SECTION SEC
SECURITY CONTROL SYSTEM

CONTENTS

BASIC INSPECTION 5

DIAGNOSIS AND REPAIR WORK FLOW 5
Work Flow 5

INSPECTION AND ADJUSTMENT 8

ECM RECOMMUNICATING FUNCTION 8
ECM RECOMMUNICATING FUNCTION : Description 8
ECM RECOMMUNICATING FUNCTION : Special Repair Requirement 8

SYSTEM DESCRIPTION 9

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION 9
System Diagram 9
System Description 9
Component Parts Location 12
Component Description 13

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS 15
System Diagram 15
System Description 15
Component Parts Location 17
Component Description 18

VEHICLE SECURITY SYSTEM 20
System Diagram 20
System Description 20
Component Parts Location 22
Component Description 23

DIAGNOSIS SYSTEM (BCM) 24

COMMON ITEM 24
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM) 24

INTELLIGENT KEY 25
INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe) 25

THEFT ALM 29
THEFT ALM : CONSULT Function (BCM - THEFT) 29

IMMU 30
IMMU : CONSULT Function (BCM - IMMU) 30

DTC/CIRCUIT DIAGNOSIS 31

U1000 CAN COMM CIRCUIT 31

BCM 31
BCM : Description 31
BCM : DTC Logic 31
BCM : Diagnosis Procedure 31

IPDM E/R 31
IPDM E/R : Description 31
IPDM E/R : DTC Logic 31
IPDM E/R : Diagnosis Procedure 31

U1010 CONTROL UNIT (CAN) 33

BCM 33
BCM : DTC Logic 33
BCM : Diagnosis Procedure 33
BCM : Special Repair Requirement 33

P1610 LOCK MODE 34
Description 34
DTC Logic 34
Diagnosis Procedure 34

P1611 ID DISCORD, IMMU-ECM 35
Description 35
DTC Logic 35
Diagnosis Procedure 35

P1612 CHAIN OF ECM-IMMU 37
Description 37

DTC Logic 37
Diagnosis Procedure 37

P1614 CHAIN OF IMMU-KEY 38
Description 38
DTC Logic 38
Diagnosis Procedure 38

P1615 DIFFRENCE OF KEY 41
Description 41
DTC Logic 41
Diagnosis Procedure 41

B2190 NATS ANTENNA AMP. 42
Description 42
DTC Logic 42
Diagnosis Procedure 42

B2191 DIFFERENCE OF KEY 45
Description 45
DTC Logic 45
Diagnosis Procedure 45

B2192 ID DISCORD, IMMU-ECM 46
Description 46
DTC Logic 46
Diagnosis Procedure 46

B2193 CHAIN OF ECM-IMMU 48
Description 48
DTC Logic 48
Diagnosis Procedure 48

B2195 ANTI-SCANNING 49
Description 49
DTC Logic 49
Diagnosis Procedure 49

B2555 STOP LAMP 50
Description 50
DTC Logic 50
Diagnosis Procedure 50
Component Inspection 51

B2556 PUSH-BUTTON IGNITION SWITCH 52
Description 52
DTC Logic 52
Diagnosis Procedure 52
Component Inspection 53

B2557 VEHICLE SPEED 54
Description 54
DTC Logic 54
Diagnosis Procedure 54

B2560 STARTER CONTROL RELAY 55
Description 55
DTC Logic 55
Diagnosis Procedure 55

B2601 SHIFT POSITION 56
Description 56
DTC Logic 56
Diagnosis Procedure 56
Component Inspection 58

B2602 SHIFT POSITION 59
Description 59
DTC Logic 59
Diagnosis Procedure 59
Component Inspection 60

B2603 SHIFT POSITION STATUS 62
Description 62
DTC Logic 62
Diagnosis Procedure 62

B2604 PNP SWITCH 65
Description 65
DTC Logic 65
Diagnosis Procedure 65

B2605 PNP SWITCH 67
Description 67
DTC Logic 67
Diagnosis Procedure 67

B2608 STARTER RELAY 69
Description 69
DTC Logic 69
Diagnosis Procedure 69

B260F ENGINE STATUS 71
Description 71
DTC Logic 71
Diagnosis Procedure 71

B26E8 CLUTCH INTERLOCK SWITCH 72
Description 72
DTC Logic 72
Diagnosis Procedure 72
Component Inspection 73

B26EA KEY REGISTRATION 74
Description 74
DTC Logic 74
Diagnosis Procedure 74

B2617 STARTER RELAY CIRCUIT 75
Description 75
DTC Logic 75
Diagnosis Procedure 75

B2619 BCM 77
Description 77
DTC Logic 77
Diagnosis Procedure 77

B261E VEHICLE TYPE 78
Description 78
DTC Logic 78
Diagnosis Procedure 78

B261F ASCD CLUTCH SWITCH 79

Description 79
DTC Logic 79
Diagnosis Procedure 79
Component Inspection 80

B210B STARTER CONTROL RELAY 81
Description 81
DTC Logic 81
Diagnosis Procedure 81

B210C STARTER CONTROL RELAY 82
Description 82
DTC Logic 82
Diagnosis Procedure 82

B210D STARTER RELAY 83
Description 83
DTC Logic 83
Diagnosis Procedure 83

B210E STARTER RELAY 84
Description 84
DTC Logic 84
Diagnosis Procedure 84

B210F PNP/CLUTCH INTERLOCK SWITCH 86
Description 86
DTC Logic 86
Diagnosis Procedure 86

B2110 PNP/CLUTCH INTERLOCK SWITCH 88
Description 88
DTC Logic 88
Diagnosis Procedure 88

POWER SUPPLY AND GROUND CIRCUIT 90

BCM 90
BCM : Diagnosis Procedure 90

IPDM E/R 90
IPDM E/R : Diagnosis Procedure 90

KEY SLOT 92
Description 92
Component Function Check 92
Diagnosis Procedure 92

KEY SLOT INDICATOR 93
Description 93
Component Function Check 93
Diagnosis Procedure 93

HOOD SWITCH 95
Description 95
Component Function Check 95
Diagnosis Procedure 95
Component Inspection 96

HORN FUNCTION 97
Description 97
Component Function Check 97
Diagnosis Procedure 97

SECURITY INDICATOR LAMP 99
Description 99
Component Function Check 99
Diagnosis Procedure 99

KEY WARNING LAMP 101
Description 101
Component Function Check 101
Diagnosis Procedure 101

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION 102
Wiring Diagram - INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION - 102

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS 114
Wiring Diagram - NISSAN VEHICLE IMMOBILIZ-ER SYSTEM - 114

VEHICLE SECURITY SYSTEM 123
Wiring Diagram - VEHICLE SECURITY SYSTEM - 123

ECU DIAGNOSIS INFORMATION 133

BCM (BODY CONTROL MODULE) 133
Reference Value 133
Wiring Diagram - BCM - 157
Fail-safe 172
DTC Inspection Priority Chart 173
DTC Index 174

IPDM E/R (INTELLIGENT POWER DISTRI-BUTION MODULE ENGINE ROOM) 177
Reference Value 177
Wiring Diagram - IPDM E/R - 184
Fail-safe 187
DTC Index 189

SYMPTOM DIAGNOSIS 190

ENGINE DOES NOT START WHEN INTELLI-GENT KEY IS INSIDE OF VEHICLE 190
Description 190
Diagnosis Procedure 190

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK 191
Description 191
Diagnosis Procedure 191

VEHICLE SECURITY SYSTEM CANNOT BE SET 192

INTELLIGENT KEY 192
INTELLIGENT KEY : Description 192
INTELLIGENT KEY : Diagnosis Procedure 192

DOOR REQUEST SWITCH 192

DOOR REQUEST SWITCH : Description 192
DOOR REQUEST SWITCH : Diagnosis Procedure 192

VEHICLE SECURITY ALARM DOES NOT ACTIVATE 194
Description 194
Diagnosis Procedure 194

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE 195
Description 195
Diagnosis Procedure 195

PANIC ALARM FUNCTION DOES NOT OPERATE 197
Description 197
Diagnosis Procedure 197

PRECAUTION 198

PRECAUTIONS 198

FOR USA AND CANADA 198
FOR USA AND CANADA : Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" 198
FOR USA AND CANADA : Precaution for Battery Service 198
FOR USA AND CANADA : Precaution for Procedure without Cowl Top Cover 198
FOR USA AND CANADA : Precautions For Xenon Headlamp Service 199
FOR USA AND CANADA : Precautions for Removing Battery Terminal 199

FOR MEXICO 199
FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" 199
FOR MEXICO : Precaution for Battery Service ... 200
FOR MEXICO : Precaution for Procedure without Cowl Top Cover 200
FOR MEXICO : Precautions For Xenon Headlamp Service 200
FOR MEXICO : Precautions for Removing Battery Terminal 201

REMOVAL AND INSTALLATION 202

KEY SLOT 202
Exploded View 202
Removal and Installation 202

PUSH-BUTTON IGNITION SWITCH 203
Exploded View 203
Removal and Installation 203

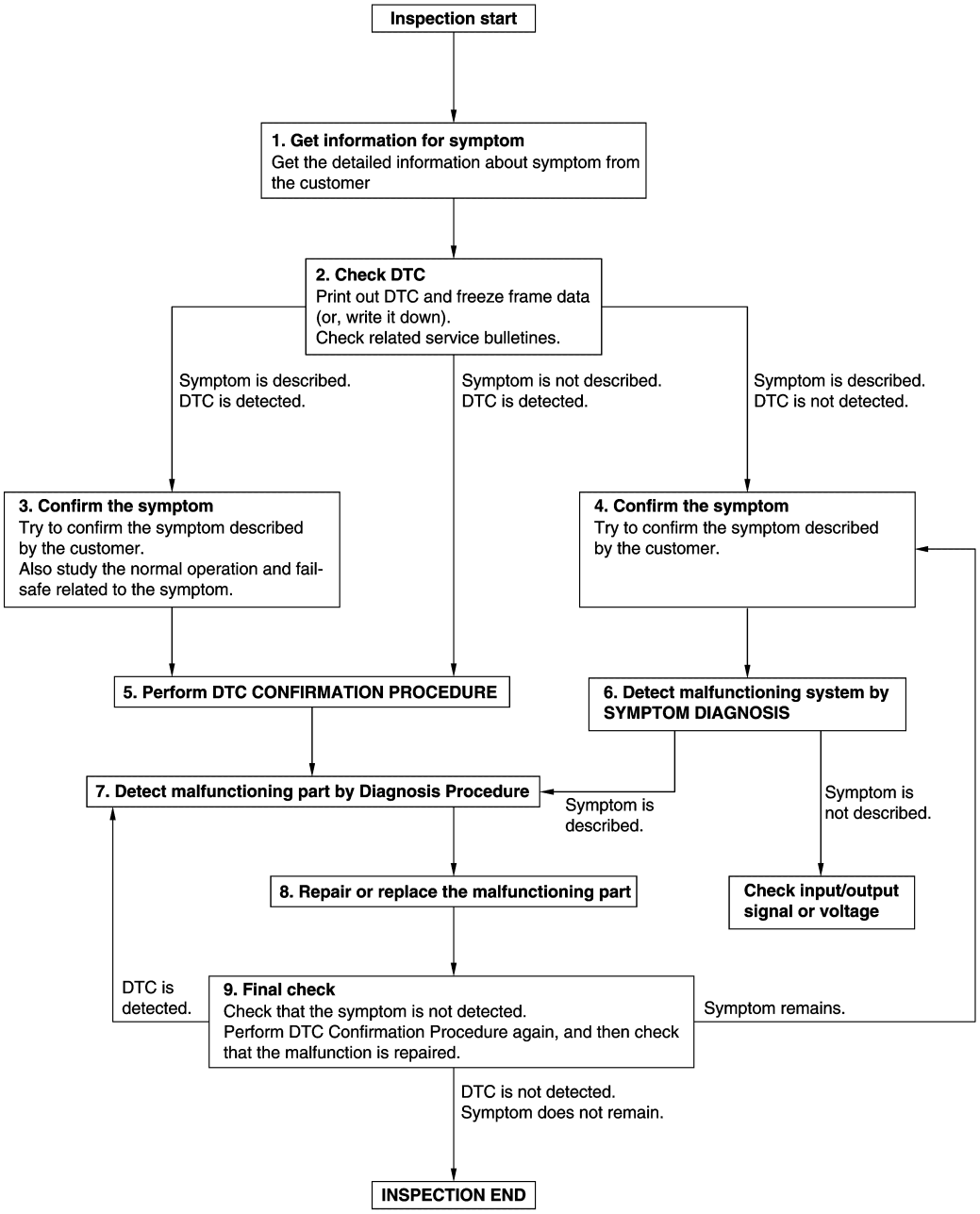
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000010841269

OVERALL SEQUENCE



JMKIA8652GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

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

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-98, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

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

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

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

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

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

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

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

Is DTC detected and does symptom remain?

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

INSPECTION AND ADJUSTMENT
ECM RECOMMUNICATING FUNCTION

ECM RECOMMUNICATING FUNCTION : Description

INFOID:0000000010841270

Performing the following procedure can automatically activate recommunication of ECM and BCM, but only when the ECM is replaced with a new one*.
*: New one means a virgin ECM that is never energized on-board.
(In this step, initialization procedure by CONSULT is not necessary)
NOTE:
- **If multiple keys are attached to the key holder, separate them before beginning work.**
- **Distinguish keys with unregistered key IDs from those with registered IDs.**

ECM RECOMMUNICATING FUNCTION : Special Repair Requirement

INFOID:0000000010841271

1.PERFORM ECM RECOMMUNICATING FUNCTION

1. Install ECM.
2. Insert the registered Intelligent Key* into key slot, turn ignition switch to “ON”.
   *: To perform this step, use the key that is used before performing ECM replacement.
3. Maintain ignition switch in the “ON” position for 5 seconds or more.
4. Turn ignition switch to “OFF”.
5. Start engine.

Can engine be started?

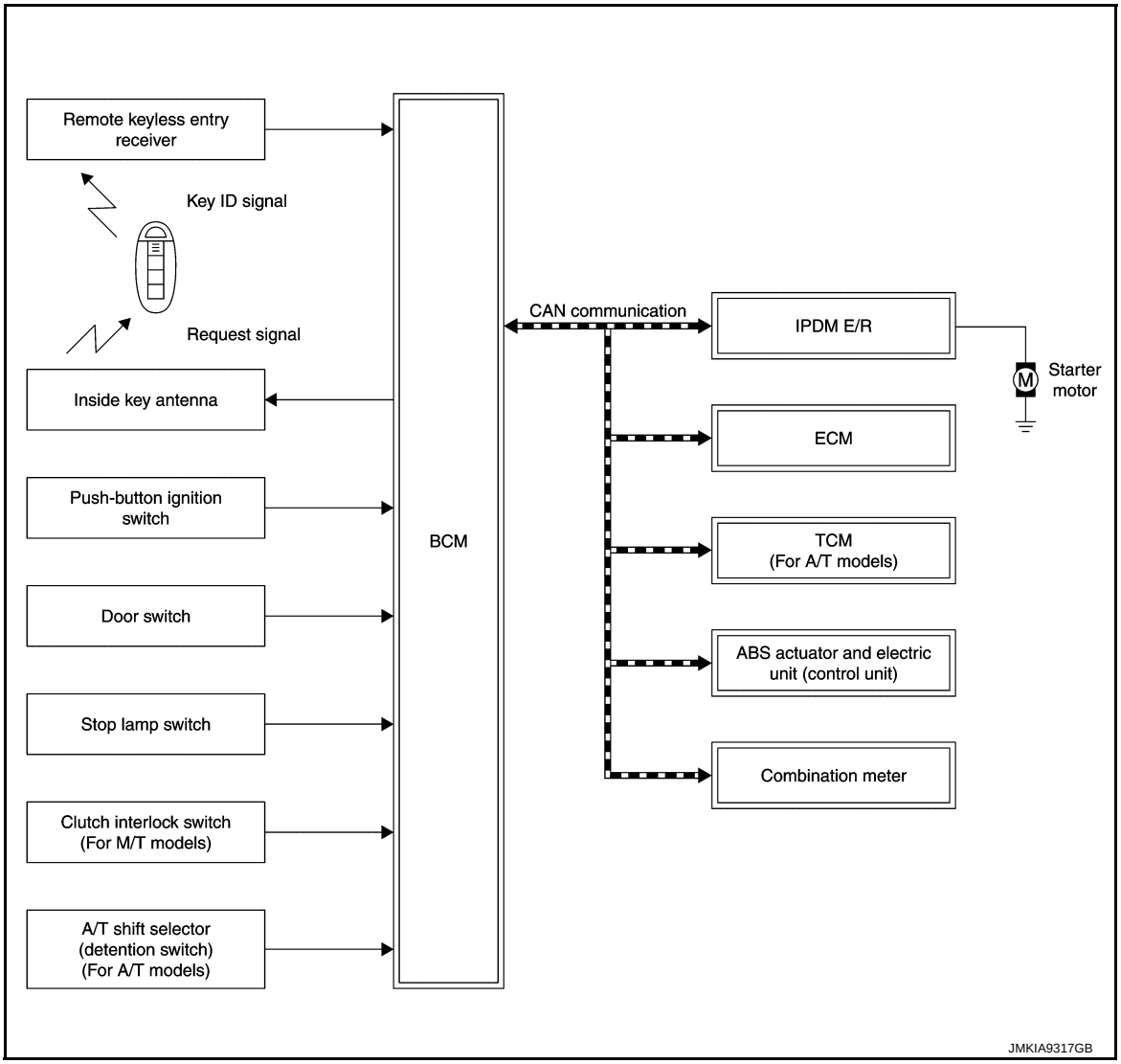
YES >> Procedure is complete.
NO >> Initialize control unit.

SYSTEM DESCRIPTION

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

System Diagram

INFOID:0000000010841272



System Description

INFOID:0000000010841273

SYSTEM DESCRIPTION

- The engine start function of Intelligent Key system is a system that makes it possible to start and stop the engine without removing the key. It verifies an electronic ID using two-way communication when pressing the push-button ignition switch while carrying the Intelligent Key, which operates based on the results of electronic ID verification of Intelligent Key using two-way communication between the Intelligent Key and the vehicle.
  NOTE:
  The driver should carry the Intelligent Key at all times.
- Intelligent Key has 2 IDs [Intelligent Key and NVIS (NATS)]. It can perform the door lock/unlock operation and the push-button ignition switch operation when the registered Intelligent Key is carried.
- When the Intelligent Key battery is discharged, it can be used as emergency back-up by inserting the Intelligent Key to the key slot. At that time, perform the NVIS (NATS) ID verification. If it is used when the Intelligent Key is carried, perform the Intelligent Key ID verification.
- Up to 4 Intelligent Keys can be registered (Including the standard Intelligent Key) upon request from the customer.
  NOTE:

Refer to DLK-25, "INTELLIGENT KEY SYSTEM : System Description" for any functions other than engine start function of Intelligent Key system.

PRECAUTIONS FOR INTELLIGENT KEY SYSTEM

In the Intelligent Key system, the transponder [the chip for NVIS (NATS) ID verification] is integrated into the Intelligent Key. (For the conventional models, it is integrated into the mechanical key.) Therefore, the mechanical key cannot perform ID verification, and thus it cannot start the engine. Instead, NVIS (NATS) ID verification can be performed by inserting the Intelligent Key to the key slot, and then it can start the engine.

OPERATION WHEN INTELLIGENT KEY IS CARRIED

1. When the push-button ignition switch is pressed, the BCM activates the inside key antenna and transmits the request signal to the Intelligent Key.
2. The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the BCM.
3. The BCM receives the Intelligent Key ID signal via the remote keyless entry receiver, and verifies it with the registered ID.
4. BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
5. IPDM E/R turns the ignition relay ON to start the ignition power supply.
6. BCM confirms that the shift position is P or N.
7. BCM transmits the starter request signal via CAN communication to IPDM E/R and turns the starter relay in IPDM E/R ON if BCM judges that the engine start condition is satisfied.
8. IPDM E/R turns the starter control relay ON when receiving the starter request signal.
9. Battery power is supplied through the starter relay and the starter control relay to operate the starter motor to start the cranking.
   CAUTION:
   If a malfunction is detected in the Intelligent Key system, the “KEY” warning lamp in the combination meter illuminates. At that time, the engine cannot be started.
10. When BCM received feedback signal from ECM indicating that the engine is started, the BCM transmits a stop signal to IPDM E/R and stops the cranking by turning OFF the starter motor relay. (If the engine initiating has failed, the cranking will stop automatically within 5 seconds.)
    CAUTION:
    When the Intelligent Key is carried outside of the vehicle (inside key antenna detection area) with the power supply in ACC or ON position, even if the engine start condition* is satisfied, the engine cannot be started.

*: For the engine start condition, refer to “POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERATION”.

OPERATION RANGE

Engine can be started when Intelligent Key is inside the vehicle. However, sometimes engine may not start when Intelligent Key is on instrument panel or in glove box.

OPERATION WHEN KEY SLOT IS USED

When the Intelligent Key battery is discharged, it performs NVIS (NATS) ID verification between the integrated transponder and BCM by inserting the Intelligent Key into the key slot, and then the engine can be started.
For details relating to starting the engine using key slot, refer to SEC-15, "System Description".

BATTERY SAVER SYSTEM

When all the following conditions are met for 60 minutes, the battery saver system cuts off the power supply to prevent battery discharge.
- The ignition switch is in the ACC position
- All doors are closed
- Selector lever is in the P position

Reset Condition of Battery Saver System

A/T models

In order to prevent the battery from discharging, the battery saver system cuts off the power supply when all doors are closed, the selector lever is in the P position, and the ignition switch is left in the ACC position for 60 minutes. If any of the following conditions are met the battery saver system is released.
- Opening any door
- Operating door lock using door request switch

• Operating door lock using Intelligent Key

Press push-button ignition switch and ignition switch changes to the ACC position from the OFF position.

M/T models

If any of the above conditions are met, the battery saver system is released.

POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERATION

The power supply position changing operation can be performed with the following operations.

NOTE:

• When an Intelligent Key is within the detection area of inside key antenna and when it is inserted to the key slot, it is equivalent to the operations below.

• When starting the engine, the BCM monitors under the engine start conditions,

A/T models

- Brake pedal operating condition
- Selector lever position
- Vehicle speed

M/T models

- Clutch pedal operating condition
- Vehicle speed

Vehicle speed: less than 4 km/h (2.5 MPH)

Power supply position	Engine start/stop condition			Push-button ignition switch operation frequency
	A/T models		M/T models	
	Selector lever	Brake pedal operation condition	Clutch pedal operation condition	
LOCK → ACC	—	Not depressed	Not depressed	1
LOCK → ACC → ON	—	Not depressed	Not depressed	2
LOCK → ACC → ON → OFF	—	Not depressed	Not depressed	3
LOCK → START ACC → START ON → START	P or N position	Depressed	Depressed	1
Engine is running → OFF	—	—	—	1

Vehicle speed: 4 km/h (2.5 MPH) or more

Power supply position	Engine start/stop condition			Push-button ignition switch operation frequency
	A/T models		M/T models	
	Selector lever	Brake pedal operation condition	Clutch pedal operation condition	
Engine is running → ACC	—	—	—	Emergency stop operation
Engine stall return operation while driving	N position	Not depressed	Depressed	1

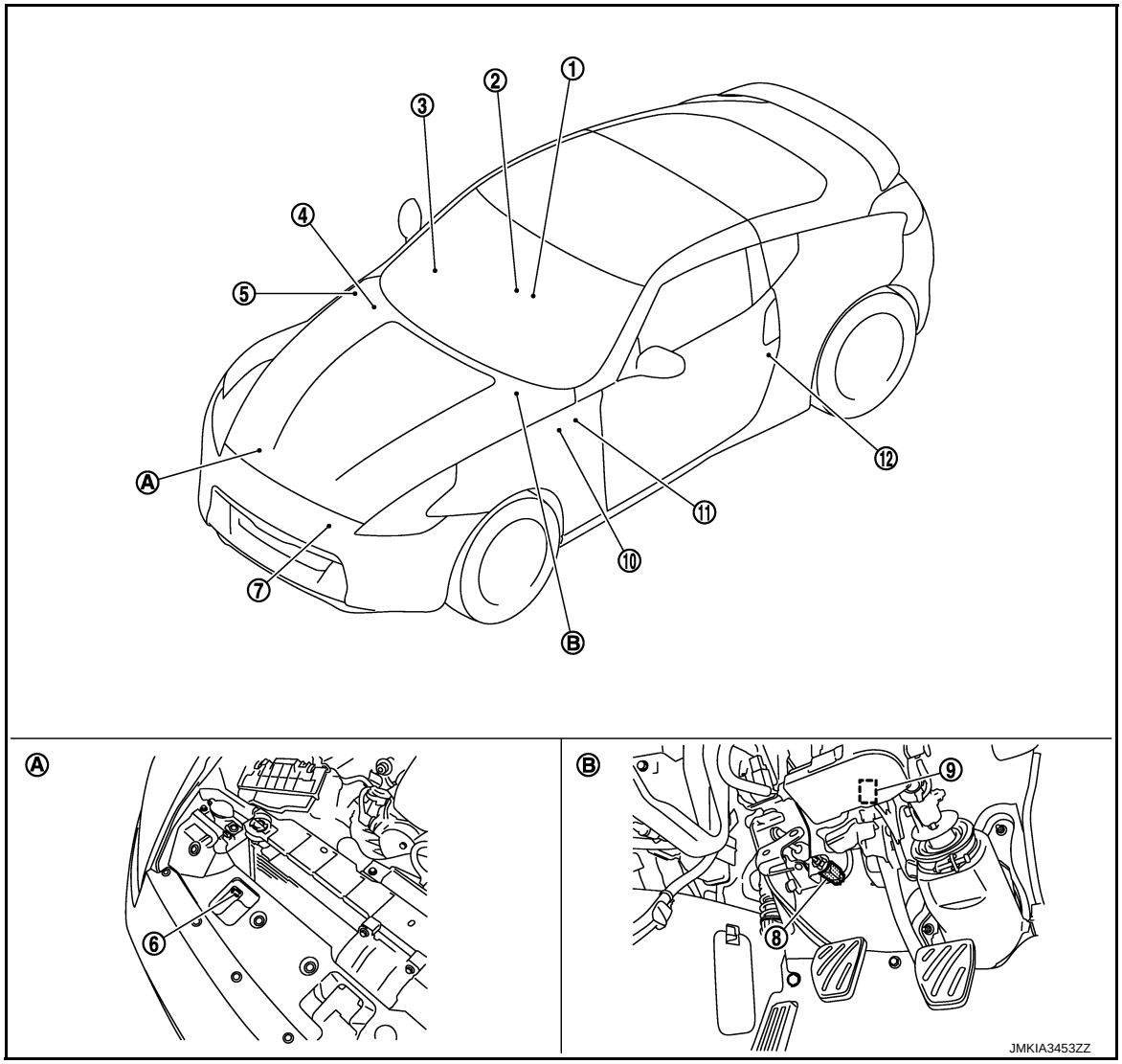
Emergency stop operation

• Press and hold the push-button ignition switch for 2 seconds or more.

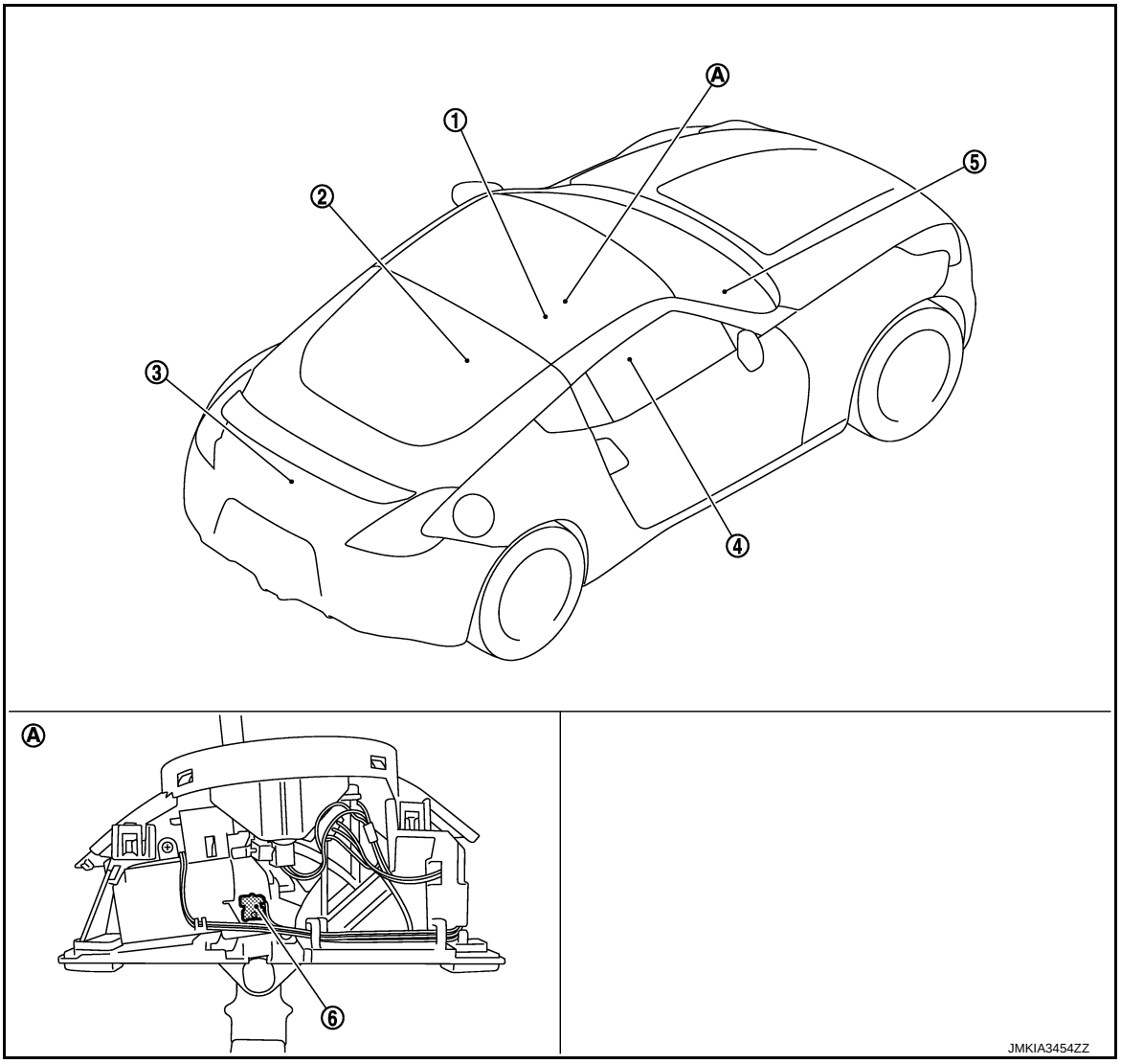
• Press the push-button ignition switch 3 times or more within 1.5 seconds.

Component Parts Location

INFOID:0000000010841274



1. Combination meter M53, M54	2. Push-button ignition switch M50	3. Remote keyless entry receiver M104 Refer to DLK-17, "INTELLIGENT KEY SYSTEM : Component Parts Location".
4. BCM M118, M119, M121, M122, M123 Refer to BCS-10, "Component Parts Location".	5. IPDM E/R E5, E6, E7, E9 Refer to PCS-5, "Component Parts Location".	6. Hood switch
7. Horn (low) E69, E70	8. Clutch interlock switch E111 (for M/T models)	9. Stop lamp switch E110
10. ABS actuator and electric unit (control unit) E41 Refer to BRC-12, "Component Parts Location".	11. Key slot M22	12. Driver side door switch B16
A. Built in hood lock RH	B. View with instrument driver lower cover removed	



1. Inside key antenna (console) M257
2. Inside key antenna (luggage room) B222
3. Back door switch B66
4. TCM F301
5. ECM M107
6. A/T shift selector (detention switch) M137

A. Built in A/T shift selector

Component Description

INFOID:0000000010841275

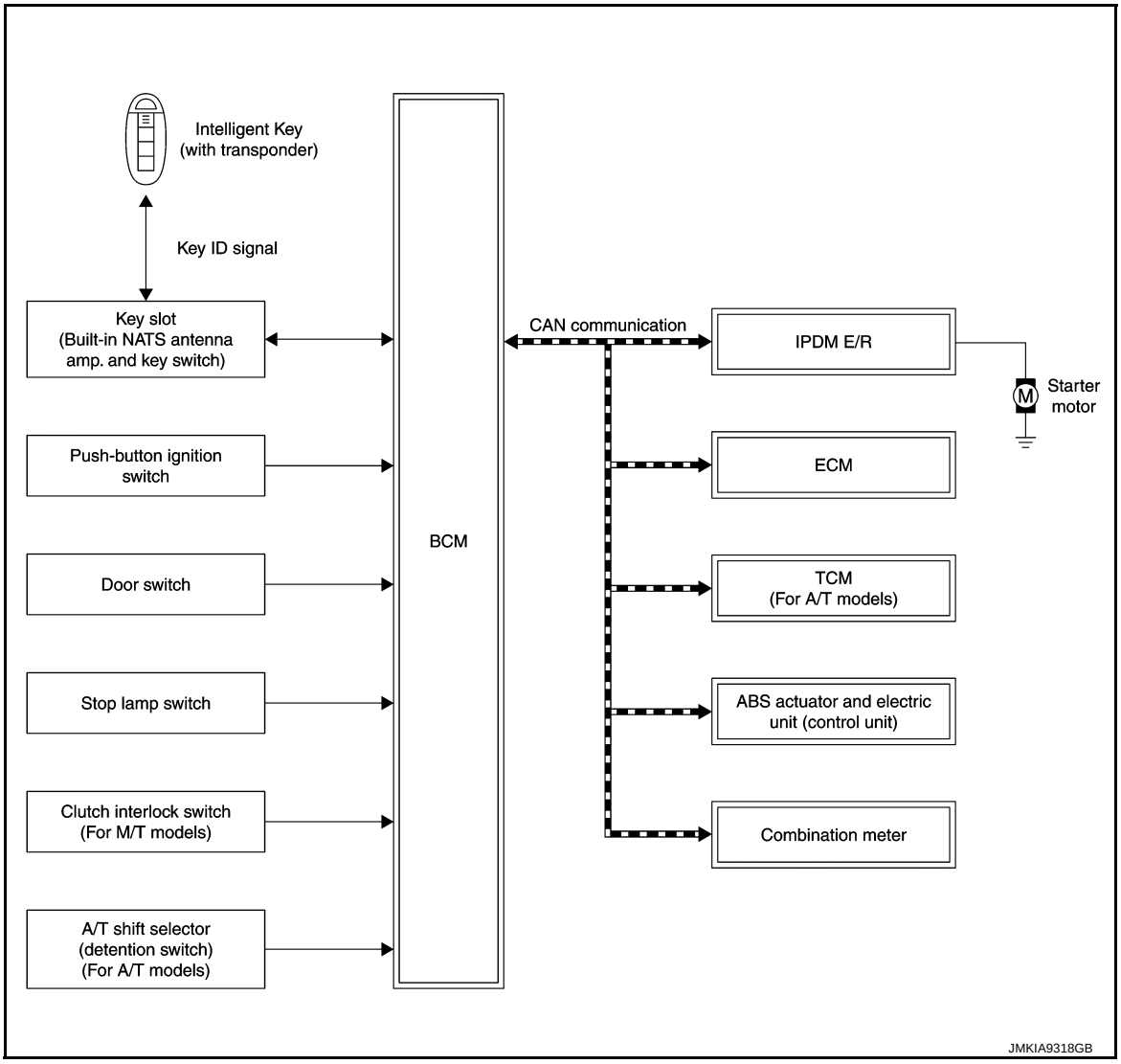
Component	Reference
BCM	SEC-77
Push-button ignition switch	SEC-52
Door switch	DLK-21 or DLK-213
A/T shift selector (detention switch) (A/T models)	SEC-86
Inside key antenna	DLK-21 or DLK-213
Remote keyless entry receiver	DLK-21 or DLK-213
Stop lamp switch	SEC-50
TCM (A/T models)	SEC-65
Clutch interlock switch (M/T models)	SEC-72

Component	Reference
Starter relay	SEC-69
Starter control relay	SEC-81
Security indicator lamp	SEC-99
Key warning lamp	SEC-101

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

System Diagram

INFOID:0000000010841276



System Description

INFOID:0000000010841277

SYSTEM DESCRIPTION

- The NVIS (NATS) is an anti-theft system that registers an Intelligent Key ID to the vehicle and prevents the engine from being started by an unregistered Intelligent Key. It has higher protection against auto theft involving the duplication of mechanical keys.
- It performs ID verification when starting the engine in the same way as the Intelligent system, but it performs the NVIS (NATS) ID verification when inserting the Intelligent Key into the key slot.
- The mechanical key integrated in the Intelligent Key cannot start the engine. When the Intelligent Key battery is discharged, the NVIS (NATS) ID verification memorized to the transponder integrated with Intelligent Key is performed by inserting the Intelligent Key into the key slot. If the verification results are OK, the engine start operation can be performed by the push-button ignition switch operation.
- Locate the security indicator lamp that warns that the NVIS (NATS) is on board the model.
- Security indicator lamp always blinks when the power supply position is in any position except the ON position.
- Up to 4 Intelligent Keys can be registered (including the standard ignition key) upon request from the owner.
- Specified registration is required when replacing ECM, BCM, or Intelligent Key. For the registrations procedures for NVIS (NATS) and Intelligent Key when installing the BCM.

- Possible symptom of NVIS (NATS) malfunction is “Engine cannot start”. But the engine can not be started with other than NVIS (NATS) malfunction neither. Identify the possible causes according to “Work Flow”. Refer to SEC-5, "Work Flow".
- If ECM other than genuine part is installed, the engine cannot be started. For ECM replacement procedure, refer to EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (ECM) : Special Repair Requirement".

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current NVIS (NATS) ID once, and then reregisters a new ID operation. Therefore a registered Intelligent Key is necessary for this procedure. Before starting the registration operation collect all registered Intelligent Keys from the customer.
- When registering the Intelligent Key, perform only one procedure to simultaneously register both ID (NVIS “NATS” ID and Intelligent Key ID).
  The NVIS (NATS) ID registration is the procedure that registers the ID stored into the transponder (integrated in Intelligent Key) to BCM.
  The Intelligent key ID registration is the procedure that registers the ID to BCM.
- When performing the Intelligent Key system registration only, the engine cannot be started by inserting the Intelligent Key into the key slot. When performing the NVIS (NATS) registration only, the engine cannot be started by the operation when carrying the Intelligent Key. The registrations of both systems should be performed.

SECURITY INDICATOR LAMP

- Warns that the vehicle is equipped with NVIS (NATS).
- Security indicator lamp always blinks when the ignition switch is in any position except the ON position.

NOTE:
Because security indicator lamp is highly efficient, the battery is barely affected.

POWER SUPPLY POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERATION

The power supply position changing operation can be performed with the following operations.

NOTE:

- When an Intelligent Key is within the detection area of inside key antenna and when it is inserted to the key slot, it is equivalent to the operations below.
- When starting the engine, the BCM monitors under the engine start conditions,
  A/T models
- Brake pedal operating condition
- Selector lever position
- Vehicle speed
  M/T models
- Clutch pedal operating condition
- Vehicle speed

Vehicle speed: less than 4 km/h (2.5 MPH)

Power supply position	Engine start/stop condition			Push-button ignition switch operation frequency
	A/T models		M/T models	
	Selector lever	Brake pedal operation condition	Clutch pedal operation condition	
LOCK → ACC	—	Not depressed	Not depressed	1
LOCK → ACC → ON	—	Not depressed	Not depressed	2
LOCK → ACC → ON → OFF	—	Not depressed	Not depressed	3
LOCK → START ACC → START ON → START	P or N position	Depressed	Depressed	1
Engine is running → OFF	—	—	—	1

Vehicle speed: 4 km/h (2.5 MPH) or more

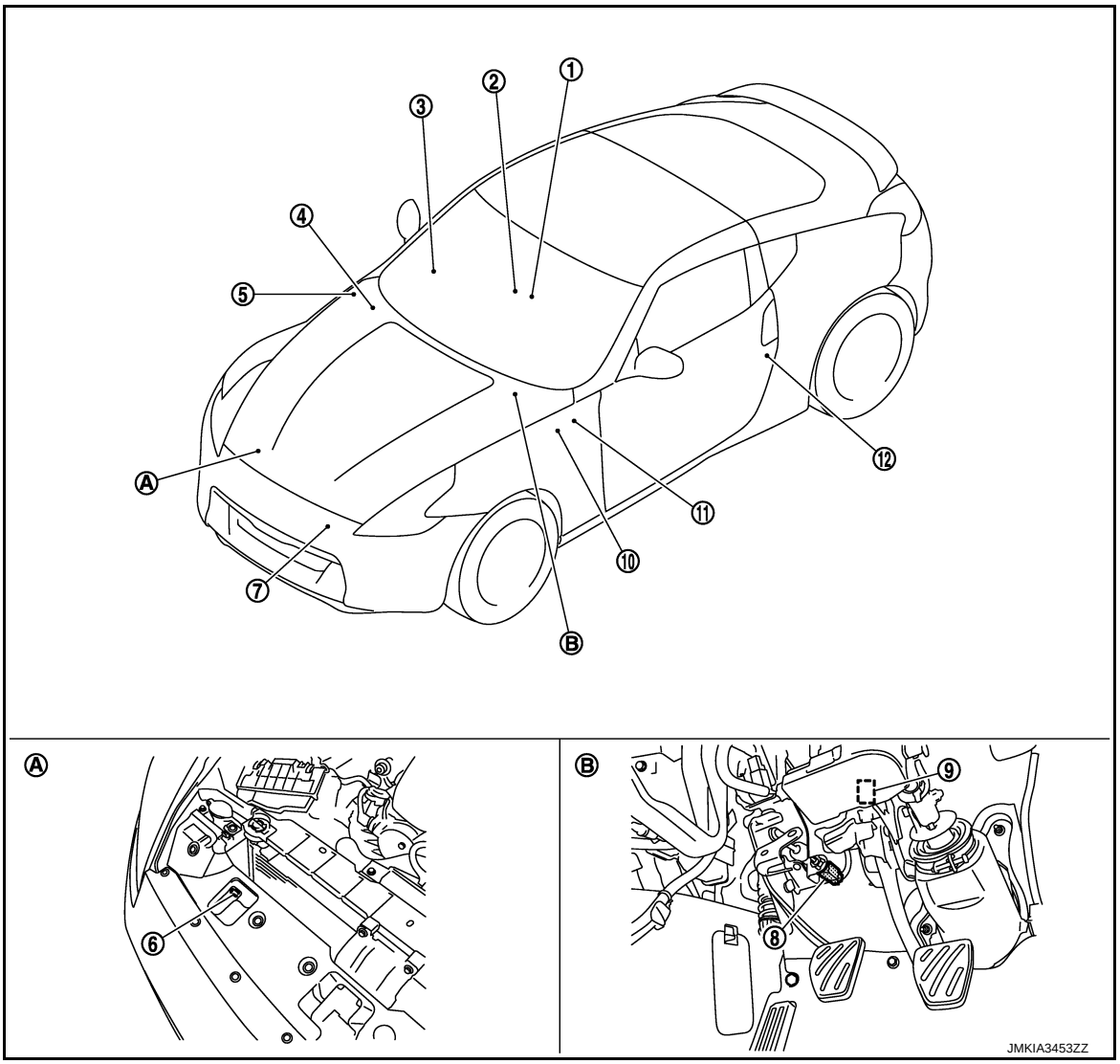
Power supply position	Engine start/stop condition			Push-button ignition switch operation frequency
	A/T models		M/T models	
	Selector lever	Brake pedal operation condition	Clutch pedal operation condition	
Engine is running → ACC	—	—	—	Emergency stop operation
Engine stall return operation while driving	N position	Not depressed	Depressed	1

Emergency stop operation

- Press and hold the push-button ignition switch for 2 seconds or more.
- Press the push-button ignition switch 3 times or more within 1.5 seconds.

Component Parts Location

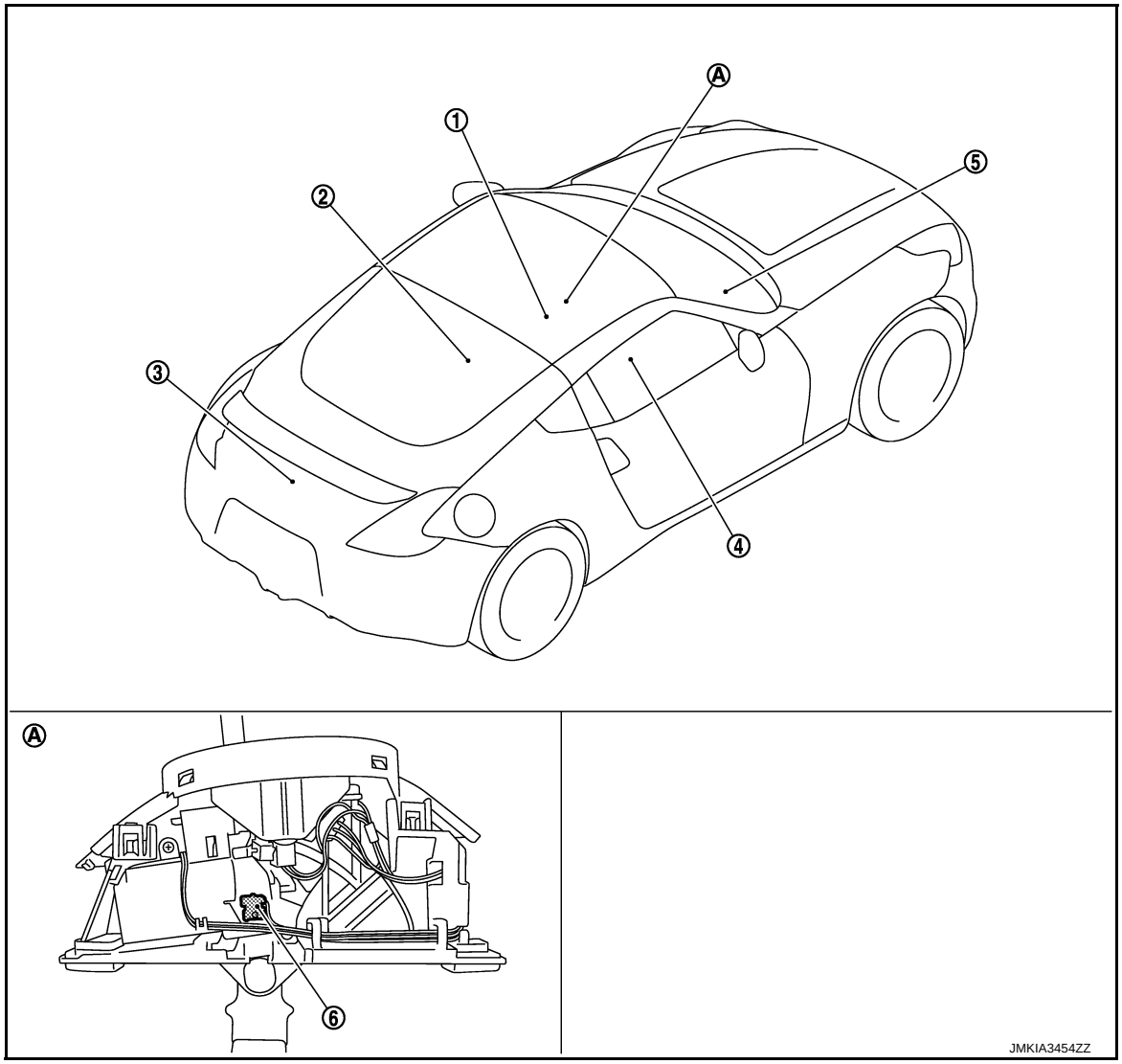
INFOID:0000000010841278



1. Combination meter M53, M54
2. Push-button ignition switch M50
3. Remote keyless entry receiver M104 Refer to DLK-17, "INTELLIGENT KEY SYSTEM : Component Parts Location".
4. BCM M118, M119, M121, M122, M123 Refer to BCS-10, "Component Parts Location".
5. IPDM E/R E5, E6, E7, E9 Refer to PCS-5, "Component Parts Location".
6. Hood switch

7. Horn (low) E69, E70
8. Clutch interlock switch E111 (for M/T models)
9. Stop lamp switch E110
10. ABS actuator and electric unit (control unit) E41 Refer to BRC-12, "Component Parts Location".
11. Key slot M22
12. Driver side door switch B16

A. Built in hood lock RH
B. View with instrument driver lower cover removed



1. Inside key antenna (console) M257
2. Inside key antenna (luggage room) B222
3. Back door switch B66
4. TCM F301
5. ECM M107
6. A/T shift selector (detention switch) M137

A. Built in A/T shift selector

Component Description

INFOID:0000000010841279

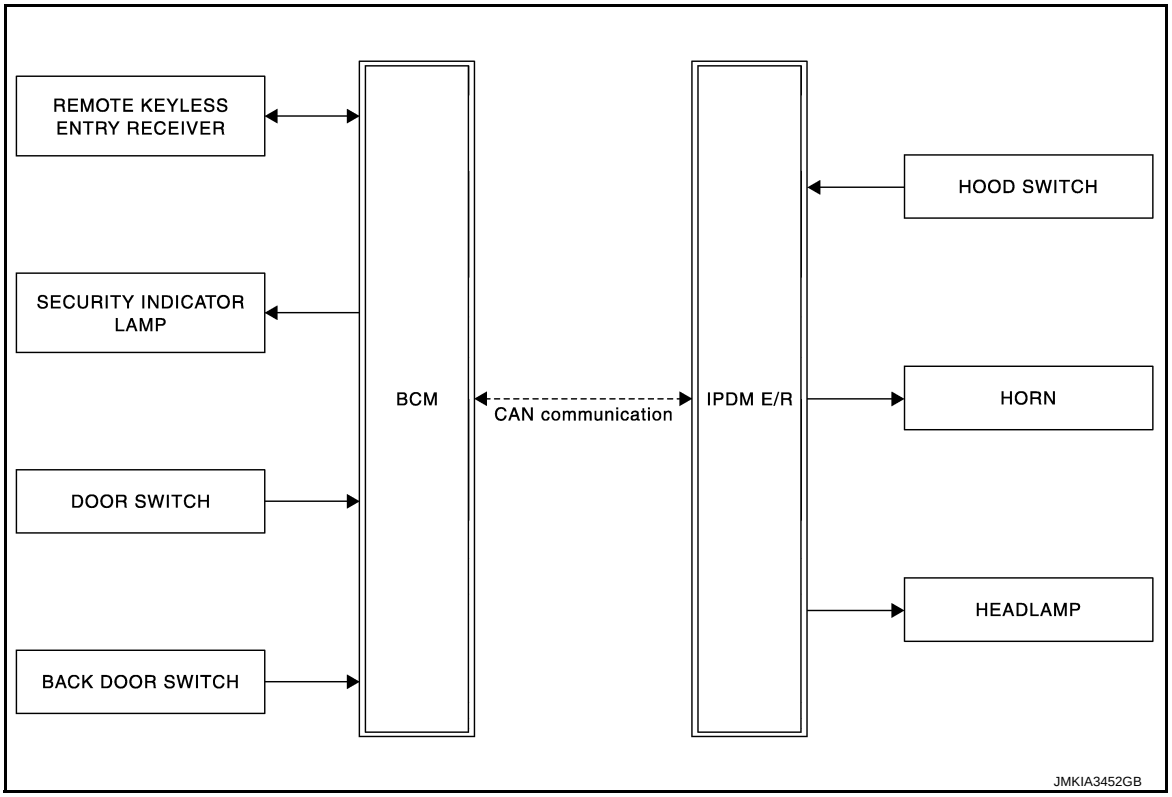
Component	Reference
BCM	SEC-77
Push-button ignition switch	SEC-52
Door switch	DLK-21 or DLK-213

Component	Reference
Key slot	SEC-92
A/T shift selector (detention switch) (A/T models)	SEC-86
Stop lamp switch	SEC-50
TCM (A/T models)	SEC-65
Clutch interlock switch (M/T models)	SEC-72
Starter relay	SEC-69
Starter control relay	SEC-81
Security indicator lamp	SEC-99

VEHICLE SECURITY SYSTEM

System Diagram

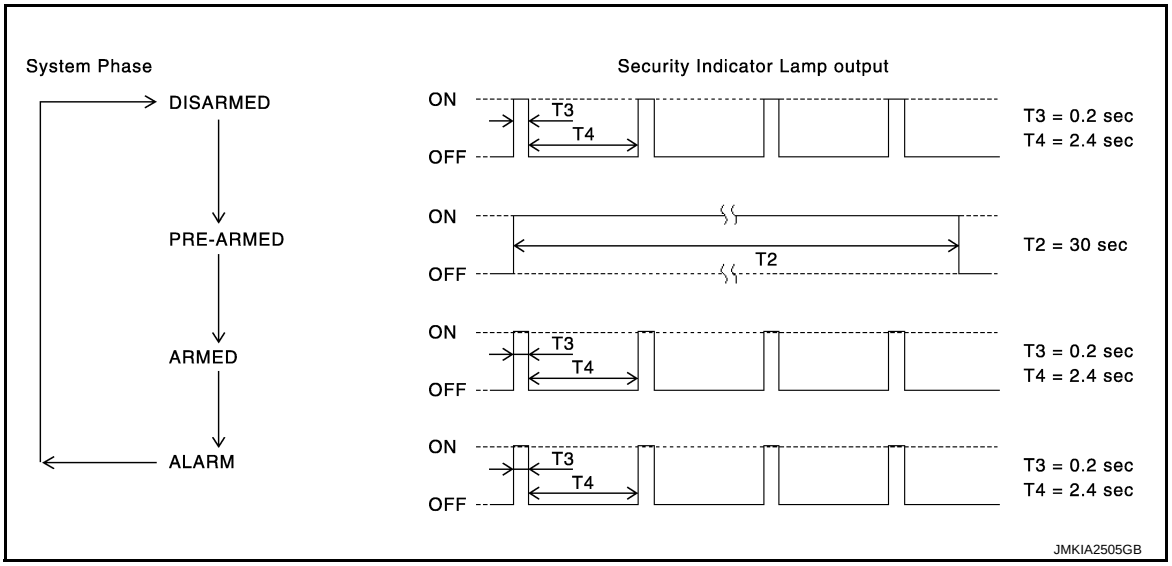
INFOID:0000000010841280



System Description

INFOID:0000000010841281

OPERATION FLOW



SETTING THE VEHICLE SECURITY SYSTEM

Initial Condition

- Ignition switch is in the OFF position.

Disarmed Phase

- When any door or back door is open, the vehicle security system is set in the disarmed phase on the assumption that the owner is inside or near the vehicle.

- When the vehicle security system is in the disarmed phase, the security indicator lamp blinks every 2.4 seconds.

Pre-armed Phase and Armed Phase

When the following operation is performed, the vehicle security system turns into the “pre-armed” phase. (The security indicator lamp illuminates.)

1. BCM receives LOCK signal from door request switch or Intelligent Key, after all doors are closed.
2. Security indicator lamp illuminates for 30 seconds. Then, the system automatically shifts into the “armed” phase.

CANCELING THE ARMED PHASE VEHICLE SECURITY SYSTEM

When one of the following operations is performed, the armed phase is canceled.

1. Unlock all doors with the door request switch or Intelligent Key.
2. Turn ignition switch “ON” or “ACC” position.

CANCELING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

When unlocking all doors with the door request switch or Intelligent Key the alarm operation is canceled.

ACTIVATING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

Check that the system is in the armed phase. (Security indicator lamp blinks every 2.4 seconds.)
When the following operations 1 or 2 is performed, the system sounds the horns and blinks the headlamps for about 50 seconds.

1. Any door or hood is open during the armed phase.
2. Disconnecting and connecting the battery connector before canceling the armed phase.

PANIC ALARM FUNCTION

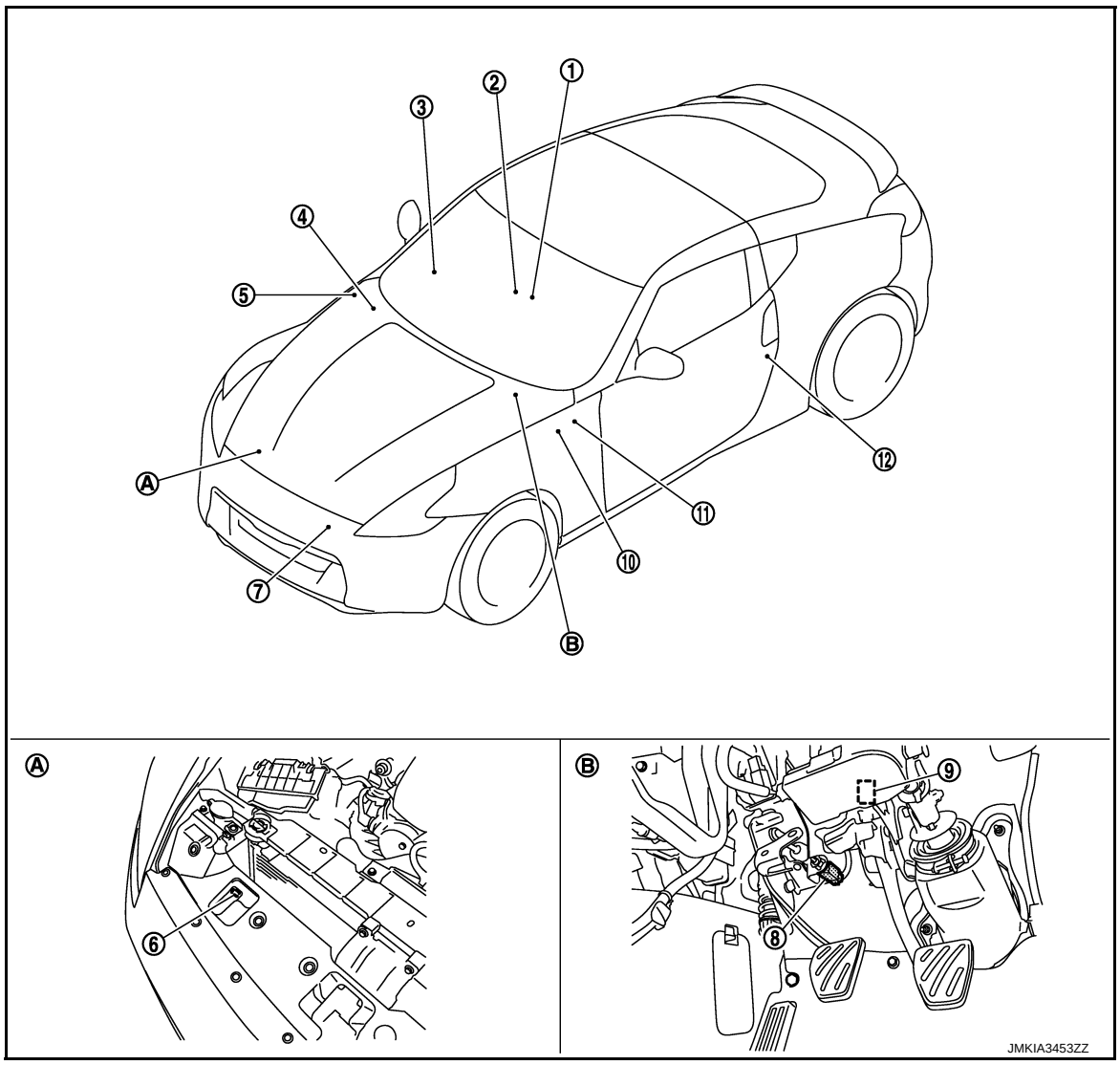
When ignition switch is OFF (ignition switch is not pressed) and key switch is OFF (Intelligent Key is not inserted in key slot), BCM receives PANIC ALARM signal from Intelligent Key.
BCM turns on and off headlamp intermittently and transmits theft warning horn signal to IPDM E/R. Then, IPDM E/R turns on and off horn intermittently.
The headlamp blinks and the horn sounds intermittently.
The alarm automatically turns off:

- After 25 seconds
- When BCM receives any signal from Intelligent Key

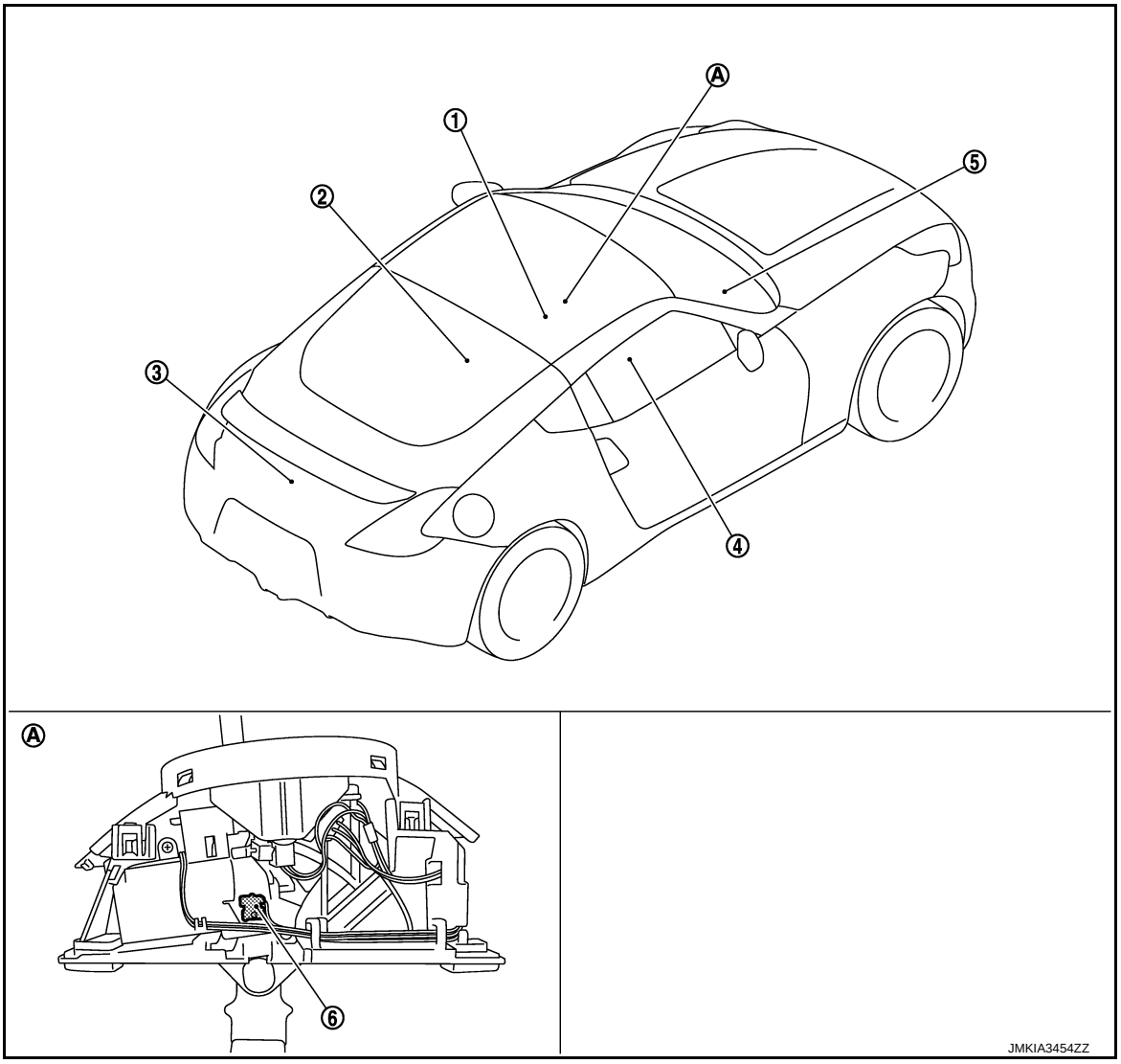
Panic alarm function mode can be changed by “PANIC ALARM SET” mode in “WORK SUPPORT” of “INTELLIGENT KEY” of “BCM” using CONSULT. Refer to DLK-43, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)" or DLK-236, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Roadster)".

Component Parts Location

INFOID:0000000010841282



1. Combination meter M53, M54	2. Push-button ignition switch M50	3. Remote keyless entry receiver M104
4. BCM M118, M119, M121, M122, M123 Refer to BCS-10, "Component Parts Location".	5. IPDM E/R E5, E6, E7, E9 Refer to PCS-5, "Component Parts Location".	6. Hood switch
7. Horn (low) E69, E70	8. Clutch interlock switch E111 (for M/T models)	9. Stop lamp switch E110
10. ABS actuator and electric unit (control unit) E41 Refer to BRC-12, "Component Parts Location".	11. Key slot M22	12. Driver side door switch B16
A. Built in hood lock RH	B. View with instrument driver lower cover removed	



1. Inside key antenna (console) M257
2. Inside key antenna (luggage room) B222
3. Back door switch B66
4. TCM F301
5. ECM M107
6. A/T shift selector (detention switch) M137

A. Built in A/T shift selector

Component Description

INFOID:0000000010841283

Component	Reference
BCM	SEC-77
Security indicator lamp	SEC-99
Door switch	DLK-21 or DLK-213
Back door switch	DLK-21
Hood switch	SEC-95

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000011320851

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

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

NOTE:

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

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

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

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

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

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)

INFOID:0000000011320850

WORK SUPPORT

Monitor item	Description
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode
AUTO LOCK SET	Auto door lock time can be changed in this mode • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch (driver side, passenger side and back door side/trunk lid*) mode can be changed to operate (On) or not operate (Off) in this mode
ENGINE START BY I-KEY	Engine start function mode can be changed to operate (On) or not operate (Off) with this mode
TRUNK/GLASS HATCH OPEN	Buzzer reminder function mode by back door opener switch/ trunk lid opener switch* can be changed to operate (ON) or not operate (OFF) with this mode
PANIC ALARM SET	Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec.
TAKE OUT FROM WIN WARN	**NOTE:** This item is displayed, but cannot be monitored
PW DOWN SET	Unlock button pressing time on Intelligent Key button can be selected from the following with this mode • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec.
TRUNK OPEN DELAY	**NOTE:** This item is displayed, but cannot be supported
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operate (On) or not operate (Off) with this mode
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operate (On) or not operate (Off) with this mode
HAZARD ANSWER BACK	Hazard reminder function mode can be selected from the following with this mode • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK/UNLOCK: Lock/unlock operation • OFF: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch (driver side, passenger side and back door side/trunk lid*) can be selected from the following with this mode • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation
ANS BACK I-KEY UNLOCK	Buzzer reminder function (unlock operation) mode by door request switch (driver side, passenger side and back door side/trunk lid*) can be changed to operate (On) or not operate (Off) with this mode
SHORT CRANKING OUTPUT	Starter motor can be forcibly activated
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
HORN WITH KEYLESS LOCK	Horn reminder function mode by Intelligent Key button can be changed to operate (On) or not operate (Off) with this mode

*: For roadster models

SELF-DIAG RESULT

Refer to SEC-174, "DTC Index".

DATA MONITOR

NOTE:

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

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of driver side door request switch
REQ SW -AS	Indicates [On/Off] condition of passenger side door request switch
REQ SW -BD/TR	Indicates [On/Off] condition of back door request switch/trunk lid door request switch*4
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
IGN RLY2 -F/B	**NOTE:** This item is displayed, but cannot be monitored
ACC RLY-F/B	**NOTE:** This item is displayed, but cannot be monitored
CLUCH SW*1	Indicates [On/Off] condition of clutch switch
BRAKE SW 1	Indicates [On/Off]*3 condition of brake switch power supply
BRAKE SW 2	Indicates [On/Off] condition of brake switch
DETE/CANCL SW*2	Indicates [On/Off] condition of P position
SFT PN/N SW*2	Indicates [On/Off] condition of P or N position
S/L -LOCK	**NOTE:** This item is displayed, but cannot be monitored
S/L -UNLOCK	**NOTE:** This item is displayed, but cannot be monitored
S/L RELAY -F/B	**NOTE:** This item is displayed, but cannot be monitored
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1
DETE SW -IPDM*2	Indicates [On/Off] condition of P position
SFT PN -IPDM*2	Indicates [On/Off] condition of P or N position
SFT P -MET*2	Indicates [On/Off] condition of P position
SFT N -MET*2	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states
S/L LOCK-IPDM	**NOTE:** This item is displayed, but cannot be monitored
S/L UNLK-IPDM	**NOTE:** This item is displayed, but cannot be monitored
S/L RELAY-REQ	**NOTE:** This item is displayed, but cannot be monitored
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLOCK] condition of driver side door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLOCK] condition of passenger side door status
ID OK FLAG	Indicates [Set/Reset] condition of key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	**NOTE:** This item is displayed, but cannot be monitored
KEY SW -SLOT	Indicates [On/Off] condition of key slot
TRNK/HAT MNTR	**NOTE:** This item is displayed, but cannot be monitored
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key

Monitor Item	Condition
RKE-TR/BD	**NOTE:** This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
RKE-P/W OPEN	Indicates [On/Off] condition of P/W DOWN signal from Intelligent Key
RKE-MODE CHG	Indicates [On/Off] condition of MODE CHANGE signal from Intelligent Key
RKE OPE COUN1	When remote keyless entry receiver (front) receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	**NOTE:** This item is displayed, but cannot be monitored
REVERSE SW*1	Indicates [On/Off] condition of R position

*1: It is displayed but does not operate on A/T models.

*2: It is displayed but does not operate on M/T models.

*3: OFF is displayed when brake pedal is depressed while brake switch power supply is OFF.

*4: For roadster models

ACTIVE TEST

Test item	Description
BATTERY SAVER	This test is able to check interior room lamp operation The interior room lamp is activated after “On” on CONSULT screen is touched
PW REMOTO DOWN SET	This test is able to check power window down operation The power window down is activated after “On” on CONSULT screen is touched
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation The Intelligent Key warning buzzer is activated after “On” on CONSULT screen is touched
INSIDE BUZZER	This test is able to check warning chime in combination meter operation • Take away warning chime sounds when “Take out” on CONSULT screen is touched • Key warning chime sounds when “Key” on CONSULT screen is touched • OFF position warning chime sounds when “Knob” on CONSULT screen is touched
INDICATOR	This test is able to check warning lamp operation • “KEY” Warning lamp illuminates when “Key on” on CONSULT screen is touched • “KEY” Warning lamp blinks when “Key ind” on CONSULT screen is touched
INT LAMP	This test is able to check interior room lamp operation The interior room lamp is activated after “On” on CONSULT screen is touched
LCD	This test is able to check meter display information • Engine start information displays when “BP N” on CONSULT screen is touched • Engine start information displays when “BP I” on CONSULT screen is touched • Key ID warning displays when “ID NG” on CONSULT screen is touched • ROTAT: This item is displayed, but cannot be tested. • P position warning displays when “SFT P” on CONSULT screen is touched • Intelligent Key insert information displays when “INSRT” on CONSULT screen is touched • Intelligent Key low battery warning displays when “BATT” on CONSULT screen is touched • Take away through window warning displays when “NO KY” on CONSULT screen is touched • Take away warning display when “OUTKEY” on CONSULT screen is touched • OFF position warning display when “LK WN” on CONSULT screen is touched
TRUNK/GLASS HATCH	**NOTE:** This item is displayed, but cannot be tested
FLASHER	This test is able to check hazard warning lamp operation The hazard warning lamps are activated after “LH/RH/Off” on CONSULT screen is touched
HORN	This test is able to check horn operation The horn is activated after “On” on CONSULT screen is touched
P RANGE*1	This test is able to check A/T shift selector power supply A/T shift selector power is supplied when “On” on CONSULT screen is touched

Test item	Description
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when “On” on CONSULT screen is touched
LOCK INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation LOCK indicator in push-ignition switch illuminates when “On” on CONSULT screen is touched
ACC INDICATOR	This test is able to check ACC indicator in push-ignition switch operation ACC indicator in push-ignition switch illuminates when “On” on CONSULT screen is touched
IGNITION ON IND	This test is able to check ON indicator in push-ignition switch operation ON indicator in push-ignition switch illuminates when “On” on CONSULT screen is touched
KEY SLOT ILLUMI	This test is able to check key slot illumination operation Key slot illumination blinks when “On” on CONSULT screen is touched
TRUNK/BACK DOOR	This test is able to check back door opener actuator/ trunk lid opener actuator*2 open operation This actuator opens when “Open” on CONSULT screen is touched

*1: It is displayed but does not operate on M/T models.

*2: For roadster models

THEFT ALM

THEFT ALM : CONSULT Function (BCM - THEFT)

INFOID:0000000010841287

DATA MONITOR

NOTE:

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

Monitored Item	Description
REQ SW -DR	Indicates [ON/OFF] condition of door request switch (driver side).
REQ SW -AS	Indicates [ON/OFF] condition of door request switch (passenger side).
REQ SW -RR	**NOTE:** This is displayed even when it is not equipped.
REQ SW -RL	**NOTE:** This is displayed even when it is not equipped.
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door request switch.
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch
UNLK SEN -DR	Indicates [ON/OFF] condition of driver door UNLOCK status.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.
DOOR SW-DR	Indicates [ON/OFF] condition of driver side door switch.
DOOR SW-AS	Indicates [ON/OFF] condition of passenger side door switch.
DOOR SW-RR	**NOTE:** This is displayed even when it is not equipped.
DOOR SW-RL	**NOTE:** This is displayed even when it is not equipped.
DOOR SW-BK	Indicates [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicates [ON/OFF] condition of lock signal from door lock/unlock switch LH and RH.
CDL UNLOCK SW	Indicates [ON/OFF] condition of unlock signal from door lock/unlock switch LH and RH.
TR/BD OPEN SW	Indicates [ON/OFF] condition of back door opener switch.
TRNK/HAT MNTR	**NOTE:** This is displayed even when it is not equipped.
RKE-LOCK	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.

Monitored Item	Description
RKE-UNLOCK	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	**NOTE:** This is displayed even when it is not equipped.

WORK SUPPORT

Test Item	Description
SECURITY ALARM SET	This mode is able to confirm and change security alarm ON-OFF setting.
THEFT ALM TRG	The switch which triggered vehicle security alarm is recorded. This mode is able to confirm and erase the record of vehicle security alarm. The trigger data can be erased by touching “CLEAR” on CONSULT screen.

ACTIVE TEST

Test Item	Description
THEFT IND	This test is able to check security indicator lamp operation. The lamp is turned on when “ON” on CONSULT screen is touched.
VEHICLE SECURITY HORN	This test is able to check vehicle security horn operation. The horns are activated for 0.5 seconds after “ON” on CONSULT screen is touched.
HEADLAMP(HI)	This test is able to check vehicle security lamp operation. The headlamps are activated for 0.5 seconds after “ON” on CONSULT screen is touched.
FLASHER	This test is able to check vehicle security hazard lamp operation. The hazard lamps are activated after “ON” on CONSULT screen is touched.

IMMU

IMMU : CONSULT Function (BCM - IMMU)

INFOID:0000000010841288

DATA MONITOR

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

Monitor item	Content
CONFRM ID ALL	Indicates [YET] at all time. Switches to [DONE] when a registered Intelligent Key is inserted into the key slot.
CONFIRM ID4	
CONFIRM ID3	
CONFIRM ID2	
CONFIRM ID1	
TP 4	Indicates the number of IDs that are registered.
TP 3	
TP 2	
TP 1	
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.
KEY SW -SLOT	Indicates [ON/OFF] condition of key slot.

ACTIVE TEST

Test item	Description
THEFT IND	This test is able to check security indicator lamp operation. The lamp is turned on when “ON” on CONSULT screen touched.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

BCM

BCM : Description

INFOID:0000000010841289

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, 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 Signal Chart. Refer to LAN-26, "CAN Communication Signal Chart".

BCM : DTC Logic

INFOID:0000000010841290

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1000	CAN COMM	When BCM cannot communicate CAN communication signal continuously for 2 seconds or more.	CAN communication system

BCM : Diagnosis Procedure

INFOID:0000000010841291

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result”.

Is DTC “U1000” displayed?

YES >> Refer to LAN-15, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-44, "Intermittent Incident".

IPDM E/R

IPDM E/R : Description

INFOID:0000000010841292

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, 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 Signal Chart. Refer to LAN-26, "CAN Communication Signal Chart".

IPDM E/R : DTC Logic

INFOID:0000000010841293

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When IPDM E/R cannot communicate CAN communication signal continuously for 2 seconds or more	CAN communication system

IPDM E/R : Diagnosis Procedure

INFOID:0000000010841294

1.PERFORM SELF DIAGNOSTIC

1. Turn the ignition switch ON and wait for 2 seconds or more.
2. Check “Self Diagnostic Result” of IPDM E/R.

Is “CAN COMM CIRCUIT” displayed?

YES >> Refer to LAN-15, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-44, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

BCM

BCM : DTC Logic

INFOID:0000000010841295

DTC DETECTION LOGIC

DTC	CONSULT display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT(CAN)	BCM detected internal CAN communication circuit malfunction.	BCM

BCM : Diagnosis Procedure

INFOID:0000000010841296

1.REPLACE BCM

When DTC “U1010” is detected, replace BCM.

>> Replace BCM. Refer to BCS-106, "Exploded View".

BCM : Special Repair Requirement

INFOID:0000000010841297

1.REQUIRED WORK WHEN REPLACING BCM

Initialize control unit.

>> Work end.

P1610 LOCK MODE

Description

INFOID:0000000010841298

When the starting operation is carried more than five times consecutively under the following conditions, NATS shifts to the mode that prevents the engine from being started.
- Unregistered Intelligent Key is used.
- BCM or ECM is malfunctioning.

DTC Logic

INFOID:0000000010841299

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1610	LOCK MODE	When the starting operation is carried out five or more times consecutively under the following conditions. • Unregistered Intelligent Key • BCM or ECM is malfunctioning	—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-34, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841300

1.CHECK ENGINE START FUNCTION

1. Perform the check for DTC except DTC P1610.
2. Use CONSULT to erase DTC after fixing.
3. Turn ignition switch OFF.
4. Turn ignition switch ON when registered Intelligent Key is inserted into key slot and wait for 5 seconds.
5. Turn the ignition switch OFF and wait 5 seconds.
6. Repeat steps 4 and 5 twice (a total of 3 times).
7. Check that engine can start when registered Intelligent Key is inserted into key slot.

>> INSPECTION END

P1611 ID DISCORD, IMMU-ECM

Description

INFOID:0000000010841301

BCM performs the ID verification with ECM that allows the engine to start. Start the engine if the ID is successfully verified. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic

INFOID:0000000010841302

DTC DETECTION LOGIC

NOTE:

- If DTC P1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC P1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1611	ID DISCORD, IMMU-ECM	The ID verification results between BCM and ECM are NG. Registration is necessary.	• BCM • ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-35, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841303

1.PERFORM INITIALIZATION

Perform initialization using CONSULT. Reregister all Intelligent Keys.
For initialization and registration of Intelligent Key.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-106, "Removal and Installation".
2. Perform initialization using CONSULT.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

3.REPLACE ECM

1. Replace ECM. Refer to EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (ECM) : Description".
2. Perform initialization using CONSULT.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

P1612 CHAIN OF ECM-IMMU

Description

INFOID:0000000010841304

BCM performs ID verification with ECM that allows the engine to start. Start the engine if the ID is successfully verified. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic

INFOID:0000000010841305

DTC DETECTION LOGIC

NOTE:

- If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1612	CHAIN OF ECM-IMMU	Inactive communication between ECM and BCM	• Harness or connectors (The CAN communication line is open or shorted) • BCM • ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-37, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841306

1.REPLACE BCM

1. Replace BCM. Refer to BCS-106, "Removal and Installation".
2. Perform initialization using CONSULT.

Does the engine start?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE ECM

Replace ECM. Refer to EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (ECM) : Description".

>> INSPECTION END

P1614 CHAIN OF IMMU-KEY

Description

INFOID:0000000010841307

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic

INFOID:0000000010841308

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1614	CHAIN OF IMMU-KEY	Inactive communication between key slot and BCM.	• Harness or connectors (The key slot circuit is open or shorted) • Key slot • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Insert Intelligent Key into the key slot.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-38, "Diagnosis Procedure".
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

1. Press the push-button ignition switch.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-38, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841309

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.
DTC confirmation procedure 2>>GO TO 4.

2.CHECK KEY SLOT INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M22	2	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to SEC-202, "Removal and Installation".
NO >> GO TO 3.

3.CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between key slot harness connector and BCM harness connector.

Key slot		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M22	2	M122	80	Existed

3. Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M22	2		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

Press push-button ignition switch and check if it turns ON.

Does ignition switch turn to ON?

YES >> GO TO 5.
NO >> GO TO 7.

5.CHECK KEY SLOT COMMUNICATION SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M22	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to SEC-202, "Removal and Installation".
NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between key slot harness connector and BCM harness connector.

Key slot		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M22	3	M122	81	Existed

3. Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M22	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

7.CHECK KEY SLOT GROUND CIRCUIT

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

Key slot		Ground	Continuity
Connector	Terminal		
M22	7		Existed

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

P1615 DIFFRENCE OF KEY

Description

INFOID:0000000010841310

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic

INFOID:0000000010841311

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1615	DIFFERENCE OF KEY	The ID verification results between BCM and Intelligent Key are NG. Registration is necessary.	Intelligent Key

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-41, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841312

1.PERFORM INITIALIZATION

Perform initialization using CONSULT. Reregister all Intelligent Keys.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Perform initialization using CONSULT.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2190 NATS ANTENNA AMP.

Description

INFOID:0000000010841313

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic

INFOID:0000000010841314

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2190	NATS ANTENNA AMP	Inactive communication between key slot and BCM.	• Harness or connectors (The key slot circuit is open or shorted) • Key slot • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Insert Intelligent Key into the key slot.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-42, "Diagnosis Procedure".
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

1. Press the push-button ignition switch.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-42, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841315

1. INSPECTION START

Perform inspection in accordance with the appropriate confirmation procedure DTC.

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 2.
DTC confirmation procedure 2>>GO TO 4.

2.CHECK KEY SLOT INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M22	2	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to SEC-202, "Removal and Installation".
NO >> GO TO 3.

3.CHECK KEY SLOT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between key slot harness connector and BCM harness connector.

Key slot		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M22	2	M122	80	Existed

3. Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M22	2		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

Press push-button ignition switch and check if it turns ON.

Does ignition switch turn to ON?

YES >> GO TO 5.
NO >> GO TO 7.

5.CHECK KEY SLOT COMMUNICATION SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M22	3	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace key slot. Refer to SEC-202, "Removal and Installation".
NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between key slot harness connector and BCM harness connector.

Key slot		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M22	3	M122	81	Existed

3. Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M22	3		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

7.CHECK KEY SLOT GROUND CIRCUIT

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

Key slot		Ground	Continuity
Connector	Terminal		
M22	7		Existed

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair or replace harness.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2191 DIFFERENCE OF KEY

Description

INFOID:0000000010841316

Performs ID verification through BCM and Intelligent Key when push-button ignition switch is pressed. Prohibits the release of steering lock (models with steering lock unit) or start of engine when an unregistered ID of Intelligent Key is used.

DTC Logic

INFOID:0000000010841317

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2191	DIFFERENCE OF KEY	The ID verification results between BCM and Intelligent Key are NG. Registration is necessary.	Intelligent Key

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-45, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841318

1.PERFORM INITIALIZATION

Perform initialization using CONSULT. Reregister all Intelligent Keys.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Perform initialization using CONSULT.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2192 ID DISCORD, IMMU-ECM

Description

INFOID:0000000010841319

BCM performs ID verification with ECM that allows the engine to start. Start the engine if the ID is successfully verified. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic

INFOID:0000000010841320

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2192	ID DISCORD, IMMU-ECM	The ID verification results between BCM and ECM are NG. Registration is necessary.	• BCM • ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-46, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841321

1.PERFORM INITIALIZATION

Perform initialization using CONSULT. Reregister all Intelligent Keys.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE BCM

1. Replace BCM. Refer to BCS-106, "Removal and Installation".
2. Perform initialization using CONSULT.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

3.REPLACE ECM

1. Replace ECM. Refer to EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (ECM) : Description".
2. Perform initialization using CONSULT.

Can the system be initialized and can the engine be started with reregistered Intelligent Key?

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

4.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2193 CHAIN OF ECM-IMMU

Description

INFOID:0000000010841322

BCM performs the ID verification with ECM that allows the engine to start. Start the engine if the ID is successfully verified. ECM prevents the engine from starting if the ID is not registered. BCM starts the communication with ECM if ignition switch is turned ON.

DTC Logic

INFOID:0000000010841323

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2193	CHAIN OF ECM-IMMU	Inactive communication between ECM and BCM	• Harness or connectors (The CAN communication line is open or shorted) • BCM • ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-48, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841324

1.REPLACE BCM

1. Replace BCM. Refer to BCS-106, "Removal and Installation".
2. Perform initialization using CONSULT.

Does the engine start?

YES >> INSPECTION END
NO >> GO TO 2.

2.REPLACE ECM

Replace ECM. Refer to EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (ECM) : Description".

>> INSPECTION END

B2195 ANTI-SCANNING

Description

INFOID:0000000010841325

When ignition switch is turned ON, BCM performs ID verification with ECM. If ID verification that is out of the specified specification is detected, BCM prohibits further ID verification and engine cranking.

DTC Logic

INFOID:0000000010841326

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2195	ANTI-SCANNING	ID verification between BCM and ECM that is out of the specified specification is detected	ID verification request out of the specified specification

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models
- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models
- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Refer to SEC-49, "Diagnosis Procedure".
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:0000000010841327

1.CHECK SELF-DIAGNOSTIC RESULT-1

1. Perform “Self-diagnostic result” of BCM using CONSULT.
2. Erase DTC.
3. Perform DTC Confirmation Procedure. Refer to SEC-49, "DTC Logic".

Is DTC 2195 detected?

YES >> GO TO 2.
NO >> INSPECTION END

2.CHECK EQUIPMENT OF THE VEHICLE

Check that unspecified accessory part related to engine start is not installed.

Is unspecified accessory part related to engine start installed?

YES >> GO TO 3.
NO >> Replace BCM. Refer to BCS-106, "Removal and Installation".

3.CHECK SELF-DIAGNOSTIC RESULT-2

1. Obtain the customers approval to remove unspecified accessory part related to engine start, and then remove it.
2. Perform “Self-diagnostic result” of BCM using CONSULT.
3. Erase DTC.
4. Perform DTC Confirmation Procedure. Refer to SEC-49, "DTC Logic".

Is DTC 2195 detected?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> INSPECTION END

B2555 STOP LAMP

Description

INFOID:0000000010841328

BCM detects the stop lamp status and confirms the stop lamp switch ON/OFF status. BCM confirms the engine start condition according to the stop lamp switch ON/OFF status.

DTC Logic

INFOID:0000000010841329

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2555	STOP LAMP	BCM makes a comparison between the upper voltage and lower voltage of stop lamp switch. It judges from their values to detect the malfunctioning circuit.	• Harness or connectors (stop lamp switch circuit is open or shorted) • Stop lamp switch • Fuse

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Depress the brake pedal and wait 1 second or more.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-50, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841330

1.CHECK STOP LAMP SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
BCM			
Connector	Terminal		
M123	116	Ground	Battery voltage

Is the inspection normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 7, located in the fuse block (J/B)].
NO-2 >> Check harness for open or short between BCM and fuse.

2.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

1. Disconnect stop lamp switch connector.
2. Check voltage between stop lamp harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Stop lamp switch			
Connector	Terminal		
E110	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check harness for open or short to stop lamp switch.

3.CHECK STOP LAMP SWITCH CIRCUIT

1. Check continuity between stop lamp switch harness connector and BCM harness connector.

Stop lamp switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E110	2	M123	118	Existed

2. Check continuity between stop lamp switch harness connector and ground.

Stop lamp switch		Ground	Continuity
Connector	Terminal		
E110	2		Not existed

Is the inspection result normal?

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

4.CHECK STOP LAMP SWITCH

Refer to SEC-51, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace stop lamp switch. Refer to BR-22, "Exploded View".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841331

1.CHECK STOP LAMP SWITCH

1. Turn ignition switch OFF.
2. Disconnect stop lamp switch connector.
3. Check continuity between stop lamp switch terminals.

Stop lamp switch		Condition		Continuity
Terminal				
1	2	Brake pedal	Not depressed	Not existed
			Depressed	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace stop lamp switch. Refer to BR-22, "Exploded View".

B2556 PUSH-BUTTON IGNITION SWITCH

Description

INFOID:0000000010841332

The switch changes the power supply position. BCM maintains the power supply position status. BCM changes the power supply position with the operation of the push-button ignition switch.

DTC Logic

INFOID:0000000010841333

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2556	PUSH-BUTTON IGNITION SWITCH	BCM detects the push-button ignition switch stuck at ON for 100 seconds or more.	• Harness or connectors (Push-button ignition switch circuit is shorted.) • Push-button ignition switch • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine and wait 100 seconds or more.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-52, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841334

1.CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Push-button ignition switch			
Connector	Terminal		
M50	4	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between push-button ignition switch harness connector and BCM harness connector.

Push-button ignition switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M50	4	M122	89	Existed

3. Check continuity between push-button ignition switch harness connector and ground.

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M50	4		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK PUSH-BUTTON IGNITION SWITCH GROUND CIRCUIT

Check continuity between push-button ignition switch harness connector and ground.

Push-button ignition switch		Ground	Continuity
Connector	Terminal		
M50	1		Existed

Is the inspection result normal?

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

4.CHECK PUSH-BUTTON IGNITION SWITCH

Refer to SEC-53, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace push-button ignition switch. Refer to SEC-203, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841335

1.CHECK PUSH-BUTTON IGNITION SWITCH

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

Push-button ignition switch		Condition		Continuity
Terminal				
1	4	Push-button ignition switch	Pressed	Existed
			Not pressed	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace push-button ignition switch. Refer to SEC-203, "Removal and Installation".

B2557 VEHICLE SPEED

Description

INFOID:0000000010841336

BCM receives 2 vehicle speed signals via CAN communication. 1 signal is transmitted by the “unified meter and A/C amp.”. Another signal is transmitted by “ABS actuator and electric unit (control unit.)”. BCM compares both signals to detect the vehicle speed.

DTC Logic

INFOID:0000000010841337

DTC DETECTION LOGIC

NOTE:

- If DTC B2557 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2557 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Self-diagnosis name	DTC detecting condition	Possible causes
B2557	VEHICLE SPEED	BCM detects the following difference between the vehicle speed signal from “unified meter and A/C amp.” and the one from “ABS actuator and electric unit” for 10 seconds continuously. • One is 10 km/h (6.2 MPH) or more and the other is 4 km/h (2.5 MPH) or less	• Wheel sensor • Unified meter and A/C amp. • ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Drive the vehicle at the vehicle speed of 10 km/h (6.2 MPH) or more and wait 10 seconds or more.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-54, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841338

1.CHECK DTC WITH “ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)”

Check “Self-diagnostic result” using CONSULT. Refer to BRC-96, "DTC Index".

Is the inspection result normal?

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

2.CHECK DTC WITH “COMBINATION METER”

Check “Self-diagnostic result” using CONSULT. Refer to MWI-77, "DTC Index".

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2560 STARTER CONTROL RELAY

Description

INFOID:0000000010841339

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in the N or P position and the steering is locked or unlocked (models with steering lock unit).

DTC Logic

INFOID:0000000010841340

DTC DETECTION LOGIC

NOTE:

- If DTC B2560 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2560 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Self-diagnosis name	DTC detecting condition	Possible causes
B2560	STARTER CONTROL RELAY	BCM detects a discrepancy between the OFF request of starter control relay to IPDM E/R and the feedback. (The feedback is ON instead of OFF.)	IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 2 seconds or more.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-55, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841341

1.CHECK DTC WITH IPDM E/R

Check “Self-diagnostic result” using CONSULT. Refer to PCS-33, "DTC Index".

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

2.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2601 SHIFT POSITION

Description

INFOID:0000000010841342

BCM confirms the shift position with the following 4 signals.
- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:0000000010841343

DTC DETECTION LOGIC

NOTE:
- If DTC B2601 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2601 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2601	SHIFT POSITION	BCM detects when a difference between the shift P input signal and the shift position signal received from IPDM E/R via CAN communication continues for 2 seconds or more.	• Harness or connectors (A/T shift selector circuit is open or shorted) • A/T shift selector (detention switch)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 2 seconds or more.
- Selector lever is in the P or N position
- Do not depress brake pedal
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-56, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841344

1.CHECK A/T SHIFT SELECTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect A/T shift selector (detention switch) connector.
3. Check voltage between A/T shift selector (detention switch) harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
A/T shift selector (detention switch)			
Connector	Terminal		
M137	9	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M137	9	M122	96	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)		Ground	Continuity
Connector	Terminal		
M137	9		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK A/T SHIFT SELECTOR CIRCUIT (BCM)

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M137	10	M122	99	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)		Ground	Continuity
Connector	Terminal		
M137	10		Not existed

Is the inspection result normal?

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

4.CHECK A/T SHIFT SELECTOR CIRCUIT (IPDM E/R)

Check continuity between A/T shift selector (detention switch) harness connector and IPDM E/R harness connector.

A/T shift selector (detention switch)		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M137	10	E6	43	Existed

Is the inspection result normal?

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

5.CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace A/T shift selector. Refer to TM-324, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841345

1. CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

1. Turn ignition switch OFF.
2. Disconnect A/T shift selector connector.
3. Check continuity between A/T shift selector (detention switch) terminals.

A/T shift selector (detention switch)		Condition		Continuity
Terminal				
9	10	Selector lever	P position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace A/T shift selector. Refer to TM-324, "Removal and Installation".

B2602 SHIFT POSITION

Description

INFOID:0000000010841346

BCM confirms the shift position with the following 4 signals.
- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:0000000010841347

DTC DETECTION LOGIC

NOTE:
- If DTC B2602 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2602 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2602	SHIFT POSITION	BCM detects the following status for 10 seconds. • Shift position is in the P position • Vehicle speed is 4 km/h (2.5 MPH) or more • Ignition switch is in the ON position	• Harness or connectors (A/T shift selector circuit is open or shorted) • A/T shift selector (detention switch) • ABS actuator and electric unit (control unit)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait 10 seconds or more.
- Selector lever is in the P or N position
- Do not depress brake pedal
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-59, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841348

1.CHECK DTC WITH “ABS ACTUATOR AND ELECTRIC UNIT”

Check “Self-diagnostic result” using CONSULT. Refer to BRC-96, "DTC Index".

Is the inspection result normal?

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

2.CHECK A/T SHIFT SELECTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect A/T shift selector (detention switch) connector.
3. Check voltage between A/T shift selector (detention switch) harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
A/T shift selector (detention switch)			
Connector	Terminal		
M137	9	Ground	Battery voltage

Is the inspection result normal?

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

3. CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M137	9	M122	96	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)		Ground	Continuity
Connector	Terminal		
M137	9		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK A/T SHIFT SELECTOR CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M137	10	M122	99	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)		Ground	Continuity
Connector	Terminal		
M137	10		Not existed

Is the inspection result normal?

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

5. CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-60, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace A/T shift selector. Refer to TM-324, "Removal and Installation".

6. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841349

1. CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

1. Turn ignition switch OFF.
2. Disconnect A/T shift selector connector.
3. Check continuity between A/T shift selector (detention switch) terminals.

A/T shift selector (detention switch)		Condition		Continuity
Terminal				
9	10	Selector lever	P position	Not existed
			Other than above	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace A/T shift selector. Refer to TM-324, "Removal and Installation".

B2603 SHIFT POSITION STATUS

Description

INFOID:0000000010841350

BCM confirms the shift position with the following 4 signals.
- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:0000000010841351

DTC DETECTION LOGIC

NOTE:
- If DTC B2603 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2603 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".
- If DTC B2603 is displayed with DTC B2601, first perform the trouble diagnosis for DTC B2601. Refer to SEC-56, "DTC Logic".

DTC No.	Self-diagnosis name	DTC detecting condition	Possible causes
B2603	SHIFT POSITION STATUS	BCM detects the following status for 500 ms or more when shift is in the P position, and ignition switch is in the ON position. • Transmission range switch: approx. 0 V • A/T shift selector (detention switch): approx. 0 V	• Harness or connector (A/T shift selector circuit is open or shorted) • Harness or connectors (TCM circuit is open or shorted) • A/T shift selector (detention switch) • TCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait 1 second or more.
- Selector lever is in the P or N position
- Do not depress brake pedal
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-62, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841352

1.CHECK DTC WITH TCM

Check “Self-diagnostic result” using CONSULT.

Are any DTC detected?

YES >> Refer to TM-295, "DTC Index".
NO >> GO TO 2.

2.CHECK TRANSMISSION RANGE SWITCH CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect A/T assembly connector and BCM connector.
3. Check continuity between A/T assembly harness connector and BCM harness connector.

A/T assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
F51	9	M123	140	Existed

4. Check continuity between A/T assembly harness connector and ground.

A/T assembly		Ground	Continuity
Connector	Terminal		
F51	9		Not existed

Is the inspection result normal?

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

3. CHECK TRANSMISSION RANGE SWITCH CIRCUIT 2

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector and A/T assembly harness connector.

TCM		A/T assembly		Continuity
Connector	Terminal	Connector	Terminal	
F301	9	F51	9	Existed

3. Check continuity between TCM harness connector and ground.

TCM		Ground	Continuity
Connector	Terminal		
F301	9		Not existed

Is the inspection result normal?

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

4. CHECK A/T SHIFT SELECTOR POWER SUPPLY

1. Disconnect A/T shift selector (detention switch) connector.
2. Check voltage between A/T shift selector (detention switch) harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
A/T shift selector (detention switch)			
Connector	Terminal		
M137	9	Ground	Battery voltage

Is the inspection result normal?

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

5. CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M137	9	M122	96	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)		Ground	Continuity
Connector	Terminal		
M137	9		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

6.CHECK A/T SHIFT SELECTOR CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M137	10	M122	99	Existed

3. Check continuity between A/T shift selector (detention switch) harness connector and ground.

A/T shift selector (detention switch)		Ground	Continuity
Connector	Terminal		
M137	10		Not existed

Is the inspection result normal?

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

7.CHECK A/T SHIFT SELECTOR (DETENTION SWITCH)

Refer to SEC-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace A/T shift selector. Refer to TM-324, "Removal and Installation".

8.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2604 PNP SWITCH

Description

INFOID:0000000010841353

BCM confirms the shift position with the following 4 signals.
- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:0000000010841354

DTC DETECTION LOGIC

NOTE:
- If DTC B2604 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2604 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2604	PNP SWITCH	BCM detects the following status for 500 ms or more when the ignition switch is in the ON position. • N position input signal exists. Shift position signal from TCM does not exist. • N position input signal does not exist. Shift position signal from TCM exists.	• Harness or connectors (TCM circuit is open or shorted) • TCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait 1 second or more.
- Selector lever is in the P or N position
- Do not depress brake pedal
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-65, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841355

1.CHECK DTC WITH TCM

Check “Self-diagnostic result” using CONSULT.

Are any DTC detected?

YES >> Refer to TM-295, "DTC Index".
NO >> GO TO 2.

2.CHECK TRANSMISSION RANGE SWITCH CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect A/T assembly connector and BCM connector.
3. Check continuity between A/T assembly harness connector and BCM harness connector.

A/T assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
F51	9	M123	140	Existed

4. Check continuity between A/T assembly harness connector and ground.

A/T assembly		Ground	Continuity
Connector	Terminal		
F51	9		Not existed

Is the inspection result normal?

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

3. CHECK TRANSMISSION RANGE SWITCH CIRCUIT 2

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector and A/T assembly harness connector.

TCM		A/T assembly		Continuity
Connector	Terminal	Connector	Terminal	
F301	9	F51	9	Existed

3. Check continuity between TCM harness connector and ground.

TCM		Ground	Continuity
Connector	Terminal		
F301	9		Not existed

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2605 PNP SWITCH

Description

INFOID:0000000010841356

BCM confirms the shift position with the following 4 signals.
- Selector lever
- Transmission range switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:0000000010841357

DTC DETECTION LOGIC

NOTE:
- If DTC B2605 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2605	PNP SWITCH	BCM detects the following status for 500 ms or more when the ignition switch is in the ON position • N position input signal exists. Shift position signal from IPDM E/R does not exist. • N position input signal does not exist. Shift position signal from IPDM E/R exists.	• Harness or connectors (TCM circuit is open or shorted) • TCM • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 1 second or more.
- Selector lever is in the P or N position
- Do not depress brake pedal
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-67, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841358

1.CHECK DTC WITH IPDM E/R

Check “Self-diagnostic result” using CONSULT. Refer to PCS-33, "DTC Index".

Is the inspection result normal?

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

2.CHECK TRANSMISSION RANGE SWITCH CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect A/T assembly connector and BCM connector.
3. Check continuity between A/T assembly harness connector and BCM harness connector.

A/T assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
F51	9	M123	140	Existed

4. Check continuity between A/T assembly harness connector and ground.

A/T assembly		Ground	Continuity
Connector	Terminal		
F51	9		Not existed

Is the inspection result normal?

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

3. CHECK TRANSMISSION RANGE SWITCH CIRCUIT 2

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector and A/T assembly harness connector.

TCM		A/T assembly		Continuity
Connector	Terminal	Connector	Terminal	
F301	9	F51	9	Existed

3. Check continuity between TCM harness connector and ground.

TCM		Ground	Continuity
Connector	Terminal		
F301	9		Not existed

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2608 STARTER RELAY

Description

INFOID:0000000010841359

Located in IPDM E/R, the starter relay runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000010841360

DTC DETECTION LOGIC

NOTE:

- If DTC B2608 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2608 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".
- If DTC B2608 is displayed with DTC B210D for IPDM E/R, first perform the trouble diagnosis for DTC B210D. Refer to SEC-83, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2608	STARTER RELAY	BCM receives starter relay ON signal (CAN) from IPDM E/R even if BCM turns the starter relay OFF.	• Harness or connectors (Starter relay circuit is open or shorted.) • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-69, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841361

1.CHECK BCM POWER SUPPLY CIRCUIT

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Voltage (V) (Approx.)
M121	52	Ground	Selector lever (A/T models)	N or P position	12
				Other than above	0
			Clutch pedal (M/T models)	Depressed	Battery voltage
				Not depressed	0

Is the measurement value within the specification?

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

2.CHECK STARTER RELAY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector and BCM harness connector.

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E6	46	M121	52	Existed

4. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E6	46		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B260F ENGINE STATUS

Description

INFOID:0000000010841362

BCM receives the engine status signal from ECM via CAN communication.

DTC Logic

INFOID:0000000010841363

DTC DETECTION LOGIC

NOTE:

- If DTC B260F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B260F is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B260F	INTERRUPTION OF ENGINE STATUS SIGNAL	BCM has not yet received the engine status signal from ECM when ignition switch is in the ON position.	ECM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-71, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841364

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” using CONSULT.
3. Touch “ERASE”.
4. **Perform DTC Confirmation Procedure.**
   See SEC-71, "DTC Logic".

Is the DTC B260F displayed again?

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

2.REPLACE ECM

Replace ECM. Refer to EC-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (ECM) : Description".

>> INSPECTION END

3.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B26E8 CLUTCH INTERLOCK SWITCH

Description

INFOID:0000000010841365

When clutch interlock switch turns ON, BCM detects that clutch pedal is being depressed and permits to start the engine.

DTC Logic

INFOID:0000000010841366

NOTE:
If DTC B26E8 is displayed with DTC B210F, first perform the trouble diagnosis for DTC B210F. Refer to SEC-86, "DTC Logic".

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detection condition	Possible cause
B26E8	CLUTCH INTERLOCK SWITCH	Detects that ASCD cancel switch is in the ON position for 2 seconds or more while ignition switch and clutch interlock switch are ON.	• Clutch interlock switch • Harness or connector (Clutch interlock switch circuit open or shorted)

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following condition.
- Shift lever is in the neutral position.
- Depress clutch pedal.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-72, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841367

1.CHECK CLUTCH INTERLOCK SWITCH POWER SUPPLY

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

(+)		(–)	Voltage (V) (Approx.)
Clutch interlock switch			
Connector	Terminal		
E111	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 9, located in the fuse block (J/B)]
NO-2 >> Check harness for open or short between clutch interlock switch and fuse.

2.CHECK CLUTCH INTERLOCK SWITCH SIGNAL

1. Connect clutch interlock switch connector.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M123	114	Ground	Clutch pedal	Depressed	Battery voltage
				Not depressed	0

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> GO TO 3.

3.CHECK CLUTCH INTERLOCK SWITCH SIGNAL CIRCUIT

1. Disconnect clutch interlock switch connector.
2. Check continuity between clutch interlock switch harness connector and BCM harness connector.

Clutch interlock switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E111	2	M123	114	Existed

3. Check continuity between clutch interlock switch harness connector and ground.

Clutch interlock switch		Ground	Continuity
Connector	Terminal		
E111	2		Not existed

Is the inspection result normal?

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

4.CHECK CLUTCH INTERLOCK SWITCH

Refer to SEC-73, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace clutch interlock switch. Refer to CL-11, "Exploded View".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841368

1.CHECK CLUTCH INTERLOCK SWITCH

1. Turn ignition switch OFF.
2. Disconnect clutch interlock switch connector.
3. Check continuity between clutch interlock switch terminals.

.

Clutch interlock switch		Condition		Continuity
Terminal				
1	2	Clutch pedal	Depressed	Existed
			Not depressed	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace clutch interlock switch. Refer to CL-11, "Exploded View".

B26EA KEY REGISTRATION

Description

INFOID:0000000010841369

When the registered Intelligent Key is carried, the door lock/unlock operation and the push-button ignition switch operation become possible.

DTC Logic

INFOID:0000000010841370

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B26EA	KEY REGISTRATION	Intelligent Key is not registered successfully.	• Improper registration operation • Intelligent Key • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Perform initialization using CONSULT. Reregister all Intelligent Keys.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-74, "Diagnosis Procedure"
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841371

1.PERFORM INITIALIZATION

1. Perform initialization using CONSULT. Reregister all Intelligent Keys.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> GO TO 2.
NO >> INSPECTION END

2.REPLACE INTELLIGENT KEY

1. Replace Intelligent Key. Reregister all Intelligent Keys
2. Perform initialization using CONSULT.
3. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> INSPECTION END

B2617 STARTER RELAY CIRCUIT

Description

INFOID:0000000010841372

Located in IPDM E/R, the starter relay runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000010841373

DTC DETECTION LOGIC

NOTE:

- If DTC B2617 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B2617 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".
- If DTC B2617 is displayed with DTC B210E for IPDM E/R, first perform the trouble diagnosis for DTC B210E. Refer to SEC-84, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2617	STARTER RELAY CIRCUIT	An immediate operation of starter relay is requested by BCM, but there is no response for more than 1 second.	• Harness or connectors (Starter relay circuit is open or shorted.) • IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 1 second or more.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-75, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841374

1.CHECK STARTER RELAY

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Voltage (V) (Approx.)
M121	52	Ground	Selector lever (A/T models)	N or P position	12
				Other than above	0
			Clutch pedal (M/T models)	Depressed	Battery voltage
				Not depressed	0

Is the measurement value within the specification.

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

2.CHECK STARTER RELAY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector and BCM harness connector.

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E6	46	M121	52	Existed

4. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E6	46		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

B2619 BCM

Description

INFOID:0000000010841375

BCM requests IPDM E/R to supply power to steering lock unit. After receiving the power, the steering lock unit transmits an ON signal to BCM.

DTC Logic

INFOID:0000000010841376

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2619	BCM	BCM detects a discrepancy between the power supplied to the steering lock unit and the feedback for one second or more.	BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 1 second or more.

A/T models
- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models
- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-77, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841377

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” using CONSULT.
3. Touch “ERASE”.
4. **Perform DTC Confirmation Procedure.**
   See SEC-77, "DTC Logic".

Is the DTC B2619 displayed again?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> INSPECTION END

B261E VEHICLE TYPE

Description

INFOID:0000000010841378

There are two types of vehicles.
- HEV
- Conventional

DTC Logic

INFOID:0000000010841379

DTC DETECTION LOGIC

NOTE:
- If DTC B261E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "BCM : DTC Logic".
- If DTC B261E is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to SEC-33, "BCM : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B261E	VEHICLE TYPE	Difference of BCM configuration.	BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.

A/T models
- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models
- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-78, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841380

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” using CONSULT.
3. Touch “ERASE”.
4. **Perform DTC Confirmation Procedure.**
   See SEC-78, "DTC Logic".

Is the 1st trip DTC B261E displayed again?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> INSPECTION END

B261F ASCD CLUTCH SWITCH

Description

INFOID:0000000010841381

BCM judges that clutch pedal is operated by clutch interlock switch and clutch pedal position switch operation.

DTC Logic

INFOID:0000000010841382

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detection condition	Possible cause
B261F	ASCD CNCL/CLTH SW	When ignition switch is ON and vehicle speed is 40 km/h, BCM detects that clutch pedal position switch is ON for 10 seconds or more.	• Harness or connector (ASCD clutch switch circuit open or shorted) • Clutch pedal position switch • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Drive the vehicle at the vehicle speed of 40 km/h (24.8 MPH) or more wait 10 seconds or more.
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-79, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841383

1.CHECK CLUTCH PEDAL POSITION SWITCH POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect clutch pedal position switch connector.
3. Turn ignition switch ON.
4. Check voltage between clutch pedal position switch harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
Clutch pedal position switch			
Connector	Terminal		
E108	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 3, located in the fuse block (J/B)]
NO-2 >> Check harness for open or short between clutch pedal position switch and fuse.

2.CHECK CLUTCH PEDAL POSITION SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Connect clutch pedal position switch connector.
3. Disconnect BCM connector.
4. Turn ignition switch ON.
5. Check voltage between BCM harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
BCM					
Connector	Terminal				
M122	99	Ground	Clutch pedal	Depressed	0
				Not depressed	Battery voltage

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> GO TO 3.

3.CHECK CLUTCH PEDAL POSITION SWITCH SIGNAL CIRCUIT

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

Clutch pedal position switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E108	2	M122	99	Existed

4. Check continuity between clutch pedal position switch harness connector and ground.

Clutch pedal position switch		Ground	Continuity
Connector	Terminal		
E108	2		Not existed

Is the inspection result normal?

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

4.CHECK CLUTCH PEDAL POSITION SWITCH

Refer to SEC-80, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace clutch pedal position switch. Refer to CL-11, "Exploded View".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841384

1.CHECK CLUTCH PEDAL POSITION SWITCH

1. Turn ignition switch OFF.
2. Disconnect clutch pedal position switch connector.
3. Check continuity between clutch pedal position switch terminals.

.

Clutch pedal position switch		Condition		Continuity
Terminal				
1	2	Clutch pedal	Depressed	Not existed
			Not depressed	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace clutch pedal position switch. Refer to CL-11, "Exploded View".

B210B STARTER CONTROL RELAY

Description

INFOID:0000000010841385

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in the N or P position and the steering is locked or unlocked (models with steering lock unit). It is installed parallel to the starter relay.

DTC Logic

INFOID:0000000010841386

DTC DETECTION LOGIC

NOTE:
If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210B	START CONT RLY ON	IPDM E/R detects that the relay is stuck in the ON position even if the following conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input signal	IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the power supply position to start under the following conditions and wait 1 second or more.

A/T models
- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models
- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-81, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841387

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” for IPDM E/R using CONSULT.
3. Touch “ERASE”.
4. **Perform DTC Confirmation Procedure.**
   See SEC-81, "DTC Logic".

Is the DTC B210B displayed again?

YES >> Replace IPDM E/R. Refer PCS-37, "Removal and Installation".
NO >> INSPECTION END

B210C STARTER CONTROL RELAY

Description

INFOID:0000000010841388

Starter control relay, integrated in IPDM E/R, permits the starter relay operation when in the N or P position and the steering is locked or unlocked (models with steering lock unit). It is installed parallel to the starter relay.

DTC Logic

INFOID:0000000010841389

DTC DETECTION LOGIC

NOTE:

- If DTC B210C is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R : DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210C may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210C	START CONT RLY OFF	IPDM E/R detects that the relay is stuck in the OFF position even if the following conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input signal	• IPDM E/R • Battery

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the power supply position to start under the following conditions and wait 1 second or more.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-82, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841390

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” for IPDM E/R using CONSULT.
3. Touch “ERASE”.
4. **Perform DTC Confirmation Procedure.**
   See SEC-82, "DTC Logic".

Is the DTC B210C displayed again?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> INSPECTION END

B210D STARTER RELAY

Description

INFOID:0000000010841391

Located in IPDM E/R, the starter relay runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000010841392

DTC DETECTION LOGIC

NOTE:

- If DTC B210D is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R : DTC Logic".
- If DTC B210D is displayed with DTC B2617, first perform the trouble diagnosis for DTC B2617. Refer to SEC-75, "DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210D	STARTER RELAY ON	IPDM E/R detects that the relay is stuck in the ON position even if the following conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input	IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for 1 second or more.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-83, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841393

1.INSPECTION START

1. Turn ignition switch ON.
2. Check “Self-diagnostic result” for IPDM E/R using CONSULT.
3. Touch “ERASE”.
4. **Perform DTC Confirmation Procedure.**
   See SEC-83, "DTC Logic".

Is the DTC B210D displayed again?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> INSPECTION END

B210E STARTER RELAY

Description

INFOID:0000000010841394

Located in IPDM E/R, the starter relay runs the starter motor. The starter relay is turned ON by the BCM when the ignition switch is in the START position. IPDM E/R transmits the starter relay ON signal to BCM via CAN communication.

DTC Logic

INFOID:0000000010841395

DTC DETECTION LOGIC

NOTE:

- If DTC B210E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R : DTC Logic".
- If DTC B210E is displayed with DTC B2110 for IPDM E/R, first perform the trouble diagnosis for DTC B2110. Refer to SEC-88, "DTC Logic".
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210F may be detected.

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210E	STARTER RELAY OFF	IPDM E/R detects that the relay is stuck in the OFF position even if the following conditions are met for about 1 second. • Starter control relay ON/OFF signal from BCM • Transmission range switch input	• IPDM E/R • Battery

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 1 second or more.

A/T models

- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models

- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-84, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841396

1.CHECK STARTER RELAY OUTPUT SIGNAL

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

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Voltage (V) (Approx.)
M121	52	Ground	Selector lever (A/T models)	P or N position	12
				Other than above	0
			Clutch pedal (M/T models)	Depressed	Battery voltage
				Not depressed	0

Is the inspection result normal?

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

2.CHECK STARTER RELAY OUTPUT SIGNAL CIRCUIT

1. Disconnect IPDM E/R connector.
2. Check continuity between BCM harness connector and IPDM E/R harness connector.

BCM		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
M121	52	E6	46	Existed

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M121	52		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK STARTER RELAY POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check voltage between IPDM E/R harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
IPDM E/R			
Connector	Terminal		
E5	36	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> Check harness for open or short between IPDM E/R and battery. Refer to PCS-28, "Wiring Diagram - IPDM E/R -".

B210F PNP/CLUTCH INTERLOCK SWITCH

Description

INFOID:0000000010841397

IPDM E/R confirms the shift position with the following signals.
- Transmission range switch
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:0000000010841398

DTC DETECTION LOGIC

NOTE:
If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R : DTC Logic"

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B210F	INTER LOCK/PNP SW ON	IPDM E/R detects the difference between the signals below for 1 second or more. • Transmission range switch input signal • Shift position signal from BCM (CAN)	• Harness or connectors (Transmission range switch circuit is open or shorted) • Transmission range switch • IPDM E/R • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait 1 second or more.
- Selector lever is in the P or N position
- Do not depress brake pedal
2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-86, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841399

1.CHECK DTC WITH BCM

Check “Self-diagnostic result” using CONSULT. Refer to BCS-99, "DTC Index".

Is the inspection result normal?

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

2.CHECK TRANSMISSION RANGE SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Turn ignition switch ON.
4. Check voltage between IPDM E/R harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
IPDM E/R					
Connector	Terminal				
E5	30	Ground	Selector lever (A/T models)	N or P position	Battery voltage
				Other than above	0
			Clutch pedal (M/T models)	Depressed	Battery voltage
				Not depressed	0

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> GO TO 3.

3. CHECK TRANSMISSION RANGE SWITCH SIGNAL CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between IPDM E/R harness connector and BCM harness connector.

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E5	30	M123	140	Existed

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E5	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

B2110 PNP/CLUTCH INTERLOCK SWITCH

Description

INFOID:0000000010841400

IPDM E/R confirms the shift position with the following signals.
- Transmission range switch
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:0000000010841401

DTC DETECTION LOGIC

NOTE:
If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to SEC-31, "IPDM E/R : DTC Logic".

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2110	INTER LOCK/PNP SW	IPDM E/R detects the difference between the signals below for 1 second or more. • Transmission range switch input signal • Shift position signal from BCM (CAN)	• Harness or connectors (Transmission range switch circuit is open or shorted) • Transmission range switch • IPDM E/R • BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON under the following conditions and wait 1 second or more.

A/T models
- Selector lever is in the P or N position
- Do not depress brake pedal

M/T models
- Do not depress clutch pedal

2. Check “Self-diagnostic result” using CONSULT.

Is DTC detected?

YES >> Go to SEC-88, "Diagnosis Procedure".
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010841402

1.CHECK DTC WITH BCM

Check “Self-diagnostic result” using CONSULT. Refer to BCS-99, "DTC Index".

Is the inspection result normal?

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

2.CHECK TRANSMISSION RANGE SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Turn ignition switch ON.
4. Check voltage between IPDM E/R harness connector and ground.

(+)		(–)	Condition		Voltage (V) (Approx.)
IPDM E/R					
Connector	Terminal				
E5	30	Ground	Selector lever (A/T models)	N or P position	Battery voltage
				Other than above	0
			Clutch pedal (M/T models)	Depressed	Battery voltage
				Not depressed	0

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> GO TO 3.

3. CHECK TRANSMISSION RANGE SWITCH SIGNAL CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between IPDM E/R harness connector and BCM harness connector.

IPDM E/R		BCM		Continuity
Connector	Terminal	Connector	Terminal	
E5	30	M123	140	Existed

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E5	30		Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> Repair or replace harness.

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:0000000010841403

1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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

2.CHECK POWER SUPPLY CIRCUIT

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

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

Is the measurement value normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

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

IPDM E/R

IPDM E/R : Diagnosis Procedure

INFOID:0000000010841404

1.CHECK FUSES AND FUSIBLE LINK

Check that the following IPDM E/R fuses or fusible links are not blown.

Signal name	Fuses and fusible link No.
Battery power supply	C
	50
	51

Is the fuse fusing?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check voltage between IPDM E/R harness connector and the ground.

Terminals			Voltage (Approx.)
(+)		(–)	
IPDM E/R			
Connector	Terminal	Ground	
E4	1		Battery voltage

Is the measurement value normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between IPDM E/R harness connectors and the ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E5	12		Existed
E6	41		

Does continuity exist?

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

KEY SLOT

Description

INFOID:0000000010841405

When the Intelligent Key battery is discharged, it performs the NVIS (NATS) ID verification between the integrated transponder and BCM by inserting the Intelligent Key into the key slot, and then the engine can be started.

Component Function Check

INFOID:0000000010841406

1.CHECK FUNCTION

1. Remove Intelligent Key battery from Intelligent Key.
2. Change power supply position when Intelligent Key insert into key slot and then press push-button ignition switch.

Is the inspection result normal?

YES >> Key slot function is normal.
NO >> Go to SEC-92, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010841407

1.CHECK KEY SLOT POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage (V) (Approx.)
Key slot			
Connector	Terminal		
M22	1	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 6 and 9 located in the fuse block (J/B)].
NO-2 >> Check harness for open or short between key slot and fuse.

2.CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M22	7		Existed

Is the inspection result normal?

YES >> Replace key slot. Refer to SEC-202, "Removal and Installation".
NO >> Repair or replace harness.

KEY SLOT INDICATOR

Description

INFOID:0000000010841408

Blinks when Intelligent Key insertion is required.

Component Function Check

INFOID:0000000010841409

1.CHECK FUNCTION

Check key slot illumination (“KEY SLOT ILLUMI”) Active Test mode.

Is the inspection result normal?

YES >> Key slot function is normal.
NO >> Refer to SEC-93, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010841410

1.CHECK KEY SLOT INDICATOR OUTPUT SIGNAL

Check voltage between key slot harness connector and ground.

Key slot (+)		(–)	Condition	Key slot illumination	Voltage (V) (Approx.)
Connector	Terminal				
M22	6	Ground	Insert Intelligent Key into key slot	OFF	Battery voltage
			Remove Intelligent Key from key slot	ON	0

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 2.

2.CHECK KEY SLOT POWER SUPPLY CIRCUIT

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

Key slot (+)		(–)	Voltage (V) (Approx.)
Connector	Terminal		
M22	1	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 3.
NO-1 >> Check 10 A fuse [No. 6 and 9 located in the fuse block (J/B)].
NO-2 >> Check harness for open or short between key slot and fuse.

3.CHECK KEY SLOT GROUND CIRCUIT

Check continuity between key slot harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M22	7		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace key slot ground circuit.

4.CHECK KEY SLOT CIRCUIT

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

BCM		Key slot		Continuity
Connector	Terminal	Connector	Terminal	
M122	92	M22	6	Existed

4. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M122	92		Not existed

Is the inspection result normal?

YES >> Replace key slot. Refer to SEC-202, "Removal and Installation".
NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

HOOD SWITCH

Description

INFOID:0000000010841411

Hood switch is built into hood lock (RH) and connected to IPDM E/R which detects the open/close condition of hood.

Component Function Check

INFOID:0000000010841412

1.CHECK FUNCTION

1. Select “HOOD SW” in the “Data Monitor” mode using CONSULT.
2. Check the hood switch signal under the following condition.

Test item	Condition		Status
HOOD SW	Hood	Open	ON
		Close	OFF

Is the indication normal?

YES >> Hood switch is normal.
NO >> Go to SEC-95, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010841413

1.CHECK HOOD SWITCH SIGNAL

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

(+)		(–)	Voltage (V) (Approx.)
Hood switch			
Connector	Terminal		
E30	2	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK HOOD SWITCH CIRCUIT

1. Disconnect IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector and hood switch harness connector.

IPDM E/R		Hood switch		Continuity
Connector	Terminal	Connector	Terminal	
E9	104	E30	2	Existed

3. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E9	104		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E30	1		Existed

Is the inspection result normal?

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

4.CHECK HOOD SWITCH

Refer to SEC-96, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace hood lock (RH). Refer to DLK-186, "Removal and Installation" (Coupe models) or DLK-389, "Removal and Installation" (Roadster models).

5.CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010841414

1.CHECK HOOD SWITCH

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

Hood switch		Condition		Continuity
Terminal				
1	2	Hood switch	Pressed	Not existed
			Released	Existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace hood lock (RH). Refer to DLK-186, "Removal and Installation" (Coupe models) or DLK-389, "Removal and Installation" (Roadster models).

HORN FUNCTION

Description

INFOID:0000000010841415

Performs answer-back for each operation with horn.

Component Function Check

INFOID:0000000010841416

1.CHECK FUNCTION

1. Use CONSULT to perform Active Test (“HORN”).
2. Touch “ON” to check that it works normally.

Is the operation normal?

YES >> Horn function is OK.
NO >> Refer to SEC-97, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010841417

1.CHECK HORN SWITCH

Check horn function with horn switch

Do the horns sound?

YES >> GO TO 2.
NO >> Refer to HRN-2, "Wiring Diagram - HORN -".

2.CHECK HORN RELAY POWER SUPPLY

1. Turn ignition switch ON.
2. Perform “ACTIVE TEST” (“HORN”) using CONSULT.
3. Check voltage between malfunctioning horn relay harness connector and ground.

(+)			(–)	Test item		Voltage (V) (Approx.)
Horn relay						
Connector		Terminal				
Low	E11	1	Ground	HORN	ON	Battery voltage → 0 → Battery voltage
High	E18	3			Other than above	Battery voltage

Is the inspection result normal?

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

3.CHECK HORN RELAY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector and horn relay.
3. Check continuity between IPDM E/R harness connector and malfunctioning horn relay terminal connector.

IPDM E/R		Horn relay		Continuity
Connector	Terminal	Connector	Terminal	
E6	44	E11	1	Existed
	45	E18	3	

4. Check continuity between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
E6	44		Not existed
	45		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-37, "Removal and Installation".

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-44, "Intermittent Incident".

Is the inspection result normal?

>> INSPECTION END

SECURITY INDICATOR LAMP

Description

INFOID:0000000010841418

- Security indicator lamp is located on combination meter.
- NVIS (Nissan Vehicle Immobilizer System) and vehicle security system conditions are indicated by blink or illumination of security indicator lamp.

Component Function Check

INFOID:0000000010841419

1.CHECK FUNCTION

1. Perform “THEFT IND” in the “ACTIVE TEST” mode using CONSULT.
2. Check security indicator lamp operation.

Test item		Description	
THEFT IND	ON	Security indicator lamp	Illuminates
	OFF		Does not illuminate

Is the inspection result normal?

YES >> INSPECTION END
NO >> Go to SEC-99, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010841420

1.CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

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

(+)		(–)	Voltage (V) (Approx.)
Combination meter			
Connector	Terminal		
M53	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.
NO-1 >> Check 10 A fuse [No. 11, located in the fuse block (J/B)].
NO-2 >> Check harness for open or short between combination meter and fuse.

2.CHECK SECURITY INDICATOR LAMP SIGNAL

1. Connect combination meter connector.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

(+)		(–)	Voltage (V) (Approx.)
BCM			
Connector	Terminal		
M123	141	Ground	Battery voltage

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-106, "Removal and Installation".
NO >> GO TO 3.

3.CHECK COMBINATION METER CIRCUIT

1. Disconnect combination meter connector.
2. Check continuity between combination meter harness connector and BCM harness connector.

Combination meter		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M54	28	M123	141	Existed

3. Check continuity between combination meter harness connector and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M54	28		Not existed

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-103, "Removal and Installation".
NO >> Repair or replace harness.

KEY WARNING LAMP

Description

INFOID:0000000010841421

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:0000000010841422

1.CHECK FUNCTION

Check the operation with “INDICATOR” in “Active Test” mode using CONSULT.

Test item	Condition	
INDICATOR	KEY ON	Key warning lamp illuminates
	KEY IND	Key warning lamp blinks

Is the inspection result normal?

YES >> Key warning lamp in combination meter is normal.
NO >> Refer to SEC-101, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010841423

1.CHECK KEY WARNING LAMP

Refer to DLK-124, "Diagnosis Procedure" (Coupe models) or DLK-326, "Diagnosis Procedure" (Roadster models).

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

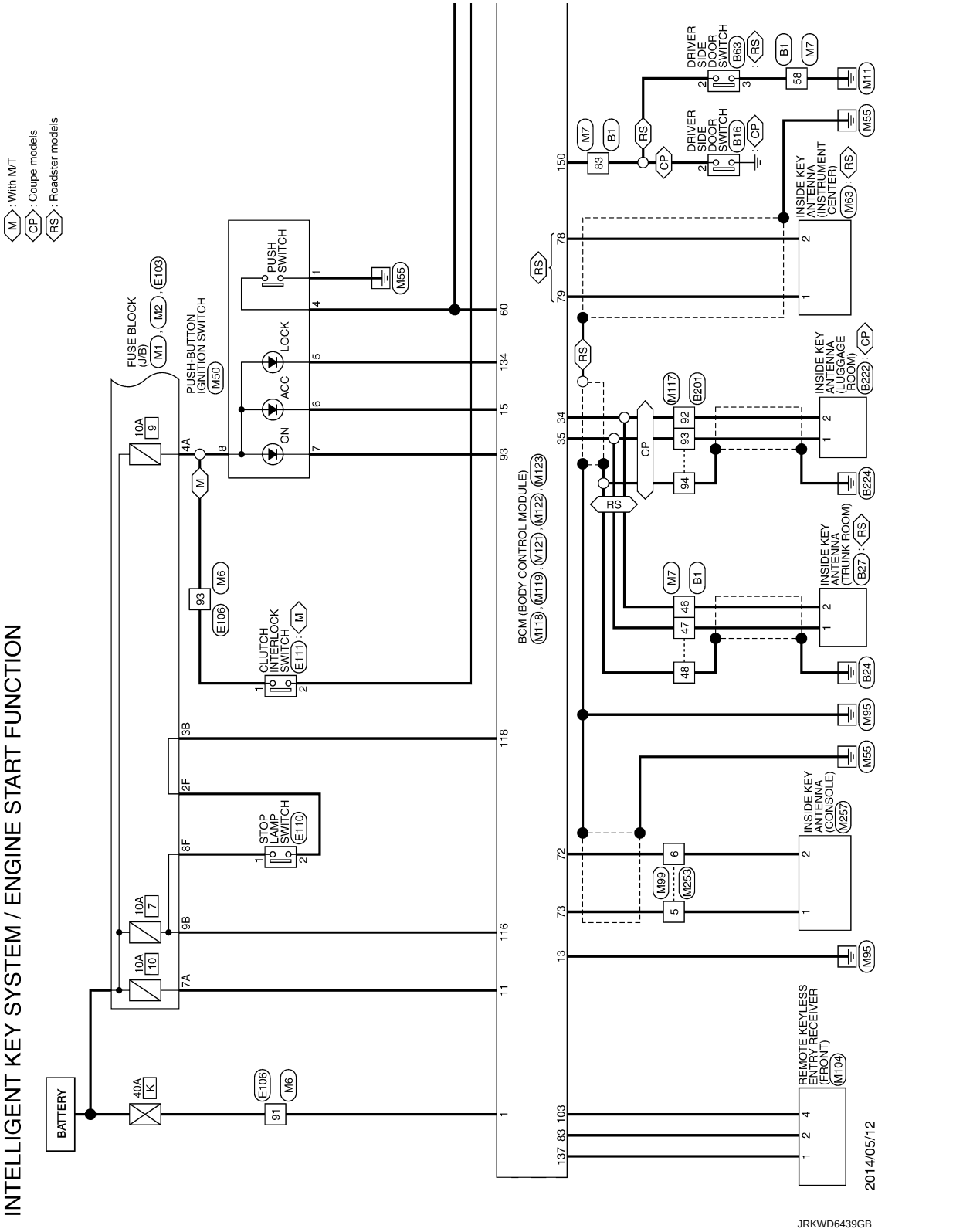
Refer to GI-44, "Intermittent Incident".

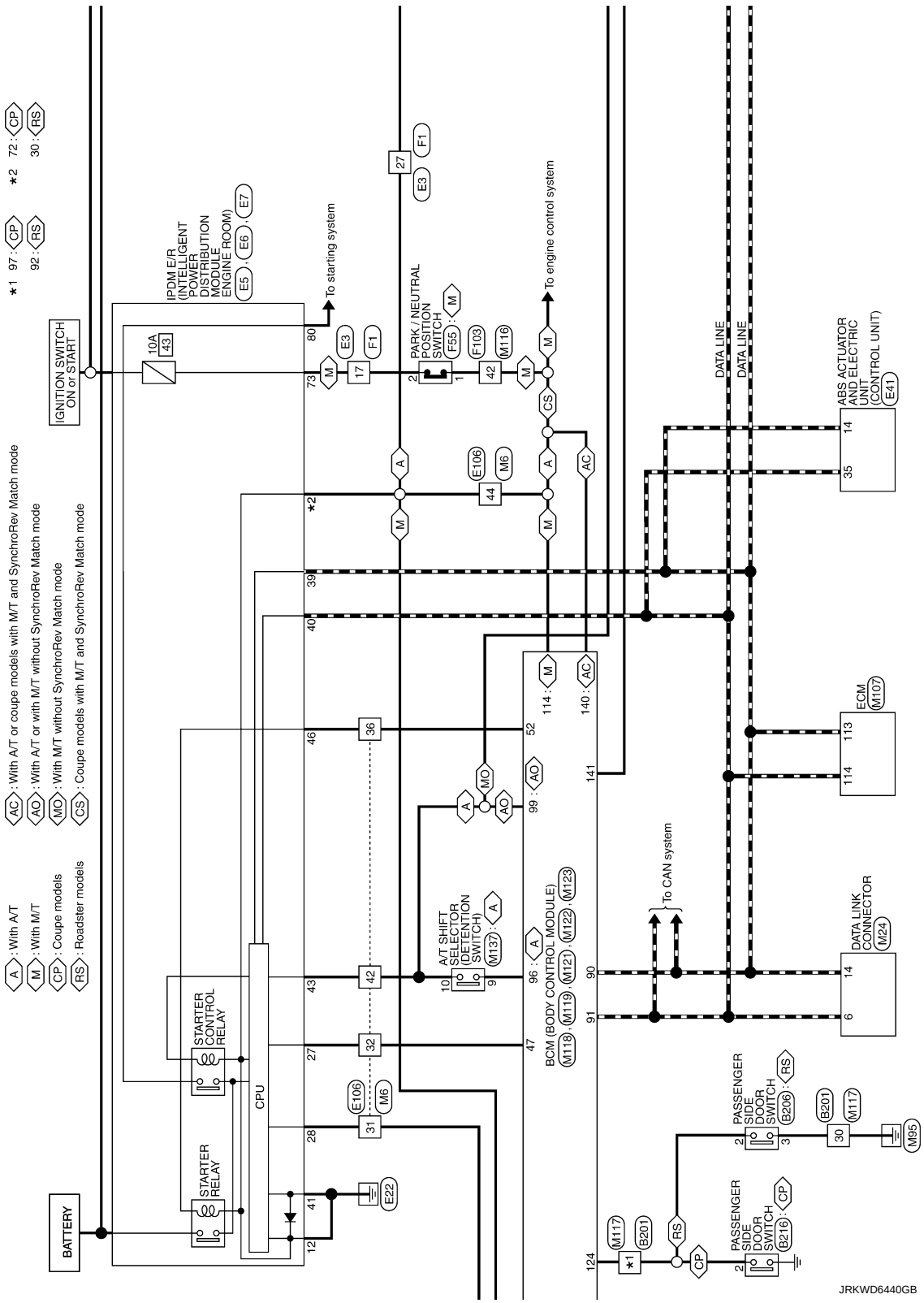
>> INSPECTION END

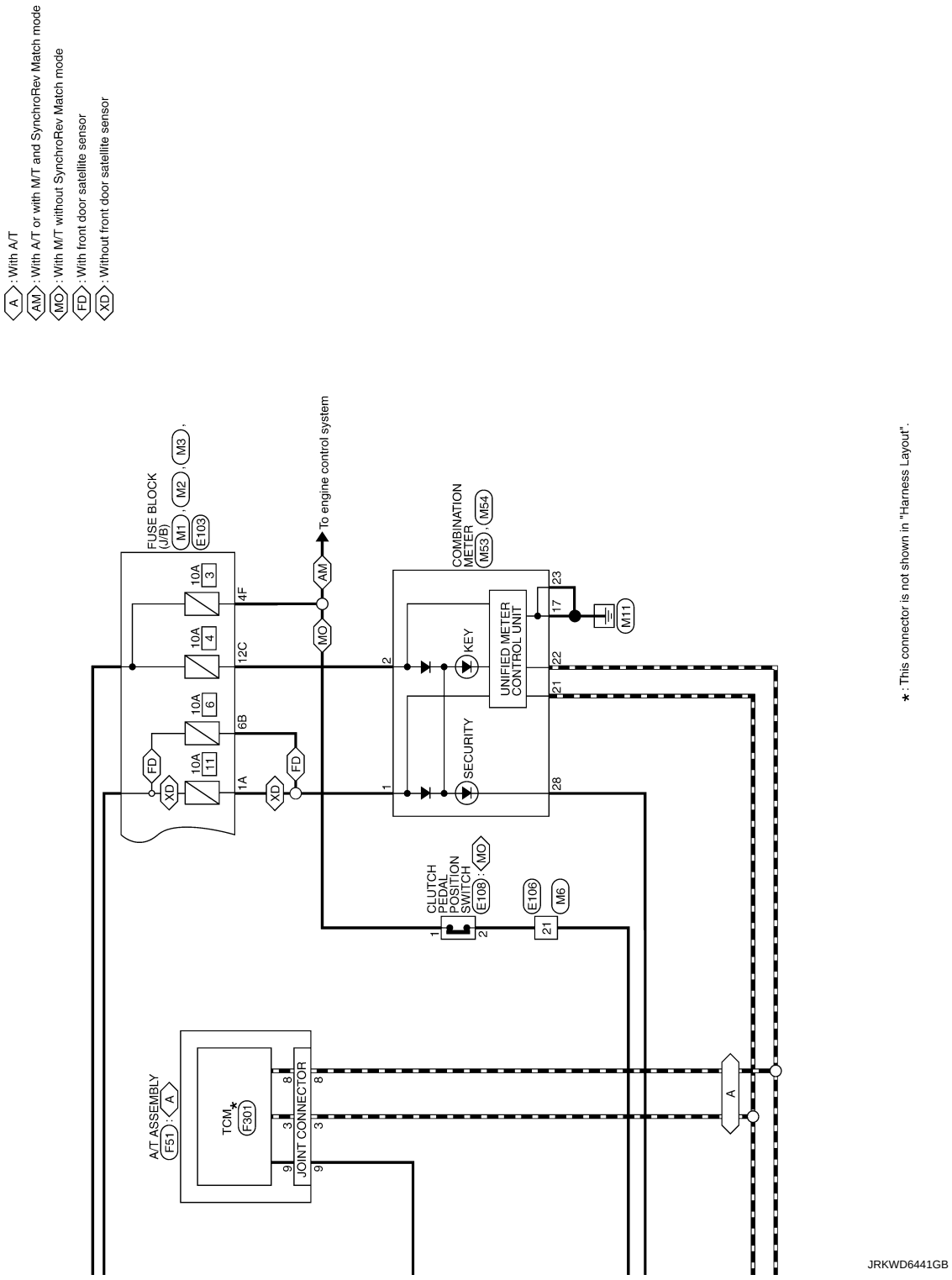
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:0000000010841424



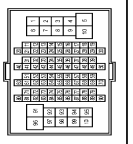

A : With A/T
M : With M/T
CP : Coupe models
RS : Roadster models
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
CS : Coupe models with M/T and SynchroRev Match mode
*1 97 : CP 92 : RS
*2 72 : CP 30 : RS
BATTERY
IGNITION SWITCH ON or START
10A 43
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5 , E6 , E7
To starting system
To engine control system
PARK / NEUTRAL POSITION SWITCH F55 : M
STARTER RELAY
STARTER CONTROL RELAY
CPU
A/T SHIFT SELECTOR (DETENTION SWITCH) M137 : A
BCM (BODY CONTROL MODULE) M118 , M119 , M121 , M122 , M123
To CAN system
DATA LINE
DATA LINE
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
ECM M107
DATA LINK CONNECTOR M24
PASSENGER SIDE DOOR SWITCH B206 : RS
PASSENGER SIDE DOOR SWITCH B216 : CP
JRKWD6440GB


A : With A/T
AM : With A/T or with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
FD : With front door satellite sensor
XD : Without front door satellite sensor
FUSE BLOCK (J/B) M1 , M2 , M3 , E103
10A 3
10A 4
10A 6
10A 11
4F
12C
6B
1A
FD
XD
To engine control system
AM
MO
COMBINATION METER M53 , M54
UNIFIED METER CONTROL UNIT
KEY
SECURITY
23
17
22
21
28
M11
CLUTCH PEDAL POSITION SWITCH E108 : MO
E106
M6
21
A/T ASSEMBLY F51 : A
TCM* F301
JOINT CONNECTOR
8
3
9
A
* : This connector is not shown in "Harness Layout".
JRKWD6441GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

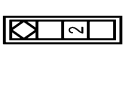
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	BG	-
3	Y	-
4	W	-
6	V	-
7	LG	-
8	GR	-
9	SB	-
11	Y	-
12	W	-
13	BR	-
14	LG	-
15	B	-
16	V	-
17	R	-
18	B	-
20	SB	-
21	G	-
22	GR	-
23	V	-
24	BG	-
25	L	-
26	P	-
27	W	-
28	SHIELD	-
31	W	-
32	B	-
33	P	- [Coupe models]
33	W	- [Roadster models]
34	R	-
35	B	- [Roadster models]
35	W	- [Coupe models]
36	B	-
40	Y	-
41	L	-
42	GR	-
43	BR	-
44	R	-
45	BG	-
46	SB	- [Roadster models]
46	SHIELD	- [Coupe models]
47	V	-
48	SHIELD	-
51	W	-
52	R	-
57	SHIELD	-
58	B	-
60	V	-
61	SB	-
62	SHIELD	-
63	BR	-
64	Y	-
65	SHIELD	-
66	P	-
67	L	-
68	SHIELD	-
69	R	-
70	G	-
71	V	-
72	P	-
73	BR	-
74	GR	-
75	BG	-
80	Y	-
81	R	-
82	B	-
83	GR	-
84	G	- [Coupe models]
84	L	- [Roadster models]
85	LG	-
86	V	-
87	BR	-
88	GR	-
93	Y	-
94	G	- [Roadster models]
94	L	- [Coupe models]
95	GR	- [Coupe models]
95	LG	- [Roadster models]
96	L	-
97	Y	-
98	W	- [Coupe models]
98	Y/B	- [Roadster models]
99	LG	-
100	B	-

Connector No.	B16
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-

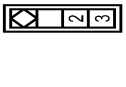
Connector No.	B27
Connector Name	INSIDE KEY ANTENNA (TRUNK ROOM)
Connector Type	RK02FGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	SB	-

Connector No.	B63
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

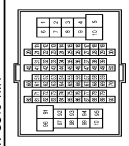
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	B	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

H.S.



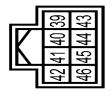
Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	- [Coupe models]
2	R	- [Roadster models]
3	B	- [Roadster models]
3	Y	- [Coupe models]
4	G	-
7	R	- [Coupe models]
7	Y	- [Roadster models]
8	LG	-
9	Y	-
11	R	-
20	G	-
21	R	-
30	B	-
40	W	-
41	V	-
42	G	-
43	L	-

JRKWD6442GB

JRKWD6443GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	E6
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH40FW-NH

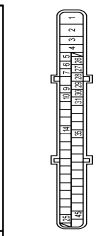


Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
42	Y	-
43	SB	-
44	W	-
45	G	-
46	V	-

Connector No.	E7
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4

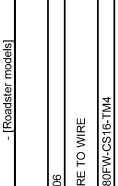
Terminal No.	Color Of Wire	Signal Name [Specification]
48	L	-
49	BG	-
51	Y	-
53	W	-
54	V	-
55	SB	-
56	LG	-
57	G	-
58	P	-
69	BR	-
70	BG	-
72	GR	-
73	GR	-
74	G	-
75	SB	-
76	Y	-
77	R	-
80	W	-

Connector No.	E41
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	BAA42FB-AHZ4-LH



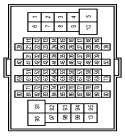
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	G	UBMR
3	R	UBVR
4	B	GROUND
5	Y	DS FL
6	BG	DP RL
7	BR	DP RR
9	B	DP FR
10	W	DS FR
14	P	CAN-L
25	Y	BUS-L
26	LG	DP FL
27	GR	DS RL
28	G	UZ
29	P	DS RR
30	SB	BLS
31	R	VDC OFF SW
35	L	CAN-H
45	B	BUS-H

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS



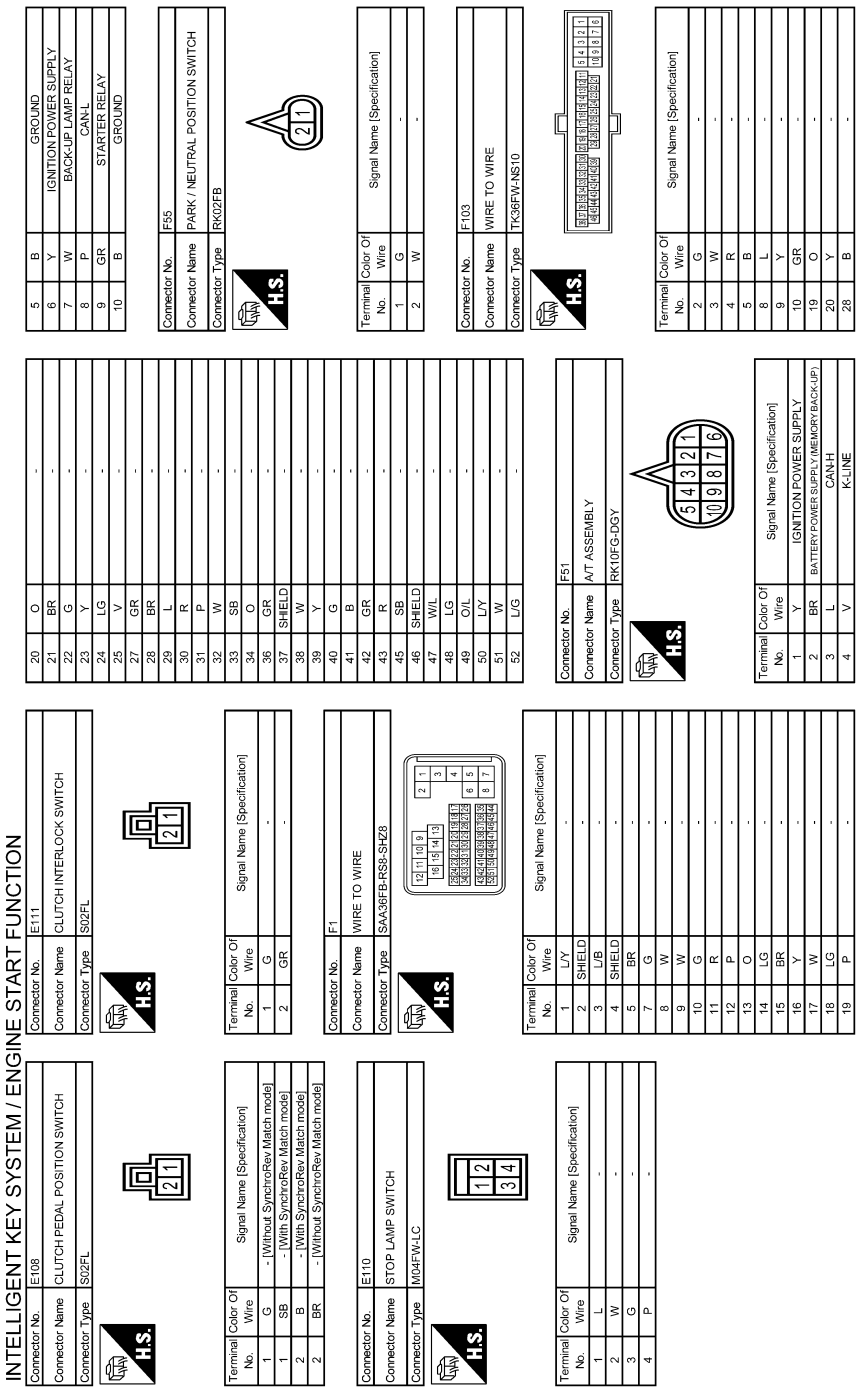
Terminal No.	Color Of Wire	Signal Name [Specification]
1F	SB	-
2F	W	-
4F	G	-
6F	BG	-
8F	L	-
9F	R	- [Coupe models]
9F	V	- [Roadster models]
11F	SB	-
20	LG	-
21	BR	- [Coupe models]
21	G	- [Roadster models]
31	L	-
32	V	-
36	V	-
37	Y	-
38	R	-
39	B	-
40	W	-
41	LG	-
42	SB	-
43	G	-
44	GR	- [Except for roadster models with M/T]
44	R	- [Roadster models with M/T]
45	BG	-
46	W	-
47	P	-
58	SHIELD	-
59	L	-
70	P	-
80	W	-
81	P	-
82	G	-
83	V	-
84	L	-
85	BG	-
86	LG	-
87	R	-
89	P	-
91	W	-
92	L	-
93	G	-
94	Y	-
96	Y	-
97	BR	-
98	GR	-
99	LG	-
100	BG	-

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

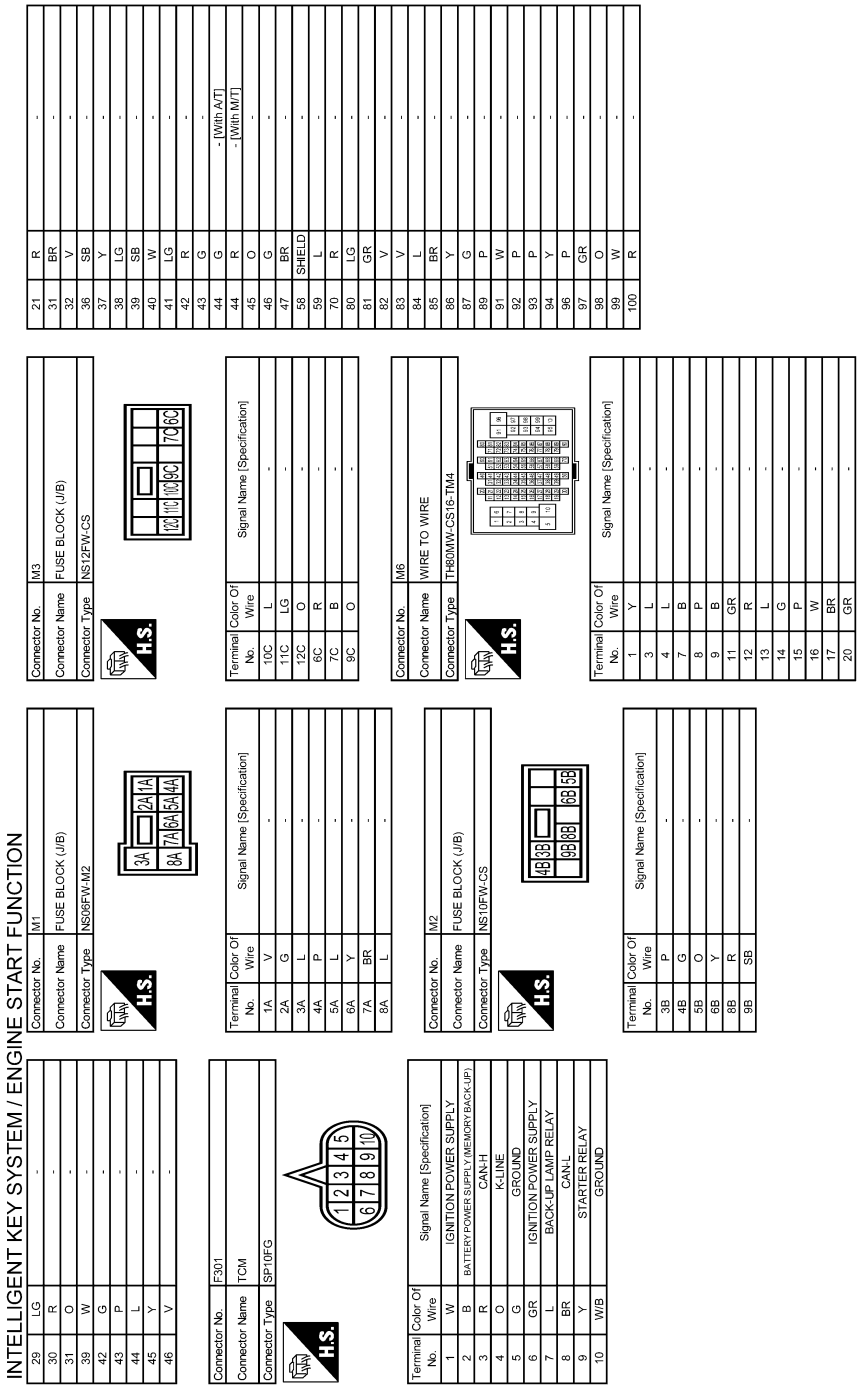


Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
3	L	-
4	L	-
7	B	-
8	P	-
9	B	-
11	V	-
12	R	-
13	L	-
14	GR	-
15	P	-
16	W	-
17	SB	-

JRKWD6444GB



JRKWD6445GB



JRKWD6446GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	LG	-
4	O	-
6	V	-
7	LG	-
8	SB	-
9	GR	-
11	Y	-
12	V	-
13	BR	-
14	V	-
15	B	-
16	V	-
17	R	-
18	L	-
20	SB	-
21	G	-
22	GR	-
23	V	-
24	R	-
25	L	-
26	P	-
27	B	-
28	SHIELD	-
31	W	-
32	B	-
33	W	-
34	R	-
35	B	-
36	L	-
40	L	-
41	R	-
42	GR	-
43	R	-
44	R	-
45	O	-
46	G	- [Roadster models]
46	SHIELD	- [Coupe models]
47	R	-
48	SHIELD	-
51	V	-
52	R	-
57	SHIELD	-
58	B	-
60	L	-
61	R	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	LG	-
67	V	-
68	SHIELD	-
69	L	-
70	P	-
71	V	-
72	P	-
73	BR	-
74	GR	-
75	O	-
80	Y	-
81	W	-
82	BR	-
83	GR	-
84	L	-
85	LG	-
86	V	-
87	BR	-
88	SB	-
93	Y	-
94	L	- [Roadster models]
94	SB	- [Coupe models]
95	GR	- [Coupe models]
95	W	- [Roadster models]
96	L	-
97	LG	- [Coupe models]
97	Y	- [Roadster models]
98	BG	- [Coupe models]
98	Y/B	- [Roadster models]
99	W	-
100	B	-

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	- [Coupe models]
3	Y	- [Roadster models]
4	B	-
5	B	-
6	L	-
7	Y	-
8	G	-
11	LG	- [Roadster models]
11	Y	- [Coupe models]
14	P	-
16	Y	-

Connector No.	M50
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	G	-
4	BR	-
5	GR	-
6	Y	-
7	V	-
8	P	-

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH24FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	O	IGNITION SIGNAL
3	L	VEHICLE SPEED SIGNAL (2-PULSE)
4	V	VEHICLE SPEED SIGNAL (8-PULSE) [For Mexico]
4	Y	VEHICLE SPEED SIGNAL (8-PULSE) [Except for Mexico]
5	B	ILLUMINATION CONTROL SIGNAL
6	R	ROOF STATUS SIGNAL
9	BR	COMMUNICATION SIGNAL (METER->TRIPLE METER)
10	L	COMMUNICATION SIGNAL (TRIPLE METER->METER)
12	G	S-MODE SWITCH SIGNAL
15	L	ACC POWER SUPPLY
16	R	AIR BAG SIGNAL
17	B	GROUND
18	V	AMBIENT SENSOR SIGNAL
19	G	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
20	GR	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	Y	FUEL LEVEL SENSOR GROUND

JRKWD6447GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	M54
Connector Name	COMBINATION METER
Connector Type	TH16FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
25	W	ALTERNATOR SIGNAL
26	O	PARKING BRAKE SWITCH SIGNAL
27	LG	BRAKE FLUID LEVEL SWITCH SIGNAL
28	Y	SECURITY SIGNAL
29	GR	WASHER LEVEL SWITCH SIGNAL
32	G	PADDLE SHIFTER DOWN SIGNAL
33	O	PADDLE SHIFTER UP SIGNAL
34	BR	FUEL LEVEL SENSOR SIGNAL
35	L	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
36	L	PASSENGER SEAT BELT WARNING SIGNAL [For Mexico]
36	P	PASSENGER SEAT BELT WARNING SIGNAL [Except for Mexico]
37	G	NON-MANUAL MODE SIGNAL
38	V	MANUAL MODE SHIFT DOWN SIGNAL
39	L	MANUAL MODE SHIFT UP SIGNAL
40	W	MANUAL MODE SIGNAL

Connector No.	M63
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	L	-

Connector No.	M99
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	SHIELD	-
2	L	-
3	G	-
4	Y	-
5	P	-
6	L	-
7	B	-
8	SHIELD	-
9	LG	-
10	V	-

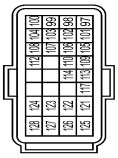
Connector No.	M104
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (FRONT)
Connector Type	JAB04FB

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	-
2	GR	GROUND
3	G	SIGNAL OUTPUT
4	LG	BATTERY

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R28-R-LH-Z

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	ACCELERATOR PEDAL POSITION SENSOR 1
98	P	ACCELERATOR PEDAL POSITION SENSOR 2
99	L	SENSOR POWER SUPPLY
100	W	SENSOR GROUND
101	SB	ASCD STEERING SWITCH
102	GR	EVAP CONTROL SYSTEM PRESSURE SENSOR
103	G	SENSOR POWER SUPPLY
104	GR	SENSOR GROUND
105	L	REFRIGERANT PRESSURE SENSOR
106	W	FUEL TANK TEMPERATURE SENSOR
107	BR	SENSOR POWER SUPPLY
108	Y	SENSOR GROUND
109	G	PNP SIGNAL
110	R	ENGINE SPEED OUTPUT SIGNAL
112	SB	SENSOR GROUND
113	P	CAN COMMUNICATION LINE
114	L	CAN COMMUNICATION LINE
117	Y	DATA LINK CONNECTOR
121	LG	EVAP CANISTER VENT CONTROL VALVE
122	P	STOP LAMP SWITCH
123	B	ECM GROUND
124	B	ECM GROUND
125	R	POWER SUPPLY FOR ECM
126	BR	ASCD BRAKE SWITCH
127	B	ECM GROUND
128	B	ECM GROUND

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK36MW-NS10

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
3	BG	- [Coupe models]
3	O	- [Roadster models]
4	W	-
5	B	-
8	L	-
9	Y	-
10	R	-
19	O	-
20	G	-
28	B	-
29	LG	-
30	LG	-
31	O	-
39	G	-
42	G	-
43	P	-
44	L	-
45	BR	-
46	V	-

JRKWD6448GB

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	- [Coupe models]
2	LG	- [Roadster models]
3	B	- [Roadster models]
3	O	- [Coupe models]
4	W	-
7	LG	- [Coupe models]
7	Y	- [Roadster models]
8	LG	-
9	Y	-
11	R	-
20	G	-
21	R	-
30	B	-
40	O	-
41	Y	-
42	G	-
43	L	-
44	SB	-
51	R	-
52	G	-
53	SHIELD	-
54	LG	-
55	V	-
56	SHIELD	-
57	G	- [Coupe models]
57	P	- [Roadster models]
58	L	- [Roadster models]
58	R	- [Coupe models]
59	B	-
60	W	-
61	GR	-
62	B	-
63	Y	-
64	L	-
65	G	-
66	O	-
67	V	-
68	P	-
69	L	-
70	L	-
71	B	-
72	B	-
73	B	-
74	B	-
75	B	-
76	B	-
77	B	-
92	G	- [Coupe models]
92	LG	- [Roadster models]
93	R	- [Coupe models]
93	V	- [Roadster models]
94	G	- [Roadster models]
94	SHIELD	- [Coupe models]
95	LG	- [Roadster models]
95	SB	- [Coupe models]
97	LG	- [Coupe models]
97	Y	- [Roadster models]
98	V	- [Coupe models]
98	Y/B	- [Roadster models]
99	G	-
100	BR	- [Coupe models]
100	Y	- [Roadster models]

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (IGN)

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	BR	BAT (FUSE)
13	B	GROUND
14	R	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT, SIDE)
18	O	TURN SIGNAL LH (FRONT, SIDE)
19	P	ROOM LAMP TIMER CONTROL

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH

H.S.

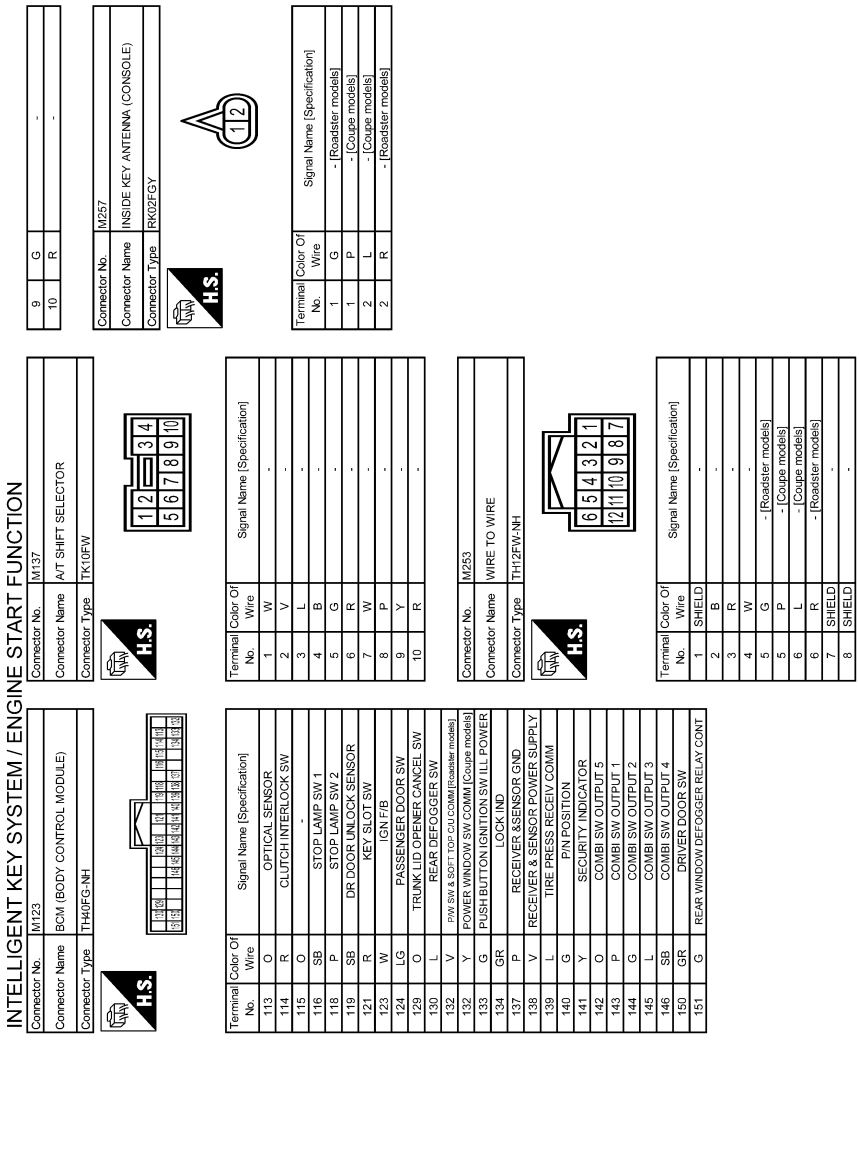
Terminal No.	Color Of Wire	Signal Name [Specification]
34	G	LUGGAGE/TRUNK ROOM ANT-
35	R	LUGGAGE/TRUNK ROOM ANT+
38	B	REAR BUMPER ANT-
39	W	REAR BUMPER ANT+
47	V	IGN RELAY (IPDM E/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR/TRUNK LID DOOR REQUEST SW
64	G	I-KEY WARN BUZZER (ENG ROOM)
66	R	BACK DOOR/TRUNK ROOM LAMP SW
67	GR	BACK DOOR/TRUNK LID OPENER SW

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

H.S.

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

JRKWD6449GB

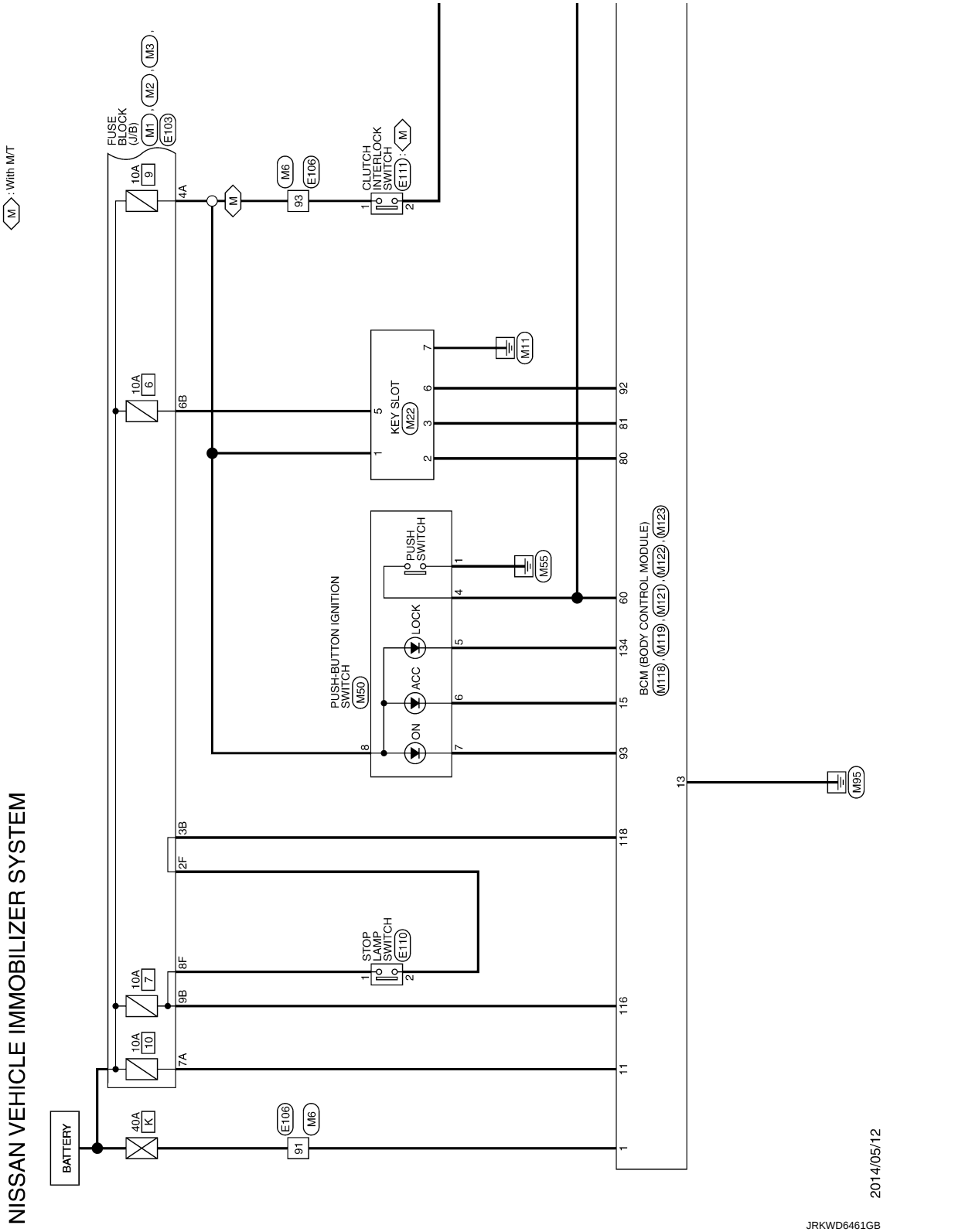


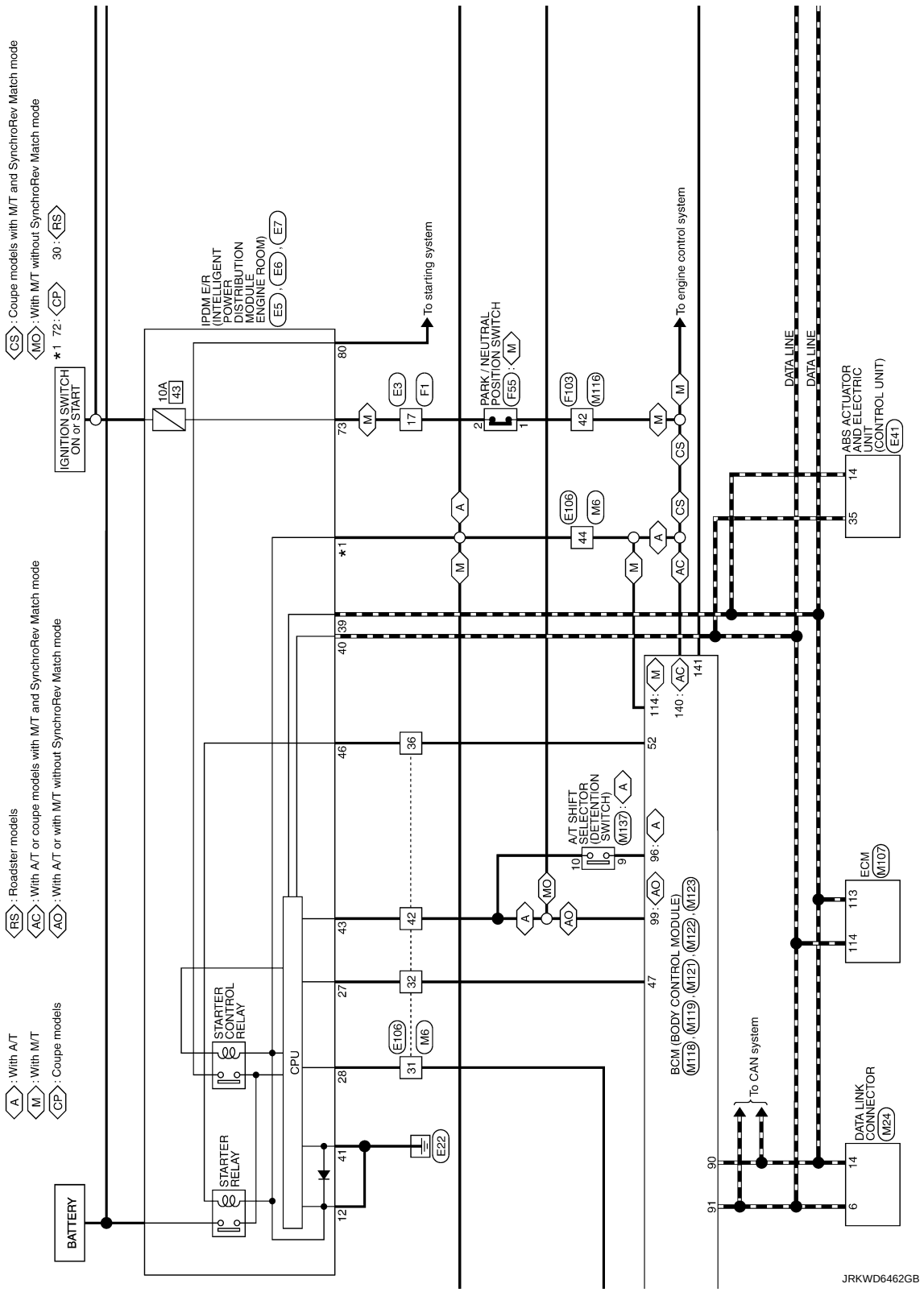
JRKWD6450GB

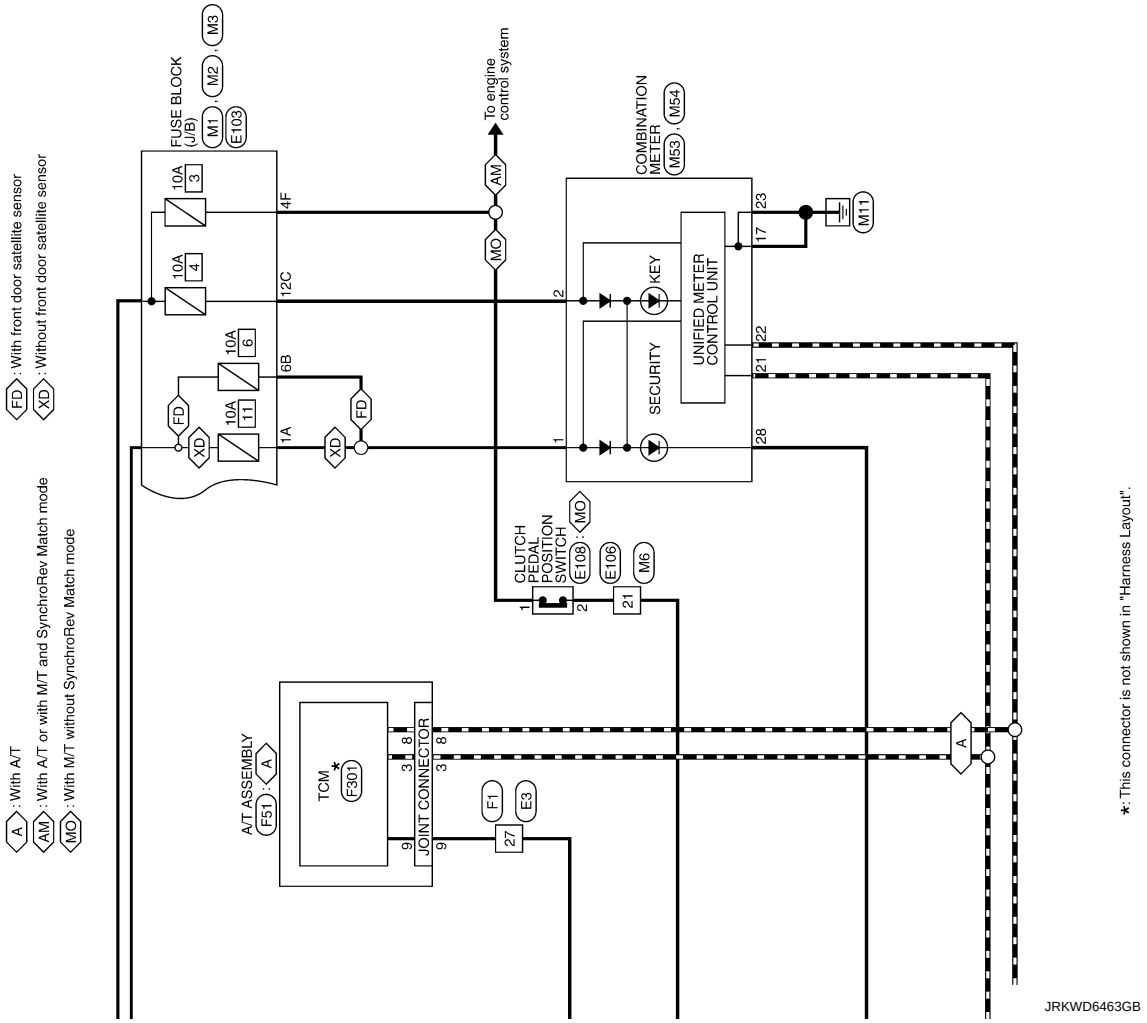
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

Wiring Diagram - NISSAN VEHICLE IMMOBILIZER SYSTEM -

INFOID:0000000010841425




CS : Coupe models with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
*1 72 : CP 30 : RS
IGNITION SWITCH ON or START
10A 43
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5 , E6 , E7
To starting system
PARK / NEUTRAL POSITION SWITCH F55 : M
To engine control system
DATA LINE
DATA LINE
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E41
ECM M107
DATA LINK CONNECTOR M24
To CAN system
BCM (BODY CONTROL MODULE) M118 , M119 , M121 , M122 , M123
A/T SHIFT SELECTOR (DETENTION SWITCH) M137 : A
STARTER CONTROL RELAY
STARTER RELAY
CPU
BATTERY
E22
E106 M6
F1 E3 F103 M116 E106 M6
A : With A/T
M : With M/T
CP : Coupe models
RS : Roadster models
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
JRKWD6462GB


FD : With front door satellite sensor
XD : Without front door satellite sensor
A : With A/T
AM : With A/T or with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
FUSE BLOCK (J/B)
M1, M2, M3
E103
10A 3
10A 4
10A 6
10A 11
4F
12C
6B
1A
To engine control system
AM
MO
COMBINATION METER
M53, M54
KEY
SECURITY
UNIFIED METER CONTROL UNIT
M11
CLUTCH PEDAL POSITION SWITCH
E108
E106
M6
A/T ASSEMBLY
F51
TCM *
F301
JOINT CONNECTOR
F1
E3
27
21
*: This connector is not shown in "Harness Layout".
JRKWD6463GB

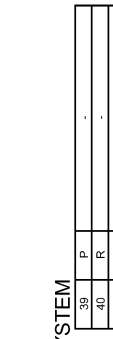
NISSAN VEHICLE IMMOBILIZER SYSTEM

Connector No.	E3
Connector Name	WIRE TO WIRE
Connector Type	SAA36MB-RS8-SHZ8

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L/Y	-
2	SHIELD	-
3	L/B	-
4	SHIELD	-
5	BR	-
7	G	-
8	W	-
9	W	-
10	Y	-
11	V	-
12	SB	-
13	L	-
14	G	-
15	R	-
16	LG	-
17	GR	-
18	Y	-
19	BG	-
20	B	-
21	SB	-
22	G	-
23	SB	-
24	GR	-
25	V	-
27	GR	-
28	V	-
29	L	-
30	R	-
31	BR	-
32	Y	-
33	SB	-
34	BG	-
36	GR	-
37	SHIELD	-
38	L	-

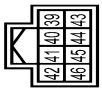
39	P	-
40	R	-
41	W	-
42	LG	-
43	G	-
45	SB	-
46	SHIELD	-
47	W	-
48	BR	-
49	G	-
50	B	-
51	SB	-
52	R	-

Connector No.	E5
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



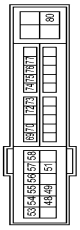
Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
7	R	- [Coupe models]
7	V	- [Roadster models]
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
27	Y	-
28	L	-
30	GR	-
36	G	-

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



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
42	Y	-
43	SB	-
44	W	-
45	G	-
46	V	-

Connector No.	E7
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4



Terminal No.	Color Of Wire	Signal Name [Specification]
48	L	-
49	BG	-
51	Y	-
53	W	-
54	V	-
55	SB	-
56	LG	-
57	G	-
58	P	-
69	BR	-
70	BG	-

72	GR	-
73	GR	-
74	G	-
75	SB	-
76	Y	-
77	R	-
80	W	-

Connector No.	E41
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	BAA42FB-AHZ4-LH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	G	UBMR
3	R	UBVR
4	B	GROUND
5	Y	DS FL
6	BG	DP RL
7	BR	DP RR
9	B	DP FR
10	W	DS FR
14	P	CAN-L
25	Y	BUS-L
26	LG	DP FL
27	GR	DS RL
28	G	UZ
29	P	DS RR
30	SB	BLS
31	R	VDC OFF SW
35	L	CAN-H
45	B	BUS-H

JRKWD6464GB

NISSAN VEHICLE IMMOBILIZER SYSTEM

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1F	SB	-
2F	W	-
4F	G	-
6F	BG	-
8F	L	-
9F	R	- [Coupe models]
9F	V	- [Roadster models]

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
3	L	-
4	L	-
7	B	-
8	P	-
9	B	-
11	V	-
12	R	-
13	L	-
14	GR	-
15	P	-
16	W	-
17	SB	-

20	LG	-
21	BR	- [Coupe models]
21	G	- [Roadster models]
31	L	-
32	Y	-
36	V	-
37	Y	-
38	R	-
39	B	-
40	W	-
41	LG	-
42	SB	-
43	G	-
44	GR	- [Except for roadster models with M/T]
44	R	- [Roadster models with M/T]
45	BG	-
46	W	-
47	P	-
58	SHIELD	-
59	L	-
70	P	-
80	W	-
81	P	-
82	G	-
83	V	-
84	L	-
85	BG	-
86	LG	-
87	R	-
89	P	-
91	W	-
92	L	-
93	G	-
94	Y	-
96	Y	-
97	BR	-
98	GR	-
99	LG	-
100	BG	-

Connector No.	E108
Connector Name	CLUTCH PEDAL POSITION SWITCH
Connector Type	S02FL

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	- [Without SynchroRev Match mode]
1	SB	- [With SynchroRev Match mode]
2	B	- [With SynchroRev Match mode]
2	BR	- [Without SynchroRev Match mode]

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	MD04FW-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	G	-
4	P	-

Connector No.	E111
Connector Name	CLUTCH INTERLOCK SWITCH
Connector Type	S02FL

H.S.

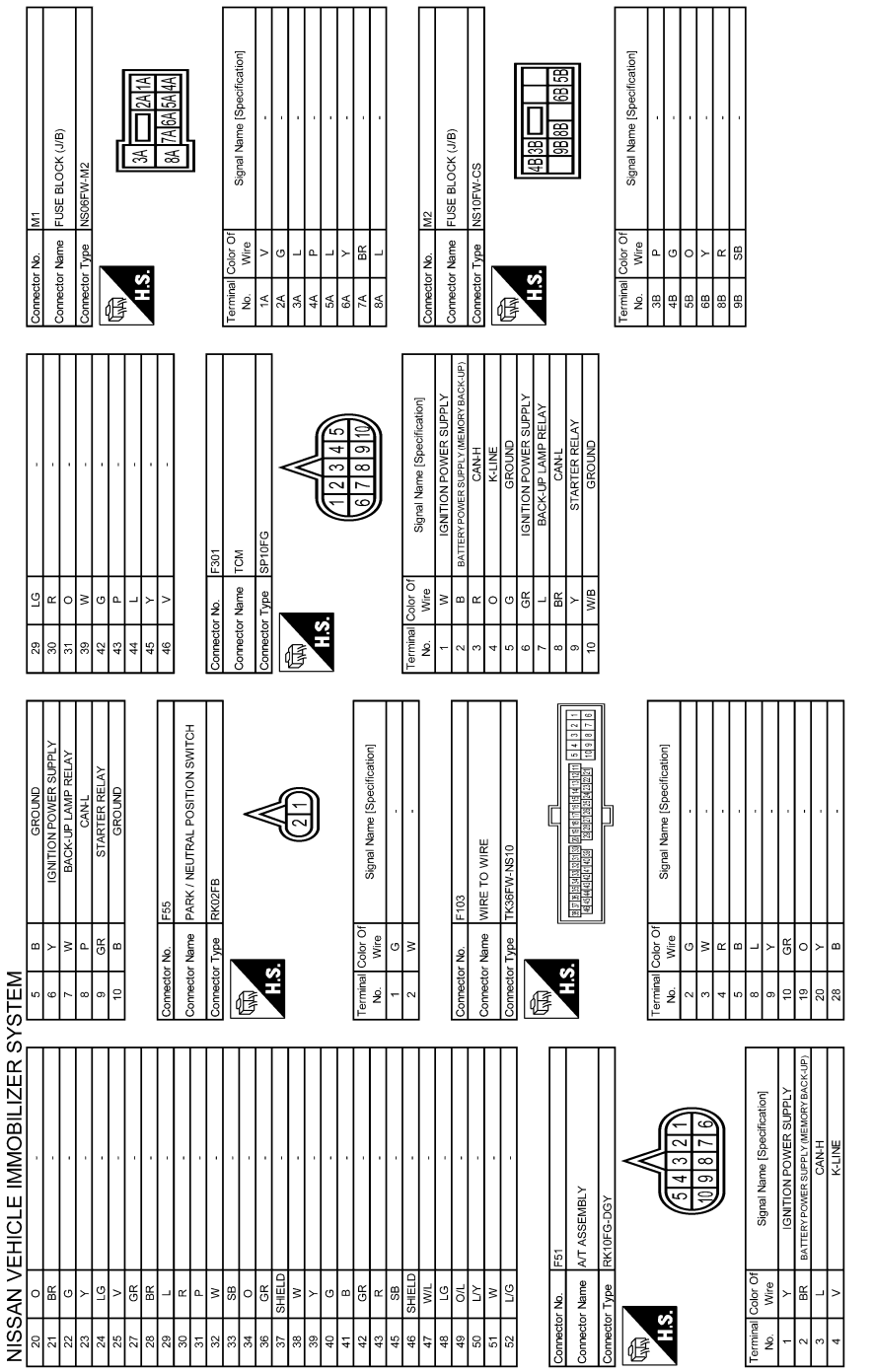
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	GR	-

Connector No.	F1
Connector Name	WIRE TO WIRE
Connector Type	SAA36FB-RS8-SHZ8

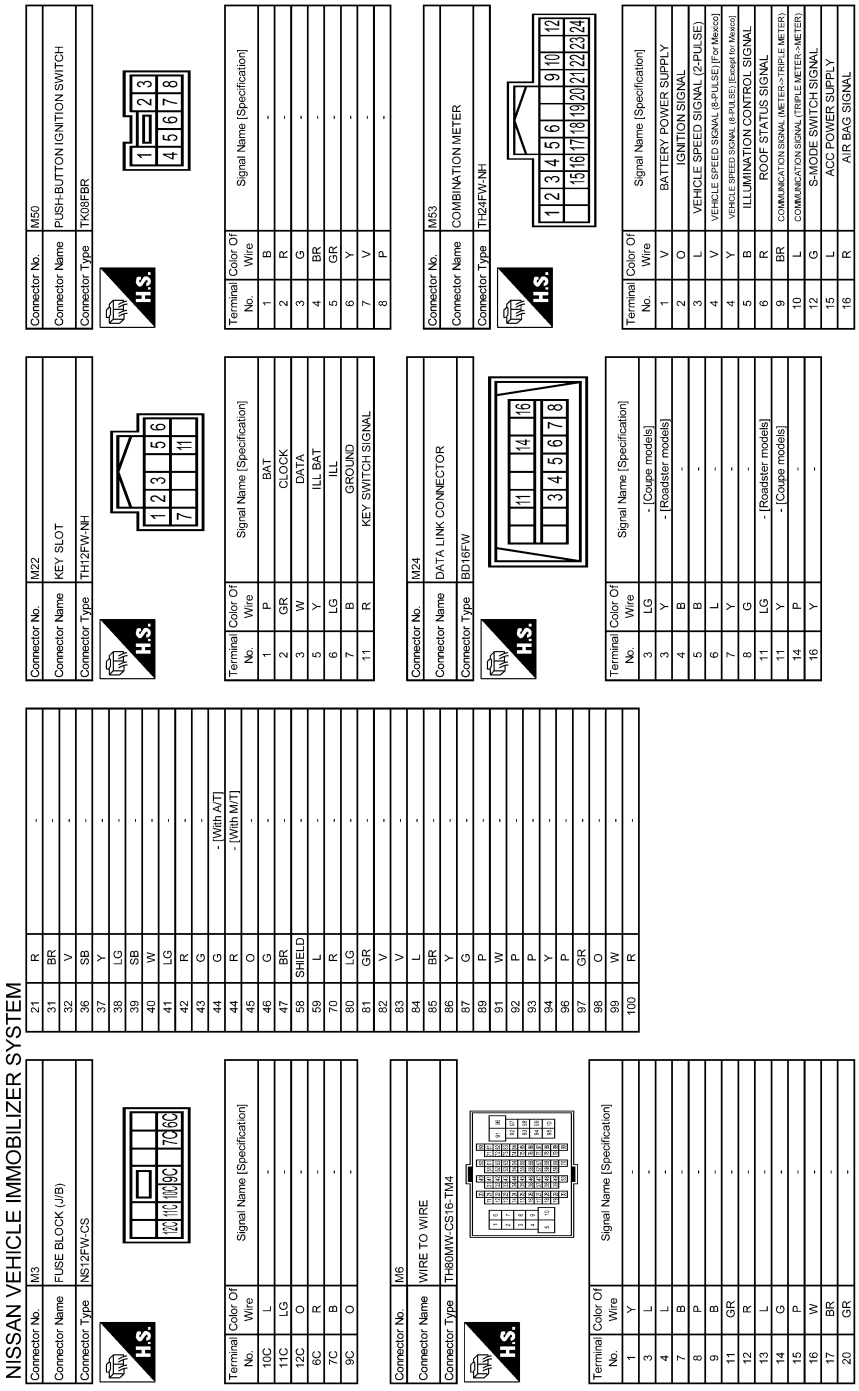
H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L/Y	-
2	SHIELD	-
3	L/B	-
4	SHIELD	-
5	BR	-
7	G	-
8	W	-
9	W	-
10	G	-
11	R	-
12	P	-
13	O	-
14	LG	-
15	BR	-
16	Y	-
17	W	-
18	LG	-
19	P	-

JRKWD6465GB



JRKWD6466GB



JRKWD6467GB

NISSAN VEHICLE IMMOBILIZER SYSTEM

17	B	GROUND
18	V	AMBIENT SENSOR SIGNAL
19	G	AIC AUTO AMP. CONNECTION RECOGNITION SIGNAL
20	GR	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	Y	FUEL LEVEL SENSOR GROUND

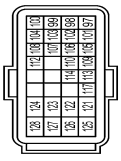
Connector No.	M54
Connector Name	COMBINATION METER
Connector Type	TH16FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
25	W	ALTERNATOR SIGNAL
26	O	PARKING BRAKE SWITCH SIGNAL
27	LG	BRAKE FLUID LEVEL SWITCH SIGNAL
28	Y	SECURITY SIGNAL
29	GR	WASHER LEVEL SWITCH SIGNAL
32	G	PADDLE SHIFTER DOWN SIGNAL
33	O	PADDLE SHIFTER UP SIGNAL
34	BR	FUEL LEVEL SENSOR SIGNAL
35	L	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
36	L	PASSENGER SEAT BELT WARNING SIGNAL [For Mexico]
36	P	PASSENGER SEAT BELT WARNING SIGNAL [Except for Mexico]
37	G	NON-MANUAL MODE SIGNAL
38	V	MANUAL MODE SHIFT DOWN SIGNAL
39	L	MANUAL MODE SHIFT UP SIGNAL
40	W	MANUAL MODE SIGNAL

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R28-R-LH-Z

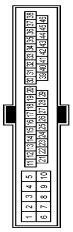
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	ACCELERATOR PEDAL POSITION SENSOR 1
98	P	ACCELERATOR PEDAL POSITION SENSOR 2
99	L	SENSOR POWER SUPPLY
100	W	SENSOR GROUND
101	SB	ASCD STEERING SWITCH
102	GR	EVAP CONTROL SYSTEM PRESSURE SENSOR
103	G	SENSOR POWER SUPPLY
104	GR	SENSOR GROUND
105	L	REFRIGERANT PRESSURE SENSOR
106	W	FUEL TANK TEMPERATURE SENSOR
107	BR	SENSOR POWER SUPPLY
108	Y	SENSOR GROUND
109	G	PNP SIGNAL
110	R	ENGINE SPEED OUTPUT SIGNAL
112	SB	SENSOR GROUND
113	P	CAN COMMUNICATION LINE
114	L	CAN COMMUNICATION LINE
117	Y	DATA LINK CONNECTOR
121	LG	EVAP CANISTER VENT CONTROL VALVE
122	P	STOP LAMP SWITCH
123	B	ECM GROUND
124	B	ECM GROUND
125	R	POWER SUPPLY FOR ECM
126	BR	ASCD BRAKE SWITCH
127	B	ECM GROUND
128	B	ECM GROUND

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK36MW-NS10

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	W	-
3	BG	- [Coupe models]
3	O	- [Roadster models]
4	W	-
5	B	-
8	L	-
9	Y	-
10	R	-
19	O	-
20	G	-
28	B	-
29	LG	-
30	LG	-
31	O	-
39	G	-
42	G	-
43	P	-
44	L	-
45	BR	-
46	V	-

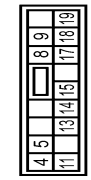
Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (IGN)

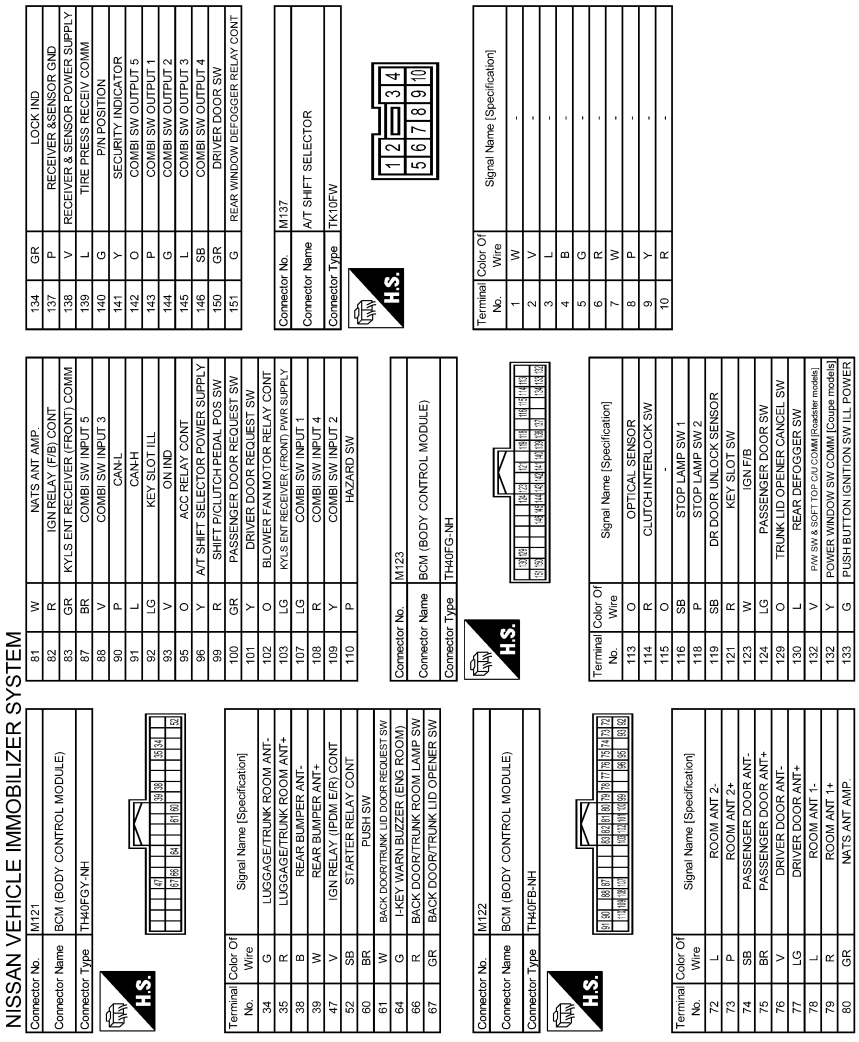
Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	BR	BAT (FUSE)
13	B	GROUND
14	R	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT, SIDE)
18	O	TURN SIGNAL LH (FRONT, SIDE)
19	P	ROOM LAMP TIMER CONTROL

JRKWD6468GB

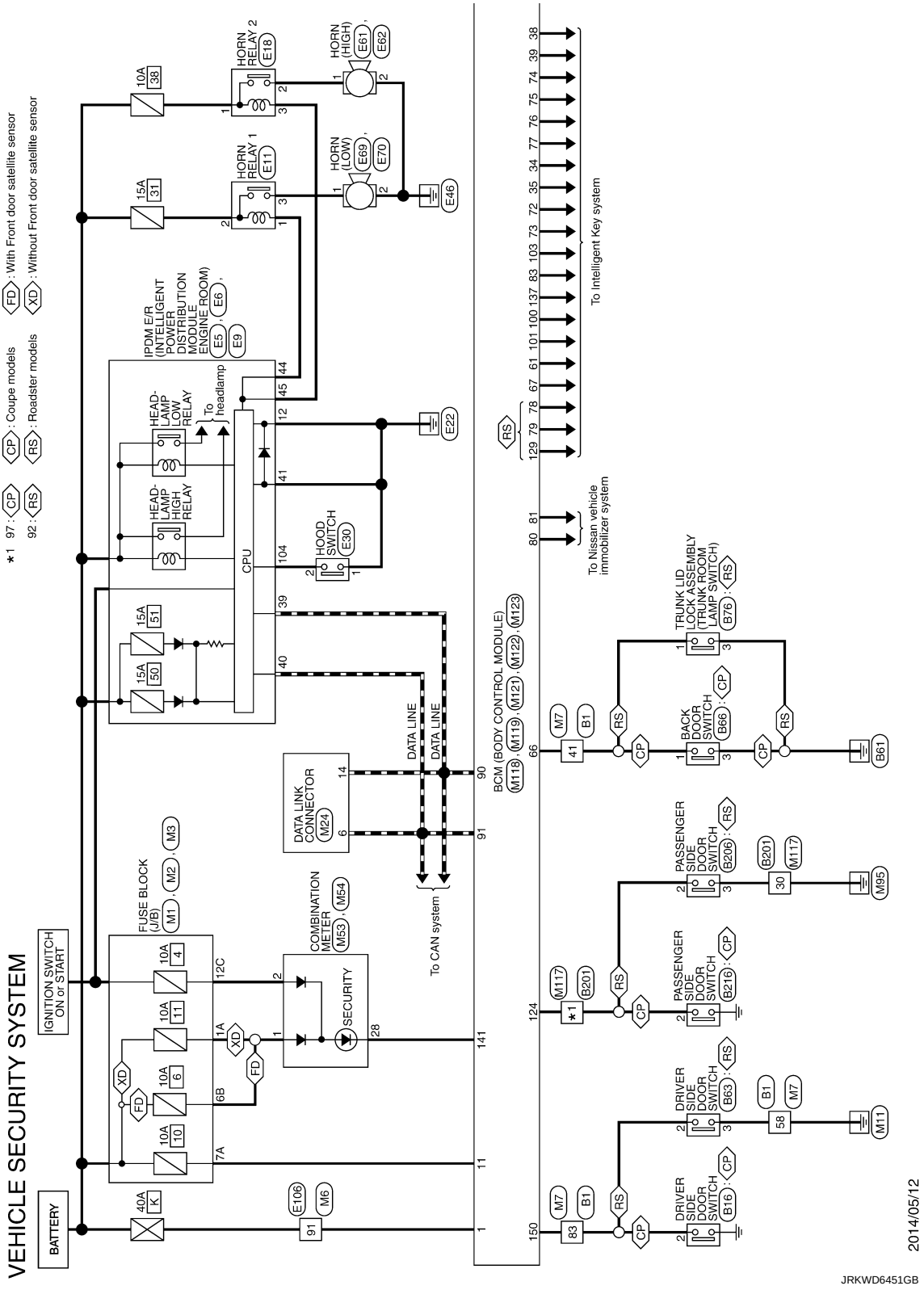


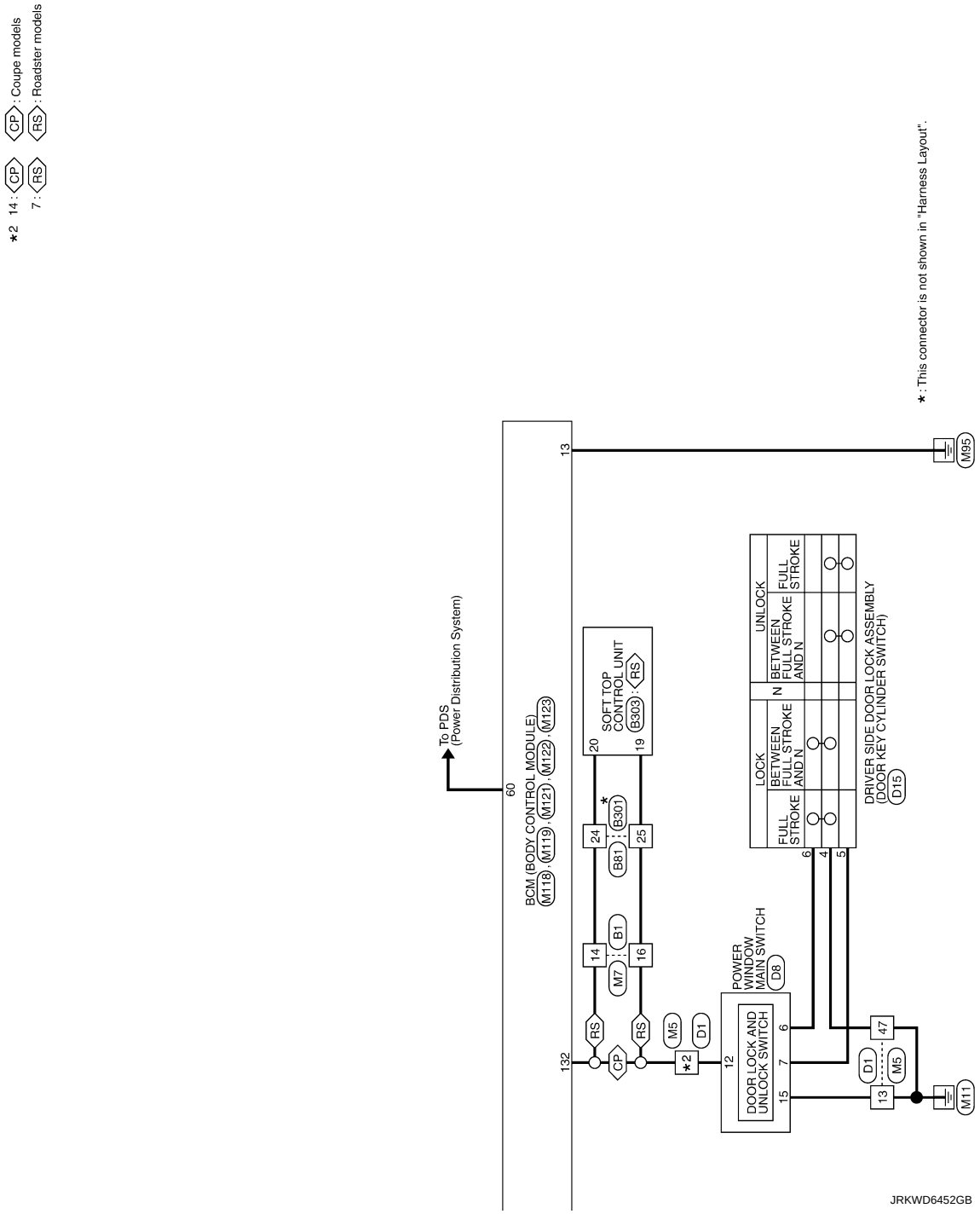
JRKWD6469GB

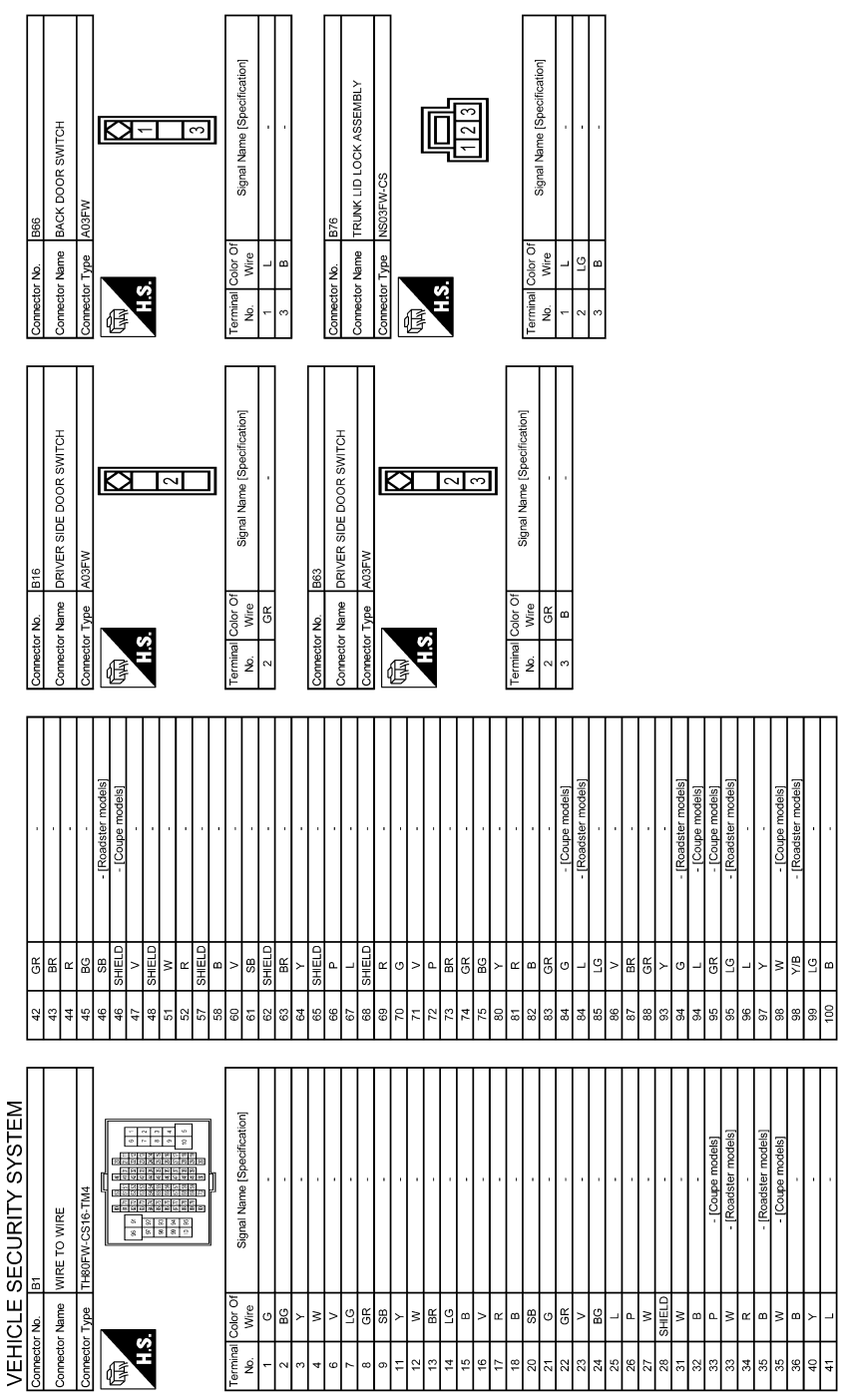
VEHICLE SECURITY SYSTEM

Wiring Diagram - VEHICLE SECURITY SYSTEM -

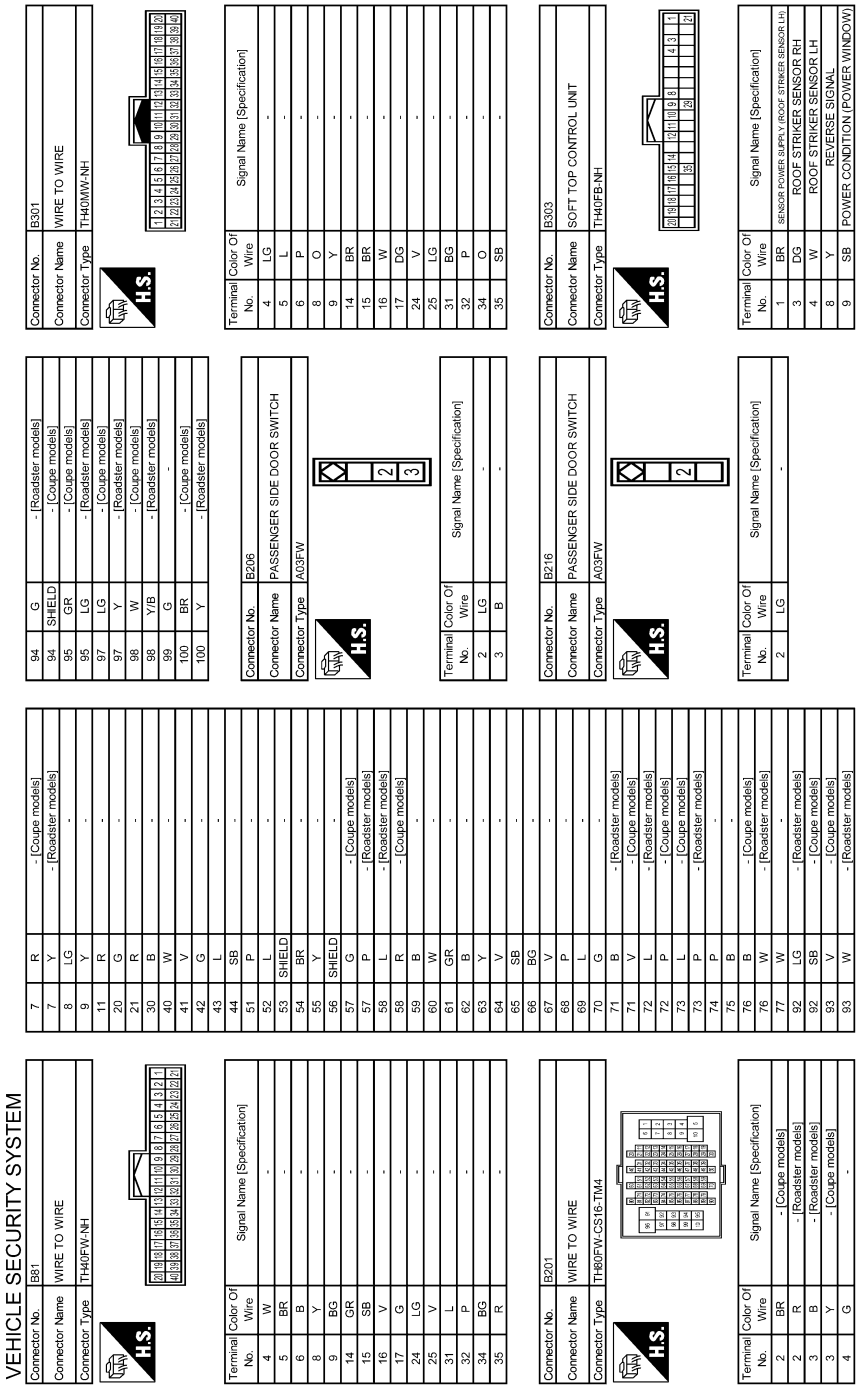
INFOID:0000000010841426



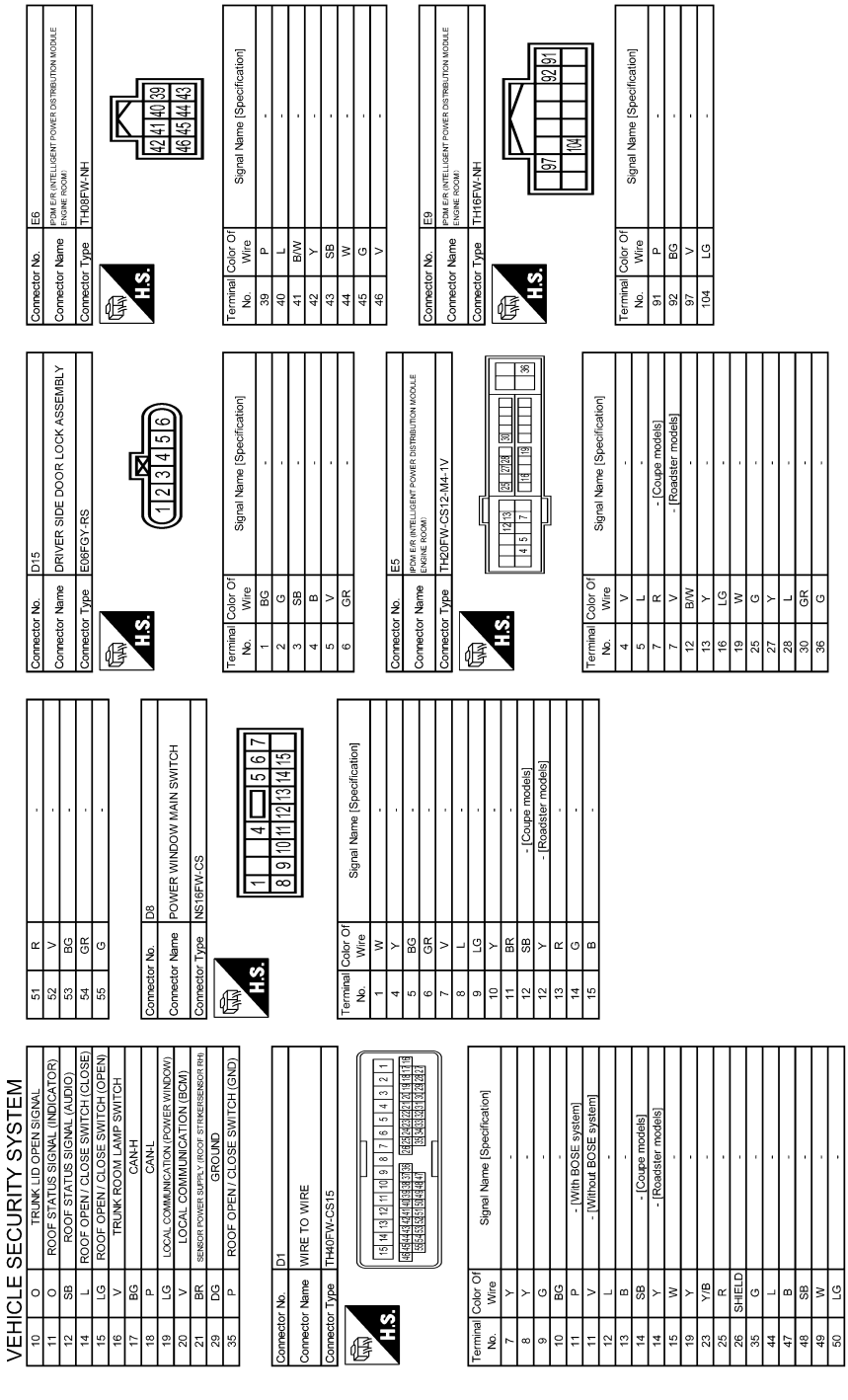

*2 14 : CP : Coupe models
7 : RS : Roadster models
* : This connector is not shown in "Harness Layout".
To PDS
(Power Distribution System)
BCM (BODY CONTROL MODULE)
M118, M119, M121, M122, M123
60
13
M95
132
RS
CP
RS
M5
D1
*2
12
DOOR LOCK AND UNLOCK SWITCH
6
7
15
POWER WINDOW MAIN SWITCH
D8
14
M7
B1
16
24
B81
B301
*
25
20
SOFT TOP CONTROL UNIT
19
B303
RS
LOCK
UNLOCK
N
FULL STROKE
BETWEEN FULL STROKE AND N
BETWEEN FULL STROKE AND N
FULL STROKE
6
4
5
DRIVER SIDE DOOR LOCK ASSEMBLY
(DOOR KEY CYLINDER SWITCH)
D15
D1
13
M5
47
M11
JRKWD6452GB



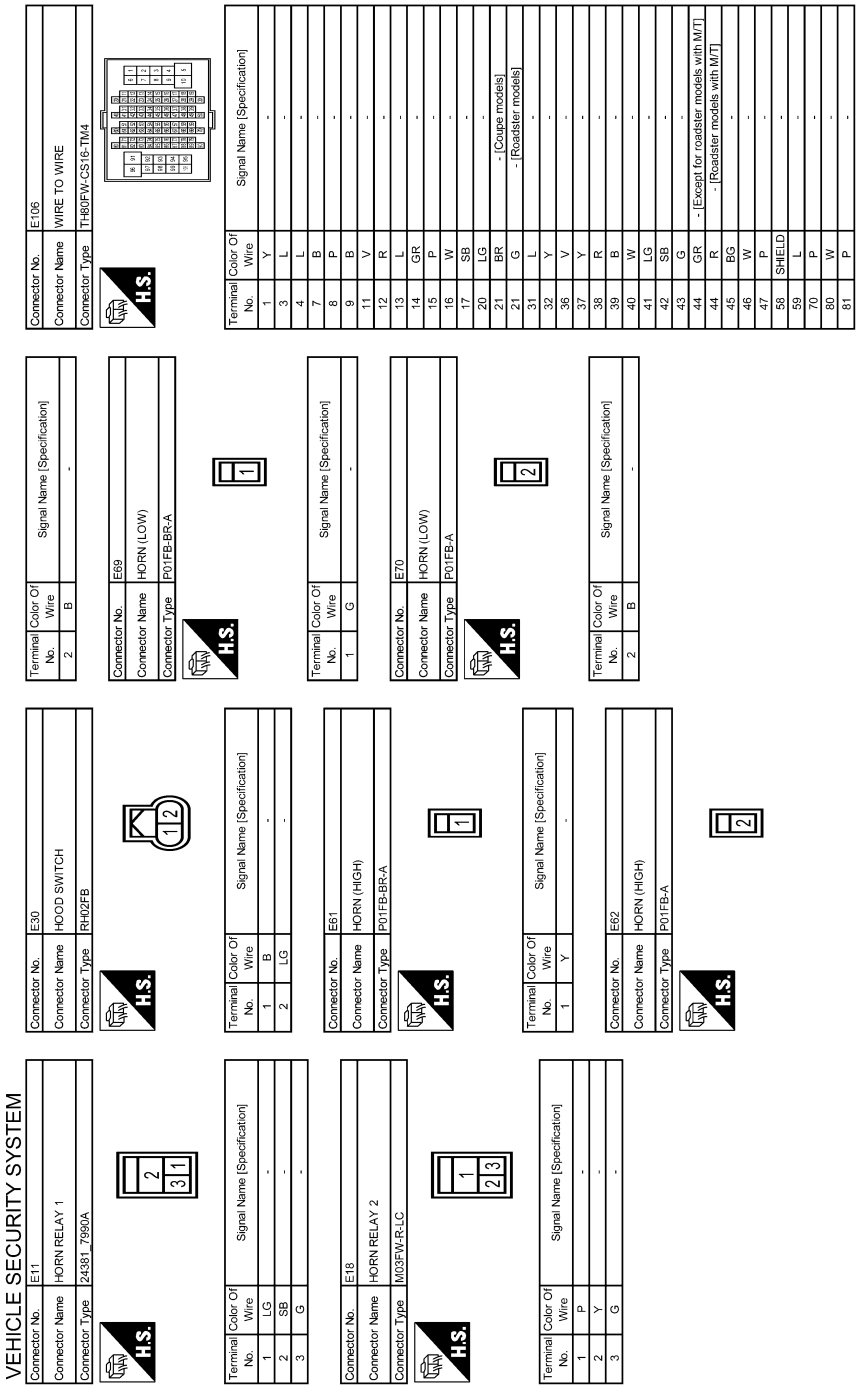
JRKWD6453GB



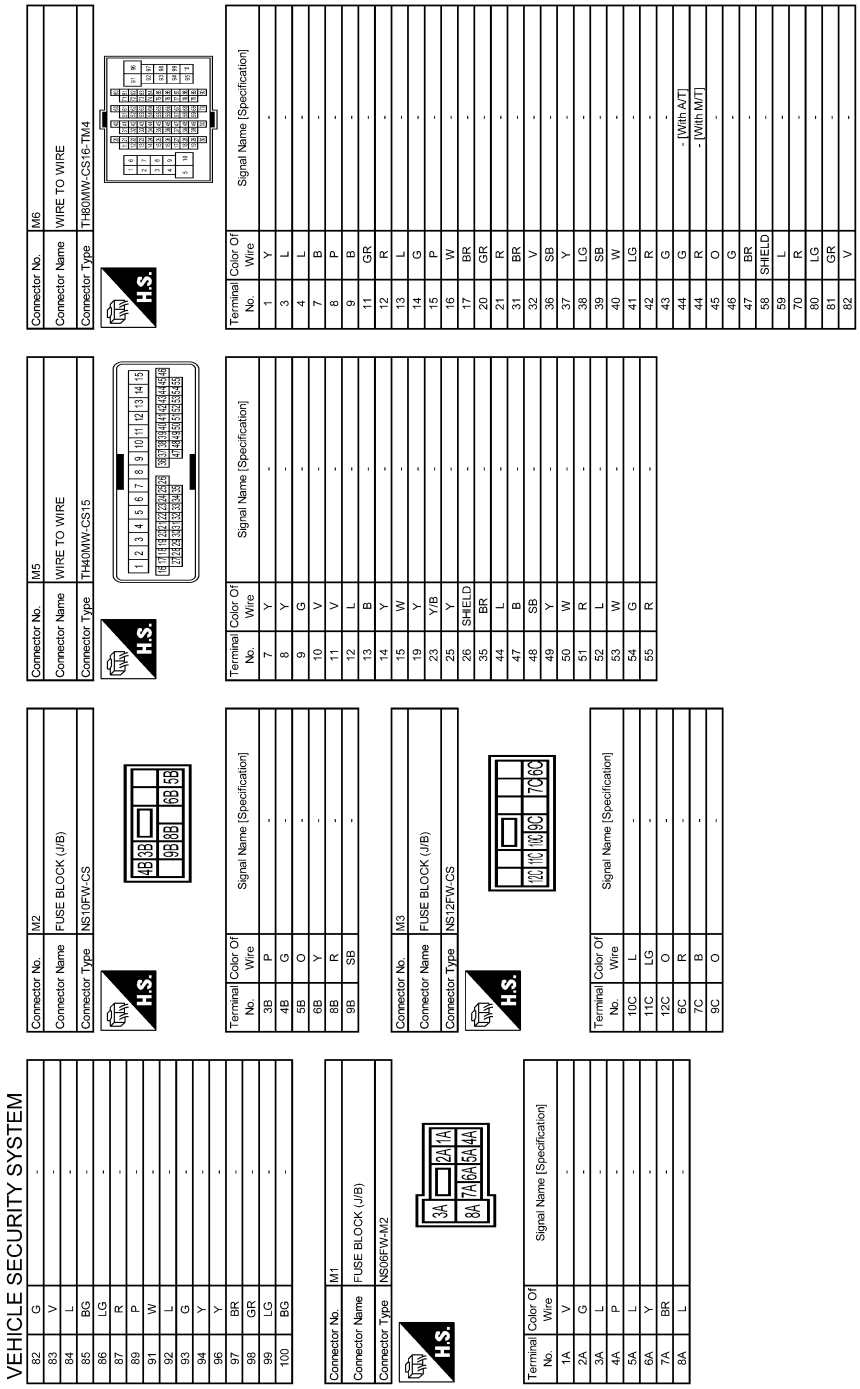
JRKWD6454GB



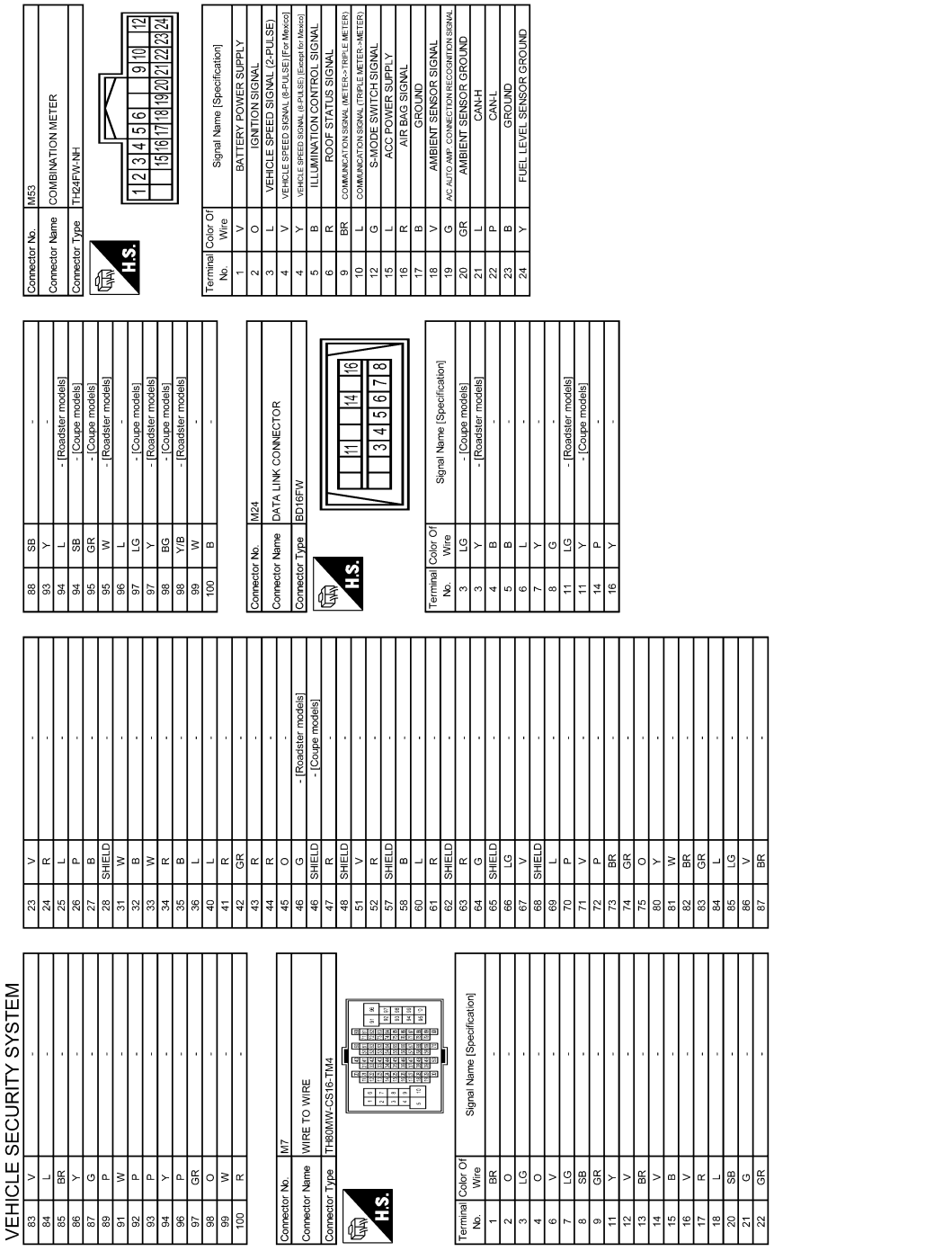
JRKWD6455GB



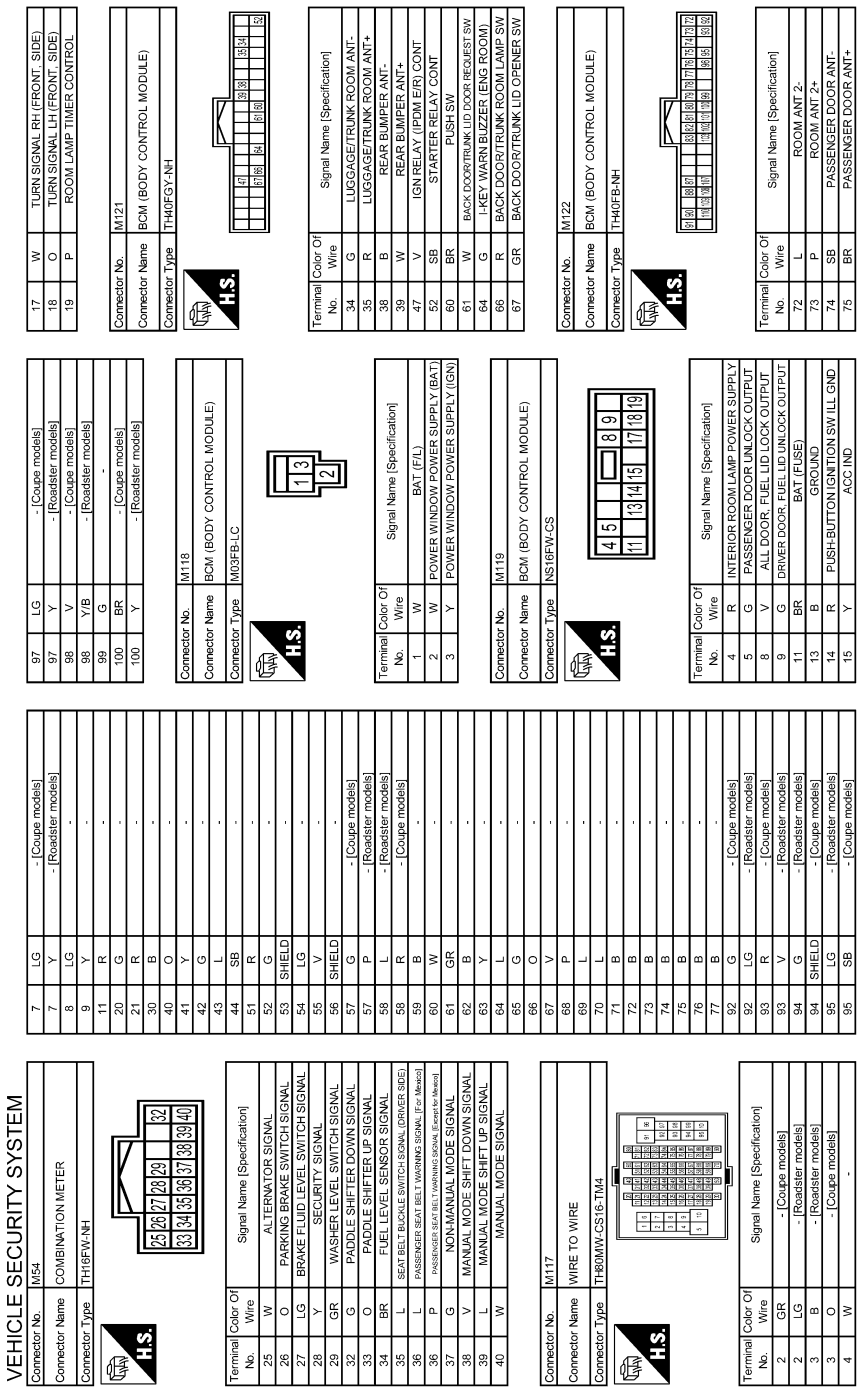
JRKWD6456GB



JRKWD6457GB



JRKWD6458GB



JRKWD6459GB

VEHICLE SECURITY SYSTEM

76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	L	ROOM ANT 1-
79	R	ROOM ANT 1+
80	GR	NATS ANT AMP
81	W	NATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	GR	KYLS ENT RECEIVER (FRONT) COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL
93	V	ON IND
95	O	ACC RELAY CONT
96	Y	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P/CLUTCH PEDAL POS SW
100	GR	PASSENGER DOOR REQUEST SW
101	Y	DRIVER DOOR REQUEST SW
102	O	BLOWER FAN MOTOR RELAY CONT
103	LG	KYLS ENT RECEIVER (FRONT) PWR SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	P	HAZARD SW
129	O	TRUNK LID OPENER CANCEL SW
130	L	REAR DEFOGGER SW
132	V	PW SW & SOFT TOP CLU COMM [Roadster models]
132	Y	POWER WINDOW SW COMM [Coupe models]
133	G	PUSH BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	P	RECEIVER &SENSOR GND
138	V	RECEIVER & SENSOR POWER SUPPLY
139	L	TIRE PRESS RECEIV COMM
140	G	P/N POSITION
141	Y	SECURITY INDICATOR
142	O	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
113	O	OPTICAL SENSOR
114	R	CLUTCH INTERLOCK SW
115	O	-
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW

JRKWD6460GB

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000011320852

VALUES ON THE DIAGNOSIS TOOL

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

CONSULT MONITOR ITEM

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

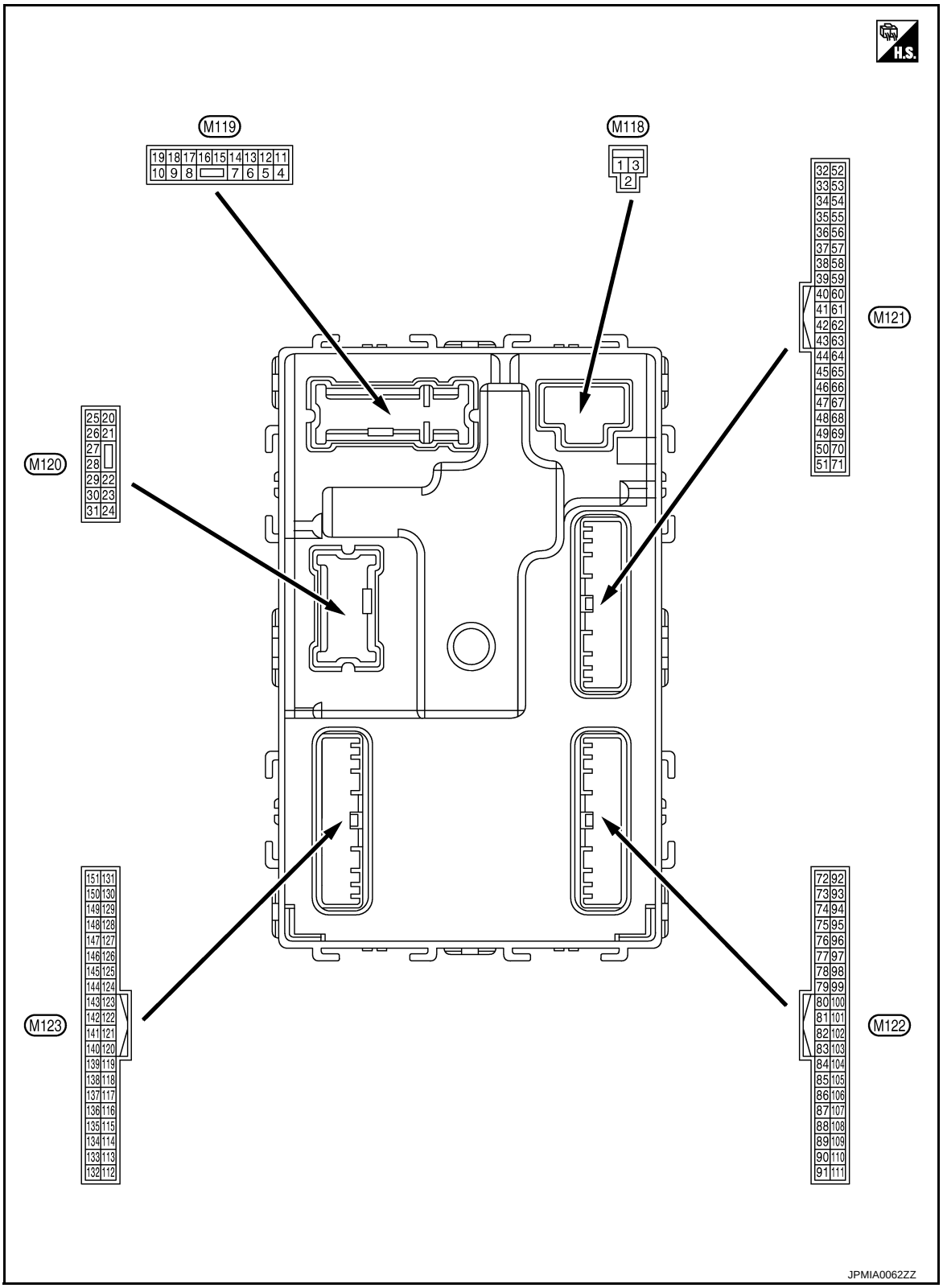
Monitor Item	Condition	Value/Status
DOOR SW-RR	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-RL	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-BK	• Back door closed (Coupe models) • Trunk lid closed (Roadster models)	Off
	• Back door opened (Coupe models) • Trunk lid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

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

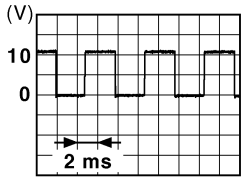
Monitor Item	Condition	Value/Status
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT PN -IPDM	• Selector lever in any position other than P and N (A/T models) • The clutch pedal is not depressed (M/T models)	Off
	• Selector lever in P or N position (A/T models) • The clutch pedal is depressed (M/T models)	On
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	**NOTE:** The item is indicated but not monitored.	Off
S/L UNLK-IPDM	**NOTE:** The item is indicated but not monitored.	Off
S/L RELAY-REQ	**NOTE:** The item is indicated but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	**NOTE:** The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The Intelligent Key is not inserted into key slot	Off
	The Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key
RKE OPE COUN2	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key

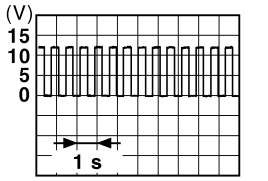
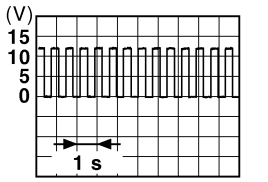
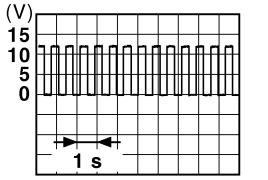
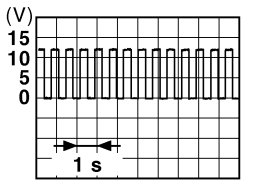
Monitor Item	Condition	Value/Status
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent Key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

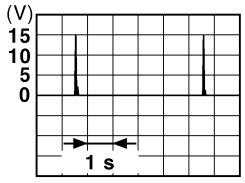
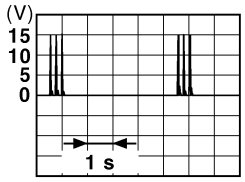
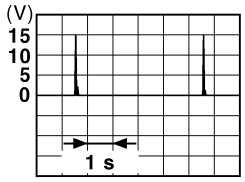
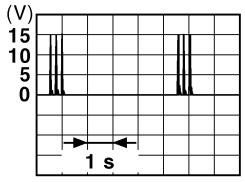
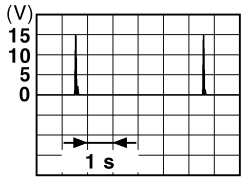
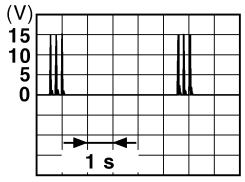
TERMINAL LAYOUT

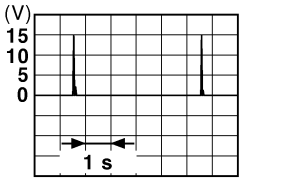
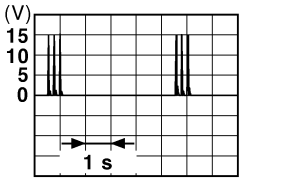
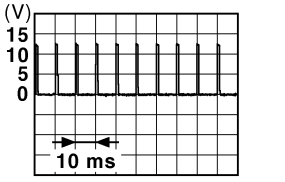
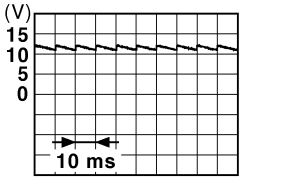


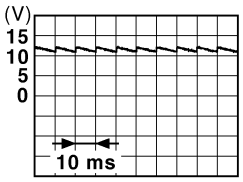
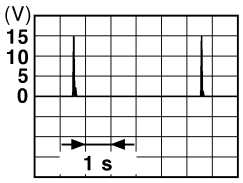
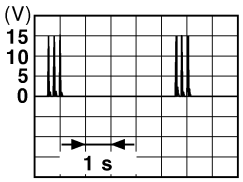
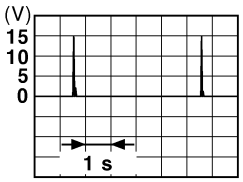
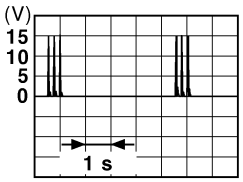
PHYSICAL VALUES

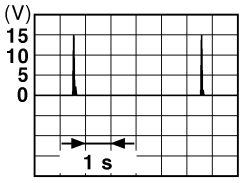
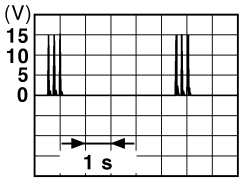
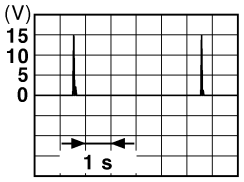
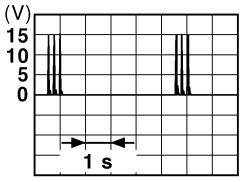
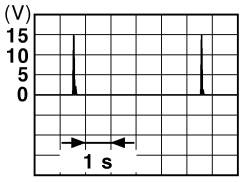
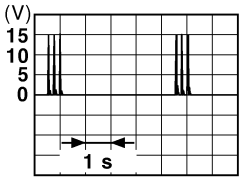
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
3 (Y)	Ground	P/W power supply (IGN)	Output	Ignition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

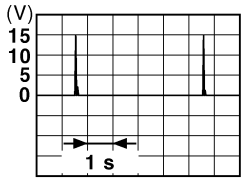
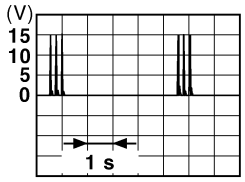
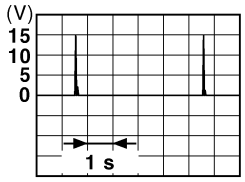
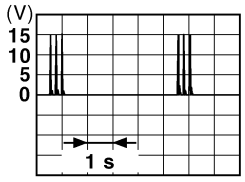
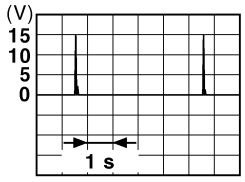
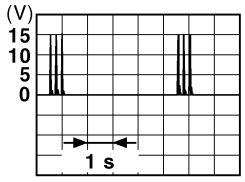
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front and side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (O)	Ground	Turn signal LH (Front and side)	Output	Ignition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

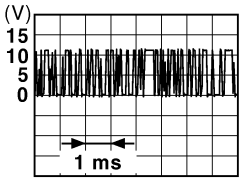
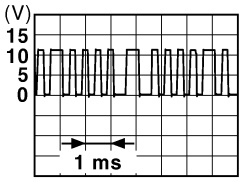
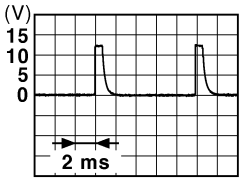
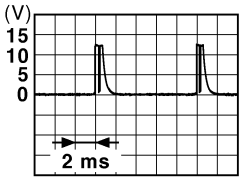
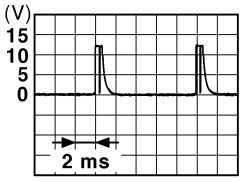
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (G)	Ground	Luggage room/Trunk room antenna (–)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment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

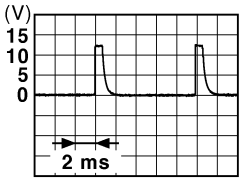
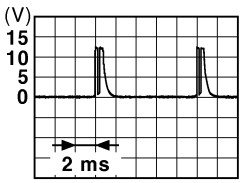
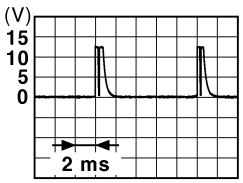
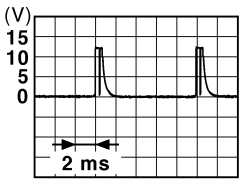
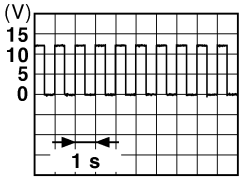
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (W)	Ground	Rear bumper antenna (+)	Output	When the back door/trunk lid door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
		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

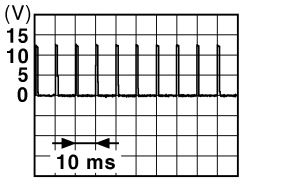
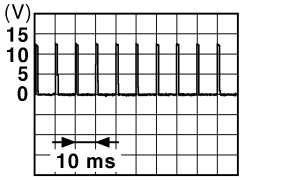
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
67 (GR)	Ground	Back door/Trunk lid opener switch	Input	Back door/ Trunk lid opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
72 (L)	Ground	Room antenna 2 (–) (Center console)	Output	Ignition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

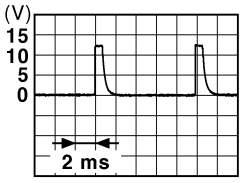
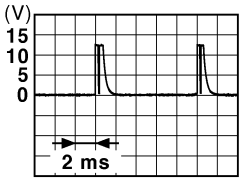
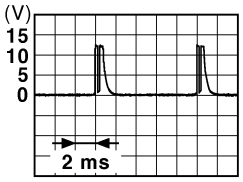
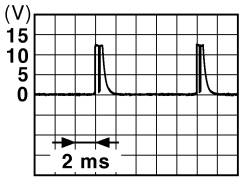
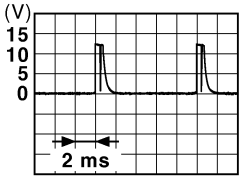
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (SB)	Ground	Passenger door antenna (–)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When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

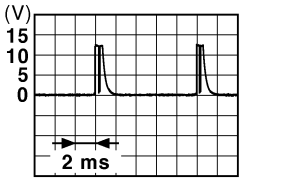
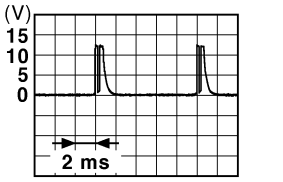
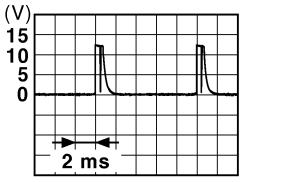
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent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

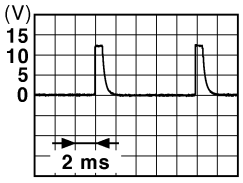
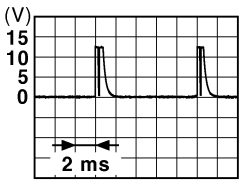
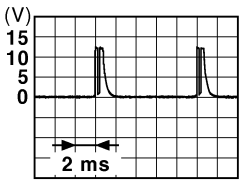
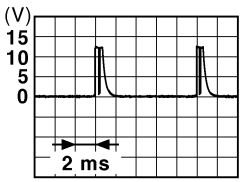
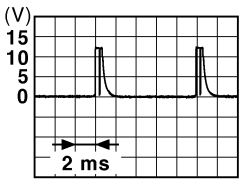
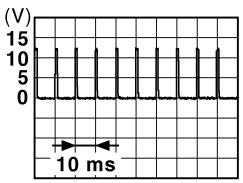
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should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

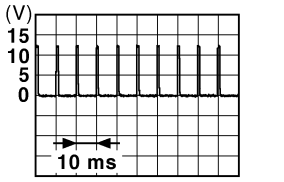
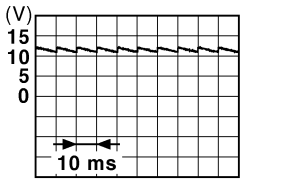
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V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

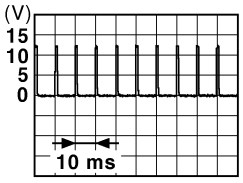
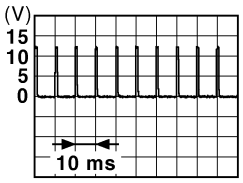
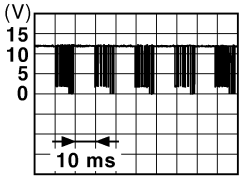
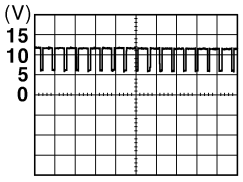
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
95 (O)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
96*3 (Y)	Ground	A/T shift selector (Detention switch) power supply	Output	—		12 V
99*6 (R)	Ground	Selector lever P position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

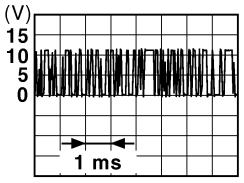
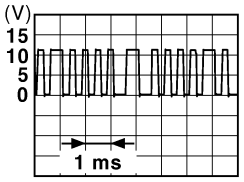
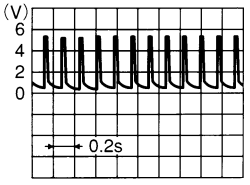
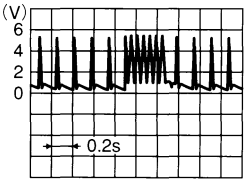
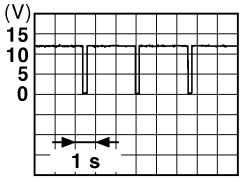
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch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

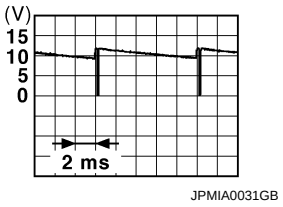
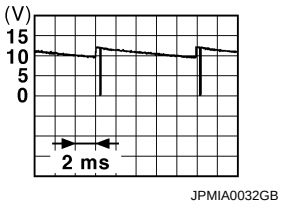
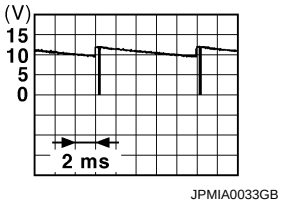
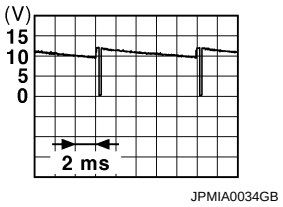
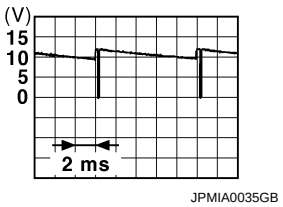
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3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

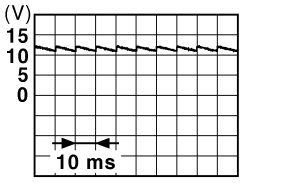
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND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

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
113 (O)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
114*4 (R)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
					ON (Clutch pedal is depressed)	Battery voltage
115*9 (O)	—	—	—	—		—
116 (SB)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (P)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
119 (SB)	Ground	Driver side door lock assembly (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (R)	Ground	Key slot switch	Input	When the Intelligent Key is inserted into key slot		12 V
				When the Intelligent Key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V

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

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

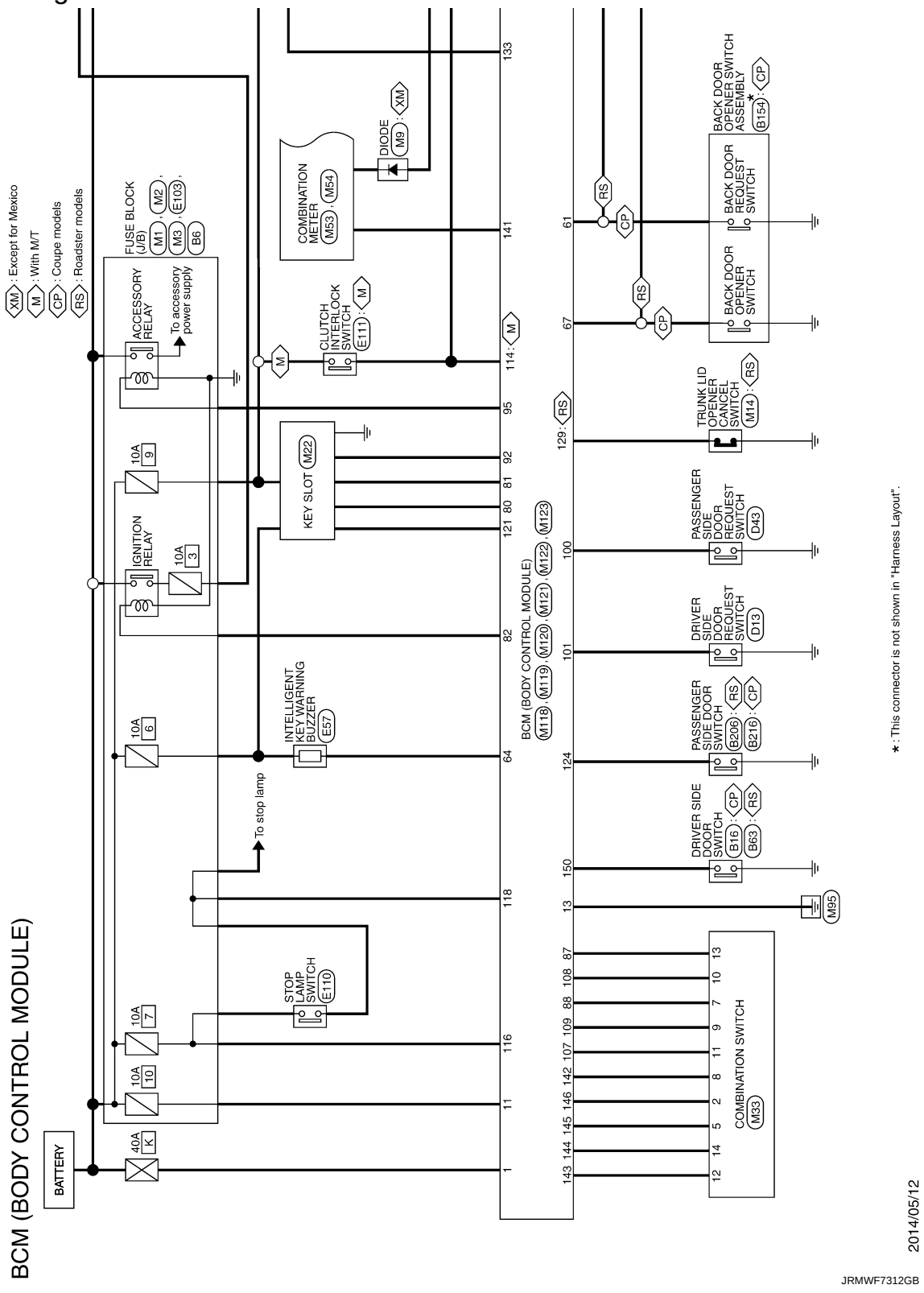
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
142 (O)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	
					Rear fog lamp switch ON	
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	 JPMIA0035GB 10.7 V
					Lighting switch PASS	
					Turn signal switch LH	

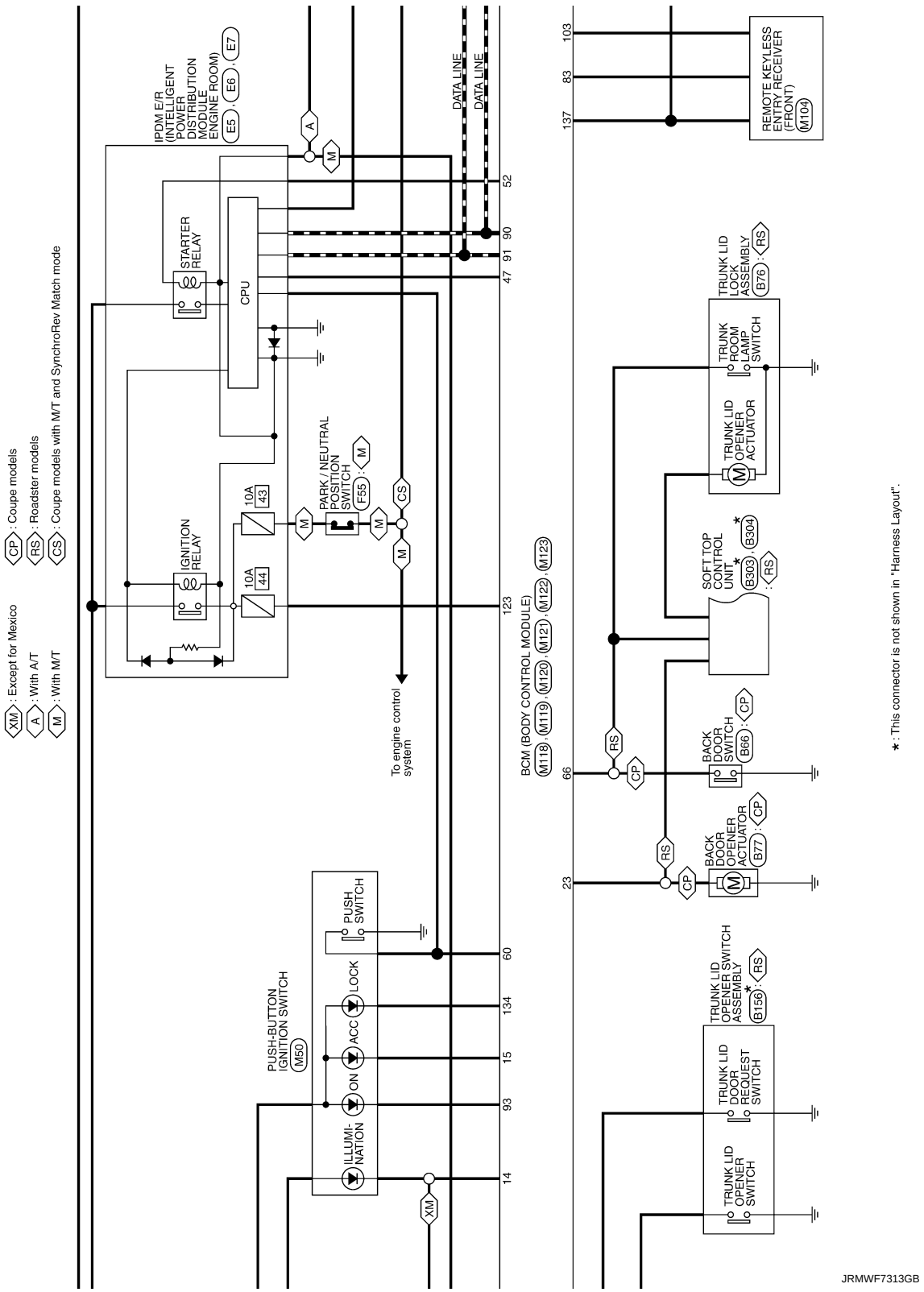
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 JPMIA0011GB 11.8 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active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

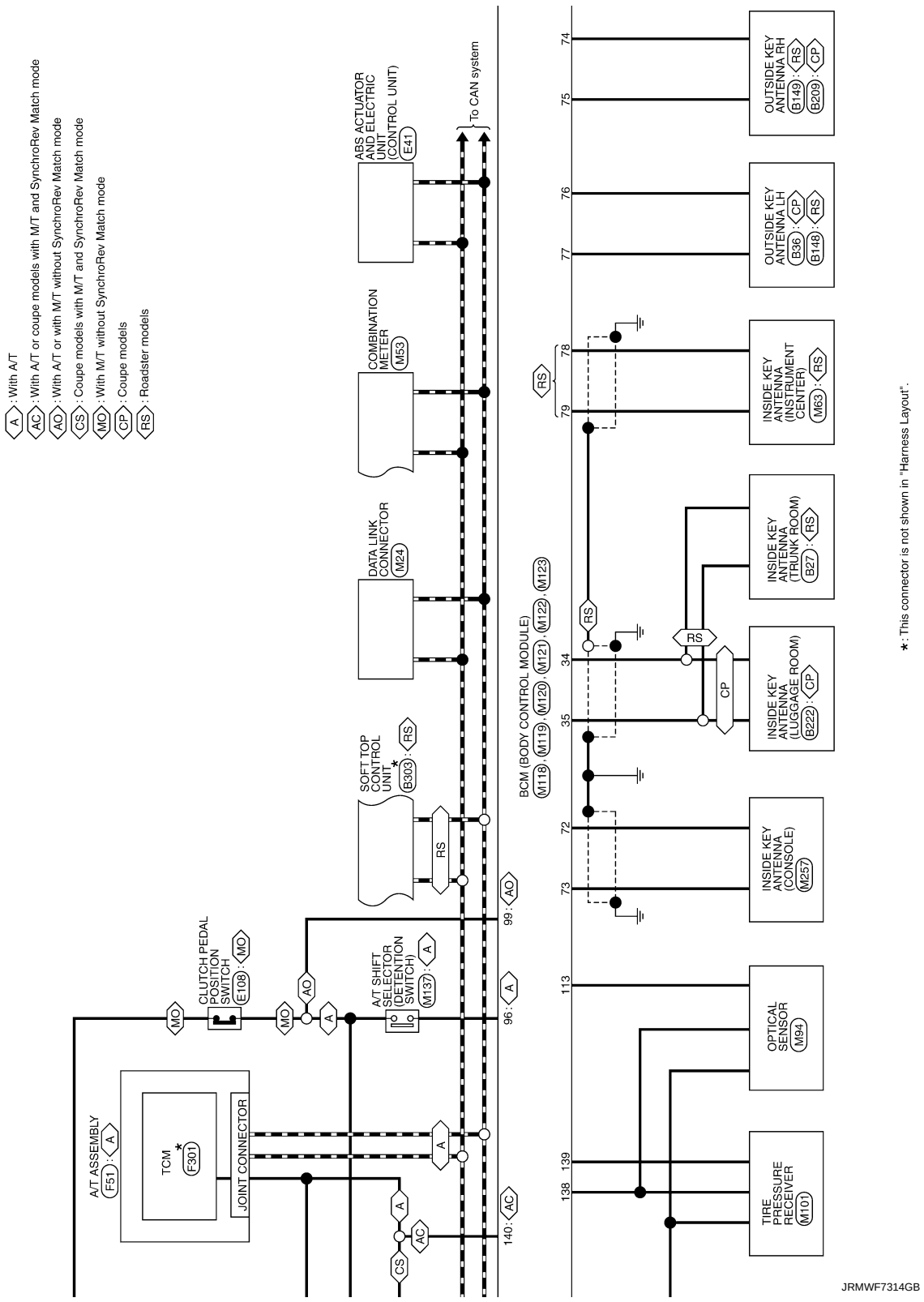
*1: Coupe models
*2: Roadster models
*3: A/T models
*4: M/T models
*5: With A/T or coupe models with M/T and SynchroRev Match mode
*6: With A/T or with M/T without SynchroRev Match mode
*7: Without NAVI
*8: With rear fog lamp
*9: BCM does not use this terminal for control.

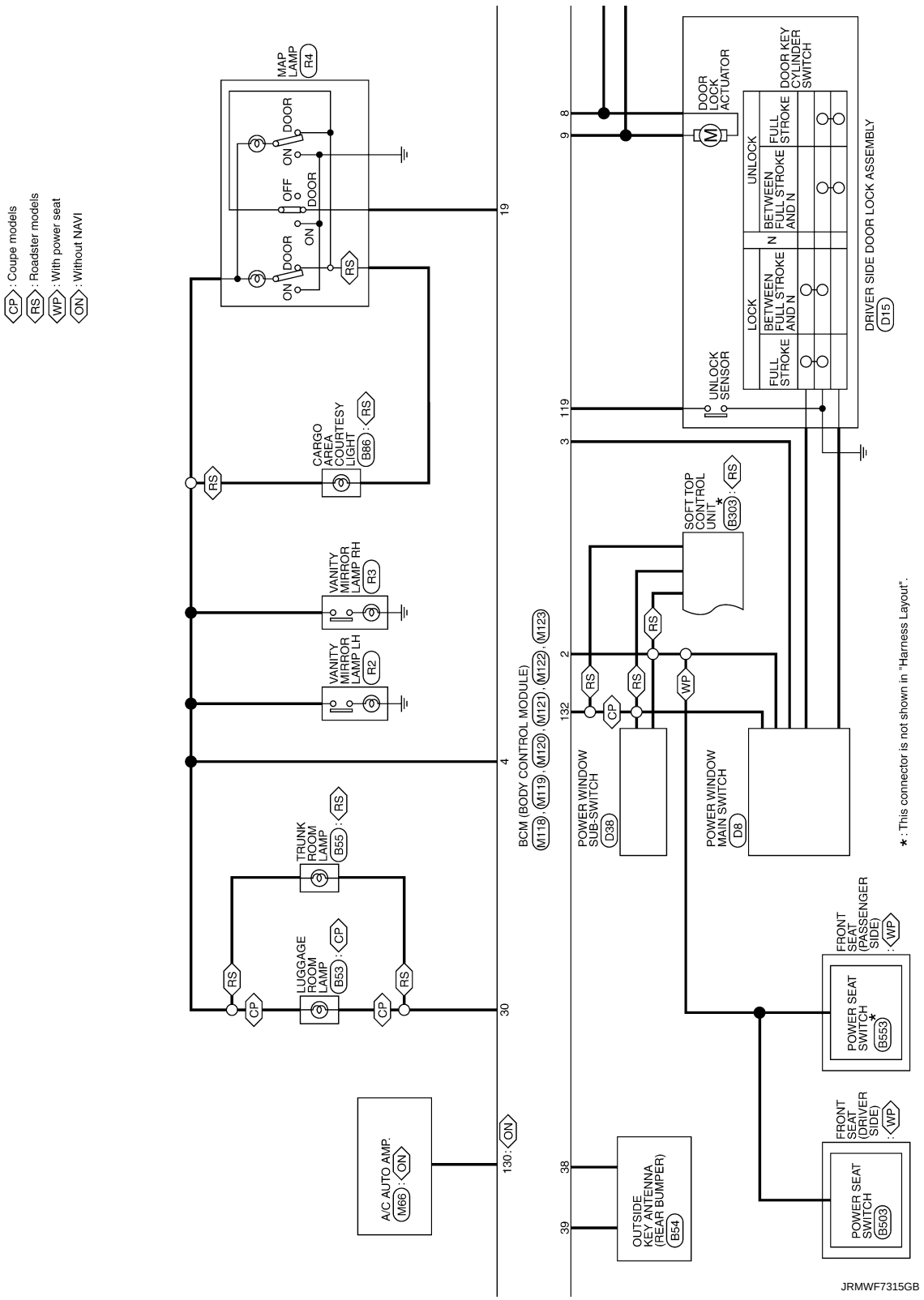
Wiring Diagram - BCM -

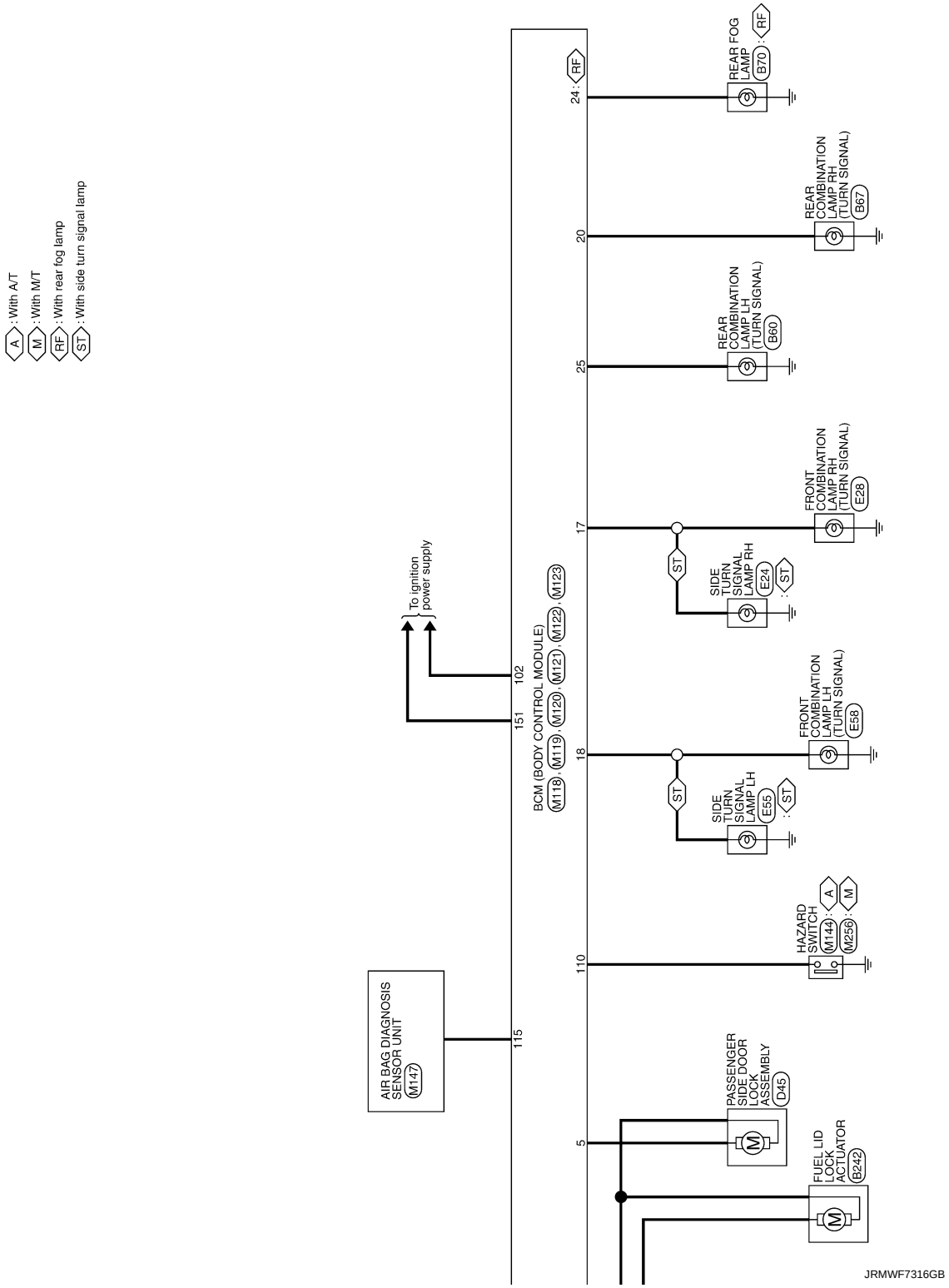
INFOID:0000000011320853

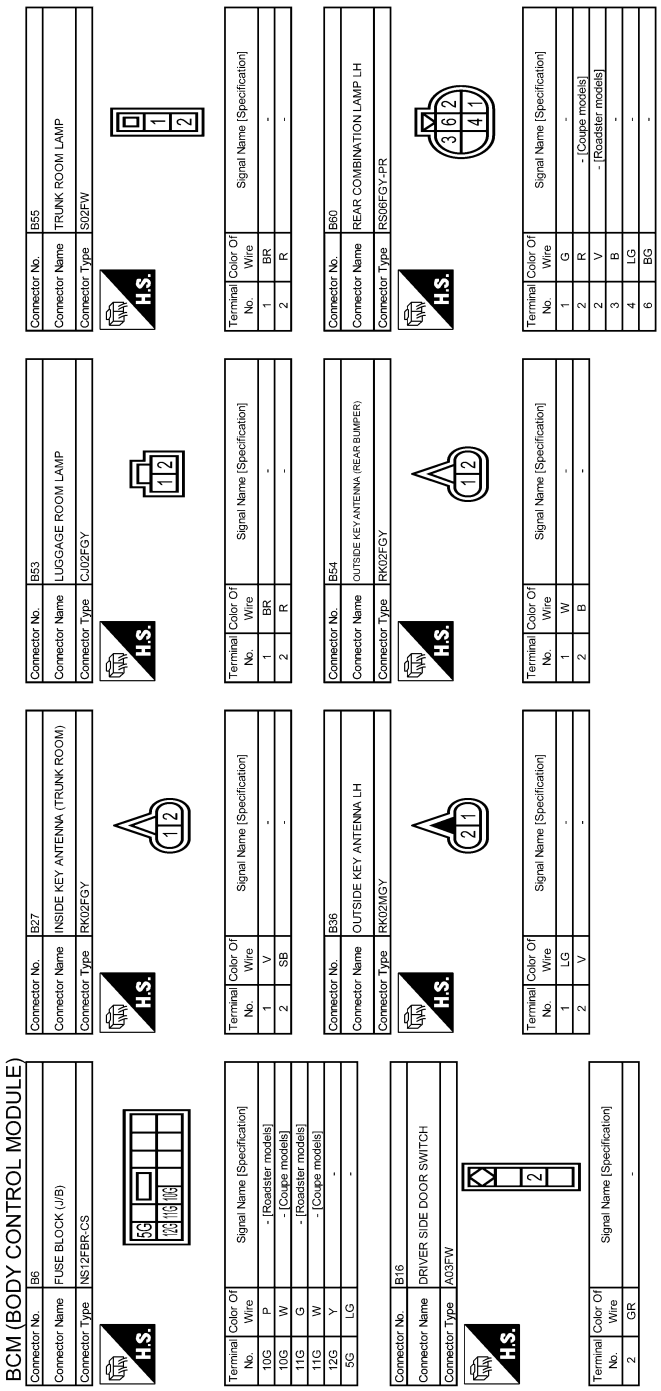



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E5
E6
E7
STARTER RELAY
CPU
IGNITION RELAY
10A 43
10A 44
PARK / NEUTRAL POSITION SWITCH
F55
DATA LINE
DATA LINE
To engine control system
BCM (BODY CONTROL MODULE)
M118, M119, M120, M121, M122, M123
PUSH-BUTTON IGNITION SWITCH
M50
PUSH SWITCH
ACC
ON
LOCK
ILLUMI-NATION
REMOTE KEYLESS ENTRY RECEIVER (FRONT)
M104
TRUNK LID LOCK ASSEMBLY
B76
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
SOFT TOP CONTROL UNIT
B303
B304
BACK DOOR SWITCH
B66
BACK DOOR OPENER ACTUATOR
B77
TRUNK LID OPENER SWITCH ASSEMBLY
B156
TRUNK LID DOOR REQUEST SWITCH
TRUNK LID OPENER SWITCH
CP : Coupe models
RS : Roadster models
CS : Coupe models with M/T and SynchroRev Match mode
XM : Except for Mexico
A : With A/T
M : With M/T
* : This connector is not shown in "Harness Layout".
JRMWF7313GB

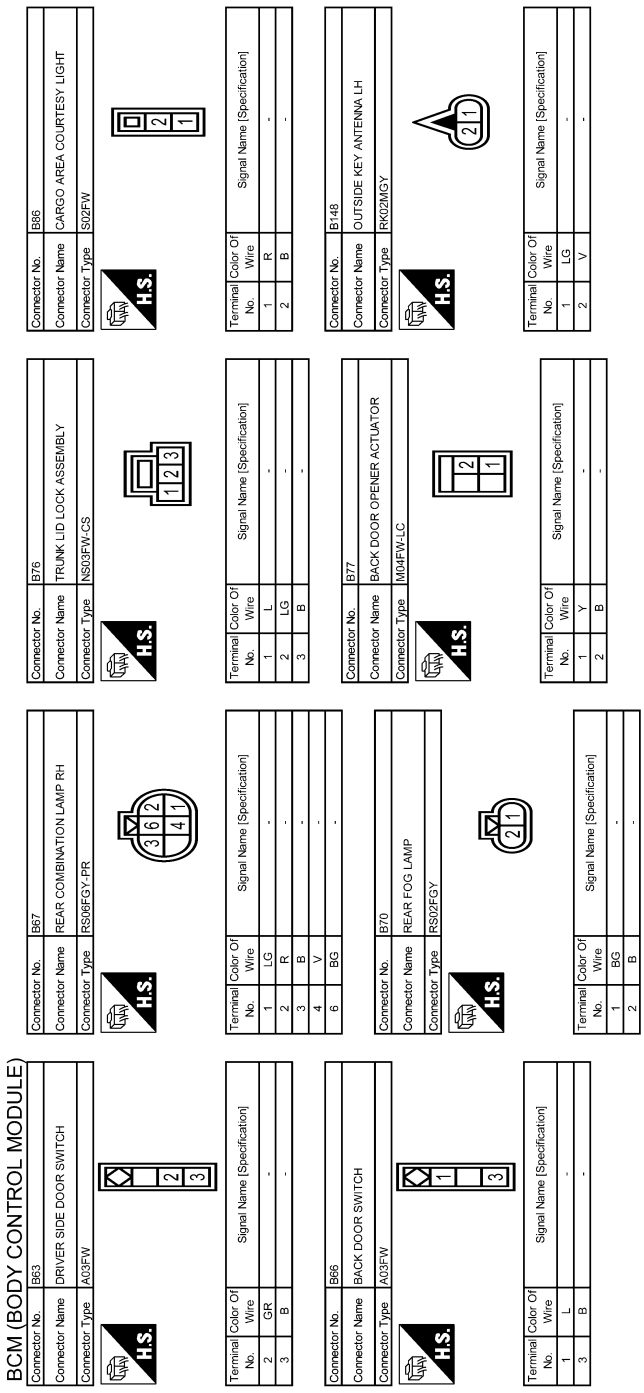

A : With A/T
AC : With A/T or coupe models with M/T and SynchroRev Match mode
AO : With A/T or with M/T without SynchroRev Match mode
CS : Coupe models with M/T and SynchroRev Match mode
MO : With M/T without SynchroRev Match mode
CP : Coupe models
RS : Roadster models
A/T ASSEMBLY (F51) : A
TCM * (F301)
JOINT CONNECTOR
CLUTCH PEDAL POSITION SWITCH (E108) : MO
A/T SHIFT SELECTOR (DETENTION SWITCH) (M137) : A
SOFT TOP CONTROL UNIT * (B303) : RS
DATA LINK CONNECTOR (M24)
COMBINATION METER (M53)
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) (E41)
To CAN system
99 : AO
96 : A
140 : AC
BCM (BODY CONTROL MODULE) (M118), (M119), (M120), (M121), (M122), (M123)
OPTICAL SENSOR (M94)
TIRE PRESSURE RECEIVER (M101)
INSIDE KEY ANTENNA (CONSOLE) (M257)
INSIDE KEY ANTENNA (LUGGAGE ROOM) (B222) : CP
INSIDE KEY ANTENNA (TRUNK ROOM) (B27) : RS
INSIDE KEY ANTENNA (INSTRUMENT CENTER) (M63) : RS
OUTSIDE KEY ANTENNA LH (B36) : CP (B148) : RS
OUTSIDE KEY ANTENNA RH (B149) : RS (B209) : CP
* : This connector is not shown in "Harness Layout".
JRMWF7314GB


CP : Coupe models
RS : Roadster models
WP : With power seat
ON : Without NAVI
MAP LAMP R4
DOOR
ON
OFF
DOOR
ON
DOOR
ON
RS
CARGO AREA COURTESY LIGHT B86 : RS
VANITY MIRROR LAMP RH R3
VANITY MIRROR LAMP LH R2
TRUNK ROOM LAMP B55 : RS
LUGGAGE ROOM LAMP B53 : CP
A/C AUTO AMP. M66 : ON
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
DOOR LOCK ACTUATOR
UNLOCK SENSOR
DOOR KEY CYLINDER SWITCH
DRIVER SIDE DOOR LOCK ASSEMBLY D15
LOCK
UNLOCK
FULL STROKE
BETWEEN FULL STROKE AND N
N
SOFT TOP CONTROL UNIT* B303 : RS
POWER WINDOW SUB-SWITCH D38
POWER WINDOW MAIN SWITCH D8
FRONT SEAT (PASSENGER SIDE) : WP
POWER SEAT SWITCH* B553
FRONT SEAT (DRIVER SIDE) : WP
POWER SEAT SWITCH B503
OUTSIDE KEY ANTENNA (REAR BUMPER) B54
*: This connector is not shown in "Harness Layout".
JRMWF7315GB

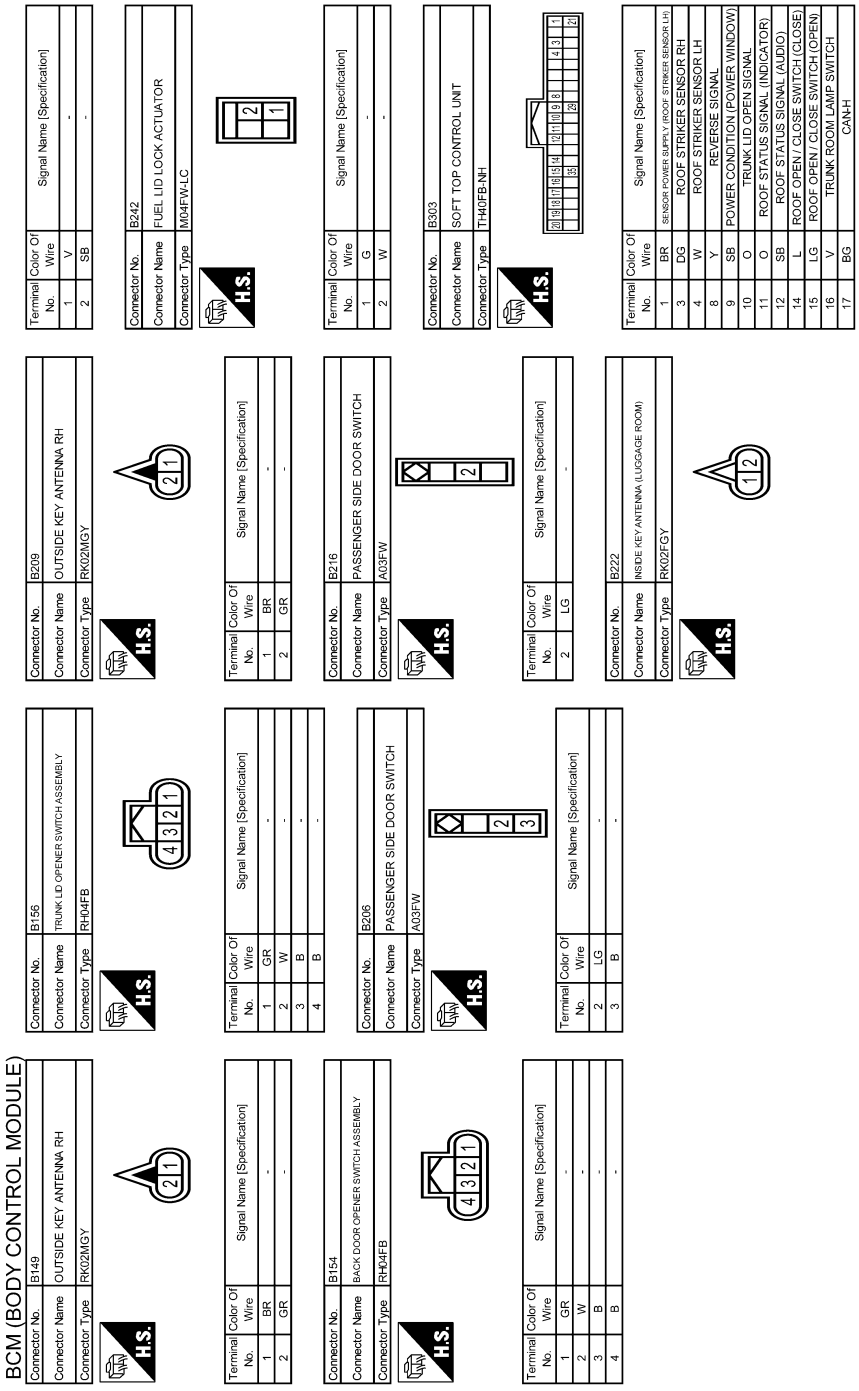

A : With A/T
M : With M/T
RF : With rear fog lamp
ST : With side turn signal lamp
To ignition power supply
BCM (BODY CONTROL MODULE)
(M118), (M119), (M120), (M121), (M122), (M123)
102
151
115
AIR BAG DIAGNOSIS SENSOR UNIT
(M147)
24 : RF
REAR FOG LAMP
B70 : RF
20
REAR COMBINATION LAMP RH (TURN SIGNAL)
B67
25
REAR COMBINATION LAMP LH (TURN SIGNAL)
B60
17
FRONT COMBINATION LAMP RH (TURN SIGNAL)
E28
ST
SIDE TURN SIGNAL LAMP RH
E24
: ST
18
FRONT COMBINATION LAMP LH (TURN SIGNAL)
E58
ST
SIDE TURN SIGNAL LAMP LH
E55
: ST
110
HAZARD SWITCH
(M144) : A
(M256) : M
5
PASSENGER SIDE DOOR LOCK ASSEMBLY
D45
FUEL LID LOCK ACTUATOR
B242
JRMWF7316GB



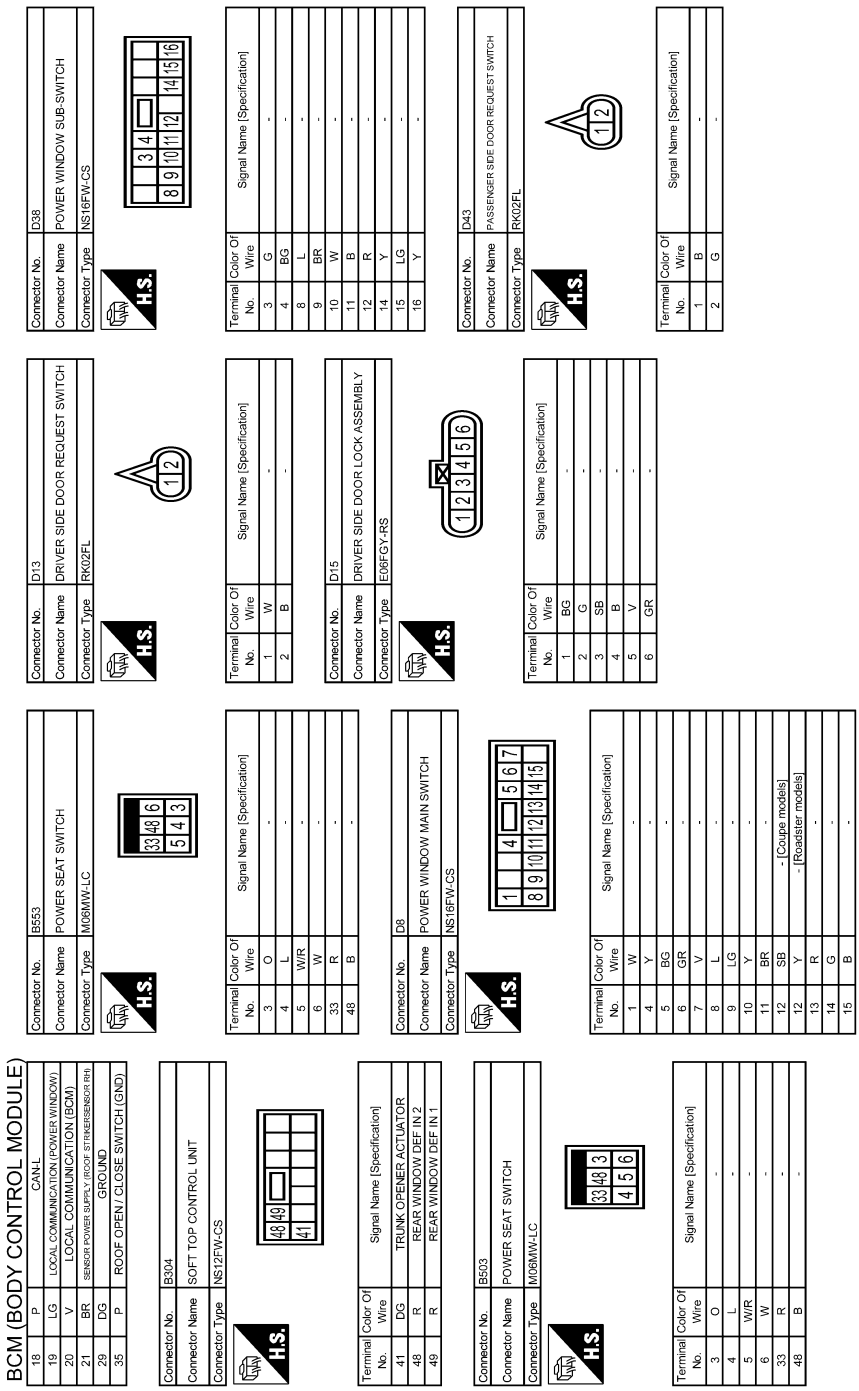
JRMWF7317GB



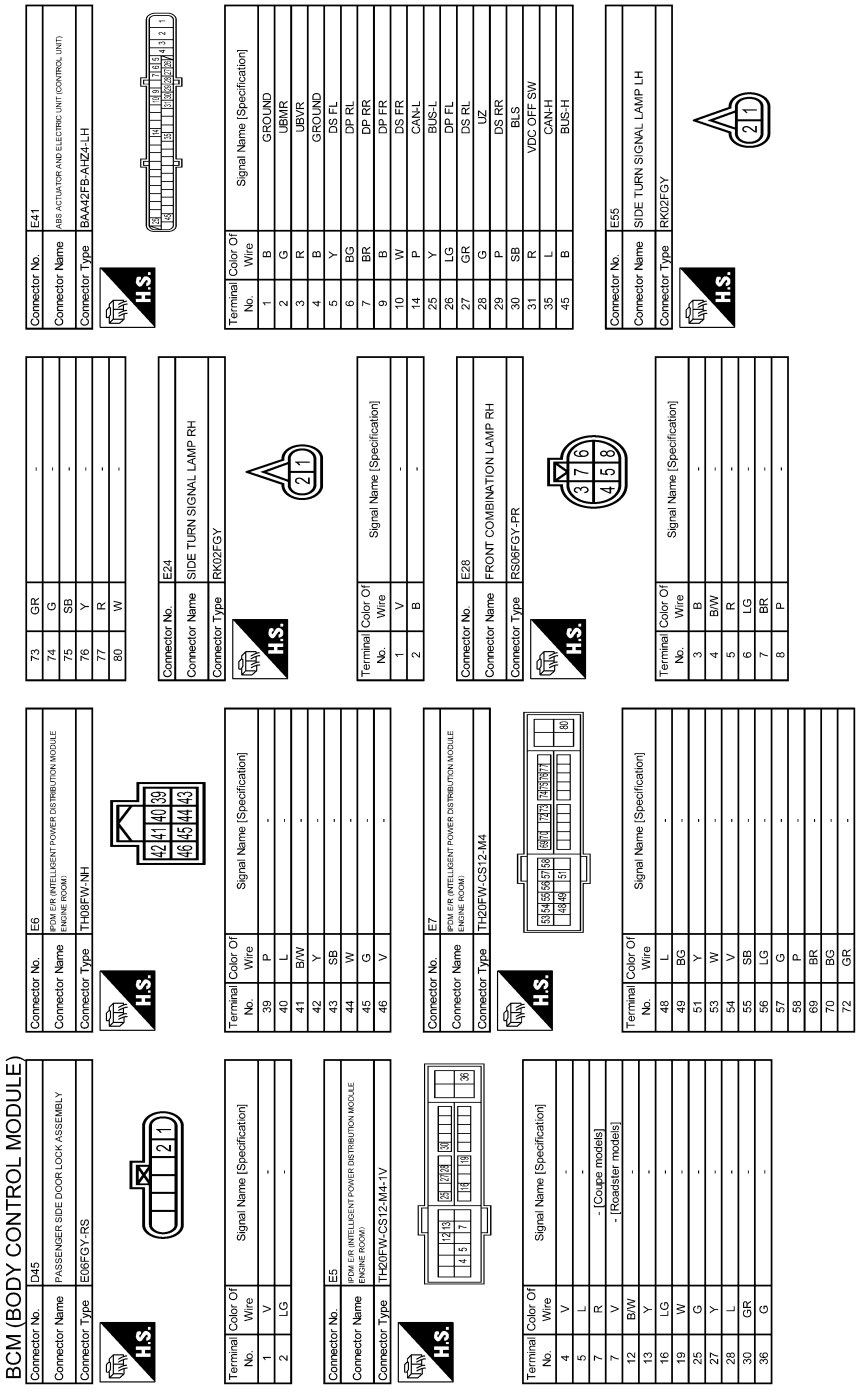
JRMWF7318GB



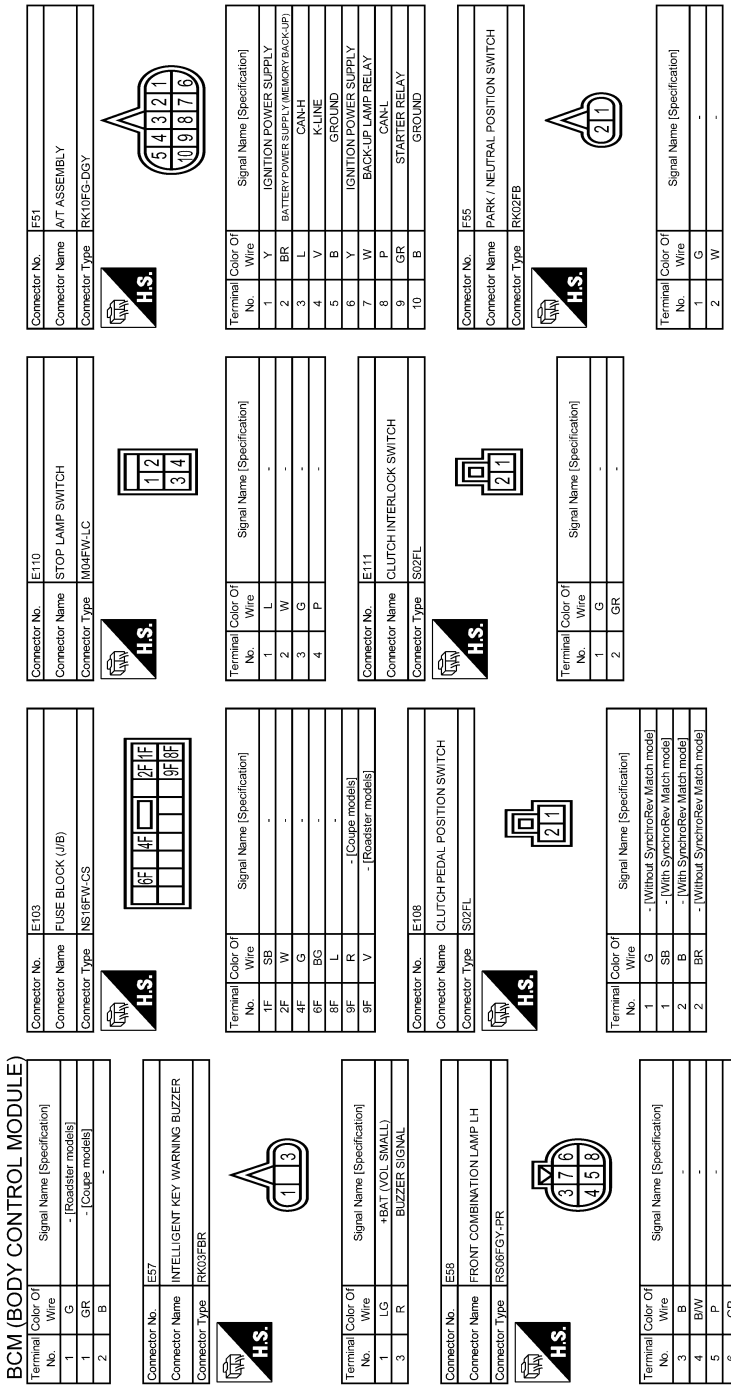
JRMWF7319GB



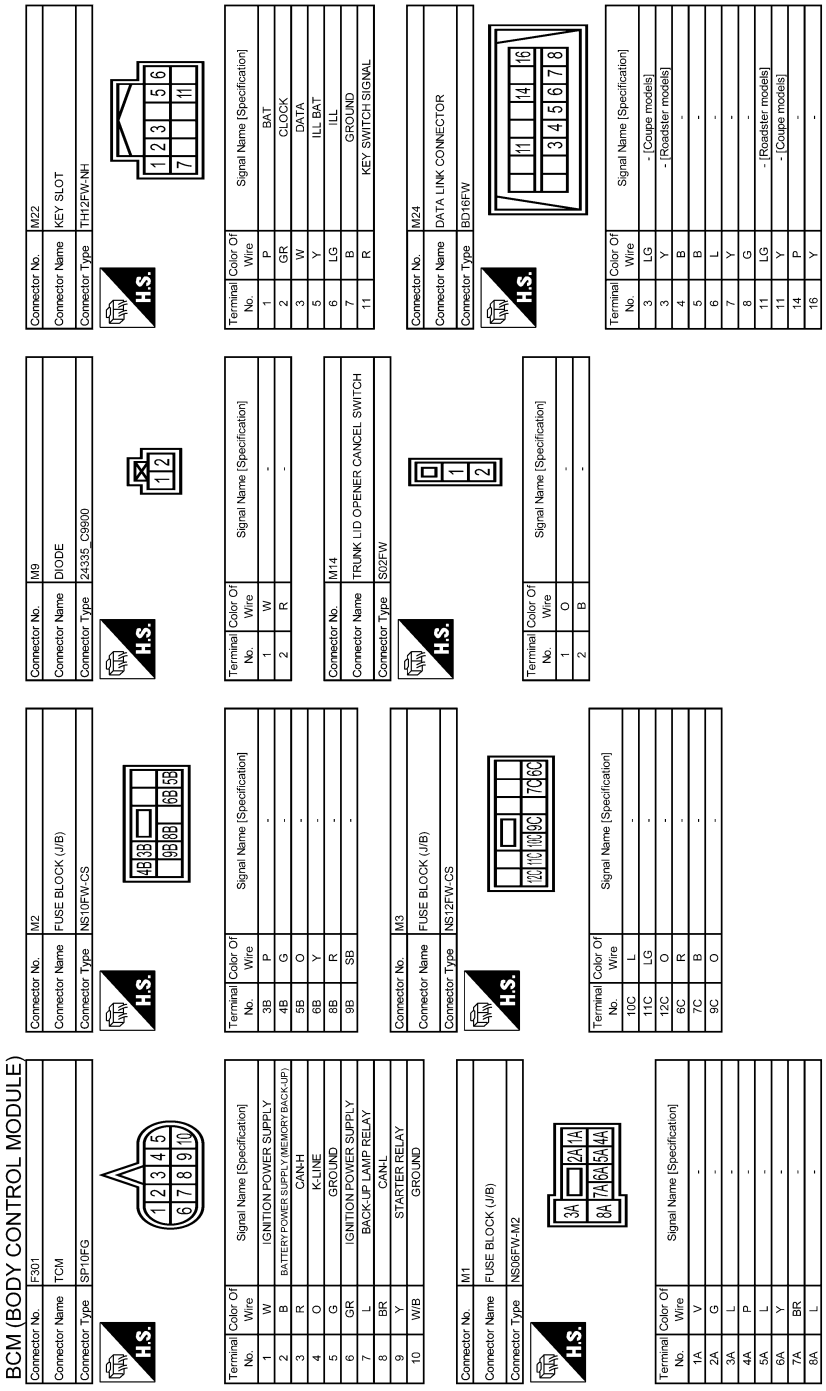
JRMWF7320GB



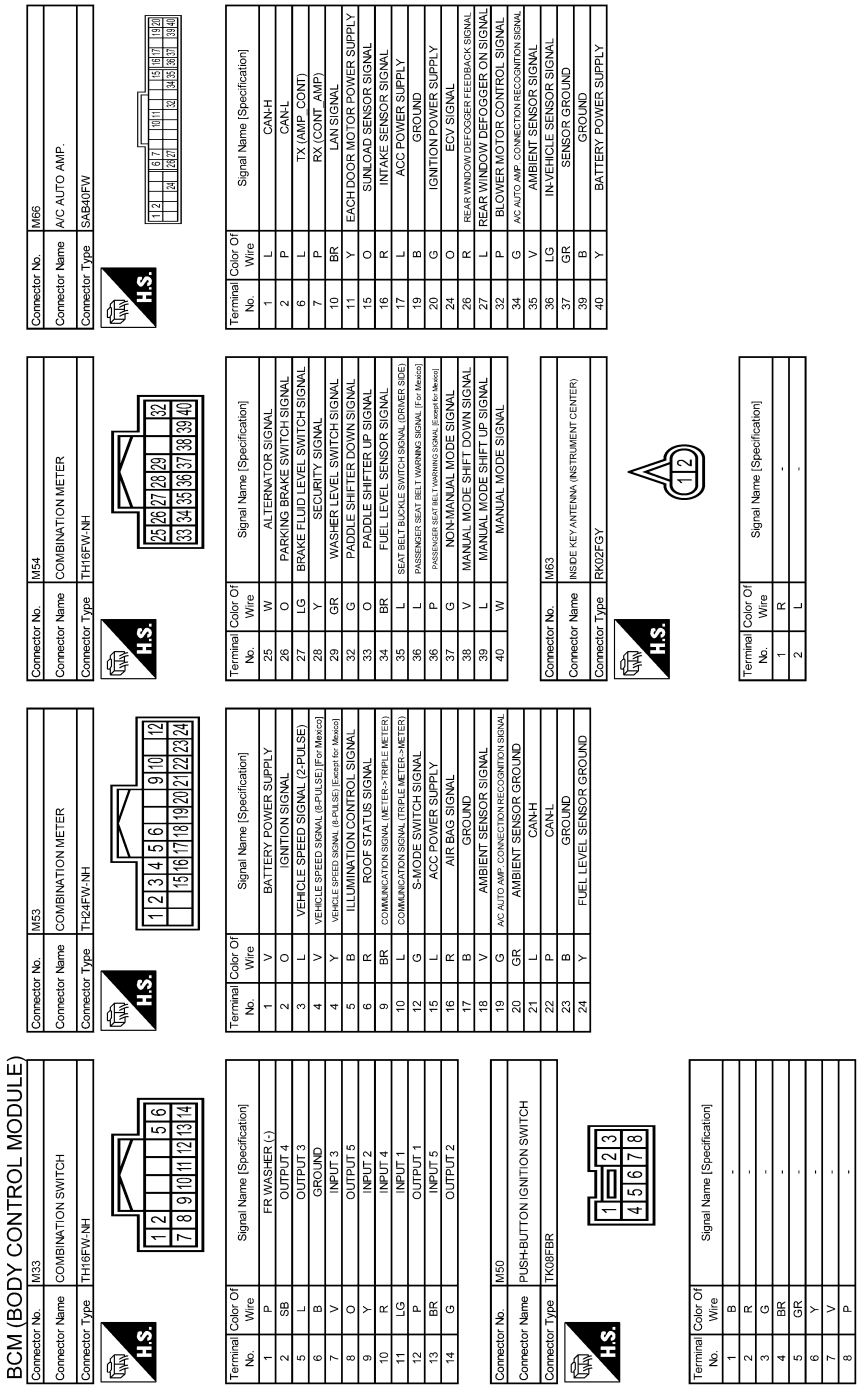
JRMWF7321GB



JRMWF7322GB



JRMWF7323GB



JRMWF7324GB

BCM (BODY CONTROL MODULE)

Connector No.	M94
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	POWER
2	O	OUTPUT
3	P	GROUND

Connector No.	M101
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	GROUND
2	L	SIGNAL
4	V	BATTERY

Connector No.	M104
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (FRONT)
Connector Type	JAB04FB

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	GROUND
2	GR	SIGNAL OUTPUT
4	LG	BATTERY

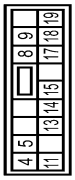
Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (IGN)

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

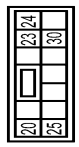
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	BR	BAT (FUSE)
13	B	GROUND
14	R	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT, SIDE)
18	O	TURN SIGNAL LH (FRONT, SIDE)
19	P	ROOM LAMP TIMER CONTROL

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	L	BACK DOOR OPEN OUTPUT [Coupe models]
23	Y	TRUNK LID OPEN OUTPUT [Roadster models]
24	O	REAR FOG OUTPUT
25	LG	TURN SIGNAL LH (REAR)
30	R	LUGGAGE/TRUNK ROOM LAMP OUTPUT

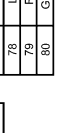
Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
34	G	LUGGAGE/TRUNK ROOM ANT-
35	R	LUGGAGE/TRUNK ROOM ANT+
38	B	REAR BUMPER ANT-
39	W	REAR BUMPER ANT+
47	V	IGN RELAY (PDM, E/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR/TRUNK LID DOOR REQUEST SW
64	G	I-KEY WARN BUZZER (ENG ROOM)
66	R	BACK DOOR/TRUNK ROOM LAMP SW
67	GR	BACK DOOR/TRUNK LID OPENER SW

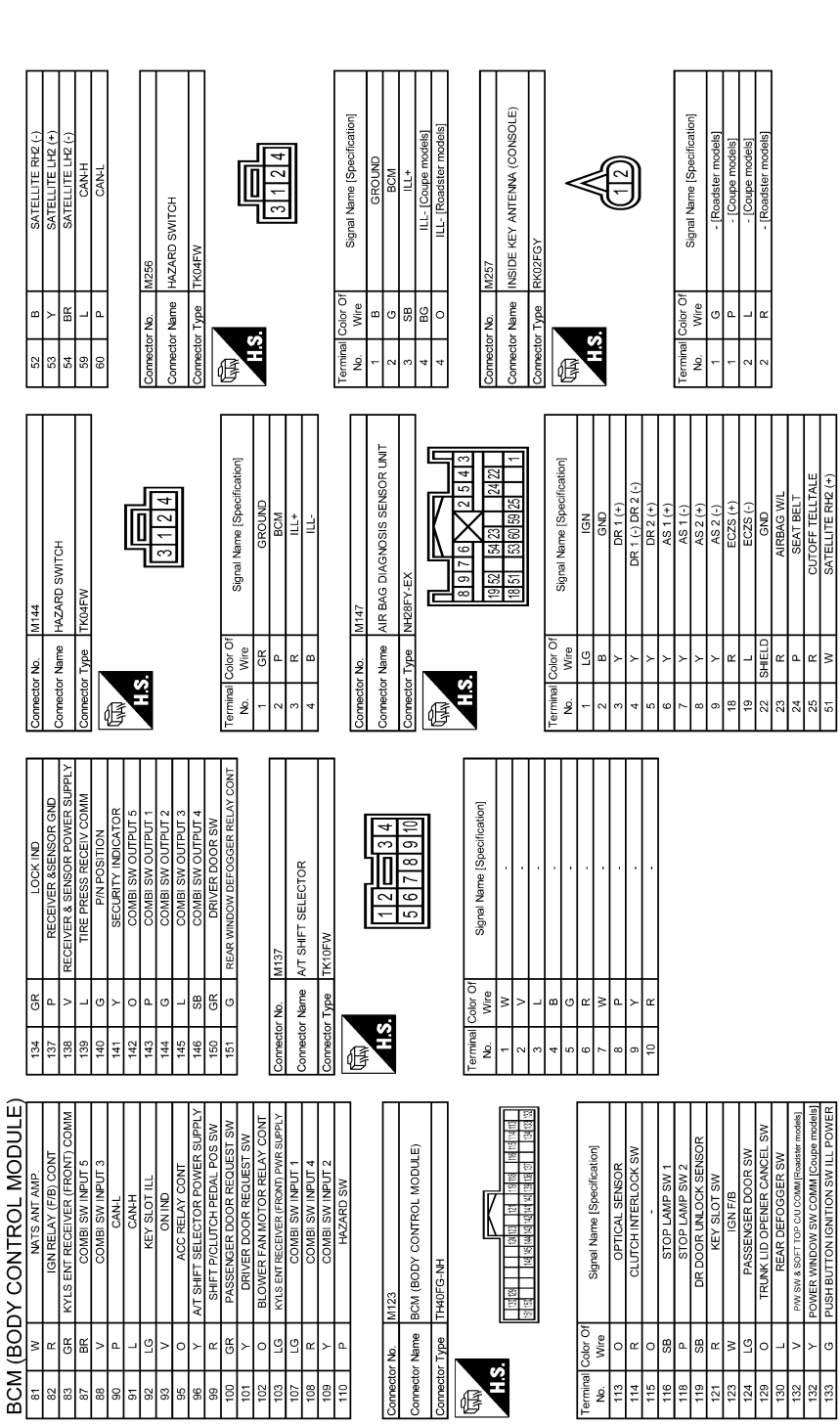
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

H.S.

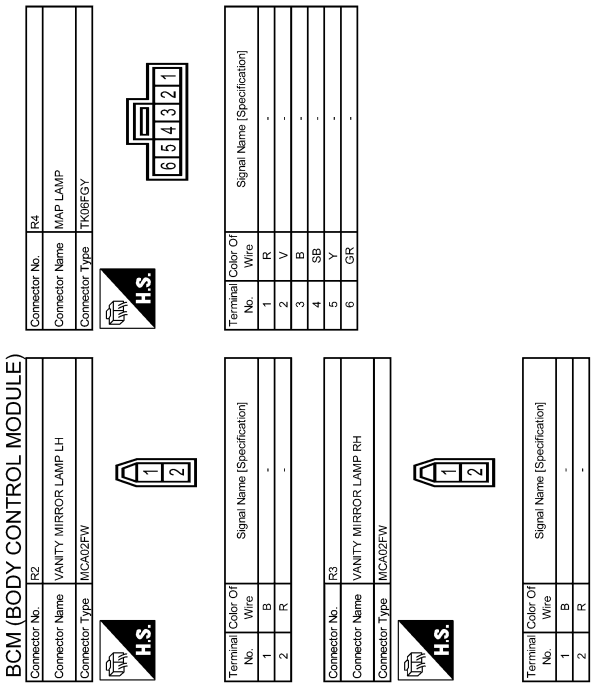


Terminal No.	Color Of Wire	Signal Name [Specification]
72	L	ROOM ANT 2-
73	P	ROOM ANT 2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	L	ROOM ANT 1-
79	R	ROOM ANT 1+
80	GR	NATS ANT AMP.

JRMWF7325GB



JRMWF7326GB



JRMWF7327GB

Fail-safe

INFOID:0000000011320854

FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled • Status 1 - Clutch switch signal (CAN from ECM): ON - Clutch interlock switch signal: OFF (0 V) • Status 2 - Clutch switch signal (CAN from ECM): OFF - Clutch interlock switch signal: ON (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000011320855

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

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

Priority	DTC
4	• B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2608: STARTER RELAY • B260A: IGNITION RELAY • B260F: ENG STATE SIG LOST • B2614: BCM • B2615: BCM • B2616: BCM • B2617: BCM • B2618: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E8: CLUTCH SW • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:0000000011320856

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to SEC-24, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

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

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-42
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-45
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-46
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-48
B2195: ANTI SCANNING	×	—	—	—	SEC-49
B2553: IGNITION RELAY	—	×	—	—	PCS-54
B2555: STOP LAMP	—	×	—	—	SEC-50
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-52
B2557: VEHICLE SPEED	×	×	×	—	SEC-54
B2560: STARTER CONT RELAY	×	×	×	—	SEC-55
B2562: LOW VOLTAGE	—	×	—	—	BCS-52
B2601: SHIFT POSITION	×	×	×	—	SEC-56
B2602: SHIFT POSITION	×	×	×	—	SEC-59
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-62
B2604: PNP SW	×	×	×	—	SEC-65
B2605: PNP SW	×	×	×	—	SEC-67
B2608: STARTER RELAY	×	×	×	—	SEC-69
B260A: IGNITION RELAY	×	×	×	—	PCS-56
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-71
B2614: BCM	—	×	×	—	PCS-58
B2615: BCM	—	×	×	—	PCS-61
B2616: BCM	—	×	×	—	PCS-64
B2617: BCM	×	×	×	—	SEC-75
B2618: BCM	×	×	×	—	PCS-67
B261A: PUSH-BTN IGN SW	—	×	×	—	PCS-68
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-78
B2621: INSIDE ANTENNA	—	×	—	—	DLK-282
B2622: INSIDE ANTENNA	—	×	—	—	•DLK-85 (Coupe) •DLK-284 (Roadster)
B2623: INSIDE ANTENNA	—	×	—	—	•DLK-87 (Coupe) •DLK-286 (Roadster)
B26E8: CLUTCH SW	×	×	×	—	SEC-72
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-74
C1704: LOW PRESSURE FL	—	—	—	×	WT-24
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1708: [NO DATA] FL	—	—	—	×	WT-26
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-29
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-31
C1734: CONTROL UNIT	—	—	—	×	WT-33

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Reference Value

INFOID:0000000011320857

VALUES ON THE DIAGNOSIS TOOL

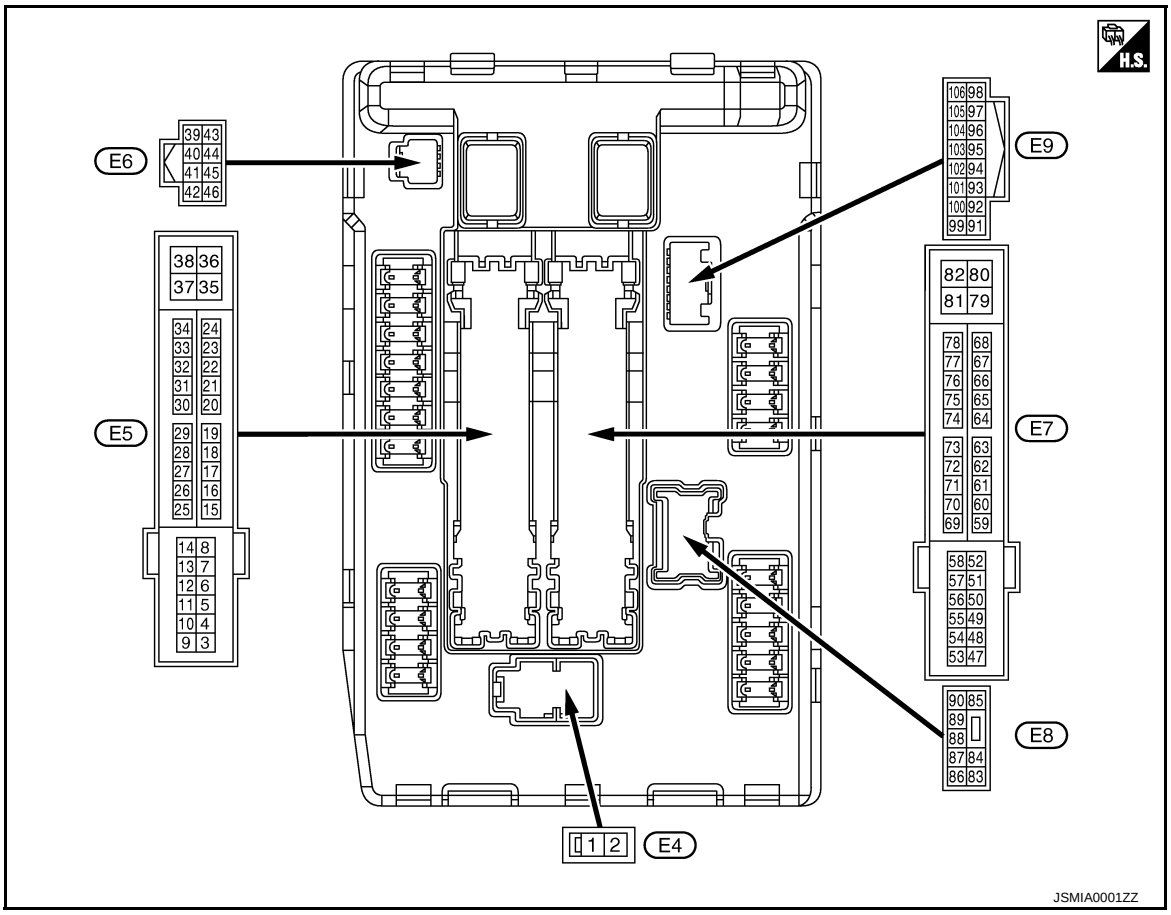
NOTE:
The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor Item	Condition		Value/Status
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 - 100 %
AC COMP REQ	Engine running	A/C switch OFF	Off
		A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND HI or AUTO (Light is illuminated)		On
	Daytime running light system is operated (With daytime running light system)		
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Daytime running light system is not operated		Off
	Daytime running light system is operated		On
FR WIP REQ	Ignition switch ON	Front wiper switch OFF	Stop
		Front wiper switch INT	1LOW
		Front wiper switch LO	Low
		Front wiper switch HI	Hi
WIP AUTO STOP	Ignition switch ON	Front wiper stop position	STOP P
		Any position other than front wiper stop position	ACT P
WIP PROT	Ignition switch ON	Front wiper operates normally	Off
		Front wiper stops at fail-safe operation	BLOCK
IGN RLY1 -REQ	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
PUSH SW	Release the push-button ignition switch		Off
	Press the push-button ignition switch		On
INTER/NP SW	Ignition switch ON	Selector lever in any position other than P or N (A/T models)	Off
		Release clutch pedal (M/T models)	
	Ignition switch ON	Selector lever in P or N position (A/T models)	On
		Depress clutch pedal (M/T models)	

Monitor Item	Condition		Value/Status
ST RLY CONT	Ignition switch ON		Off
	At engine cranking		On
IHBT RLY -REQ	Ignition switch ON		Off
	At engine cranking		On
ST/INHI RLY	Ignition switch ON		Off
	At engine cranking		INHI ON → ST ON
	The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF		UNKWN
DETENT SW	Ignition switch ON	• Press the selector button with selector lever in P position • Selector lever in any position other than P	Off
	Release the selector button with selector lever in P position **NOTE:** Fixed On for M/T models		On
S/L RLY -REQ	**NOTE:** The item is indicated, but not monitored.		Off
S/L STATE	**NOTE:** The item is indicated, but not monitored.		UNLOCK
DTRL REQ	**NOTE:** The item is indicated, but not monitored.		Off
OIL P SW	Ignition switch OFF, ACC or engine running		Open
	Ignition switch ON		Close
HOOD SW	Close the hood		Off
	Open the hood		On
HL WASHER REQ	**NOTE:** The item is indicated, but not monitored.		Off
THFT HRN REQ	Not operation		Off
	• Panic alarm is activated • Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM		On
HORN CHIRP	Not operating		Off
	Door locking with Intelligent Key (horn chirp mode)		On
CRNRNG LMP REQ	**NOTE:** The item is indicated, but not monitored.		Off

TERMINAL LAYOUT

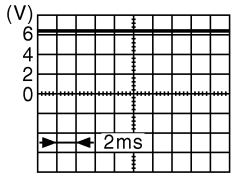
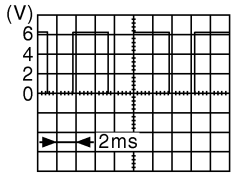
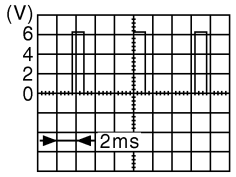


PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (V)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
5 (L)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
7 (R)*3 (V)*4	Ground	Illuminations	Output	Ignition switch ON	Lighting switch OFF	0 V
		Tail, license plate lamps & illuminations			Lighting switch 1ST	Battery voltage
12 (B/W)	Ground	Ground	—	Ignition switch ON		0 V
13 (Y)	Ground	Fuel pump power supply	Output	Approximately 1 second or more after turning the ignition switch ON		0 V
				• Approximately 1 second after turning the ignition switch ON • Engine running		Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
16 (LG)	Ground	Front wiper auto stop	Input	Ignition switch ON	Front wiper stop position	0 V
					Any position other than front wiper stop position	Battery voltage
19 (W)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
25 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
27 (Y)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0 V
28 (L)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch		0 V
				Release the push-button ignition switch		Battery voltage
30 (GR)	Ground	Starter relay control	Input	A/T models	Selector lever in any position other than P or N (Ignition switch ON)	0 V
					Selector lever P or N (Ignition switch ON)	Battery voltage
				M/T models	Release the clutch pedal	0 V
					Depress the clutch pedal	Battery voltage
36 (G)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
39 (P)	—	CAN-L	Input/ Output	—		—
40 (L)	—	CAN-H	Input/ Output	—		—
41 (B/W)	Ground	Ground	—	Ignition switch ON		0 V
42 (Y)	Ground	Cooling fan relay control	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		0.7 V
43*1 (SB)	Ground	A/T shift selector (Detention switch)	Input	Ignition switch ON	• Press the selector button (selector lever P) • Selector lever in any position other than P	Battery voltage
					Release the selector button (selector lever P)	0 V
44 (W)	Ground	Horn relay control	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
45 (G)	Ground	Anti theft horn relay control	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
46 (V)	Ground	Starter relay control	Input	A/T models	Selector lever in any position other than P or N (Ignition switch ON)	0 V
					Selector lever P or N (Ignition switch ON)	Battery voltage
				M/T models	Release the clutch pedal	0 V
					Depress the clutch pedal	Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
49 (BG)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF)		Battery voltage
51 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
53 (W)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF)		Battery voltage
54 (V)	Ground	Throttle control motor relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF)		Battery voltage
55 (SB)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage
56 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
57 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
58*1 (P)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
69 (BR)	Ground	ECM relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		Battery voltage
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF)		0 - 1.5 V
70 (BG)	Ground	Throttle control motor relay control	Output	Ignition switch ON → OFF		0 -1.0 V ↓ Battery voltage ↓ 0 V
				Ignition switch ON		0 - 1.0 V

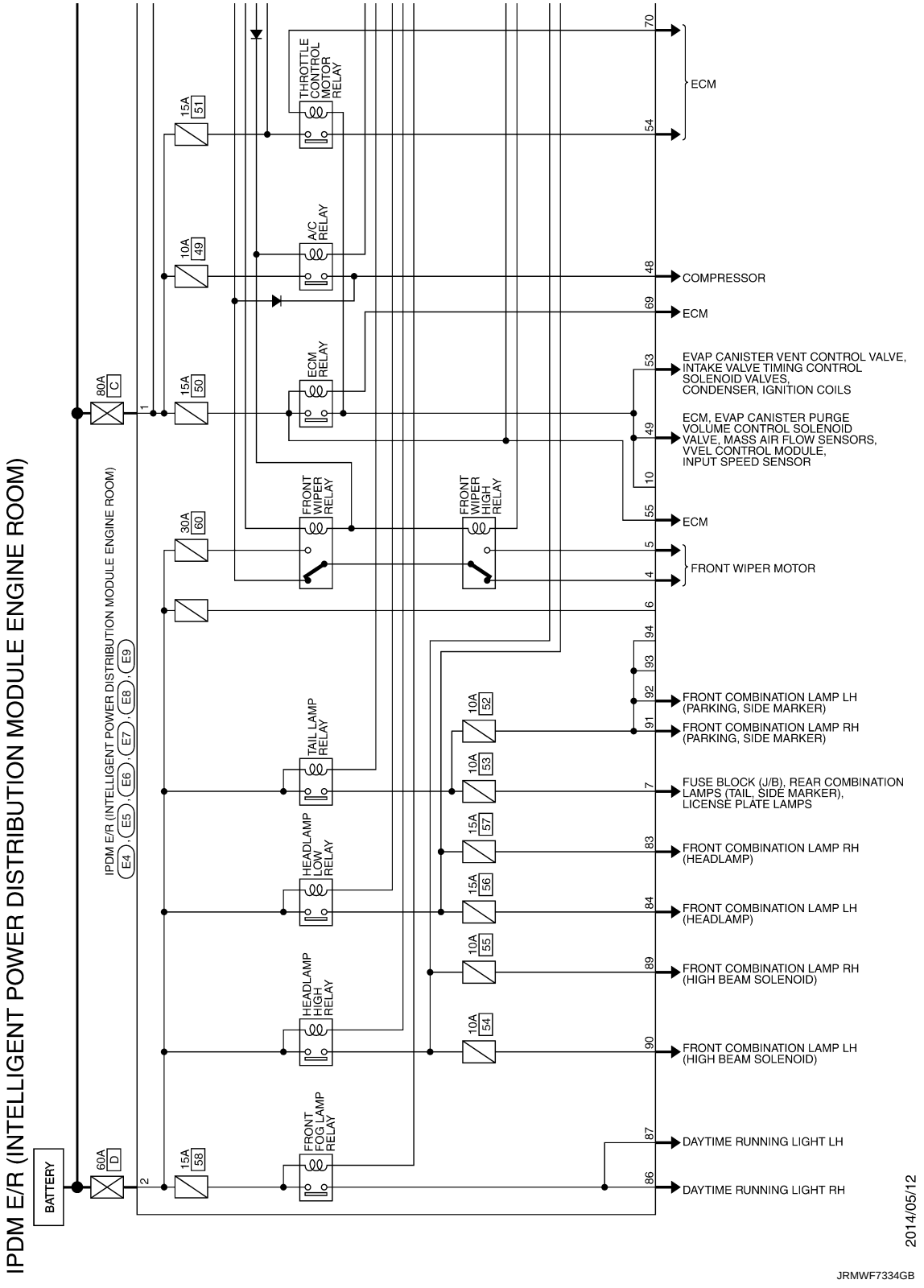
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
72 (GR)	Ground	Starter relay control	Input	A/T models	Selector lever in any position other than P or N (Ignition switch ON)	0 V
					Selector lever P or N (Ignition switch ON)	Battery voltage
				M/T models	Release the clutch pedal	0 V
					Depress the clutch pedal	Battery voltage
73*2 (GR)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
74 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
75 (SB)	Ground	Oil pressure switch	Input	Ignition switch ON	Engine stopped	0 V
					Engine running	Battery voltage
76 (Y)	Ground	Power generation command signal	Output	Ignition switch ON		 JPMIA0001GB 6.3 V
				40% is set on “ACTIVE TEST”, “ALTERNATOR DUTY” of “ENGINE”		 JPMIA0002GB 3.8 V
				80% is set on “ACTIVE TEST”, “ALTERNATOR DUTY” of “ENGINE”		 JPMIA0003GB 1.4 V
77 (R)	Ground	Fuel pump relay control	Output	• Approximately 1 second after turning the ignition switch ON • Engine running		0 - 1.0 V
				Approximately 1 second or more after turning the ignition switch ON		Battery voltage
80 (W)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 (R)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
84 (P)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage

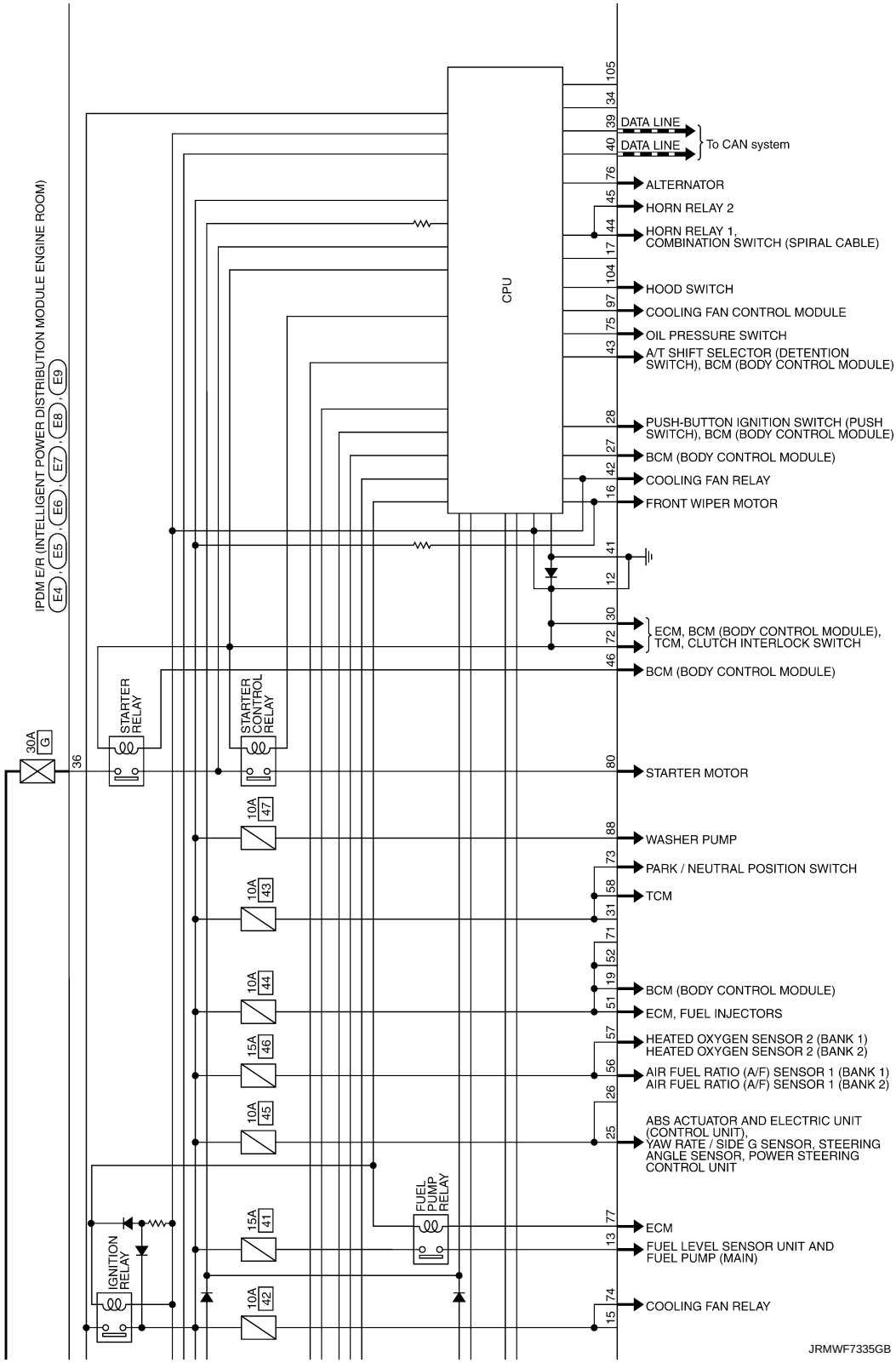
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
86 (BG)	Ground	Daytime running light (RH)	Output	Daytime running light system is not operated		0 V
				Daytime running light system is operated		Battery voltage
87 (R)	Ground	Daytime running light (LH)	Output	Daytime running light system is not operated		0 V
				Daytime running light system is operated		Battery voltage
88 (G)	Ground	Washer pump power supply	Output	Ignition switch ON		Battery voltage
89 (BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					• Lighting switch HI • Lighting switch PASS	Battery voltage
90 (LG)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					• Lighting switch HI • Lighting switch PASS	Battery voltage
91 (P)	Ground	Parking lamp (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
92 (BG)	Ground	Parking lamp (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
97 (V)	Ground	Cooling fan control	Output	Engine idling		0 - 5 V
104 (LG)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V

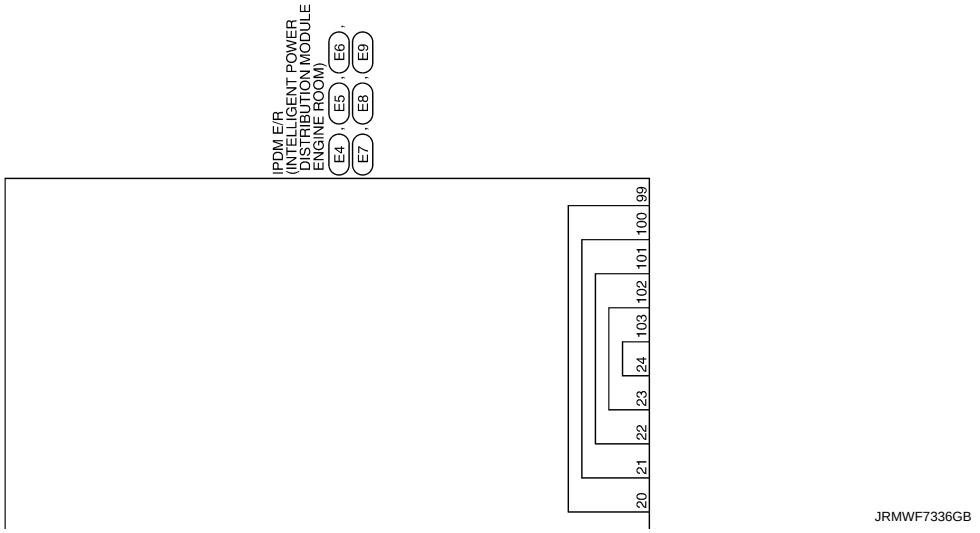
*1: A/T models only
*2: M/T models only
*3: Coupe models
*4: Roadster models

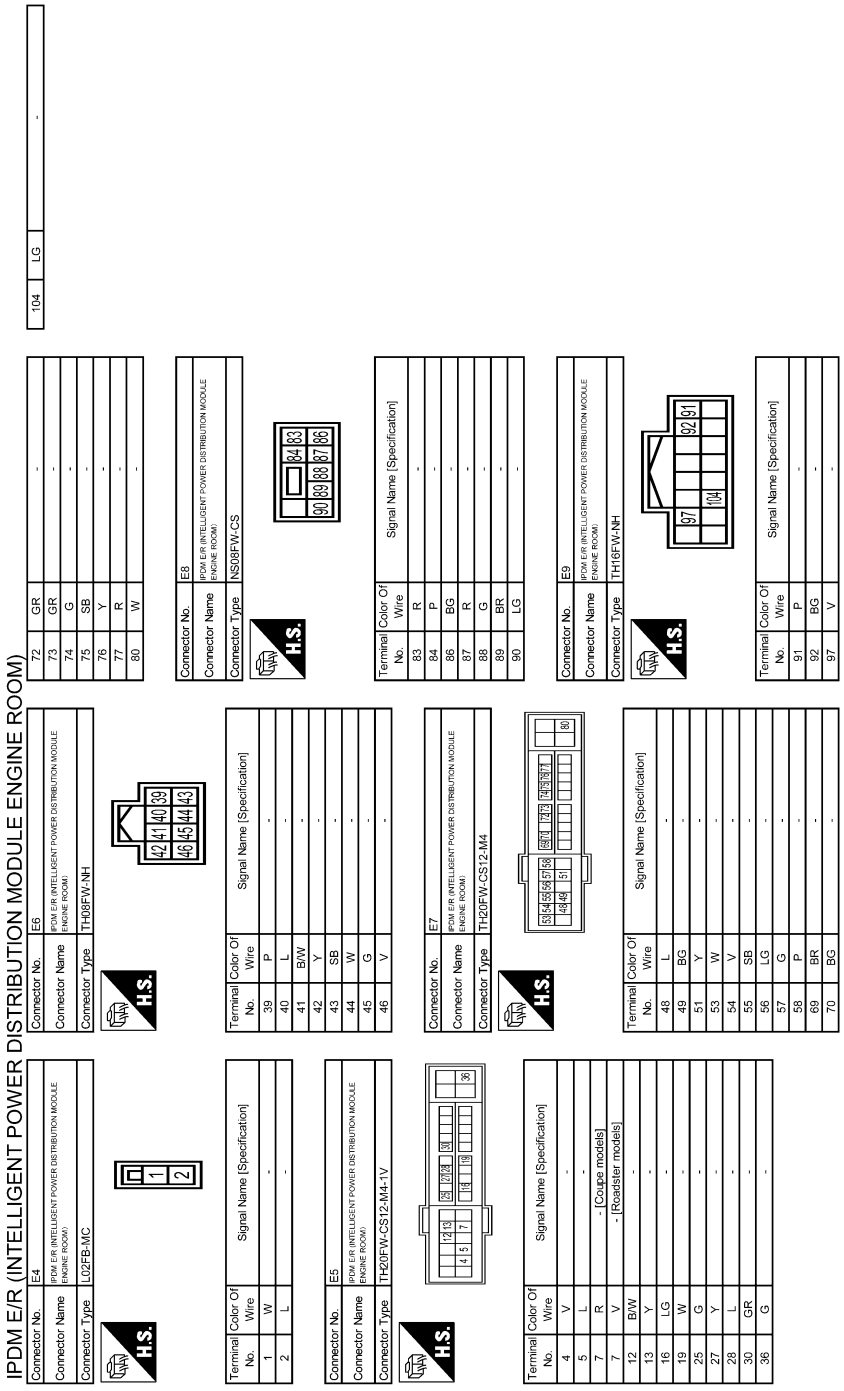
Wiring Diagram - IPDM E/R -

INFOID:0000000011377374




IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E4, E5, E6, E7, E8, E9
CPU
105
34
39 DATA LINE
40 DATA LINE
To CAN system
76 ALTERNATOR
45 HORN RELAY 2
44 HORN RELAY 1, COMBINATION SWITCH (SPIRAL CABLE)
17
104 HOOD SWITCH
97 COOLING FAN CONTROL MODULE
75 OIL PRESSURE SWITCH
43 A/T SHIFT SELECTOR (DETENTION SWITCH), BCM (BODY CONTROL MODULE)
28 PUSH-BUTTON IGNITION SWITCH (PUSH SWITCH), BCM (BODY CONTROL MODULE)
27 BCM (BODY CONTROL MODULE)
42 COOLING FAN RELAY
16 FRONT WIPER MOTOR
41
12
30
72 ECM, BCM (BODY CONTROL MODULE), TCM, CLUTCH INTERLOCK SWITCH
46 BCM (BODY CONTROL MODULE)
30A G
36
STARTER RELAY
STARTER CONTROL RELAY
80 STARTER MOTOR
10A 47
88 WASHER PUMP
73 PARK / NEUTRAL POSITION SWITCH
10A 43
58 TCM
31
71
52
19 BCM (BODY CONTROL MODULE)
10A 44
51 ECM, FUEL INJECTORS
57 HEATED OXYGEN SENSOR 2 (BANK 1) HEATED OXYGEN SENSOR 2 (BANK 2)
15A 46
56 AIR FUEL RATIO (A/F) SENSOR 1 (BANK 1) AIR FUEL RATIO (A/F) SENSOR 1 (BANK 2)
26
10A 45
25 ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT), YAW RATE / SIDE G SENSOR, STEERING ANGLE SENSOR, POWER STEERING CONTROL UNIT
FUEL PUMP RELAY
15A 41
77 ECM
13 FUEL LEVEL SENSOR UNIT AND FUEL PUMP (MAIN)
IGNITION RELAY
10A 42
74 COOLING FAN RELAY
15
JRMWF7335GB


IPDM E/R
(INTELLIGENT POWER
DISTRIBUTION MODULE
ENGINE ROOM)
E4
E5
E6
E7
E8
E9
99
100
101
102
103
24
23
22
21
20
JRMWF7336GB



JRMWF7337GB

Fail-safe

INFOID:0000000011320859

CAN COMMUNICATION CONTROL

When CAN communication with ECM and BCM is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.

If No CAN Communication Is Available With ECM

Control part	Fail-safe operation
Cooling fan	• Outputs the pulse duty signal (PWM signal) 100% when the ignition switch is turned ON • Outputs the pulse duty signal (PWM signal) 0% when the ignition switch is turned OFF
A/C compressor	A/C relay OFF
Alternator	Outputs the power generation command signal (PWM signal) 0%

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation
Headlamp	• Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF
• Parking lamps • Side maker lamp • License plate lamps • Illuminations • Tail lamps	• Turns ON the tail lamp relay and the daytime running light relay*1 when the ignition switch is turned ON • Turns OFF the tail lamp relay and the daytime running light relay*1 when the ignition switch is turned OFF
Front wiper	• The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. • The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the AUTO mode and the front wiper motor is operating.
Horn	Horn relay OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Starter motor	Starter control relay OFF

*: With daytime running light system

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay and the daytime running light relay* for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

Voltage judgment		IPDM E/R judgment	Operation
Ignition relay contact side	Ignition relay excitation coil side		
ON	ON	Ignition relay ON normal	—
OFF	OFF	Ignition relay OFF normal	—
ON	OFF	Ignition relay ON stuck	• Detects DTC “B2098: IGN RELAY ON” • Turns ON the tail lamp relay and the daytime running light relay* for 10 minutes
OFF	ON	Ignition relay OFF stuck	Detects DTC “B2099: IGN RELAY OFF”

*: With daytime running light system

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper stop position signal.
When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper stop position signal does not change for 10 seconds.

NOTE:
This operation status can be confirmed on the IPDM E/R “Data Monitor” that displays “BLOCK” for the item “WIP PROT” while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

INFOID:0000000011320860

NOTE:
- The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
- The number is 0 when is detected now.
- The number increases like 1 → 2 ··· 38 → 39 after returning to the normal condition whenever IGN OFF → ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

×: Applicable

CONSULT display	Fail-safe	Refer to
No DTC is detected. further testing may be required.	—	—
U1000: CAN COMM CIRCUIT	×	PCS-15
B2098: IGN RELAY ON CIRC	×	PCS-16
B2099: IGN RELAY OFF CIRC	—	PCS-18
B210B: STR CONT RLY ON CIRC	—	SEC-81
B210C: STR CONT RLY OFF CIRC	—	SEC-82
B210D: STARTER RLY ON CIRC	—	SEC-83
B210E: STARTER RLY OFF CIRC	—	SEC-84
B210F: INTRLCK/PNP SW ON	—	SEC-86
B2110: INTRLCK/PNP SW OFF	—	SEC-88

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE

Description

INFOID:0000000010841436

Engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

NOTE:

- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- The engine start function, door lock function, power distribution system, and NATS-IVIS/NVIS in the Intelligent Key system are closely related to each other regarding control. The vehicle security function can operate only when the door lock and power distribution system are operating normally.

Conditions of Vehicle (Operating Conditions)

- “ENGINE START BY I-KEY” in “WORK SUPPORT” is ON when setting on CONSULT.
- Intelligent Key is not inserted in key slot.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:0000000010841437

1.PERFORM WORK SUPPORT

Perform “INSIDE ANT DIAGNOSIS” on Work Support in “INTELLIGENT KEY”.
Refer to DLK-43, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)" or DLK-236, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Roadster)".

>> GO TO 2.

2.PERFORM SELF-DIAGNOSTIC RESULT

Perform Self-Diagnostic Result in “BCM”, and check whether or not DTC of inside key antenna is detected.

Is DTC detected?

YES >> Refer to DLK-85, "DTC Logic" (console) or DLK-87, "DTC Logic" (luggage room).
NO >> GO TO 3.

3.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.
Refer to PCS-71, "Component Function Check".

Is the operation normal?

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

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

Description

INFOID:0000000010841438

Security indicator lamp does not blink when ignition switch is in a position other than ON

NOTE:

- Before performing the diagnosis, check “Work Flow”. Refer to SEC-5, "Work Flow".
- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is not inserted in key slot.
- Ignition switch is not in the ON position.

Diagnosis Procedure

INFOID:0000000010841439

1.CHECK SECURITY INDICATOR LAMP

Check security indicator lamp.
Refer to SEC-99, "Component Function Check".

Is the inspection result normal?

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

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

VEHICLE SECURITY SYSTEM CANNOT BE SET
INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000010841440

Armed phase is not activated when door is locked using Intelligent Key.

NOTE:

Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of “SECURITY ALARM SET” in “WORK SUPPORT” in “THEFT ALM” using CONSULT.

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000010841441

1.CHECK INTELLIGENT KEY SYSTEM (REMOTE KEYLESS ENTRY FUNCTION)

Lock/unlock door with Intelligent Key.

Refer to DLK-30, "REMOTE KEYLESS ENTRY FUNCTION : System Diagram" (Coupe models) or DLK-223, "REMOTE KEYLESS ENTRY FUNCTION : System Diagram" (Roadster models).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (remote keyless entry function). Refer to DLK-133, "Diagnosis Procedure" (Coupe models) or DLK-335, "Diagnosis Procedure" (Roadster models).

2.CHECK HOOD SWITCH

Check hood switch.

Refer to SEC-95, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Description

INFOID:0000000010841442

Armed phase is not activated when door is locked using door request switch.

NOTE:

Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of “SECURITY ALARM SET” in “WORK SUPPORT” in “THEFT ALM” using CONSULT.

DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:0000000010841443

1.CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Lock/unlock door with door request switch.

Refer to DLK-26, "DOOR LOCK FUNCTION : System Description" (Coupe models) or DLK-220, "DOOR LOCK FUNCTION : System Description" (Roadster models).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (door lock function). Refer to DLK-131, "ALL DOOR : Diagnosis Procedure" (Coupe models) or DLK-333, "ALL DOOR : Diagnosis Procedure" (Roadster models).

2.CHECK HOOD SWITCH

Check hood switch.
Refer to SEC-95, "Component Function Check".

Is the inspection result normal?

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

3.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:0000000010841444

Alarm does not operate when alarm operating condition is satisfied.

NOTE:

Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

“SECURITY ALARM SET” in “WORK SUPPORT” of “THEFT ALM” is ON when setting on CONSULT.

Diagnosis Procedure

INFOID:0000000010841445

1.CHECK DOOR SWITCH

Check door switch.

Refer to DLK-89, "Component Function Check" (Coupe models) or DLK-288, "Component Function Check" (Roadster models).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the malfunctioning door switch

2.CHECK HOOD SWITCH

Check hood switch.

Refer to SEC-95, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK HEADLAMP

Check headlamp.

Refer to EXL-75, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK HORN

Check horn.

Refer to HRN-2, "Wiring Diagram - HORN -".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".

NO >> GO TO 1.

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

Description

INFOID:0000000010841446

Intelligent Key insert information does not operate when push-button ignition switch is operated while Intelligent Key is not inside vehicle.

NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to ensure proper operation. Refer to DLK-33, "WARNING FUNCTION : System Description" (Coupe models) or DLK-226, "WARNING FUNCTION : System Description" (Roadster models).

Diagnosis Procedure

INFOID:0000000010841447

1.CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.
Refer to PCS-71, "Component Function Check".

Is the inspection result normal?

YES >> Check BCM for DTC. Refer to BCS-99, "DTC Index".
NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR SWITCH

Check door switch.
Refer to DLK-89, "Component Function Check" (Coupe models) or DLK-288, "Component Function Check" (Roadster models).

Is the inspection result normal?

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

4.CHECK KEY SLOT

Check key slot.
Refer to SEC-92, "Component Function Check".

Is the inspection result normal?

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

5.CHECK COMBINATION METER DISPLAY

Check combination meter display.
Refer to DLK-122, "Component Function Check" (Coupe models) or DLK-324, "Component Function Check" (Roadster models).

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.CHECK KEY SLOT INDICATOR

Check key slot indicator.
Refer to SEC-93, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

PANIC ALARM FUNCTION DOES NOT OPERATE

Description

INFOID:0000000010841448

NOTE:
Before performing the diagnosis in the following procedure, check the operation condition. Refer to DLK-30, "REMOTE KEYLESS ENTRY FUNCTION : System Description" (Coupe models) or DLK-224, "REMOTE KEYLESS ENTRY FUNCTION : System Description" (Roadster models).

Diagnosis Procedure

INFOID:0000000010841449

1.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 2.
NO >> Refer to DLK-133, "Diagnosis Procedure" (Coupe models) or DLK-335, "Diagnosis Procedure" (Roadster models).

2.CHECK VEHICLE SECURITY ALARM OPERATION

Check vehicle security alarm operation.

Does alarm (headlamp and horn) active?

YES >> GO TO 3.
NO >> Refer to SEC-194, "Diagnosis Procedure".

3.CHECK “PANIC ALARM SET” SETTING IN “WORK SUPPORT”

Check “PANIC ALARM SET” setting in “WORK SUPPORT”.
Refer to DLK-43, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Coupe)" or DLK-236, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) (For Roadster)".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Set “PANIC ALARM SET” setting in “WORK SUPPORT”.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-44, "Intermittent Incident".
NO >> GO TO 1.

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

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

INFOID:0000000010841450

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR USA AND CANADA : Precaution for Battery Service

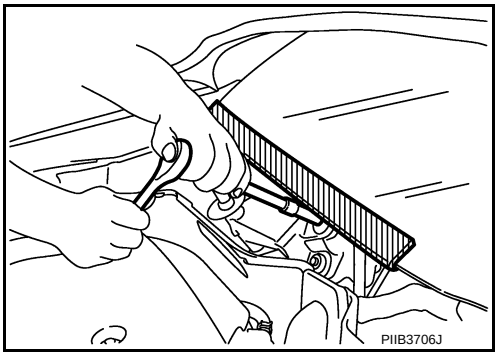
INFOID:0000000010841451

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

FOR USA AND CANADA : Precaution for Procedure without Cowl Top Cover

INFOID:0000000010841452

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



FOR USA AND CANADA : Precautions For Xenon Headlamp Service

INFOID:0000000011337861

WARNING:

Comply with the following warnings to prevent any serious accident.

- **Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.**
- **Never work with wet hands.**
- **Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)**
- **Never touch the bulb glass immediately after turning it OFF. It is extremely hot.**

CAUTION:

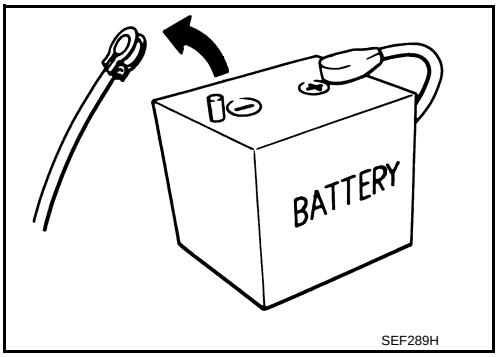
Comply with the following cautions to prevent any error and malfunction.

- **Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)**
- **Never perform HID circuit inspection with a tester.**
- **Never touch the xenon bulb glass with hands. Never put oil and grease on it.**
- **Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.**
- **Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).**

FOR USA AND CANADA : Precautions for Removing Battery Terminal

INFOID:0000000011337860

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



SEF289H

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

FOR MEXICO

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

INFOID:0000000010841453

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR MEXICO : Precaution for Battery Service

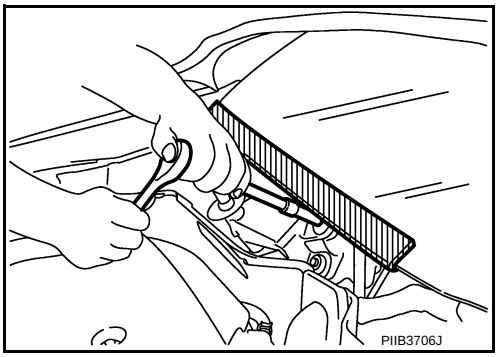
INFOID:0000000010841454

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

FOR MEXICO : Precaution for Procedure without Cowl Top Cover

INFOID:0000000010841455

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



FOR MEXICO : Precautions For Xenon Headlamp Service

INFOID:0000000011337862

WARNING:

Comply with the following warnings to prevent any serious accident.

- **Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.**
- **Never work with wet hands.**
- **Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector. (Turning it ON outside the lamp case may cause fire or visual impairments.)**
- **Never touch the bulb glass immediately after turning it OFF. It is extremely hot.**

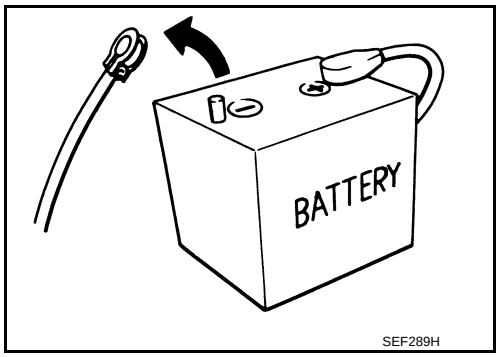
CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- **Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)**
- **Never perform HID circuit inspection with a tester.**
- **Never touch the xenon bulb glass with hands. Never put oil and grease on it.**
- **Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.**
- **Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).**

FOR MEXICO : Precautions for Removing Battery Terminal

INFOID:0000000011337863



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

REMOVAL AND INSTALLATION

KEY SLOT

Exploded View

INFOID:0000000010841456

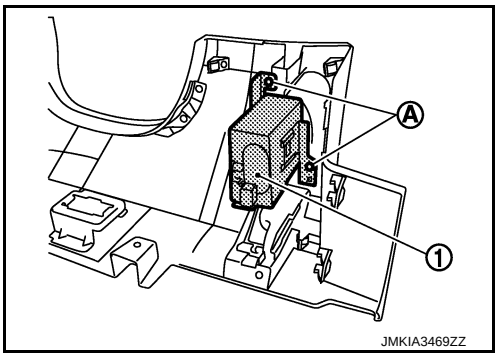
Refer to IP-13, "Exploded View".

Removal and Installation

INFOID:0000000010841457

REMOVAL

1. Remove the instrument driver lower panel. Refer to IP-14, "Removal and Installation".
2. Disconnect key slot connector.
3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument driver lower panel.



INSTALLATION

Install in the reverse order of removal.

PUSH-BUTTON IGNITION SWITCH

Exploded View

INFOID:0000000010841458

Refer to IP-13, "Exploded View".

Removal and Installation

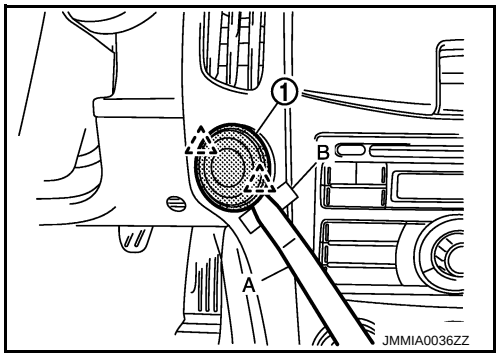
INFOID:0000000010841459

REMOVAL

Disconnect the push-button ignition switch (1) fixing pawl using a remover tool (A), and then remove push-button ignition switch.

CAUTION:

Always apply a protective tape (B) on instrument panel for protection.



: Pawl

INSTALLATION

Install in the reverse order of removal.