amp. installation. Refer to [BL-305, "Removal and Installation NATS Antenna Amp."](#).

OK or NG

OK >> GO TO 3.

NG >> Reinstall NATS antenna amp. correctly.

3. CHECK MECHANICAL KEY ID CHIP

Start engine with another registered mechanical key.

Does the engine start?

Yes >> ● Mechanical key ID chip is malfunctioning.

● Replace the mechanical key.

● Perform initialization with CONSULT-II.

For initialization, refer to “CONSULT-II Operation Manual NATS”.

No >> GO TO 4.

4. CHECK POWER SUPPLY FOR NATS ANTENNA AMP.

1. Turn ignition switch “ON”.

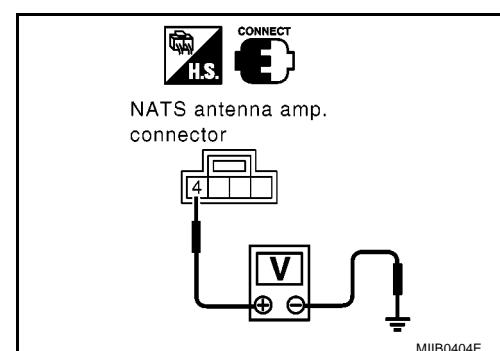
2. Check voltage between NATS antenna amp. connector M35 terminal 4 (LG) and ground.

4 (LG) - Ground: Battery voltage

OK or NG

OK >> GO TO 5.

NG >> Check harness for open or short between NATS antenna amp. and fuse.



NATS (NISSAN ANTI-THEFT SYSTEM)

5. CHECK NATS ANTENNA AMP. SIGNAL LINE- 1

Check voltage between NATS antenna amp. connector M35 terminal 2 (W) and ground with analogue tester.

Before inserting mechanical key in ignition knob

Voltage: 0V

Just after inserting mechanical key in ignition knob

: Pointer of tester should move.

OK or NG

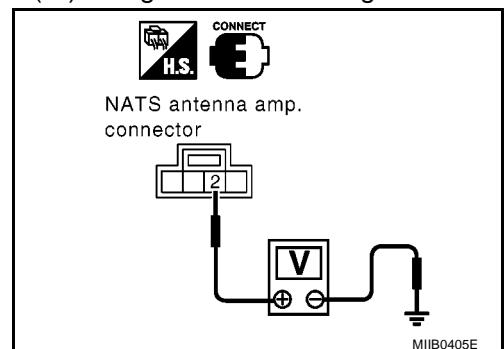
OK >> GO TO 6.

NG >> ● Check harness for open or short between NATS antenna amp. and Intelligent Key unit.

NOTE:

If harness is OK, replace new* Intelligent Key unit, perform initialization with CONSULT-II. For initialization, refer to "CONSULT-II Operation Manual NATS".

*: New one means virgin control unit that has never been energized on-board.



MIIIB0405E

6. CHECK NATS ANTENNA AMP. SIGNAL LINE- 2

Check voltage between NATS antenna amp. connector M35 terminal 3 (OR) and ground with analogue tester.

Before inserting mechanical key in ignition knob

Voltage: 0V

Just after inserting mechanical key in ignition knob

: Pointer of tester should move.

OK or NG

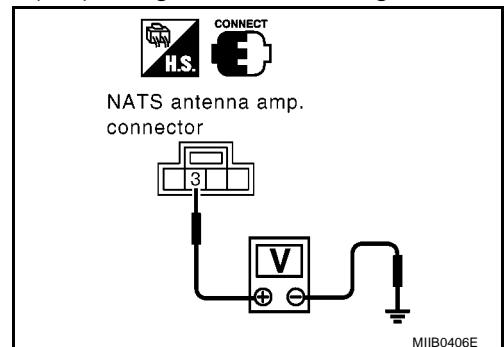
OK >> GO TO 7.

NG >> ● Check harness for open or short between NATS antenna amp. and Intelligent Key unit.

NOTE:

If harness is OK, replace new* Intelligent Key unit, perform initialization with CONSULT-II. For initialization, refer to "CONSULT-II Operation Manual NATS".

*: New one means virgin control unit that has never been energized on-board.



MIIIB0406E

7. CHECK NATS ANTENNA AMP. GROUND LINE CIRCUIT

1. Turn ignition switch "OFF".

2. Check continuity between NATS antenna amp. connector M35 terminal 1 (B) and ground.

1 (B) - Ground: Continuity should exist.

OK or NG

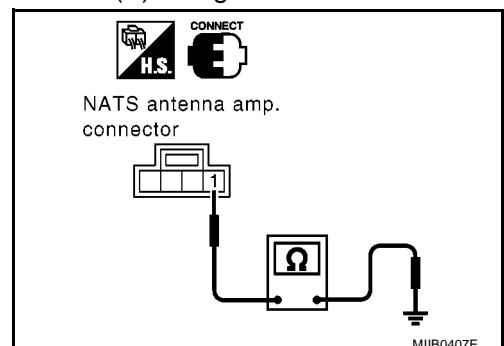
OK >> NATS antenna amp. is malfunctioning.

NG >> ● Check harness for open or short between NATS antenna amp. and ground.

NOTE:

If harness is OK, replace new* Intelligent Key unit, perform initialization with CONSULT-II. For initialization, refer to "CONSULT-II Operation Manual NATS".

*: New one means virgin control unit that has never been energized on-board.



MIIIB0407E

Diagnostic Procedure 3

EIS004QG

IMMU FUNCTION CHECK results:

“DIFFERENCE OF KEY” displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm “IMMU FUNCTION CHECK” results “DIFFERENCE OF KEY” displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

Yes >> GO TO 2.

No >> GO TO [BL-295, "Trouble Diagnosis Symptom Chart"](#).

2. PERFORM INITIALIZATION WITH CONSULT-II

Perform initialization with CONSULT-II. Re-register all NATS ignition key IDs.

For initialization and registration of NATS ignition key IDs, refer to “CONSULT-II Operation Manual NATS”.

NOTE:

If the initialization is not completed or malfunctions, CONSULT-II shows message on the screen.

Can the system be initialized and can the engine be started with re-registered NATS ignition key?

Yes >> ● Ignition key ID was unregistered.

No >> ● BCM is malfunctioning. (models without Intelligent Key system)

- Replace new* BCM.

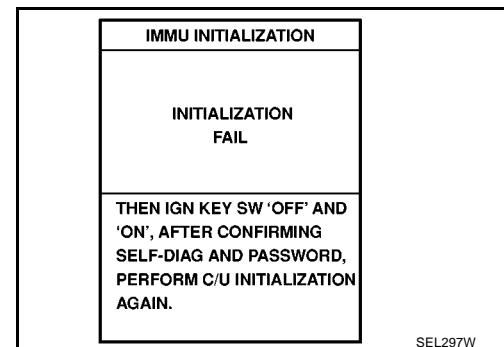
- Intelligent Key unit is malfunctioning. (models with Intelligent Key system)

- Replace new* Intelligent Key unit.

- Perform initialization with CONSULT-II.

- For initialization, refer to “CONSULT-II Operation Manual NATS”.

*: New one means virgin control unit that has never been energized on-board.



Diagnostic Procedure 4

EIS0056B

IMMU FUNCTION CHECK results:

“UNREGISTERD ECM” displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm “IMMU FUNCTION CHECK” results “UNREGISTERD ECM” displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

YES >> ● ECM is malfunctioning.

- Replace ECM.

- Perform initialization or re-communicating function.

- For initialization, refer to [BL-286, "ECM Re-communicating Function"](#).

NO >> GO TO [BL-295, "Trouble Diagnosis Symptom Chart"](#).

NATS (NISSAN ANTI-THEFT SYSTEM)

Diagnostic Procedure 5

EIS0056C

IMMU FUNCTION CHECK results:

"ID DISCORD ECM-IMMU" displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm "IMMU FUNCTION CHECK" results "UNREGISTERD ECM" displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

YES >> ● ECM is malfunctioning.

- Replace ECM.
- Perform initialization or re-communicating function.
 - For initialization, refer to "CONSULT-II Operation Manual NATS".

NO >> GO TO [BL-295, "Trouble Diagnosis Symptom Chart"](#).

Diagnostic Procedure 6

EIS0056G

MODELS WITHOUT INTELLIGENT KEY SYSTEM

"Security indicator does not light up"

1. CHECK FUSE

Check 10A fuse [No. 8, located in the fuse block (J/B)]

OK or NG

OK >> GO TO 2.

NG >> Replace fuse.

2. CHECK SECURITY INDICATOR LAMP

1. Install 10A fuse.
2. Start engine and turn ignition switch OFF.
3. Check the security indicator lamp lights up.

Security indicator lamp should light up.

OK or NG

OK >> Inspection END.

NG >> GO TO 3.

3. CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

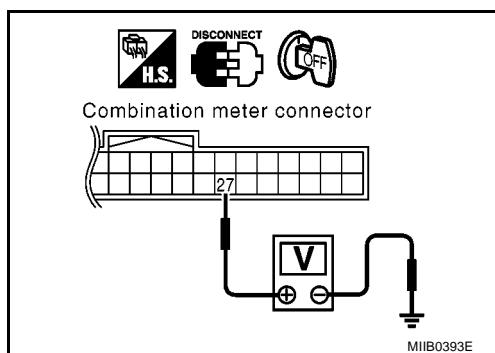
1. Disconnect combination meter (security indicator lamp) connector.
2. Check voltage between security indicator lamp connector M22 terminal 27 (LG) and ground.

27 (LG)- Ground: Battery voltage

OK or NG

OK >> GO TO 4.

NG >> Check harness for open or short between fuse and security indicator lamp.



NATS (NISSAN ANTI-THEFT SYSTEM)

4. CHECK BCM FUNCTION

1. Connect combination meter (security indicator lamp) connector.
2. Disconnect BCM connector M3.
3. Check voltage between BCM connector M49 terminal 47 (P) and ground.

47 (P)- Ground: Battery voltage

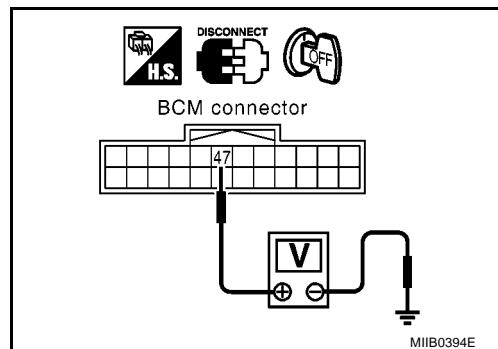
OK or NG

OK >> BCM is malfunctioning.

- Replace BCM.
- Perform initialization with CONSULT-II.
- For initialization, refer to "CONSULT-II Operation Manual NATS".

NG >> Check the following.

- Harness for open or short between security indicator lamp and BCM.
- Indicator lamp condition



MODELS WITH INTELLIGENT KEY SYSTEM

"Security indicator does not light up"

1. CHECK FUSE

Check 10A fuse [No. 8, located in the fuse block (J/B)]

OK or NG

OK >> GO TO 2.

NG >> Replace fuse.

2. CHECK SECURITY INDICATOR LAMP

1. Install 10A fuse.
2. Start engine and turn ignition knob OFF position.
3. Check the security indicator lamp lights up.

Security indicator lamp should light up.

OK or NG

OK >> Inspection END.

NG >> GO TO 3.

3. CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

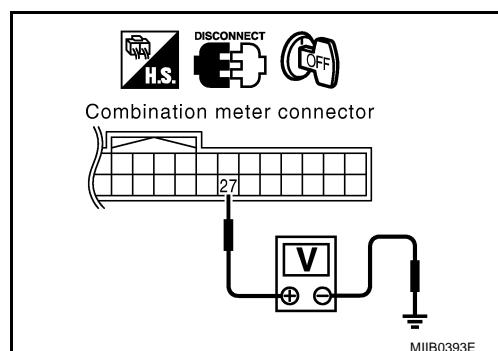
1. Disconnect combination meter (security indicator lamp) connector.
2. Check voltage between security indicator lamp connector M22 terminal 27 (LG) and ground.

27 (LG)- Ground: Battery voltage

OK or NG

OK >> GO TO 4.

NG >> Check harness for open or short between fuse and security indicator lamp.



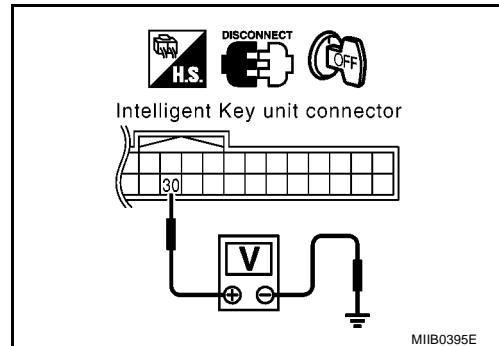
4. CHECK INTELLIGENT KEY UNIT FUNCTION

1. Connect combination meter (security indicator lamp) connector.
2. Disconnect Intelligent Key unit connector M51.
3. Check voltage between Intelligent Key unit connector M51 terminal 30 (P) and ground.

30 (P)- Ground: **Battery voltage**

OK or NG

- OK >> Intelligent Key is malfunctioning.
● Replace Intelligent Key unit.
● Perform initialization with CONSULT-II.
● For initialization, refer to "CONSULT-II Operation Manual NATS".
- NG >> Check the following.
● Harness for open or short between security indicator lamp and Intelligent Key unit.
● Indicator lamp condition



Diagnostic Procedure 7

EIS0056H

IMMU FUNCTION CHECK results:

"P1610" displayed on CONSULT-II screen

1. CONFIRM IMMU FUNCTION CHECK

Confirm "IMMU FUNCTION CHECK" results "P1610" (LOCK MODE) is displayed on CONSULT-II screen.

Is CONSULT-II screen displayed as above?

- Yes >> GO TO 2.
No >> GO TO [BL-294, "WORK FLOW"](#).

2. ESCAPE FROM LOCK MODE

1. Turn ignition switch OFF.
2. Turn ignition switch ON with registered key. (Do not start engine.) Wait 5 seconds.
3. Return the key to OFF position. Wait 5 seconds.
4. Repeat steps 2 and 3 twice (total of three cycles).
5. Start the engine.

Does engine start?

- Yes >> System is OK (Now system is escaped from "LOCK MODE").
No >> Perform "IMMU FUNCTION CHECK", and repair the diagnosis result on the display.

Removal and Installation NATS Antenna Amp.

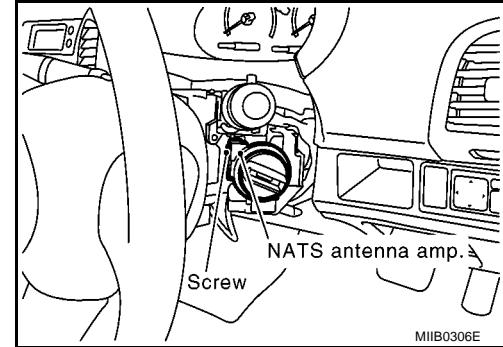
EIS004QK

REMOVAL

CAUTION:

Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.

1. Remove the spiral cable. Refer to [SRS-39, "Removal and Installation"](#).
2. Disconnect the NATS antenna amp. connect, remove the screw and NATS antenna amp.



INSTALLATION

Install in the reverse order of removal.

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NATS (NISSAN ANTI-THEFT SYSTEM)
