

SECTION **SEC**

SECURITY CONTROL SYSTEM

A

B

C

D

E

CONTENTS

F

G

H

I

J

SEC

L

M

N

O

P

<p>WITH INTELLIGENT KEY SYSTEM</p> <p>BASIC INSPECTION 7</p> <p>DIAGNOSIS AND REPAIR WORKFLOW 7 Work Flow7</p> <p>INSPECTION AND ADJUSTMENT10</p> <p>ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT 10 ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description 10 ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement 10</p> <p>ECM RE-COMMUNICATING FUNCTION 10 ECM RE-COMMUNICATING FUNCTION : Description 10 ECM RE-COMMUNICATING FUNCTION : Special Repair Requirement 10</p> <p>FUNCTION DIAGNOSIS 11</p> <p>INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION 11 System Diagram 11 System Description 11 Component Parts Location 13 Component Description 15</p> <p>NATS (NISSAN ANTI-THEFT SYSTEM) 16 System Diagram 16 System Description 16 Component Parts Location 18 Component Description 20</p> <p>VEHICLE SECURITY SYSTEM 21 System Diagram 21 System Description 21 Component Parts Location 23 Component Description 25</p>	<p>DIAGNOSIS SYSTEM (BCM) 26</p> <p>COMMON ITEM 26 COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM) 26</p> <p>IMMU 26 IMMU : CONSULT-III Function (BCM - IMMU) 26</p> <p>THEFT ALM 27 THEFT ALM : CONSULT-III Function (BCM - THEFT ALM) 27</p> <p>DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT) 29 CONSULT-III Function (INTELLIGENT KEY) 29</p> <p>DIAGNOSIS SYSTEM (SIREN CONTROL UNIT) 32 Diagnosis Description 32</p> <p>COMPONENT DIAGNOSIS 35</p> <p>U1000 CAN COMM CIRCUIT 35 Description 35 DTC Logic 35 Diagnosis Procedure 35</p> <p>U1010 CONTROL UNIT (CAN) 36 Description 36 DTC Logic 36 Diagnosis Procedure 36 Special Repair Requirement 36</p> <p>P1610 LOCK MODE 37 Description 37 DTC Logic 37 Diagnosis Procedure 37</p> <p>P1611 ID DISCORD, IMMU-ECM 38 Description 38 DTC Logic 38 Diagnosis Procedure 38</p>
---	--

P1612 CHAIN OF ECM-IMMU	40	DTC Logic	56
Description	40	Diagnosis Procedure	56
DTC Logic	40	Special Repair Requirement	56
Diagnosis Procedure	40		
P1614 CHANIN OF IMMU-KEY	41	B2590 ID DISCORD BCM-I-KEY	57
Description	41	Description	57
DTC Logic	41	DTC Logic	57
Diagnosis Procedure	41	Diagnosis Procedure	57
P1615 DIFFERENCE OF KEY	43	POWER SUPPLY AND GROUND CIRCUIT	58
Description	43	INTELLIGENT KEY UNIT	58
DTC Logic	43	INTELLIGENT KEY UNIT : Diagnosis Procedure...	58
Diagnosis Procedure	43	INTELLIGENT KEY UNIT : Special Repair Re-	
P1616 ECM	44	quirement	58
Description	44	SIREN CONTROL UNIT	58
DTC Logic	44	SIREN CONTROL UNIT : Diagnosis Procedure	58
Diagnosis Procedure	44	SIREN CONTROL UNIT : Special Repair Require-	
B2013 ID DISCORD I-KEY-STRG	45	ment	59
Description	45	BCM	59
DTC Logic	45	BCM : Diagnosis Procedure	59
Diagnosis Procedure	45	KEY SWITCH	61
B2190 NATS ANTENNA AMP.	47	Description	61
Description	47	Component Function Check	61
DTC Logic	47	Diagnosis Procedure	61
Diagnosis Procedure	47	Component Inspection	62
B2191 DIFFERENCE OF KEY	49	IGNITION KNOB SWITCH	64
Description	49	Description	64
DTC Logic	49	Component Function Check	64
Diagnosis Procedure	49	Diagnosis Procedure	64
B2192 ID DISCORD, IMMU-ECM	50	Component Inspection	65
Description	50	STOP LAMP SWITCH	66
DTC Logic	50	Description	66
Diagnosis Procedure	50	Component Function Check	66
B2193 CHAIN OF ECM-IMMU	52	Diagnosis Procedure	66
Description	52	Component Inspection	67
DTC Logic	52	HOOD SWITCH	68
Diagnosis Procedure	52	Description	68
B2194 ID DISCORD IMMU-I-KEY	53	Component Function Check	68
Description	53	Diagnosis Procedure	68
DTC Logic	53	Component Inspection	69
Diagnosis Procedure	53	VEHICLE SECURITY INDICATOR	70
B2195 ANTI-SCANNING	54	Description	70
Description	54	Component Function Check	70
DTC Logic	54	Diagnosis Procedure	70
Diagnosis Procedure	54	ULTRA SONIC SENSOR	72
B2196 DONGLE NG	55	Description	72
Description	55	Component Function Check	72
DTC Logic	55	Diagnosis Procedure	72
Diagnosis Procedure	55	SIREN CONTROL UNIT SIGNAL CIRCUIT	74
B2552 INTELLIGENT KEY	56	Description	74
Description	56	Component Function Check	74
		Diagnosis Procedure	74

ECU DIAGNOSIS	75	KEY WARNING LAMP DOES NOT ILLUMINATE ..	216	
BCM (BODY CONTROL MODULE)	75	KEY WARNING LAMP DOES NOT ILLUMINATE		A
Reference Value	75	: Description	216	
Wiring Diagram - INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION -	92	KEY WARNING LAMP DOES NOT ILLUMINATE		B
Wiring Diagram - THEFT WARNING SYSTEM -	98	: Diagnosis Procedure	216	
Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	105	KEY WARNING LAMP (RED) ILLUMINATES	217	
Wiring Diagram - NATS -	112	KEY WARNING LAMP (RED) ILLUMINATES :		C
Fail Safe	117	Description	217	
DTC Inspection Priority Chart	118	KEY WARNING LAMP (RED) ILLUMINATES : Di-		D
DTC Index	119	agnosis Procedure	217	
INTELLIGENT KEY UNIT	120	ENGINE CAN NOT START WITH INTELLI-		
Reference Value	120	GENENT KEY	218	
Wiring Diagram - INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION -	127	Description	218	
Wiring Diagram - THEFT WARNING SYSTEM - ..	133	Diagnosis Procedure	218	E
Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	140	VEHICLE SECURITY SYSTEM CAN NOT BE		
Wiring Diagram - NATS -	147	SET	219	F
Fail Safe	153	Description	219	
DTC Inspection Priority Chart	153	Diagnosis Procedure	219	
DTC Index	153	SECURITY INDICATOR DOES NOT TURN		G
IPDM E/R (INTELLIGENT POWER DISTRI-		ON	220	
BUTION MODULE ENGINE ROOM)	154	Description	220	
Reference Value	154	Diagnosis Procedure	220	H
Wiring Diagram - INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION -	160	VEHICLE SECURITY ALARM DOES NOT		
Wiring Diagram - THEFT WARNING SYSTEM - ..	166	ACTIVATE	221	I
Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	173	Description	221	
Wiring Diagram - NATS -	180	Diagnosis Procedure	221	
Fail Safe	185	VEHICLE SECURITY SYSTEM CAN NOT BE		J
DTC Index	187	CANCELED WITH INTELLIGENT KEY	222	
SIREN CONTROL UNIT	188	Description	222	
Reference Value	188	Diagnosis Procedure	222	SEC
Wiring Diagram - INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION -	189	VEHICLE SECURITY SYSTEM CAN NOT BE		
Wiring Diagram - THEFT WARNING SYSTEM - ..	195	CANCELED WITH DOOR REQUEST		L
Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	202	SWITCH	223	
Wiring Diagram - NATS -	209	Description	223	
SYMPTOM DIAGNOSIS	215	Diagnosis Procedure	223	M
SECURITY CONTROL SYSTEM	215	ENGINE CAN NOT START WITH MECHANI-		
Symptom Table	215	CAL KEY	224	
IGNITION KNOB SWITCH DOES NOT TURN		Description	224	
ON	216	Diagnosis Procedure	224	N
KEY WARNING LAMP (GREEN) ILLUMINATES ..	216	SECURITY INDICATOR DOES NOT TURN		
KEY WARNING LAMP (GREEN) ILLUMINATES :		ON OR FLASH	225	O
Description	216	Description	225	
KEY WARNING LAMP (GREEN) ILLUMINATES :		Diagnosis Procedure	225	
Diagnosis Procedure	216	PRECAUTION	226	P
KEY WARNING LAMP DOES NOT ILLUMINATE ..	216	PRECAUTIONS	226	
KEY WARNING LAMP DOES NOT ILLUMINATE		Precaution for Supplemental Restraint System		
: Description	216	(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-		
KEY WARNING LAMP DOES NOT ILLUMINATE		SIONER"	226	
: Diagnosis Procedure	216	Precaution Necessary for Steering Wheel Rota-		
KEY WARNING LAMP (RED) ILLUMINATES	217	tion After Battery Disconnect	226	
KEY WARNING LAMP (RED) ILLUMINATES :				
Description	217			
KEY WARNING LAMP (RED) ILLUMINATES : Di-				
agnosis Procedure	217			
ENGINE CAN NOT START WITH INTELLI-				
GENENT KEY	218			
Description	218			
Diagnosis Procedure	218			
VEHICLE SECURITY SYSTEM CAN NOT BE				
SET	219			
Description	219			
Diagnosis Procedure	219			
SECURITY INDICATOR DOES NOT TURN				
ON	220			
Description	220			
Diagnosis Procedure	220			
VEHICLE SECURITY ALARM DOES NOT				
ACTIVATE	221			
Description	221			
Diagnosis Procedure	221			
VEHICLE SECURITY SYSTEM CAN NOT BE				
CANCELED WITH INTELLIGENT KEY	222			
Description	222			
Diagnosis Procedure	222			
VEHICLE SECURITY SYSTEM CAN NOT BE				
CANCELED WITH DOOR REQUEST				
SWITCH	223			
Description	223			
Diagnosis Procedure	223			
ENGINE CAN NOT START WITH MECHANI-				
CAL KEY	224			
Description	224			
Diagnosis Procedure	224			
SECURITY INDICATOR DOES NOT TURN				
ON OR FLASH	225			
Description	225			
Diagnosis Procedure	225			
PRECAUTION	226			
PRECAUTIONS	226			
Precaution for Supplemental Restraint System				
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-				
SIONER"	226			
Precaution Necessary for Steering Wheel Rota-				
tion After Battery Disconnect	226			

ON-VEHICLE REPAIR	227	THEFT ALM : CONSULT-III Function (BCM - THEFT ALM)	244
INTELLIGENT KEY UNIT	227	DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)	246
Exploded View	227	Diagnosis Description	246
Removal and Installation	227	COMPONENT DIAGNOSIS	249
NATS ANTENNA AMP.	228	U1000 CAN COMM CIRCUIT	249
Exploded View	228	Description	249
Removal and Installation	228	DTC Logic	249
ULTRA SONIC SENSOR	229	Diagnosis Procedure	249
Exploded View	229	U1010 CONTROL UNIT (CAN)	250
Removal and Installation	229	DTC Logic	250
HOOD SWITCH	230	Diagnosis Procedure	250
Exploded View	230	P1611 ID DISCORD, IMMU-ECM	251
Removal and Installation	230	Description	251
WITHOUT INTELLIGENT KEY SYSTEM		DTC Logic	251
BASIC INSPECTION	231	Diagnosis Procedure	251
DIAGNOSIS AND REPAIR WORKFLOW	231	P1612 CHAIN OF ECM-IMMU	253
Work Flow	231	Description	253
INSPECTION AND ADJUSTMENT	234	DTC Logic	253
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT	234	Diagnosis Procedure	253
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description	234	P1614 CHANIN OF IMMU-KEY	254
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement	234	Description	254
ECM RE-COMMUNICATING FUNCTION	234	DTC Logic	254
ECM RE-COMMUNICATING FUNCTION : Description	234	Diagnosis Procedure	254
ECM RE-COMMUNICATING FUNCTION : Special Repair Requirement	234	P1615 DIFFERENCE OF KEY	256
FUNCTION DIAGNOSIS	235	Description	256
NATS (NISSAN ANTI-THEFT SYSTEM)	235	DTC Logic	256
System Diagram	235	Diagnosis Procedure	256
System Description	235	P1616 ECM	257
Component Parts Location	237	Description	257
Component Description	238	DTC Logic	257
VEHICLE SECURITY SYSTEM	239	Diagnosis Procedure	257
System Diagram	239	B2190 NATS ANTENNA AMP.	258
System Description	239	Description	258
Component Parts Location	241	DTC Logic	258
Component Description	242	Diagnosis Procedure	258
DIAGNOSIS SYSTEM (BCM)	243	B2191 DIFFERENCE OF KEY	260
COMMON ITEM	243	Description	260
COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)	243	DTC Logic	260
IMMU	243	Diagnosis Procedure	260
IMMU : CONSULT-III Function (BCM - IMMU)	243	B2192 ID DISCORD, IMMU-ECM	261
THEFT ALM	244	Description	261
		DTC Logic	261
		Diagnosis Procedure	261
		B2193 CHAIN OF ECM-IMMU	263
		Description	263
		DTC Logic	263
		Diagnosis Procedure	263

B2195 ANTI-SCANNING	264	DTC Inspection Priority Chart	315	
Description	264	DTC Index	316	A
DTC Logic	264			
Diagnosis Procedure	264			
B2196 DONGLE NG	265	IPDM E/R (INTELLIGENT POWER DISTRI- BUTION MODULE ENGINE ROOM)	317	B
Description	265	Reference Value	317	
DTC Logic	265	Wiring Diagram - THEFT WARNING SYSTEM - ..	322	
Diagnosis Procedure	265	Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	329	C
		Wiring Diagram - NATS -	336	
		Fail Safe	340	
		DTC Index	342	D
POWER SUPPLY AND GROUND CIRCUIT ...	266	SIREN CONTROL UNIT	343	
SIREN CONTROL UNIT	266	Reference Value	343	E
SIREN CONTROL UNIT : Diagnosis Procedure ..	266	Wiring Diagram - THEFT WARNING SYSTEM - ..	344	
SIREN CONTROL UNIT : Special Repair Require- ment	266	Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	351	F
BCM	266	Wiring Diagram - NATS -	358	
BCM : Diagnosis Procedure	266	SYMPTOM DIAGNOSIS	363	
KEY SWITCH	268	SECURITY CONTROL SYSTEM	363	G
Description	268	Symptom Table	363	
Component Function Check	268	VEHICLE SECURITY SYSTEM CAN NOT BE SET	364	H
Diagnosis Procedure	268	Description	364	
Component Inspection	269	Diagnosis Procedure	364	I
STOP LAMP SWITCH	270	SECURITY INDICATOR DOES NOT TURN ON	365	J
Description	270	Description	365	
Component Function Check	270	Diagnosis Procedure	365	
Diagnosis Procedure	270	VEHICLE SECURITY ALARM DOES NOT ACTIVATE	366	
Component Inspection	271	Description	366	
HOOD SWITCH	272	Diagnosis Procedure	366	
Description	272	VEHICLE SECURITY SYSTEM CAN NOT CANCELED	367	
Component Function Check	272	Description	367	M
Diagnosis Procedure	272	Diagnosis Procedure	367	
Component Inspection	273	ENGINE CAN NOT START WITH MECHANI- CAL KEY	368	N
VEHICLE SECURITY INDICATOR	274	Description	368	
Description	274	Diagnosis Procedure	368	O
Component Function Check	274	SECURITY INDICATOR DOES NOT TURN ON OR FLASH	369	
Diagnosis Procedure	274	Description	369	P
ULTRA SONIC SENSOR	276	Diagnosis Procedure	369	
Description	276	PRECAUTION	370	
Component Function Check	276	PRECAUTIONS	370	
Diagnosis Procedure	276	Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER"	370	
SIREN CONTROL UNIT SIGNAL CIRCUIT	278			
Description	278			
Component Function Check	278			
Diagnosis Procedure	278			
ECU DIAGNOSIS	279			
BCM (BODY CONTROL MODULE)	279			
Reference Value	279			
Wiring Diagram - THEFT WARNING SYSTEM - ..	296			
Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -	303			
Wiring Diagram - NATS -	310			
Fail Safe	314			

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect	370
ON-VEHICLE REPAIR	371
NATS ANTENNA AMP.	371
Exploded View	371
Removal and Installation	371

ULTRA SONIC SENSOR	372
Exploded View	372
Removal and Installation	372
HOOD SWITCH	373
Exploded View	373
Removal and Installation	373

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

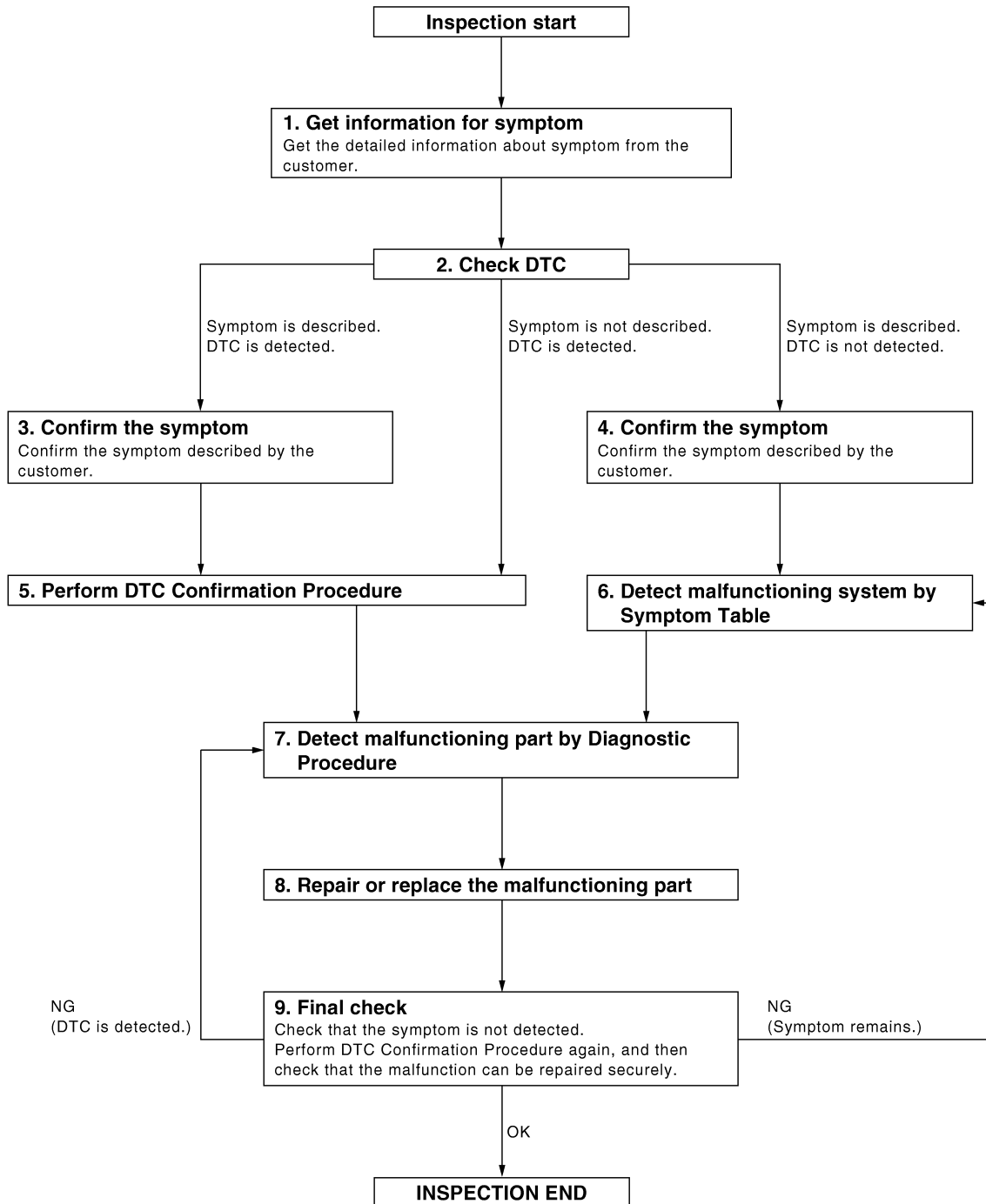
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000001569825

OVERALL SEQUENCE



DETAILED FLOW

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2.CHECK DTC

1. Check DTC for Intelligent Key unit and BCM.
2. Perform the following procedure if DTC is displayed.
 - 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.

Is any symptom described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real-time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT-III to the vehicle in "DATA MONITOR " mode and check real-time diagnosis results.
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 displayed DTC, and then check that DTC is detected again.
If two or more DTCs are detected, refer to [SEC-153, "DTC Inspection Priority Chart"](#) (Intelligent Key unit), [SEC-118, "DTC Inspection Priority Chart"](#) (BCM) and determine trouble diagnosis order.

Is DTC detected?

- YES >> GO TO 7.
- NO >> Refer to [GI-39, "Intermittent Incident"](#).

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 7.

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure is described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

>> GO TO 8.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

>> GO TO 9.

9.FINAL CHECK

When DTC was detected in step 9, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunctions have been fully repaired.

When symptom was described by the customer, refer to the confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Are all malfunctions corrected?

NO (DTC is detected)>>GO TO 7.

NO (Symptom remains)>>GO TO 6.

YES >> **INSPECTION END**

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000001286481

Perform the system initialization when replacing BCM, replacing Intelligent Key unit or registering an additional Intelligent Key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000001286482

Refer to the CONSULT-III Operation Manual-NATS.

ECM RE-COMMUNICATING FUNCTION

ECM RE-COMMUNICATING FUNCTION : Description

INFOID:000000001286483

Performing following procedure can automatically perform re-communication of ECM and BCM, but only when the ECM has been replaced with a new one (*1).

*1: New one means a virgin ECM which has never been energized on-board.

(In this step, initialization procedure by CONSULT-III is not necessary)

NOTE:

- When registering new Key IDs or replacing the ECM that is not brand new, refer to CONSULT-III Operation Manual NATS.
- If multiple keys are attached to the key holder, separate them before work.
- Distinguish keys with unregistered key ID from those with registered ID.

ECM RE-COMMUNICATING FUNCTION : Special Repair Requirement

INFOID:000000001286484

1. PERFORM ECM RE-COMMUNICATING FUNCTION

1. Install ECM.
2. Using a registered key (*2), turn ignition switch to "ON".
*2: To perform this step, use the key that has been used before performing ECM replacement.
3. Maintain ignition switch in "ON" position for at least 5 seconds.
4. Turn ignition switch to "OFF".
5. Start engine.

Can engine be started?

YES >> Procedure is completed.

NO >> Initialize control unit. Refer to CONSULT-III Operation Manual NATS.

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

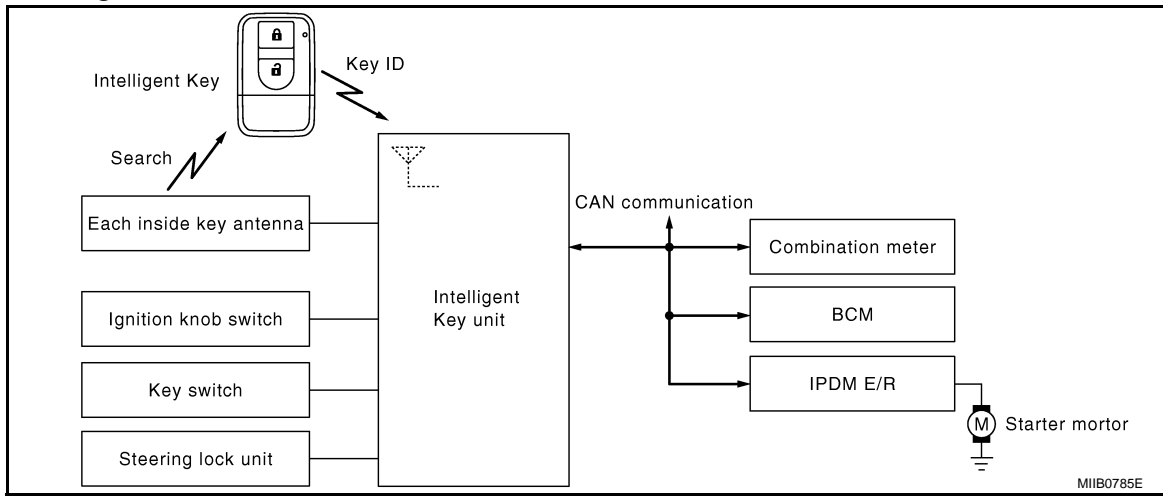
< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

FUNCTION DIAGNOSIS

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

System Diagram



System Description

INFOID:000000001286486

INPUT/OUTPUT SIGNAL CHART

Intelligent Key Unit

Switch/Input signal	Input signal to Intelligent Key unit	Intelligent Key unit function	Actuator/Output signal
Key switch	Mechanical key (insert/remove)	Engine start function	<ul style="list-style-type: none"> KEY warning lamp/buzzer Steering lock unit Starter relay request (to IPDM E/R) Inside key antenna (Instrument center, console, rear seat) Key interlock solenoid
Ignition knob switch	Ignition knob (push/release)		
Steering lock unit	Steering lock (lock/unlock)		
Inside key antenna (Instrument center, console, rear seat)	Intelligent Key (inside antenna detection area or not.)		

IPDM E/R

Switch/Input signal	Input signal to IPDM E/R	IPDM E/R function	Actuator/Output signal
Park/neutral position switch (only for CVT models)	P,N range	Engine start function	<ul style="list-style-type: none"> Starter relay Starter motor

BCM

Switch/Input signal	Input signal to BCM	BCM function	Actuator/Output signal
Stop lamp switch	Brake (press/release)	Engine start function	<ul style="list-style-type: none"> Inside key antenna (Instrument center, console, rear seat)
Key switch	Mechanical key (insert/remove)		

SYSTEM DESCRIPTION

- The engine start function of Intelligent Key system is a system that makes it possible to start and stop the engine without using the key. It verifies the electronic ID using two-way communications when pressing the ignition knob switch while carrying the Intelligent Key, which operates based on the results of electronic ID verification for Intelligent Key using two-way communications between the Intelligent Key and the vehicle.

NOTE:

The driver should carry the Intelligent Key at all times.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- Intelligent Key has 2 IDs (for Intelligent Key and for NATS). It can perform the door lock/unlock operation and the engine start 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 mechanical key set in the Intelligent Key to the ignition key cylinder. At that time, perform the NATS ID verification. If it is used when the Intelligent Key is carried, perform the Intelligent Key ID verification.
- If the ID is successfully verified, and when the ignition knob switch is pressed and the brake pedal is pushed, steering lock will be released and initiating the engine will be possible.
- The door lock/unlock operation can be performed when the Intelligent Key battery is discharged, by operating the driver door key cylinder using the mechanical key set in the Intelligent Key.
- Up to 4 Intelligent Keys can be registered (Including the standard Intelligent Key) on request from the owner.

NOTE:

- Refer to [DLK-30, "INTELLIGENT KEY : System Description"](#) for any functions other than engine start function of Intelligent Key system.

PRECAUTIONS FOR INTELLIGENT KEY SYSTEM

- **In the Intelligent Key system of model J10, the transponder [the chip for 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 the ID verification, and thus it cannot start the engine. Instead, the NATS ID verification can be performed by inserting the mechanical key into the key cylinder, and then it can start the engine.**

OPERATION WHEN INTELLIGENT KEY IS CARRIED

1. When the ignition knob switch and brake switch are ON, and Intelligent Key unit is transmit the request signal to the Intelligent Key.
2. The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the Intelligent Key unit.
3. The Intelligent Key unit receives the Intelligent Key ID signal and verifies it with the registered ID.
4. Intelligent Key unit transmits the steering lock unlock signal to steering lock unit and turn on the key warning lamp (green) if the verification results are OK. (The detail of key warning lamp operation, refer to [DLK-54, "System Description"](#))
5. Release of the steering lock.
6. 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.
7. IPDM E/R turns the starter control relay ON when receiving the starter request signal.
8. When shift position is in P or N position, battery power is supplied through the starter relay and operate the starter motor and to start the cranking.

CAUTION:

If a malfunction is detected in the Intelligent Key system, the red "KEY" warning lamp in the combination meter illuminates. At that time, the engine cannot be started.

OPERATION RANGE

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

OPERATION WHEN MECHANICAL KEY IS USED

When the Intelligent Key battery is discharged, performs the NATS ID verification between the integrated transponder and BCM by inserting the mechanical key into the key cylinder, and then the engine can be started. For details relating to starting the engine using mechanical key, refer to [SEC-16, "System Description"](#).

STEERING LOCK OPERATION

Steering is locked by steering lock unit when ignition switch is in the OFF position (the ignition knob is released) and key switch is OFF (key is removed from ignition key cylinder).

KEY INTERLOCK OPERATION (ONLY FOR MT MODELS)

In case of a MT vehicle is in motion and ignition is turned into LOCK position, steering lock unit causes a risk by activating the steering lock actuator. The key interlock operation is designed to override the steering lock system and prevent the situation mentioned above from occurring.

LOCK condition

When the following conditions are fulfilled, key interlock solenoid will be locked. (Steering lock inactive)

- 1 second passes after ignition switch is in ON position and engine revolution speed goes above 500 rpm.

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

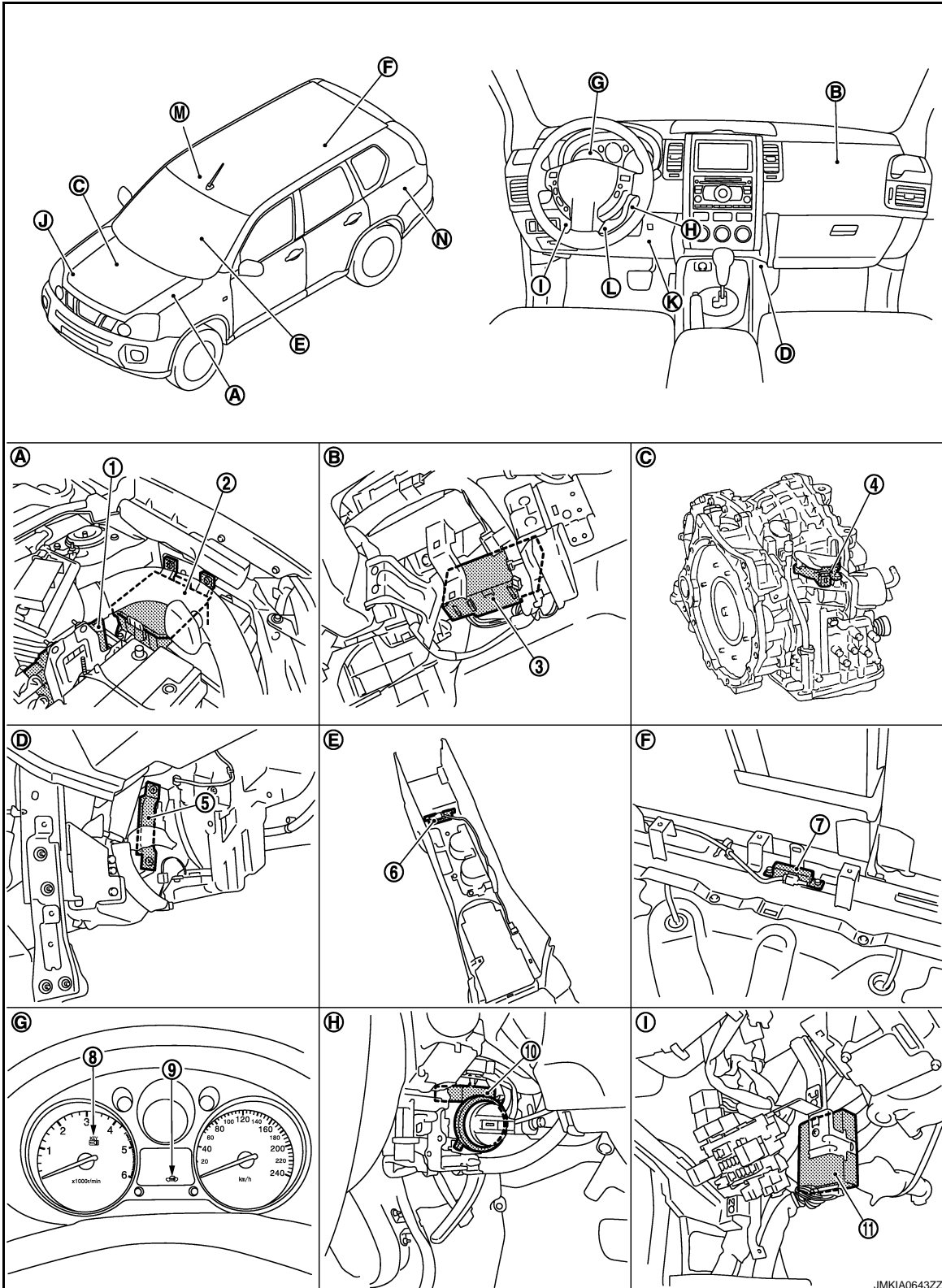
UNLOCK condition

When any of the following condition are fulfilled key interlock solenoid will be unlocked. (Steering lock active)

- When vehicle speed is below 4km/h and the ignition switch is turned from ON to OFF.
- When vehicle speed is over 4km/h but less than 10km/h, and 3 second passes after the ignition switch is turned from ON to OFF.

Component Parts Location

INFOID:000000001286487



A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

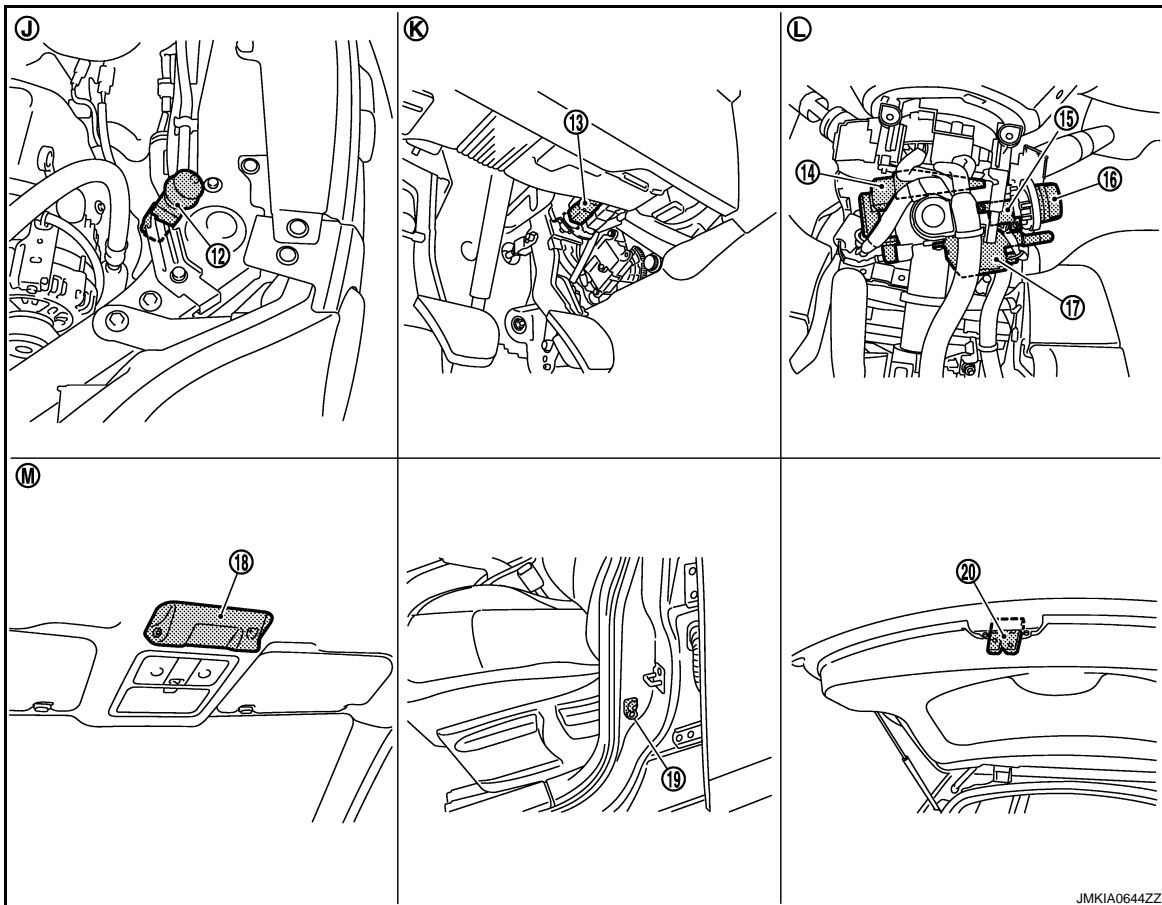
SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- | | | |
|---|--|--|
| 1. ECM
With MR engine E16
With QR engine E19
Diesel engine E60 | 2. IPDM E/R
E10, E11, E13, E14,15 | 3. BCM
M65, M66, M67 |
| 4. Park/neutral position switch
With CVT F21
With A/T F22 | 5. Inside key antenna (instrument center)
M56 | 6. Inside key antenna (console)
M252 |
| 7. Inside key antenna (rear seat) B45 | 8. Combination meter (key warning lamp) M34 | 9. Combination meter (security indicator lamp) M34 |
| 10. NATS antenna amp.
M26 | 11. Intelligent Key unit M40 | |
| A. Engine room (LH) | B. Over the glove box | C. CVT unit |
| D. View with instrument lower cover RH removed. | E. View with r | F. View with luggage floor spacer (LH) removed |
| G. Built in combination meter | H. Built in combination meter | I. Over the instrument lower panel (driver side) |



JMKIA0644ZZ

- | | | |
|--|--|---|
| 12. Hood switch
E113 | 13. Stop lamp switch
M/T models: E114
Except M/T models: E115 | 14. Steering lock unit
M28 |
| 15. Ignition knob switch, key switch and key lock solenoid (key switch)
M25 | 16. Ignition knob switch, key switch and key lock solenoid (ignition knob switch)
M25 | 17. Ignition knob switch, key switch and key lock solenoid (key lock solenoid)
M25 |
| 18. Ultra sonic sensor R11 | 19. Front door switch (driver side) B34 | 20. Back door lock assembly D190 |

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- | | | |
|---|--|--|
| J. Engine room RH | K. Remove lower instrument panel (driver side) | L. View with steering column cover removed |
| M. View with ultra sonic sensor located in the front headlining | | |

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

Component Description

INFOID:000000001286488

Component	Reference
Intelligent Key unit	SEC-56
BCM	BCS-9
ECM	MR20 : ECM-19 QR25 (WITH EURO-OBD): ECQ-22 QR25 (WITHOUT EURO-OBD): ECQ-371 M9R: ECR-20
Combination meter	MWI-5
Steering lock unit	SEC-45
Ignition knob switch, key switch and key lock solenoid	SEC-64
Inside key antenna	DLK-119
Stop lamp switch	SEC-66
Security indicator	SEC-70

SEC

NATS (NISSAN ANTI-THEFT SYSTEM)

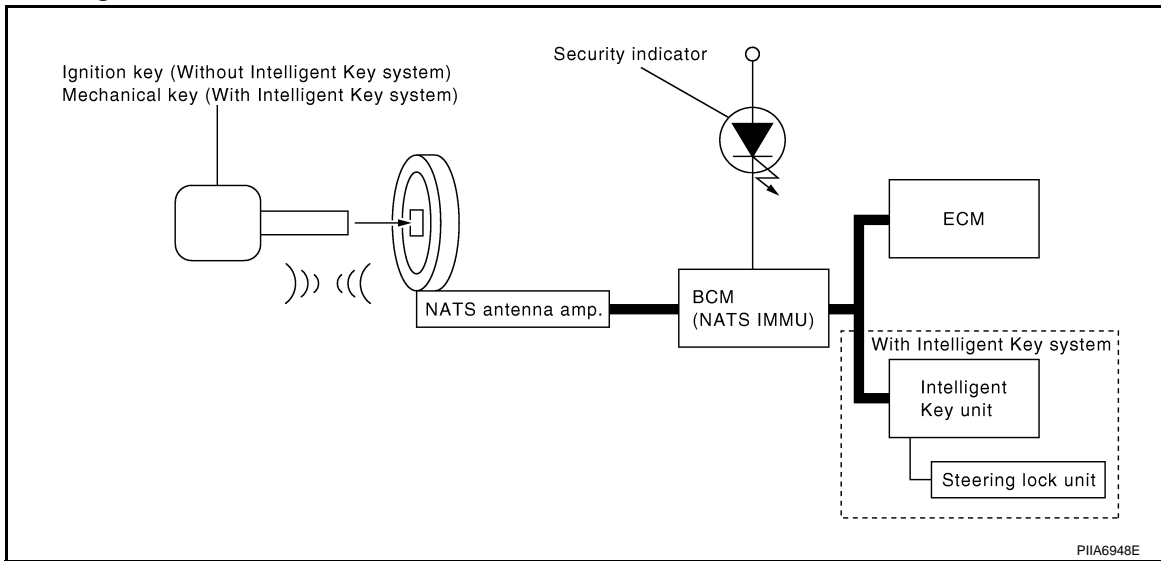
< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM)

System Diagram

INFOID:000000001286489



PIIA6948E

System Description

INFOID:000000001286490

INPUT/OUTPUT SIGNAL CHART

Intelligent Key Unit

Switch/Input signal	Input signal to BCM	Intelligent Key unit function	Actuator/Output signal
Ignition knob switch	Ignition knob (push/release)	NATS	Steering lock unit
Key switch	Mechanical key (Insert/remove)		
Steering lock unit	Steering (lock/unlock)		
ECM	Engine status signal		

BCM

Switch/Input signal	Input signal to BCM	BCM function	Actuator/Output signal
NATS antenna amp.	Key ID	NATS	<ul style="list-style-type: none"> Security indicator lamp Starter request
Audio unit	Audio unit ID		
ECM	Engine status signal		

SYSTEM DESCRIPTION

NATS (Nissan Anti-Theft System) has the following immobilizer functions:

- Engine immobilizer shows high anti-theft performance to prevent engine from starting by other than the owner.
- Only a key with key ID registered in BCM and ECM can start engine, and shows high anti-theft performance to prevent key from being copied or stolen.
- Security indicator always flashes with mechanical key removed condition (key switch: OFF) and ignition knob released condition on LOCK position (ignition knob switch: OFF).
- Therefore, NATS warns outsiders that the vehicle is equipped with the anti-theft system. Refer to [SEC-21, "System Description"](#).
- If system detects malfunction, security indicator illuminates when ignition switch is turned to ON position.
- If the owner requires, ignition key ID or mechanical key ID can be registered for up to 5 keys.

NATS (NISSAN ANTI-THEFT SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

- During trouble diagnosis or when the following parts have been replaced, and if mechanical key is added, registration* is required.
 - *1: All keys kept by the owner of the vehicle should be registered with mechanical key.
- ECM
- BCM
- Mechanical key
- EPS control unit
- IPDM E/R
- Combination meter
- NATS trouble diagnosis, system initialization and additional registration of other mechanical key IDs must be carried out using CONSULT-III hardware and SECURITY CARD.
When NATS initialization has been completed, the ID of the inserted mechanical key or mechanical key IDs can be carried out.
- Possible symptom of NATS malfunction is "Engine cannot start". The engine can be started with the Intelligent Key system and NATS. Identify the possible causes according to "Work Flow", Refer to [SEC-7. "Work Flow"](#).
- If ECM other than Genuine NISSAN is installed, the engine cannot be started. For ECM replacement procedure, refer to [SEC-10. "ECM RE-COMMUNICATING FUNCTION : Description"](#).

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current NATS ID once, and then re-registers a new ID. Therefore the registered Intelligent Key is necessary for this procedure. Before starting the registration operation collect all registered Intelligent Keys from the customer.
- The NATS ID registration is the procedure that registers the ID stored into the transponder (integrated in mechanical key) to BCM.
The Intelligent Key ID registration is the procedure that registers the ID to Intelligent Key unit.
- When performing the Intelligent Key system registration only, the engine cannot be started by inserting the key into the key cylinder. When performing the NATS registration only, the engine cannot be started by using the mechanical key.

SECURITY INDICATOR

- Always flashes with ignition knob released (ignition knob switch: OFF) condition on ignition knob LOCK position.
- Always flashes with ignition knob released (ignition knob switch: OFF) condition on mechanical key removed position.

MAINTENANCE INFORMATION

CAUTION:

It is necessary to perform NATS ID registration when replacing any of the following part.

• ECM

For RHD vehicles, it is necessary to perform NATS ID registration when replacing any of the following part with a used parts.

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

*: A new part should register automatically after the ignition switch is turned ON.

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

- EPS control unit
- IPDM E/R
- Combination meter

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

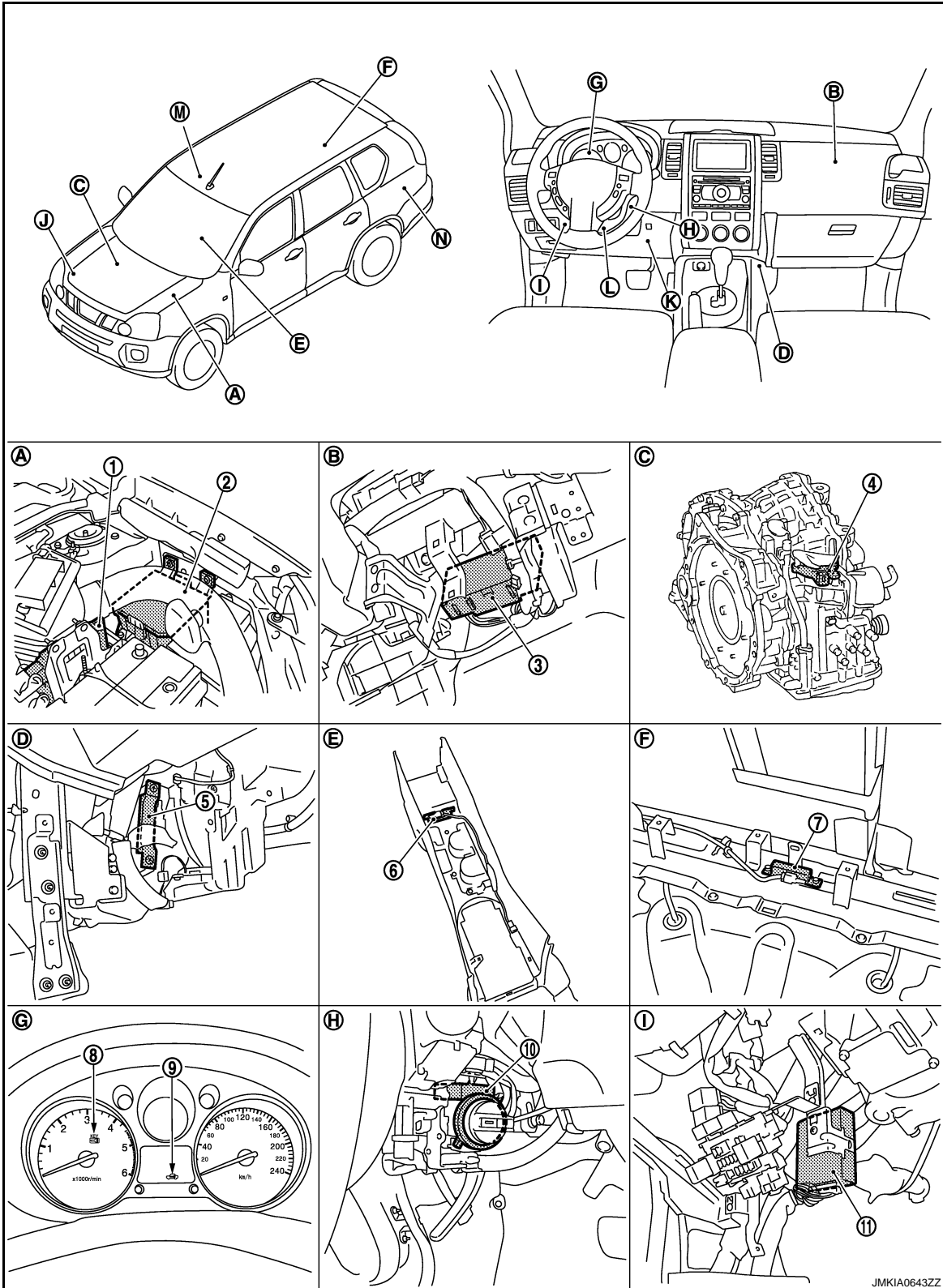
NATS (NISSAN ANTI-THEFT SYSTEM)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Component Parts Location

INFOID:000000001485193

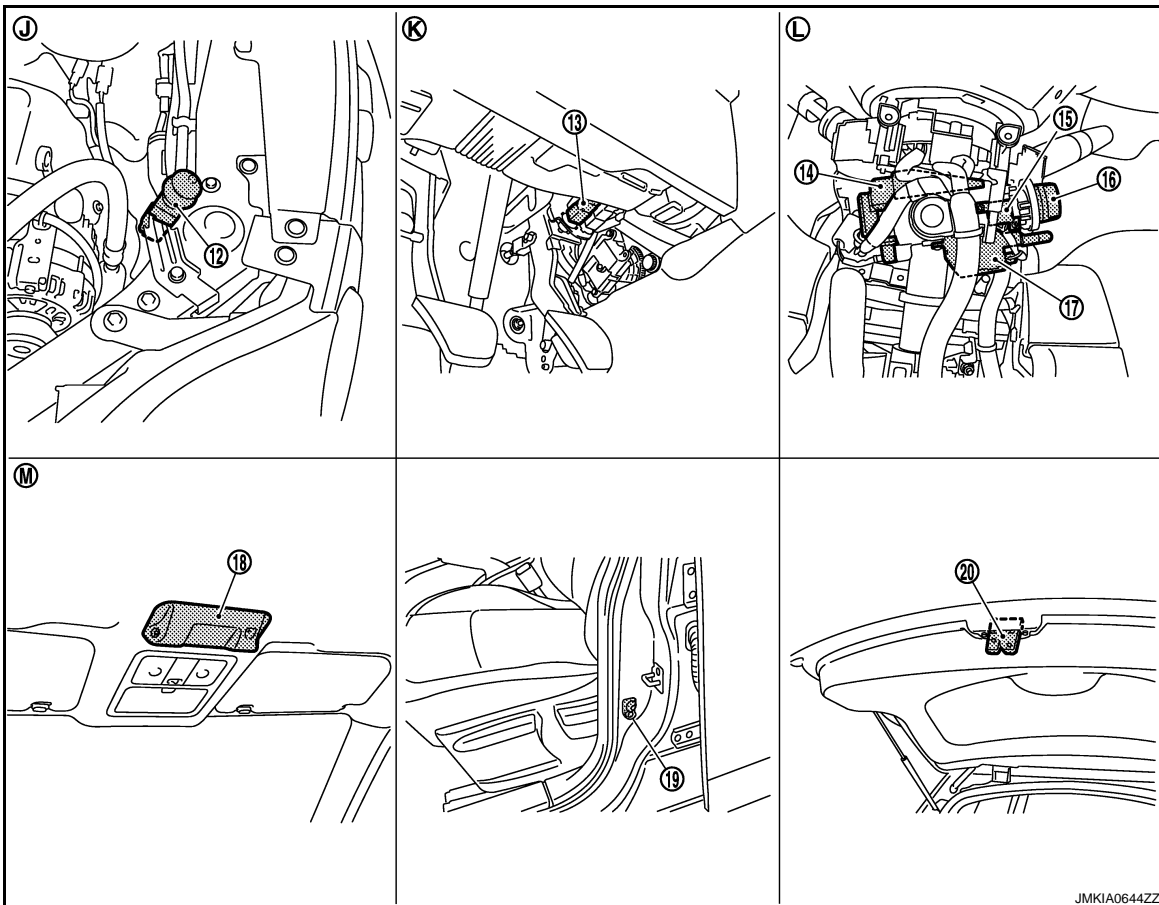


NATS (NISSAN ANTI-THEFT SYSTEM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

- | | | | |
|---|--|--|---|
| 1. ECM
With MR engine E16
With QR engine E19
Diesel engine E60 | 2. IPDM E/R
E10, E11, E13, E14,15 | 3. BCM
M65, M66, M67 | A |
| 4. Park/neutral position switch
With CVT F21
With A/T F22 | 5. Inside key antenna (instrument center)
M56 | 6. Inside key antenna (console)
M252 | B |
| 7. Inside key antenna (rear seat) B45 | 8. Combination meter (key warning lamp) M34 | 9. Combination meter (security indicator lamp) M34 | C |
| 10. NATS antenna amp.
M26 | 11. Intelligent Key unit M40 | | D |
| A. Engine room (LH) | B. Over the glove box | C. CVT unit | E |
| D. View with instrument lower cover RH removed. | E. View with r | F. View with luggage floor spacer (LH) removed | F |
| G. Built in combination meter | H. Built in combination meter | I. Over the instrument lower panel (driver side) | G |



- | | | | |
|--|--|---|---|
| 12. Hood switch
E113 | 13. Stop lamp switch
M/T models: E114
Except M/T models: E115 | 14. Steering lock unit
M28 | H |
| 15. Ignition knob switch, key switch and key lock solenoid (key switch)
M25 | 16. Ignition knob switch, key switch and key lock solenoid (ignition knob switch)
M25 | 17. Ignition knob switch, key switch and key lock solenoid (key lock solenoid)
M25 | I |
| 18. Ultra sonic sensor R11 | 19. Front door switch (driver side) B34 | 20. Back door lock assembly D190 | J |

SEC

NATS (NISSAN ANTI-THEFT SYSTEM)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- J. Engine room RH
K. Remove lower instrument panel (driver side)
L. View with steering column cover removed
M. View with ultra sonic sensor located in the front headlining

Component Description

INFOID:000000001286492

Component	Reference
BCM	BCS-9
Steering lock unit	SEC-45
Key switch	SEC-61
Ignition knob switch	SEC-64
NATS antenna amp.	SEC-254
Security indicator	SEC-274
IPDM E/R	PCS-3

VEHICLE SECURITY SYSTEM

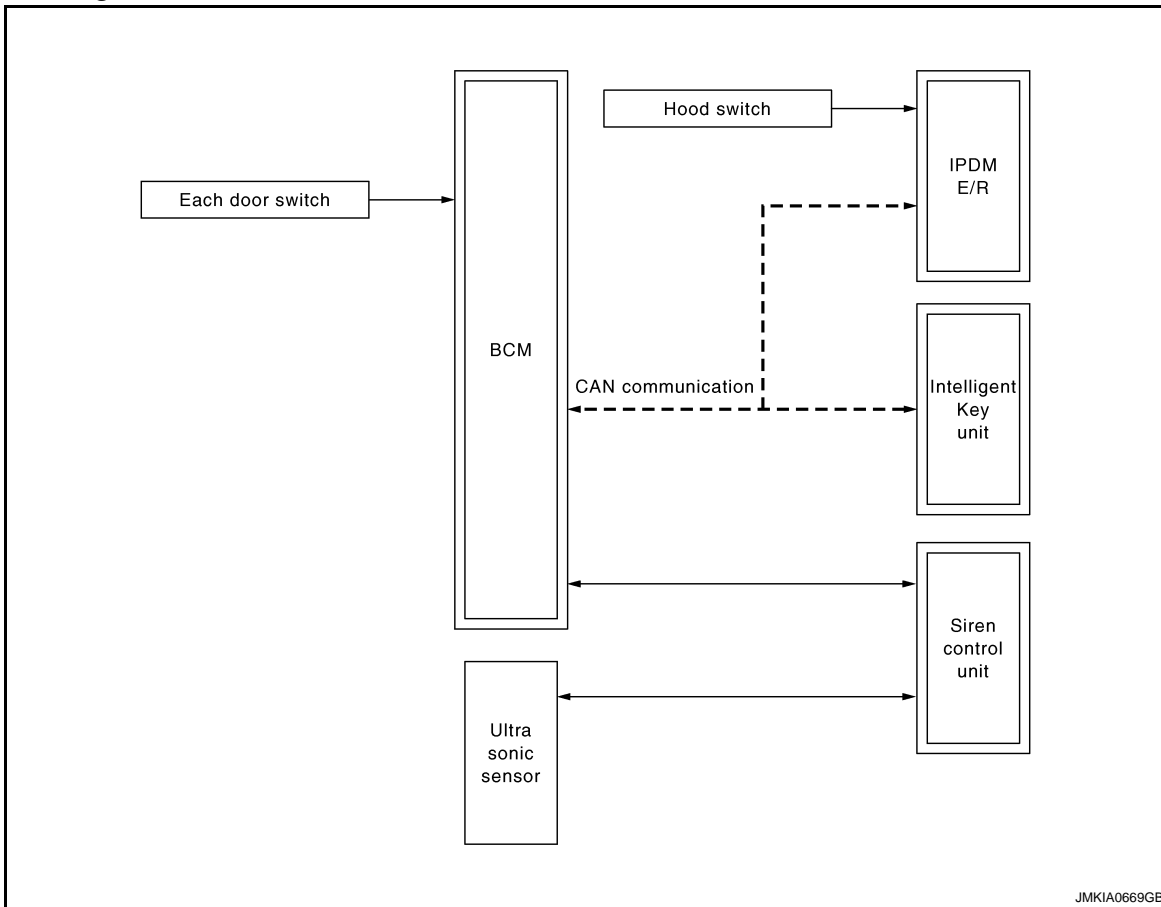
< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

System Diagram

INFOID:000000001286493



JMKIA0669GB

System Description

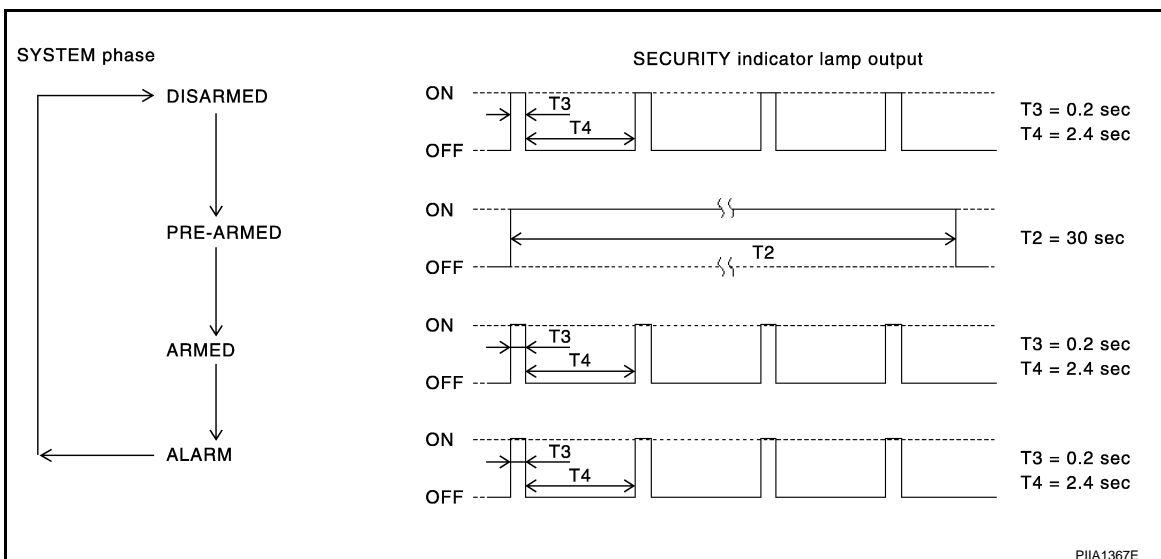
INFOID:000000001286494

DESCRIPTION

The security system provides an audible and visual alarm when an unauthorized access to the vehicle is detected while the system is in armed phase.

The security system consist of two control units. The BCM relays door status, arming state, etc, to the siren control unit. The siren control unit manages the alarm function and the audible alarm (siren).

OPERATION FLOW



PIIA1367E

VEHICLE SECURITY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

BCM shifts the phase as follows and the phase information is sent to siren control unit via communication line.

Disarmed Phase

When the vehicle is being driven or when doors are open, the theft warning system is set in the disarmed phase on the assumption that the owner is inside or near the vehicle.

Pre-Armed Phase And Armed Phase

The vehicle security system turns into the pre-armed phase when ignition switch is in OFF position, all doors are closed and locked (using Intelligent Key, door request switch or auto relock function). 20 seconds after the lock operation, the system automatically shifts into the armed phase.

Condition of Activating The System

When the following condition is performed in armed phase, the system sounds the siren and flashes the head lamps for about 30 seconds.

- Hood or any door is opened.
- Ultra sonic sensor is triggered.
- Ignition switch goes ON with invalid transponder ID.

Condition of Deactivating The System

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

- Unlock the doors with Intelligent Key or door request switch.
- Ignition switch goes ON with transponder ID verified.

SIREN CONTROL UNIT

Siren control unit manages siren. The siren control unit does not shift to armed phase in the same way as BCM. The siren control unit goes to armed phase after about 20 seconds from lock command. If door is opened or closed within about 20 seconds, only the siren will be activated.

Siren control unit has battery inside. If disconnect or connect battery terminal before canceling armed phase, siren will be activated.

Ultra Sonic Sensor Function

The ultra sonic sensor consist of two separate units, a transmitter on the left and receiver on the right mounted on room mirror. The LH transmitter sensor sends an ultra sonic pulse of sound, and RH receiver sensor receives the returning echo pulse.

It is possible to exclude the ultrasonic sensors.

To exclude the ultra sonic sensors:

1. Turn the ignition switch from the OFF to the ON position.
2. Turn the ignition switch from OFF to ON 3 times within 7 seconds.
3. Close the doors, bonnet and press the lock button on the Intelligent Key to lock all doors.

The ultra sonic sensors are now excluded from the alarm system. All other functions of the system remain activated until the alarm system is disarmed again.

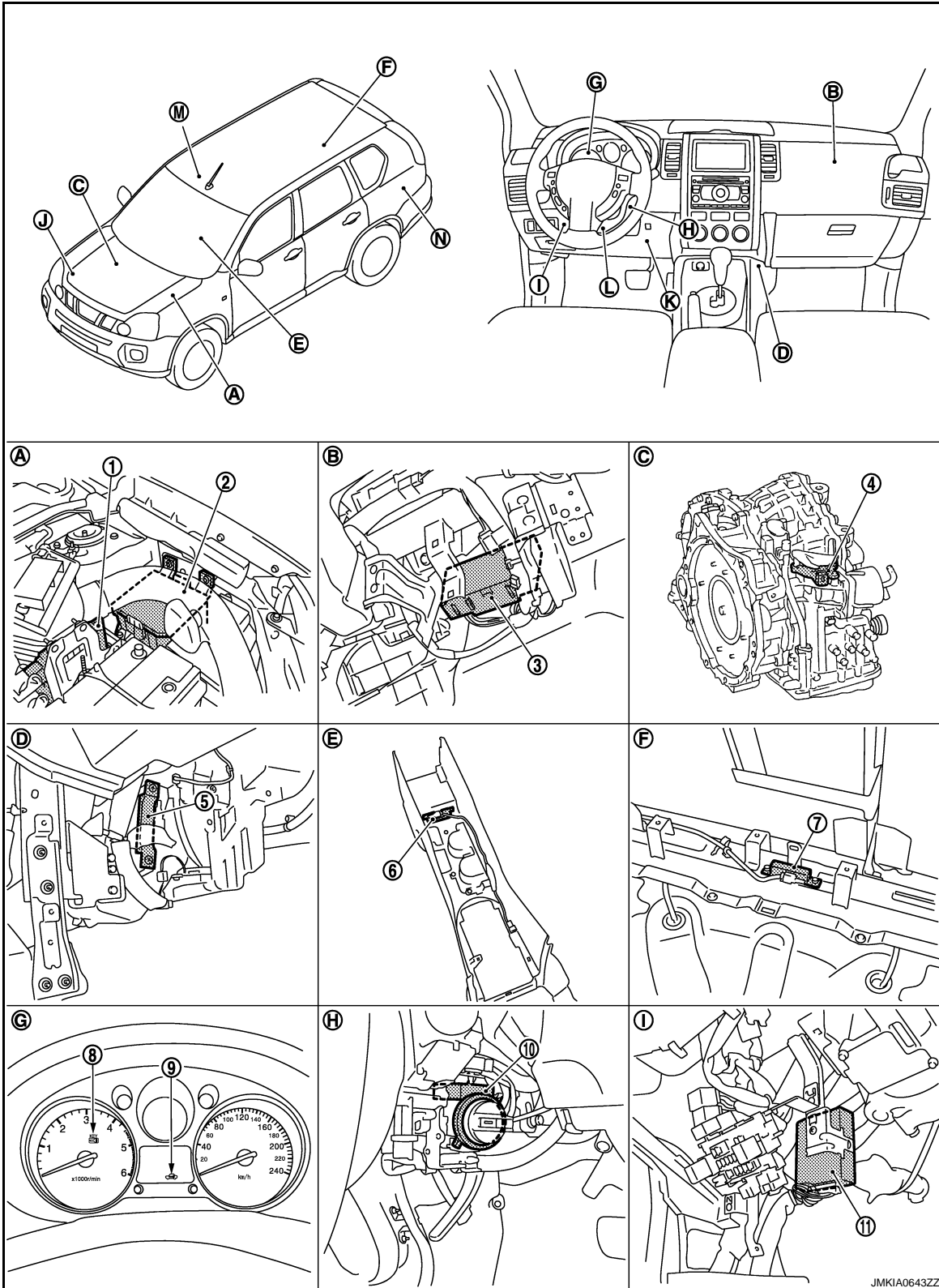
VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Component Parts Location

INFOID:000000001485194



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

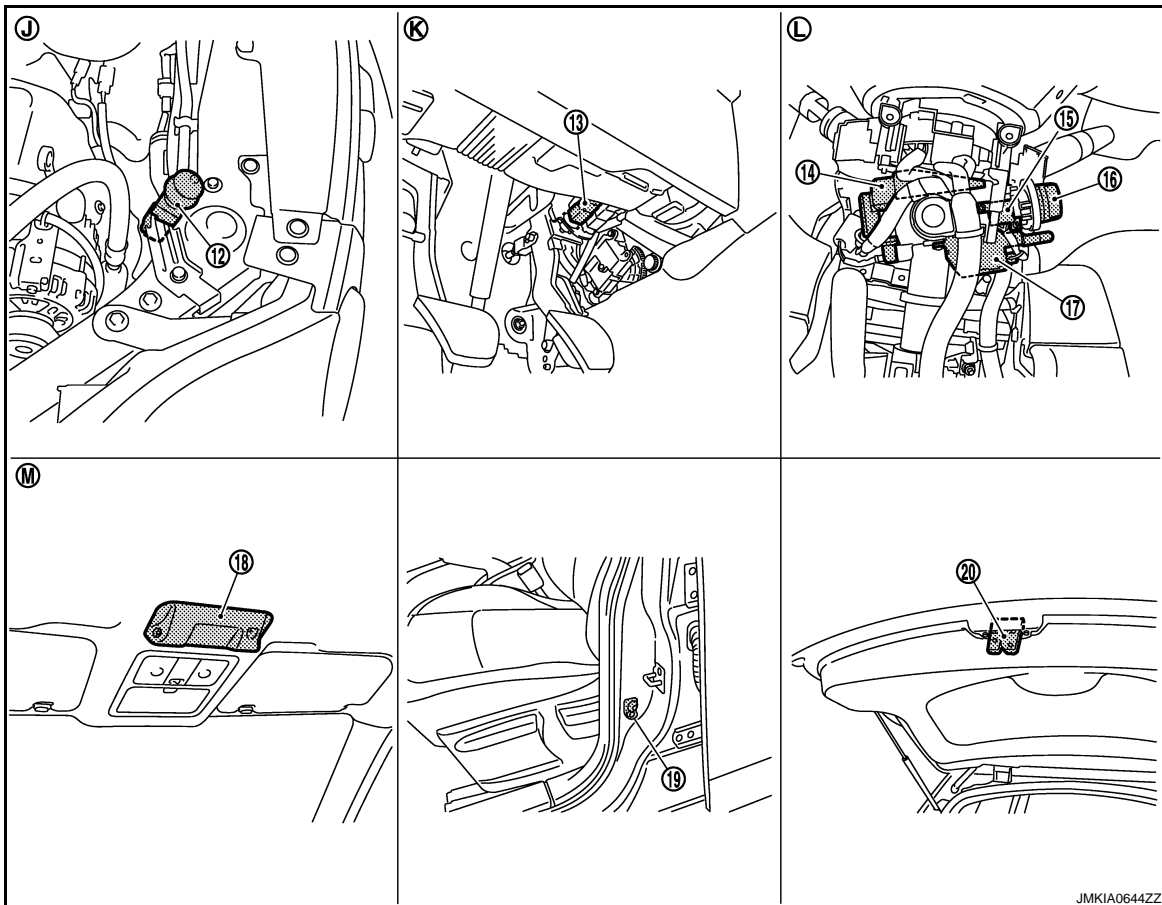
SEC

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- | | | |
|---|--|--|
| 1. ECM
With MR engine E16
With QR engine E19
Diesel engine E60 | 2. IPDM E/R
E10, E11, E13, E14,15 | 3. BCM
M65, M66, M67 |
| 4. Park/neutral position switch
With CVT F21
With A/T F22 | 5. Inside key antenna (instrument center)
M56 | 6. Inside key antenna (console)
M252 |
| 7. Inside key antenna (rear seat) B45 | 8. Combination meter (key warning lamp) M34 | 9. Combination meter (security indicator lamp) M34 |
| 10. NATS antenna amp.
M26 | 11. Intelligent Key unit M40 | |
| A. Engine room (LH) | B. Over the glove box | C. CVT unit |
| D. View with instrument lower cover RH removed. | E. View with r | F. View with luggage floor spacer (LH) removed |
| G. Built in combination meter | H. Built in combination meter | I. Over the instrument lower panel (driver side) |



JMKIA0644ZZ

- | | | |
|--|--|---|
| 12. Hood switch
E113 | 13. Stop lamp switch
M/T models: E114
Except M/T models: E115 | 14. Steering lock unit
M28 |
| 15. Ignition knob switch, key switch and key lock solenoid (key switch)
M25 | 16. Ignition knob switch, key switch and key lock solenoid (ignition knob switch)
M25 | 17. Ignition knob switch, key switch and key lock solenoid (key lock solenoid)
M25 |
| 18. Ultra sonic sensor R11 | 19. Front door switch (driver side) B34 | 20. Back door lock assembly D190 |

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- J. Engine room RH
K. Remove lower instrument panel (driver side)
L. View with steering column cover removed
M. View with ultra sonic sensor located in the front headlining

Component Description

INFOID:000000001286496

Component	Reference
BCM	BCS-9
Hood switch	SEC-272
Security indicator	SEC-274
Door switch	DLK-83
Siren control unit	SEC-74
Ultra sonic sensor	SEC-72

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000001569647

APPLICATION ITEM

CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Results	Displays the diagnosis results judged by BCM. Refer to SEC-119, "DTC Index" .
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from 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	CONSULT-III sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER	×	×	×
Warning chime	BUZZER		×	×
Interior room lamp control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
—	PTC HEATER*			

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

IMMU

IMMU : CONSULT-III Function (BCM - IMMU)

INFOID:000000001286498

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.

DATA MONITOR

Monitor item	Content
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.

*1: For the vehicle Intelligent key is equipped.

ACTIVE TEST

Test item	Description
THEFT IND	This test is able to check security indicator operation [ON/OFF].

THEFT ALM

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

INFOID:000000001286499

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
KEYLESS LOCK*2	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK*2	Indicates [ON/OFF] condition of unlock signal from key fob.
I-KEY LOCK*1	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK*1	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
HOOD SW	Indicates [ON/OFF] condition of hood switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.

*1: For vehicle equipped with Intelligent Key.

*2: For the vehicle equipped with remote key less entry system.

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ACTIVE TEST

Test item	Description
THEFT IND	This test is able to check security indicator operation [ON/OFF].
VEHICLE SECURITY HORN	This test is able to check horn operation [ON].
FLASHER	This test is able to check flasher operation [LH/RH/OFF].

WORK SUPPORT

Test item	Description
SECURITY ALARM SET	Vehicle security function mode can be changed in this mode. <ul style="list-style-type: none">• ON: Vehicle security function is ON.• OFF: Vehicle security function is OFF.
THEFT ALM TRG	The switch which triggered vehicle security system is recorded. This mode can be able to confirm and erase the record of vehicle security system.

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

CONSULT-III Function (INTELLIGENT KEY)

INFOID:000000001286500

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with Intelligent Key unit.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
SELF-DIAG RESULTS	Displays the diagnosis results judged by Intelligent Key unit.
CAN DIAG SUPPORT MNTR	Monitors the reception status of CAN communication viewed from Intelligent Key unit.
DATA MONITOR	The Intelligent Key unit input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.
ECU IDENTIFICATION	The Intelligent Key unit part number is displayed.

WORK SUPPORT

Support item	Description	Selection item	Condition
CONFIRM KEY FOB ID	It can check whether Intelligent Key ID code is registered or not.	—	—
TAKE OUT FROM WINDOW WARN	Take away warning chime (from window) mode can be changed.	ON	Active
		OFF	Inactive
LOW BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed.	ON	Active
		OFF	Inactive
KEYLESS FUNCTION	Door lock function with Intelligent Key can be changed.	ON	Active
		OFF	Inactive
ANSWER BACK FUNCTION	Buzzer reminder operation can be changed.	ON	Active
		OFF	Inactive
SELECTIVE UNLOCK FUNCTION	Anti-hijack mode can be changed.	ON	Active
		OFF	Inactive
HAZARD ANSWER BACK	Hazard reminder operation mode can be changed.	Refer to SEC-11 .	
ANSWER BACK WITH I-KEY LOCK	Buzzer reminder operation (lock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
ANSWER BACK WITH I-KEY UNLOCK	Buzzer reminder operation (unlock operation) mode by each door request switch can be changed.	BUZZER	Active
		OFF	Inactive
AUTO RELOCK TIMER	Auto door lock operation mode can be changed.	OFF	Inactive
		2 min	Active
ENGINE START BY I-KEY	Engine start function (by Intelligent Key) mode can be changed.	ON	Active
		OFF	Inactive
LOCK/UNLOCK BY I-KEY	Door lock function by door request switch can be changed.	ON	Active
		OFF	Inactive

SELF-DIAG RESULT

Refer to [SEC-153, "DTC Index"](#).

DATA MONITOR

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition
PUSH SW	Indicates [ON (pressed)/OFF (released)] condition of ignition knob switch.
KEY SW	Indicates [ON (inserted)/OFF (removed)] condition of key switch.
DR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (driver side).
AS REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (passenger side).
BD/TR REQ SW	Indicates [ON (pressed)/OFF (released)] condition of door request switch (back door).
IGN SW	Indicates [ON (ON or START position)/OFF (other than ON and START position)] condition of ignition switch ON position.
ACC SW	Indicates [ON/OFF] condition of ignition switch ACC position.
STOP LAMP SW	Indicates [ON/OFF] condition of stop lamp switch.
DOOR LOCK SIG	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
DOOR UNLOCK SIG	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
DOOR SW DR	Indicates [OPEN/CLOSE] condition of front door switch (driver side) from BCM via CAN communication.
DOOR SW AS	Indicates [OPEN/CLOSE] condition of front door switch (passenger side) from BCM via CAN communication.
DOOR SW RR	Indicates [OPEN/CLOSE] condition of rear door switch (RH) from BCM via CAN communication.
DOOR SW RL	Indicates [OPEN/CLOSE] condition of rear door switch (LH) from BCM via CAN communication.
DOOR BK SW	Indicates [OPEN/CLOSE] condition of back door switch from BCM via CAN communication.
VEHICLE SPEED	Displays the vehicle speed signal received from combination meter by numerical value [km/h].

ACTIVE TEST

Test item	Description
DOOR LOCK/UNLOCK	<p>This test is able to check door lock/unlock operation.</p> <ul style="list-style-type: none"> • ALL UNLK: All door lock actuators are unlocked. • DR UNLK: Door lock actuator (driver side) is unlocked. • AS UNLK: Door lock actuator (passenger side) is unlocked. • BK UNLK: This item is indicated, but inactive. • LOCK: All door lock actuator is locked.
ANTENNA	<p>This test is able to check Intelligent Key antenna operation.</p> <p>When the following condition are met, hazard warning lamps flash.</p> <ul style="list-style-type: none"> • ROOM ANT1: Inside key antenna (console) detects Intelligent Key, when "ROOM ANT1" is selected. • ROOM ANT2: Inside key antenna (instrument center/rear seat) detects Intelligent Key, when "ROOM ANT2" is selected. • DRIVER ANT: Outside key antenna (driver side) detects Intelligent Key, when "DRIVER ANT" is selected. • ASSIST ANT: Outside key antenna (passenger side) detects Intelligent Key, when "ASSIST ANT" is selected. • BK DOOR ANT: Outside key antenna (rear bumper) detects Intelligent Key, when "BK DOOR ANT" is selected.
OUTSIDE BUZZER	<p>This test is able to check Intelligent Key warning buzzer operation.</p> <ul style="list-style-type: none"> • ON • OFF
INSIDE BUZZER	<p>This test is able to check warning chime in combination meter operation.</p> <ul style="list-style-type: none"> • TAKE OUT: Take away warning chime sounds. • KNOB: Ignition knob switch warning chime sounds. • KEY: Key warning chime sounds. • OFF

DIAGNOSIS SYSTEM (INTELLIGENT KEY UNIT)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Test item	Description	A
INDICATOR	This test is able to check warning lamp operation. <ul style="list-style-type: none">• BLUE ON: Key warning lamp (green) illuminates.• RED ON: Key warning lamp (red) illuminates.• KNOB ON: Lock warning lamp illuminates.• BLUE IND: Key warning lamp (green) flashes.• RED IND: Key warning lamp (red) flashes.• KNOB IND: Lock warning lamp flashes.• OFF	B
KEY LOCK SOLENOID* ¹	This test is able to check key interlock operation. <ul style="list-style-type: none">• LOCK: Key interlock is active.• UNLOCK: Key interlock is inactive.	C

*¹: The item is only for MT model.

E

F

G

H

I

J

SEC

L

M

N

O

P

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

Diagnosis Description

INFOID:000000001539576

SELF-DIAGNOSIS MODE

The siren control unit possess the self-diagnosis function and can detect the theft warning system malfunction. The self-diagnosis modes are the following:

- Siren control unit circuit diagnosis
- Alarm data display
- System diagnosis

The self-diagnosis results are display by the number of time the hazard blinks or by siren sounds.

• **NOTE:**

The siren sounds in this order (alarm data display, system diagnosis). The siren sound interpretation is very complex, please refer to an example of self-diagnosis results and then perform the diagnosis several times.

OPERATION PROCEDURE

1. Connect the CONSULT-III.
2. Turn the key to ON position.
3. Perform the work support mode security alarm setting.
4. Turn the security alarm set to OFF.
5. The self-diagnosis will automatically start 2 seconds after turning again the security alarm set to ON.

NOTE:

Perform the siren control unit self-diagnosis if the self-diagnosis does not start automatically.

SELF-DIAGNOSIS RESULT

The self-diagnosis results are displayed in the order below.

1. **Siren control unit circuit diagnosis display**

Perform the siren control unit wires connection status diagnosis and display the results.

Normal: The hazard lamp blinks 3 times after 2 seconds and the alarm data display will start.

Circuit is malfunctioning: The hazard lamp does not blink and the self-diagnosis will not start.

2. **Alarm data display**

Siren control unit sounds the alarm, and display the cause of the alarm start-up.

Refer to SELF-DIAGNOSIS RESULT TABLE (alarm data).

No data displayed: The system diagnosis results will be displayed.

Data displayed: The alarm indicates an item related to the number of time it sounds.

NOTE:

A maximum of 3 alarm latest data can be memorized.

CAUTION:

The alarm data will disappear as soon as the system is shifted to ARMED mode.

3. **System diagnosis results display**

Perform the theft warning system diagnosis.

Refer to SELF-DIAGNOSIS RESULT TABLE (malfunctioning part).

Malfunction is not detected: Finish the self-diagnosis

Malfunction is detected: The alarm indicates an item related to the number of time it sounds.

SELF-DIAGNOSIS RESULT TABLE

Alarm data

No. of time the alarm sounds	Alarm start-up condition
1st time	Battery removed.
2nd time	Hood or Door open/close
3rd time	Disconnection between the BCM and the siren control unit wires or malfunction.
4th time	Ultra sonic sensor has detected an intrusion.
5th time	Operate ignition switch with an unregistered key.
6th time	Disconnection between the siren control unit and ultra sonic sensor wires.

Malfunctioning part

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

< FUNCTION DIAGNOSIS >

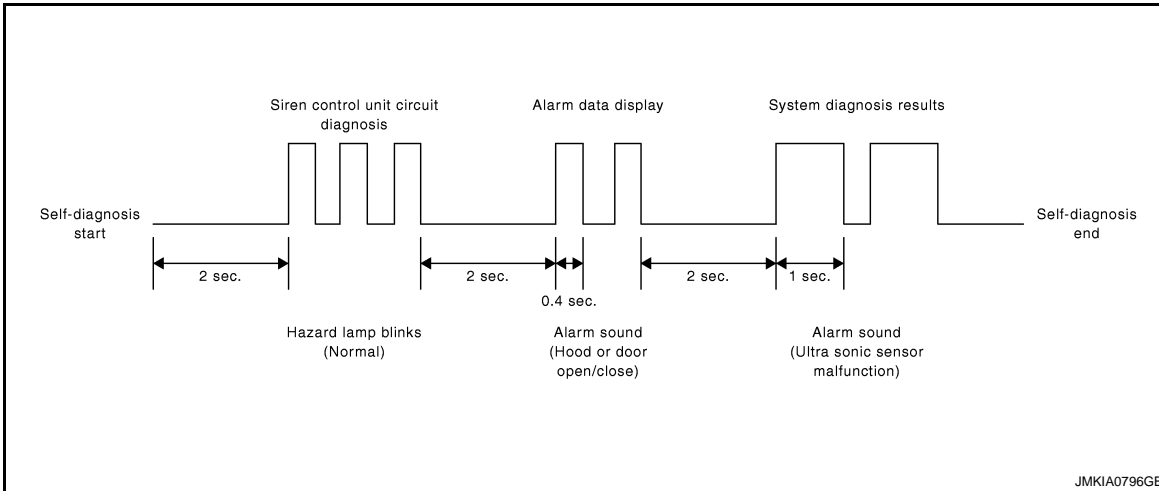
[WITH INTELLIGENT KEY SYSTEM]

No. of time the alarm sounds	Malfunctioning parts
1st time	Siren control unit
2nd time	Ultra sonic sensor

Self-diagnosis result examples

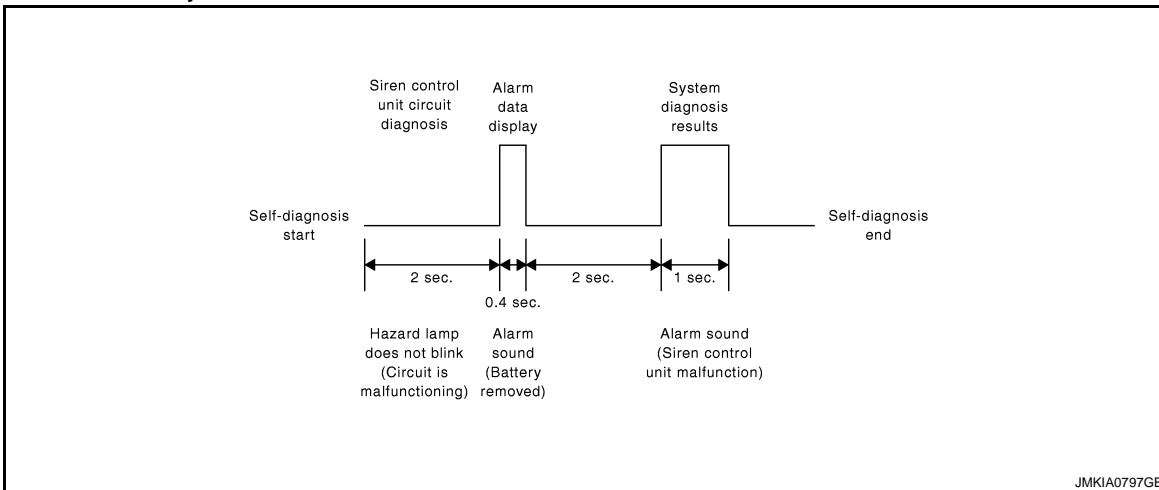
1.

- Siren control unit circuit diagnosis: Normal
- System diagnosis: Ultra sonic sensor malfunction
- Alarm data: Door open



2.

- Siren control unit circuit diagnosis: Circuit is malfunctioning
- System diagnosis: Siren control unit malfunction
- Alarm data: Battery removed



3.

- Siren control unit circuit diagnosis: Normal
- System diagnosis: Ultra sonic sensor malfunction

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

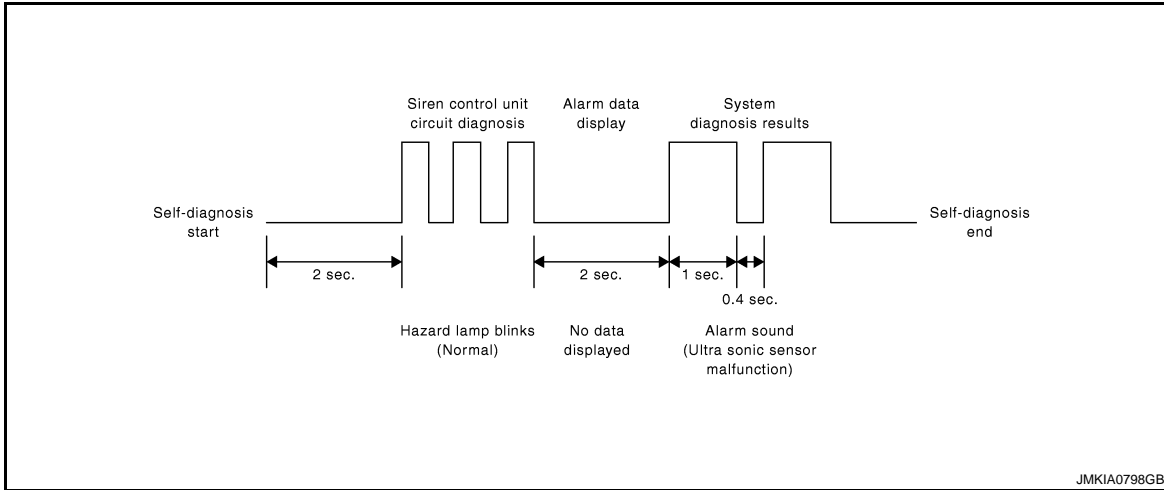
SEC

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

< FUNCTION DIAGNOSIS >

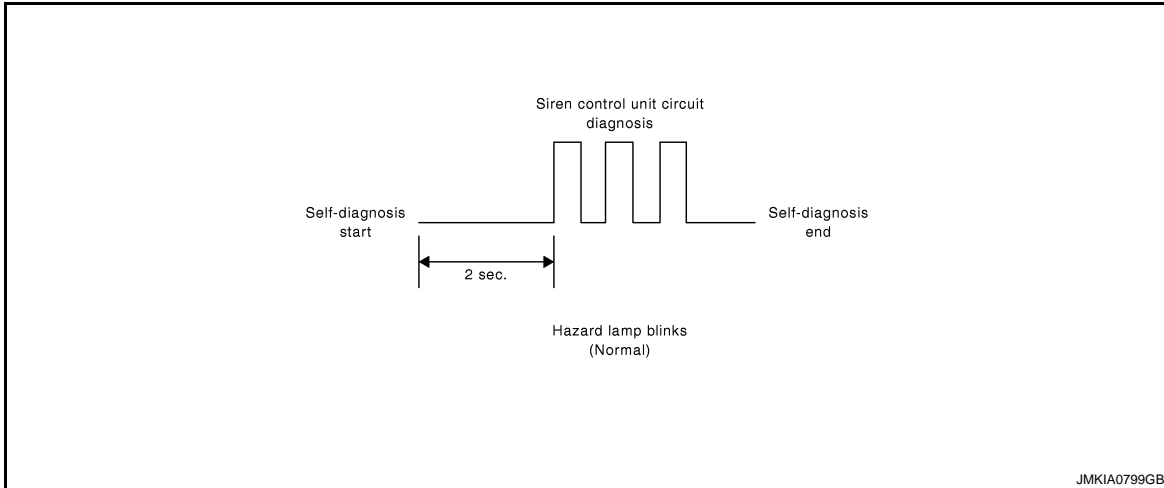
[WITH INTELLIGENT KEY SYSTEM]

- Alarm data: No data



4.

- Siren control unit circuit diagnosis: Normal



U1000 CAN COMM CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:000000001559432

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-25, "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000001286502

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1000	CAN COMM CIRCUIT	When Intelligent Key unit cannot communicate CAN communication signal continuously for 2 seconds or more.	In CAN communication system, any item (or items) of the following listed below is malfunctioning. <ul style="list-style-type: none">• Transmission• Receiving (BCM)• Receiving (IPDM E/R)• Receiving (ECM)• Receiving (METER/M&A)• Receiving (MULTI AV)

Diagnosis Procedure

INFOID:000000001559433

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" of BCM.

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to [LAN-13, "Trouble Diagnosis Flow Chart"](#).
NO >> Refer to [GI-39, "Intermittent Incident"](#).

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

U1010 CONTROL UNIT (CAN)

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

Description

INFOID:000000001286504

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-25. "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000001286505

DTC DETECTION LOGIC

DTC	CONSULT-III display description	DTC Detection Condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of Intelligent Key unit.	Intelligent Key unit

Diagnosis Procedure

INFOID:000000001286506

1. REPLACE INTELLIGENT KEY UNIT

When DTC [U1010] is detected, replace Intelligent Key unit.

>> Replace Intelligent Key unit.

Special Repair Requirement

INFOID:000000001286507

1. REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

P1610 LOCK MODE

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1610 LOCK MODE

Description

INFOID:000000001286539

When the starting operation is carried more than five times consecutively under the following conditions, NATS will shift to the mode which prevents the engine from being started.

- Unregistered mechanical key is used.
- BCM or ECM's malfunctioning.

DTC Logic

INFOID:000000001286540

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. <ul style="list-style-type: none">• Unregistered mechanical key• BCM or ECM's malfunctioning.	—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-37, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001286541

1. CHECK ENGINE START FUNCTION

1. Perform the check for DTC except DTC P1610.
2. Use CONSULT-III to erase DTC after fixing.
3. Check that engine can start with registered mechanical key.

Does the engine start?

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

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

P1611 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1611 ID DISCORD, IMMUECM

Description

INFOID:000000001286517

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

DTC Logic

INFOID:000000001286518

DTC DETECTION LOGIC

NOTE:

- If DTC P1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35, "DTC Logic"](#).
- If DTC P1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1611	ID DISCORD BCM-ECM	The ID verification results between BCM and ECM are NG. The registration is necessary.	<ul style="list-style-type: none">• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-38, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286519

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> ID was unregistered.
NO >> GO TO 2.

2. PEPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> BCM is malfunctioning.
NO >> GO TO 3.

3. PEPLACE ECM

1. Replace ECM. Refer to the following page.
 - MR20 : [ECM-13, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)
 - QR25 (WITH EURO-OBDD): [ECQ-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)
 - QR25 (WITHOUT EURO-OBDD): [ECQ-366, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)

P1611 ID DISCORD, IMMU-ECM

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

- M9R: [ECR-12. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)
- 2. Perform initialization with CONSULT-III. Re-register all mechanical keys.
For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> ECM is malfunctioning.
- NO >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

P1612 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1612 CHAIN OF ECM-IMMU

Description

INFOID:000000001286520

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

DTC Logic

INFOID:000000001286521

DTC DETECTION LOGIC

NOTE:

- If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35, "DTC Logic"](#).
- If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1612	CHAIN OF BCM-ECM	Inactive communication between ECM and BCM	<ul style="list-style-type: none">• Harness or connectors (The CAN communication line is open or short)• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-40, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001286522

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Does the engine start?

- YES >> BCM was malfunctioning.
NO >> ECM is malfunctioning.
 - Replace ECM.
 - Perform ECM re-communicating function.

P1614 CHANIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1614 CHANIN OF IMMU-KEY

Description

INFOID:000000001286511

Performs ID verification through BCM and NATS antenna amplifier when ignition knob switch is pressed. Prohibits the release of steering lock or start of engine when an unregistered ID of mechanical key is used.

DTC Logic

INFOID:000000001286512

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1614	NATS ANTENNA AMP	<ul style="list-style-type: none"> Inactive communication between NATS antenna amp. and BCM. Mechanical key is malfunctioning. 	<ul style="list-style-type: none"> Harness or connectors (The NATS antenna amp. circuit is open or shorted) Mechanical key NATS antenna amp. BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Insert mechanical key into the key cylinder.
2. Press the ignition knob switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-41, "Diagnosis Procedure"](#).
 NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286513

1.CHECK NATS ANTENNA AMP. INSTALLATION

Check NATS antenna amp. installation. Refer to [SEC-228, "Removal and Installation"](#).

Is the inspection result normal?

- YES >> GO TO 2.
 NO >> Reinstall NATS antenna amp. correctly.

2.CHECK MECHANICAL KEY

Start engine with another registered mechanical key.

Does the engine start?

- YES >> Replace mechanical key. Perform initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS"
 NO >> GO TO 3.

3.CHECK NATS ANTENNA AMP. POWER SUPPLY

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

NATS antenna amp.		Ground	Voltage [V] (approx.)
Connector	Terminal		
M26	1	Ground	Battery voltage

Is the inspection result normal?

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

4.CHECK NATS ANTENNA AMP. GROUND CIRCUIT

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

P1614 CHANIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between NATS antenna amp. Harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M26	3	Ground	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace circuit.

5.CHECK NATS ANTENNA AMP. SIGNAL CIRCUIT

Check voltage between NATS antenna amp. harness connector and ground.

NATS antenna amp.		Ground	Condition	Voltage [V] (approx.)
Connector	Terminal			
M26	2	Ground	Just after inserting mechanical key in key cylinder.	Pointer of tester should move.
			Other than above.	0
	4		Just after inserting mechanical key in key cylinder.	Pointer of tester should move.
			Other than above.	0

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace circuit.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

P1615 DIFFERENCE OF KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1615 DIFFERENCE OF KEY

Description

INFOID:000000001286514

Performs ID verification through BCM when ignition knob switch is pressed.
Prohibits the release of steering lock or start of engine when an unregistered ID of mechanical key is used.

DTC Logic

INFOID:000000001286515

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1615	DIFFERENCE OF KEY	The ID verification results between BCM and mechanical key are NG. The registration is necessary.	Mechanical key

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Insert mechanical key into the key cylinder.
2. Press the ignition knob switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-43. "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286516

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all mechanical keys.
For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> Mechanical key was unregistered.
NO >> BCM is malfunctioning.
- Replace BCM. Refer to [BCS-68. "Removal and Installation"](#).
 - Perform initialization again

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

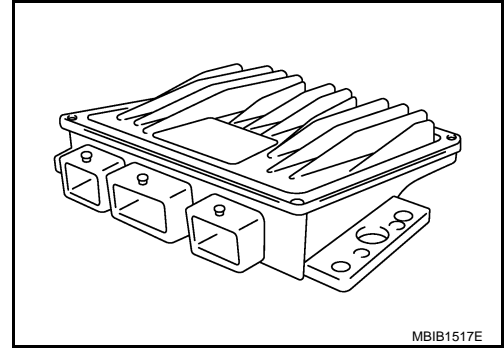
SEC

P1616 ECM

Description

INFOID:000000001557470

The ECM consists of a microcomputer and connectors for signal input and output and for power supply. The ECM controls the engine.



DTC Logic

INFOID:000000001557471

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1616	Engine control module	ECM is malfunctioning.	<ul style="list-style-type: none"> ECM

DTC CONFIRMATION PROCEDURE

1. PRECONDITIONING

If DTC Confirmation Procedure has been previously conducted, always turn ignition switch OFF and wait at least 20 seconds before conducting the next test.

>> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE FOR MALFUNCTION

1. Turn ignition switch ON.
2. Check 1st trip DTC.

Is DTC detected?

- YES >> Go to [SEC-44, "Diagnosis Procedure"](#).
- NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001557472

1. INSPECTION START

Ⓟ With CONSULT-III

1. Turn ignition switch ON.
2. Select "SELF-DIAG RESULTS" mode with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC CONFIRMATION PROCEDURE.**
See [SEC-44, "DTC Logic"](#).

Is the DTC P1616 displayed again?

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

2. REPLACE ECM

1. Replace ECM.
2. Go to [ECR-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).

>> INSPECTION END

B2013 ID DISCORD I-KEY-STRG

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2013 ID DISCORD I-KEY-STRG

Description

INFOID:000000001286508

Intelligent Key unit performs the ID verification with the steering lock unit and releases the steering lock if both Intelligent Key unit and steering lock unit ID are same. Intelligent Key unit starts the communication with the steering lock unit when Intelligent Key is carried into the vehicle and the ignition knob switch is pressed.

DTC Logic

INFOID:000000001286509

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2013	STRG COMM 1	The ID verification results between Intelligent Key unit and steering control unit are NG. The registration is necessary.	Steering lock unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the ignition knob switch
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-45. "Diagnosis Procedure"](#).
 NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286510

1.PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can steering lock be released with re-registered mechanical key?

- YES >> Steering lock unit was unregistered.
 NO >> GO TO 2.

2.CHECK STEERING LOCK UNIT POWER SUPPLY-1

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

Terminals		Voltage (V) (Approx.)
(+)	(-)	
Steering lock unit connector	Terminal	Battery voltage
M28	1	
		Ground

Is the inspection result normal?

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

3.CHECK STEERING LOCK UNIT POWER SUPPLY-2

Check voltage between steering lock unit harness connector and ground.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

B2013 ID DISCORD I-KEY-STRG

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminals			Voltage (V) (Approx.)
(+)		(-)	
Steering lock unit connector	Terminal		
M28	2	Ground	5

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK STEERING LOCK UNIT GROUND CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check continuity between Intelligent Key unit harness connector and steering lock unit harness connector.

Intelligent Key unit connector	Terminal	Steering lock unit connector	Terminal	Continuity
M40	31	M28	4	Existed

3. Check continuity between Intelligent Key unit harness connector and ground.

Intelligent Key unit connector	Terminal	Ground	Continuity
M40	31	Ground	Not existed

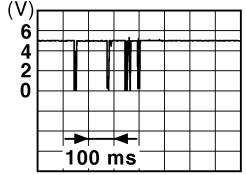
Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK STEERING LOCK UNIT COMMUNICATION CIRCUIT

1. Connect Intelligent Key unit connector and steering lock unit connector.
2. Check voltage between steering lock unit harness connector and ground.

Terminals			Condition	Voltage (V) (Approx.)	
(+)		(-)			
Steering lock unit connector	Terminal				
M28	3	Ground	Steering lock	LOCK status	5
			Ground	LOCK ⇔ UNLOCK	
				For 15 seconds after UNLOCK	5
				15 seconds later UNLOCK	0

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2190 NATS ANTENNA AMP.

Description

INFOID:000000001551496

Performs ID verification through BCM and NATS antenna amplifier when ignition knob switch is pressed. Prohibits the release of steering lock or start of engine when an unregistered ID of mechanical key is used.

DTC Logic

INFOID:000000001551497

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P2190	NATS ANTENNA AMP	<ul style="list-style-type: none">Inactive communication between NATS antenna amp. and BCM.Mechanical key is malfunctioning.	<ul style="list-style-type: none">Harness or connectors (The NATS antenna amp. circuit is open or shorted)Mechanical keyNATS antenna amp.BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Insert mechanical key into the key cylinder.
2. Press the ignition knob switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

YES >> Refer to [SEC-47. "Diagnosis Procedure"](#).

NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001551498

1.CHECK NATS ANTENNA AMP. INSTALLATION

Check NATS antenna amp. installation. Refer to [SEC-228. "Removal and Installation"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Reinstall NATS antenna amp. correctly.

2.CHECK MECHANICAL KEY

Start engine with another registered mechanical key.

Does the engine start?

YES >> Replace mechanical key. Perform initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS"

NO >> GO TO 3.

3.CHECK NATS ANTENNA AMP. POWER SUPPLY

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

NATS antenna amp.		Ground	Voltage [V] (approx.)
Connector	Terminal		
M26	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK NATS ANTENNA AMP. GROUND CIRCUIT

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Check continuity between NATS antenna amp. Harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M26	3	Ground	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace circuit.

5.CHECK NATS ANTENNA AMP. SIGNAL CIRCUIT

Check voltage between NATS antenna amp. harness connector and ground.

NATS antenna amp.		Ground	Condition	Voltage [V] (approx.)
Connector	Terminal			
M26	2	Ground	Just after inserting mechanical key in key cylinder.	Pointer of tester should move.
			Other than above.	0
	4		Just after inserting mechanical key in key cylinder.	Pointer of tester should move.
			Other than above.	0

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace circuit.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

B2191 DIFFERENCE OF KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2191 DIFFERENCE OF KEY

Description

INFOID:000000001551499

Performs ID verification through BCM when ignition knob switch is pressed.
Prohibits the release of steering lock or start of engine when an unregistered ID of mechanical key is used.

DTC Logic

INFOID:000000001551500

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2191	DIFFERENCE OF KEY	The ID verification results between BCM and mechanical key are NG. The registration is necessary.	Mechanical key

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Insert mechanical key into the key cylinder.
2. Press the ignition knob switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-49. "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001551501

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all mechanical keys.
For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> Mechanical key was unregistered.
NO >> BCM is malfunctioning.
- Replace BCM. Refer to [BCS-68. "Removal and Installation"](#).
 - Perform initialization again

SEC

B2192 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2192 ID DISCORD, IMMUECM

Description

INFOID:000000001551505

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

DTC Logic

INFOID:000000001551506

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35, "DTC Logic"](#).
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2192	ID DISCORD BCM-ECM	The ID verification results between BCM and ECM are NG. The registration is necessary.	<ul style="list-style-type: none">• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-50, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001551507

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> ID was unregistered.
NO >> GO TO 2.

2. PEPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> BCM is malfunctioning.
NO >> GO TO 3.

3. PEPLACE ECM

1. Replace ECM. Refer to the following page.
 - MR20 : [ECM-13, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)
 - QR25 (WITH EURO-OBDD): [ECQ-17, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)
 - QR25 (WITHOUT EURO-OBDD): [ECQ-366, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)

B2192 ID DISCORD, IMMU-ECM

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

- M9R: [ECR-12. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#)
- 2. Perform initialization with CONSULT-III. Re-register all mechanical keys.
For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

YES >> ECM is malfunctioning.

NO >> GO TO 4.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

B2193 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2193 CHAIN OF ECM-IMMU

Description

INFOID:000000001551502

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

DTC Logic

INFOID:000000001551503

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35, "DTC Logic"](#).
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2193	CHAIN OF BCM-ECM	Inactive communication between ECM and BCM	<ul style="list-style-type: none">• Harness or connectors (The CAN communication line is open or short)• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-52, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001551504

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Does the engine start?

- YES >> BCM was malfunctioning.
NO >> ECM is malfunctioning.
 - Replace ECM.
 - Perform ECM re-communicating function.

B2194 ID DISCORD IMMUI-KEY

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B2194 ID DISCORD IMMUI-KEY

Description

INFOID:000000001286523

BCM performs the ID verification with Intelligent Key unit that allows the engine to start. BCM starts the communication with Intelligent Key unit if ignition switch is turned ON and starts the engine if the ID is OK. BCM prevents the engine from starting if the ID is not registered.

DTC Logic

INFOID:000000001286524

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2194	DISCORD BCM-I-KEY	The ID verification results between BCM and Intelligent Key unit are NG. The registration is necessary.	<ul style="list-style-type: none">• BCM• Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-53. "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286525

1. PERFORM INITIALIZATION

1. Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/ NVIS".
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> GO TO 2.
NO >> ID was unregistered.

2. REPLACE BCM

1. Turn ignition switch OFF.
2. Replace BCM. Refer to [BCS-68. "Removal and Installation"](#).
3. Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/ NVIS".

Can the system be initialized and can the engine be started?

- YES >> BCM is malfunctioning.
NO >> GO TO 3.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

B2195 ANTI-SCANNING

Description

INFOID:000000001286526

When the ID of the remote control engine starter installed cannot be registered, anti-scanning operates and it may be possible that the engine can not start. In the case, obtain the customer approval to remove the remote control engine starter.

DTC Logic

INFOID:000000001286527

DTC DETECTION LOGIC

NOTE:

- If DTC B2195 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35, "DTC Logic"](#).
- If DTC B2195 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2195	ANTI-SCANNING	The ID of the remote control engine starter installed cannot be registered.	Remote control engine starter

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-54, "Diagnosis Procedure"](#).
 NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286528

1. REMOVAL OF REMOTE CONTROL ENGINE STARTER

Remove remote control engine starter with the customer approval.

>> GO TO 2.

2. CHECK SELF DIAGNOSTIC RESULT

1. Turn ignition switch ON.
2. Perform "Self diagnostic result" with CONSULT-III.
3. Erase DTC.
4. Start the engine.

Does the engine start?

- YES >> INSPECTION END
 NO >> BCM is malfunctioning.
 - Replace BCM
 - Perform initialization

B2196 DONGLE NG

Description

INFOID:000000001286529

BCM performs the ID verification with the slave control units (ECM, EPS column assy, IPDM E/R, combination meter).

If either slave control unit is replaced by used part, perform initialization with CONSULT-III. But if the control unit is replaced by new part, the system does not need initialization.

DTC Logic

INFOID:000000001286530

DTC DETECTION LOGIC

NOTE:

- If DTC B2196 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35. "DTC Logic"](#).
- If DTC B2196 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36. "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2196	DONGLE NG	The ID verification results between BCM and each slave control unit are NG.	<ul style="list-style-type: none"> • ECM • EPS column assy • Combination meter • IPDM E/R

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self Diagnostic Result" with CONSULT-III.

Is the DTC detected?

- YES >> Refer to [SEC-55. "Diagnosis Procedure"](#).
 NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286531

1. PERFORM INITIALIZATION

1. Perform initialization with CONSULT-III. Re-register all mechanical keys. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".
2. Start the engine.

Does the engine start?

- YES >> INSPECTION END
 NO >> Perform "Self Diagnostic Result" for each control unit.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

B2552 INTELLIGENT KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2552 INTELLIGENT KEY

Description

INFOID:000000001286532

Intelligent key unit performs engine start operation and steering lock control by crosschecking ID with the Intelligent key.

DTC Logic

INFOID:000000001286533

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2552	INTELLIGENT KEY	Malfunction is detected inside Intelligent key unit.	Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-56, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286534

1.REPLACE INTELLIGENT KEY UNIT

1. Replace Intelligent Key unit.
2. Perform initialization with CONSULT-III. Re-register all mechanical keys. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".
3. Start the engine.

Does the engine start?

- YES >> INSPECTION END
NO >> Perform "DTC confirmation procedure". Refer to [SEC-56, "DTC Logic"](#).

Special Repair Requirement

INFOID:000000001286535

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

B2590 ID DISCORD BCM-I-KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2590 ID DISCORD BCM-I-KEY

Description

INFOID:000000001286536

Intelligent Key unit performs the ID verification with BCM that allows the engine to start. BCM starts the engine if the ID is OK and prevents the engine from starting if the ID is not registered.

DTC Logic

INFOID:000000001286537

DTC DETECTION LOGIC

NOTE:

- If DTC B2590 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-35, "DTC Logic"](#).
- If DTC B2590 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-36, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2590	DISCORD BCM-I-KEY	The ID verification results between BCM and Intelligent Key unit are NG. The registration is necessary.	<ul style="list-style-type: none">• BCM• Intelligent Key unit

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-57, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001286538

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all mechanical keys. For initialization and registration of mechanical key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered mechanical key?

- YES >> ID was unregistered.
NO >> BCM is malfunctioning.
 - Replace BCM
 - Perform initialization again

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT INTELLIGENT KEY UNIT

INTELLIGENT KEY UNIT : Diagnosis Procedure

INFOID:000000001286542

1.CHECK FUSE

Check that the following fuse is not blown.

Terminal No.	Signal name	Fuse No.
11	Battery power supply	14 (10A)
6	Ignition power supply	1 (10A)

Is the fuse blown?

YES >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

Terminal		Voltage (V) (Approx.)
(+)	(-)	
Intelligent Key unit		Ground
Connector	Terminal	
M40	11	
	6	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between Intelligent Key unit harness connector and ground.

Intelligent Key unit		Ground	Continuity
Connector	Terminal		
M40	12		Exists

Does continuity exist?

YES >> Intelligent Key unit power supply and ground circuit are OK.

NO >> Repair harness or connector.

INTELLIGENT KEY UNIT : Special Repair Requirement

INFOID:000000001286543

1.REQUIRED WORK WHEN REPLACING INTELLIGENT KEY UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

SIREN CONTROL UNIT

SIREN CONTROL UNIT : Diagnosis Procedure

INFOID:000000001286544

1.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

POWER SUPPLY AND GROUND CIRCUIT

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

2. Disconnect siren control unit connector.
3. Check voltage between siren control unit harness connector and ground.

Terminals			Voltage (Approx.)
(+)		(-)	
Siren control unit		Ground	
Connector	Terminal	Ground	Battery voltage
B68	2	Ground	

Is the measurement value normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2.CHECK GROUND CIRCUIT

Check continuity between siren control unit harness connectors and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
B68	5	Ground	Existed

Does continuity exist?

YES >> INSPECTION END.

NO >> Repair harness or connector.

SIREN CONTROL UNIT : Special Repair Requirement

INFOID:0000000001286545

1.REQUIRED WORK WHEN REPLACING SIREN CONTROL UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

BCM

BCM : Diagnosis Procedure

INFOID:0000000001286547

SEC

1.CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
41	Battery power supply	10 (10A)
57		J (50A)
4	ACC power supply	20 (10A)
3	Ignition power supply	1 (10A)

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.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminals		(-)	Ignition switch position		
(+)			OFF	ACC	ON
BCM					
Connector	Terminal	Ground	OFF	ACC	ON
M65	4		Approx. 0 V	Battery voltage	Battery voltage
	3		Approx. 0 V	Approx. 0 V	Battery voltage
M66	41		Battery voltage	Battery voltage	Battery voltage
M67	57	Battery voltage	Battery voltage	Battery voltage	

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		
M67	55		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

KEY SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY SWITCH

Description

INFOID:000000001286548

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to BCM and Intelligent Key unit.

Component Function Check

INFOID:000000001286549

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch ("KEY SW") in "Data Monitor" mode with CONSULT-III.

Monitor item	Condition
KEY SW	Insert mechanical key into key cylinder : ON
	Remove mechanical key from key cylinder : OFF

Is the inspection result normal?

- YES >> Key switch is OK.
NO >> Refer to [SEC-61, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001286550

1.CHECK KEY SWITCH INPUT SIGNAL

- Turn ignition switch OFF.
- Disconnect Intelligent Key unit and BCM connector.
- Check voltage between Intelligent Key unit harness connector and ground.

Terminals		Condition	Voltage (V) (Approx.)
(+)	(-)		
Intelligent Key unit connector	Terminal		
M40	7	Ground	Battery voltage
		Insert mechanical key into key cylinder	0

- Check voltage between BCM harness connector and ground.

Terminals		Condition	Voltage (V) (Approx.)
(+)	(-)		
BCM connector	Terminal		
M65	5	Ground	Battery voltage
		Insert mechanical key into key cylinder	0

Is the inspection result normal?

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

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

- Remove mechanical key from key cylinder.
- Disconnect ignition knob switch, key switch and key lock solenoid connector.
- Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

KEY SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminals			Voltage (V) (Approx.)
(+)		(-)	
Ignition knob switch, key switch and key lock solenoid connector	Terminal		
M25	2	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK KEY SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

Intelligent Key unit connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M40	7	M25	1	Exists

2. Check continuity between BCM harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

BCM connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M65	5	M25	1	Exists

3. Check continuity between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Ignition knob switch, key switch and key lock solenoid connector	Terminal	Ground	Continuity
M25	1	Ground	Does not exist

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK KEY SWITCH

Check key switch.

Refer to [SEC-62, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace key cylinder assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001286551

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

KEY SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal		Condition	Continuity
Ignition knob switch, key switch and key lock solenoid connector			
1	2	Insert mechanical key into key cylinder	Exists
		Remove mechanical key from key cylinder	Does not exist

Is the inspection result normal?

YES >> Key switch is OK.

NO >> Replace key cylinder assembly.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IGNITION KNOB SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IGNITION KNOB SWITCH

Description

INFOID:000000001286552

Ignition knob switch detects that ignition knob is pressed, and then transmits the signal to Intelligent Key unit.

Component Function Check

INFOID:000000001286553

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

Check ignition knob switch ("PUSH SW") in "Data Monitor" mode with CONSULT-III.

Monitor item	Condition
PUSH SW	Ignition knob switch is pressed : ON
	Ignition knob switch is released : OFF

Is the inspection result normal?

- YES >> Ignition knob switch is OK.
NO >> Refer to [SEC-61. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001286554

1.CHECK IGNITION KNOB SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(-)		
Intelligent Key unit connector	Terminal			
M40	27	Ground	Ignition knob switch is pressed	Battery voltage
			Ignition knob switch is released	0

Is the inspection result normal?

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

2.CHECK IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

1. Disconnect ignition knob switch, key switch and key lock solenoid connector.
2. Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Terminals			Voltage (V) (Approx.)
(+)		(-)	
Ignition knob switch, key switch and key lock solenoid connector	Terminal		
M25	4	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK IGNITION KNOB SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

IGNITION KNOB SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Intelligent Key unit connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M40	27	M25	3	Exists

2. Check continuity between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Ignition knob switch, key switch and key lock solenoid connector	Terminal	Ground	Continuity
M25	3		Does not exist

Is the inspection result normal?

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

4.CHECK IGNITION KNOB SWITCH

Check ignition knob switch.

Refer to [SEC-62. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace key cylinder assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001286555

1.CHECK IGNITION KNOB SWITCH

- Turn ignition switch OFF.
- Disconnect ignition knob switch, key switch and key solenoid harness connector.
- Check continuity between ignition knob switch, key switch and key solenoid terminals under the following conditions.

Ignition knob switch, key switch and key solenoid		Condition	Continuity
Terminal			
3	4	Ignition knob switch is pressed	Exists
		Ignition knob switch is released	Does not exist

Is the inspection result normal?

- YES >> Ignition knob switch is OK.
NO >> Replace key cylinder assembly.

STOP LAMP SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

STOP LAMP SWITCH

Description

INFOID:000000001286556

Stop lamp switch detects that brake pedal is depressed, and then transmits the signal to BCM.

Component Function Check

INFOID:000000001286557

1. CHECK STOP LAMP SWITCH INPUT SIGNAL

Check stop lamp function by depressing brake pedal.

Is the inspection result normal?

YES >> Stop lamp switch is OK.

NO >> Refer to [SEC-61, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001286558

1. CHECK STOP LAMP SWITCH INPUT SIGNAL

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

Terminals			Condition	Voltage (V) (Approx.)
(+)		(-)		
Intelligent Key unit connector	Terminal			
M40	26	Ground	Brake pedal is depressed	Battery voltage
			Brake pedal is not depressed	0

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

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

Terminals			Voltage (V) (Approx.)
(+)		(-)	
Stop lamp switch connector	Terminal		
E114 (with M/T models) E115 (except M/T models)	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK STOP LAMP SWITCH SIGNAL CIRCUIT

1. Check continuity between Intelligent Key unit harness connector and stop lamp switch connector.

Intelligent Key unit connector	Terminal	Stop lamp switch connector	Terminal	Continuity
M40	26	E114 (with M/T models) E115 (except M/T models)	2	Existed

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

STOP LAMP SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Stop lamp switch connector	Terminal	Ground	Continuity
E114 (with M/T models) E115 (except M/T models)	2	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK STOP LAMP SWITCH

Check stop lamp switch.

Refer to [SEC-62. "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace stop lamp switch. Refer to [BR-17. "Exploded View"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001286559

1.CHECK STOP LAMP SWITCH

Check continuity between stop lamp switch terminals under the following conditions.

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

Is the inspection result normal?

YES >> Stop lamp is OK.

NO >> Replace stop lamp switch. Refer to [BR-17. "Exploded View"](#).

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

HOOD SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

HOOD SWITCH

Description

INFOID:000000001286560

Hood switch detects that hood is open/close condition, and then transmits the signal to IPDM E/R.

Component Function Check

INFOID:000000001286561

1.CHECK FUNCTION

1. Select "HOOD SW" in "Data Monitor" mode with CONSULT-III.
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 >> INSPECTION END.

NO >> Refer to [SEC-68, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001286562

1.CHECK HOOD SWITCH SIGNAL

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

IPDM E/R		Ground	Condition		Voltage (V) (Approx.)
Connector	Terminal				
E13	34	Ground	Hood	Open	0
				Close	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.CHECK HOOD SWITCH SIGNAL CIRCUIT

1. Disconnect IPDM E/R and hood switch 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	
E13	34	E113	1	Existed

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E13	34	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

HOOD SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Hood switch		Ground	Continuity
Connector	Terminal		
E113	2	Ground	Existed

Is the inspection result normal?

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

4.CHECK IPDM E/R OUTPUT

1. Connect the IPDM E/R connector.
2. Check voltage between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Voltage (V) (Approx.)
Connector	Terminal		
E13	34	Ground	Battery voltage

Is the inspection result normal?

- YES >> GO TO 5.
 NO >> Replace IPDM E/R. Refer to [PCS-28, "Removal and Installation"](#).

5.CHECK HOOD SWITCH

Refer to [SEC-69, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 6.
 NO >> Replace hood switch. Refer to [SEC-230, "Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001286563

1.CHECK HOOD SWITCH

Check continuity between hood switch terminals.

Hood switch		Condition		Continuity
Terminal				
1	2	Hood switch	Push	Not existed
			Release	Existed

Is the inspection result normal?

- YES >> Hood switch is OK.
 NO >> Replace hood switch. Refer to [SEC-230, "Removal and Installation"](#).

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

VEHICLE SECURITY INDICATOR

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY INDICATOR

Description

INFOID:000000001286567

- Vehicle security indicator is built in combination meter.
- NATS (Nissan Anti-Theft System) and vehicle security system conditions are indicated by blink or illumination of vehicle security indicator.

Component Function Check

INFOID:000000001286568

1. CHECK FUNCTION

1. Perform "THEFT IND" in the "Active Test" mode with CONSULT-III.
2. Check vehicle security indicator operation.

Test item		Description	
THEFT IND	ON	Vehicle security indicator	ON
	OFF		OFF

Is the inspection result normal?

- YES >> INSPECTION END.
NO >> Refer to [SEC-70, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001286569

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.

Terminals			Voltage (V) (Approx.)
(+)		(-)	
Combination meter connector	Terminal		
M34	1	Ground	Battery voltage

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2. CHECK SECURITY INDICATOR LAMP SIGNAL CIRCUIT

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

BCM connector	Terminal	Combination meter connector	Terminal	Continuity
M65	23	M34	28	Existed

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

Combination meter connector	Terminal	Ground	Continuity
M34	28	Ground	Not existed

Is the inspection result normal?

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

3. CHECK BCM OUTPUT SIGNAL

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

VEHICLE SECURITY INDICATOR

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminals		Voltage (V) (Approx.)
(+)	(-)	
BCM connector	Terminal	Battery voltage
M65	23	
	Ground	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination meter. Refer to [MWI-83, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

ULTRA SONIC SENSOR

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ULTRA SONIC SENSOR

Description

INFOID:000000001286570

Siren control unit sounds the siren when it received a trigger signal from ultra sonic sensor.

Component Function Check

INFOID:000000001286571

1. CHECK ULTRA SONIC SENSOR FUNCTION

1. Turn ignition switch OFF.
2. Get in the vehicle and close all doors.
3. Lock doors with Intelligent Key.
4. Check that security indicator blinks when theft warning system is armed.
5. With hand, intercept the signal between left and right sensors.

Does the siren sound?

- YES >> Ultra sonic sensor is OK.
NO >> Refer to [SEC-72, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001286572

1. CHECK ULTRA SONIC SENSOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Check voltage between ultra sonic sensor harness connector and ground.

Ultra sonic sensor		Ground	Voltage (V) (Approx.)
Connector	Terminal		
R11	1	Ground	Battery voltage

Is the inspection result normal?

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

2. CHECK ULTRA SONIC SENSOR SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect siren control unit and ultra sonic sensor connector.
3. Check continuity between siren control unit harness connector and ultra sonic sensor harness connector.

Siren control unit connector	Terminal	Ultra sonic sensor connector	Terminal	Continuity
B68	4	R11	2	Existed

4. Check continuity between siren control unit harness connector and ground.

Siren control unit connector	Terminal	Ground	Continuity
B68	4	Ground	Not existed

Is the inspection result normal?

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

3. CHECK ULTRA SONIC SENSOR GROUND CIRCUIT

1. Connect ultra sonic sensor connectors.
2. Check continuity between ultra sonic sensor harness connector and ground.

Ultra sonic sensor connector	Terminal	Ground	Continuity
R11	3	Ground	Existed

Is the inspection result normal?

ULTRA SONIC SENSOR

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

SIREN CONTROL UNIT SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SIREN CONTROL UNIT SIGNAL CIRCUIT

Description

INFOID:000000001530689

Siren control unit sounds the siren when it received a trigger signal from ultra sonic sensor.

Component Function Check

INFOID:000000001530691

1.CHECK SIREN CONTROL UNIT FUNCTION

1. Turn ignition switch OFF.
2. Get in the vehicle and close all doors.
3. Lock doors with Intelligent Key.
4. Check that security indicator blinks when theft warning system is armed.
5. With hand, intercept the signal between left and right sensors.

Does the siren sound?

- YES >> Siren control unit function is OK.
NO >> Refer to [SEC-72, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001530693

1.CHECK SIREN CONTROL UNIT SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and siren connectors.
3. Check continuity between BCM harness connector and siren control unit harness connector.

BCM connector	Terminal	Siren control unit connector	Terminal	Continuity
M65	33	B68	1	Existed
	25		3	Existed

4. Check continuity between siren control unit harness connector and ground.

Siren control unit connector	Terminal	Ground	Continuity
B68	1	Ground	Not existed
	3		Not existed

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000001569737

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
VEHICLE SPEED	While driving	Equivalent to speedometer reading
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	On
CDL LOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the lock side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the unlock side	On
DOOR SW-DR	Driver's door closed	Off
	Driver's door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
PUSH SW	Return to ignition switch to "LOCK" position	Off
	Press ignition switch	On
KEYLESS LOCK	"LOCK" button of key fob is not pressed	Off
	"LOCK" button of key fob is pressed	On
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	Off
	"UNLOCK" button of key fob is pressed	On
SHOCK SENSOR	Ignition switch ON	NOMAL
	After the reception of air bag deployment signal from air bag diagnosis sensor unit	Off
	During the reception of air bag deployment signal from air bag diagnosis sensor unit	On
UNLOCK SHOCK	Other than the following	Off
	During the unlock operation interlocked with air bag	On

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
UNLOCK WITH DR	NOTE: The item is indicated, but not monitored	On
		Off
LOCK WITH SPEED	Vehicle speed sensing auto door lock function does not operate	Off
	Vehicle speed sensing auto door lock function is operating	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TAIL LAMP SW	Lighting switch OFF	Off
	Lighting switch 1ST	On
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Lighting switch OFF	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Lighting switch OFF	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Lighting switch OFF	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with error	NOTOK
AUT LIGHT SYS	Outside of the room is dark	On
	Outside of the room is bright	Off
HD LIGHT TIME	—	Displays a setting time of the follow me home function set by the work support
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
RR WIPER ON	Rear wiper switch OFF	Off
	Rear wiper switch ON	On
RR WIPER INT	Rear wiper switch OFF	Off
	Rear wiper switch INT	On
RR WIPER STOP	Rear wiper stop position	Off
	Other than rear wiper stop position	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
REVERSE SW CAN	NOTE: The item is indicated, but not monitored	Off
		On
H/L WASH SW	When headlamp washer switch is not pressed	Off
	When headlamp washer switch is pressed	On
FAN ON SIG	Blower fan motor switch OFF	Off
	Blower fan motor switch ON (other than OFF)	On
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	Off
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	On
HAZARD SW	Hazard switch OFF	Off
	Hazard switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
	Brake pedal is depressed	On
TRNK OPNR SW	When back door opener switch is not pressed	Off
	When back door opener switch is pressed	On
HOOD SW	Close the hood NOTE: Vehicles without theft warning system are OFF-fixed	Off
	Open the hood	On
AUTO RELOCK	Auto lock function does not operate	Off
	Auto lock function is operating	On
GLS BREAK SEN	The vehicle without glass break sensor	Off
	The vehicle with glass break sensor	On
OIL PRESS SW	<ul style="list-style-type: none"> • Ignition switch OFF or ACC • Engine running 	Off
	Ignition switch ON	On

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

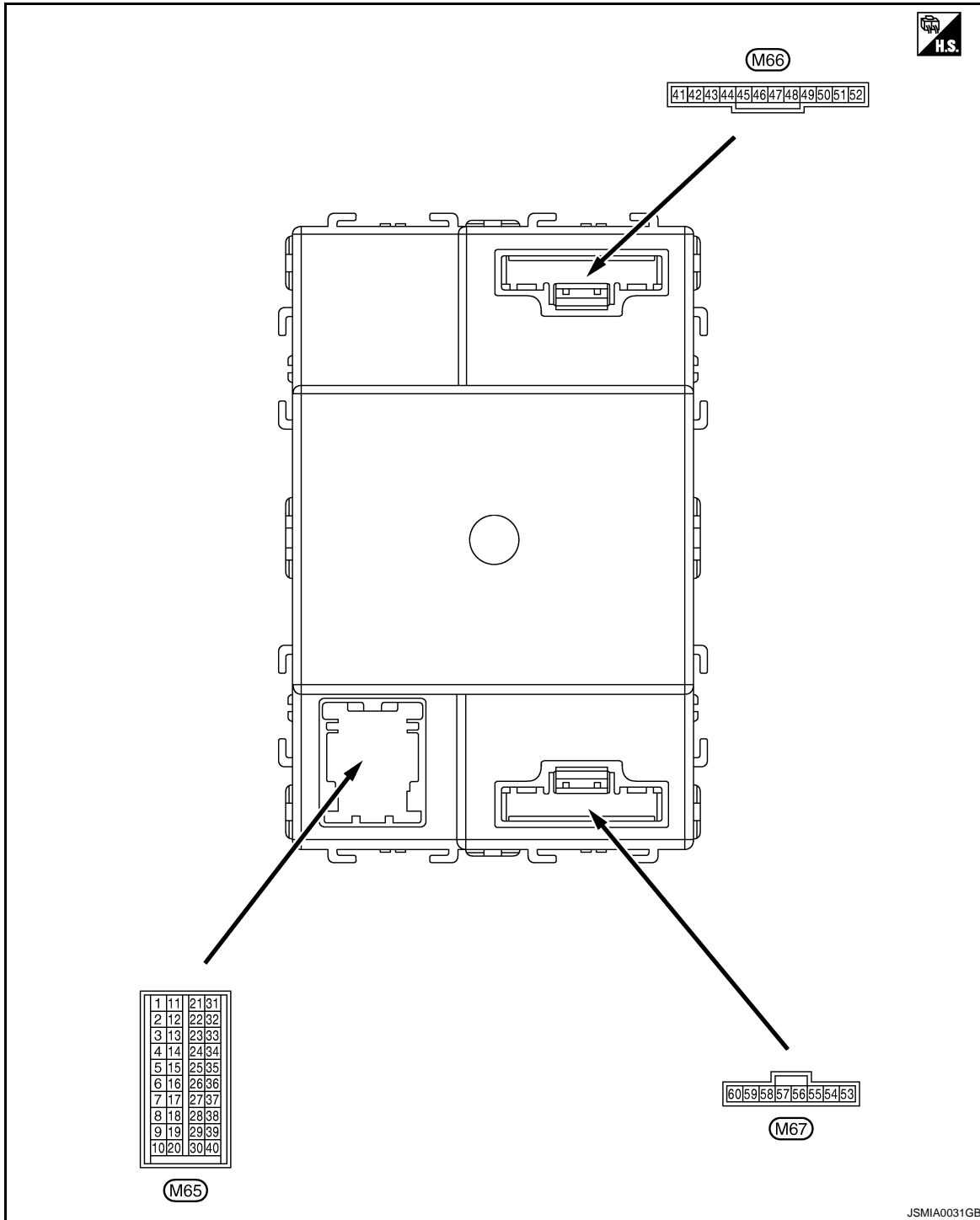
SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

CAUTION:

- Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.
- Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT-III. Refer to [BCS-28, "COMB SW : CONSULT-III Function \(BCM - COMB SW\)"](#).
- BCM reads the status of the combination switch at 10 ms internal normally. Refer to [BCS-9, "System Description"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
1 (W)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder	Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
2 (G)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder	Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
3 (W)	Ground	Ignition power supply	Input	Ignition switch OFF or ACC	0 V
				Ignition switch ON or START	Battery voltage
4 (SB)	Ground	ACC power supply	Input	Ignition switch OFF	0 V
				Ignition switch ON or ACC	Battery voltage
5 (LG) ^{*1} (R) ^{*2}	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage
				Remove mechanical key from ignition key cylinder	0 V

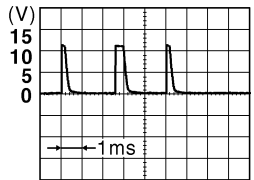
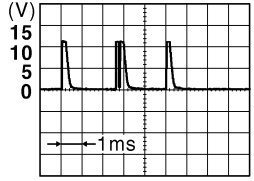
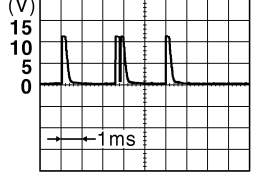
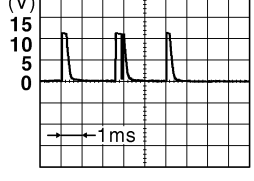
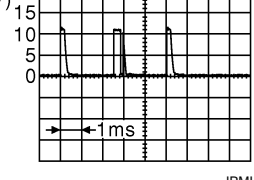
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
6 (L)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					Rear washer switch ON	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					Any of the condition below with all switch OFF	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
7 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	<p>1.4 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	<p>1.3 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	<p>1.3 V</p>
					Any of the condition below with all switch OFF	<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 6 <p>1.3 V</p>
					Rear wiper INT (Wiper intermittent dial 4)	<p>1.3 V</p>

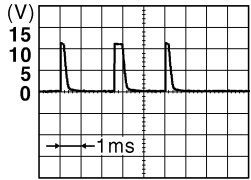
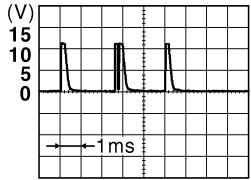
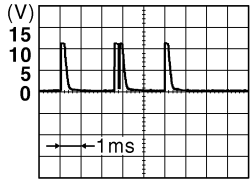
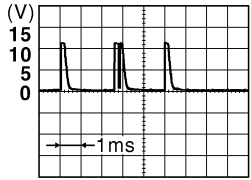
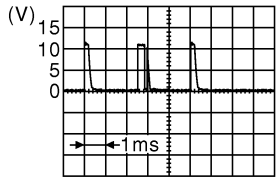
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

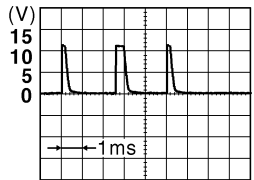
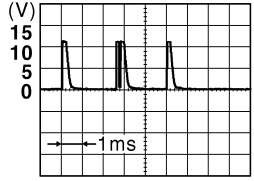
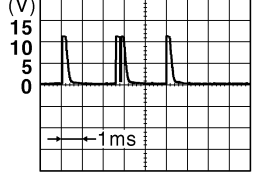
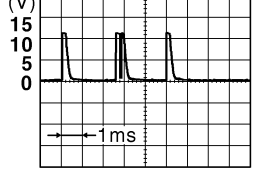
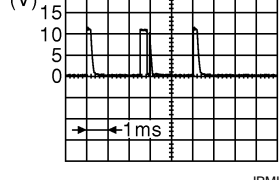
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
8 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 <p style="text-align: center;">1.4 V</p>
					Turn signal switch RH	 <p style="text-align: center;">1.3 V</p>
					Turn signal switch LH	 <p style="text-align: center;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: center;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
9 (G) ^{*3} (B) ^{*4}	Ground	Combination switch INPUT 2	Input	All switch OFF	 <p style="text-align: center;">1.4 V</p>
				Lighting switch 2ND	 <p style="text-align: center;">1.3 V</p>
				Lighting switch PASS	 <p style="text-align: center;">1.3 V</p>
				Front wiper switch INT	 <p style="text-align: center;">1.3 V</p>
				Front wiper switch HI	 <p style="text-align: center;">1.3 V</p>

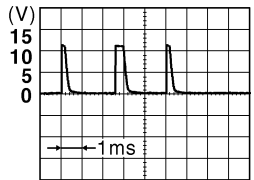
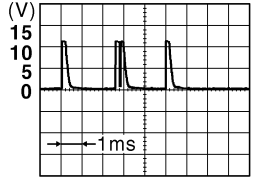
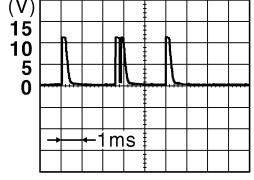
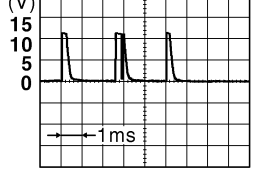
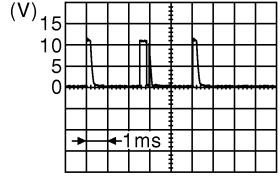
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

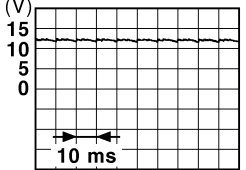
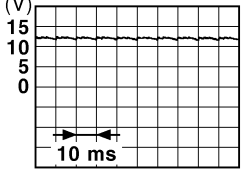
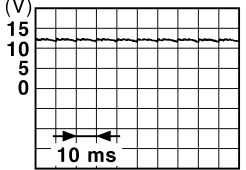
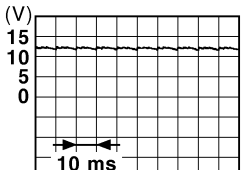
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
10 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0165GB</p> <p style="text-align: center;">1.3 V</p>
					Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0167GB</p> <p style="text-align: center;">1.3 V</p>
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0168GB</p> <p style="text-align: center;">1.3 V</p>
					Rear wiper switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0169GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the condition below with all switch OFF	<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7  <p style="text-align: right; font-size: small;">JPMIA0196GB</p> <p style="text-align: center;">1.3 V</p>
11 (B)	Ground	Audio link	Input/ Output	—	—	

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
12 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 11.2 V
				Rear door switch RH	ON (When rear door RH opened)	0 V
13 (V)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	 11.2 V
				Back door switch	ON (When back door opened)	0 V
14 (P) ^{*3} (BR) ^{*4}	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 11.2 V
				Passenger door switch	ON (When passenger door opened)	0 V
15 (BR) ^{*3} (P) ^{*4}	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 11.2 V
				Driver door switch	ON (When driver door opened)	0 V

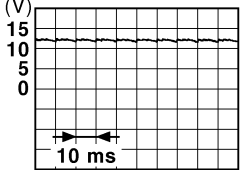
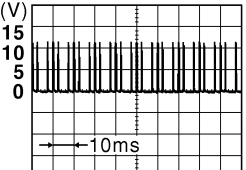
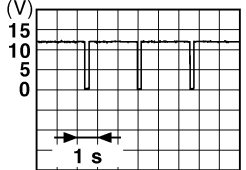
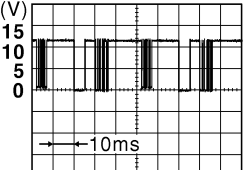
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

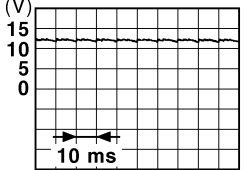
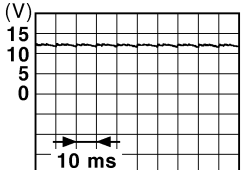
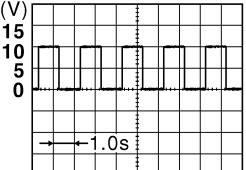
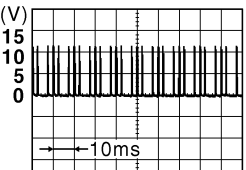
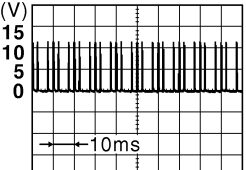
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
16 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 <p style="text-align: right; font-size: small;">PKID0924E</p>
				Rear door switch LH	ON (When rear door LH opened)	0 V
17 (L)	Ground	Door lock status indicator	Output	Door lock status indicator	ON	12 V
				Door lock status indicator	OFF	0 V
20 (SB)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed	 <p style="text-align: right; font-size: small;">JPMIA0154GB</p>
				Rear window defogger switch	While pressing	0 V
21 (P)	—	CAN-L	Input/ Output	—	—	
22 (L)	—	CAN-H	Input/ Output	—	—	
23 (V)	Ground	Security indicator	Output	Security indicator	ON	0 V
				Security indicator	Blinking	 <p style="text-align: right; font-size: small;">JPMIA0014GB</p>
Security indicator	OFF	12 V				
24 (GR)	Ground	Light & rain sensor serial link	Input/ Output	Ignition switch OFF or ACC	12 V	
				Ignition switch ON	 <p style="text-align: right; font-size: small;">JPMIA0156GB</p>	
Ignition switch ON	8.7 V					
25 (G)	Ground	Alarm link	Output	—	—	

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
26 (GR) ^{*5} (LG) ^{*6}	Ground	Blower fan motor switch	Input	Blower fan motor switch	OFF	 PKID0924E 11.2 V
				Blower fan motor switch	ON (other than OFF)	0 V
27 (P) ^{*5} (Y) ^{*6}	Ground	A/C switch	Input	Ignition switch ON	Compressor ON is not re- quested from auto amp. (A/C indicator OFF, blow- er fan motor switch OFF or etc.)	 PKID0924E 11.2 V
				Ignition switch ON	Compressor ON is re- quested from auto amp. (A/C indicator ON and blower fan motor switch ON).	0 V
28 (LG) ^{*7} (R) ^{*8}	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON	 JPMIA0155GB 6.0 V	
29 (LG) ^{*3} (O) ^{*4}	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	 JPMIA0154GB 1.2 V
				Back door opener switch	Pressed	0 V
32 (BR)	Ground	Door lock/unlock switch (Unlock)	Input	Door lock/un- lock switch	Not pressed	 JPMIA0154GB 1.2 V
				Door lock/un- lock switch	Pressed to the unlock side	0 V

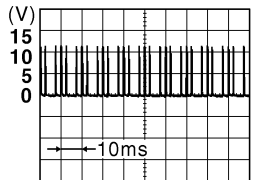
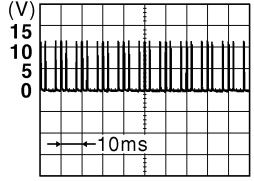
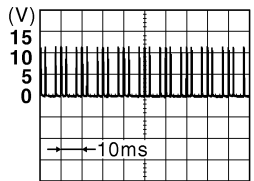
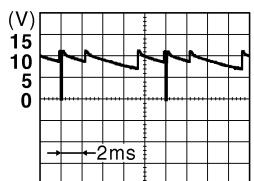
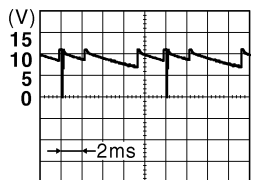
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

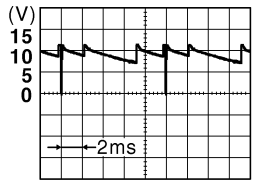
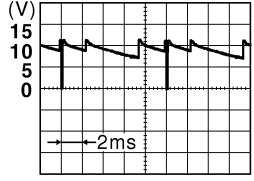
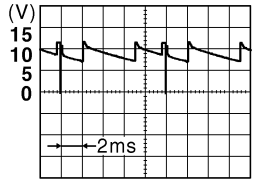
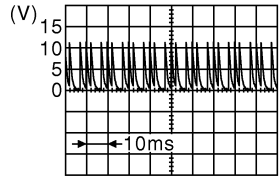
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
33 (W) ^{*9} (Y) ^{*10}	Ground	Hazard switch	Input	Hazard switch	OFF	 <p style="text-align: right; font-size: small;">JPMIA0154GB</p>
					ON	0 V
34 (SB) ^{*3} (P) ^{*4}	Ground	Door lock/unlock switch (Lock)	Input	Door lock/un- lock switch	Not pressed	 <p style="text-align: right; font-size: small;">JPMIA0154GB</p>
					Pressed to the lock side	0 V
35 (G)	Ground	Headlamp washer switch	Input	Headlamp washer switch	Not pressed	 <p style="text-align: right; font-size: small;">JPMIA0154GB</p>
					Pressed to the lock side	0 V
36 (G)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">JPMIA0164GB</p>
					Lighting switch 2ND	
					Lighting switch HI	
					Lighting switch 1ST	
37 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0161GB</p>
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF	
					Rear wiper switch ON (Wiper intermittent dial 4)	

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
38 (W)	Ground	Combination switch OUTPUT 3	Output	All switch OFF	0 V
				Front wiper switch LO	
				Front wiper switch MIST	
				Front wiper switch INT	
				Lighting switch AUTO	
				Rear fog lamp switch ON	
39 (Y)	Ground	Combination switch OUTPUT 4	Output	All switch OFF	0 V
				Turn signal switch LH	
				Lighting switch PASS	
				Lighting switch 2ND	
				Front fog lamp switch ON	
40 (P)	Ground	Combination switch OUTPUT 1	Output	All switch OFF (Wiper intermittent dial 4)	0 V
				Front wiper switch HI (Wiper intermittent dial 4)	
				Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	
Rear wiper switch INT (Wiper intermittent dial 4)					
41 (LG)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver activation	0 V
				Interior room lamp battery saver no activation	12 V
43 (SB)	Ground	Rear wiper motor	Output	Rear wiper switch OFF	0 V
				Rear wiper switch ON	12 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch ON	Rear wiper stop position
				Any position other than rear wiper stop position	0 V
					

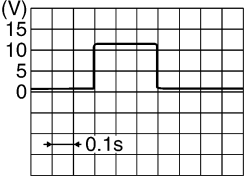
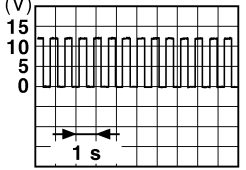
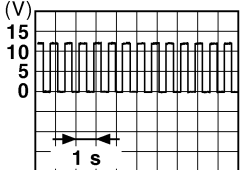
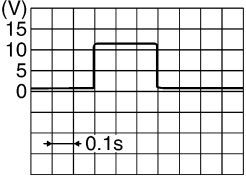
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

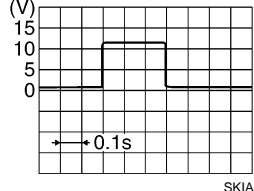
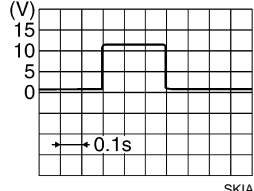
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
45 (V)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	 <p style="text-align: right; font-size: small;">SKIA9232E</p>
				Not pressed	0 V	
47 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p> <p style="text-align: center;">6.5 V</p>	
48 (GR)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
				Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p> <p style="text-align: center;">6.5 V</p>	
49 (Y)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
50 (G)	Ground	Unlock sensor	Input	Driver's door	Unlock	5 V
					lock	0 V
51 (R)	Ground	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	12 V
					ON	0 V
53 (L)	Ground	Power window power supply (IGN)	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
54 (O)	Ground	Door unlock (All other than driver's door)	Output	Door lock/unlock switch	Pressed to the unlock side	 <p style="text-align: right; font-size: small;">SKIA9232E</p>
					Not pressed	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
56 (V)	Ground	Door lock (All) and fuel lid lock	Output	Door lock/un- lock switch	Not pressed	0 V
				Door lock/un- lock switch	Pressed to the lock side	
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window pow- er supply (BAT)	Output	Ignition switch OFF		12 V
59 (R)	Ground	Super lock	Output	When lock button of key fob or Intelligent Key is not pressed		0 V
				When lock button of key fob or Intelligent Key is pressed		12 V
60 (G)	Ground	Driver's door unlock and fuel lid unlock	Output	Door lock/un- lock switch	Pressed to the unlock side	
				Door lock/un- lock switch	Not pressed	0 V

- *1: With Intelligent Key
- *2: Without Intelligent Key
- *3: RHD models
- *4: LHD models
- *5: With gasoline engine
- *6: With diesel engine
- *7: RHD models with side air bag
- *8: LHD models with side air bag
- *9: With xenon headlamp and daytime light system
- *10: Except with xenon headlamp and daytime light system

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

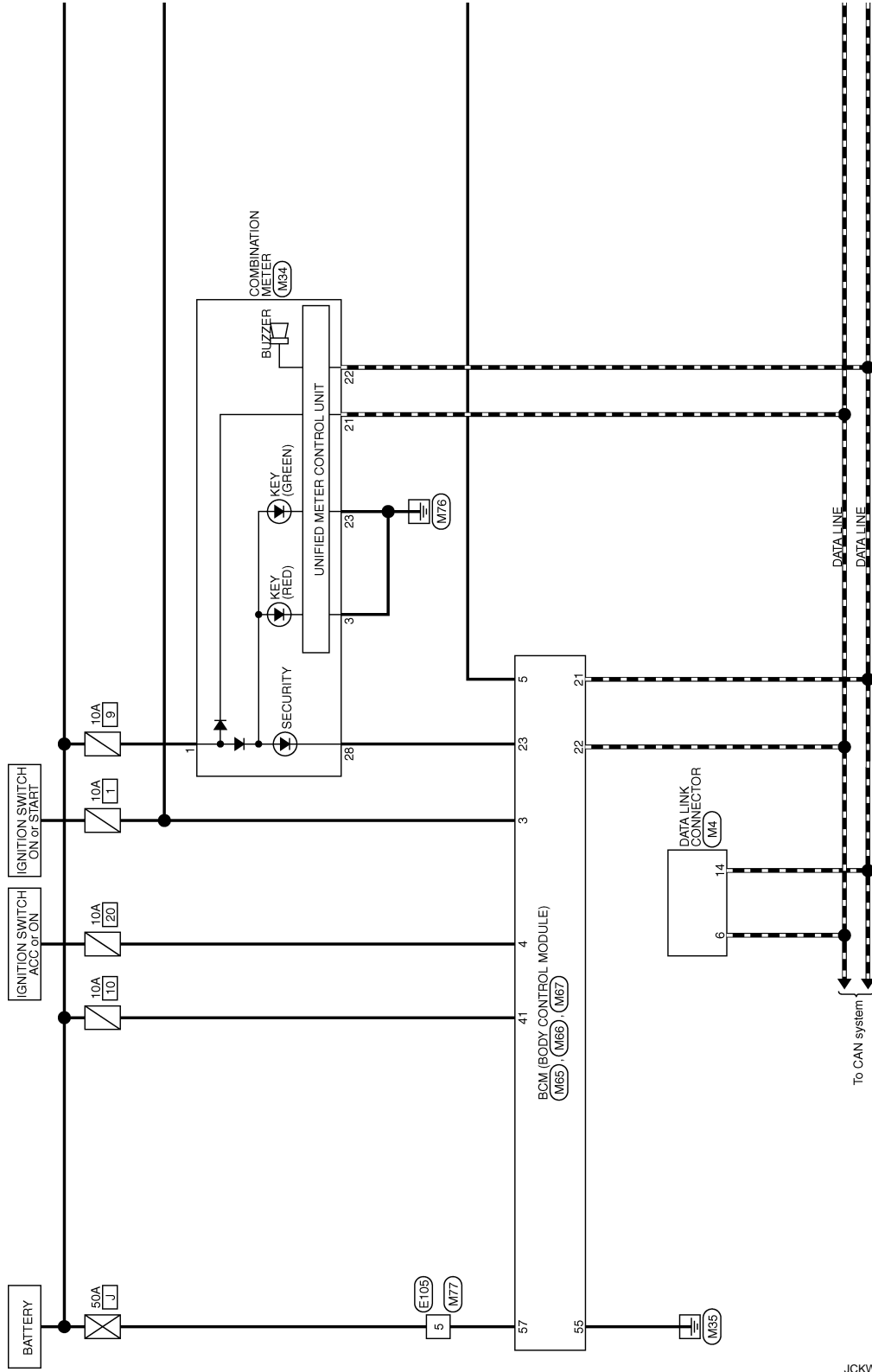
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:000000001286574

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION



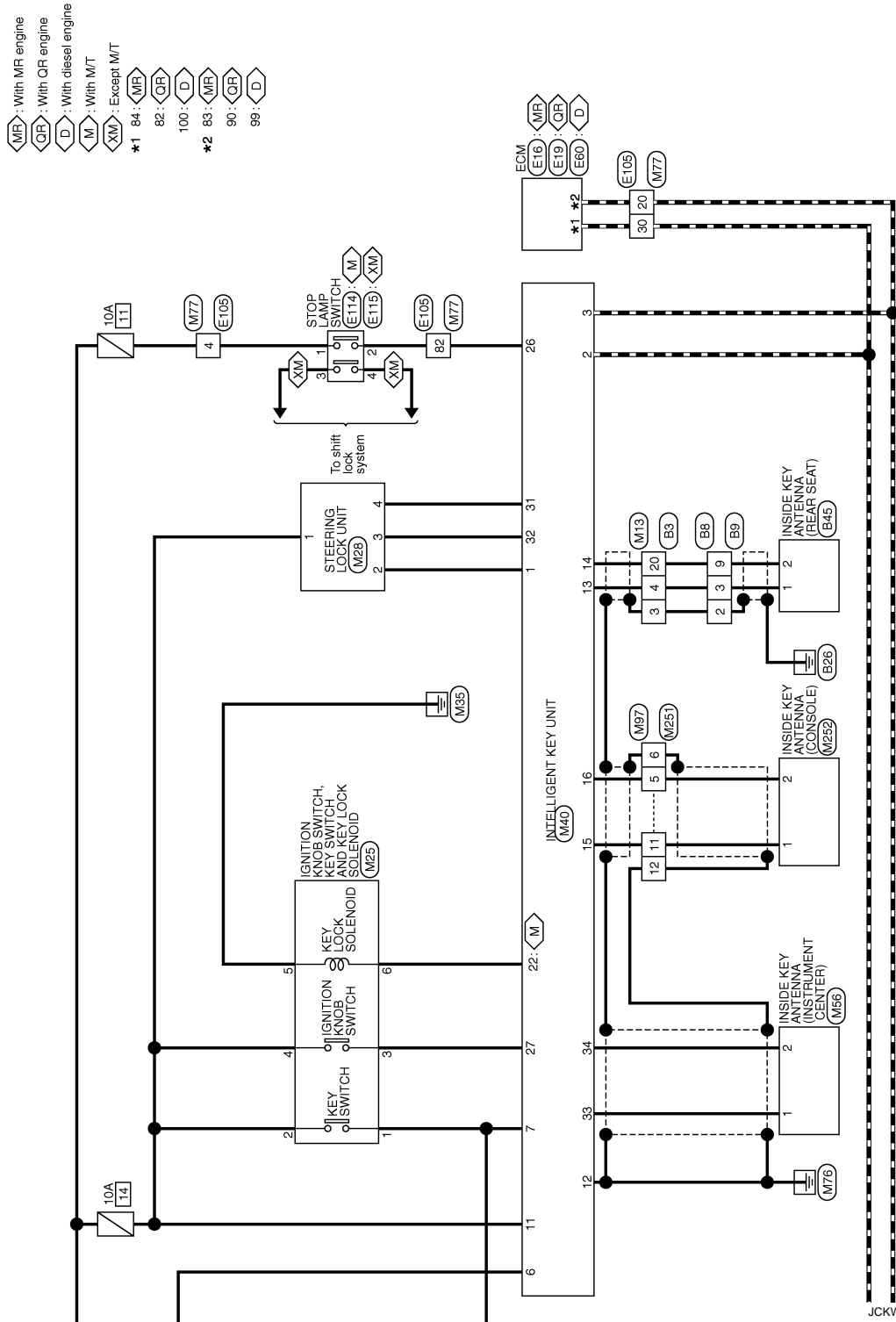
2007/02/28

JCKWA0437GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0438GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

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

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	P	-
20	L	-

Connector No.	B8
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	B	-
3	P	-
9	L	-

Connector No.	B9
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

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

Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	P	-
9	L	-

Connector No.	B45
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	RK02FEY

2	1
---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA24FB-MEA8-LH

81	85	89	93	97	101	105	109
82	86	90	94	98	102	106	110
83	87	91	95	99	103	107	111
84	88	92	96	100	104	108	112

Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-LI
84	L	CAN-HI

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32FB-AHY8

116	115	114	89	88	87	86	85	84	83	82
118	117		97	96	95	94	93	92	91	90
121	120	119	113	112	111	110	109	108	107	106

Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
80	P	VEHCAN-L

Connector No.	E60
Connector Name	ECM
Connector Type	MAA24FB-MEA8-LH

97	101	105	109	113	117	121	125
98	102	106	110	114	118	122	126
99	103	107	111	115	119	123	127
102	104	108	112	116	120	124	128

Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4

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

Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
82	O	-

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	E14
Connector Name	STOP LAMP SWITCH
Connector Type	M02FE-LC



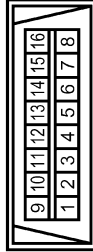
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-

Connector No.	E15
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



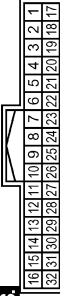
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	O	-
4	LG	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD1BFW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	B	-
20	W	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MG



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	- [LHD models] - [RHD models]
4	BR	-
5	B	-
6	LG	- [LHD models with M/T] - [RHD models with M/T]

Connector No.	M28
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [LHD models] - [RHD models]
2	BR	-
3	O	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 5V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
13	B	REAR SEAT (+)
14	W	REAR SEAT (-)
15	R	CONSOLE (+)

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



52	51	50	49	48	47	46	45	44	43	42	41
----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BATT(FUSE)

16	G	CONSOLE (-)
22	LG	KEY [L SOL][LHD models with M/T]
22	Y	KEY [L SOL][RHD models with M/T]
26	R	STOP LAMP SW
27	G	KNOB SW [LHD models]
31	LG	STRG LOCK UNIT GND
32	P	STRG LOCK UNIT SIG
33	L	INSTRUMENT (+)
34	P	INSTRUMENT (-)

Connector No.	M56
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FCY



2	1
---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
32	R	-

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AA84DFB



31	29	33	34	35	36	37	38	39	40
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN SW
4	SB	ACC SW
5	LG	KEY SW [With Intelligent Key]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M97
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	B	-
11	R	-
12	B	-

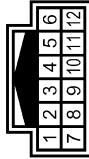
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	SHIELD	-
11	R	-
12	SHIELD	-

Connector No.	M252
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	PK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	G	-

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0442GE

BCM (BODY CONTROL MODULE)

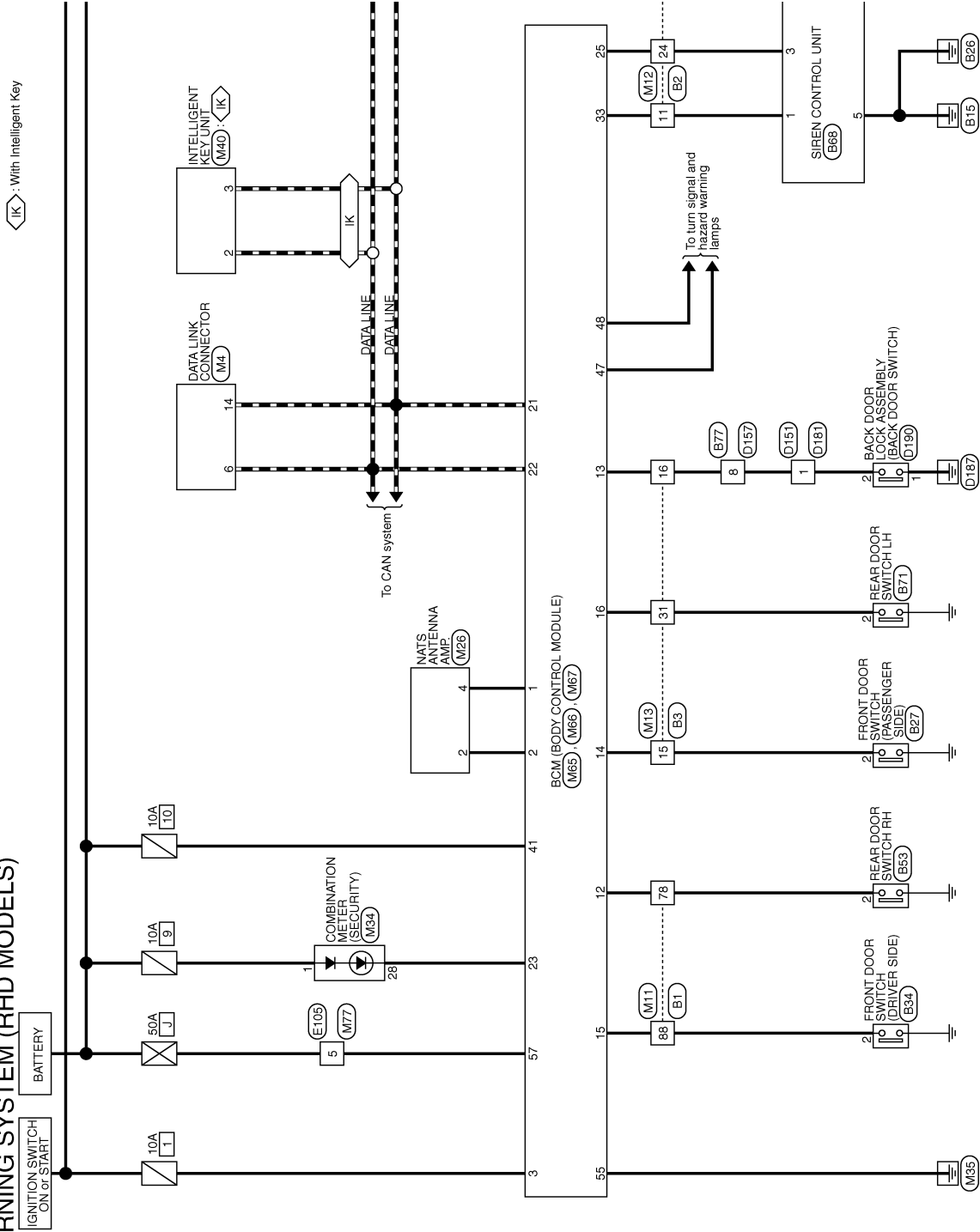
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM -

INFOID:000000001286575

THEFT WARNING SYSTEM (RHD MODELS)



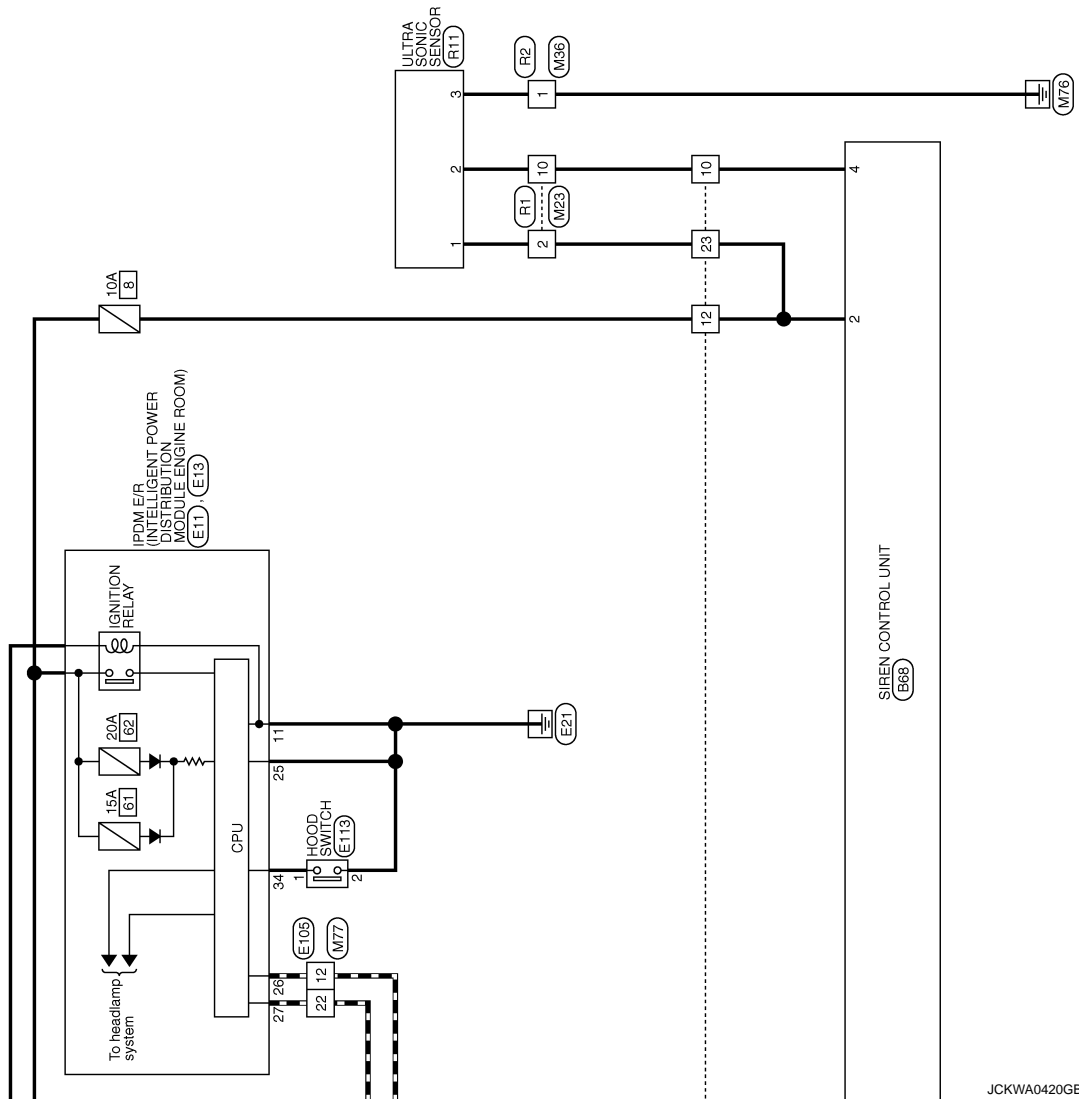
2007/02/28

JCKWA0419GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0420GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

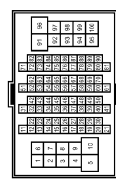
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

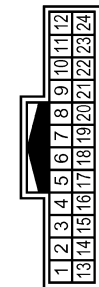
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



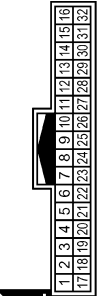
Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



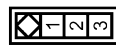
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



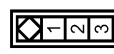
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



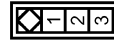
Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [RHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [RHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



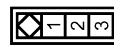
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	RH08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIAL LINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

JCKWA0421GE


BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >


THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS




Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	G	-
4	B	-
5	O	-
6	P	-
7	Br	-
8	Gr	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS308FBR-CS




Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	G	-
4	B	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS120FW-CS




Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	G	-
4	B	-
5	O	-

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS




Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	G	-
4	B	-
5	O	-
6	P	-
7	Br	-
8	Gr	-

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS




Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	R	-
3	G	-
4	B	-

Connector No.	E11
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	IM08FB-LC



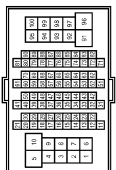
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
23	B	-
24	R	-
25	G	-
26	B	-
27	O	-
28	P	-
29	Br	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

JCKWA0422GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

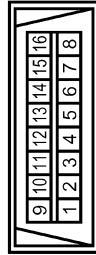
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



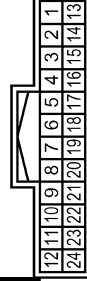
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



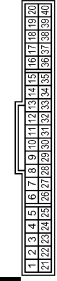
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

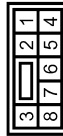
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

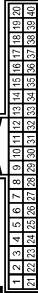
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



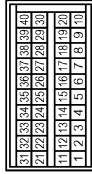
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



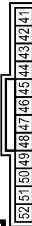
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	CAN-L
22	L	CAN-H
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



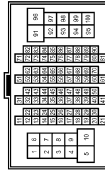
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0424GE

A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

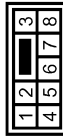
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	MS38MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

JCKWA0425GE

BCM (BODY CONTROL MODULE)

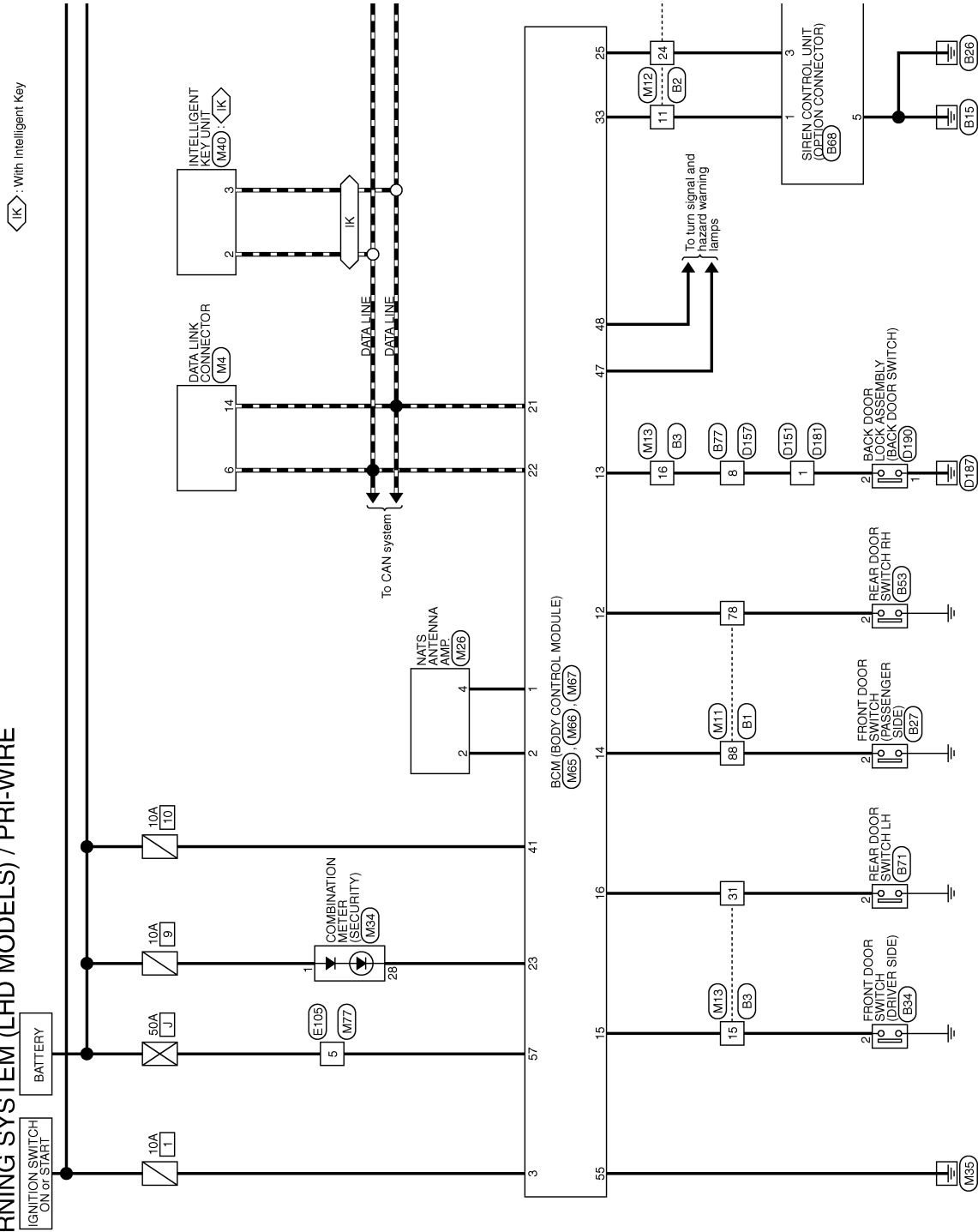
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559273

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



2007/02/28

JCKWA0412GE

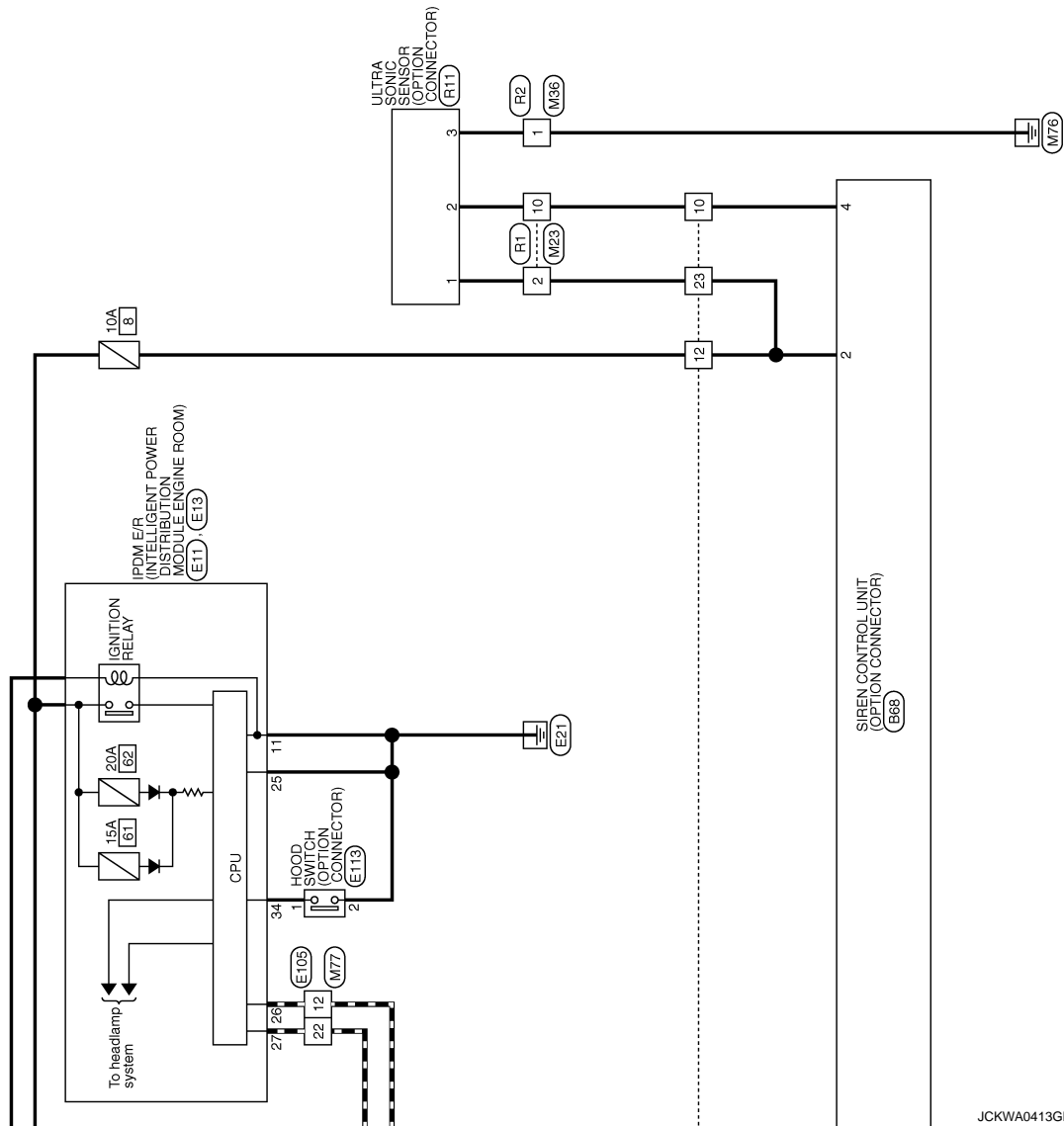
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0413GE

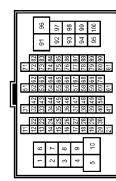
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

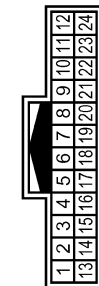
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80W-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



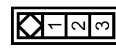
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



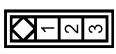
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



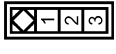
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [LHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [LHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



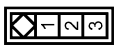
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIALLINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0414GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS



Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM08FB-LC



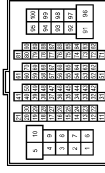
Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-
Terminal No.	34	Color of Wire	Y	Signal Name [Specification]	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH06FW-CS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-

JCKWA0415GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

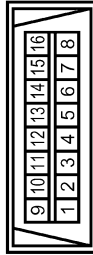
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



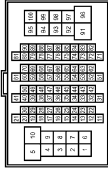
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



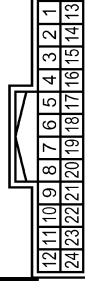
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



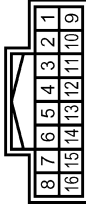
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	- [LHD models]
31	GR	- [LHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NSDBFW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



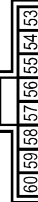
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



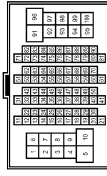
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



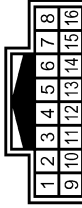
Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

Terminal No.	23	G	ALARM LINK
Terminal No.	33	W	HAZARD SW (With xenon headlamps and daytime light system)

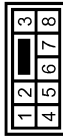
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0418GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

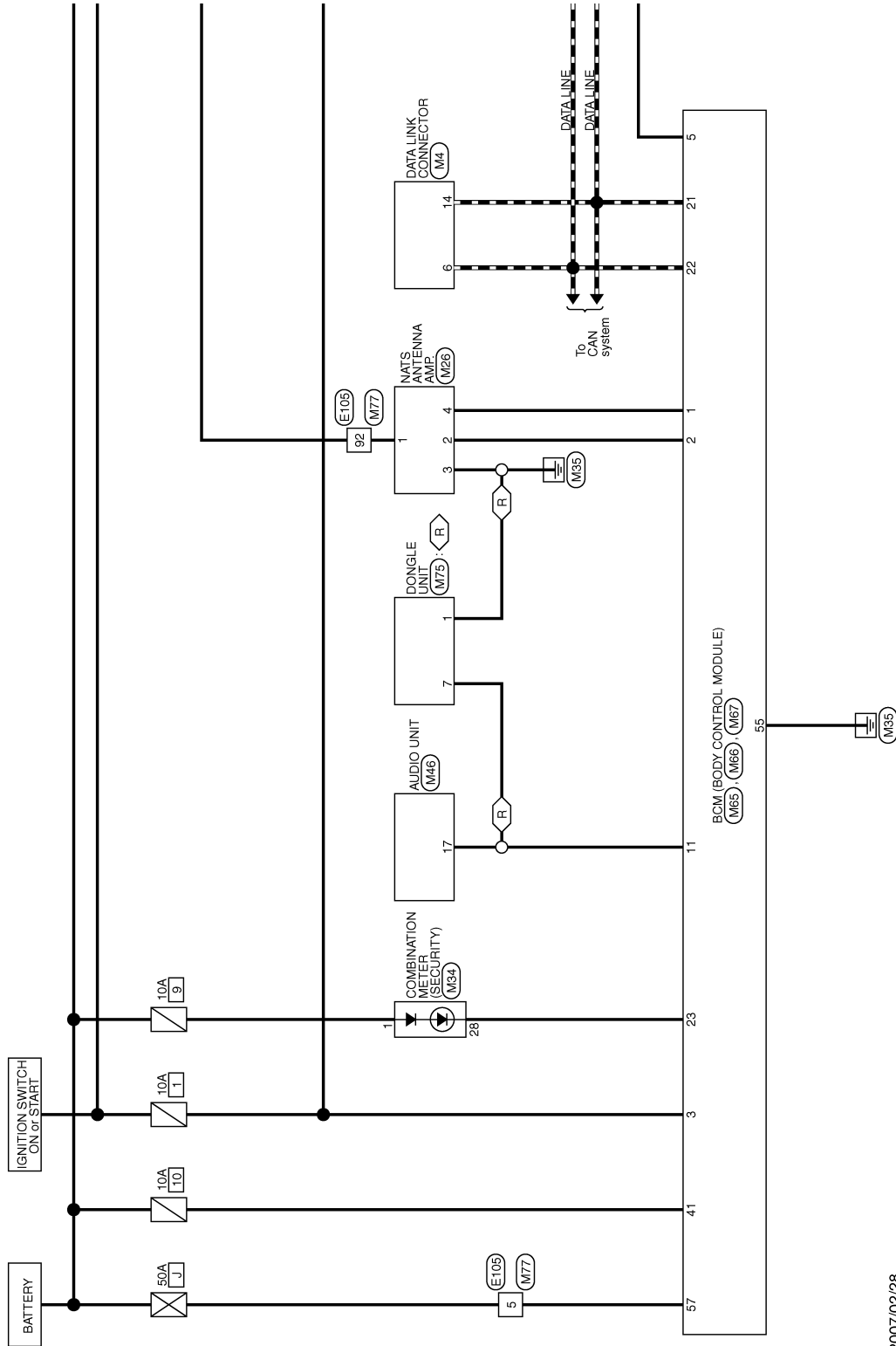
< ECU DIAGNOSIS >

Wiring Diagram - NATS -

INFOID:000000001286576

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

R: RHD models



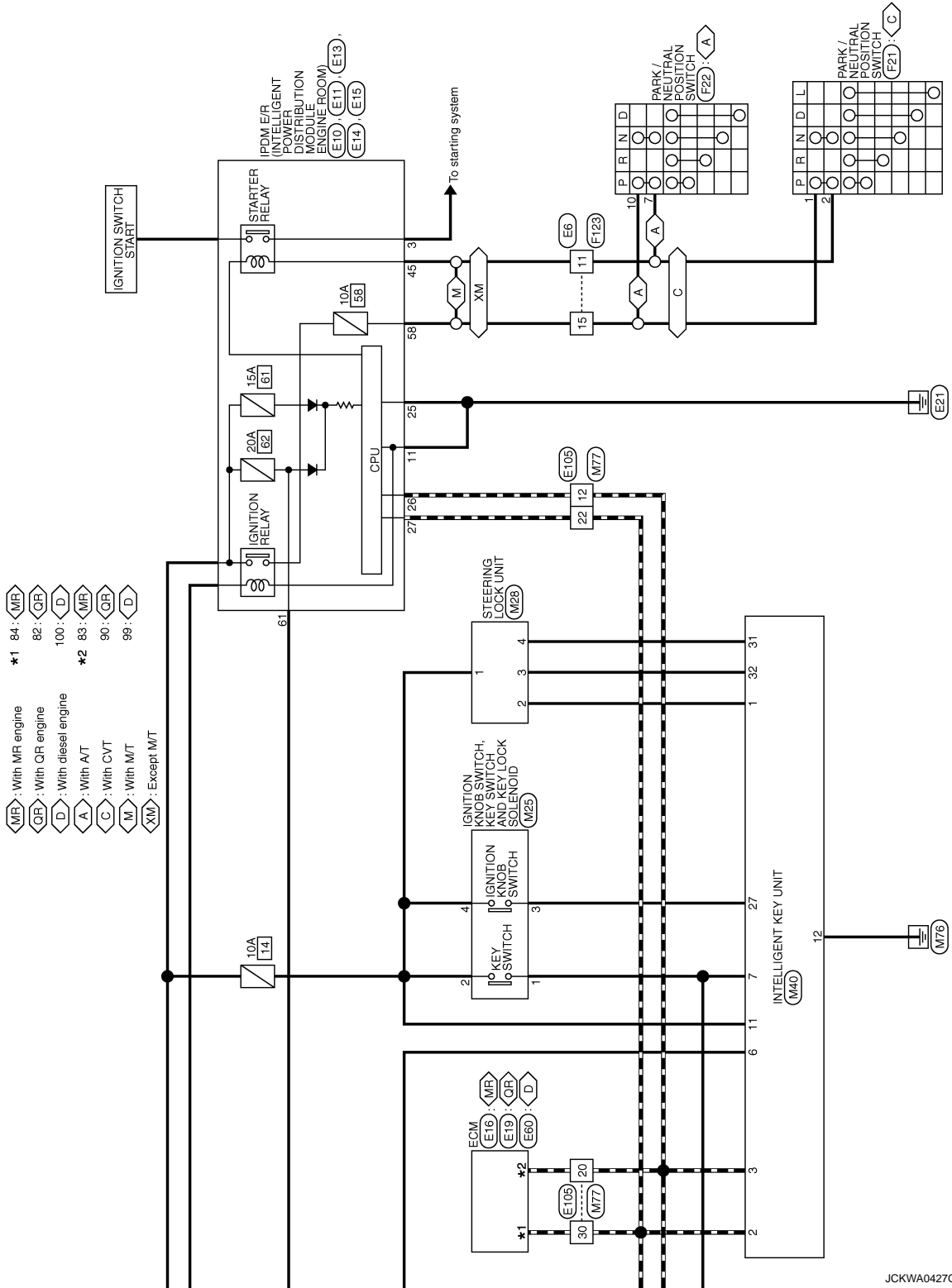
2007/02/28

JCKWA0426GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0427GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

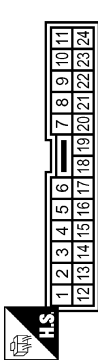
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

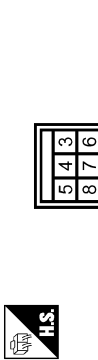
< ECU DIAGNOSIS >

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

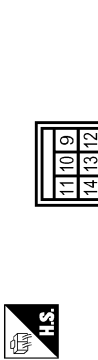
Connector No.	EB
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



Connector No.	E10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M08FW-LC



Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M06FB-LC



Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



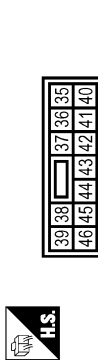
Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

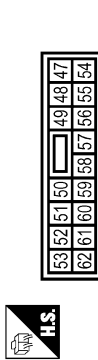
Terminal No.	Color of Wire	Signal Name [Specification]
25	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS12FB-CS



Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS16FW-CS



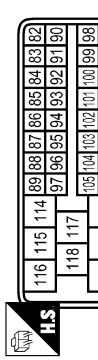
Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	- [Except M/T]
58	Y	- [With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA2FB-MEA3-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32B-AH3



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

JCKWA0428GE

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

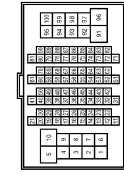
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



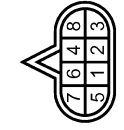
Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



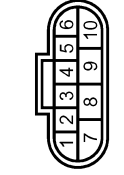
Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK08FG



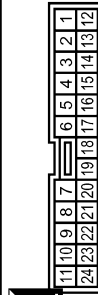
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



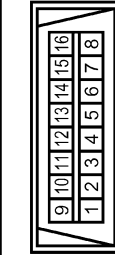
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK24FW-1V



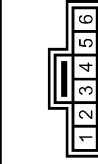
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

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



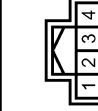
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	- [LHD models]
4	BR	- [RHD models]

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

JCKWA0429GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

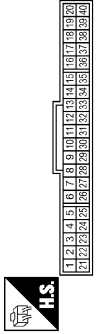
< ECU DIAGNOSIS >

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	M28
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



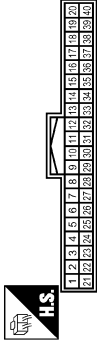
Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—[LHD models]
2	BR	—[RHD models]
3	O	—
4	LG	—

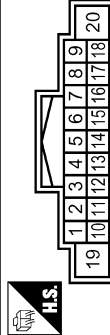
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH

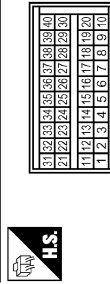


Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 3V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
27	G	KNOB SW[LHD models]
27	L	KNOB SW[RHD models]
31	LG	STRG LOCK UNIT GND

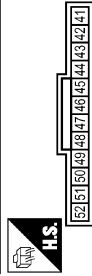
Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-GS2



Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AA840FB



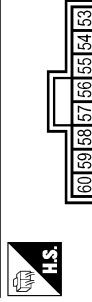
Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12BR



Terminal No.	Color of Wire	Signal Name [Specification]
17	B	IMMOBI

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP
2	G	NATS ANTENNA AMP
3	W	IGN SW
5	LG	KEY SWITCH (Intelligent Key)
11	B	AUDIO DONGLE LINK(SIGNAL)
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR[LHD models]
23	B	SECURITY INDICATOR[RHD models]

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



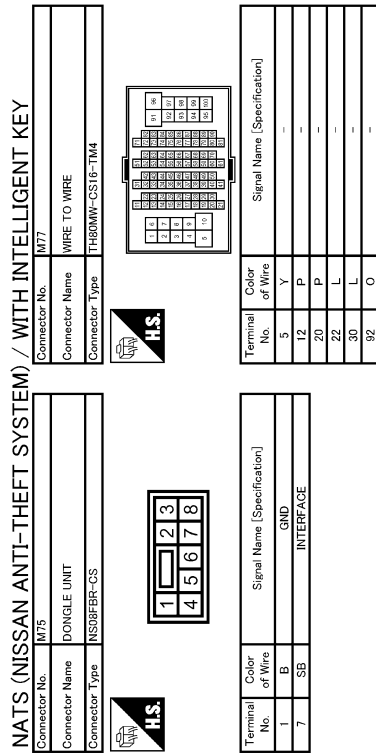
Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

JCKWA0430GE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



Fail Safe

FAIL-SAFE CONTROL BY DTC

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

JCKWA0431GE

INFOID:000000001569739

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

DTC	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2191: DIFFERENCE OF KEY	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2195: ANTI SCANNING	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2196: DONGLE NG	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.

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

Condition of cancellation

1. Turn ignition switch OFF.
2. Pass more than 1 minute after the rear wiper stop.
3. Turn ignition switch ON.
4. Operate the rear wiper switch.

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status from the terminal voltage.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

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

FAIL-SAFE CONTROL BY LIGHT & RAIN SENSOR MALFUNCTION

BCM detects the light & rain sensor serial link error and the light & rain sensor malfunction.

BCM controls the following fail-safe when light & rain sensor has a malfunction.

Fail-safe Control

- Auto light control: Headlamp is turned ON.
- Front wiper control: The condition just before the activation of fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:000000001569740

Priority	DTC
1	<ul style="list-style-type: none"> U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
2	<ul style="list-style-type: none"> B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2194: DISCORD BCM-I-KEY B2195: ANTI SCANNING B2196: DONGLE NG

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

DTC Index

INFOID:000000001569741

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

DTC	TIME		Fail-safe	Reference
	0	1 - 39		
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-33
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-34
B2190: NATS ANTENNA AMP	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-41 • Without Intelligent Key system: SEC-254
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-43 • Without Intelligent Key system: SEC-256
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-38 • Without Intelligent Key system: SEC-251
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-40 • Without Intelligent Key system: SEC-253
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-53
B2195: ANTI SCANNING	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-54 • Without Intelligent Key system: SEC-264
B2196: DONGLE NG	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-55 • Without Intelligent Key system: SEC-265

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY UNIT

Reference Value

INFOID:000000001329204

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

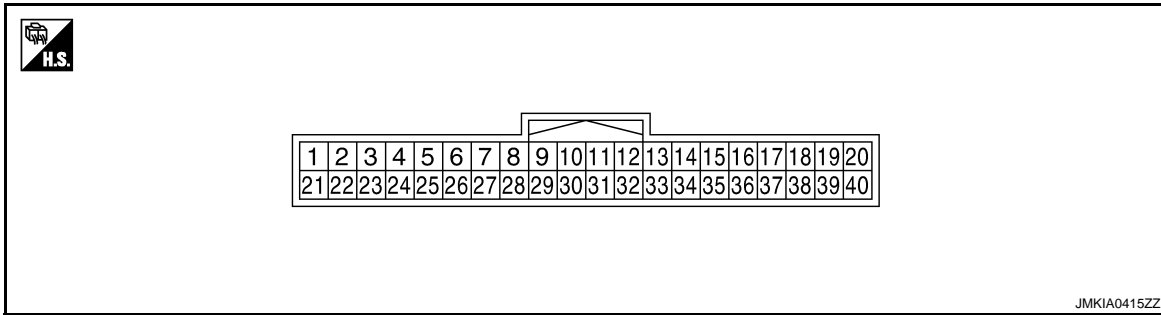
Monitor Item	Condition	Value/Status	
PUSH SW	Ignition knob	Release	OFF
		Press	ON
KEY ON SW	Mechanical key	Removed	OFF
		Inserted	ON
DR REQ SW	Door request switch (driver)	Release	OFF
		Press	ON
AS REQ SW	Door request switch (passenger)	Release	OFF
		Press	ON
BD/TR REQ SW	Door request switch (back door)	Release	OFF
		Press	ON
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
ACC SW	Ignition switch	Other than ACC or ON position	OFF
		ACC or ON position	ON
STOP LAMP SW	Brake pedal	Press	OFF
		Release	ON
DOOR LOCK SIG	Lock button of Intelligent Key	Release	OFF
		Press	ON
DOOR UNLOCK SIG	Unlock button of Intelligent Key	Release	OFF
		Press	ON
DOOR SW DR	Door (driver side)	Close	OFF
		Open	ON
DOOR SW AS	Door (passenger side)	Close	OFF
		Open	ON
DOOR SW RR	Door (rear RH)	Close	OFF
		Open	ON
DOOR SW RL	Door (rear LH)	Close	OFF
		Open	ON
DOOR BK SW	Back door	Close	OFF
		Open	ON
VEHICLE SPEED	While driving	Equivalent to speedometer reading	

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No.		Wire color	Description		Condition	Value [V] (Approx.)
+	-		Signal name	Input/Output		
1	Ground	LG	Steering lock unit power supply	Output	—	5
2	Ground	L	CAN - H	Input/Output	—	—
3	Ground	P	CAN - L	Input/Output	—	—
4	Ground	LG	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	0
					Not sounding	Battery voltage
5	Ground	P	Front door request switch (driver side)	Input	Front door request switch (driver side)	0
					OFF (Released)	5
6	Ground	W	Ignition switch power supply	Input	Ignition switch	0
					ON or START	Battery voltage
7	Ground	V	Key switch	Input	When ignition key is inserted into ignition key cylinder	Battery voltage
					When ignition key is not inserted into ignition key cylinder	0
11	Ground	V	Battery power supply	Input	Ignition switch OFF	Battery voltage
12	Ground	B	Ground	—	Ignition switch ON	0
13	Ground	Y	Inside key antenna (+) (rear seat)	Output	Ignition knob is pressed.	<p style="text-align: right; font-size: small;">JMKIA0393ZZ</p>
					When Intelligent Key is not in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0391ZZ</p>

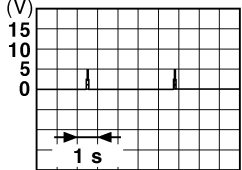
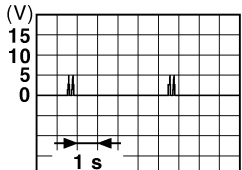
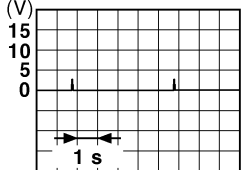
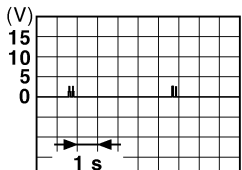
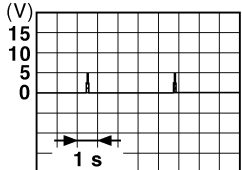
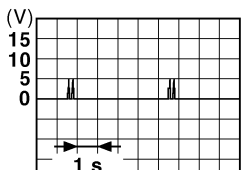
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No.		Wire color	Description		Condition	Value [V] (Approx.)
+	-		Signal name	Input/ Output		
14	Ground	W	Inside key antenna (-) (rear seat)	Output	Ignition knob is pressed.	 <p style="text-align: right; font-size: small;">JMKIA0392ZZ</p>
					When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0390ZZ</p>
15	Ground	SB	Inside key antenna (+) (console)	Output	Ignition knob is pressed.	 <p style="text-align: right; font-size: small;">JMKIA0393ZZ</p>
					When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0391ZZ</p>
16	Ground	BR	Inside key antenna (-) (console)	Output	Ignition knob is pressed.	 <p style="text-align: right; font-size: small;">JMKIA0392ZZ</p>
					When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0390ZZ</p>

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No.		Wire color	Description		Condition	Value [V] (Approx.)
+	-		Signal name	Input/ Output		
17	Ground	SB	Outside key antenna (+) (rear bumper)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0397ZZ</p>
					When the back door request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area
18	Ground	V	Outside key antenna (-) (rear bumper)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0395ZZ</p>
					When the back door request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area
19	Ground	L	Outside key antenna (+) (driver side)	Output	When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA0397ZZ</p>
					When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area

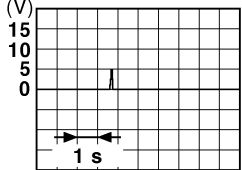
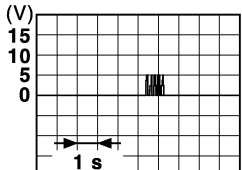
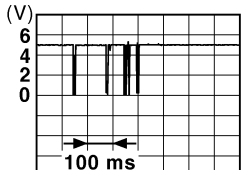
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No.		Wire color	Description		Condition	Value [V] (Approx.)	
+	-		Signal name	Input/Output			
20	Ground	BR	Outside key antenna (-) (driver side)	Output	When the front door request switch (driver side) is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area 	
					When Intelligent Key is not in the antenna detection area		
22 ^{*1}	Ground	W	Key lock solenoid	Output	LOCK ^{*2}	Battery voltage	
					UNLOCK ^{*2}	0	
25	Ground	BR	Front door request switch (passenger side)	Input	Front door request switch (passenger side)	ON (Pressed)	0
					OFF (Released)	5	
26	Ground	R	Stop lamp switch	Input	Depress the brake pedal	Battery voltage	
					Release the brake pedal	0	
27	Ground	L	Ignition knob switch	Input	Ignition switch OFF	When ignition knob switch is pressed	Battery voltage
					When ignition knob switch is released	0	
28	Ground	O	Unlock sensor	Input	Lock (ON)	5	
					Unlock (OFF)	0	
29	Ground	GR	Back door request switch	Input	Back door request switch	ON (Pressed)	0
					OFF (Released)	5	
31	Ground	GR	Steering lock unit ground	—	—	0	
32	Ground	P	Steering lock unit communication	Input/Output	Steering lock	LOCK status	5
					LOCK or UNLOCK		

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No.		Wire color	Description		Condition	Value [V] (Approx.)
+	-		Signal name	Input/Output		
33	Ground	O	Inside key antenna (+) (instrument center)	Output	Ignition knob is pressed.	<p style="text-align: right; font-size: small;">JMKIA0393ZZ</p>
					Ignition knob is pressed.	<p style="text-align: right; font-size: small;">JMKIA0391ZZ</p>
34	Ground	G	Inside key antenna (-) (instrument center)	Output	Ignition knob is pressed.	<p style="text-align: right; font-size: small;">JMKIA0392ZZ</p>
					Ignition knob is pressed.	<p style="text-align: right; font-size: small;">JMKIA0390ZZ</p>
37	Ground	L	Outside key antenna (+) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	<p style="text-align: right; font-size: small;">JMKIA0397ZZ</p>
					Ignition knob is pressed.	<p style="text-align: right; font-size: small;">JMKIA0514ZZ</p>

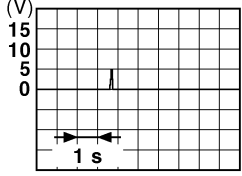
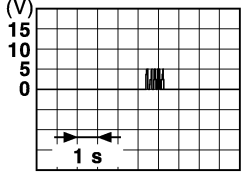
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No.		Wire color	Description		Condition	Value [V] (Approx.)
+	-		Signal name	Input/Output		
38	Ground	O	Outside key antenna (-) (passenger side)	Output	When the front door request switch (passenger side) is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0395ZZ</p>
					When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0515ZZ</p>
40	Ground	Y	Passenger side anti-hijack relay	Input	Press front door request switch (passenger side)	Battery voltage → 0 → Battery voltage
					Other than above	Battery voltage

*1: Only for MT model.

*2: Key interlock operation is only for M/T model for operation condition, refer to [SEC-16. "System Description"](#).

INTELLIGENT KEY UNIT

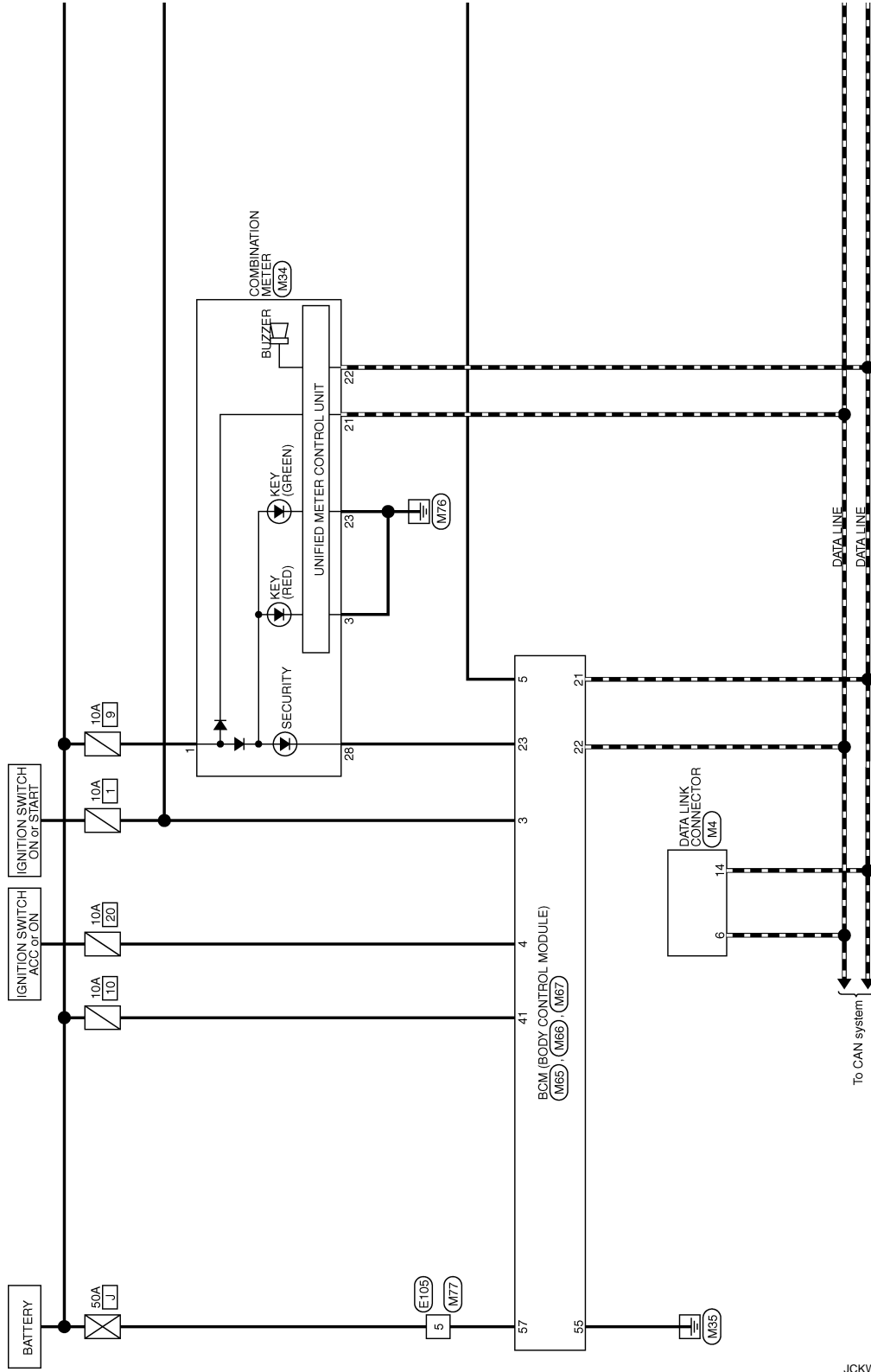
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:000000001559331

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION



2007/02/28

JCKWA0437GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

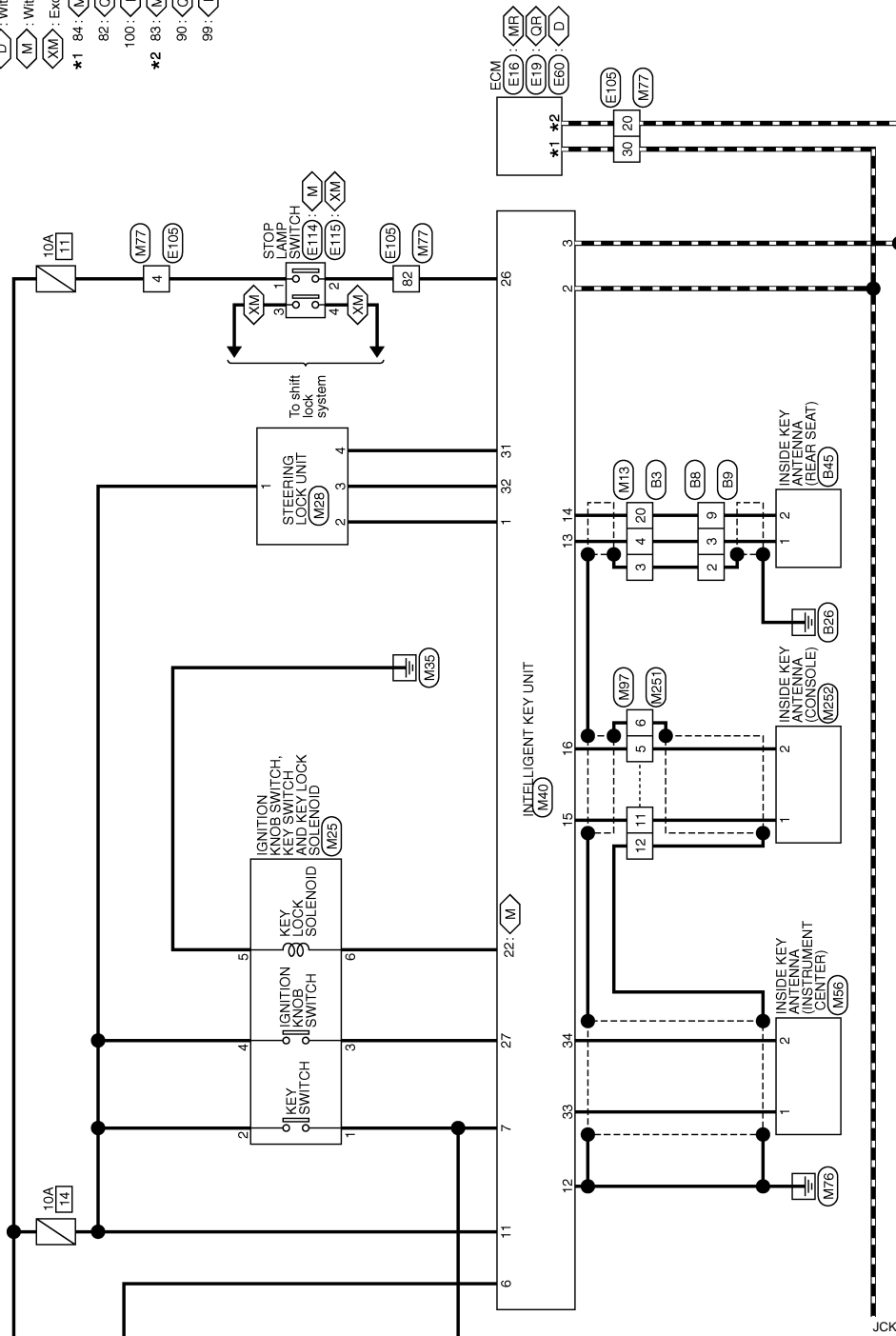
SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- With MR engine
- With QR engine
- With diesel engine
- With M/T
- Except M/T
- *1
- 82:
- 100:
- *2
- 83:
- 90:
- 99:



JCKWA0438GE

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	P	-
20	L	-

Connector No.	B8
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	B	-
3	P	-
9	L	-

Connector No.	B9
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	P	-
9	L	-

Connector No.	B45
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	FK02F5Y

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA24FB-MEA6-LH

Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32FB-AH3

Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
80	P	VEHCAN-L

Connector No.	E60
Connector Name	ECM
Connector Type	MAA24FB-MEA6-LH

Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
82	O	-

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	E14
Connector Name	STOP LAMP SWITCH
Connector Type	M02FE-LC



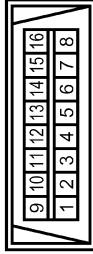
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-

Connector No.	E15
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	O	-
4	LG	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD18FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	THS2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	B	-
20	W	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MG



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	-[LHD models]
3	L	-[RHD models]
4	BR	-
5	B	-
6	Y	-[LHD models with M/T] -[RHD models with M/T]

Connector No.	M23
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-[LHD models]
1	BR	-[RHD models]
2	O	-
3	P	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND
28	B	SECURITY



INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

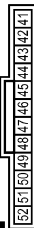
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 5V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
13	B	REAR SEAT (+)
14	W	REAR SEAT (-)
15	R	CONSOLE (+)

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)

16	G	CONSOLE (-)
22	LG	KEY [L/SOL/LHD models with M/T]
22	Y	KEY [L/SOL/RHD models with M/T]
26	R	STOP LAMP SW
27	G	KNGB SW [LHD models]
31	LG	STRG LOCK UNIT GND
32	P	STRG LOCK UNIT SIG
33	L	INSTRUMENT (+)
34	P	INSTRUMENT (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)




Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
32	R	-

Connector No.	M55
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FCY




Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN SW
4	SB	ACQ SW
5	LG	KEY SW [With Intelligent Key]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M97
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	B	-
11	R	-
12	B	-

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

JCKWA0441GE

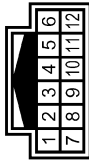
INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	SHIELD	-
11	R	-
12	SHIELD	-

Connector No.	M252
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	PK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	G	-

JCKWA0442GE

INTELLIGENT KEY UNIT

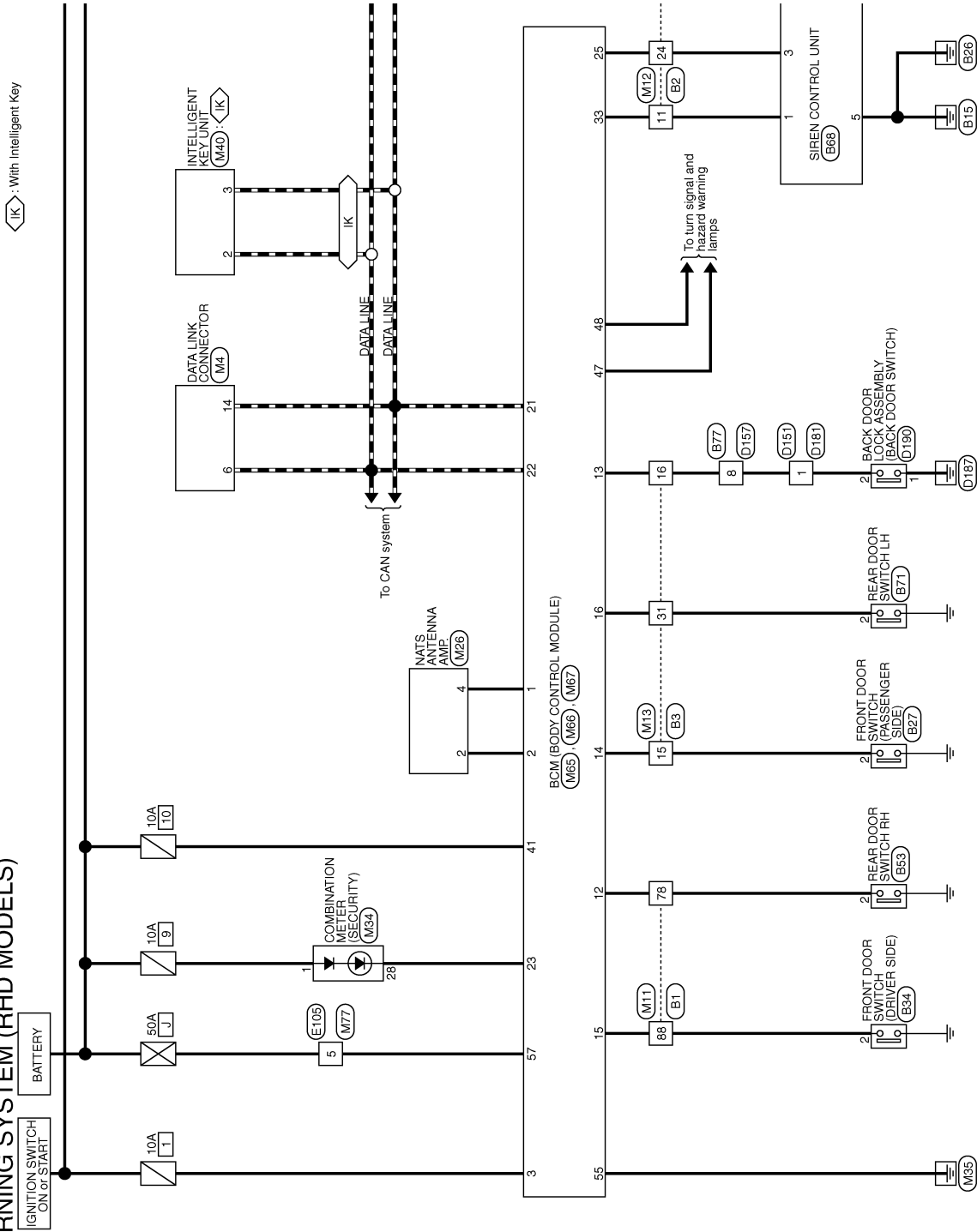
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM -

INFOID:000000001559332

THEFT WARNING SYSTEM (RHD MODELS)



2007/02/28

JCKWA0419GE

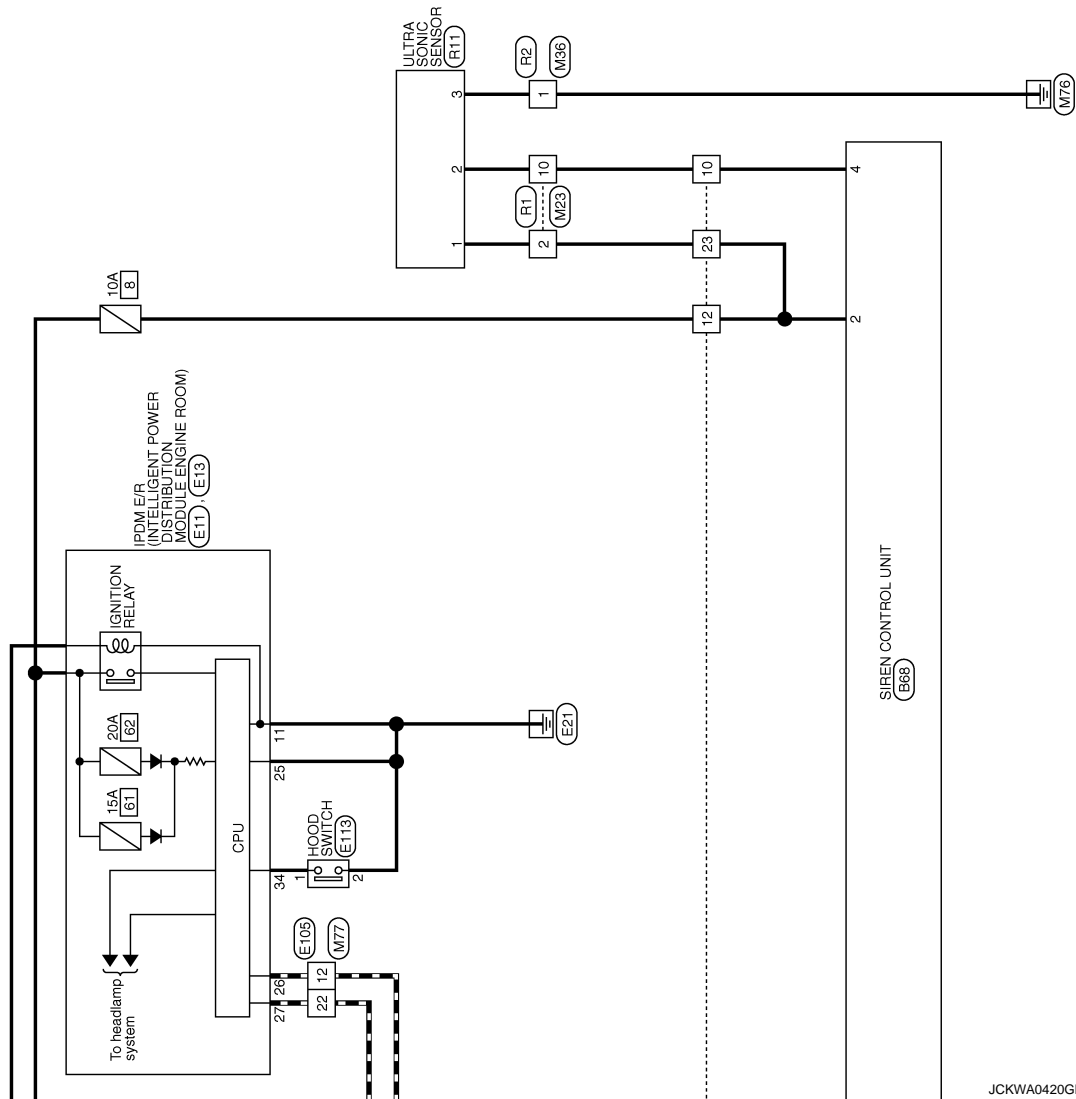
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JCKWA0420GE


INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]


THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW




Terminal No.	2	Color of Wire	P	Signal Name [Specification]	[RHD models]
--------------	---	---------------	---	-----------------------------	--------------

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	T1432MW-NH




Terminal No.	15	Color of Wire	P	Signal Name [Specification]	
	16		V		
	31		GR		

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	T1424MW-NH



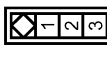
Terminal No.	10	Color of Wire	L	Signal Name [Specification]	
	11		W		
	12		Y		
	23		Y		
	24		G		

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	T180MW-CS16-TM4




Terminal No.	78	Color of Wire	Y	Signal Name [Specification]	
	88		BR		

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW




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

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB




Terminal No.	1	Color of Wire	W	Signal Name [Specification]	BLINKERCOMMAND
	2		Y		+B
	3		G		COM1
	4		L		SERIALLINE
	5		B		GND

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



Terminal No.	2	Color of Wire	Y	Signal Name [Specification]	
--------------	---	---------------	---	-----------------------------	--

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal No.	2	Color of Wire	BR	Signal Name [Specification]	[RHD models]
--------------	---	---------------	----	-----------------------------	--------------

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC



INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NSC8MBF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS


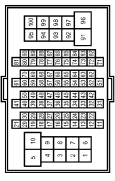
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-
Terminal No.	34	Color of Wire	Y	Signal Name [Specification]	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM8FB-LC

Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	D130
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS

Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-

JCKWA0422GE

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

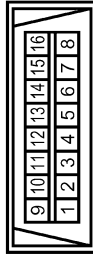
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



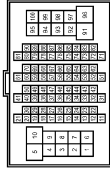
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



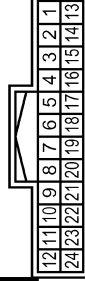
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



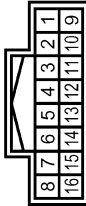
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	CAN-L
22	L	CAN-H
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



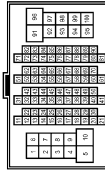
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

Terminal No.	23	G	ALARM LINK
Terminal No.	33	Y	HAZARD SW [Except with xenon headlamp and daytime light system]

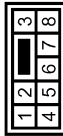
INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK104FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0425GE

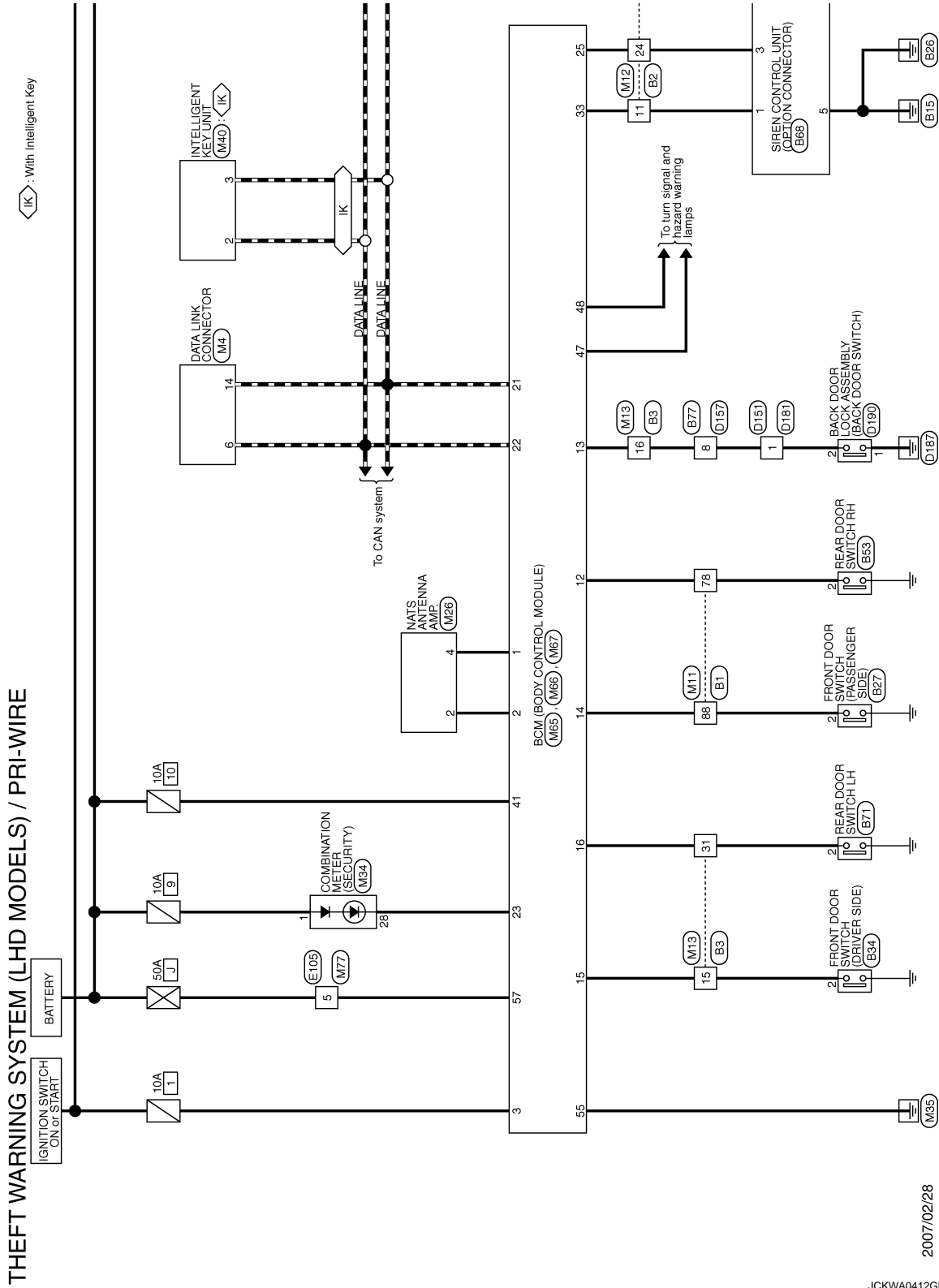
INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559333



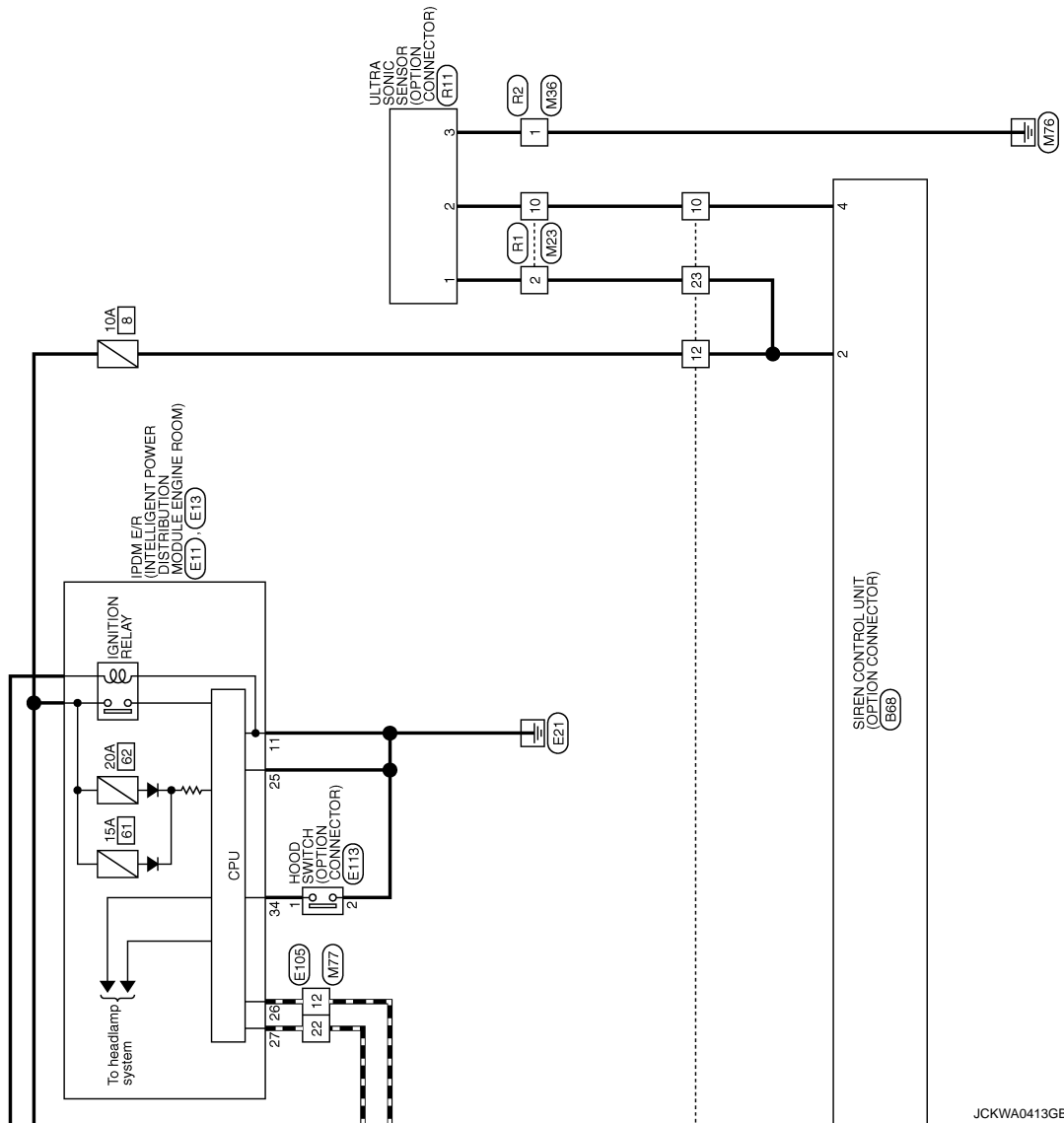
2007/02/28

JCKWA0412GE

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0413GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

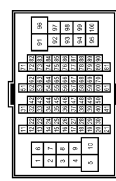
INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

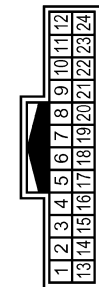
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



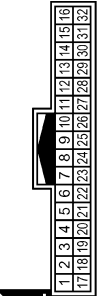
Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



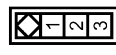
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



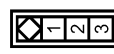
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



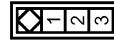
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [LHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [LHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



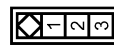
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	RH08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIAL LINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

JCKWA0414GE



INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]



< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



Connector No.	D181	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	
Connector Name	WIRE TO WIRE	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	
Connector Type	NS28MRF-CS	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	



Connector No.	D157	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	
Connector Name	WIRE TO WIRE	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	
Connector Type	NS12DFW-CS	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	

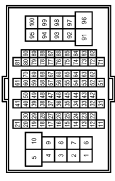

Connector No.	D151	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	
Connector Name	WIRE TO WIRE	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	
Connector Type	NS308FBR-CS	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	



Connector No.	B77	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	
Connector Name	WIRE TO WIRE	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	
Connector Type	NS10WW-CS	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	



Connector No.	E105	Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	
Connector Name	WIRE TO WIRE	Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	
Connector Type	TH80FW-CS16-TM4	Terminal No.	12	Color of Wire	P	Signal Name [Specification]	



Connector No.	E13	Terminal No.	25	Color of Wire	B	Signal Name [Specification]	
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Terminal No.	25	Color of Wire	B	Signal Name [Specification]	
Connector Type	TH12FW-NH	Terminal No.	26	Color of Wire	P	Signal Name [Specification]	

Connector No.	E11	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	
Connector Type	IM8FB-LC	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	

Connector No.	D190	Terminal No.	1	Color of Wire	B	Signal Name [Specification]	
Connector Name	BACK DOOR LOCK ASSEMBLY	Terminal No.	1	Color of Wire	B	Signal Name [Specification]	
Connector Type	NS24FW-CS	Terminal No.	2	Color of Wire	V	Signal Name [Specification]	

JCKWA0415GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

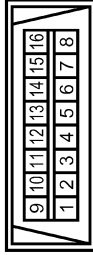
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



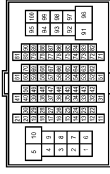
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



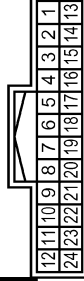
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



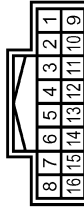
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-(LHD models)
31	GR	-(LHD models)

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



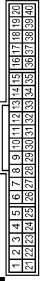
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

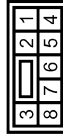
INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

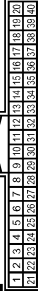
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



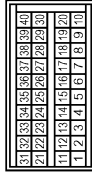
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



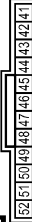
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



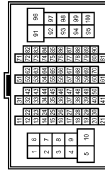
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



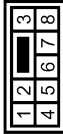
Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0417GE

A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	MS38MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R1
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

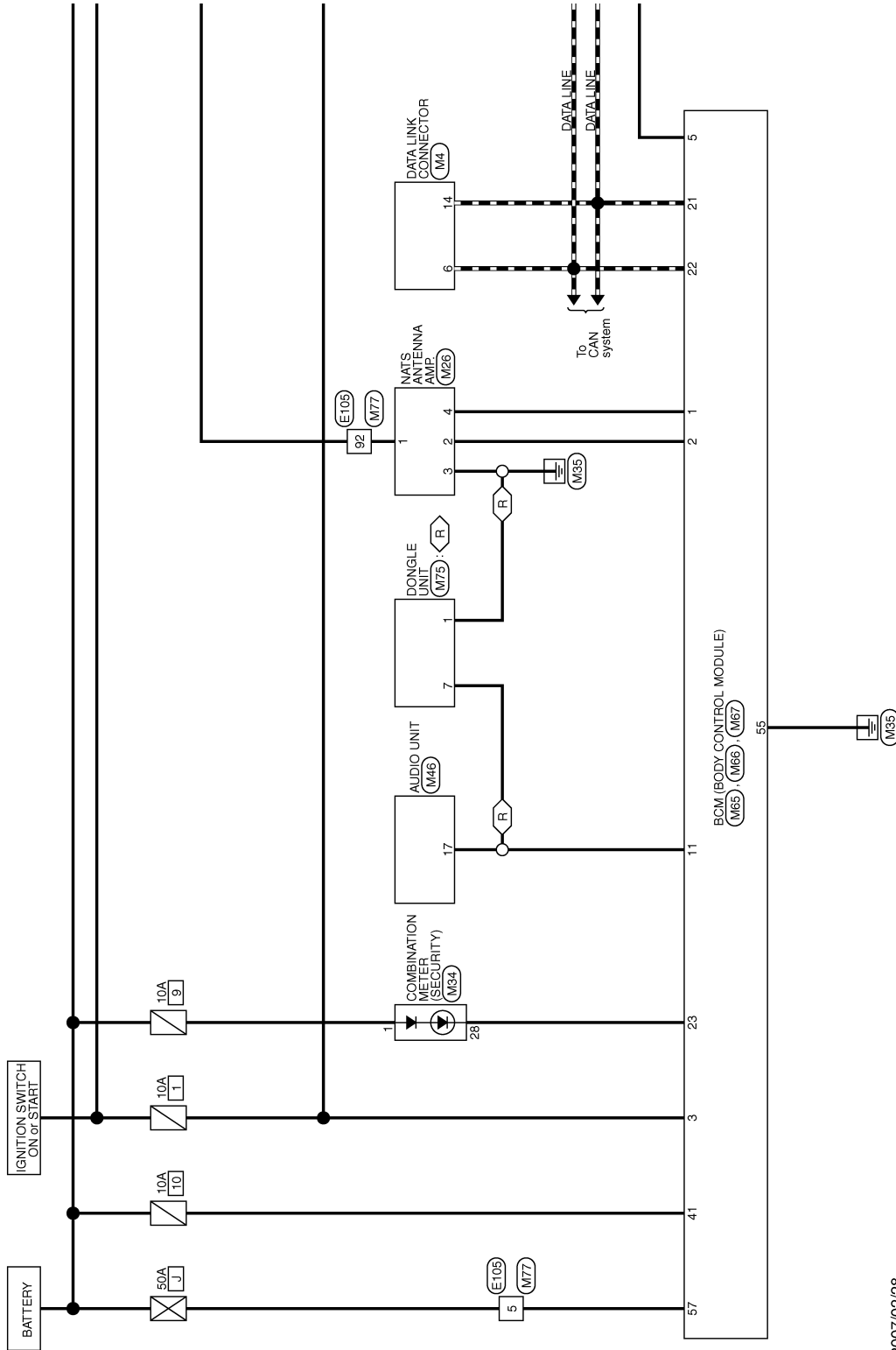
< ECU DIAGNOSIS >

Wiring Diagram - NATS -

INFOID:000000001559334

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

: RHD models



2007/02/28

JCKWA0426GE

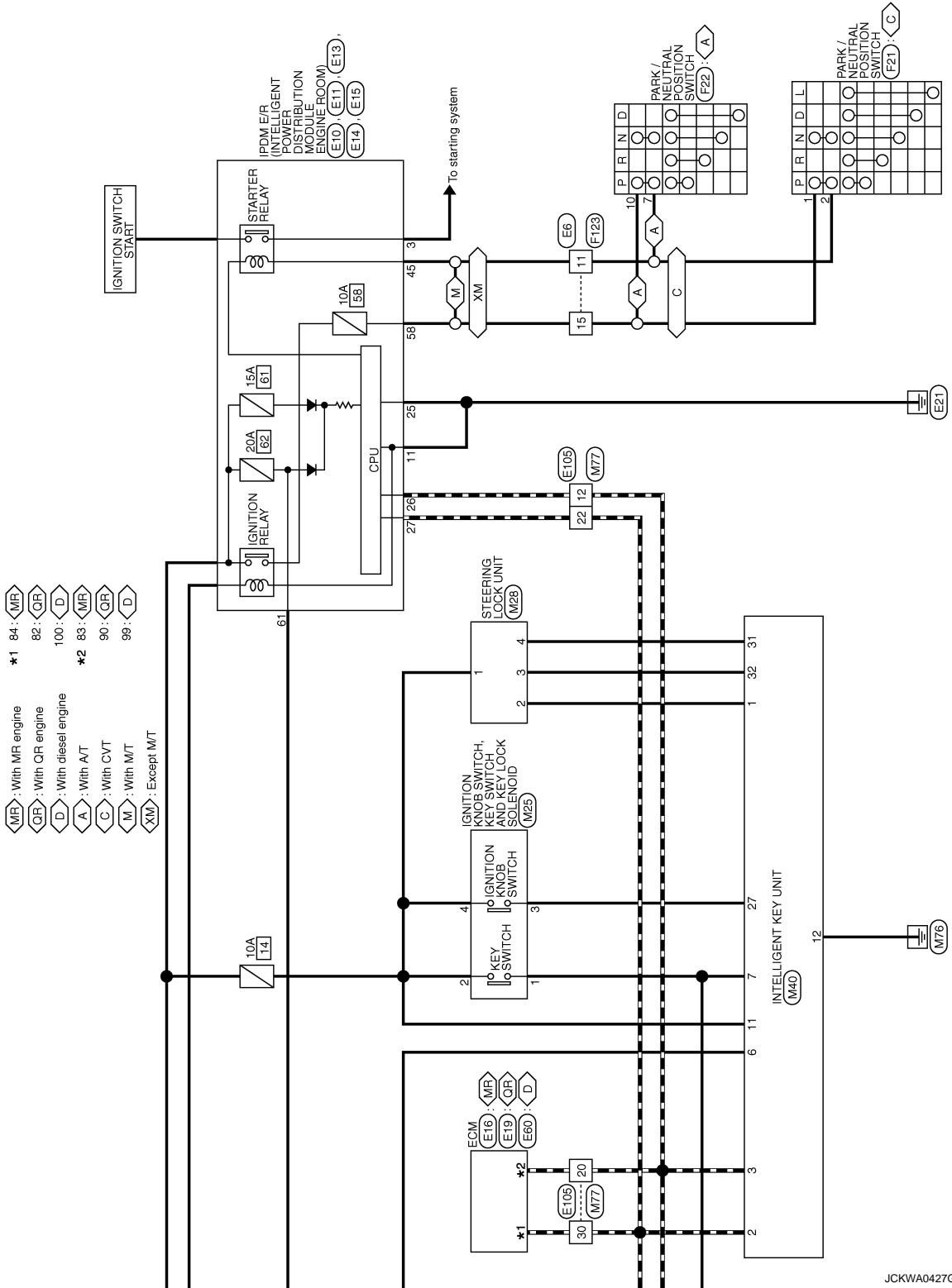
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0427GE

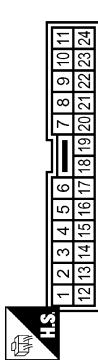
INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Connector No.	E10
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	M08FW-LC



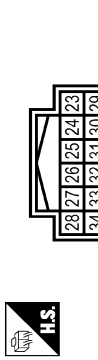
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Connector No.	E11
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	M08FB-LC



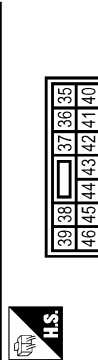
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH12FW-NH



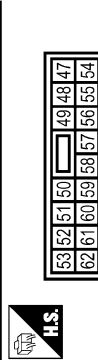
Terminal No.	Color of Wire	Signal Name [Specification]
23	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS12FB-CS



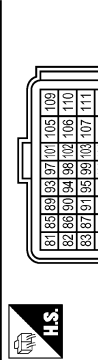
Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	-[Except M/T]
59	Y	-[With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MA42FB-ME4F-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	B4432FB-ATY8



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

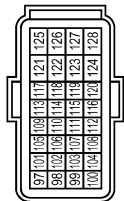
INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

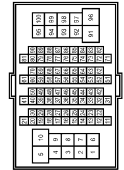
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	E60
Connector Name	ECM
Connector Type	MAA24FF-MEA8-LH



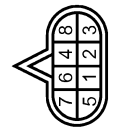
Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



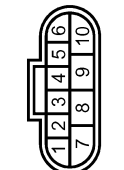
Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK09FG



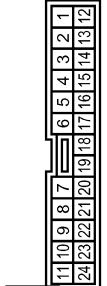
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



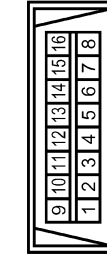
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK24FW-1V



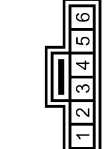
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



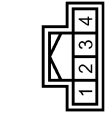
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	-[LHD model]
3	L	-[RHD model]
4	BR	-

Connector No.	M26
Connector Name	MATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

JCKWA0429GE

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	M23
Connector Name	STEERING LOCK UNIT
Connector Type	TK0AFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	[LHD models]
2	BR	[RHD models]
3	O	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 3V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
27	G	KNOB SW[LHD models]
27	L	KNOB SW[RHD models]
31	LG	STRG LOCK UNIT GND

32	P	STRG LOCK UNIT SIG
----	---	--------------------

Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
17	B	IMMOBI

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AA4B0FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP
2	G	NATS ANTENNA AMP
3	W	IGN SW
5	LG	KEY SWITCH (Intelligent Key)
11	B	AUDIO DONGLE LINK(SIGNAL)
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR[LHD models]
23	B	SECURITY INDICATOR[RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FB



Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

JCKWA0430GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	M75
Connector Name	DONGLE UNIT
Connector Type	NS02BFF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
7	SB	INTERFACE

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TF80MM-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

JCKWA0431GE

INTELLIGENT KEY UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Fail Safe

INFOID:000000001559881

Display contents of CONSULT-III	Fail-safe	Cancellation
B2013: STRG COMM 1	<ul style="list-style-type: none"> Inhibits steering lock unlocking 	Erase DTC
B2552: INTELLIGENT KEY	<ul style="list-style-type: none"> Inhibits steering lock unlocking Inhibits engine cranking (BCM) Fuel cut (ECM) 	Erase DTC
B2590: NATS MALFUNCTION	<ul style="list-style-type: none"> Inhibits steering lock unlocking Inhibits engine cranking (BCM) Fuel cut (ECM) 	Erase DTC

DTC Inspection Priority Chart

INFOID:000000001559881

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

Priority	DTC
1	<ul style="list-style-type: none"> U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN) B2552: INTELLIGENT KEY
2	<ul style="list-style-type: none"> B2013: STRG COMM 1 B2590: NATS MALFUNCTION

DTC Index

INFOID:000000001559882

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Detection condition	Fail-safe	Diagnosis
No DTC is detected. further testing may be required.	—	—	—
U1000: CAN COMM CIRCUIT	Intelligent Key unit cannot receive CAN communication signal continuously for 2 seconds or more.	—	Check CAN communication system. Refer to SEC-35
U1010: CONTROL UNIT (CAN)	Intelligent Key unit detects internal CAN communication circuit malfunction.	—	Replace Intelligent Key unit.
B2013: STRG COMM 1	The ID verification result between Intelligent key unit and steering lock unit are NG. Or Intelligent Key unit cannot communicate with steering lock unit.	×	Perform steering lock unit ID registration with CONSULT-III
B2552: INTELLIGENT KEY	Intelligent Key unit internal malfunction.	×	Replace Intelligent Key unit.
B2590: ID DISCORD BCM-I-KEY	The ID verification result between Intelligent key unit and BCM are NG. Or Intelligent Key unit cannot communicate with BCM.	×	Check NATS Refer to SEC-57

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Reference Value

INFOID:000000001569742

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
MOTOR FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	1 - 4
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 or AUTO (Light is illuminated)		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND or AUTO (Light is illuminated)		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI (Light is illuminated)		On
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch OFF	Off
		Front fog lamp switch ON	On
HL WASHER REQ NOTE: This item is monitored only on the vehicle with headlamp washer.	Ignition switch ON, and low beam headlamp is ON	Front washer switch OFF	Off
		Front washer switch ON (When headlamp washer is operating)	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
ST RLY REQ NOTE: Vehicle without Intelligent Key system indicates only "ON", and it does not change.	When Intelligent Key is outside the vehicle, and the push switch is pushed		Off
	When Intelligent Key is inside the vehicle, and the push switch is pushed		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
RR DEF REQ	Ignition switch ON	Rear window defogger switch OFF	Off
		Rear window defogger switch ON (Rear window defogger is operating)	On
OIL P SW	Ignition switch OFF, ACC or engine running		Open
	Ignition switch ON		Close

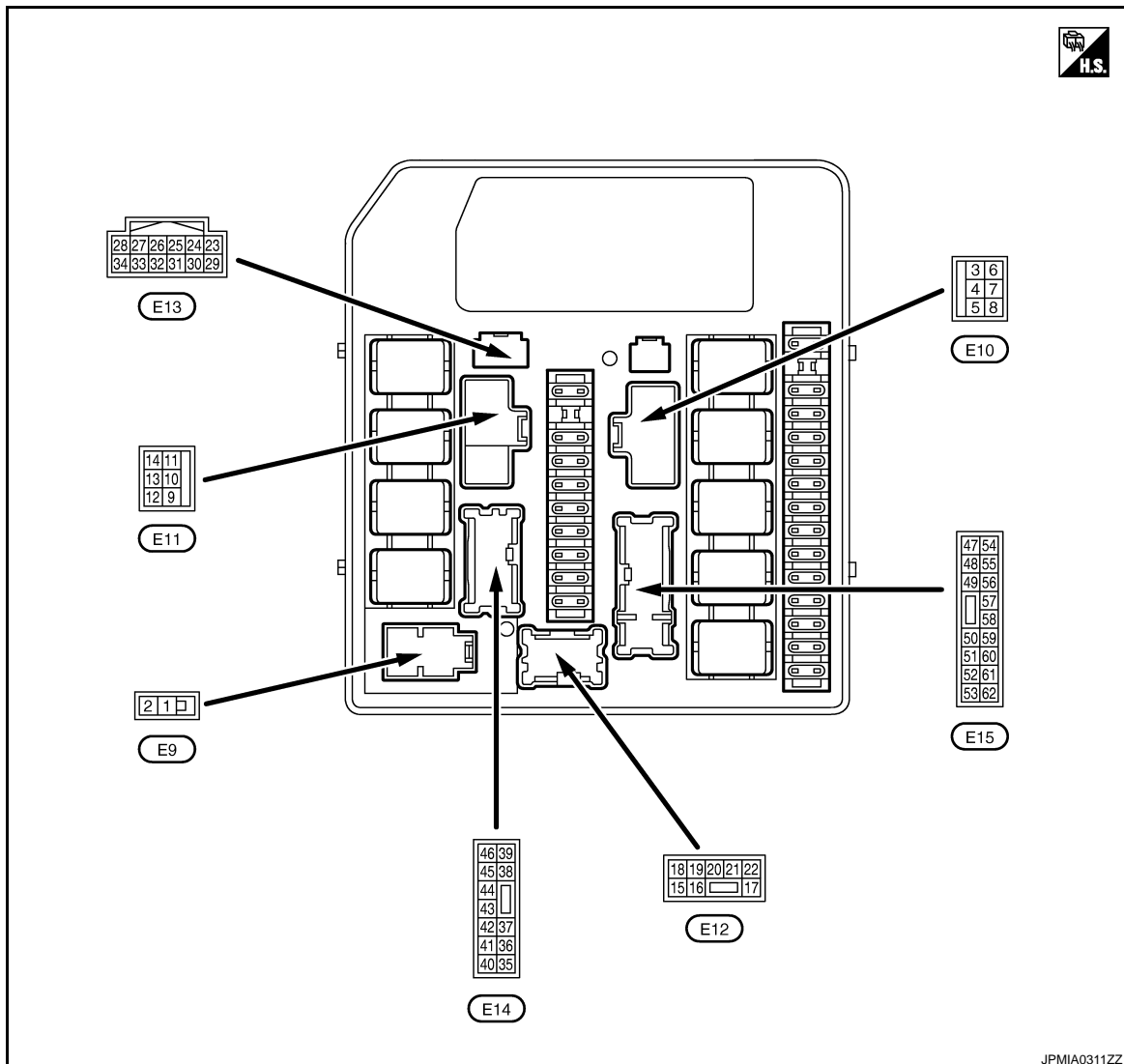
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
REV SW	NOTE: This item is indicated, but not monitored.	Off
DTRL REQ	Daytime running light system is not operated with lighting switch OFF.	Off
NOTE: This item is monitored only on the vehicle with the daytime running light system.	Any of the condition below	On
	<ul style="list-style-type: none"> Daytime running light system is operated. Lighting switch 1ST, 2ND or AUTO (Light is illuminated) 	On
HOOD SW	Close the hood	Off
NOTE: This item is monitored only on the vehicle with the vehicle security system.	Open the hood	On
	Not operation	Off
THFT HRN REQ	Not operation	Off
NOTE: This item is monitored only on the vehicle with the vehicle security system.	Horn is activated with vehicle security system.	On
	NOTE: This item is indicated, but not monitored.	Off

TERMINAL LAYOUT



PHYSICAL VALUES

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
1 (G)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
3 (O)*1 (BR)*2	Ground	Starter relay power supply	Output	When engine is clanking		Battery voltage
				When engine is not clanking		0 V
4 (W)	Ground	Cooling fan relay-1 power supply	Output	Cooling fan operation	OFF	0 V
					MID or HI	Battery voltage
5 (R)	Ground	Ignition switch START	Input	Ignition switch OFF, ACC or ON		0 V
				Ignition switch START		Battery voltage
6 (BR)	Ground	Battery power supply (Cooling fan relay)	Input	Ignition switch OFF		Battery voltage
7 (P)	Ground	Cooling fan motor-2 (HI) ground	—	Cooling fan operation	OFF	Battery voltage
					HI	0 V
8 (G)	Ground	Cooling fan relay-2 power supply	Output	Cooling fan operation	OFF	0 V
					HI	Battery voltage
11 (B)	Ground	Ground	—	Ignition switch ON		0 V
12 (O)*3 (G)*4	Ground	Rear window defogger relay power supply	Output	Ignition switch ON	Rear window defogger switch OFF	0 V
					Rear window defogger switch ON	Battery voltage
15*5 (SB)	Ground	Daytime running light relay control	Output	<ul style="list-style-type: none"> • Parking lamp • License plate lamp • Tail lamp 	Turn off	Battery voltage
					Turn on	0 V
16*6 (Y)	Ground	Front fog lamp (LH)	Output	Lighting switch 1ST	Front fog lamp switch OFF	0 V
					Front fog lamp switch ON	Battery voltage
17*6 (W)	Ground	Front fog lamp (RH)	Output	Lighting switch 1ST	Front fog lamp switch OFF	0 V
					Front fog lamp switch ON	Battery voltage
18 (L)	Ground	Headlamp LO (LH)	Output	Lighting switch OFF		0 V
				Lighting switch 2ND		Battery voltage
19*7 (R)	Ground	Headlamp aiming motor power supply	Output	Lighting switch OFF		0 V
				Lighting switch 2ND		Battery voltage
20 (SB)	Ground	Headlamp LO (RH)	Output	Lighting switch OFF		0 V
				Lighting switch 2ND		Battery voltage
21 (G)	Ground	Headlamp HI (LH)	Output	Lighting switch OFF		0 V
				<ul style="list-style-type: none"> • Lighting switch 2ND and HI • lighting switch PASS 		Battery voltage
22 (LG)	Ground	Headlamp HI (RH)	Output	Lighting switch OFF		0 V
				<ul style="list-style-type: none"> • Lighting switch 2ND and HI • lighting switch PASS 		Battery voltage
23 (W)	Ground	Oil pressure switch	Input	Ignition switch ON	Engine stopped	0 V
					Engine running	Battery voltage

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
24 (Y)	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
25 (B)	Ground	Ground	—	Ignition switch ON		0 V
26 (P)	—	CAN-L	Input/ Output	—		—
27 (L)	—	CAN-H	Input/ Output	—		—
31 (V)	Ground	Cooling fan relay-4 control	Output	Cooling fan operation	OFF	Battery voltage
					LO	0 V
32*1 (LG)	Ground	ETC relay control	Input	After passing approximately 2 seconds or more after turning the ignition switch from ON to OFF		Battery voltage
				<ul style="list-style-type: none"> • Ignition switch ON • For approximately 2 seconds after turning ignition switch from ON to OFF 		0 V
33*1 (GR)	Ground	Fuel pump relay control	Input	Ignition switch OFF		0 V
				Ignition switch ON	Engine stopped	Battery voltage
					Engine running	0.8 V
34*8 (Y)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
35*9 (W)	Ground	Headlamp washer relay control	Output	Ignition switch ON	When headlamp washer is not operating	Battery voltage
					When headlamp washer is operating	0 V
37 (R)	Ground	Tail, license plate lamps and illuminations	Output	Lighting switch OFF		0 V
				Lighting switch 1ST		Battery voltage
38*10 (O)*1 (GR)*2	Ground	Parking lamp (LH)	Output	Lighting switch OFF		0 V
				Lighting switch 1ST		Battery voltage
39*10 (GR)	Ground	Parking lamp (RH)	Output	Lighting switch OFF		0 V
				Lighting switch 1ST		Battery voltage
40 (V)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage
41 (O)*1 (L)*2	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage
42 (L)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
43 (G)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
45 (Y)	Ground	Starter relay power supply	Input	Ignition switch ON (Except M/T models)	Selector lever "P" or "N"	Battery voltage
					Selector lever in any position other than "P" or "N"	0 V
				Ignition switch ON (M/T models)		Battery voltage

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
46*1 (W)	Ground	Fuel pump relay power supply	Output	<ul style="list-style-type: none"> Ignition switch OFF or ACC After passing approximately 1 second or more after turning the ignition switch ON 	0 V	
				<ul style="list-style-type: none"> For approximately 1 second after turning the ignition switch ON Engine running 	Battery voltage	
47 (BR)*1 (G)*2	Ground	ECM relay power supply	Output	After passing approximately 20 seconds or more after turning the ignition switch from ON to OFF	0 V	
				<ul style="list-style-type: none"> Ignition switch ON For approximately 20 seconds after turning ignition switch from ON to OFF 	Battery voltage	
48 (R)*1 (V)*2	Ground	ECM relay power supply	Output	After passing approximately 20 seconds or more after turning the ignition switch from ON to OFF	0 V	
				<ul style="list-style-type: none"> Ignition switch ON For approximately 20 seconds after turning ignition switch from ON to OFF 	Battery voltage	
50 (G)	Ground	Cooling fan relay-5 control	Output	Cooling fan operation	OFF	
				MID or HI	0 V	
51 (W)	Ground	ECM relay control	Output	After passing approximately 20 seconds or more after turning the ignition switch from ON to OFF	Battery voltage	
				<ul style="list-style-type: none"> Ignition switch ON For approximately 20 seconds after turning ignition switch from ON to OFF 	0 V	
52*1 (P)	Ground	ETC relay power supply	Output	After passing approximately 2 seconds or more after turning the ignition switch from ON to OFF	0 V	
				<ul style="list-style-type: none"> Ignition switch ON For approximately 2 seconds after turning ignition switch from ON to OFF 	Battery voltage	
55 (O)	Ground	A/C relay power supply	Output	Engine stopped	0 V	
				Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
56 (L)	Ground	Ignition switch ON	Input	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
57*8 (V)	Ground	Horn relay control	Output	The horn is not activated	Battery voltage	
				The horn is activated	0 V	
58 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
59 (GR)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
60 (SB)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
61 (O)	Ground	ECM power supply	Output	Ignition switch OFF	Battery voltage	

*1: MR engine and QR engine models

*2: M9R engine models

*3: MR engine models

*4: QR engine and M9R engine models

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

*5: With daytime running light system

*6: With front fog lamp system

*7: Halogen type headlamp

*8: With vehicle security system

*9: With headlamp washer system

*10: Without daytime running light system

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

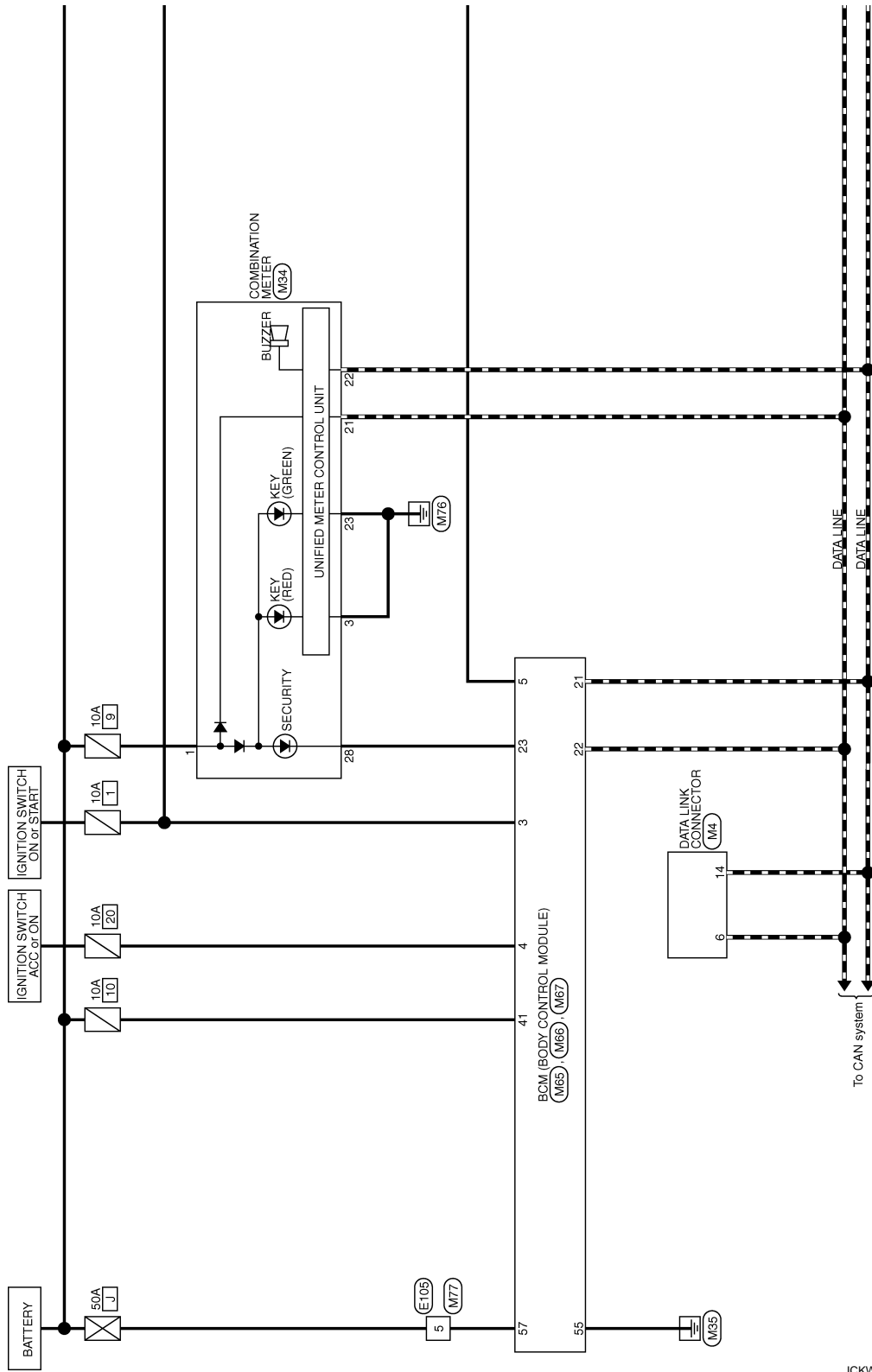
< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:000000001559335

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION



2007/02/28

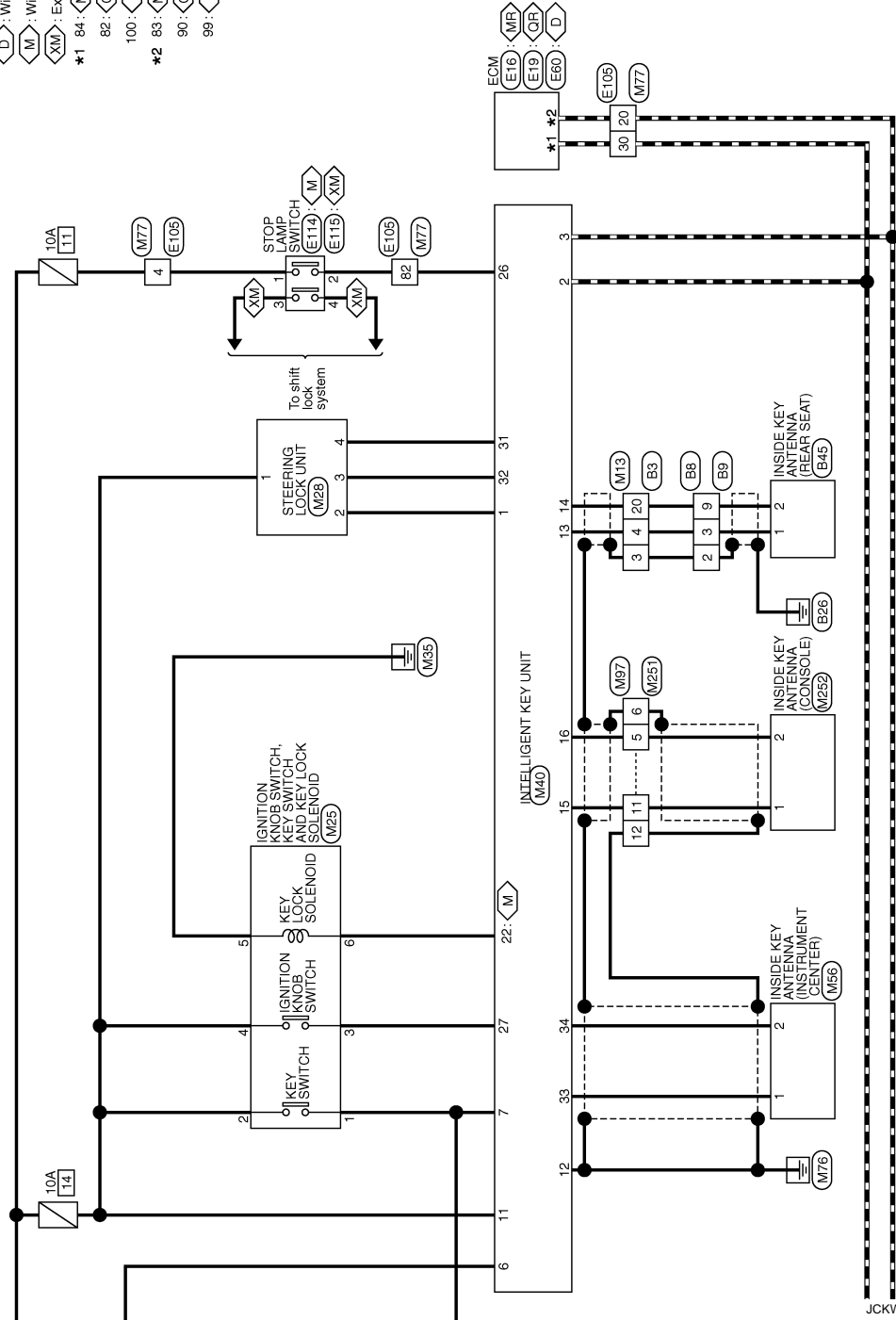
JCKWA0437GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- : With MR engine
- : With QR engine
- : With diesel engine
- : With M/T
- : Except M/T
- *1 : 84
- : 82
- : 100
- *2 : 83
- : 90
- : 99



JCKWA0438GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	B43
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	RK02FEY



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	B9
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



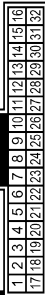
Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	P	-
9	L	-

Connector No.	B8
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	B	-
3	P	-
9	L	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



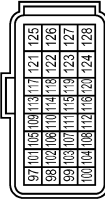
Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	P	-
20	L	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4



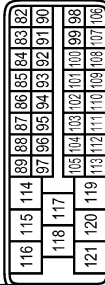
Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
32	O	-

Connector No.	E60
Connector Name	ECM
Connector Type	MAA24EB-MEA3-LH



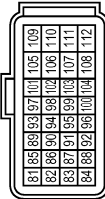
Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32EB-AH3



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
80	P	VEHCAN-L

Connector No.	E16
Connector Name	ECM
Connector Type	MAA24EB-MEA3-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-LI
84	L	CAN-HI

JCKWA0439GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	E14
Connector Name	STOP LAMP SWITCH
Connector Type	M02FE-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-

Connector No.	E15
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	O	-
4	LG	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD1BFW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	B	-
20	W	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	- [LHD models] - [RHD models]
4	BR	-
5	B	-
6	LG	- [LHD models with M/T] - [RHD models with M/T]

Connector No.	M28
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [LHD models] - [RHD models]
2	BR	-
3	P	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
--------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 5V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
13	B	REAR SEAT (+)
14	W	REAR SEAT (-)
15	R	CONSOLE (+)

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
--------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BATT(FUSE)

16	G	CONSOLE (-)
22	LG	KEY [L SOL][LHD models with M/T]
22	Y	KEY [L SOL][RHD models with M/T]
26	R	STOP LAMP SW
27	G	KNOB SW [LHD models]
31	LG	STRG LOCK UNIT GND
32	P	STRG LOCK UNIT SIG
33	L	INSTRUMENT (+)
34	P	INSTRUMENT (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
--------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
32	R	-

Connector No.	M56
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FCY

Terminal No.	1	2
--------------	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN SW
4	SB	ACC SW
5	LG	KEY SW [With Intelligent Key]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]
23	B	SECURITY INDICATOR [RHD models]

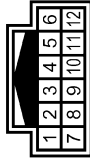
Connector No.	M97
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

Terminal No.	1	2	3	4	5	6	7
--------------	---	---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	B	-
11	R	-
12	B	-

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	SHIELD	-
11	R	-
12	SHIELD	-

Connector No.	M252
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	PK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	G	-

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0442GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

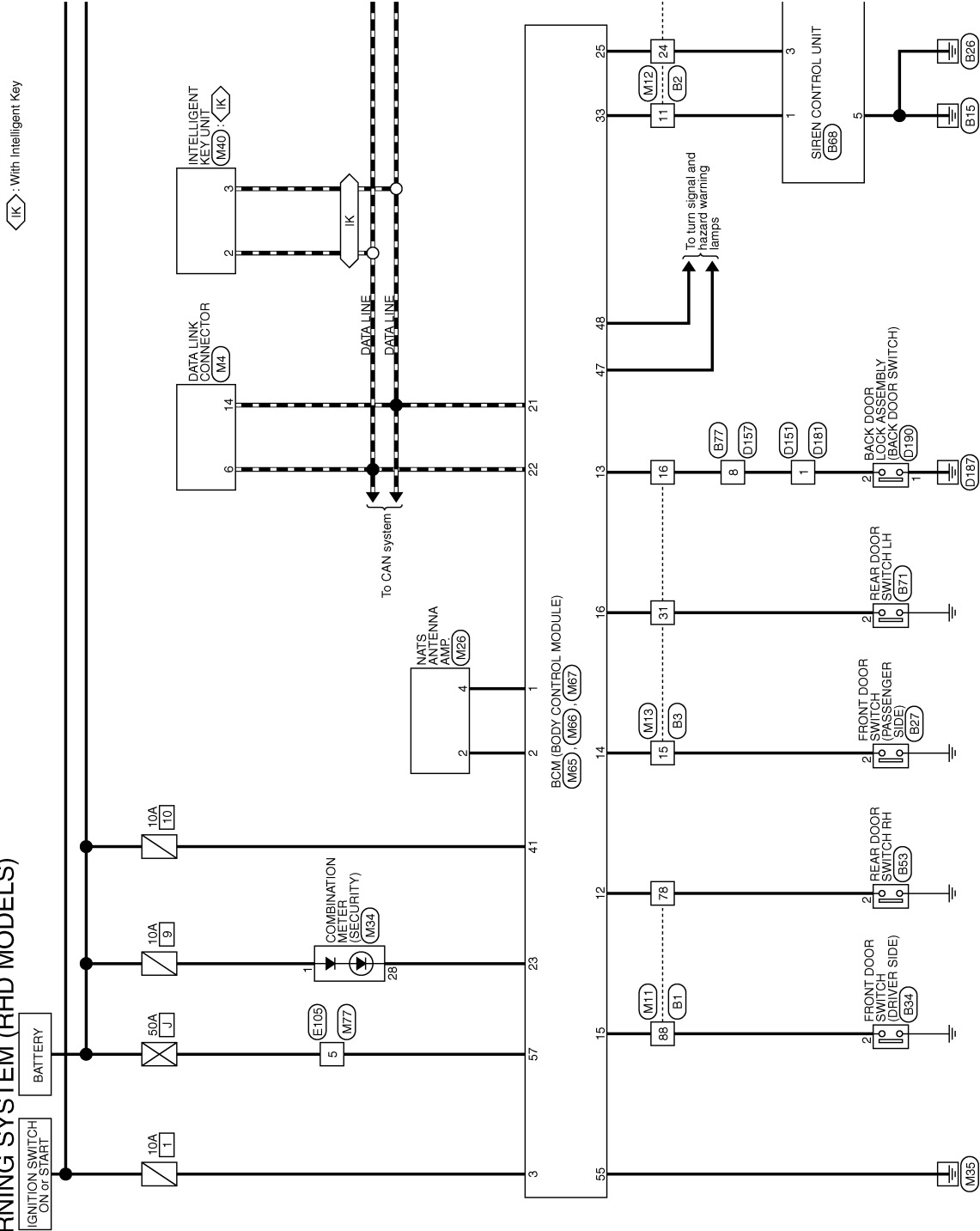
< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Wiring Diagram - THEFT WARNING SYSTEM -

INFOID:000000001559336

THEFT WARNING SYSTEM (RHD MODELS)



IK: With Intelligent Key

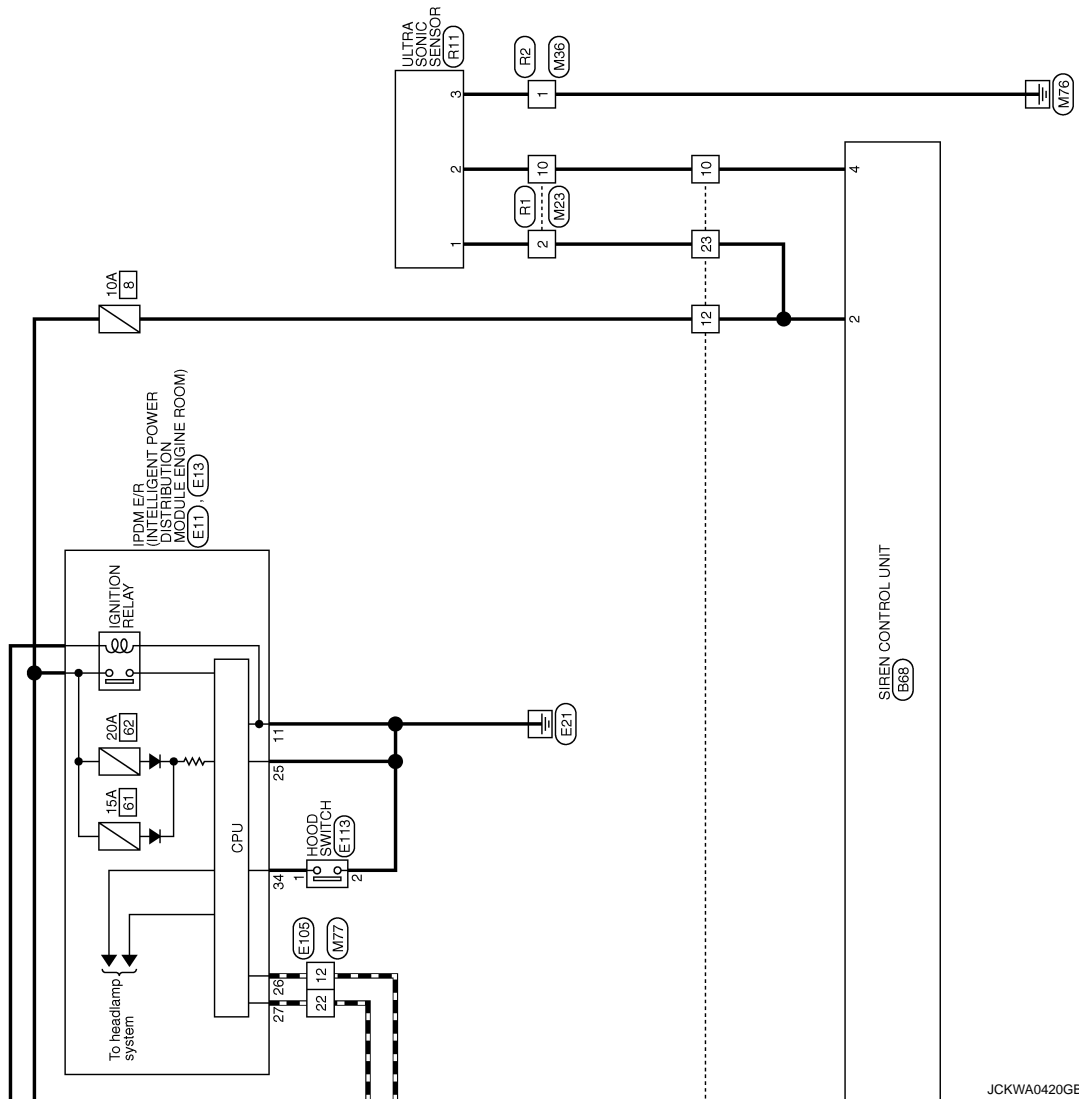
To CAN system

To turn signal and hazard warning lamps

2007/02/28

JCKWA0419GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITH INTELLIGENT KEY SYSTEM]
 < ECU DIAGNOSIS >



JCKWA0420GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

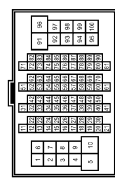
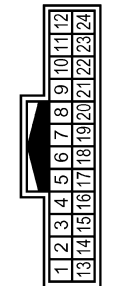

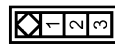
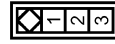


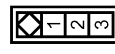
SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

<table border="1"> <tr><td>Connector No.</td><td>B1</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80MW-CS16-TM4</td></tr> </table> 	Connector No.	B1	Connector Name	WIRE TO WIRE	Connector Type	TH80MW-CS16-TM4	<table border="1"> <tr><td>Terminal No.</td><td>78</td><td>88</td></tr> <tr><td>Color of Wire</td><td>Y</td><td>BR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	78	88	Color of Wire	Y	BR	Signal Name [Specification]	-	-												
Connector No.	B1																											
Connector Name	WIRE TO WIRE																											
Connector Type	TH80MW-CS16-TM4																											
Terminal No.	78	88																										
Color of Wire	Y	BR																										
Signal Name [Specification]	-	-																										
<table border="1"> <tr><td>Connector No.</td><td>B2</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH24MW-NH</td></tr> </table> 	Connector No.	B2	Connector Name	WIRE TO WIRE	Connector Type	TH24MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>10</td><td>11</td><td>12</td><td>23</td><td>24</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td><td>Y</td><td>Y</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	10	11	12	23	24	Color of Wire	L	W	Y	Y	G	Signal Name [Specification]	-	-	-	-	-			
Connector No.	B2																											
Connector Name	WIRE TO WIRE																											
Connector Type	TH24MW-NH																											
Terminal No.	10	11	12	23	24																							
Color of Wire	L	W	Y	Y	G																							
Signal Name [Specification]	-	-	-	-	-																							
<table border="1"> <tr><td>Connector No.</td><td>B3</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH32MW-NH</td></tr> </table> 	Connector No.	B3	Connector Name	WIRE TO WIRE	Connector Type	TH32MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>15</td><td>16</td><td>31</td></tr> <tr><td>Color of Wire</td><td>P</td><td>V</td><td>GR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	15	16	31	Color of Wire	P	V	GR	Signal Name [Specification]	-	-	-									
Connector No.	B3																											
Connector Name	WIRE TO WIRE																											
Connector Type	TH32MW-NH																											
Terminal No.	15	16	31																									
Color of Wire	P	V	GR																									
Signal Name [Specification]	-	-	-																									
<table border="1"> <tr><td>Connector No.</td><td>B27</td></tr> <tr><td>Connector Name</td><td>FRONT DOOR SWITCH (PASSENGER SIDE)</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B27	Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>- [RHD models]</td></tr> </table>	Terminal No.	2	Color of Wire	P	Signal Name [Specification]	- [RHD models]															
Connector No.	B27																											
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	P																											
Signal Name [Specification]	- [RHD models]																											
<table border="1"> <tr><td>Connector No.</td><td>B53</td></tr> <tr><td>Connector Name</td><td>REAR DOOR SWITCH RH</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B53	Connector Name	REAR DOOR SWITCH RH	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>Y</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	2	Color of Wire	Y	Signal Name [Specification]	-															
Connector No.	B53																											
Connector Name	REAR DOOR SWITCH RH																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	Y																											
Signal Name [Specification]	-																											
<table border="1"> <tr><td>Connector No.</td><td>B34</td></tr> <tr><td>Connector Name</td><td>FRONT DOOR SWITCH (DRIVER SIDE)</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B34	Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>BR</td></tr> <tr><td>Signal Name [Specification]</td><td>- [RHD models]</td></tr> </table>	Terminal No.	2	Color of Wire	BR	Signal Name [Specification]	- [RHD models]															
Connector No.	B34																											
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	BR																											
Signal Name [Specification]	- [RHD models]																											
<table border="1"> <tr><td>Connector No.</td><td>B68</td></tr> <tr><td>Connector Name</td><td>SIREN CONTROL UNIT</td></tr> <tr><td>Connector Type</td><td>RH08FB</td></tr> </table> 	Connector No.	B68	Connector Name	SIREN CONTROL UNIT	Connector Type	RH08FB	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>Color of Wire</td><td>W</td><td>Y</td><td>G</td><td>L</td><td>L</td><td>B</td></tr> <tr><td>Signal Name [Specification]</td><td>BLINKERCOMMAND</td><td>+B</td><td>COM1</td><td>SERIAL LINE</td><td>GND</td><td></td></tr> </table>	Terminal No.	1	2	3	4	5	6	Color of Wire	W	Y	G	L	L	B	Signal Name [Specification]	BLINKERCOMMAND	+B	COM1	SERIAL LINE	GND	
Connector No.	B68																											
Connector Name	SIREN CONTROL UNIT																											
Connector Type	RH08FB																											
Terminal No.	1	2	3	4	5	6																						
Color of Wire	W	Y	G	L	L	B																						
Signal Name [Specification]	BLINKERCOMMAND	+B	COM1	SERIAL LINE	GND																							
<table border="1"> <tr><td>Connector No.</td><td>B71</td></tr> <tr><td>Connector Name</td><td>REAR DOOR SWITCH LH</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B71	Connector Name	REAR DOOR SWITCH LH	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>GR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	2	Color of Wire	GR	Signal Name [Specification]	-															
Connector No.	B71																											
Connector Name	REAR DOOR SWITCH LH																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	GR																											
Signal Name [Specification]	-																											

JCKWA0421GE



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS12DFW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS308FBR-CS


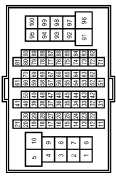
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-
Terminal No.	34	Color of Wire	Y	Signal Name [Specification]	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM8FB-LC

Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS

Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0422GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

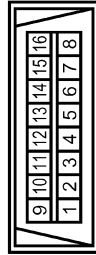
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



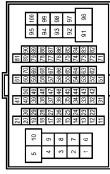
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



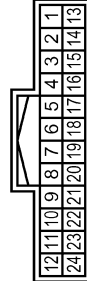
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



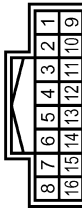
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



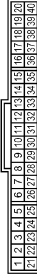
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

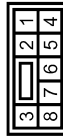
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



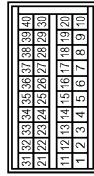
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



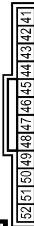
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	GAN-H
3	P	GAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	GAN-L
22	L	GAN-H
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



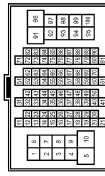
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

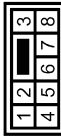
JCKWA0424GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS38MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

JCKWA0425GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

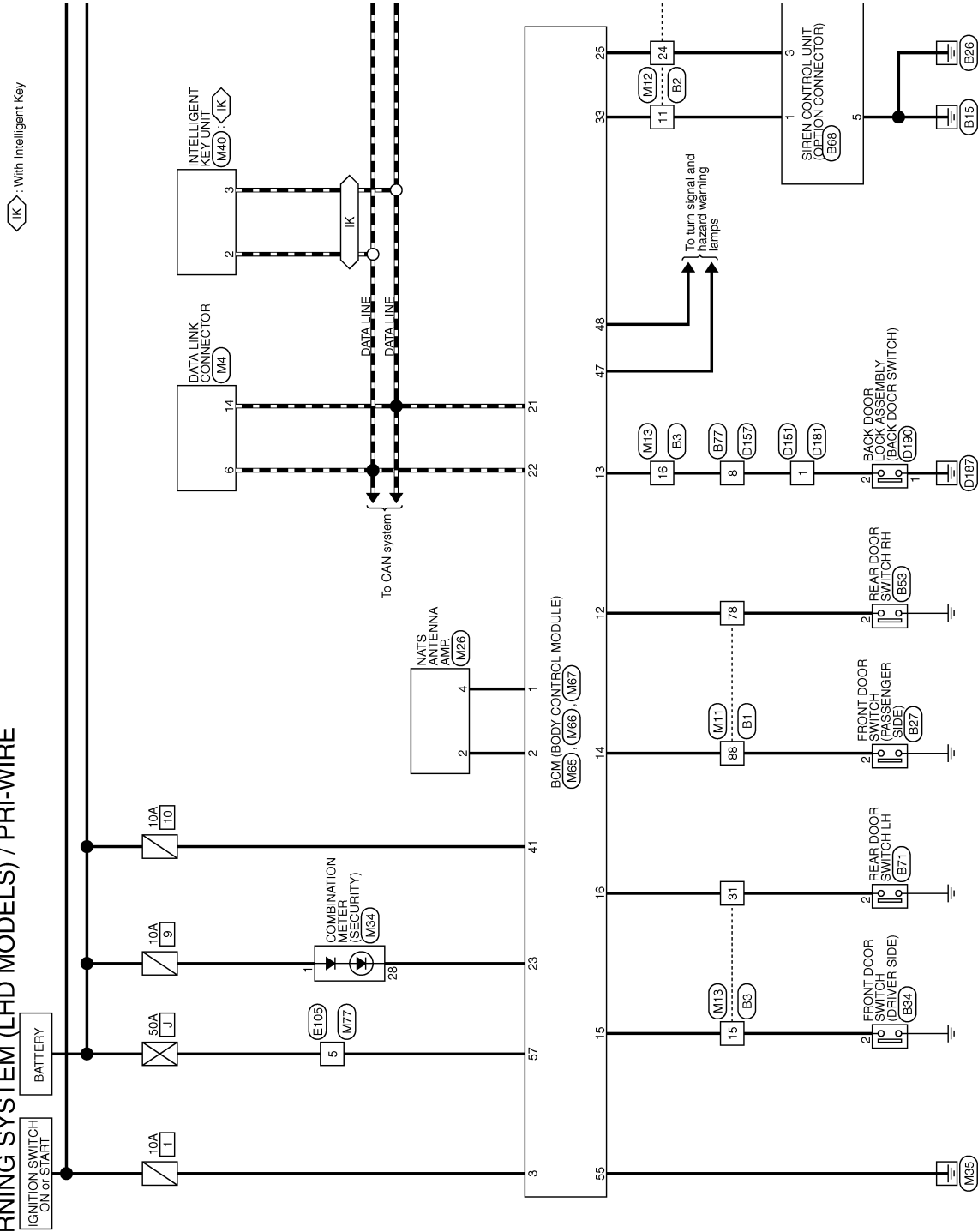
< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559337

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



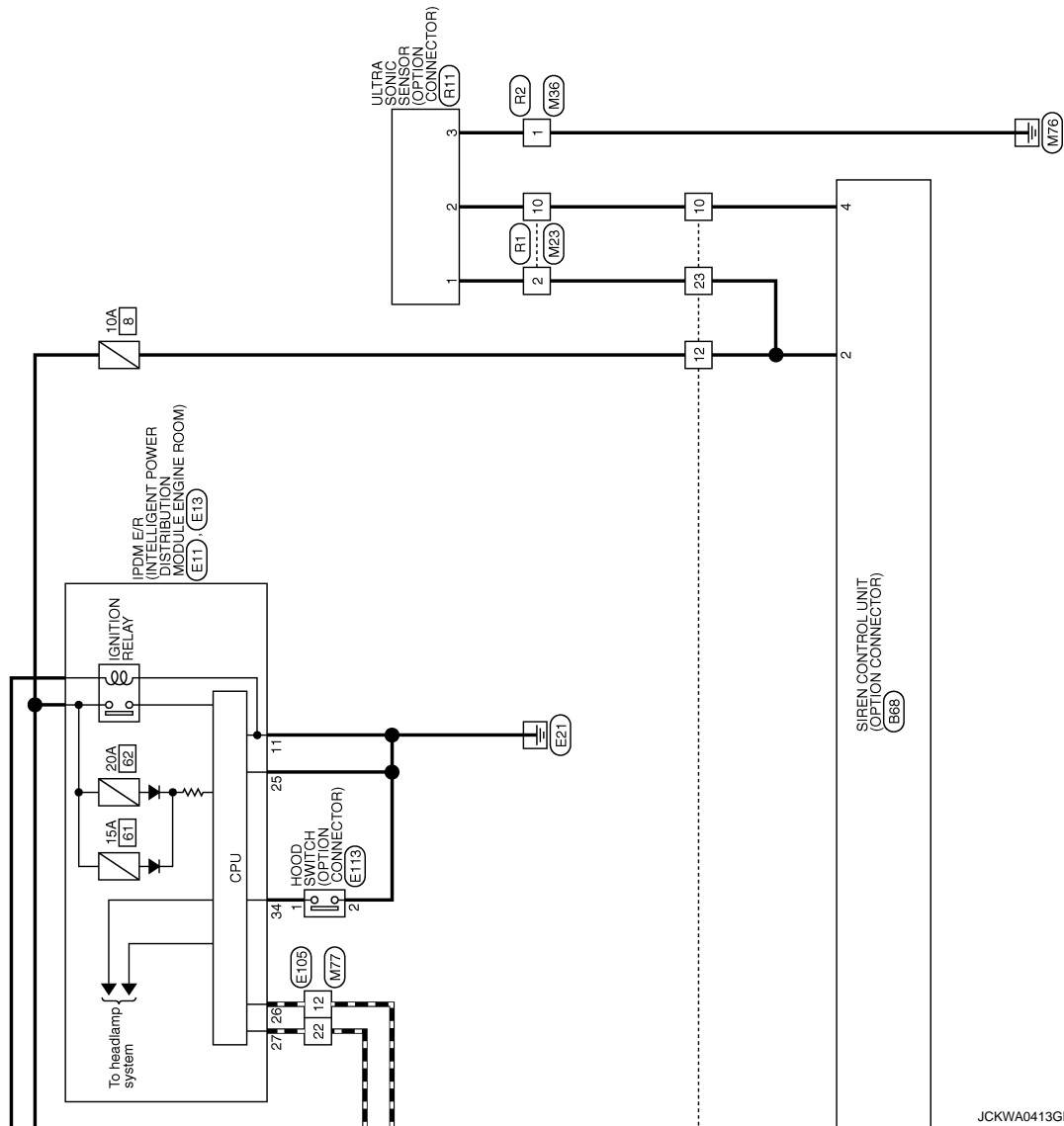
2007/02/28

JCKWA0412GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
< ECU DIAGNOSIS > [WITH INTELLIGENT KEY SYSTEM]



JCKWA0413GE

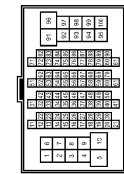
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

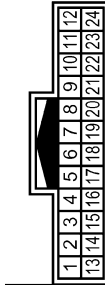
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80W-CS16-TM4



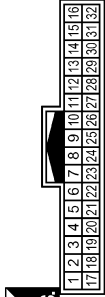
Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



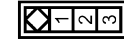
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



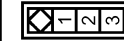
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	[LHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



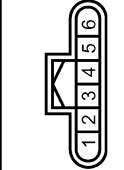
Terminal No.	Color of Wire	Signal Name [Specification]
2	P	[LHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



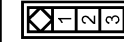
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIALLINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

JCKWA0414GE



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NSCBMBF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS1DFW-CS


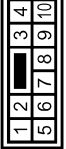
Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS


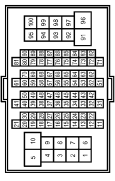
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-GS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-
Terminal No.	34	Color of Wire	Y	Signal Name [Specification]	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	MB8FB-LC

Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	D130
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS

Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-

JCKWA0415GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

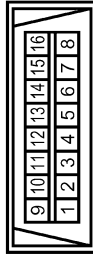
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



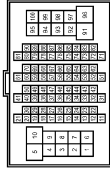
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	- [LHD models]
31	GR	- [LHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



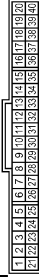
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

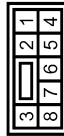
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

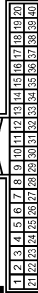
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



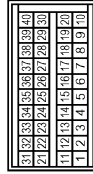
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



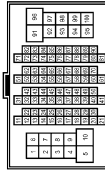
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Terminal No.	23	G	ALARM LINK
Terminal No.	33	W	HAZARD SW (With xenon headlamps and daytime light system)

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH

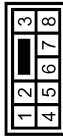


Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0417GE

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0418GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

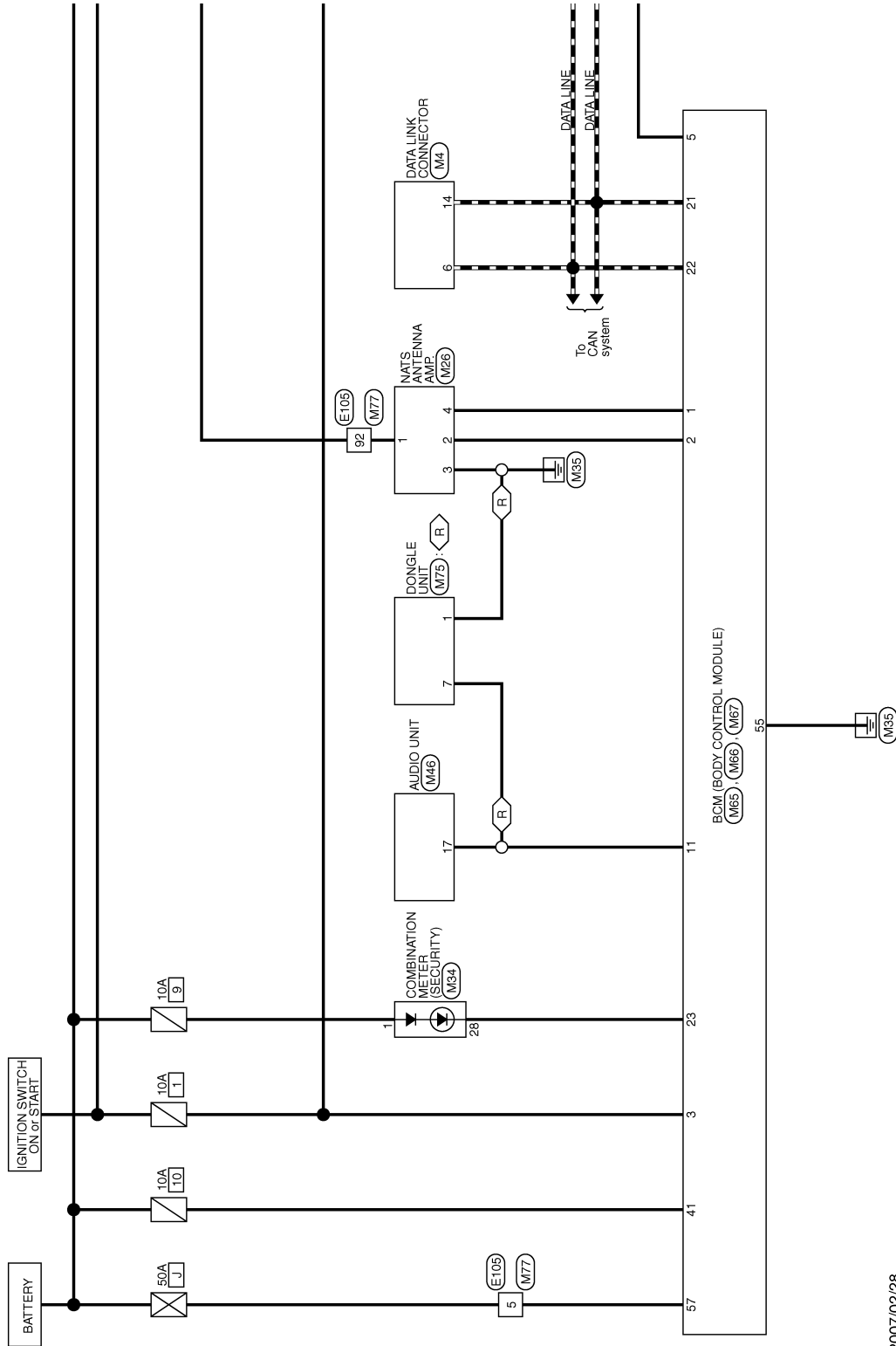
[WITH INTELLIGENT KEY SYSTEM]

Wiring Diagram - NATS -

INFOID:000000001559338

◇ R ◇ : RHD models

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY



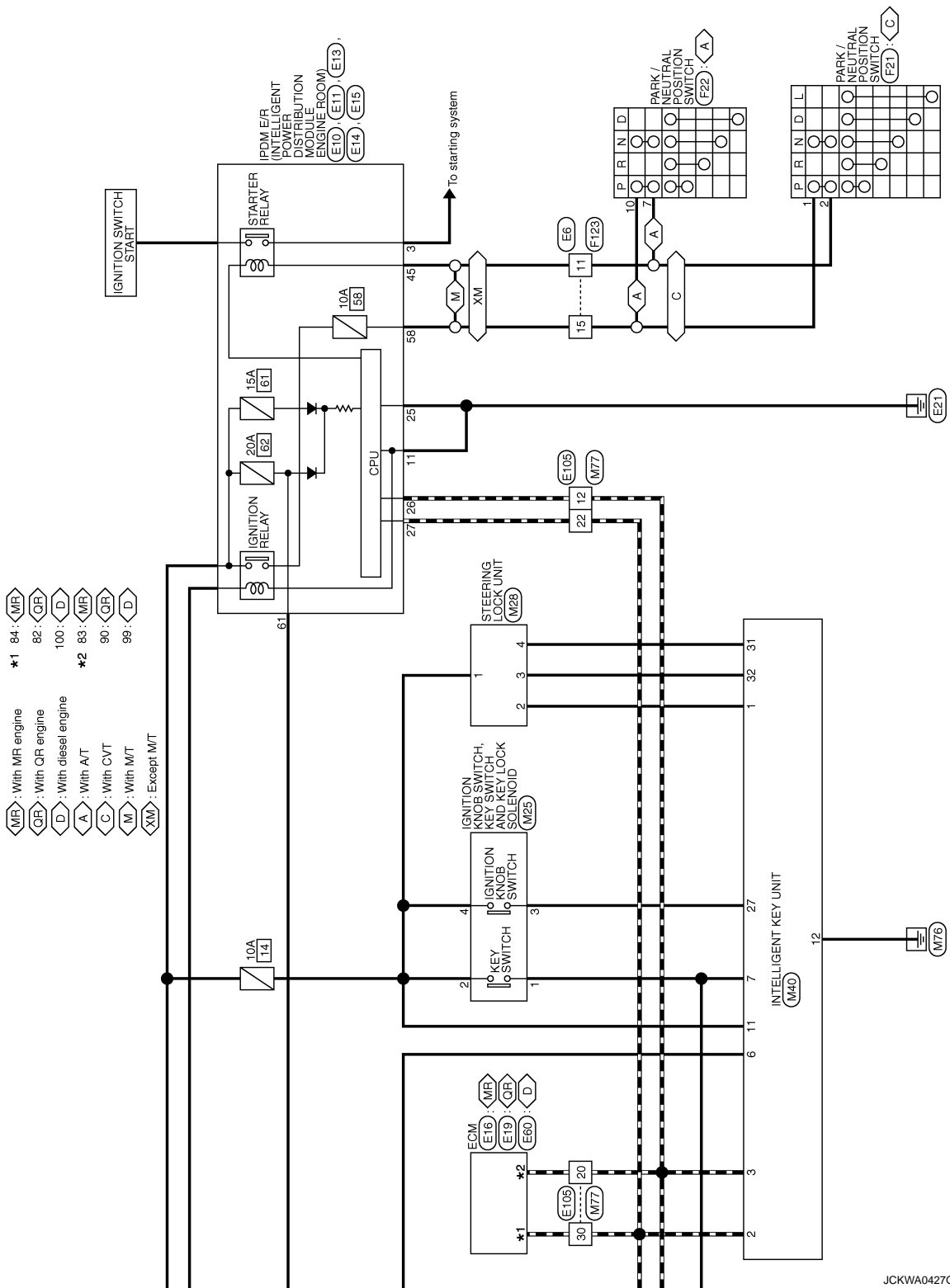
2007/02/28

JCKWA0426GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



- *1: 84: MR, 82: QR, 100: D, 83: MR, 90: QR, 99: D
 *2: MR, QR, D, A, C, M, XM
 Legend:
 MR: With MR engine
 QR: With QR engine
 D: With diesel engine
 A: With A/T
 C: With CVT
 M: With M/T
 XM: Except M/T

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0427GE

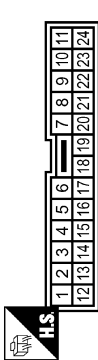
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	EB
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



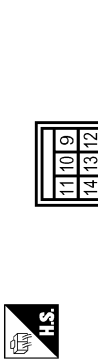
Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Connector No.	E10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M08FW-LC



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M06FB-LC



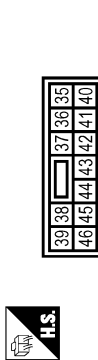
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



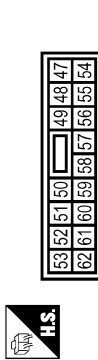
Terminal No.	Color of Wire	Signal Name [Specification]
25	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS16FW-CS



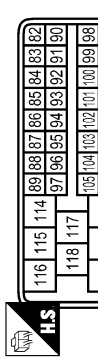
Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	- [Except M/T]
58	Y	- [With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA2FB-MEA3-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32FB-AH3



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

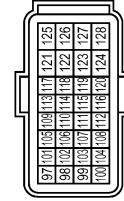
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

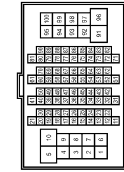
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



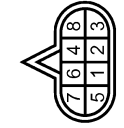
Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



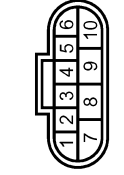
Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK08FG



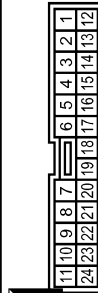
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



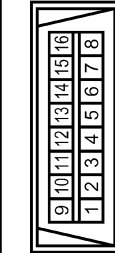
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK24FW-1V



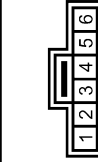
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

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



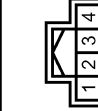
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	-[LHD models]
4	BR	-[RHD models]

Connector No.	M26
Connector Name	MATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

JCKWA0429GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

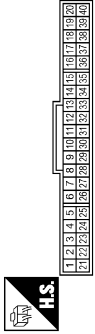
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	M28
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



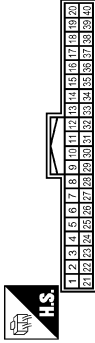
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-[LHD models]
2	BR	-[RHD models]
3	O	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

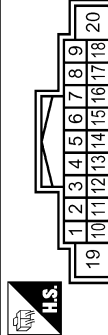
Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 3V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
27	G	KNOB SW[LHD models]
27	L	KNOB SW[RHD models]
31	LG	STRG LOCK UNIT GND

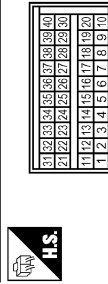
32	P	STRG LOCK UNIT SIG
----	---	--------------------

Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-GS2



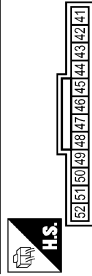
Terminal No.	Color of Wire	Signal Name [Specification]
17	B	IMMOBI

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AA840FB



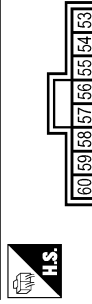
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP
2	G	NATS ANTENNA AMP
3	W	IGN SW
5	LG	KEY SWITCH (Intelligent Key)
11	B	AUDIO DONGLE LINK(SIGNAL)
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR[LHD models]
23	B	SECURITY INDICATOR[RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12BR



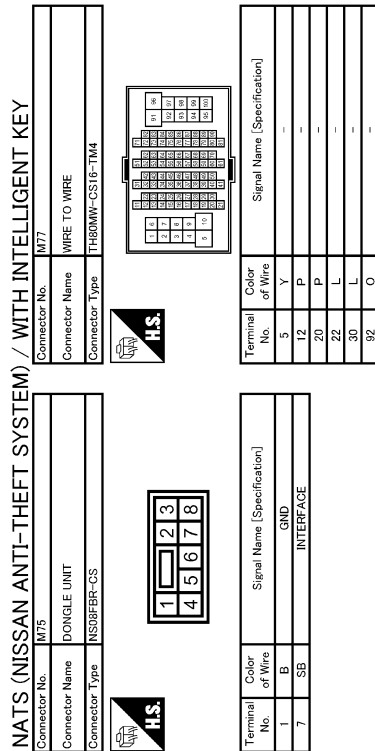
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

JCKWA0430GE



Fail Safe

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

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0431GE

INFOID:000000001569744

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Control part	Fail-safe in operation
Cooling fan	<ul style="list-style-type: none"> The cooling fan relay-1, the cooling fan relay-2, the cooling fan relay-3 and the cooling fan relay-5 turn ON when the ignition switch is turned ON The cooling fan relay-1, the cooling fan relay-2, the cooling fan relay-3 and the cooling fan relay-5 turn OFF when the ignition switch is turned OFF Cooling fan relay-4 OFF
A/C compressor	A/C relay OFF

If no CAN communication is available with BCM

Control part	Fail-safe in operation
Headlamp	<ul style="list-style-type: none"> The headlamp low relay turns ON when the ignition switch is turned ON The headlamp low relay turns OFF when the ignition switch is turned OFF Headlamp high relay OFF
<ul style="list-style-type: none"> Parking lamps License plate lamps Tail lamps Illuminations 	<ul style="list-style-type: none"> The tail lamp relay and the daytime running light relay*¹ turn ON when the ignition switch is turned ON The tail lamp relay and the daytime running light relay*¹ turn OFF when the ignition switch is turned OFF
Front wiper	<ul style="list-style-type: none"> 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 front 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 INT mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Starter motor	Starter relay OFF
Rear window defogger	Rear window defogger relay OFF
Headlamp washer* ²	Headlamp washer relay OFF
Horn* ³	Horn relay OFF

NOTE:

- *1: With daytime running light system
- *2: With headlamp washer system
- *3: With vehicle security system

Ignition relay malfunction detection function

- IPDM E/R monitors status of ignition relay by the voltage at ignition relay contact circuit inside it.
- IPDM E/R judges that the ignition relay is error, if status of the ignition relay and ignition switch ON signal (CAN) *.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay and daytime running light relay* for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

DTC	Ignition switch	Ignition relay	Tail lamp relay and daytime running light relay*
—	ON	ON	—
—	OFF	OFF	—
—	OFF	ON	ON (10 minutes)
B2099: IGN RLY OFF	ON	OFF	—

NOTE:

- The tail lamp relay and the daytime running light relay* are turned OFF when the ignition switch is turned ON.
- *: With daytime running light system

Front wiper control

IPDM E/R detects the front wiper stop position with the front wiper auto stop signal.

When the front wiper auto stop signal is in the conditions listed below, IPDM E/R repeats a front wiper 10 seconds operation and 20 seconds stop five times.

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Ignition switch	Front wiper switch	Front wiper auto stop signal
ON	OFF	The front wiper auto stop signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper auto stop 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.

DTC Index

INFOID:000000001569745

CONSULT display	Fail-safe	Timing ^{NOTE}		Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	×	CRNT	PAST	PCS-13
B2099: IGN RELAY OFF	—	CRNT	PAST	PCS-14

NOTE:

The details of time display are as follows.

- CRNT: The malfunctions that are detected now.
- PAST: The number is indicated when it is normal at present and a malfunction was detected in the past.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

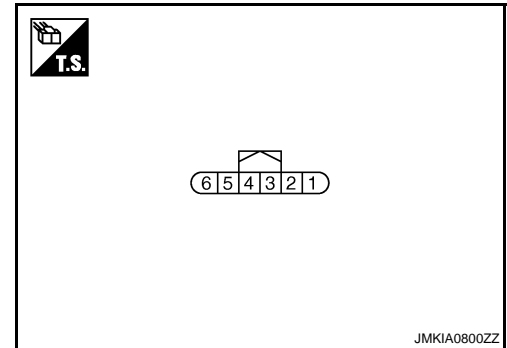
[WITH INTELLIGENT KEY SYSTEM]

SIREN CONTROL UNIT

Reference Value

INFOID:000000001507498

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
1 (W)	Ground	Hazard switch	Input	Hazard lamp is blinking	<p style="text-align: right;">JPMIA0165GB</p> <p style="text-align: center;">1.3 V</p>
				Hazard lamp is not blinking	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
3 (G)	Ground	Communication line (BCM)	Input/ Output	Armed phase	<p style="text-align: right;">JMKIA0619ZZ</p>
				Disarmed phase	Battery voltage
4 (L)	Ground	Communication line (ultra sonic sensor)	Input/ Output	Armed phase	<p style="text-align: right;">JMKIA0619ZZ</p>
				Disarmed phase	Battery voltage
5 (B)	Ground	Ground	—	Ignition switch ON	0 V

SIREN CONTROL UNIT

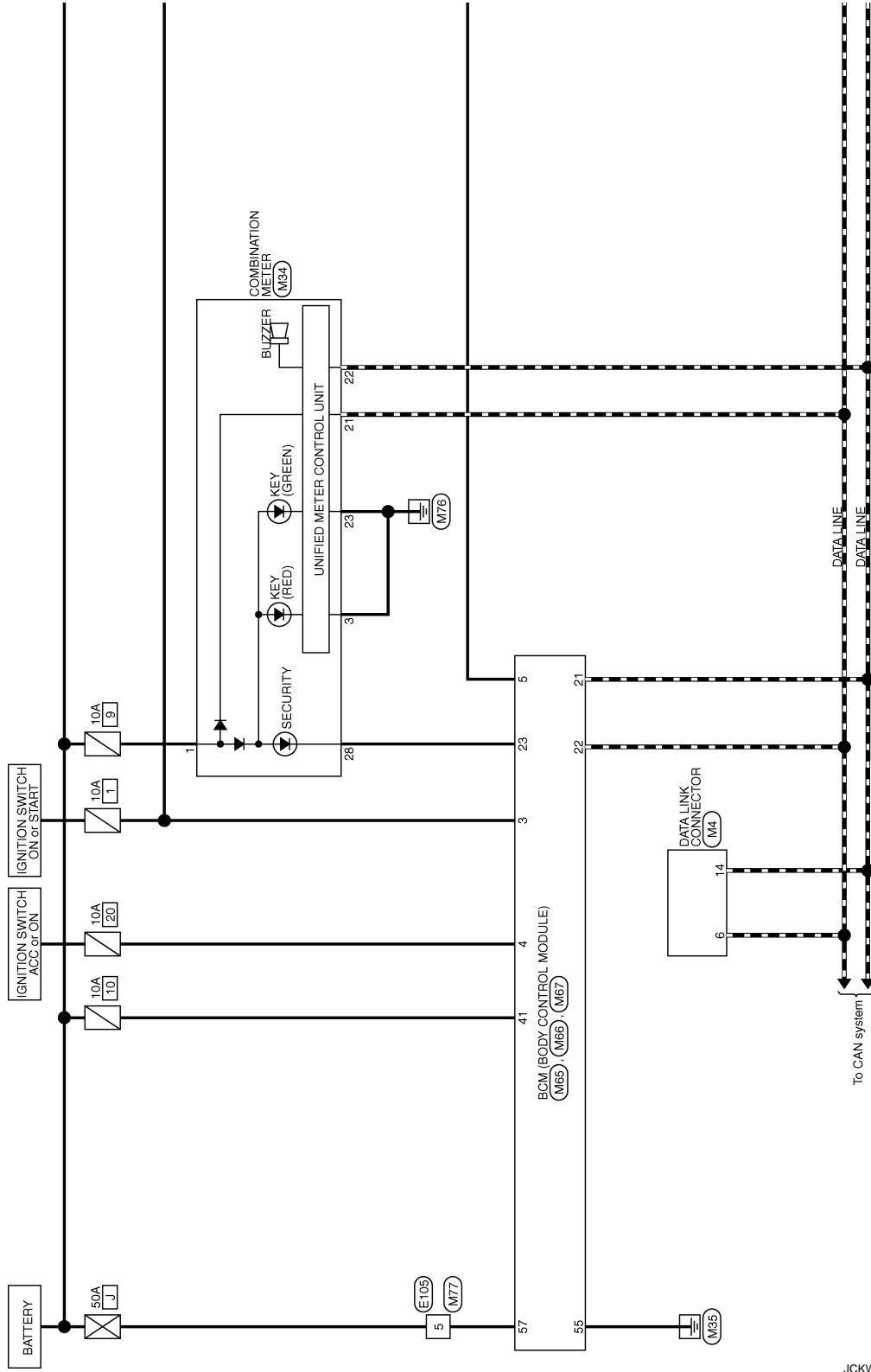
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:000000001559339

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION



2007/02/28

JCKWA0437GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

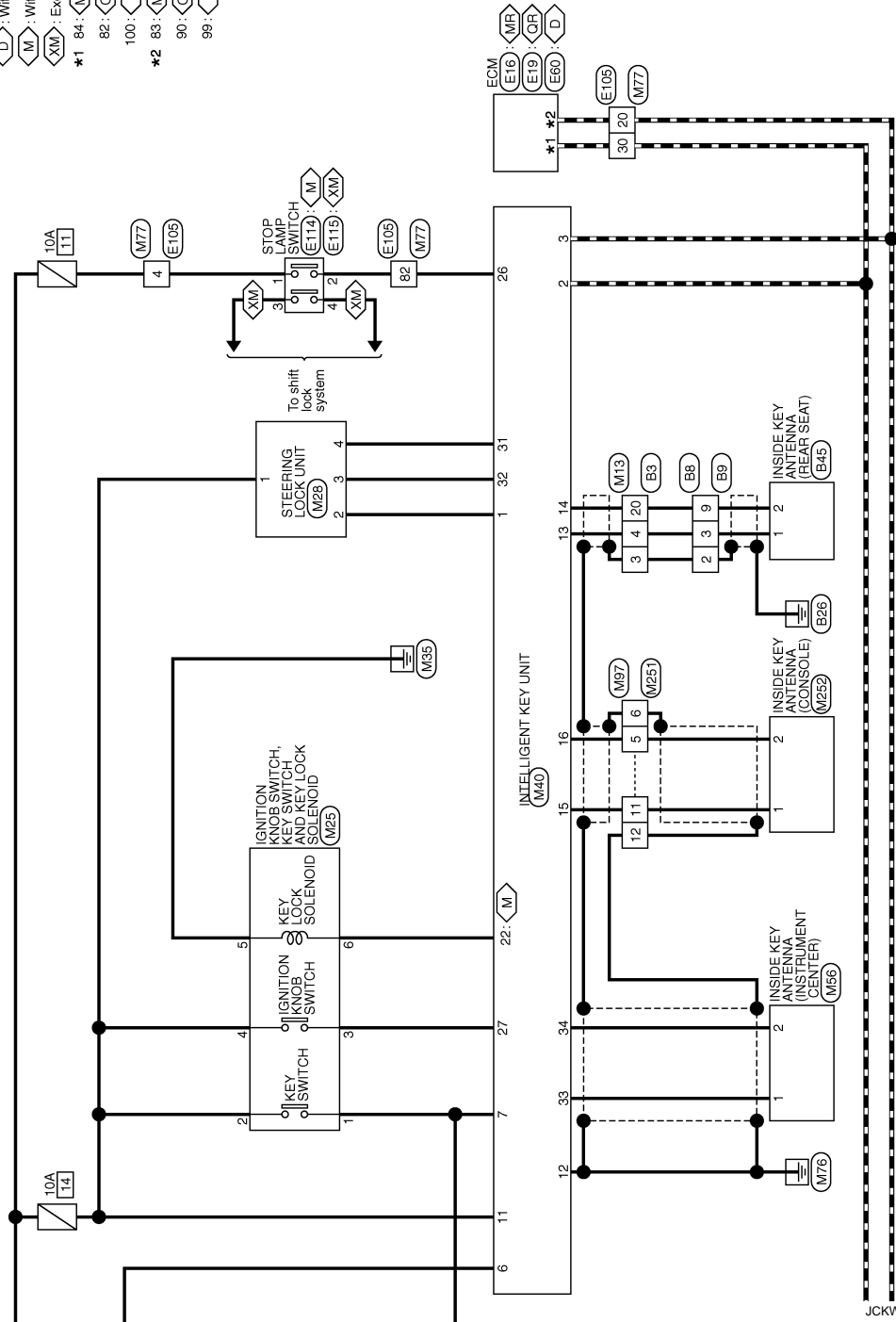
SEC

SIREN CONTROL UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

- With MR engine
- With QR engine
- With diesel engine
- With M/T
- Except M/T
- *1 84:
- 82:
- 100:
- *2 83:
- 90:
- 99:



JCKWA0438GE


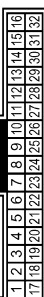
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
3	B	-
4	P	-
20	L	-

Connector No.	B8
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
2	B	-
3	P	-
9	L	-

Connector No.	B9
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
2	SHIELD	-
3	P	-
9	L	-

Connector No.	B45
Connector Name	INSIDE KEY ANTENNA (REAR SEAT)
Connector Type	FK02F5Y




Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	L	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA24FB-MEA6-LH




Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32FB-AH3




Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
80	P	VEHCAN-L

Connector No.	E60
Connector Name	ECM
Connector Type	MAA24FB-MEA6-LH




Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-(BODY)
100	L	MAIN CAN-(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
82	O	-

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	E14
Connector Name	STOP LAMP SWITCH
Connector Type	M02FE-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-

Connector No.	E15
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



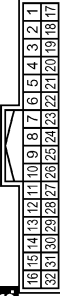
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	P	-
3	O	-
4	LG	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD18FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	B	-
20	W	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MG



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	-[LHD models]
3	L	-[RHD models]
4	BR	-
5	B	-
6	Y	-[LHD models with M/T] -[RHD models with M/T]

Connector No.	M23
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-[LHD models]
1	BR	-[RHD models]
2	O	-
3	P	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
3	B	GND
21	L	CAN-H
22	P	CAN-L
23	B	GND
28	B	SECURITY

JCKWA0440GE


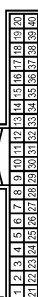
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 5V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
13	B	REAR SEAT (+)
14	W	REAR SEAT (-)
15	R	CONSOLE (+)

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR




Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)

16	G	CONSOLE (-)
22	LG	KEY [L/SOL/LHD models with M/T]
22	Y	KEY [L/SOL/RHD models with M/T]
26	R	STOP LAMP SW
27	G	KNGB SW [LHD models]
31	LG	STRG LOCK UNIT GND
32	P	STRG LOCK UNIT SIG
33	L	INSTRUMENT (+)
34	P	INSTRUMENT (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)




Terminal No.	Color of Wire	Signal Name [Specification]
4	V	-
5	Y	-
20	P	-
30	L	-
32	R	-

Connector No.	M55
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FCY




Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN SW
4	SB	ACQ SW
5	LG	KEY SW [With Intelligent Key]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M97
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	B	-
11	R	-
12	B	-

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

JCKWA0441GE

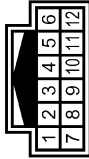
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	G	-
6	SHIELD	-
11	R	-
12	SHIELD	-

Connector No.	M252
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	G	-

JCKWA0442GE

SIREN CONTROL UNIT

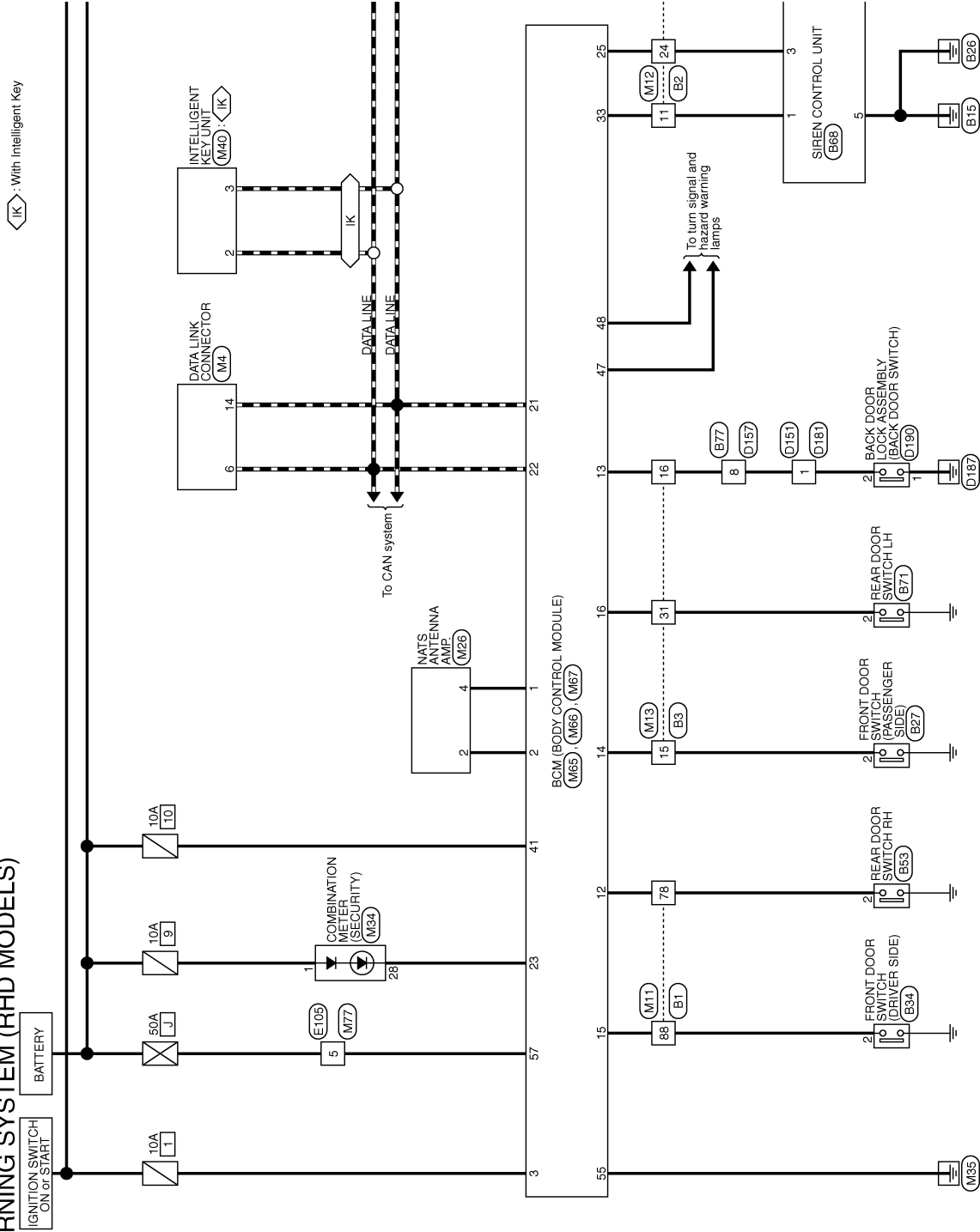
[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM -

INFOID:000000001559340

THEFT WARNING SYSTEM (RHD MODELS)



2007/02/28

JCKWA0419GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC


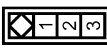
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]


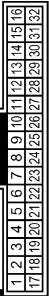
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW


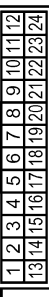
Terminal No.	2	Color of Wire	P	Signal Name [Specification]	[RHD models]
--------------	---	---------------	---	-----------------------------	--------------

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	T1432MW-NH



Terminal No.	15	Color of Wire	P	Signal Name [Specification]	
	16	Color of Wire	V		
	31	Color of Wire	GR		

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	T1424MW-NH


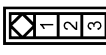
Terminal No.	10	Color of Wire	L	Signal Name [Specification]	
	11	Color of Wire	W		
	12	Color of Wire	Y		
	23	Color of Wire	Y		
	24	Color of Wire	G		

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	T180MW-CS16-TM4



Terminal No.	78	Color of Wire	Y	Signal Name [Specification]	
	88	Color of Wire	BR		

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW


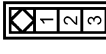
Terminal No.	2	Color of Wire	GR	Signal Name [Specification]	
--------------	---	---------------	----	-----------------------------	--

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB


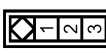
Terminal No.	1	Color of Wire	W	Signal Name [Specification]	BLINKERCOMMAND
	2	Color of Wire	Y		+B
	3	Color of Wire	G		COM1
	4	Color of Wire	L		SERIALLINE
	5	Color of Wire	B		GND

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

Terminal No.	2	Color of Wire	Y	Signal Name [Specification]	
--------------	---	---------------	---	-----------------------------	--

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

Terminal No.	2	Color of Wire	BR	Signal Name [Specification]	[RHD models]
--------------	---	---------------	----	-----------------------------	--------------

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

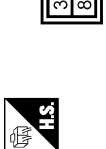
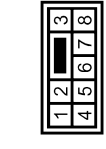
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	B77	Connector No.	D151	Connector No.	D157	Connector No.	D181
Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE	Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS	Connector Type	NS08FBR-CS	Connector Type	NS10FW-CS	Connector Type	NS08MBF-CS

Terminal No.	8	Terminal No.	1	Terminal No.	8	Terminal No.	1
Color of Wire	V	Color of Wire	V	Color of Wire	V	Color of Wire	V
Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-

Terminal No.	1	Terminal No.	5	Terminal No.	5	Terminal No.	5
Color of Wire	B	Color of Wire	B	Color of Wire	B	Color of Wire	B
Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-

Terminal No.	1	Terminal No.	25	Terminal No.	25	Terminal No.	5
Color of Wire	V	Color of Wire	B	Color of Wire	B	Color of Wire	Y
Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-

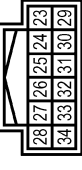
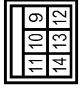
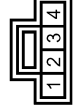


Connector No.	D130	Connector No.	E11	Connector No.	E13	Connector No.	E105
Connector Name	BACK DOOR LOCK ASSEMBLY	Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Connector Name	WIRE TO WIRE
Connector Type	NS04FW-CS	Connector Type	IM08FB-LC	Connector Type	TH12FW-NH	Connector Type	TH08FW-CS16-TM4

Terminal No.	1	Terminal No.	11	Terminal No.	25	Terminal No.	5
Color of Wire	B	Color of Wire	B	Color of Wire	B	Color of Wire	Y
Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-

Terminal No.	2	Terminal No.	11	Terminal No.	26	Terminal No.	12
Color of Wire	V	Color of Wire	B	Color of Wire	B	Color of Wire	P
Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-

Terminal No.	1	Terminal No.	11	Terminal No.	27	Terminal No.	22
Color of Wire	V	Color of Wire	B	Color of Wire	P	Color of Wire	L
Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-	Signal Name [Specification]	-



SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

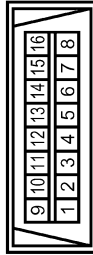
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



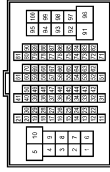
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



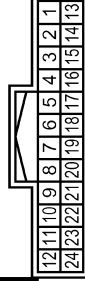
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



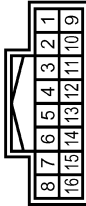
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



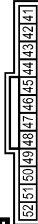
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	CAN-L
22	L	CAN-H
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



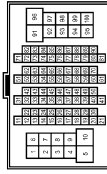
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



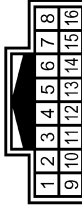
Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

Terminal No.	23	G	ALARM LINK
Terminal No.	33	Y	HAZARD SW [Except with xenon headlamp and daytime light system]

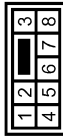
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK104FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0425GE

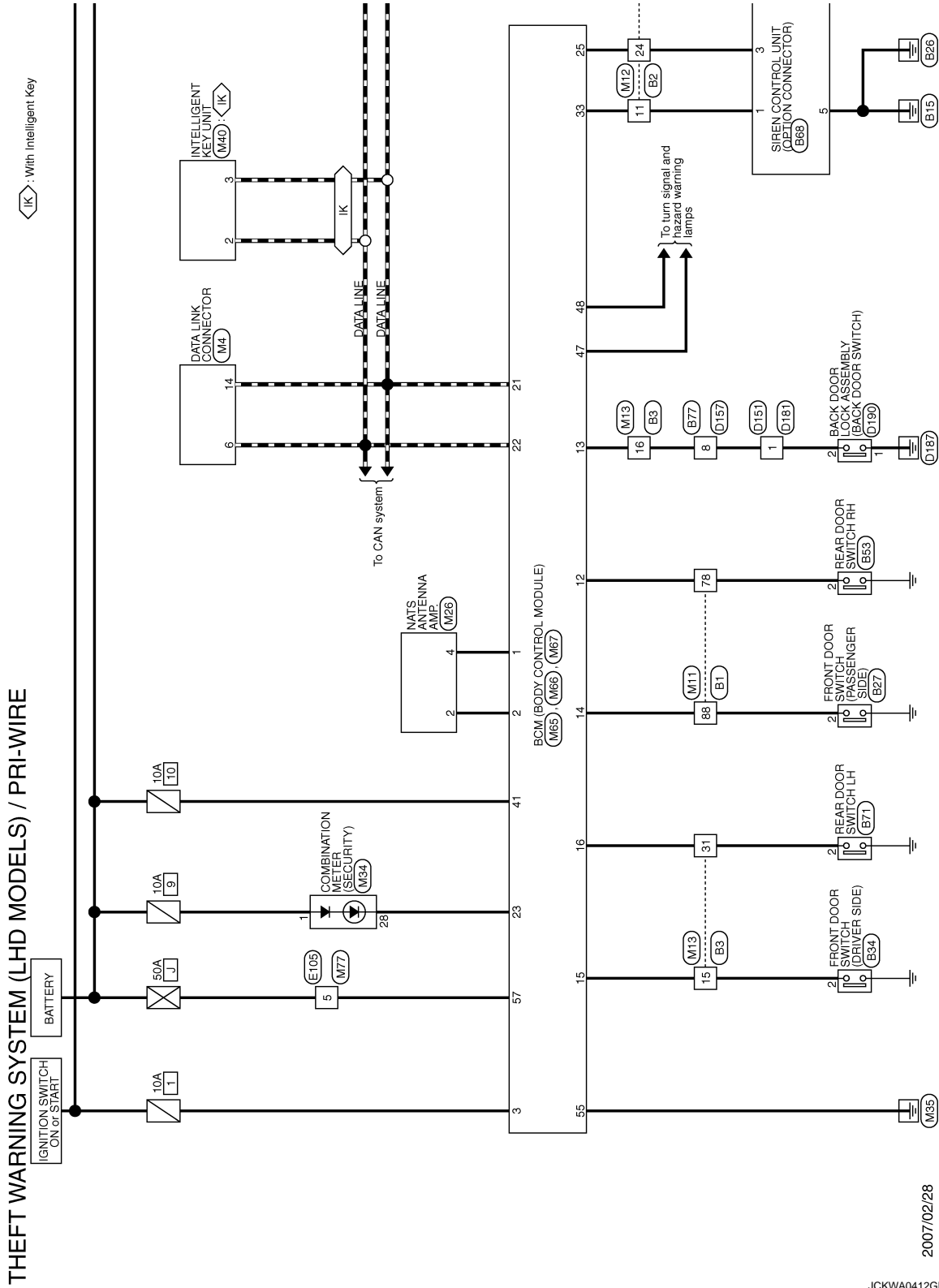
SIREN CONTROL UNIT

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559341



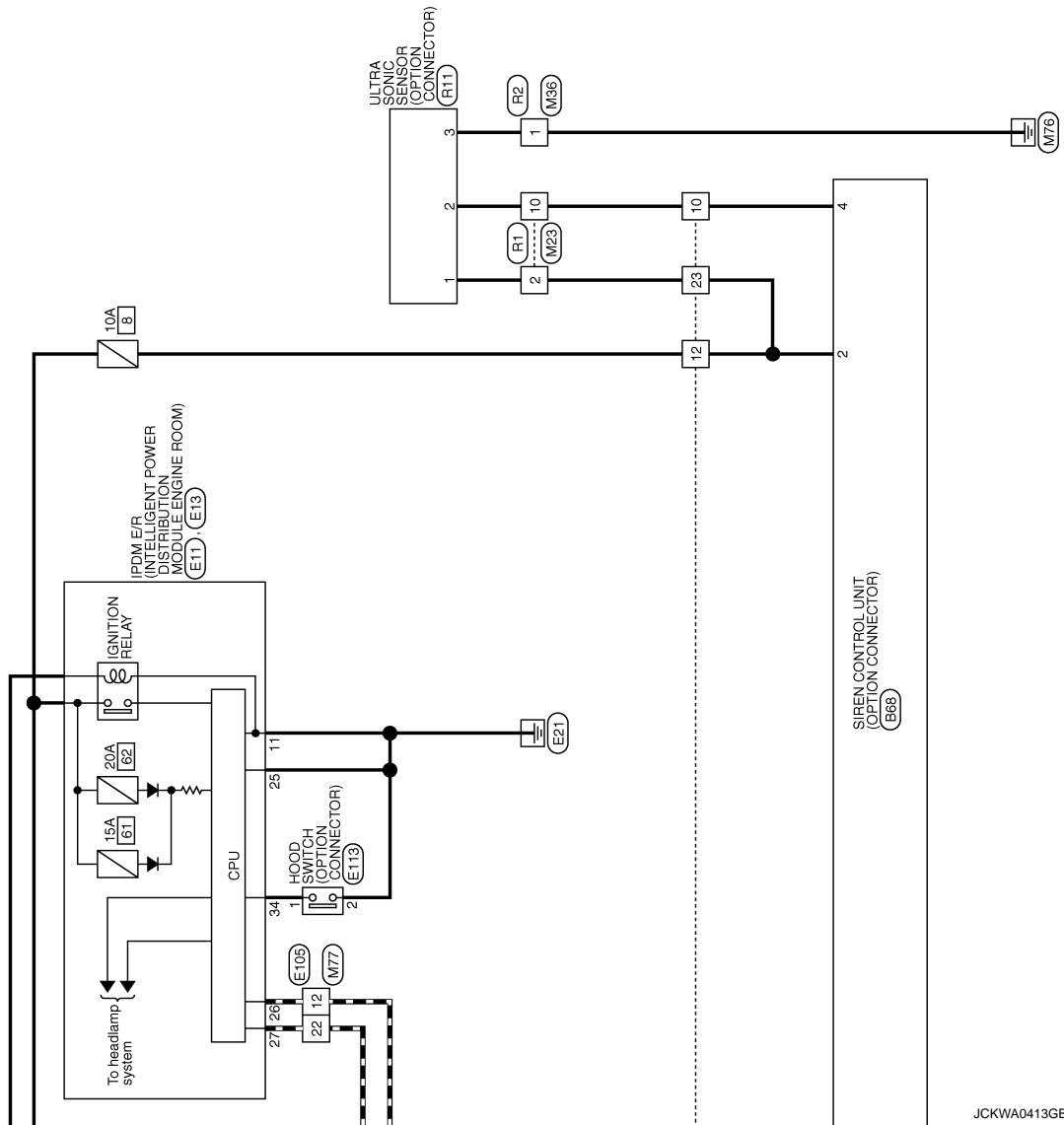
2007/02/28

JCKWA0412GE

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JCKWA0413GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

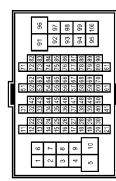
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

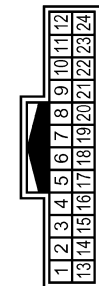
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



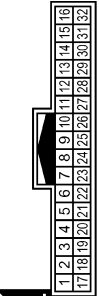
Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



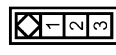
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



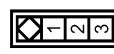
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



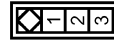
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [LHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [LHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



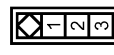
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	RH08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIAL LINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

JCKWA0414GE



SIREN CONTROL UNIT

< ECU DIAGNOSIS >



[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



Connector No.	D181	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
Connector Name	WIRE TO WIRE	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
Connector Type	NS28MRF-CS	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-



Connector No.	D157	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
Connector Name	WIRE TO WIRE	Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Connector Type	NS12DFW-CS	Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-

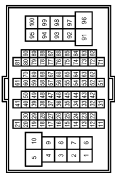

Connector No.	D151	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
Connector Name	WIRE TO WIRE	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
Connector Type	NS308FBR-CS	Terminal No.	14	Color of Wire	B	Signal Name [Specification]	-



Connector No.	B77	Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
Connector Name	WIRE TO WIRE	Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
Connector Type	NS10MW-CS	Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-



Connector No.	E105	Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Connector Name	WIRE TO WIRE	Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Connector Type	TH8DFW-CS16-TM4	Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-



Connector No.	E13	Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Connector Type	TH12FW-NH	Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-

Connector No.	E11	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
Connector Type	IM8FB-LC	Terminal No.	14	Color of Wire	B	Signal Name [Specification]	-

Connector No.	D190	Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Connector Name	BACK DOOR LOCK ASSEMBLY	Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-
Connector Type	NS24FW-CS	Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-

JCKWA0415GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

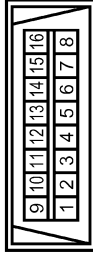
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



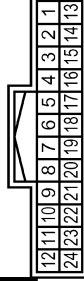
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-[LHD models]
31	GR	-[LHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



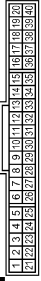
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

JCKWA0416GE

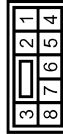
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

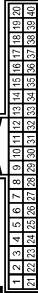
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



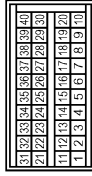
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



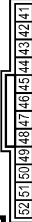
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



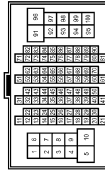
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA88FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0417GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

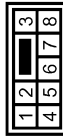
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	MS38MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R1
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

JCKWA0418GE

SIREN CONTROL UNIT

[WITH INTELLIGENT KEY SYSTEM]

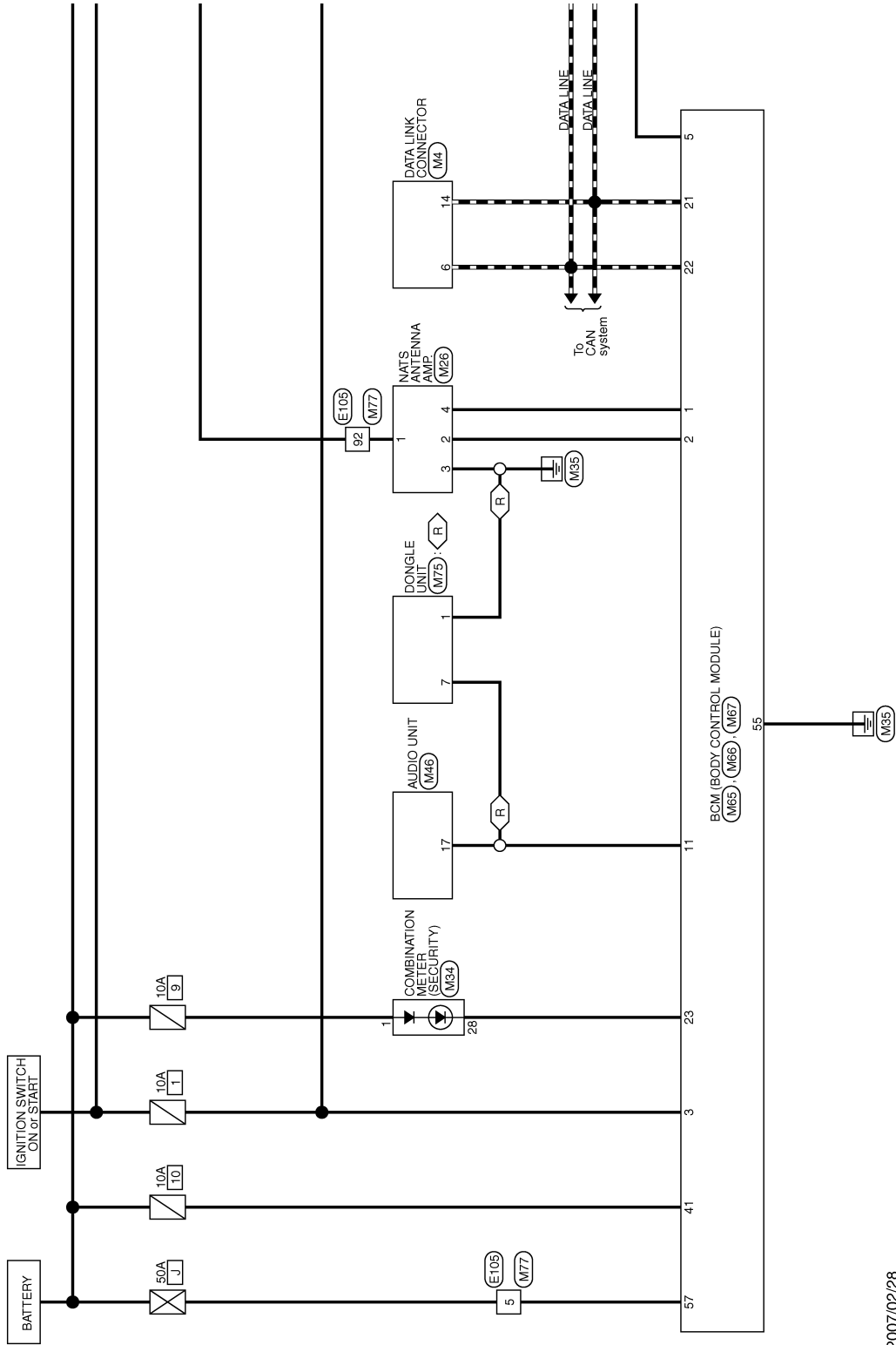
< ECU DIAGNOSIS >

Wiring Diagram - NATS -

INFOID:000000001559342

NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

◊: RHD models



2007/02/28

JCKWA0426GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

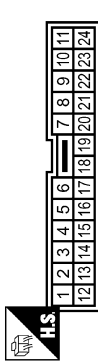
SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

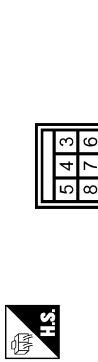
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Connector No.	E10
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	M08FW-LC



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Connector No.	E11
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	M08FB-LC



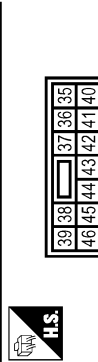
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH12FW-NH



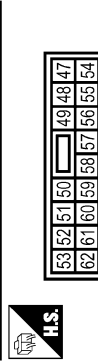
Terminal No.	Color of Wire	Signal Name [Specification]
23	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS12FB-CS



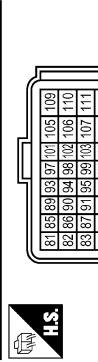
Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	-[Except M/T]
59	Y	-[With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MA42FB-ME4S-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	B4432FB-A1Y8



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC


SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

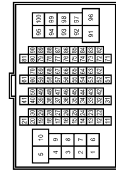
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	E80
Connector Name	ECM
Connector Type	MAA24FF-MEA8-LH




Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



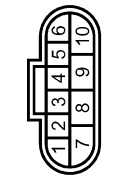
Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK09FG



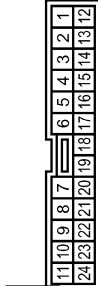
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



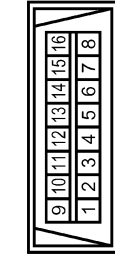
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK24FW-1V



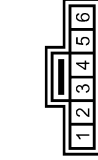
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



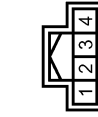
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	IGNITION KNOB SWITCH, KEY SWITCH AND KEY LOCK SOLENOID
Connector Type	TK08MY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	G	-[LHD model]
4	BR	-[RHD model]

Connector No.	M26
Connector Name	MATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

JCKWA0429GE

SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

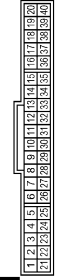
NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	M23
Connector Name	STEERING LOCK UNIT
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	[LHD models]
2	BR	[RHD models]
3	O	-
4	LG	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	STRG LOCK UNIT 3V O/P
2	L	CAN-H
3	P	CAN-L
6	W	IGN SW
7	LG	KEY SW
11	R	BATT-[LHD models]
11	BR	BATT-[RHD models]
12	B	GND
27	G	KNOB SW[LHD models]
27	L	KNOB SW[RHD models]
31	LG	STRG LOCK UNIT GND

32	P	STRG LOCK UNIT SIG
----	---	--------------------

Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
17	B	IMMOBI

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AA400FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP
2	G	NATS ANTENNA AMP
3	W	IGN SW
5	LG	KEY SWITCH (Intelligent Key)
11	B	AUDIO DONGLE LINK(SIGNAL)
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR[LHD models]
23	B	SECURITY INDICATOR[RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FB



Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

JCKWA0430GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC



SIREN CONTROL UNIT

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



NATS (NISSAN ANTI-THEFT SYSTEM) / WITH INTELLIGENT KEY

Connector No.	M75
Connector Name	DONGLE UNIT
Connector Type	NS02BFF-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
7	SB	INTERFACE

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TF180MM-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

JCKWA0431GE

SECURITY CONTROL SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

SECURITY CONTROL SYSTEM

Symptom Table

INFOID:000000001470554

Use the chart below to help you find the cause of the symptom. The numbers indicate the order of the inspection.

NO.	Function	Operation condition	Symptom	Diagnostic Item	Reference page
1	INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION	Ignition switch turn ON	Ignition switch does not turn ON	KEY warning lamp (GREEN) illuminates	SEC-216
				KEY warning lamp does not illuminate	SEC-216
				KEY warning lamp (RED) illuminates	SEC-217
		Engine start	Engine can not start	—	SEC-218
2	VEHICLE SECURITY SYSTEM	Lock all doors with Intelligent Key or door request switch	Vehicle security system can not be set	—	SEC-219
		Lock all doors with Intelligent Key or door request switch	Security indicator does not turn ON	—	SEC-220
		In the armed phase, open the door	Vehicle security alarm does not activate	—	SEC-221
		When alarm sound, press Intelligent Key button	Vehicle security system can not be canceled	—	SEC-222
		When alarm sound, press door request switch		—	SEC-223
3	NATS(NISSAN ANTI-THEFT SYSTEM)	Engine start	Engine start.Engine can not start	—	SEC-224
		Ignition switch turn OFF	Security indicator does not turn ON or flash	—	SEC-225

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IGNITION KNOB SWITCH DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

IGNITION KNOB SWITCH DOES NOT TURN ON

KEY WARNING LAMP (GREEN) ILLUMINATES

KEY WARNING LAMP (GREEN) ILLUMINATES : Description

INFOID:000000001470566

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7, "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

KEY WARNING LAMP (GREEN) ILLUMINATES : Diagnosis Procedure

INFOID:000000001470567

1.CHECK STEERING LOCK UNIT

Check steering lock unit.

Refer to [SEC-45, "DTC Logic"](#).

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-39, "Intermittent Incident"](#).

NO >> GO TO 1.

KEY WARNING LAMP DOES NOT ILLUMINATE

KEY WARNING LAMP DOES NOT ILLUMINATE : Description

INFOID:000000001470568

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7, "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

KEY WARNING LAMP DOES NOT ILLUMINATE : Diagnosis Procedure

INFOID:000000001470569

1.CHECK INTELLIGENT KEY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check Intelligent Key unit power supply and ground circuit.

Refer to [SEC-58, "INTELLIGENT KEY UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK IGNITION KNOB SWITCH

Check ignition knob switch.

Refer to [SEC-64, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts..

3.CHECK KEY SWITCH

IGNITION KNOB SWITCH DOES NOT TURN ON

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

Check key switch.

Refer to [SEC-61, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts..

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

KEY WARNING LAMP (RED) ILLUMINATES

KEY WARNING LAMP (RED) ILLUMINATES : Description

INFOID:0000000001470570

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7, "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

KEY WARNING LAMP (RED) ILLUMINATES : Diagnosis Procedure

INFOID:0000000001470571

1.CHECK INSIDE KEY ANTENNA

Check inside key antenna.

Refer to [DLK-119, "INSTRUMENT CENTER : 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-39, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

ENGINE CAN NOT START WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ENGINE CAN NOT START WITH INTELLIGENT KEY

Description

INFOID:000000001470572

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [GI-38. "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470573

1. CHECK KEY SWITCH

Check key switch.

Refer to [SEC-61. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CHECK STOP LAMP SWITCH

Check stop lamp switch.

Refer to [SEC-66. "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-39. "Intermittent Incident"](#).

NO >> GO TO 1.

VEHICLE SECURITY SYSTEM CAN NOT BE SET

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT BE SET

Description

INFOID:000000001470574

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7, "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470575

1.CHECK DOOR LOCK FUNCTION

Check door lock function.

Refer to [DLK-26, "DOOR LOCK AND UNLOCK SWITCH : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [DLK-22, "Work Flow"](#).

2.PERFORM SELF-DIAGNOSIS OF SIREN CONTROL UNIT

Perform self-diagnosis of siren control unit.

Refer to [SEC-32, "Diagnosis Description"](#).

Does hazard lamp blink?

YES >> GO TO 3.

NO >> GO TO 4.

3.CHECK HOOD SWITCH

Check hood switch.

Refer to [SEC-68, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

4.CHECK SIREN CONTROL UNIT CIRCUIT

Check siren control unit circuit.

Refer to [SEC-58, "SIREN CONTROL UNIT : Diagnosis Procedure"](#). (Power supply and ground circuit.)

Refer to [SEC-74, "Component Function Check"](#). (Siren control unit signal circuit.)

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

SECURITY INDICATOR DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR DOES NOT TURN ON

Description

INFOID:000000001470576

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7. "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470577

1. CHECK VEHICLE SECURITY INDICATOR

Check vehicle security indicator.

Refer to [SEC-70. "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-39. "Intermittent Incident"](#).

NO >> GO TO 1.

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:000000001470586

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to [SEC-7. "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470587

1. CHECK SELF-DIAGNOSIS OF SIREN CONTROL UNIT

Check self-diagnosis of siren control unit.

Refer to [SEC-32. "Diagnosis Description"](#).

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-39. "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

VEHICLE SECURITY SYSTEM CAN NOT BE CANCELED WITH INTELLIGENT KEY

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT BE CANCELED WITH INTELLIGENT KEY

Description

INFOID:000000001470584

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7. "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470585

1. CHECK INTELLIGENT KEY SYSTEM

Check Intelligent Key system.

Refer to [DLK-30. "INTELLIGENT KEY : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [DLK-22. "Work Flow"](#).

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39. "Intermittent Incident"](#).

NO >> GO TO 1.

VEHICLE SECURITY SYSTEM CAN NOT BE CANCELED WITH DOOR REQUEST SWITCH

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT BE CANCELED WITH DOOR REQUEST SWITCH

Description

INFOID:000000001470582

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7, "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470583

1. CHECK INTELLIGENT KEY SYSTEM

Check Intelligent Key system.

Refer to [DLK-30, "INTELLIGENT KEY : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [DLK-22, "Work Flow"](#).

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

ENGINE CAN NOT START WITH MECHANICAL KEY

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

ENGINE CAN NOT START WITH MECHANICAL KEY

Description

INFOID:000000001470580

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7. "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)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470581

1. CHECK STOP LAMP SWITCH

Check stop lamp switch.

Refer to [SEC-66. "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-39. "Intermittent Incident"](#).

NO >> GO TO 1.

SECURITY INDICATOR DOES NOT TURN ON OR FLASH

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR DOES NOT TURN ON OR FLASH

Description

INFOID:000000001470578

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-7. "Work Flow"](#).
- Check that vehicle is under the condition shown in AAConditions of vehicleAAbefore starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Engine start function is ON when setting on CONSULT-III.
- Mechanical key is not inserted in key cylinder.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000001470579

1. CHECK VEHICLE SECURITY INDICATOR

Check vehicle security indicator.

Refer to [SEC-70. "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-39. "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000001524253

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 AIRBAG" and "SEAT BELT" of this Service Manual.

WARNING:

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

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:000000001524254

NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

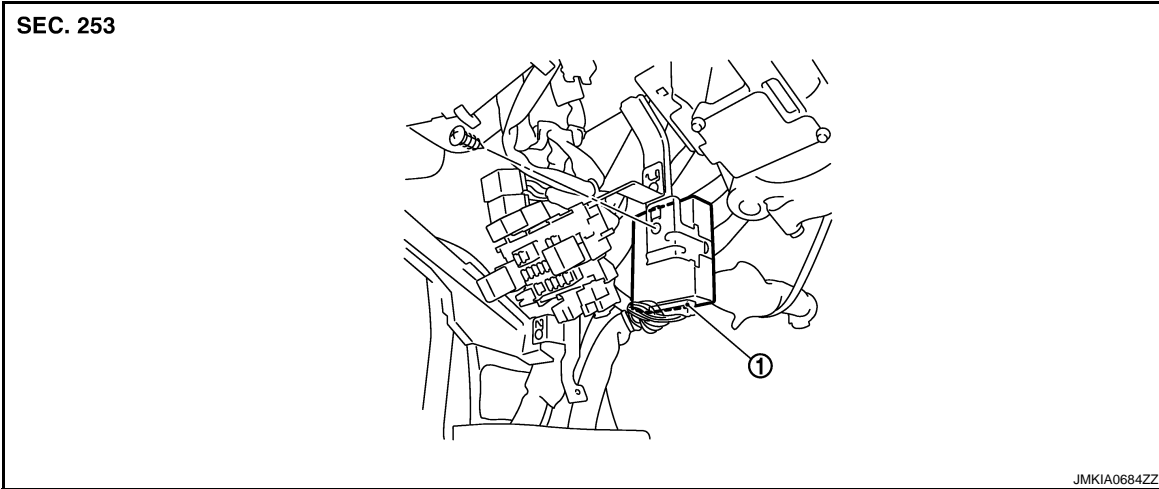
2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
4. Perform the necessary repair operation.
5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
6. Perform a self-diagnosis check of all control units using CONSULT-III.

ON-VEHICLE REPAIR

INTELLIGENT KEY UNIT

Exploded View

INFOID:000000001495926



1. Intelligent Key unit M40

Removal and Installation

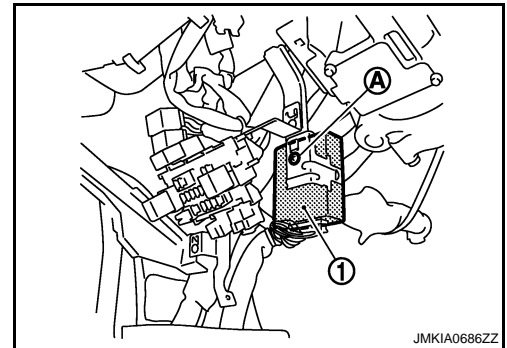
INFOID:000000001495927

REMOVAL

1. Remove lower instrument panel (driver side). Refer to [IP-12. "Removal and Installation"](#).
2. Remove the Intelligent Key unit mounting screw (A), and then remove Intelligent Key unit (1).

NOTE:

Perform the system initialization when replacing Intelligent Key unit. Refer to [SEC-10. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).



A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INSTALLATION

Install in the reverse order of removal.

NATS ANTENNA AMP.

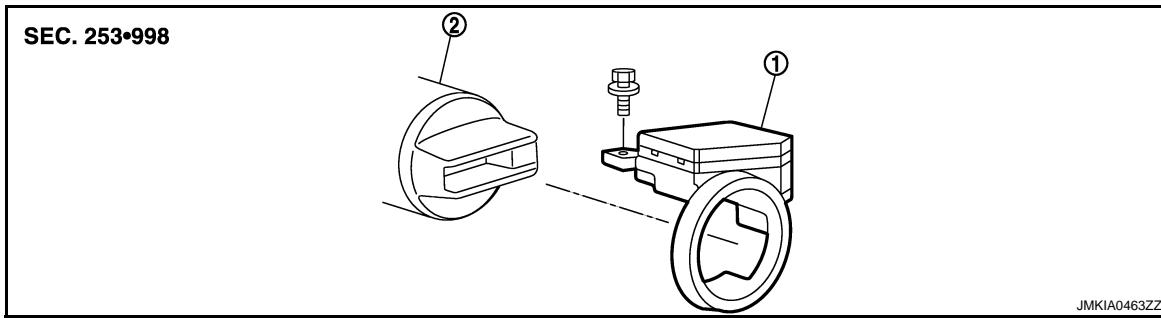
< ON-VEHICLE REPAIR >

[WITH INTELLIGENT KEY SYSTEM]

NATS ANTENNA AMP.

Exploded View

INFOID:000000001286598



1. NATS antenna amp.

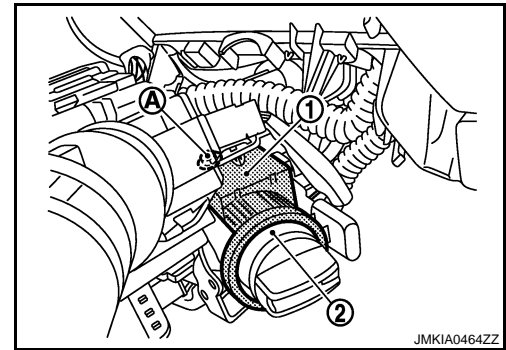
2. Steering lock assembly

Removal and Installation

INFOID:000000001286599

REMOVAL

1. Remove the steering column cover.
Refer to [IP-12, "Removal and Installation"](#).
2. Remove the NATS antenna amp. mounting screw (A), and then remove NATS antenna amp. (1) from steering lock assembly (2).



INSTALLATION

Install in the reverse order of removal.

ULTRA SONIC SENSOR

< ON-VEHICLE REPAIR >

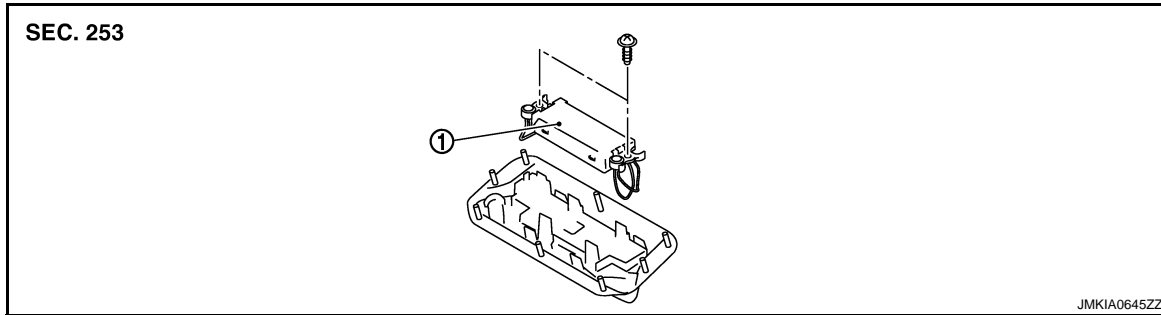
[WITH INTELLIGENT KEY SYSTEM]

ULTRA SONIC SENSOR

Exploded View

INFOID:000000001286604

ULTRA SONIC SENSOR



1. Ultra sonic sensor

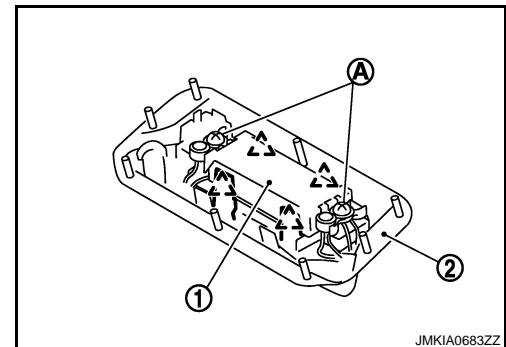
Removal and Installation

INFOID:000000001286605

REMOVAL

1. Remove the ultra sonic sensor finisher.
Refer to [SEC-229. "Exploded View"](#).
2. Remove the ultra sonic sensor mounting screw (A), and then remove pawl.
3. Remove the ultra sonic sensor (2) from ultra sonic sensor finisher (1).

 : Pawl



INSTALLATION

Install in the reverse order of removal.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

HOOD SWITCH

< ON-VEHICLE REPAIR >

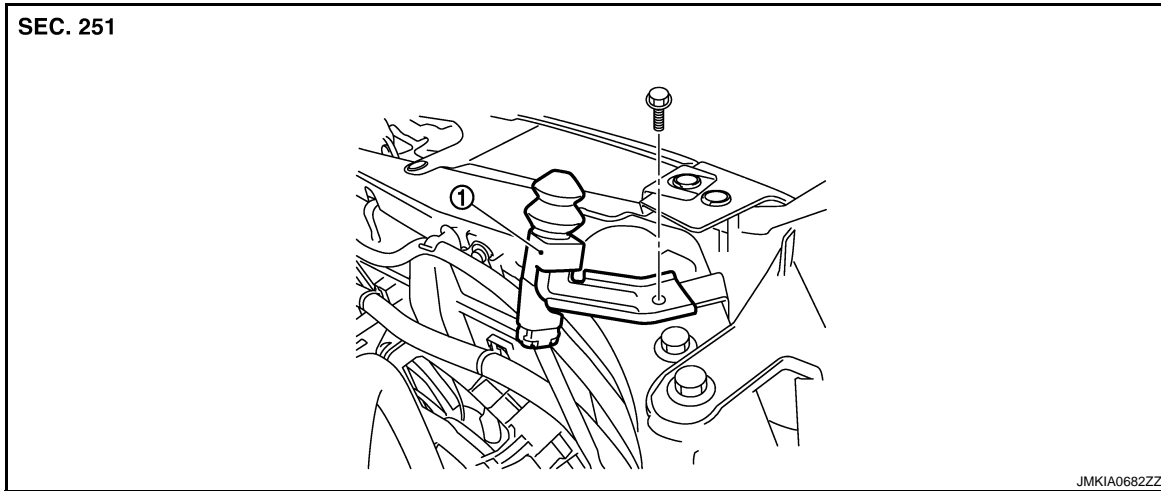
[WITH INTELLIGENT KEY SYSTEM]

HOOD SWITCH

Exploded View

INFOID:000000001286606

HOOD SWITCH



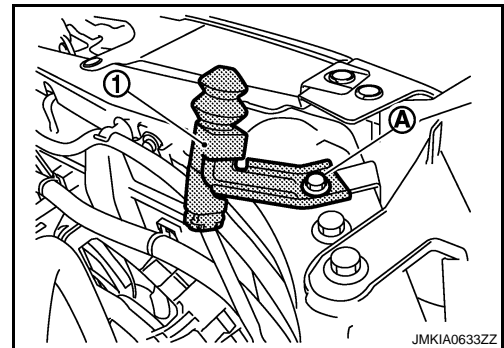
1. Hood switch

Removal and Installation

INFOID:000000001286607

REMOVAL

1. Remove the hood switch mounting bolt (A), and then remove hood switch (1).



INSTALLATION

Install in the reverse order of removal.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

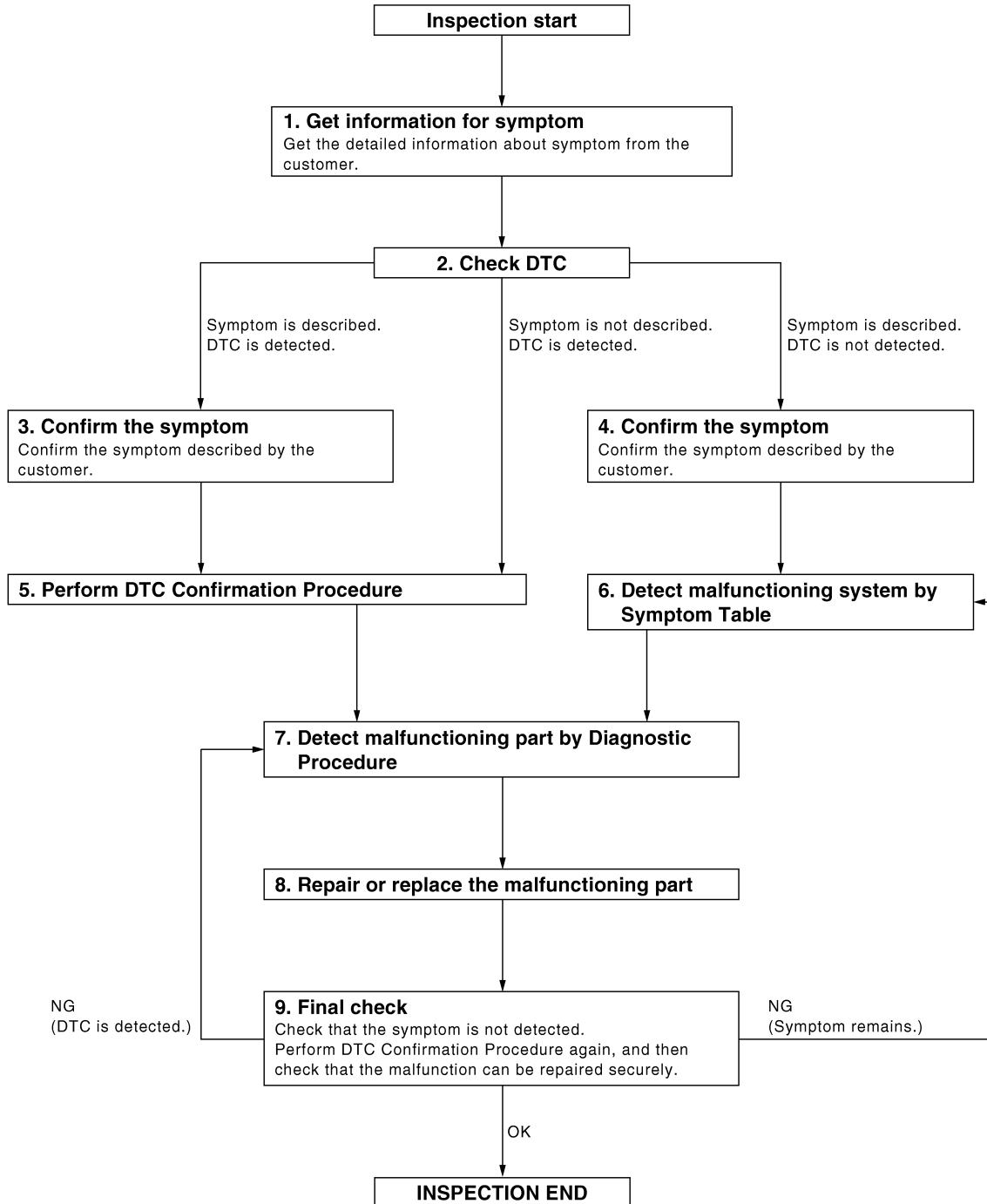
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000001569839

OVERALL SEQUENCE



A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

DETAILED FLOW

JMKIA0676GB

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

1.GET INFORMATION FOR SYMPTOM

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2.CHECK DTC

1. Check DTC for BCM.
2. Perform the following procedure if DTC is displayed.
 - 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.

Is any symptom described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT-III to the vehicle in "DATA MONITOR" mode and check real-time diagnosis results.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Confirm the symptom described by the customer.
Connect CONSULT-III to the vehicle in "DATA MONITOR " mode and check real-time diagnosis results.
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 displayed DTC, and then check that DTC is detected again.
If two or more DTCs are detected, refer to [SEC-315, "DTC Inspection Priority Chart"](#) (BCM) and determine trouble diagnosis order.

Is DTC detected?

- YES >> GO TO 7.
- NO >> Refer to [GI-39, "Intermittent Incident"](#).

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE

Detect malfunctioning system according to Symptom Table based on the confirmed symptom in step 4.

>> GO TO 7.

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

The Diagnostic Procedure is described based on open circuit inspection. A short circuit inspection is also required for the circuit check in the Diagnostic Procedure.

>> GO TO 8.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

>> GO TO 9.

9.FINAL CHECK

When DTC was detected in step 9, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunctions have been fully repaired.

When symptom was described by the customer, refer to the confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Are all malfunctions corrected?

NO (DTC is detected)>>GO TO 7.

NO (Symptom remains)>>GO TO 6.

YES >> **INSPECTION END**

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000001286609

Perform the system initialization when replacing BCM.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000001286610

Refer to the CONSULT-III Operation Manual-NATS.

ECM RE-COMMUNICATING FUNCTION

ECM RE-COMMUNICATING FUNCTION : Description

INFOID:000000001286611

Performing following procedure can automatically perform re-communication of ECM and BCM, but only when the ECM has been replaced with a new one (*1).

*1: New one means a virgin ECM which has never been energized on-board.

(In this step, initialization procedure by CONSULT-III is not necessary)

NOTE:

- When registering new Key IDs or replacing the ECM that is not brand new, refer to CONSULT-III Operation Manual NATS.
- If multiple keys are attached to the key holder, separate them before work.
- Distinguish keys with unregistered key ID from those with registered ID.

ECM RE-COMMUNICATING FUNCTION : Special Repair Requirement

INFOID:000000001286612

1. PERFORM ECM RE-COMMUNICATING FUNCTION

1. Install ECM.
2. Using a registered key (*2), turn ignition switch to "ON".
*2: To perform this step, use the key that has been used before performing ECM replacement.
3. Maintain ignition switch in "ON" position for at least 5 seconds.
4. Turn ignition switch to "OFF".
5. Start engine.

Can engine be started?

- YES >> Procedure is completed.
NO >> Initialize control unit. Refer to CONSULT-III Operation Manual NATS.

NATS (NISSAN ANTI-THEFT SYSTEM)

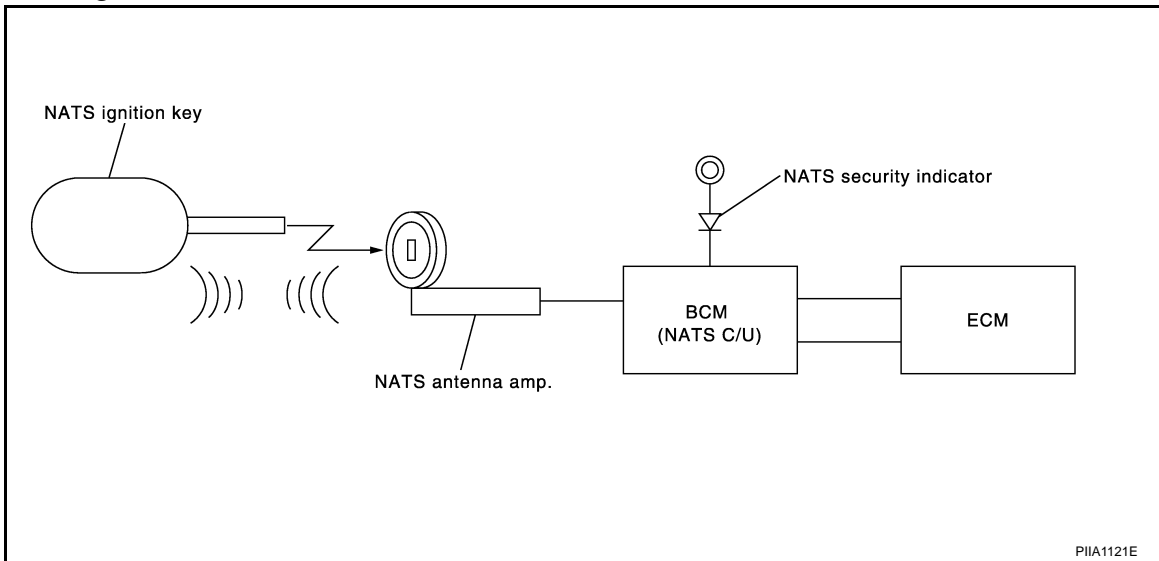
< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

FUNCTION DIAGNOSIS

NATS (NISSAN ANTI-THEFT SYSTEM)

System Diagram



System Description

INFOID:000000001286614

INPUT/OUTPUT SIGNAL CHART

BCM

Switch/Input signal	Input signal to BCM	BCM function	Actuator/Output signal
NATS antenna amp.	Key ID	NATS	<ul style="list-style-type: none"> Security indicator lamp Starter request
Audio unit	Audio unit ID		
ECM	Engine status signal		

SEC

SYSTEM DESCRIPTION

NATS (Nissan Anti-Theft System) has the following immobilizer functions:

- Engine immobilizer shows high anti-theft performance to prevent engine start by other than the owner.
- Only a key with key ID registered in BCM and ECM can start engine, and shows high anti-theft performance to prevent key from being copied or stolen.
- Security indicator always flashes with mechanical key removed condition (key switch: OFF).
- Therefore, NATS warns outsiders that the vehicle is equipped with the anti-theft system. Refer to [SEC-239, "System Description"](#).
- If system detects malfunction, security indicator illuminate when ignition switch is turned to ON position.
- If the owner requires, ignition key ID can be registered for up to 5 keys.
- During trouble diagnosis or when the following parts have been replaced, and if ignition key is added, registration* is required.

*1: All keys kept by the owner of the vehicle should be registered with ignition key.

- ECM
 - BCM
 - Ignition key
 - EPS control unit
 - IPDM E/R
 - Combination meter
 - NATS trouble diagnosis, system initialization and additional registration of other Ignition key IDs must be carried out using CONSULT-III hardware and SECURITY CARD.
- When NATS initialization has been completed, the ID of the inserted ignition key or ignition key IDs can be carried out.

NATS (NISSAN ANTI-THEFT SYSTEM)

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

- Possible symptom of NATS malfunction is "Engine cannot start". The engine can be started with the NATS. Identify the possible causes according to "Work Flow". Refer to [SEC-231, "Work Flow"](#).
- If ECM other than Genuine NISSAN is installed, the engine cannot be started. For ECM replacement procedure, refer to [SEC-234, "ECM RE-COMMUNICATING FUNCTION : Description"](#).

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current NATS ID once, and then re-registers a new ID. Therefore the registered ignition key is necessary for this procedure. Before starting the registration operation collect all registered ignition keys from the customer
- The NATS ID registration is the procedure that registers the ID stored into the transponder (integrated in ignition key) to BCM.

SECURITY INDICATOR

- Security indicator blinks when the ignition switch is in "OFF" or "ACC" position.
- When NATS detects trouble, the security indicator lamp lights up while ignition key is in the "ON" position.

MAINTENANCE INFORMATION

CAUTION:

If necessary to perform NATS ID registration when replacing any of the following part.

- **ECM**

For RHD vehicles, it is necessary to perform NATS ID registration when replacing any of the following parts with a used part.

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

***: A new part should register automatically after the ignition switch is turned ON.**

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

- **EPS control unit**
- **IPDM E/R**
- **ECM**
- **Combination meter**

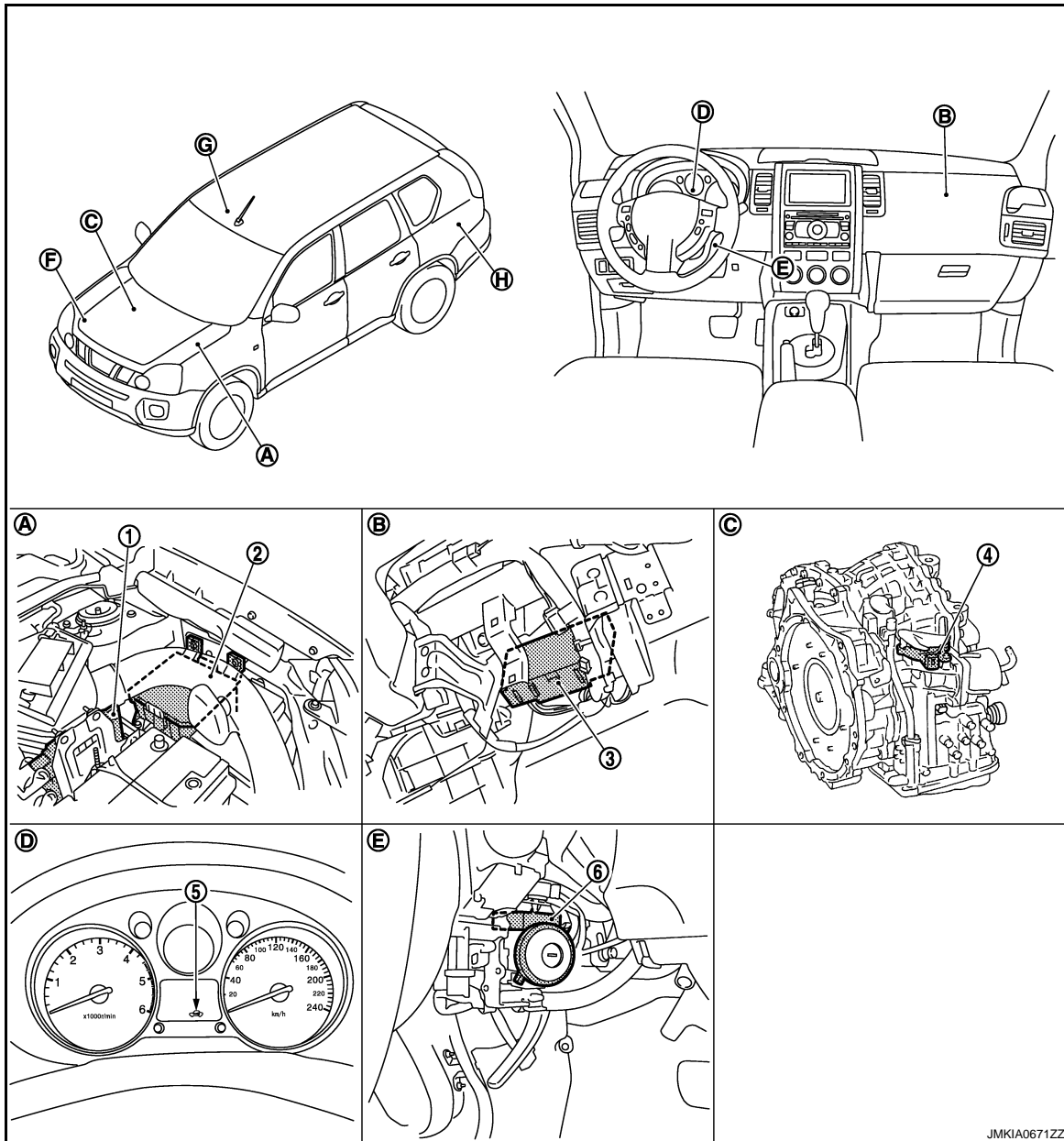
NATS (NISSAN ANTI-THEFT SYSTEM)

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Component Parts Location

INFOID:000000001286615

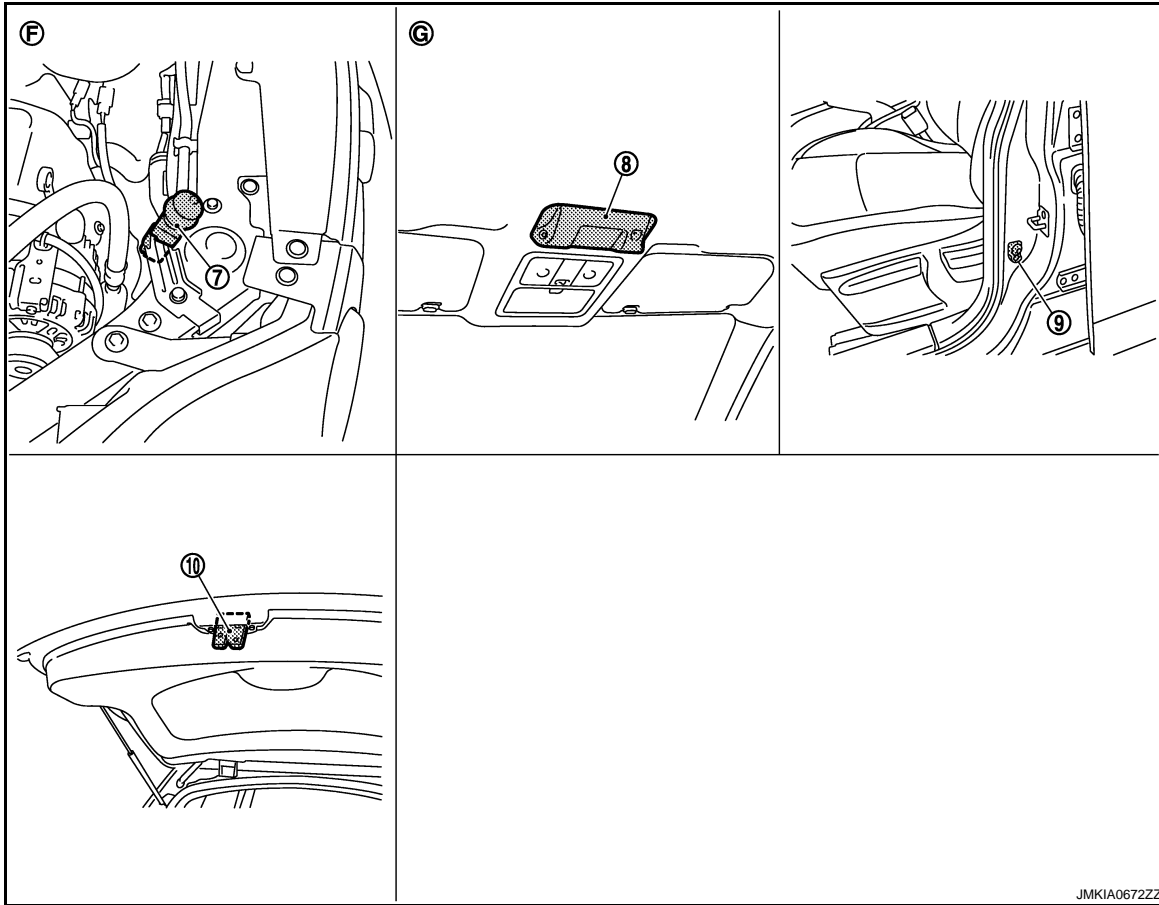


- | | | |
|---|---|-----------------------------|
| 1. ECM
Gasoline engine E16
Diesel engine E60 | 2. IPDM E/R
E10, E11, E13, E14 | 3. BCM
M65, M66, M67 |
| 4. Park/neutral position switch
With A/T F22
With CVT F21 | 5. Combination meter (security indicator lamp)
M34 | 6. NATS antenna amp.
M26 |
| A. Engine room (LH) | B. Over the glove box | C. CVT unit |
| D. Built in combination meter | E. View with steering column cover removed | |

NATS (NISSAN ANTI-THEFT SYSTEM)

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]



7. Hood switch E113

10. Back door lock assembly D190

F. Engine room RH

8. Ultra sonic sensor R11

G. View with ultra sonic sensor located in the front headlining

9. Front door switch (driver side) B34

Component Description

INFOID:000000001286616

Component	Reference
BCM	BCS-9
Key switch	SEC-268
NATS antenna amp.	SEC-254
Security indicator	SEC-274
IPDM E/R	PCS-3

VEHICLE SECURITY SYSTEM

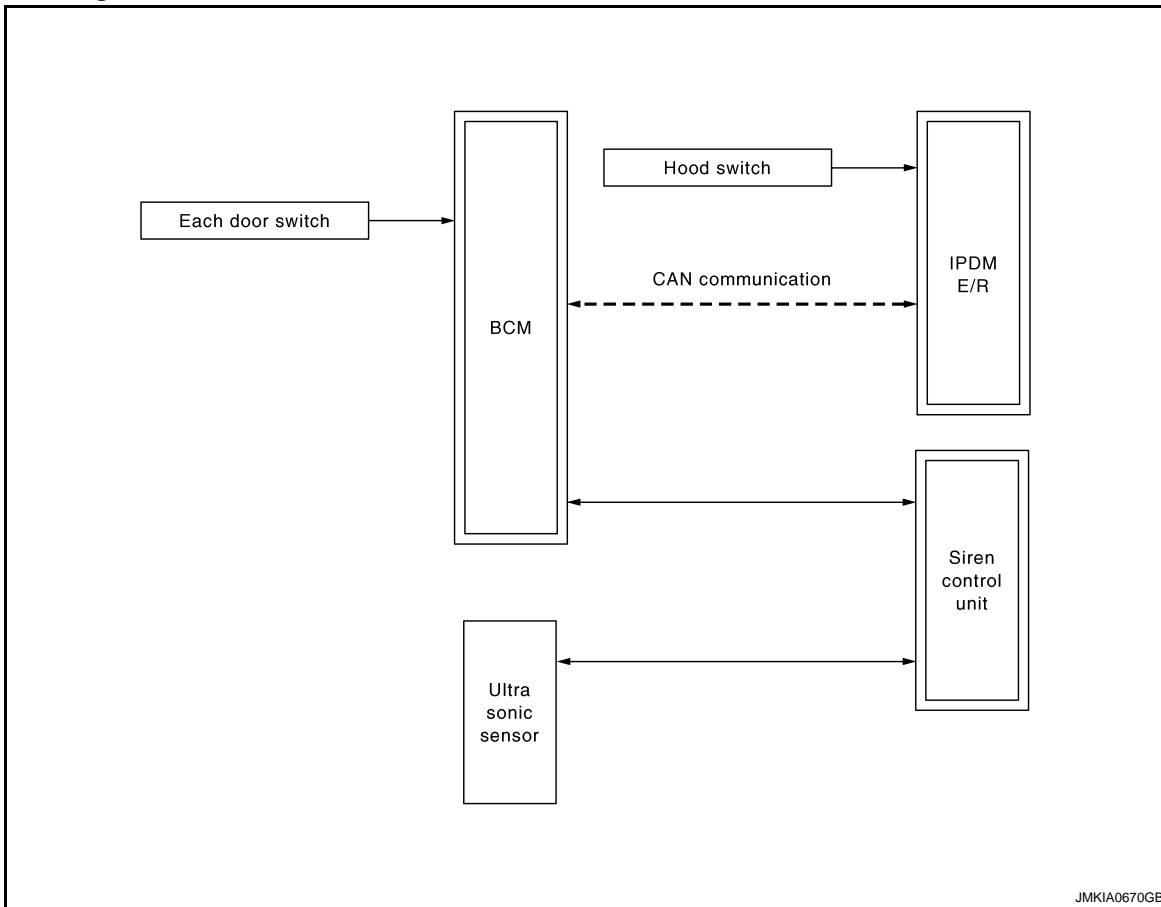
< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

System Diagram

INFOID:000000001286617



System Description

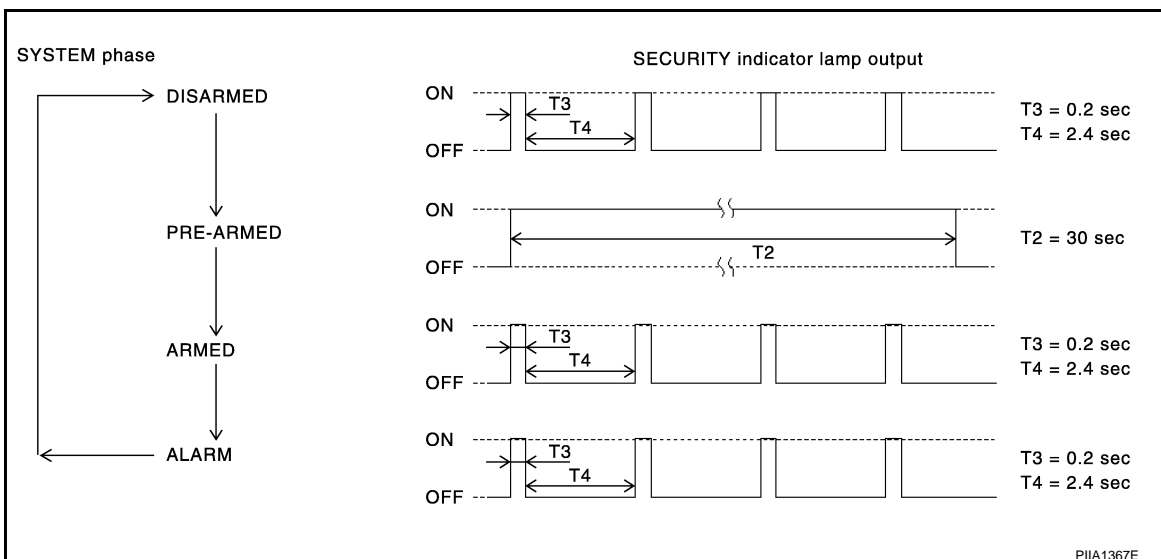
INFOID:000000001286618

DESCRIPTION

The vehicle security system provides an audible and visual alarm when an unauthorized access to the vehicle is detected while the system is in armed phase.

The security system consist of two control units. The BCM relays door status, arming state, etc, to the siren control unit. The siren control unit manages alarm function and audible alarm (siren).

OPERATION FLOW



A
B
C
D
E
F
G
H
I
J

SEC

L
M
N
O
P

VEHICLE SECURITY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

BCM shifts the phase as follows and the phase information is sent to siren control unit via communication line.

Disarmed Phase

When the vehicle is being driven or when doors are open, the vehicle security system is set in the disarmed phase on the assumption that the owner is inside or near the vehicle.

Pre-Armed Phase And Armed Phase

The vehicle security system turns into the pre-armed phase when ignition switch is in OFF position, all doors are closed and locked (using Intelligent Key, door request switch or auto relock function). After 20 seconds from the lock operation, the system automatically shifts into the armed phase.

Condition of Activating The System

When the following condition are performed in armed phase, the system sounds the horns/siren and flashes the headlamps for about 30 seconds.

- Hood or any door is opened.
- Ultra sonic sensor is triggered.
- Ignition switch goes ON with invalid transponder ID.

Condition of Deactivating The System

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

- Unlock the doors with Intelligent Key or door request switch.
- Ignition switch goes ON with transponder ID verified.

SIREN CONTROL UNIT

Siren control unit manages siren. the siren control unit does not shift to armed phase in the same way as BCM. the siren control unit goes to armed phase after about 10 seconds from lock command. If door is opened or closed within about 20 seconds, only the siren will be activated.

Siren control unit has battery inside. If disconnect or connect battery terminal before canceling armed phase, siren will be activated.

Ultra Sonic Sensor Function

The ultra sonic sensor consist of two separate units, a transmitter on the left and receiver on the right mounted on room mirror. The LH transmitter sensor sends an ultra sonic pulse of sound, and RH receiver sensor receives the returning echo pulse.

It is possible to exclude the ultrasonic sensors.

To exclude the ultra sonic sensors:

1. Turn the ignition switch from the OFF to the ON position.
2. Turn the ignition switch from OFF to ON 3 times within 7 seconds.
3. Close the doors, hood and press the lock button on the keyfob to lock all doors.

The ultra sonic sensors are now excluded from the alarm system. All other functions of the system remain activated until the alarm system is disarmed again.

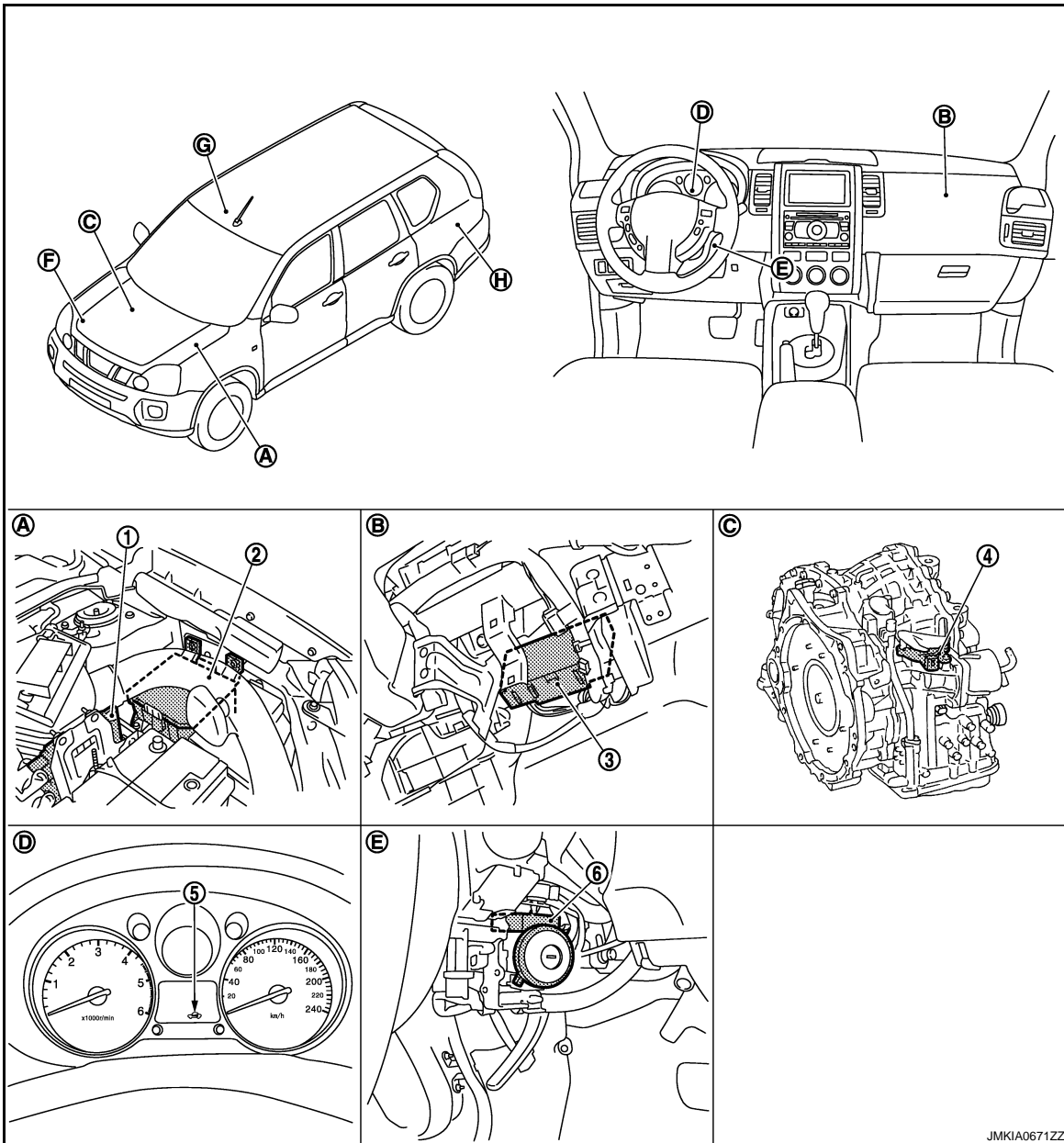
VEHICLE SECURITY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

Component Parts Location

INFOID:000000001495333

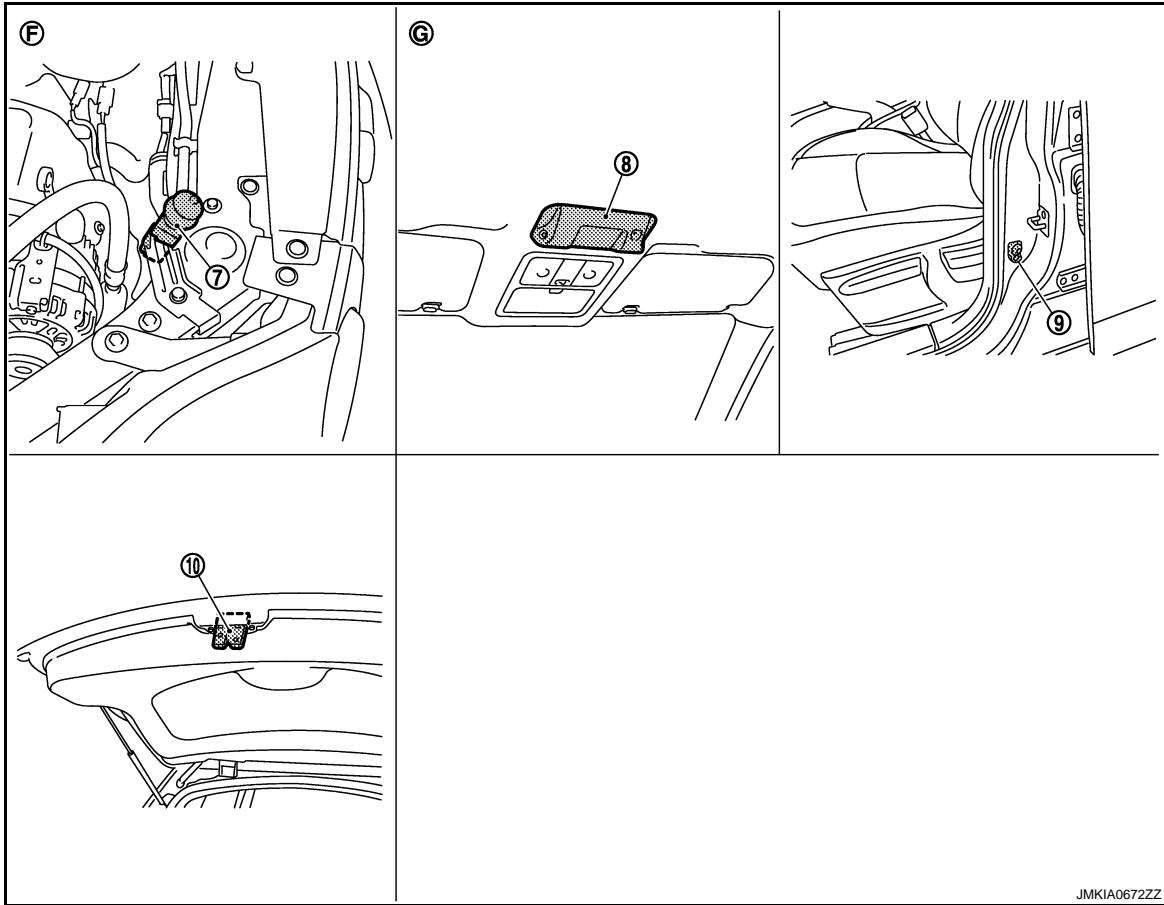


- | | | |
|---|---|-----------------------------|
| 1. ECM
Gasoline engine E16
Diesel engine E60 | 2. IPDM E/R
E10, E11, E13, E14 | 3. BCM
M65, M66, M67 |
| 4. Park/neutral position switch
With A/T F22
With CVT F21 | 5. Combination meter (security indicator lamp)
M34 | 6. NATS antenna amp.
M26 |
| A. Engine room (LH) | B. Over the glove box | C. CVT unit |
| D. Built in combination meter | E. View with steering column cover removed | |

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]



7. Hood switch E113

10. Back door lock assembly D190

F. Engine room RH

8. Ultra sonic sensor R11

G. View with ultra sonic sensor located in the front headlining

9. Front door switch (driver side) B34

Component Description

INFOID:000000001286620

Component	Reference
BCM	BCS-9
Horn	HRN-2
Hood switch	SEC-272
Security indicator	SEC-274
Door switch	DLK-633
Siren control unit	SEC-278
Ultra sonic sensor	SEC-276
NATS antenna amp.	SEC-254

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000001569646

APPLICATION ITEM

CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Results	Displays the diagnosis results judged by BCM. Refer to SEC-316. "DTC Index" .
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from 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	CONSULT-III sub system selection item	Diagnosis mode		
		WORK SUPPORT	DATA MONITOR	ACTIVE TEST
—	BCM	×		
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER	×	×	×
Warning chime	BUZZER		×	×
Interior room lamp control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Air conditioner	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
—	PTC HEATER*			

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

IMMU

IMMU : CONSULT-III Function (BCM - IMMU)

INFOID:000000001286622

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

Diagnosis mode	Function Description
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from Intelligent Key unit.

DATA MONITOR

Monitor item	Content
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
PUSH SW*1	Indicates [ON/OFF] condition of ignition knob switch.

*1: For the vehicle Intelligent key is equipped.

ACTIVE TEST

Test item	Description
THEFT IND	This test is able to check security indicator operation [ON/OFF].

THEFT ALM

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

INFOID:000000001286623

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
WORK SUPPORT	Changes the setting for each system function.
DATA MONITOR	The BCM input/output signals are displayed.
ACTIVE TEST	The signals used to activate each device are forcibly supplied from BCM.

DATA MONITOR

Monitor Item	Condition
IGN ON SW	Indicates [ON/OFF] condition of ignition switch in ON position.
ACC ON SW	Indicates [ON/OFF] condition of ignition switch in ACC position.
KEY ON SW	Indicates [ON/OFF] condition of key switch.
KEYLESS LOCK*2	Indicates [ON/OFF] condition of lock signal from key fob.
KEYLESS UNLOCK*2	Indicates [ON/OFF] condition of unlock signal from key fob.
I-KEY LOCK*1	Indicates [ON/OFF] condition of lock signal from Intelligent Key.
I-KEY UNLOCK*1	Indicates [ON/OFF] condition of unlock signal from Intelligent Key.
HOOD SW	Indicates [ON/OFF] condition of hood switch.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [ON/OFF] condition of rear door switch RH.
DOOR SW-RL	Indicates [ON/OFF] condition of rear door switch LH.
BACK DOOR SW	Indicates [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of door lock and unlock switch.

*1: For vehicle equipped with Intelligent Key.

*2: For the vehicle equipped with remote key less entry system.

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

ACTIVE TEST

Test item	Description
THEFT IND	This test is able to check security indicator operation [ON/OFF].
VEHICLE SECURITY HORN	This test is able to check horn operation [ON].
FLASHER	This test is able to check flasher operation [LH/RH/OFF].

WORK SUPPORT

Test item	Description
SECURITY ALARM SET	Vehicle security function mode can be changed in this mode. <ul style="list-style-type: none">• ON: Vehicle security function is ON.• OFF: Vehicle security function is OFF.
THEFT ALM TRG	The switch which triggered vehicle security system is recorded. This mode can be able to confirm and erase the record of vehicle security system.

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

Diagnosis Description

INFOID:000000001548064

SELF-DIAGNOSIS MODE

The siren control unit possess the self-diagnosis function and can detect the theft warning system malfunction. The self-diagnosis modes are the following:

- Siren control unit circuit diagnosis
- Alarm data display
- System diagnosis

The self-diagnosis results are display by the number of time the hazard blinks or by siren sounds.

• **NOTE:**

The siren sounds in this order (alarm data display, system diagnosis). The siren sound interpretation is very complex, please refer to an example of self-diagnosis results and then perform the diagnosis several times.

OPERATION PROCEDURE

1. Connect the CONSULT-III.
2. Turn the key to ON position.
3. Perform the work support mode security alarm setting.
4. Turn the security alarm set to OFF.
5. The self-diagnosis will automatically start 2 seconds after turning again the security alarm set to ON.

NOTE:

Perform the siren control unit self-diagnosis if the self-diagnosis does not start automatically.

SELF-DIAGNOSIS RESULT

The self-diagnosis results are displayed in the order below.

1. **Siren control unit circuit diagnosis display**

Perform the siren control unit wires connection status diagnosis and display the results.

Normal: The hazard lamp blinks 3 times after 2 seconds and the alarm data display will start.

Circuit is malfunctioning: The hazard lamp does not blink and the self-diagnosis will not start.

2. **Alarm data display**

Siren control unit sounds the alarm, and display the cause of the alarm start-up.

Refer to SELF-DIAGNOSIS RESULT TABLE (alarm data).

No data displayed: The system diagnosis results will be displayed.

Data displayed: The alarm indicates an item related to the number of time it sounds.

NOTE:

A maximum of 3 alarm latest data can be memorized.

CAUTION:

The alarm data will disappear as soon as the system is shifted to ARMED mode.

3. **System diagnosis results display**

Perform the theft warning system diagnosis.

Refer to SELF-DIAGNOSIS RESULT TABLE (malfunctioning part).

Malfunction is not detected: Finish the self-diagnosis

Malfunction is detected: The alarm indicates an item related to the number of time it sounds.

SELF-DIAGNOSIS RESULT TABLE

Alarm data

No. of time the alarm sounds	Alarm start-up condition
1st time	Battery removed.
2nd time	Hood or Door open/close
3rd time	Disconnection between the BCM and the siren control unit wires or malfunction.
4th time	Ultra sonic sensor has detected an intrusion.
5th time	Operate ignition switch with an unregistered key.
6th time	Disconnection between the siren control unit and ultra sonic sensor wires.

Malfunctioning part

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

< FUNCTION DIAGNOSIS >

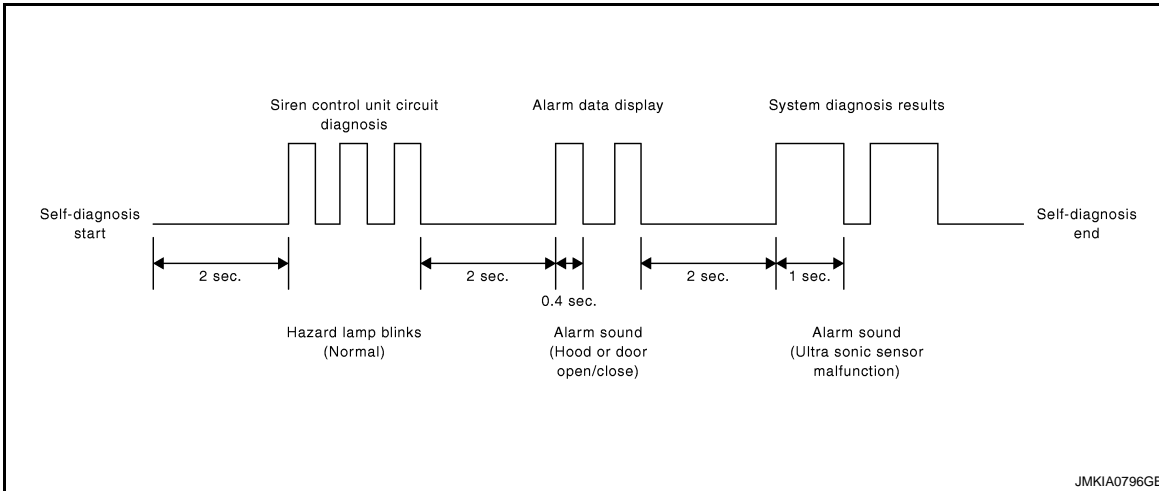
[WITHOUT INTELLIGENT KEY SYSTEM]

No. of time the alarm sounds	Malfunctioning parts
1st time	Siren control unit
2nd time	Ultra sonic sensor

Self-diagnosis result examples

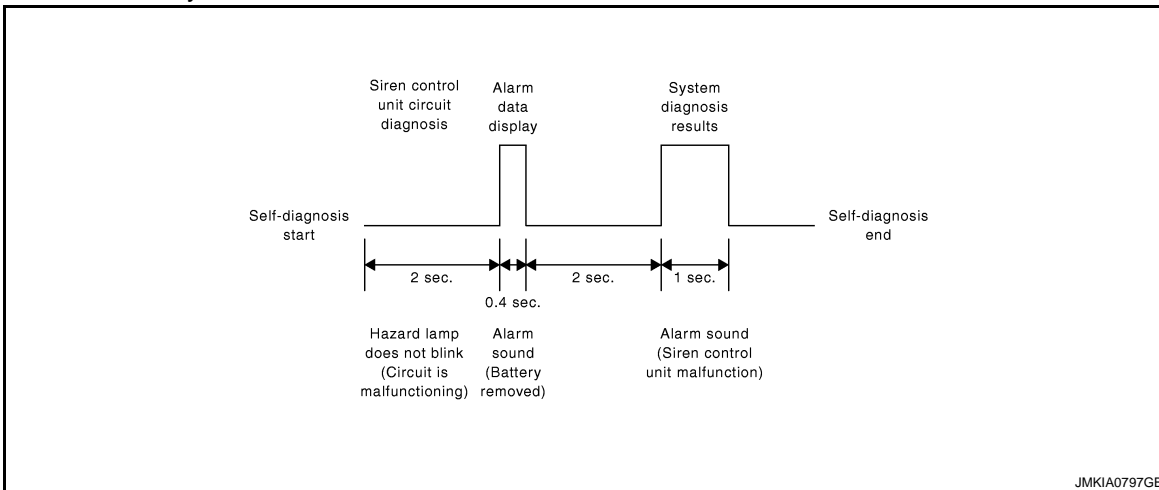
1.

- Siren control unit circuit diagnosis: Normal
- System diagnosis: Ultra sonic sensor malfunction
- Alarm data: Door open



2.

- Siren control unit circuit diagnosis: Circuit is malfunctioning
- System diagnosis: Siren control unit malfunction
- Alarm data: Battery removed



3.

- Siren control unit circuit diagnosis: Normal
- System diagnosis: Ultra sonic sensor malfunction

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

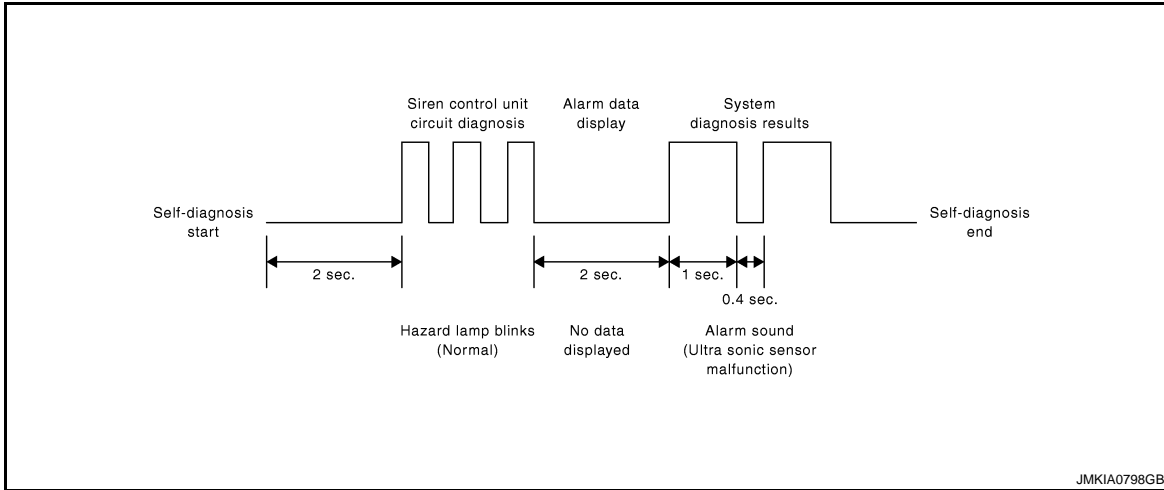
SEC

DIAGNOSIS SYSTEM (SIREN CONTROL UNIT)

< FUNCTION DIAGNOSIS >

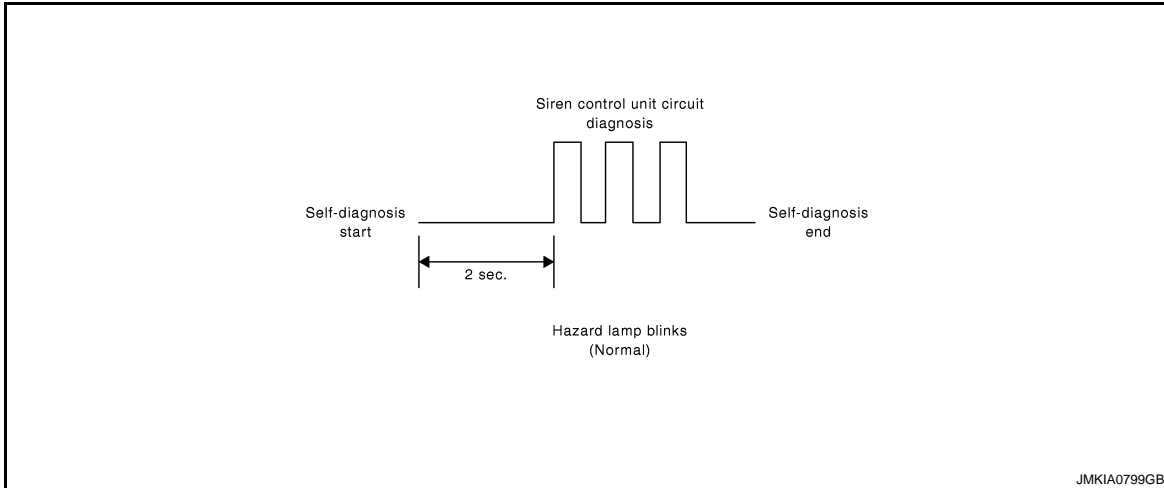
[WITHOUT INTELLIGENT KEY SYSTEM]

- Alarm data: No data



4.

- Siren control unit circuit diagnosis: Normal



U1000 CAN COMM CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

Description

INFOID:000000001559438

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-25, "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000001559439

DTC DETECTION LOGIC

DTC	DTC Detection Condition	Possible cause
U1000: CAN COMM CIRCUIT	When BCM cannot communicate CAN communication signal continuously for 2 seconds or more.	Any item (or items) of the following listed below is malfunctioning in CAN communication system. <ul style="list-style-type: none">• Transmission• Receiving (ECM)• Receiving (METER/M&A)• Receiving (TCM)• Receiving (MULTI AV)• Receiving (IPDM E/R)• Receiving (I-KEY)

Diagnosis Procedure

INFOID:000000001559440

1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" of BCM.

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to [LAN-13, "Trouble Diagnosis Flow Chart"](#).
NO >> Refer to [GI-39, "Intermittent Incident"](#).

SEC

U1010 CONTROL UNIT (CAN)

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000001559441

DTC DETECTION LOGIC

DTC	DTC Detection Condition	Possible cause
U1010: CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN controller of BCM.	BCM

Diagnosis Procedure

INFOID:000000001559442

1. REPLACE BCM

When "DTC:U1010" is detected, replace BCM.

>> Replace BCM. Refer to [BCS-68, "Exploded View"](#).

P1611 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1611 ID DISCORD, IMMUECM

Description

INFOID:000000001286636

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

DTC Logic

INFOID:000000001286637

DTC DETECTION LOGIC

NOTE:

- If DTC P1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-249, "DTC Logic"](#).
- If DTC P1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-250, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1611	ID DISCORD BCM-ECM	The ID verification results between BCM and ECM are NG. The registration is necessary.	<ul style="list-style-type: none">• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-251, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286638

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> ID was unregistered.
NO >> GO TO 2.

2. PEPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> BCM is malfunctioning.
NO >> GO TO 3.

3. PEPLACE ECM

1. Replace ECM.
2. Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> ECM is malfunctioning.
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

P1611 ID DISCORD, IMMU-ECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

>> INSPECTION END

P1612 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1612 CHAIN OF ECM-IMMU

Description

INFOID:000000001286639

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

DTC Logic

INFOID:000000001286640

DTC DETECTION LOGIC

NOTE:

- If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-249, "DTC Logic"](#).
- If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-250, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1612	CHAIN OF BCM-ECM	Inactive communication between ECM and BCM	<ul style="list-style-type: none">• Harness or connectors (The CAN communication line is open or short)• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-253, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001286641

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS".

Does the engine start?

- YES >> BCM was malfunctioning.
NO >> ECM is malfunctioning.
 - Replace ECM.
 - Perform ECM re-communicating function.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

P1614 CHANIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1614 CHANIN OF IMMU-KEY

Description

INFOID:000000001286630

Performs ID verification through BCM and NATS antenna amplifier when ignition switch is ON position. Prohibits the release of steering lock or start of engine when an unregistered ID of ignition key is used.

DTC Logic

INFOID:000000001286631

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1614	NATS ANTENNA AMP	<ul style="list-style-type: none">Inactive communication between NATS antenna amp. and BCM.Ignition key is malfunctioning.	<ul style="list-style-type: none">Harness or connectors (The NATS antenna amp. circuit is open or short)Ignition keyNATS antenna amp.BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Insert ignition key into the key cylinder.
2. Turn ignition switch ON.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-254, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001286632

1.CHECK NATS ANTENNA AMP. INSTALLATION

Check NATS antenna amp. installation. Refer to [SEC-371, "Removal and Installation"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Reinstall NATS antenna amp. correctly.

2.CHECK IGNITION KEY

Start engine with another registered ignition key.

Does the engine start?

- YES >> Replace ignition key. Perform initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS"
NO >> GO TO 3.

3.CHECK NATS ANTENNA AMP. POWER SUPPLY

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

NATS antenna amp.		Ground	Voltage [V] (approx.)
Connector	Terminal		
M26	1	Ground	Battery voltage

Is the inspection result normal?

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

4.CHECK NATS ANTENNA AMP. GROUND CIRCUIT

P1614 CHANIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Check continuity between NATS antenna amp. harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M26	3	Ground	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace circuit.

5.CHECK NATS ANTENNA AMP. SIGNAL CIRCUIT

Check voltage between NATS antenna amp. harness connector and ground.

NATS antenna amp.		Ground	Condition	Voltage [V] (approx.)
Connector	Terminal			
M26	2	Ground	Just after inserting ignition key in key cylinder.	Pointer of tester should move.
			Other than above.	0
	4		Just after inserting ignition key in key cylinder.	Pointer of tester should move.
			Other than above.	0

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace circuit.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace NATS antenna amp.

NO >> Repair or replace malfunctioning parts.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

P1615 DIFFERENCE OF KEY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1615 DIFFERENCE OF KEY

Description

INFOID:000000001286633

Performs ID verification through BCM when ignition switch is ON position.
Prohibits the release of steering lock or start of engine when an unregistered key is used.

DTC Logic

INFOID:000000001286634

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1615	DIFFERENCE OF KEY	The ID verification results between BCM and ignition key are NG. The registration is necessary.	Ignition key

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Insert ignition key into the key cylinder.
2. Press the ignition knob switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-256, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286635

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> Ignition key was unregistered.
NO >> BCM is malfunctioning.
- Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
 - Perform initialization again

P1616 ECM

< COMPONENT DIAGNOSIS >

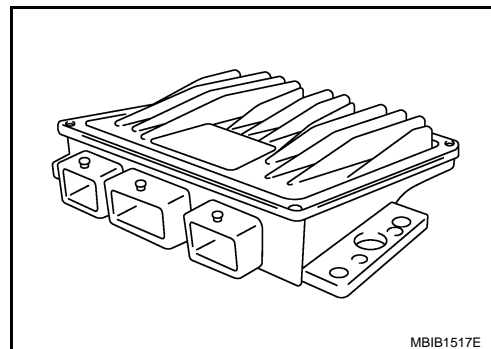
[WITHOUT INTELLIGENT KEY SYSTEM]

P1616 ECM

Description

INFOID:000000001558734

The ECM consists of a microcomputer and connectors for signal input and output and for power supply. The ECM controls the engine.



DTC Logic

INFOID:000000001558735

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
P1616	Engine control module	ECM is malfunctioning.	• ECM

DTC CONFIRMATION PROCEDURE

1. PRECONDITIONING

If DTC Confirmation Procedure has been previously conducted, always turn ignition switch OFF and wait at least 20 seconds before conducting the next test.

>> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE FOR MALFUNCTION

1. Turn ignition switch ON.
2. Check 1st trip DTC.

Is DTC detected?

- YES >> Go to [SEC-257, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001558736

1. INSPECTION START

Ⓜ With CONSULT-III

1. Turn ignition switch ON.
2. Select "SELF-DIAG RESULTS" mode with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC CONFIRMATION PROCEDURE.**
See [SEC-257, "DTC Logic"](#).

Is the DTC P1616 displayed again?

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

2. REPLACE ECM

1. Replace ECM.
2. Go to [ECR-12, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement"](#).

>> INSPECTION END

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2190 NATS ANTENNA AMP.

Description

INFOID:000000001553138

Performs ID verification through BCM and NATS antenna amplifier when ignition switch is ON position. Prohibits the release of steering lock or start of engine when an unregistered ID of ignition key is used.

DTC Logic

INFOID:000000001553139

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2190	NATS ANTENNA AMP	<ul style="list-style-type: none">Inactive communication between NATS antenna amp. and BCM.Ignition key is malfunctioning.	<ul style="list-style-type: none">Harness or connectors (The NATS antenna amp. circuit is open or short)Ignition keyNATS antenna amp.BCM

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Insert ignition key into the key cylinder.
2. Turn ignition switch ON.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

YES >> Refer to [SEC-258. "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001553140

1.CHECK NATS ANTENNA AMP. INSTALLATION

Check NATS antenna amp. installation. Refer to [SEC-371. "Removal and Installation"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Reinstall NATS antenna amp. correctly.

2.CHECK IGNITION KEY

Start engine with another registered ignition key.

Does the engine start?

YES >> Replace ignition key. Perform initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS"

NO >> GO TO 3.

3.CHECK NATS ANTENNA AMP. POWER SUPPLY

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

NATS antenna amp.		Ground	Voltage [V] (approx.)
Connector	Terminal		
M26	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK NATS ANTENNA AMP. GROUND CIRCUIT

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Check continuity between NATS antenna amp. harness connector and ground.

Key slot		Ground	Continuity
Connector	Terminal		
M26	3	Ground	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace circuit.

5.CHECK NATS ANTENNA AMP. SIGNAL CIRCUIT

Check voltage between NATS antenna amp. harness connector and ground.

NATS antenna amp.		Ground	Condition	Voltage [V] (approx.)
Connector	Terminal			
M26	2	Ground	Just after inserting ignition key in key cylinder.	Pointer of tester should move.
			Other than above.	0
	4		Just after inserting ignition key in key cylinder.	Pointer of tester should move.
			Other than above.	0

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace circuit.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace NATS antenna amp.

NO >> Repair or replace malfunctioning parts.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

B2191 DIFFERENCE OF KEY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2191 DIFFERENCE OF KEY

Description

INFOID:000000001553141

Performs ID verification through BCM when ignition switch is ON position.
Prohibits the release of steering lock or start of engine when an unregistered key is used.

DTC Logic

INFOID:000000001553142

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2191	DIFFERENCE OF KEY	The ID verification results between BCM and ignition key are NG. The registration is necessary.	Ignition key

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Insert ignition key into the key cylinder.
2. Press the ignition knob switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-260, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001553143

1.PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> Ignition key was unregistered.
NO >> BCM is malfunctioning.
 - Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
 - Perform initialization again

B2192 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2192 ID DISCORD, IMMUECM

Description

INFOID:000000001553132

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

DTC Logic

INFOID:000000001553133

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-249, "DTC Logic"](#).
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-250, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2192	ID DISCORD BCM-ECM	The ID verification results between BCM and ECM are NG. The registration is necessary.	<ul style="list-style-type: none">• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-261, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001553134

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> ID was unregistered.
NO >> GO TO 2.

2. PEPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> BCM is malfunctioning.
NO >> GO TO 3.

3. PEPLACE ECM

1. Replace ECM.
2. Perform initialization with CONSULT-III. Re-register all ignition keys.
For initialization and registration of ignition key. Refer to "CONSULT-III Operation Manual NATS".

Can the system be initialized and can the engine be started with re-registered ignition key?

- YES >> ECM is malfunctioning.
NO >> GO TO 4.

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

B2192 ID DISCORD, IMMU-ECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

>> INSPECTION END

B2193 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2193 CHAIN OF ECM-IMMU

Description

INFOID:000000001553135

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

DTC Logic

INFOID:000000001553136

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-249, "DTC Logic"](#).
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-250, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2193	CHAIN OF BCM-ECM	Inactive communication between ECM and BCM	<ul style="list-style-type: none">• Harness or connectors (The CAN communication line is open or short)• BCM• ECM

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-263, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000001553137

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-68, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS".

Does the engine start?

- YES >> BCM was malfunctioning.
NO >> ECM is malfunctioning.
 - Replace ECM.
 - Perform ECM re-communicating function.

B2195 ANTI-SCANNING

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2195 ANTI-SCANNING

Description

INFOID:000000001286642

When the ID of the remote control engine starter installed cannot be registered, anti-scanning operates and it may be possible that the engine can not start. In the case, obtain the customer approval to remove the remote control engine starter.

DTC Logic

INFOID:000000001286643

DTC DETECTION LOGIC

NOTE:

- If DTC B2195 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-249, "DTC Logic"](#).
- If DTC B2195 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-250, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2195	ANTI-SCANNING	The ID of the remote control engine starter installed cannot be registered.	Remote control engine starter

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-264, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286644

1. REMOVAL OF REMOTE CONTROL ENGINE STARTER

Remove remote control engine starter with the customer approval.

>> GO TO 2.

2. CHECK SELF DIAGNOSTIC RESULT

1. Turn ignition switch ON.
2. Perform "Self diagnostic result" with CONSULT-III.
3. Erase DTC.
4. Start the engine.

Does the engine start?

- YES >> INSPECTION END
NO >> BCM is malfunctioning.
 - Replace BCM
 - Perform initialization

B2196 DONGLE NG

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2196 DONGLE NG

Description

INFOID:000000001286645

BCM performs the ID verification with the slave control units (ECM, EPS column assy, IPDM E/R, combination meter).

If either slave control unit is replaced by used part, perform initialization with CONSULT-III. But if the control unit is replaced by new part, the system does not need initialization.

DTC Logic

INFOID:000000001286646

DTC DETECTION LOGIC

NOTE:

- If DTC B2196 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-249, "DTC Logic"](#).
- If DTC B2196 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-250, "DTC Logic"](#).

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2196	DONGLE NG	The ID verification results between BCM and each slave control unit are NG.	<ul style="list-style-type: none">• ECM• EPS column assy• Combination meter• IPDM E/R

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self Diagnostic Result" with CONSULT-III.

Is the DTC detected?

- YES >> Refer to [SEC-265, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000001286647

1.PERFORM INITIALIZATION

1. Perform initialization with CONSULT-III. Re-register all ignition keys. Refer to "".
2. Start the engine.

Does the engine start?

- YES >> INSPECTION END
NO >> Perform "Self Diagnostic Result" for each control unit.

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

SIREN CONTROL UNIT

SIREN CONTROL UNIT : Diagnosis Procedure

INFOID:000000001306679

1. CHECK POWER SUPPLY CIRCUIT

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

Terminals		Voltage (Approx.)
(+)	(-)	
Siren control unit		Battery voltage
Connector	Terminal	
B68	2	

Is the measurement value normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

2. CHECK GROUND CIRCUIT

Check continuity between siren control unit harness connectors and ground.

IPDM E/R		Ground	Continuity
Connector	Terminal		
B68	5	Ground	Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

SIREN CONTROL UNIT : Special Repair Requirement

INFOID:000000001306680

1. REQUIRED WORK WHEN REPLACING SIREN CONTROL UNIT

Initialize control unit. Refer to CONSULT-III operation manual NATS-IVIS/NVIS.

>> Work end.

BCM

BCM : Diagnosis Procedure

INFOID:000000001306681

1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
41	Battery power supply	10 (10A)
57		J (50A)
3	Ignition power supply	1 (10A)

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

POWER SUPPLY AND GROUND CIRCUIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

Terminals		(-)	Ignition switch position		
(+)			OFF	ACC	ON
BCM		Ground	OFF	ACC	ON
Connector	Terminal				
M65	3		Approx. 0 V	Approx. 0 V	Battery voltage
M66	41		Battery voltage	Battery voltage	Battery voltage
M67	57				

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		
M67	55		Existed

Does continuity exist?

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

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

KEY SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEY SWITCH

Description

INFOID:000000001306682

Key switch detects that mechanical key is inserted into the key cylinder, and then transmits the signal to BCM and Intelligent Key unit.

Component Function Check

INFOID:000000001306683

1.CHECK KEY SWITCH INPUT SIGNAL

Check key switch ("KEY ON SW") in "Data Monitor" mode with CONSULT-III.

Monitor item	Condition
KEY ON SW	Insert mechanical key into key cylinder : ON
	Remove mechanical key from key cylinder : OFF

Is the inspection result normal?

YES >> Key switch is OK.

NO >> Refer to [SEC-268, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001306684

1.CHECK KEY SWITCH INPUT SIGNAL

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

Terminals		Condition	Voltage (V) (Approx.)
(+)	(-)		
BCM connector	Terminal		
M65	5	Ground	Battery voltage
		Insert mechanical key into key cylinder	0

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2.CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Remove mechanical key from key cylinder.
2. Disconnect ignition knob switch, key switch and key lock solenoid connector.
3. Check voltage between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Terminals		Condition	Voltage (V) (Approx.)
(+)	(-)		
Ignition knob switch, key switch and key lock solenoid connector	Terminal		
M25	2	Ground	Battery voltage
		Insert mechanical key into key cylinder	0

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK KEY SWITCH SIGNAL CIRCUIT

KEY SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

1. Check continuity between BCM harness connector and ignition knob switch, key switch and key lock solenoid harness connector.

BCM connector	Terminal	Ignition knob switch, key switch and key lock solenoid connector	Terminal	Continuity
M65	5	M25	1	Exists

2. Check continuity between ignition knob switch, key switch and key lock solenoid harness connector and ground.

Ignition knob switch, key switch and key lock solenoid connector	Terminal	Ground	Continuity
M25	1	Ground	Does not exist

Is the inspection result normal?

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

4.CHECK KEY SWITCH

Check key switch.

Refer to [SEC-269. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
NO >> Replace key cylinder assembly.

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-39. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001306685

COMPONENT INSPECTION

1.CHECK KEY SWITCH

Check continuity between key switch terminals.

Terminal		Condition	Continuity
Ignition knob switch, key switch and key lock solenoid connector			
1	2	Insert mechanical key into key cylinder	Exists
		Remove mechanical key from key cylinder	Does not exist

Is the inspection result normal?

- YES >> Key switch is OK.
NO >> Replace key cylinder assembly.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

STOP LAMP SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

STOP LAMP SWITCH

Description

INFOID:000000001306686

Stop lamp switch detects that brake pedal is depressed, and then transmits the signal to BCM.

Component Function Check

INFOID:000000001306687

1. CHECK STOP LAMP SWITCH INPUT SIGNAL

Check stop lamp function by depressing brake pedal.

Is the inspection result normal?

YES >> Stop lamp switch is OK.

NO >> Refer to [SEC-268, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001306688

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.

Terminals		Condition	Voltage (V) (Approx.)
(+)			
BCM connector	Terminal		
M66	51	Ground	Battery voltage
		Brake pedal is depressed	0

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

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

Terminals		Voltage (V) (Approx.)
(+)		
Stop lamp switch connector	Terminal	
E114 (with M/T models) E115 (except M/T models)	1	Ground

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK STOP LAMP SWITCH SIGNAL CIRCUIT

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

BCM connector	Terminal	Stop lamp switch connector	Terminal	Continuity
M66	51	E114 (with M/T models) E115 (except M/T models)	2	Existed

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

STOP LAMP SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Stop lamp switch connector	Terminal	Ground	Continuity
E114 (with M/T models) E115 (except M/T models)	2	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK STOP LAMP SWITCH

Check stop lamp switch.

Refer to [SEC-269, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace stop lamp switch. Refer to [BR-17, "Exploded View"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001306689

1.CHECK STOP LAMP SWITCH

Check continuity between stop lamp switch terminals under the following conditions.

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

Is the inspection result normal?

YES >> Stop lamp is OK.

NO >> Replace stop lamp switch. Refer to [BR-17, "Exploded View"](#).

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

HOOD SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

HOOD SWITCH

Description

INFOID:000000001306690

Hood switch detects that hood is open/close condition, and then transmits the signal to IPDM E/R.

Component Function Check

INFOID:000000001306691

1.CHECK FUNCTION

1. Select "HOOD SW" in "Data Monitor" mode with CONSULT-III.
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 >> INSPECTION END.

NO >> Refer to [SEC-272, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001306692

1.CHECK HOOD SWITCH SIGNAL

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

IPDM E/R		Ground	Condition		Voltage (V) (Approx.)
Connector	Terminal				
E13	34	Ground	Hood	Open	0
				Close	Battery voltage

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.CHECK HOOD SWITCH SIGNAL CIRCUIT

1. Disconnect IPDM E/R and hood switch 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	
E13	34	E113	1	Existed

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E13	34	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

HOOD SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Hood switch		Ground	Continuity
Connector	Terminal		
E113	2	Ground	Existed

Is the inspection result normal?

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

4.CHECK IPDM E/R OUTPUT

1. Connect the IPDM E/R connector.
2. Check voltage between IPDM E/R harness connector and ground.

IPDM E/R		Ground	Voltage (V) (Approx.)
Connector	Terminal		
E13	34	Ground	Battery voltage

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace IPDM E/R. Refer to [PCS-28, "Removal and Installation"](#).

5.CHECK HOOD SWITCH

Refer to [SEC-273, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 6.
- NO >> Replace hood switch. Refer to [SEC-373, "Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000001306693

1.CHECK HOOD SWITCH

Check continuity between hood switch terminals.

Hood switch		Condition		Continuity
Terminal				
1	2	Hood switch	Push	Not existed
			Release	Existed

Is the inspection result normal?

- YES >> Hood switch is OK.
- NO >> Replace hood switch. Refer to [SEC-230, "Removal and Installation"](#).

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

VEHICLE SECURITY INDICATOR

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY INDICATOR

Description

INFOID:000000001306697

- Vehicle security indicator is built in combination meter.
- NATS (Nissan Anti-Theft System) and vehicle security system conditions are indicated by blink or illumination of vehicle security indicator.

Component Function Check

INFOID:000000001306698

1.CHECK FUNCTION

1. Perform "THEFT IND" in the "Active Test" mode with CONSULT-III.
2. Check vehicle security indicator operation.

Test item		Description	
THEFT IND	ON	Vehicle security indicator	ON
	OFF		OFF

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Refer to [SEC-274, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001306699

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.

Terminals			Voltage (V) (Approx.)
(+)		(-)	
Combination meter connector	Terminal		
M34	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

2.CHECK SECURITY INDICATOR LAMP SIGNAL CIRCUIT

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

BCM connector	Terminal	Combination meter connector	Terminal	Continuity
M65	23	M34	28	Existed

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

Combination meter connector	Terminal	Ground	Continuity
M34	28	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK BCM OUTPUT SIGNAL

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

VEHICLE SECURITY INDICATOR

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Terminals		Voltage (V) (Approx.)
(+)	(-)	
BCM connector	Terminal	Battery voltage
M65	23	
	Ground	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination meter. Refer to [MWI-83, "Removal and Installation"](#).

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

ULTRA SONIC SENSOR

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

ULTRA SONIC SENSOR

Description

INFOID:000000001306700

Siren control unit sounds the siren when it received a trigger signal from ultra sonic sensor.

Component Function Check

INFOID:000000001306701

1.CHECK ULTRA SONIC SENSOR FUNCTION

1. Turn ignition switch OFF.
2. Get in the vehicle and close all doors.
3. Lock doors with key fob.
4. Check that security indicator blinks when theft warning system is armed.
5. With hand, intercept the signal between left and right sensors.

Does the siren sound?

- YES >> Ultra sonic sensor is OK.
NO >> Refer to [SEC-276, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001306702

1.CHECK ULTRA SONIC SENSOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Check voltage between ultra sonic sensor harness connector and ground.

Ultra sonic sensor		Ground	Voltage (V) (Approx.)
Connector	Terminal		
R11	1	Ground	Battery voltage

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK ULTRA SONIC SENSOR SIGNAL CIRCUIT

1. Disconnect siren control unit and ultra sonic sensor connector.
2. Check continuity between siren control unit harness connector and ultra sonic sensor harness connector.

Siren control unit connector	Terminal	Ultra sonic sensor connector	Terminal	Continuity
B68	4	R11	2	Existed

3. Check continuity between siren control unit harness connector and ground.

Siren control unit connector	Terminal	Ground	Continuity
B68	4	Ground	Not existed

Is the inspection result normal?

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

3.CHECK ULTRA SONIC SENSOR GROUND CIRCUIT

1. Connect ultra sonic sensor connectors.
2. Check continuity between ultra sonic sensor harness connector and ground.

Ultra sonic sensor connector	Terminal	Ground	Continuity
R11	3	Ground	Existed

Is the inspection result normal?

- YES >> GO TO 4.

ULTRA SONIC SENSOR

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness.

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END.

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

SIREN CONTROL UNIT SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SIREN CONTROL UNIT SIGNAL CIRCUIT

Description

INFOID:000000001532271

Siren control unit sounds the siren when it received a trigger signal from ultra sonic sensor.

Component Function Check

INFOID:000000001532272

1.CHECK SIREN CONTROL UNIT FUNCTION

1. Turn ignition switch OFF.
2. Get in the vehicle and close all doors.
3. Lock doors with key fob.
4. Check that security indicator blinks when theft warning system is armed.
5. With hand, intercept the signal between left and right sensors.

Does the siren sound?

- YES >> Siren control unit function is OK.
NO >> Refer to [SEC-278, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000001532273

1.CHECK SIREN CONTROL UNIT SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM and siren connectors.
3. Check continuity between BCM harness connector and siren control unit harness connector.

BCM connector	Terminal	Siren control unit connector	Terminal	Continuity
M65	33	B68	1	Existed
	25		3	Existed

4. Check continuity between siren control unit harness connector and ground.

Siren control unit connector	Terminal	Ground	Continuity
B68	1	Ground	Not existed
	3		Not existed

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Repair or replace harness.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-39, "Intermittent Incident"](#).

>> INSPECTION END.

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000001569728

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
VEHICLE SPEED	While driving	Equivalent to speedometer reading
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	On
CDL LOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the lock side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the unlock side	On
DOOR SW-DR	Driver's door closed	Off
	Driver's door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
PUSH SW	Return to ignition switch to "LOCK" position	Off
	Press ignition switch	On
KEYLESS LOCK	"LOCK" button of key fob is not pressed	Off
	"LOCK" button of key fob is pressed	On
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	Off
	"UNLOCK" button of key fob is pressed	On
SHOCK SENSOR	Ignition switch ON	NOMAL
	After the reception of air bag deployment signal from air bag diagnosis sensor unit	Off
	During the reception of air bag deployment signal from air bag diagnosis sensor unit	On
UNLOCK SHOCK	Other than the following	Off
	During the unlock operation interlocked with air bag	On

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
UNLOCK WITH DR	NOTE: The item is indicated, but not monitored	On
		Off
LOCK WITH SPEED	Vehicle speed sensing auto door lock function does not operate	Off
	Vehicle speed sensing auto door lock function is operating	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TAIL LAMP SW	Lighting switch OFF	Off
	Lighting switch 1ST	On
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Lighting switch OFF	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Lighting switch OFF	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Lighting switch OFF	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	Rear fog lamp switch OFF	Off
	Rear fog lamp switch ON	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
LIT-SEN FAIL	Light & rain sensor is in normal condition	OK
	Light & rain sensor is with error	NOTOK
AUT LIGHT SYS	Outside of the room is dark	On
	Outside of the room is bright	Off
HD LIGHT TIME	—	Displays a setting time of the follow me home function set by the work support
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On
FR WIPER LOW	Front wiper switch OFF	Off
	Front wiper switch LO	On
FR WIPER INT	Front wiper switch OFF	Off
	Front wiper switch INT	On

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7
FR WIPER STOP	Any position other than front wiper stop position	Off
	Front wiper stop position	On
RR WIPER ON	Rear wiper switch OFF	Off
	Rear wiper switch ON	On
RR WIPER INT	Rear wiper switch OFF	Off
	Rear wiper switch INT	On
RR WIPER STOP	Rear wiper stop position	Off
	Other than rear wiper stop position	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
REVERSE SW CAN	NOTE: The item is indicated, but not monitored	Off
		On
H/L WASH SW	When headlamp washer switch is not pressed	Off
	When headlamp washer switch is pressed	On
FAN ON SIG	Blower fan motor switch OFF	Off
	Blower fan motor switch ON (other than OFF)	On
AIR COND SW	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	Off
	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	On
HAZARD SW	Hazard switch OFF	Off
	Hazard switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
	Brake pedal is depressed	On
TRNK OPNR SW	When back door opener switch is not pressed	Off
	When back door opener switch is pressed	On
HOOD SW	Close the hood NOTE: Vehicles without theft warning system are OFF-fixed	Off
	Open the hood	On
AUTO RELOCK	Auto lock function does not operate	Off
	Auto lock function is operating	On
GLS BREAK SEN	The vehicle without glass break sensor	Off
	The vehicle with glass break sensor	On
OIL PRESS SW	<ul style="list-style-type: none"> • Ignition switch OFF or ACC • Engine running 	Off
	Ignition switch ON	On

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

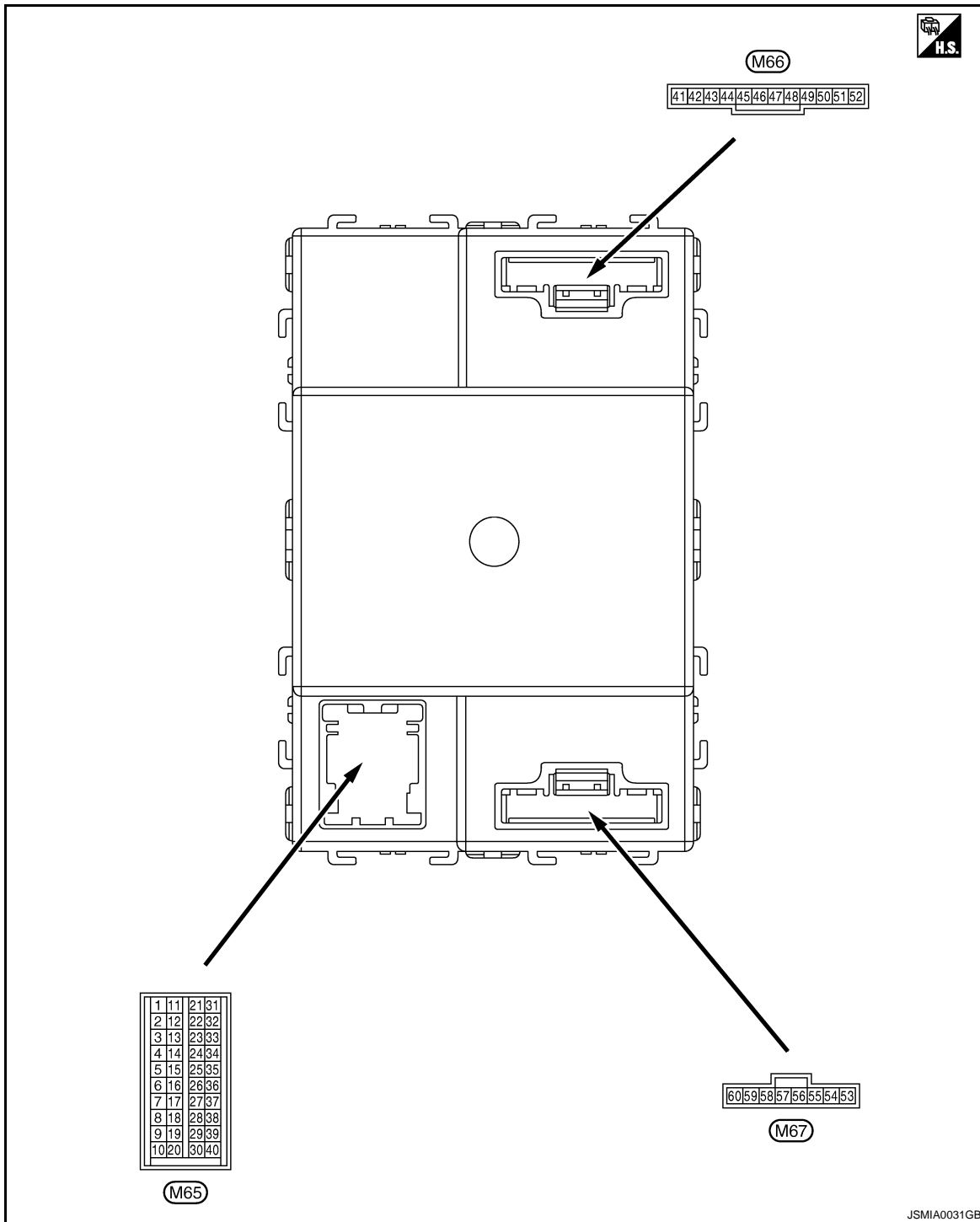
SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

CAUTION:

- Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.
- Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT-III. Refer to [BCS-28, "COMB SW : CONSULT-III Function \(BCM - COMB SW\)"](#).
- BCM reads the status of the combination switch at 10 ms internal normally. Refer to [BCS-9, "System Description"](#).

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
1 (W)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder	Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
2 (G)	Ground	NATS antenna amp.	Input/ Output	Insert mechanical key into ignition key cylinder	Just after Insert mechanical key into ignition key cylinder. Pointer of tester should move
3 (W)	Ground	Ignition power supply	Input	Ignition switch OFF or ACC	0 V
				Ignition switch ON or START	Battery voltage
4 (SB)	Ground	ACC power supply	Input	Ignition switch OFF	0 V
				Ignition switch ON or ACC	Battery voltage
5 (LG) ^{*1} (R) ^{*2}	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage
				Remove mechanical key from ignition key cylinder	0 V

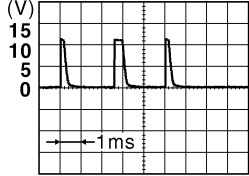
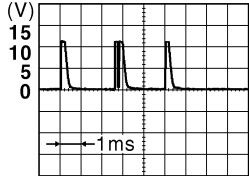
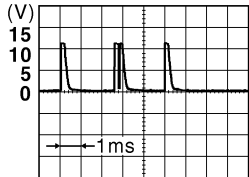
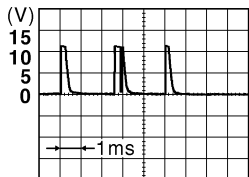
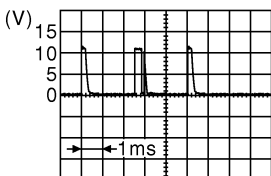
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

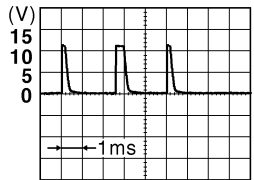
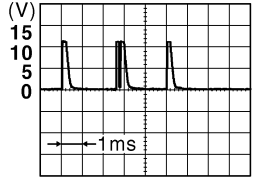
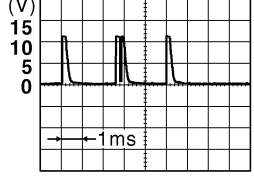
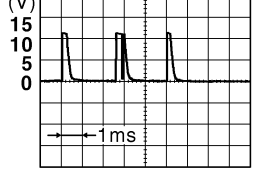
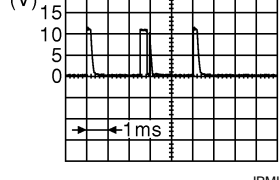
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
6 (L)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0165GB</p> <p style="text-align: center;">1.4 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0166GB</p> <p style="text-align: center;">1.3 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0167GB</p> <p style="text-align: center;">1.3 V</p>
					Rear washer switch ON	 <p style="text-align: right; font-size: small;">JPMIA0169GB</p> <p style="text-align: center;">1.3 V</p>
					Any of the condition below with all switch OFF	<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3  <p style="text-align: right; font-size: small;">JPMIA0196GB</p> <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
7 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.4 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					Any of the condition below with all switch OFF	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>
					Rear wiper INT (Wiper intermittent dial 4)	 <p style="text-align: right; margin-right: 50px;">1.3 V</p>

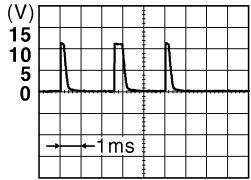
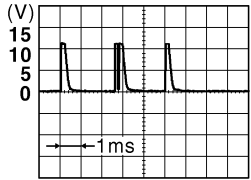
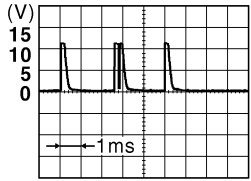
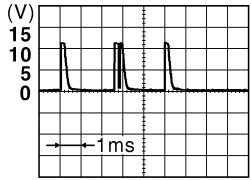
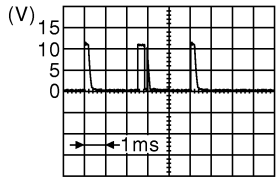
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

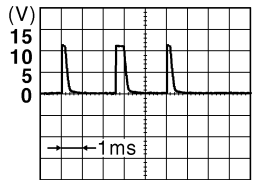
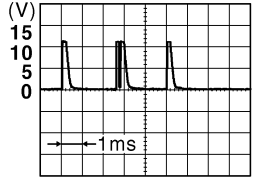
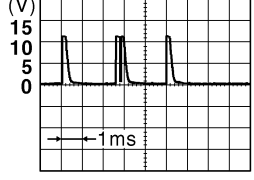
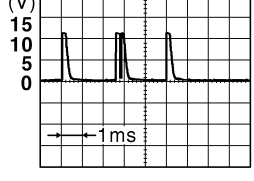
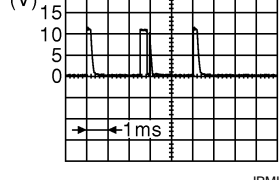
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
8 (V)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	 <p style="text-align: center;">1.4 V</p>
					Turn signal switch RH	 <p style="text-align: center;">1.3 V</p>
					Turn signal switch LH	 <p style="text-align: center;">1.3 V</p>
					Front wiper switch LO	 <p style="text-align: center;">1.3 V</p>
					Front washer switch ON	 <p style="text-align: center;">1.3 V</p>

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
9 (G) ^{*3} (B) ^{*4}	Ground	Combination switch INPUT 2	Input	All switch OFF	 <p style="text-align: right;">JPMA0165GB</p> <p style="text-align: center;">1.4 V</p>
				Lighting switch 2ND	 <p style="text-align: right;">JPMA0166GB</p> <p style="text-align: center;">1.3 V</p>
				Lighting switch PASS	 <p style="text-align: right;">JPMA0167GB</p> <p style="text-align: center;">1.3 V</p>
				Front wiper switch INT	 <p style="text-align: right;">JPMA0168GB</p> <p style="text-align: center;">1.3 V</p>
				Front wiper switch HI	 <p style="text-align: right;">JPMA0196GB</p> <p style="text-align: center;">1.3 V</p>

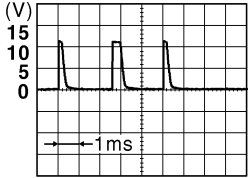
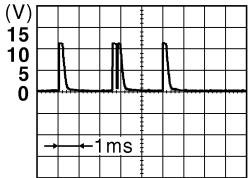
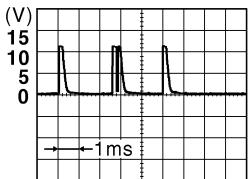
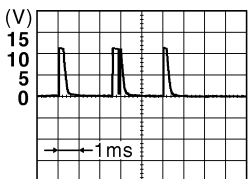
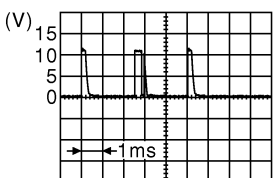
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

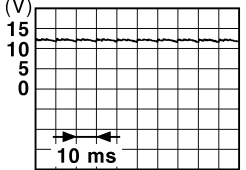
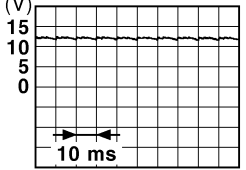
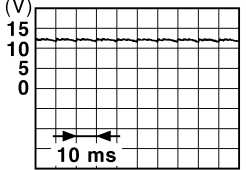
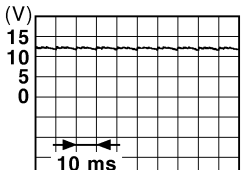
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description			Condition	Value (Approx.)
+	-	Signal name	Input/ Output			
10 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <small>JPMIA0165GB</small> 1.3 V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 <small>JPMIA0167GB</small> 1.3 V
					Rear fog lamp switch ON (Wiper intermittent dial 4)	 <small>JPMIA0168GB</small> 1.3 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 <small>JPMIA0169GB</small> 1.3 V
					Any of the condition below with all switch OFF	 <small>JPMIA0196GB</small> 1.3 V
11 (B)	Ground	Audio link	Input/ Output	—	—	—

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
12 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 PKID0924E 11.2 V
					ON (When rear door RH opened)	0 V
13 (V)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	 PKID0924E 11.2 V
					ON (When back door opened)	0 V
14 (P) ^{*3} (BR) ^{*4}	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 PKID0924E 11.2 V
					ON (When passenger door opened)	0 V
15 (BR) ^{*3} (P) ^{*4}	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 PKID0924E 11.2 V
					ON (When driver door opened)	0 V

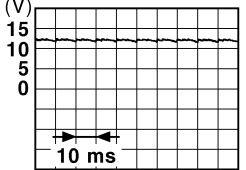
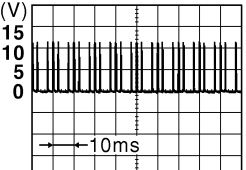
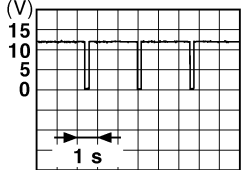
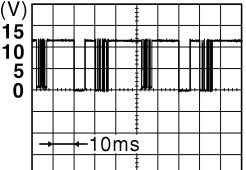
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

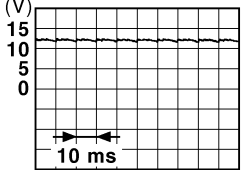
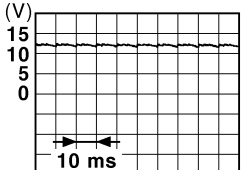
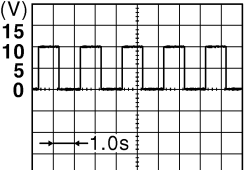
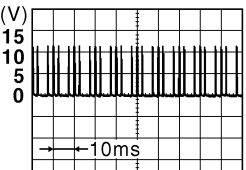
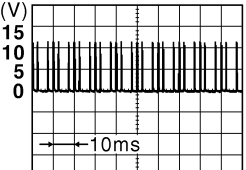
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
16 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)  PKID0924E 11.2 V
				ON (When rear door LH opened)	0 V
17 (L)	Ground	Door lock status indicator	Output	Door lock status indicator	ON 12 V OFF 0 V
20 (SB)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed  JPMIA0154GB 1.1 V
				While pressing	0 V
21 (P)	—	CAN-L	Input/ Output	—	—
22 (L)	—	CAN-H	Input/ Output	—	—
23 (V)	Ground	Security indicator	Output	Security indicator	ON 0 V Blinking  JPMIA0014GB 10.3 V
				OFF	12 V
24 (GR)	Ground	Light & rain sensor serial link	Input/ Output	Ignition switch OFF or ACC	12 V
				Ignition switch ON	 JPMIA0156GB 8.7 V
25 (G)	Ground	Alarm link	Output	—	—

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
26 (GR) ^{*5} (LG) ^{*6}	Ground	Blower fan motor switch	Input	Blower fan motor switch	OFF	 PKID0924E 11.2 V
				Blower fan motor switch	ON (other than OFF)	0 V
27 (P) ^{*5} (Y) ^{*6}	Ground	A/C switch	Input	Ignition switch ON	Compressor ON is not requested from auto amp. (A/C indicator OFF, blower fan motor switch OFF or etc.)	 PKID0924E 11.2 V
				Ignition switch ON	Compressor ON is requested from auto amp. (A/C indicator ON and blower fan motor switch ON).	0 V
28 (LG) ^{*7} (R) ^{*8}	Ground	Shock detect sensor	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON		 JPMIA0155GB 6.0 V
29 (LG) ^{*3} (O) ^{*4}	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	 JPMIA0154GB 1.2 V
				Back door opener switch	Pressed	0 V
32 (BR)	Ground	Door lock/unlock switch (Unlock)	Input	Door lock/unlock switch	Not pressed	 JPMIA0154GB 1.2 V
				Door lock/unlock switch	Pressed to the unlock side	0 V

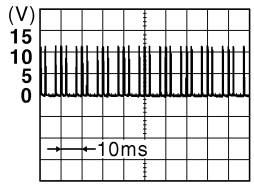
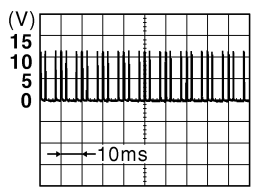
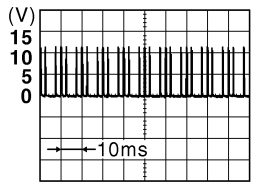
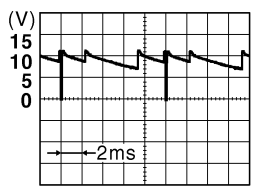
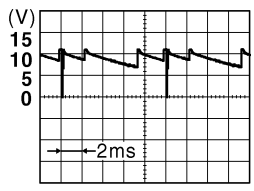
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

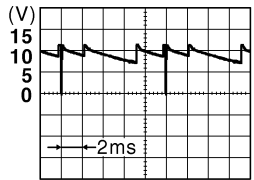
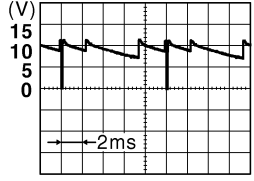
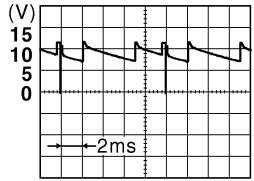
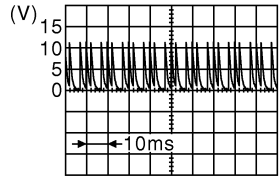
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
33 (W) ^{*9} (Y) ^{*10}	Ground	Hazard switch	Input	Hazard switch	OFF	 1.3 V
					ON	0 V
34 (SB) ^{*3} (P) ^{*4}	Ground	Door lock/unlock switch (Lock)	Input	Door lock/un- lock switch	Not pressed	 1.2 V
					Pressed to the lock side	0 V
35 (G)	Ground	Headlamp washer switch	Input	Headlamp washer switch	Not pressed	 1.2 V
					Pressed to the lock side	0 V
36 (G)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Turn signal switch RH	 9.1 V
					Lighting switch 2ND	
					Lighting switch HI	
					Lighting switch 1ST	
37 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 9.1 V
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF	
					• Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
Rear wiper switch ON (Wiper intermittent dial 4)						

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
38 (W)	Ground	Combination switch OUTPUT 3	Output	All switch OFF	0 V
				Front wiper switch LO	 <p style="text-align: right; font-size: small;">JPMA0162GB</p>
				Front wiper switch MIST	
				Front wiper switch INT	
				Lighting switch AUTO	
				Rear fog lamp switch ON	
39 (Y)	Ground	Combination switch OUTPUT 4	Output	All switch OFF	0 V
				Turn signal switch LH	 <p style="text-align: right; font-size: small;">JPMA0163GB</p>
				Lighting switch PASS	
				Lighting switch 2ND	
				Front fog lamp switch ON	
40 (P)	Ground	Combination switch OUTPUT 1	Output	All switch OFF (Wiper intermittent dial 4)	0 V
				Front wiper switch HI (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMA0160GB</p>
				Any of the condition below with all switch OFF	
				<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	
Rear wiper switch INT (Wiper intermittent dial 4)	9.1 V				
41 (LG)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
42 (V)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver activation	0 V
				Interior room lamp battery saver no activation	12 V
43 (SB)	Ground	Rear wiper motor	Output	Rear wiper switch OFF	0 V
				Rear wiper switch ON	12 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch ON	 <p style="text-align: right; font-size: small;">JPMA0197GB</p>
				Any position other than rear wiper stop position	0 V

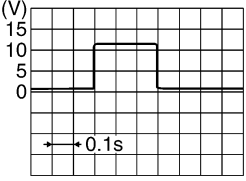
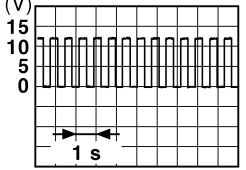
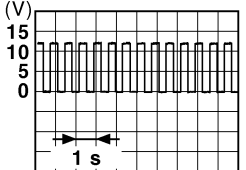
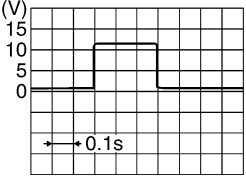
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

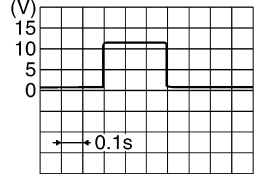
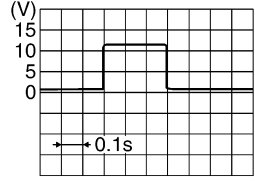
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
45 (V)	Ground	Back door lock actuator	Output	Back door opener switch	Pressed	 <p style="text-align: right; font-size: small;">SKIA9232E</p>
					Not pressed	0 V
47 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p> <p style="text-align: center;">6.5 V</p>
48 (GR)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p> <p style="text-align: center;">6.5 V</p>
49 (Y)	Ground	Rear fog lamp	Output	Rear fog lamp	OFF	0 V
					ON	12 V
50 (G)	Ground	Unlock sensor	Input	Driver's door	Unlock	5 V
					lock	0 V
51 (R)	Ground	Stop lamp switch	Input	Depress the brake pedal		Battery voltage
				Release the brake pedal		0 V
52 (R)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	12 V
					ON	0 V
53 (L)	Ground	Power window power supply (IGN)	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
54 (O)	Ground	Door unlock (All other than driver's door)	Output	Door lock/unlock switch	Pressed to the unlock side	 <p style="text-align: right; font-size: small;">SKIA9232E</p>
					Not pressed	0 V
55 (B)	Ground	Ground	—	Ignition switch ON		0 V

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
56 (V)	Ground	Door lock (All) and fuel lid lock	Output	Door lock/un- lock switch	Not pressed	0 V
				Door lock/un- lock switch	Pressed to the lock side	 <p style="text-align: right; font-size: small;">SKIA9232E</p>
57 (Y)	Ground	Battery power sup- ply	Input	Ignition switch OFF		Battery voltage
58 (P)	Ground	Power window pow- er supply (BAT)	Output	Ignition switch OFF		12 V
59 (R)	Ground	Super lock	Output	When lock button of key fob or Intelligent Key is not pressed		0 V
				When lock button of key fob or Intelligent Key is pressed		12 V
60 (G)	Ground	Driver's door unlock and fuel lid unlock	Output	Door lock/un- lock switch	Pressed to the unlock side	 <p style="text-align: right; font-size: small;">SKIA9232E</p>
				Not pressed		0 V

*1: With Intelligent Key

*2: Without Intelligent Key

*3: RHD models

*4: LHD models

*5: With gasoline engine

*6: With diesel engine

*7: RHD models with side air bag

*8: LHD models with side air bag

*9: With xenon headlamp and daytime light system

*10: Except with xenon headlamp and daytime light system

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

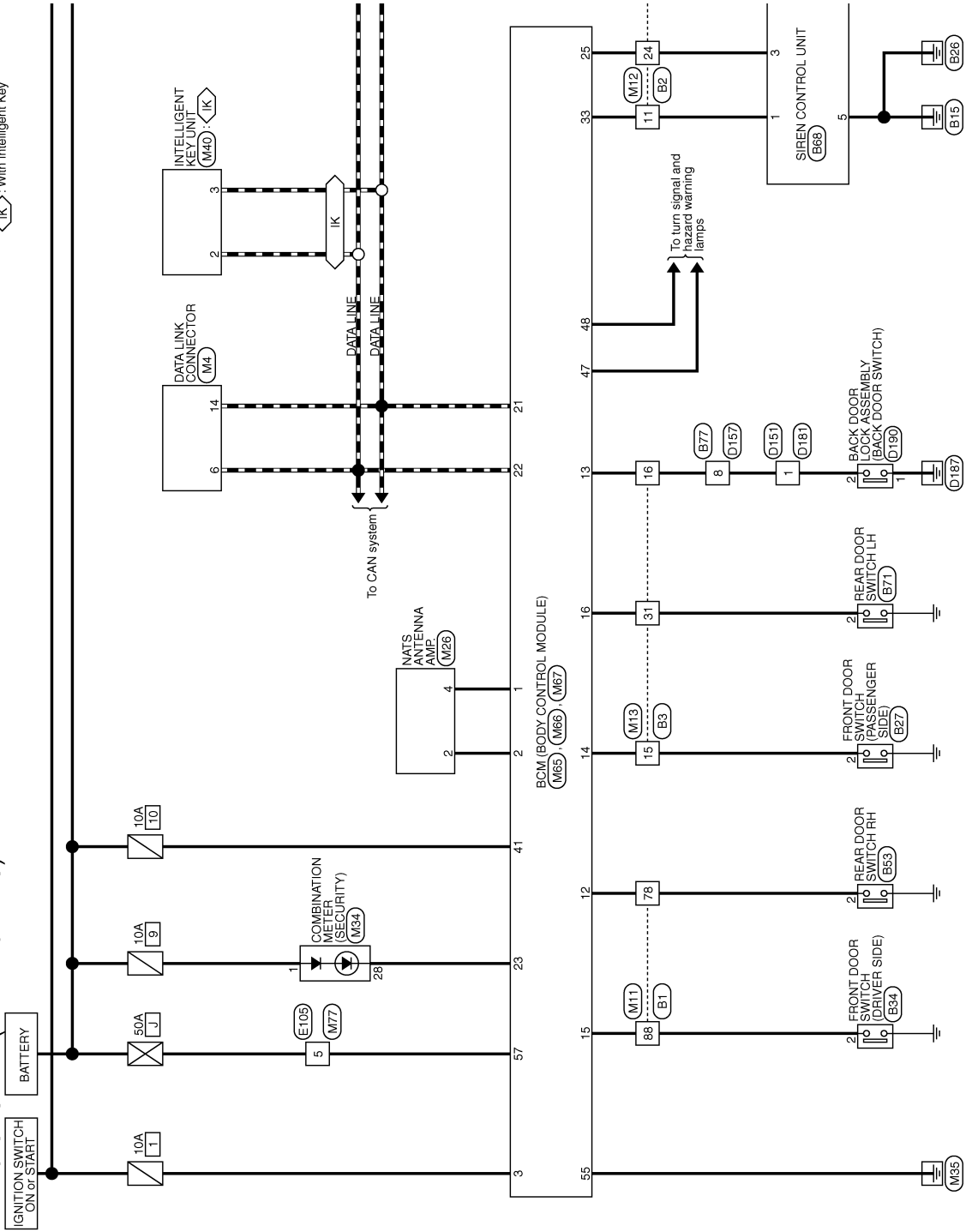
< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM -

INFOID:000000001559350

THEFT WARNING SYSTEM (RHD MODELS)

◊(IK)◊ : With Intelligent Key



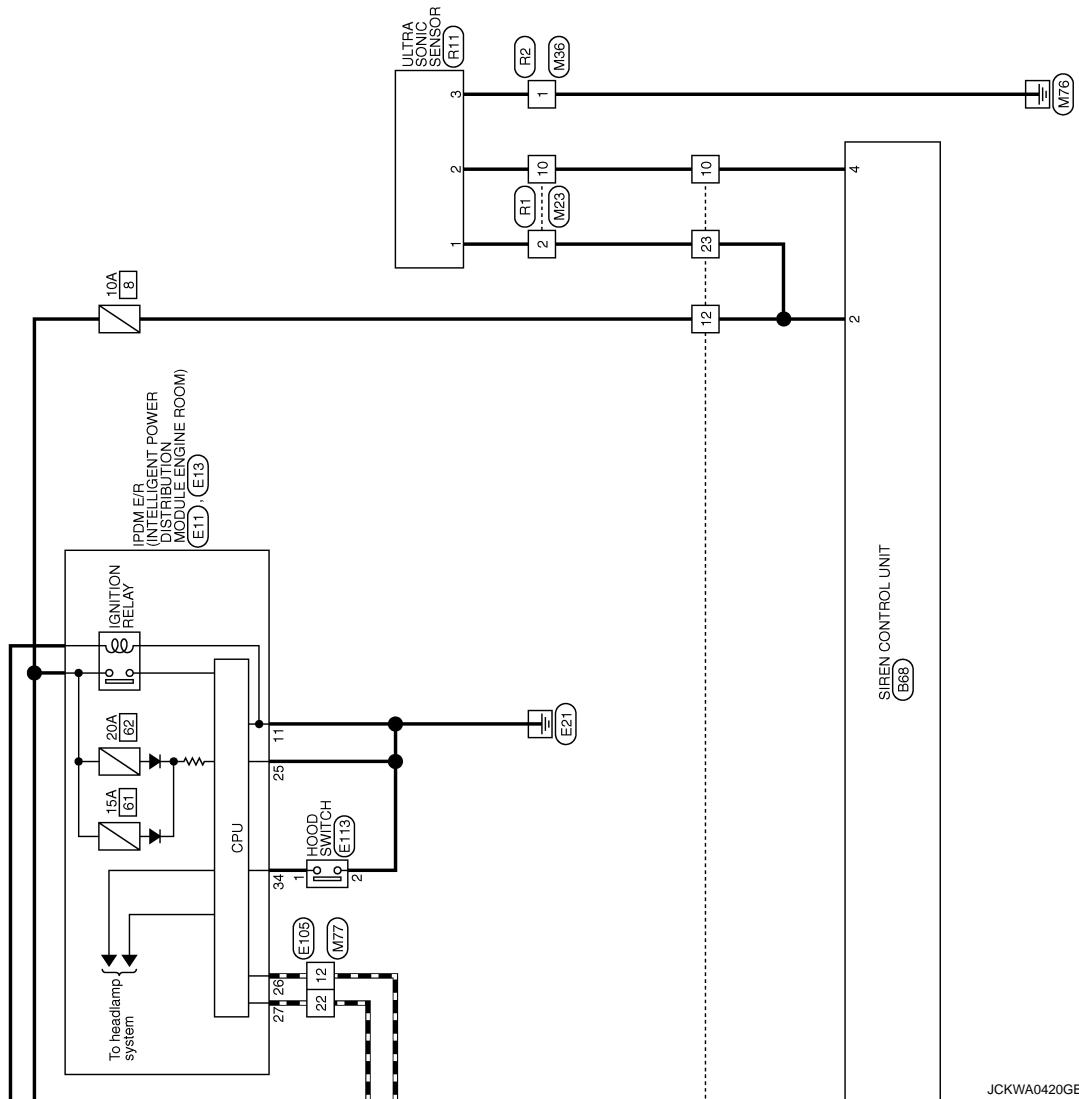
2007/02/28

JCKWA0419GE

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0420GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

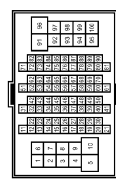
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

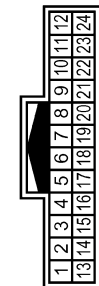
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



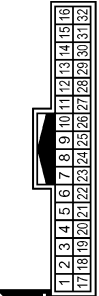
Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



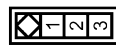
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



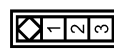
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



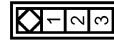
Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [RHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [RHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



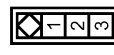
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B68
Connector Name	SIREN CONTROL UNIT
Connector Type	RH08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIAL LINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

JCKWA0421GE


BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >


THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS




Terminal No.	1	2	3	4	5	6	7	8
Color of Wire	V							
Signal Name [Specification]								

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS12DFW-CS




Terminal No.	8
Color of Wire	V
Signal Name [Specification]	

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS308FBR-CS



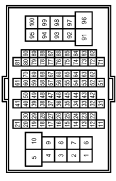
Terminal No.	1
Color of Wire	V
Signal Name [Specification]	

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS




Terminal No.	8
Color of Wire	V
Signal Name [Specification]	

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4




Terminal No.	5	12	22
Color of Wire	Y	P	L
Signal Name [Specification]			

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH




Terminal No.	25	26	27	34
Color of Wire	B	P	L	Y
Signal Name [Specification]				

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM8FB-LC



Terminal No.	11
Color of Wire	B
Signal Name [Specification]	

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS



Terminal No.	1	2
Color of Wire	B	V
Signal Name [Specification]		

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

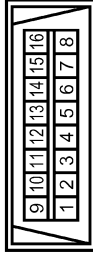
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



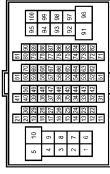
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



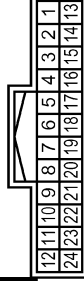
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



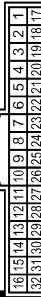
Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



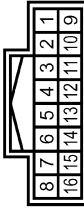
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



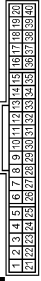
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

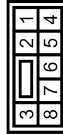
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

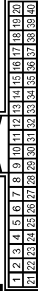
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



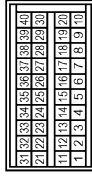
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

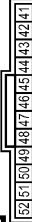
Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	CAN-L
22	L	CAN-H
23	B	SECURITY INDICATOR [RHD models]

Terminal No.	25	G	ALARM LINK
Terminal No.	33	Y	HAZARD SW [Except with xenon headlamp and daytime light system]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



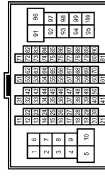
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS (6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0424GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

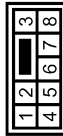
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS328MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FEGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

JCKWA0425GE

BCM (BODY CONTROL MODULE)

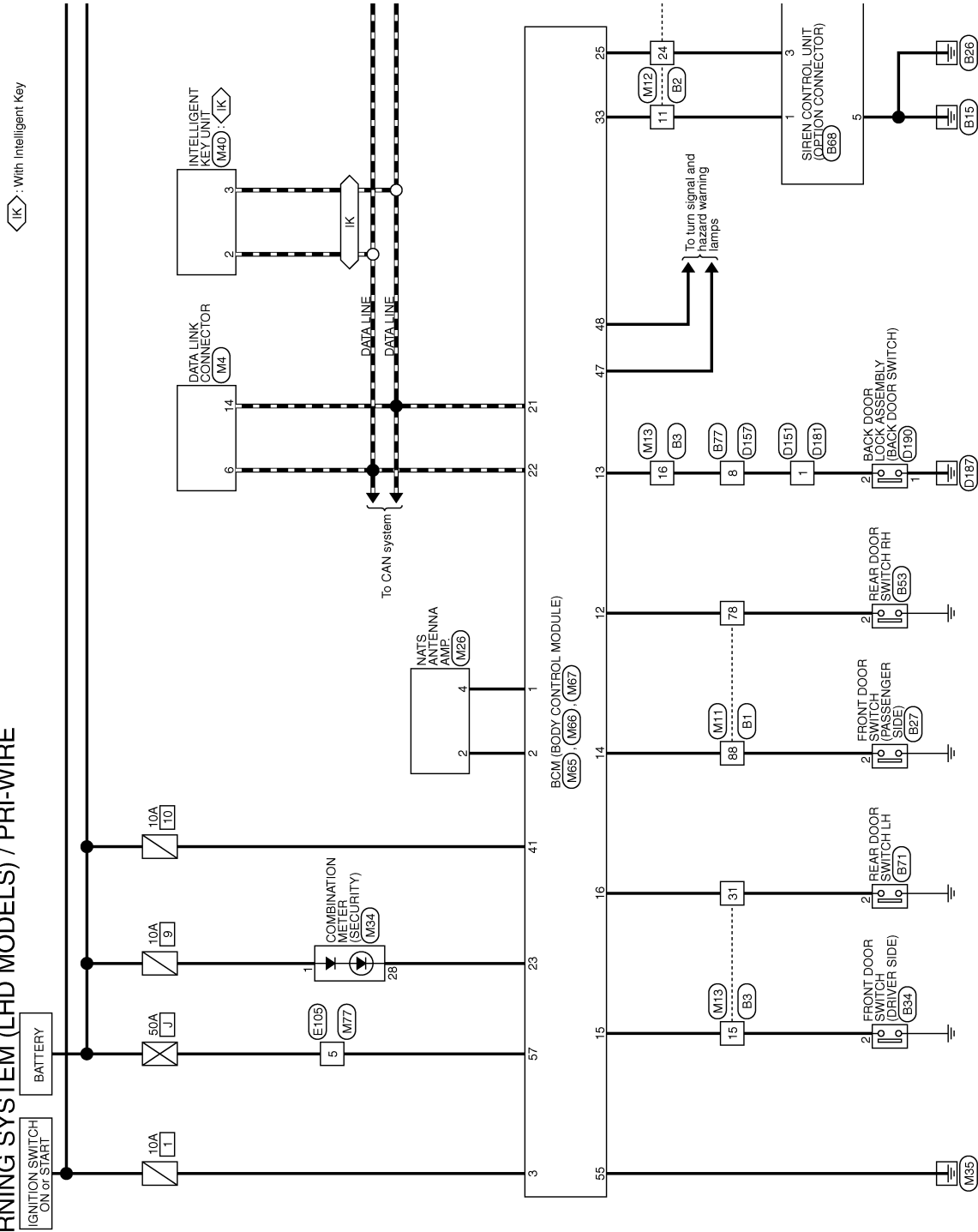
[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559351

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



2007/02/28

JCKWA0412GE

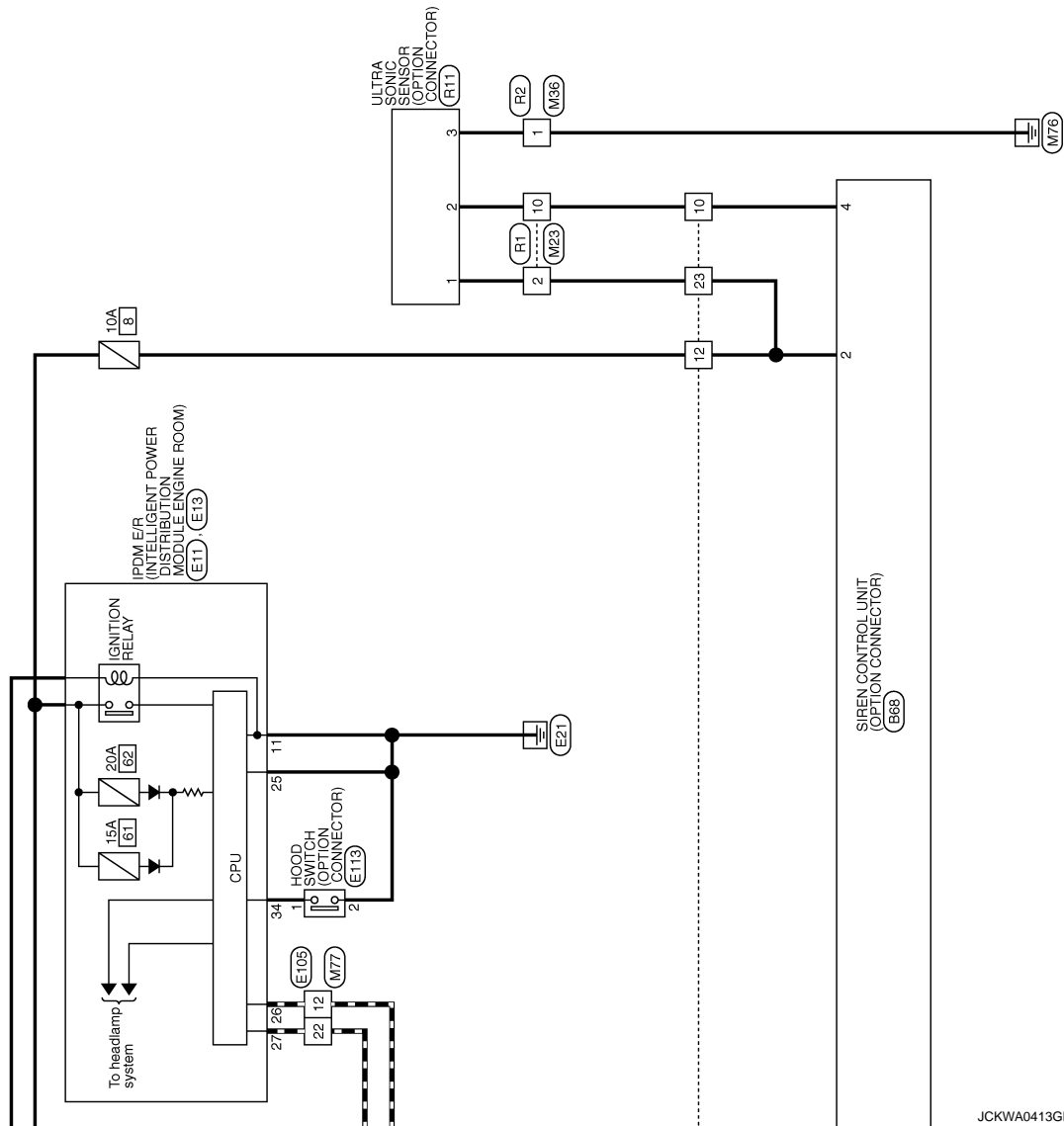
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0413GE

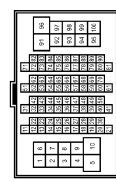
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

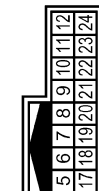
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80W-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



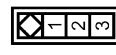
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



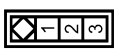
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



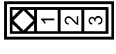
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [LHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [LHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



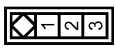
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIALLINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC



BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NSCBMBF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS1DFW-CS


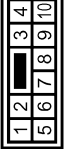
Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS


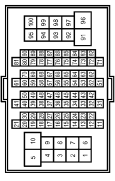
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS


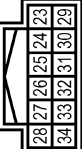
Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
	12	P	-	-	-
	22	L	-	-	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
	26	P	-	-	-
	27	L	-	-	-
	34	Y	-	-	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM8FB-LC

Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	D130
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS

Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
	2	V	-	-	-

JCKWA0415GE

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



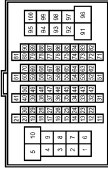
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



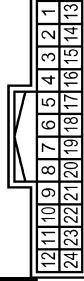
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



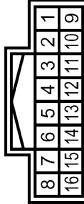
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	- [LHD models]
31	GR	- [LHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



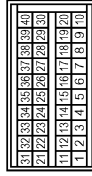
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAB40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Terminal No.	23	G	ALARM LINK
Terminal No.	33	W	HAZARD SW [With xenon headlamps and daytime light system]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



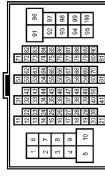
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



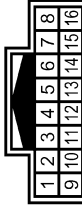
Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS (6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

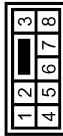
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK104FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0418GE

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

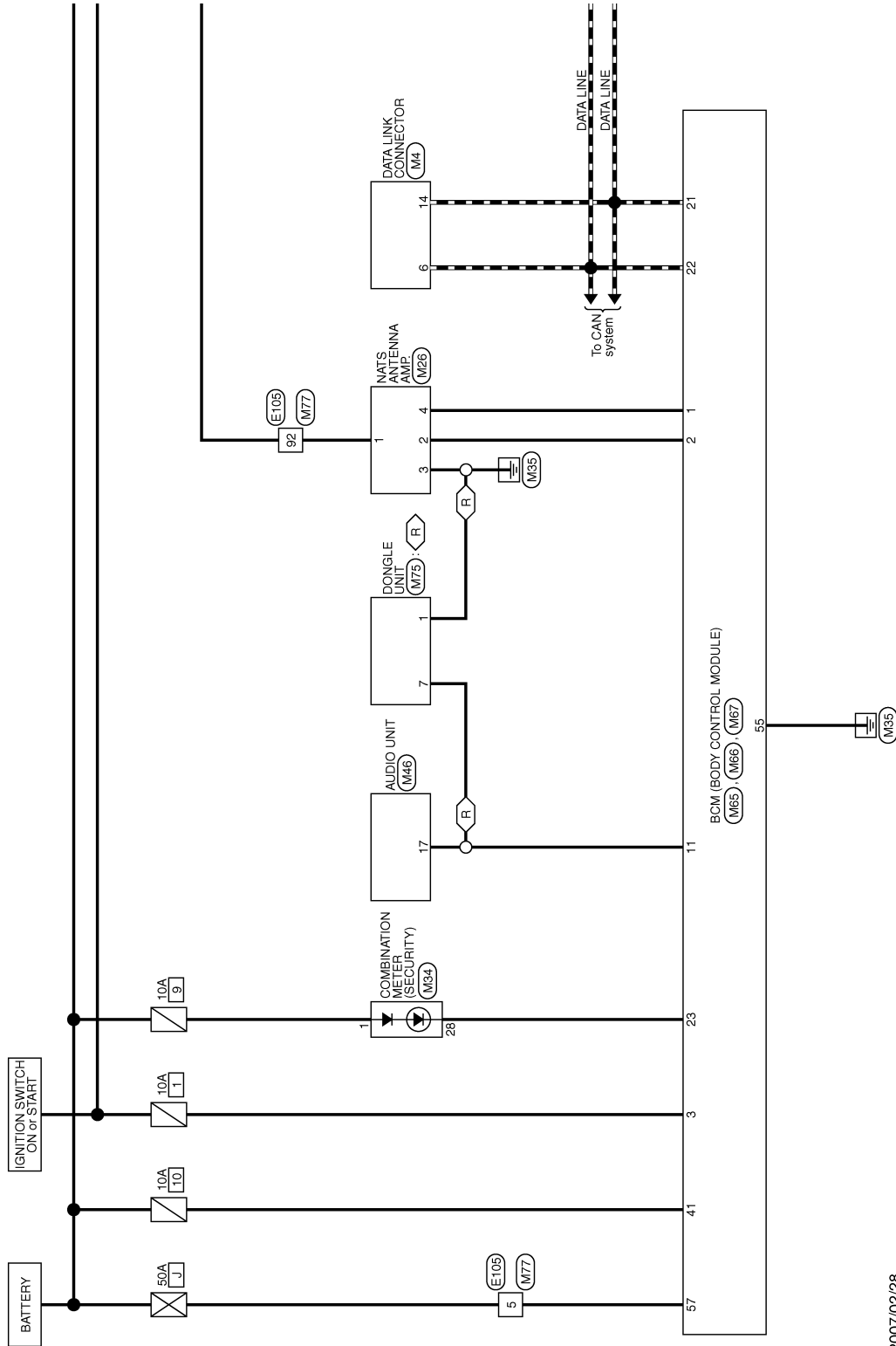
< ECU DIAGNOSIS >

Wiring Diagram - NATS -

INFOID:000000001286678

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

◊ R : RHD models



2007/02/28

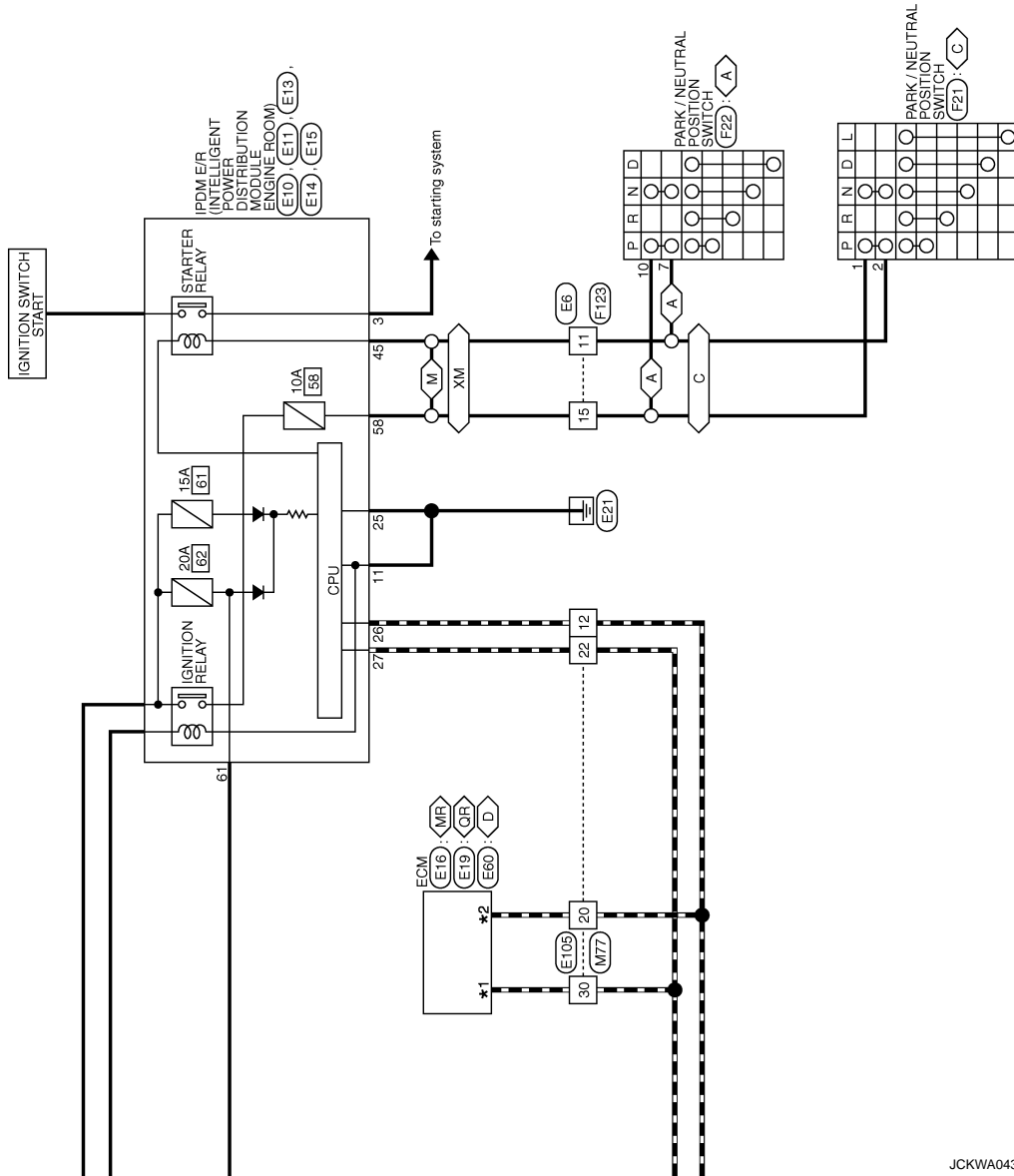
JCKWA0432GE

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

- MR: With MR engine
 - QR: With QR engine
 - D: With diesel engine
 - A: With AT
 - C: With CVT
 - M: With MT
 - XM: Except MT
- *1 84: MR
82: QR
100: D
*2 83: MR
90: QR
99: D



JCKWA0433GE

A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

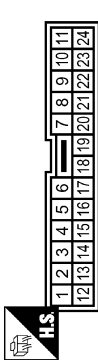
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

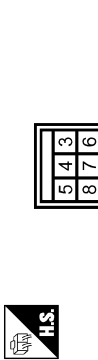
NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	EB
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



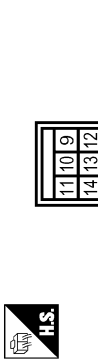
Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Connector No.	E10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M08FW-LC



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M06FB-LC



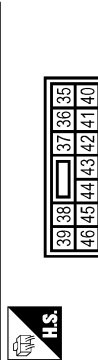
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



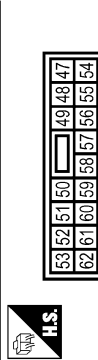
Terminal No.	Color of Wire	Signal Name [Specification]
25	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS12FB-CS



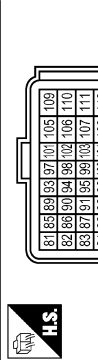
Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	- [Except M/T]
58	Y	- [With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA2FB-MEA3-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32B-AH3



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

JCKWA0434GE

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



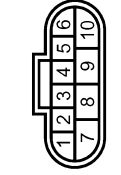
Terminal No.	Color of Wire	Signal Name [Specification]
98	P	MAIN CAN-L(BODY)
100	L	MAIN CAN-H(BODY)

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK08FG



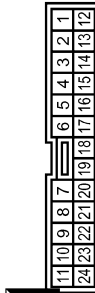
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



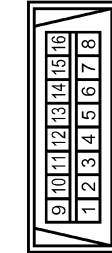
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK2FW-1V



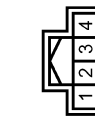
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

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



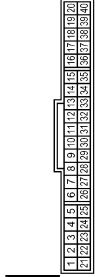
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FY-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

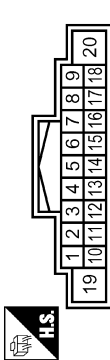
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

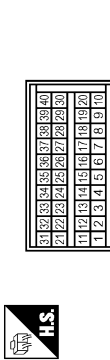
NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-CS2



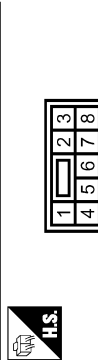
Terminal No.	Color of Wire	Signal Name [Specification]
17	B	IMMOBI

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AA8A0FB



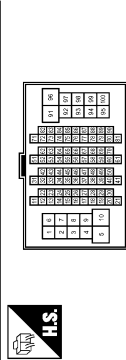
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
11	B	AUDIO DONGLE LINK(SIGNAL)
21	P	CAN-H
22	L	CAN-H
23	V	SECURITY INDICATOR[LHD models]
23	B	SECURITY INDICATOR[RHD models]

Connector No.	M75
Connector Name	DONGLE UNIT
Connector Type	NS08FB-CS



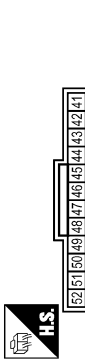
Terminal No.	Color of Wire	Signal Name [Specification]
7	B	GND
	SB	INTERFACE

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS1B-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FB



Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
35	B	GND
57	Y	BAT(F/L)

Fail Safe

FAIL-SAFE CONTROL BY DTC

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

JCKWA0436GE

INFOID:000000001569730

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

DTC	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2191: DIFFERENCE OF KEY	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2192: ID DISCORD BCM-ECM	Fuel cut (ECM)	Erase DTC
B2193: CHAIN OF BCM-ECM	Fuel cut (ECM)	Erase DTC
B2194: DISCORD BCM-I-KEY	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2195: ANTI SCANNING	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC
B2196: DONGLE NG	<ul style="list-style-type: none"> Inhibits engine cranking Inhibits steering lock unlocking (Intelligent Key unit) Fuel cut (ECM) 	Erase DTC

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.

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

Condition of cancellation

- Turn ignition switch OFF.
- Pass more than 1 minute after the rear wiper stop.
- Turn ignition switch ON.
- Operate the rear wiper switch.

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status from the terminal voltage.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

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

FAIL-SAFE CONTROL BY LIGHT & RAIN SENSOR MALFUNCTION

BCM detects the light & rain sensor serial link error and the light & rain sensor malfunction.

BCM controls the following fail-safe when light & rain sensor has a malfunction.

Fail-safe Control

- Auto light control: Headlamp is turned ON.
- Front wiper control: The condition just before the activation of fail-safe is maintained until the front wiper switch is turned OFF.

DTC Inspection Priority Chart

INFOID:000000001569731

Priority	DTC
1	<ul style="list-style-type: none"> U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)
2	<ul style="list-style-type: none"> B2190: NATS ANTENNA AMP B2191: DIFFERNCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2194: DISCORD BCM-I-KEY B2195: ANTI SCANNING B2196: DONGLE NG

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

DTC Index

INFOID:000000001569732

NOTE:

- Details of time display
- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- PAST: Displays when there is a malfunction that is detected in the past and stored.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

DTC	TIME		Fail-safe	Reference
	0	1 - 39		
U1000: CAN COMM CIRCUIT	0	1 - 39	—	BCS-33
U1010: CONTROL UNIT (CAN)	0	1 - 39	—	BCS-34
B2190: NATS ANTENNA AMP	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-41 • Without Intelligent Key system: SEC-254
B2191: DIFFERENCE OF KEY	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-43 • Without Intelligent Key system: SEC-256
B2192: ID DISCORD BCM-ECM	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-38 • Without Intelligent Key system: SEC-251
B2193: CHAIN OF BCM-ECM	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-40 • Without Intelligent Key system: SEC-253
B2194: DISCORD BCM-I-KEY	CRNT	PAST	×	SEC-53
B2195: ANTI SCANNING	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-54 • Without Intelligent Key system: SEC-264
B2196: DONGLE NG	CRNT	PAST	×	<ul style="list-style-type: none"> • With Intelligent Key system: SEC-55 • Without Intelligent Key system: SEC-265

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Reference Value

INFOID:000000001569733

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
MOTOR FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	1 - 4
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 or AUTO (Light is illuminated)		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND or AUTO (Light is illuminated)		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI (Light is illuminated)		On
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch OFF	Off
		Front fog lamp switch ON	On
HL WASHER REQ NOTE: This item is monitored only on the vehicle with headlamp washer.	Ignition switch ON, and low beam headlamp is ON	Front washer switch OFF	Off
		Front washer switch ON (When headlamp washer is operating)	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
ST RLY REQ NOTE: Vehicle without Intelligent Key system indicates only "ON", and it does not change.	When Intelligent Key is outside the vehicle, and the push switch is pushed		Off
	When Intelligent Key is inside the vehicle, and the push switch is pushed		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
RR DEF REQ	Ignition switch ON	Rear window defogger switch OFF	Off
		Rear window defogger switch ON (Rear window defogger is operating)	On
OIL P SW	Ignition switch OFF, ACC or engine running		Open
	Ignition switch ON		Close

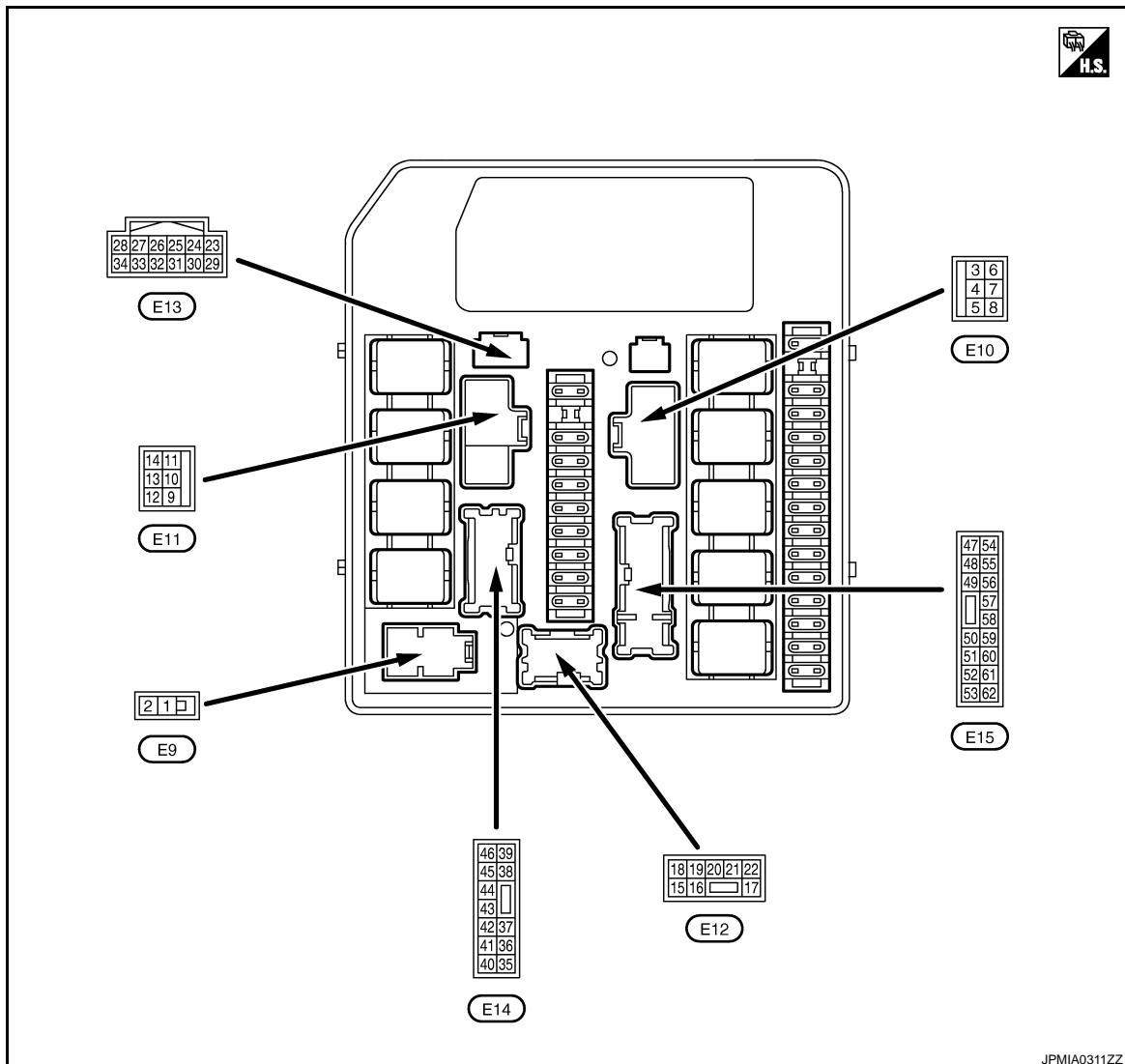
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
REV SW	NOTE: This item is indicated, but not monitored.	Off
DTRL REQ	Daytime running light system is not operated with lighting switch OFF.	Off
NOTE: This item is monitored only on the vehicle with the daytime running light system.	Any of the condition below	On
	<ul style="list-style-type: none"> Daytime running light system is operated. Lighting switch 1ST, 2ND or AUTO (Light is illuminated) 	
HOOD SW	Close the hood	Off
NOTE: This item is monitored only on the vehicle with the vehicle security system.	Open the hood	On
	Not operation	Off
THFT HRN REQ	Not operation	Off
NOTE: This item is monitored only on the vehicle with the vehicle security system.	Horn is activated with vehicle security system.	On
	NOTE: This item is indicated, but not monitored.	Off

TERMINAL LAYOUT



PHYSICAL VALUES

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (G)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
3 (O)*1 (BR)*2	Ground	Starter relay power supply	Output	When engine is clanking		Battery voltage
				When engine is not clanking		0 V
4 (W)	Ground	Cooling fan relay-1 power supply	Output	Cooling fan operation	OFF	0 V
					MID or HI	Battery voltage
5 (R)	Ground	Ignition switch START	Input	Ignition switch OFF, ACC or ON		0 V
				Ignition switch START		Battery voltage
6 (BR)	Ground	Battery power supply (Cooling fan relay)	Input	Ignition switch OFF		Battery voltage
7 (P)	Ground	Cooling fan motor-2 (HI) ground	—	Cooling fan operation	OFF	Battery voltage
					HI	0 V
8 (G)	Ground	Cooling fan relay-2 power supply	Output	Cooling fan operation	OFF	0 V
					HI	Battery voltage
11 (B)	Ground	Ground	—	Ignition switch ON		0 V
12 (O)*3 (G)*4	Ground	Rear window defogger relay power supply	Output	Ignition switch ON	Rear window defogger switch OFF	0 V
					Rear window defogger switch ON	Battery voltage
15*5 (SB)	Ground	Daytime running light relay control	Output	<ul style="list-style-type: none"> • Parking lamp • License plate lamp • Tail lamp 	Turn off	Battery voltage
					Turn on	0 V
16*6 (Y)	Ground	Front fog lamp (LH)	Output	Lighting switch 1ST	Front fog lamp switch OFF	0 V
					Front fog lamp switch ON	Battery voltage
17*6 (W)	Ground	Front fog lamp (RH)	Output	Lighting switch 1ST	Front fog lamp switch OFF	0 V
					Front fog lamp switch ON	Battery voltage
18 (L)	Ground	Headlamp LO (LH)	Output	Lighting switch OFF		0 V
				Lighting switch 2ND		Battery voltage
19*7 (R)	Ground	Headlamp aiming motor power supply	Output	Lighting switch OFF		0 V
				Lighting switch 2ND		Battery voltage
20 (SB)	Ground	Headlamp LO (RH)	Output	Lighting switch OFF		0 V
				Lighting switch 2ND		Battery voltage
21 (G)	Ground	Headlamp HI (LH)	Output	Lighting switch OFF		0 V
				<ul style="list-style-type: none"> • Lighting switch 2ND and HI • lighting switch PASS 		Battery voltage
22 (LG)	Ground	Headlamp HI (RH)	Output	Lighting switch OFF		0 V
				<ul style="list-style-type: none"> • Lighting switch 2ND and HI • lighting switch PASS 		Battery voltage
23 (W)	Ground	Oil pressure switch	Input	Ignition switch ON	Engine stopped	0 V
					Engine running	Battery voltage

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
24 (Y)	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
25 (B)	Ground	Ground	—	Ignition switch ON		0 V
26 (P)	—	CAN-L	Input/ Output	—		—
27 (L)	—	CAN-H	Input/ Output	—		—
31 (V)	Ground	Cooling fan relay-4 control	Output	Cooling fan operation	OFF	Battery voltage
					LO	0 V
32*1 (LG)	Ground	ETC relay control	Input	After passing approximately 2 seconds or more after turning the ignition switch from ON to OFF		Battery voltage
				<ul style="list-style-type: none"> • Ignition switch ON • For approximately 2 seconds after turning ignition switch from ON to OFF 		0 V
33*1 (GR)	Ground	Fuel pump relay control	Input	Ignition switch OFF		0 V
				Ignition switch ON	Engine stopped	Battery voltage
					Engine running	0.8 V
34*8 (Y)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
35*9 (W)	Ground	Headlamp washer relay control	Output	Ignition switch ON	When headlamp washer is not operating	Battery voltage
					When headlamp washer is operating	0 V
37 (R)	Ground	Tail, license plate lamps and illuminations	Output	Lighting switch OFF		0 V
				Lighting switch 1ST		Battery voltage
38*10 (O)*1 (GR)*2	Ground	Parking lamp (LH)	Output	Lighting switch OFF		0 V
				Lighting switch 1ST		Battery voltage
39*10 (GR)	Ground	Parking lamp (RH)	Output	Lighting switch OFF		0 V
				Lighting switch 1ST		Battery voltage
40 (V)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage
41 (O)*1 (L)*2	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC		0 V
				Ignition switch ON		Battery voltage
42 (L)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
43 (G)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
45 (Y)	Ground	Starter relay power supply	Input	Ignition switch ON (Except M/T models)	Selector lever "P" or "N"	Battery voltage
					Selector lever in any position other than "P" or "N"	0 V
				Ignition switch ON (M/T models)		Battery voltage

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
46*1 (W)	Ground	Fuel pump relay power supply	Output	<ul style="list-style-type: none"> • Ignition switch OFF or ACC • After passing approximately 1 second or more after turning the ignition switch ON 	0 V	
				<ul style="list-style-type: none"> • For approximately 1 second after turning the ignition switch ON • Engine running 	Battery voltage	
47 (BR)*1 (G)*2	Ground	ECM relay power supply	Output	After passing approximately 20 seconds or more after turning the ignition switch from ON to OFF	0 V	
				<ul style="list-style-type: none"> • Ignition switch ON • For approximately 20 seconds after turning ignition switch from ON to OFF 	Battery voltage	
48 (R)*1 (V)*2	Ground	ECM relay power supply	Output	After passing approximately 20 seconds or more after turning the ignition switch from ON to OFF	0 V	
				<ul style="list-style-type: none"> • Ignition switch ON • For approximately 20 seconds after turning ignition switch from ON to OFF 	Battery voltage	
50 (G)	Ground	Cooling fan relay-5 control	Output	Cooling fan operation	OFF	
				MID or HI	0 V	
51 (W)	Ground	ECM relay control	Output	After passing approximately 20 seconds or more after turning the ignition switch from ON to OFF	Battery voltage	
				<ul style="list-style-type: none"> • Ignition switch ON • For approximately 20 seconds after turning ignition switch from ON to OFF 	0 V	
52*1 (P)	Ground	ETC relay power supply	Output	After passing approximately 2 seconds or more after turning the ignition switch from ON to OFF	0 V	
				<ul style="list-style-type: none"> • Ignition switch ON • For approximately 2 seconds after turning ignition switch from ON to OFF 	Battery voltage	
55 (O)	Ground	A/C relay power supply	Output	Engine stopped	0 V	
				Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
56 (L)	Ground	Ignition switch ON	Input	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
57*8 (V)	Ground	Horn relay control	Output	The horn is not activated	Battery voltage	
				The horn is activated	0 V	
58 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
59 (GR)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
60 (SB)	Ground	Ignition relay power supply	Output	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
61 (O)	Ground	ECM power supply	Output	Ignition switch OFF	Battery voltage	

*1: MR engine and QR engine models

*2: M9R engine models

*3: MR engine models

*4: QR engine and M9R engine models

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

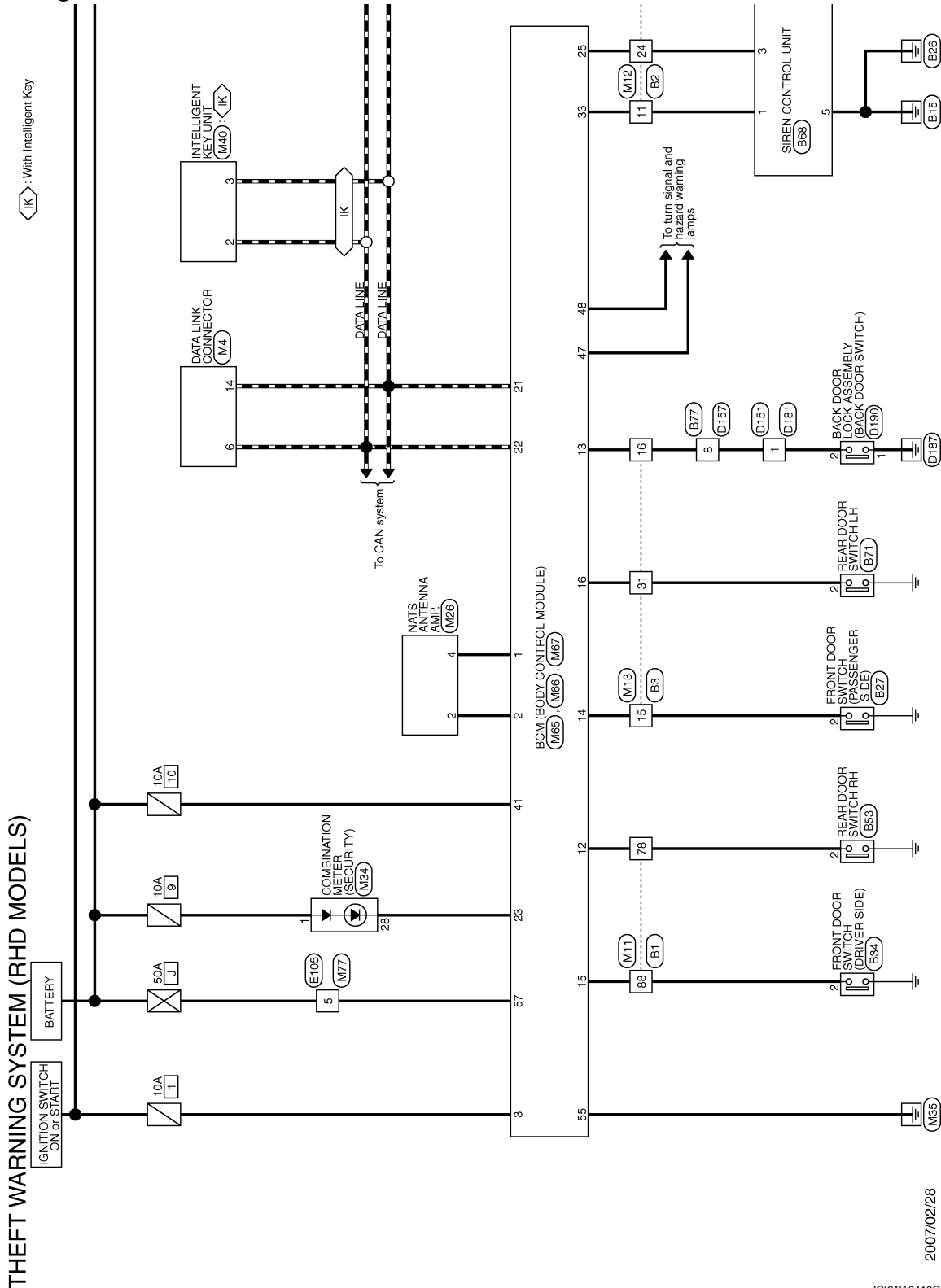
< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

- *5: With daytime running light system
- *6: With front fog lamp system
- *7: Halogen type headlamp
- *8: With vehicle security system
- *9: With headlamp washer system
- *10: Without daytime running light system

Wiring Diagram - THEFT WARNING SYSTEM -

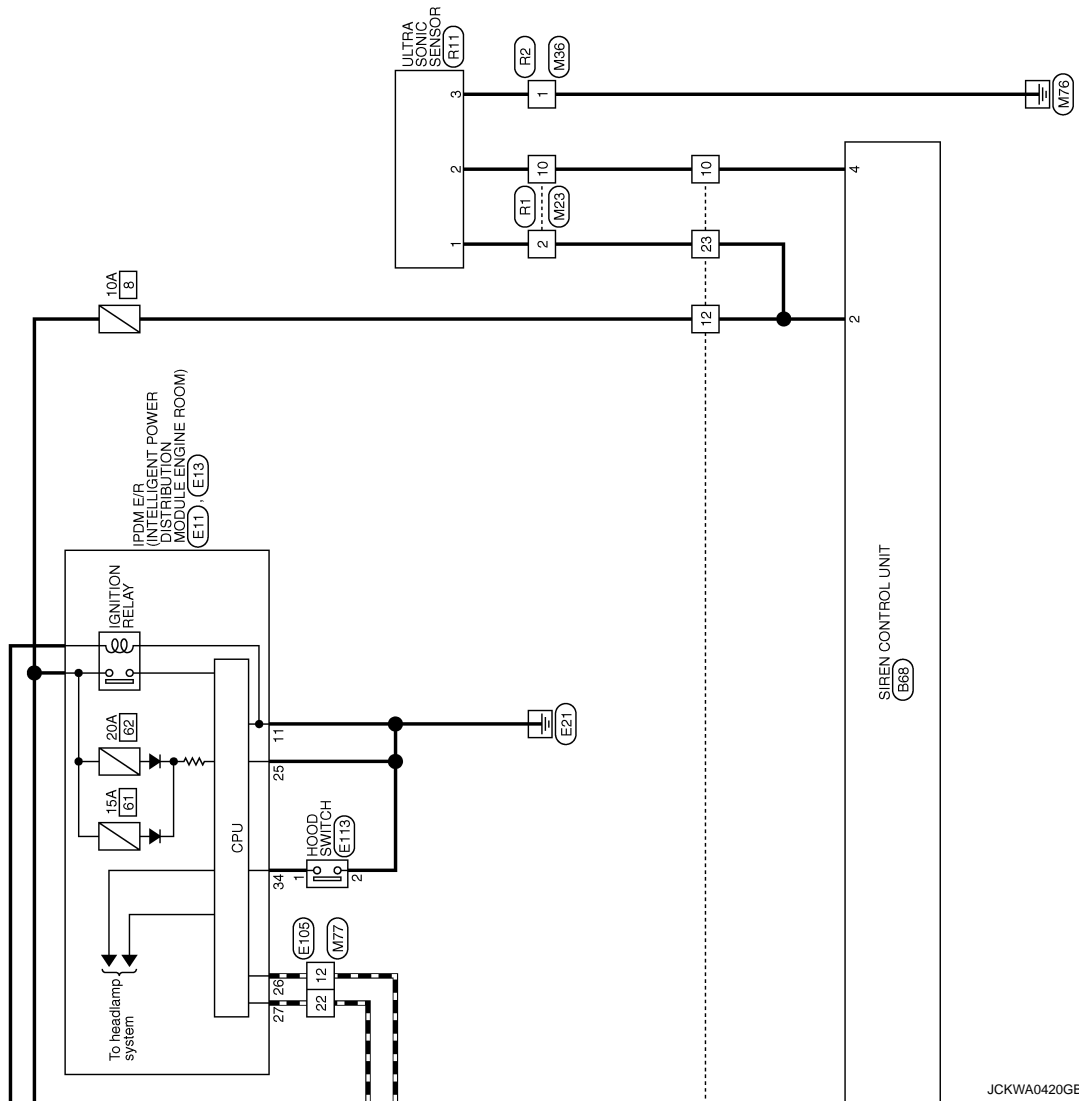
INFOID:000000001559380



2007/02/28

JCKWA0419GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITHOUT INTELLIGENT KEY SYSTEM]
 < ECU DIAGNOSIS >



JCKWA0420GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

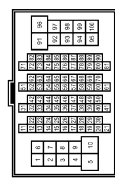
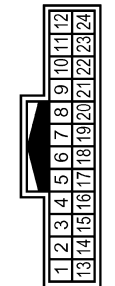

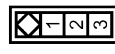
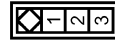


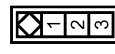
SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

<table border="1"> <tr><td>Connector No.</td><td>B1</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80MW-CS16-TM4</td></tr> </table> 	Connector No.	B1	Connector Name	WIRE TO WIRE	Connector Type	TH80MW-CS16-TM4	<table border="1"> <tr><td>Terminal No.</td><td>78</td><td>88</td></tr> <tr><td>Color of Wire</td><td>Y</td><td>BR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	78	88	Color of Wire	Y	BR	Signal Name [Specification]	-	-												
Connector No.	B1																											
Connector Name	WIRE TO WIRE																											
Connector Type	TH80MW-CS16-TM4																											
Terminal No.	78	88																										
Color of Wire	Y	BR																										
Signal Name [Specification]	-	-																										
<table border="1"> <tr><td>Connector No.</td><td>B2</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH24MW-NH</td></tr> </table> 	Connector No.	B2	Connector Name	WIRE TO WIRE	Connector Type	TH24MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>10</td><td>11</td><td>12</td><td>23</td><td>24</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td><td>Y</td><td>Y</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	10	11	12	23	24	Color of Wire	L	W	Y	Y	G	Signal Name [Specification]	-	-	-	-	-			
Connector No.	B2																											
Connector Name	WIRE TO WIRE																											
Connector Type	TH24MW-NH																											
Terminal No.	10	11	12	23	24																							
Color of Wire	L	W	Y	Y	G																							
Signal Name [Specification]	-	-	-	-	-																							
<table border="1"> <tr><td>Connector No.</td><td>B3</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH32MW-NH</td></tr> </table> 	Connector No.	B3	Connector Name	WIRE TO WIRE	Connector Type	TH32MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>15</td><td>16</td><td>31</td></tr> <tr><td>Color of Wire</td><td>P</td><td>V</td><td>GR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	15	16	31	Color of Wire	P	V	GR	Signal Name [Specification]	-	-	-									
Connector No.	B3																											
Connector Name	WIRE TO WIRE																											
Connector Type	TH32MW-NH																											
Terminal No.	15	16	31																									
Color of Wire	P	V	GR																									
Signal Name [Specification]	-	-	-																									
<table border="1"> <tr><td>Connector No.</td><td>B27</td></tr> <tr><td>Connector Name</td><td>FRONT DOOR SWITCH (PASSENGER SIDE)</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B27	Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>- [RHD models]</td></tr> </table>	Terminal No.	2	Color of Wire	P	Signal Name [Specification]	- [RHD models]															
Connector No.	B27																											
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	P																											
Signal Name [Specification]	- [RHD models]																											
<table border="1"> <tr><td>Connector No.</td><td>B53</td></tr> <tr><td>Connector Name</td><td>REAR DOOR SWITCH RH</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B53	Connector Name	REAR DOOR SWITCH RH	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>Y</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	2	Color of Wire	Y	Signal Name [Specification]	-															
Connector No.	B53																											
Connector Name	REAR DOOR SWITCH RH																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	Y																											
Signal Name [Specification]	-																											
<table border="1"> <tr><td>Connector No.</td><td>B34</td></tr> <tr><td>Connector Name</td><td>FRONT DOOR SWITCH (DRIVER SIDE)</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B34	Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>BR</td></tr> <tr><td>Signal Name [Specification]</td><td>- [RHD models]</td></tr> </table>	Terminal No.	2	Color of Wire	BR	Signal Name [Specification]	- [RHD models]															
Connector No.	B34																											
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	BR																											
Signal Name [Specification]	- [RHD models]																											
<table border="1"> <tr><td>Connector No.</td><td>B89</td></tr> <tr><td>Connector Name</td><td>SIREN CONTROL UNIT</td></tr> <tr><td>Connector Type</td><td>RH08FB</td></tr> </table> 	Connector No.	B89	Connector Name	SIREN CONTROL UNIT	Connector Type	RH08FB	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>Color of Wire</td><td>W</td><td>Y</td><td>G</td><td>L</td><td>L</td><td>B</td></tr> <tr><td>Signal Name [Specification]</td><td>BLINKERCOMMAND</td><td>+B</td><td>COM1</td><td>SERIAL LINE</td><td>GND</td><td></td></tr> </table>	Terminal No.	1	2	3	4	5	6	Color of Wire	W	Y	G	L	L	B	Signal Name [Specification]	BLINKERCOMMAND	+B	COM1	SERIAL LINE	GND	
Connector No.	B89																											
Connector Name	SIREN CONTROL UNIT																											
Connector Type	RH08FB																											
Terminal No.	1	2	3	4	5	6																						
Color of Wire	W	Y	G	L	L	B																						
Signal Name [Specification]	BLINKERCOMMAND	+B	COM1	SERIAL LINE	GND																							
<table border="1"> <tr><td>Connector No.</td><td>B71</td></tr> <tr><td>Connector Name</td><td>REAR DOOR SWITCH LH</td></tr> <tr><td>Connector Type</td><td>A03FW</td></tr> </table> 	Connector No.	B71	Connector Name	REAR DOOR SWITCH LH	Connector Type	A03FW	<table border="1"> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>GR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	2	Color of Wire	GR	Signal Name [Specification]	-															
Connector No.	B71																											
Connector Name	REAR DOOR SWITCH LH																											
Connector Type	A03FW																											
Terminal No.	2																											
Color of Wire	GR																											
Signal Name [Specification]	-																											



JCKWA0421GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
8	V	-

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NSJ08FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS12DFW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
8	V	-

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	V	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM08FB-LC


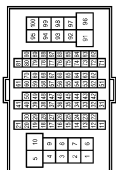
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
25	B	-
26	P	-
27	L	-
34	Y	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

JCKWA0422GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

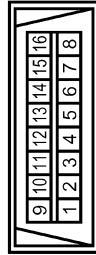
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



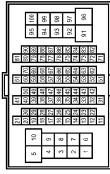
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



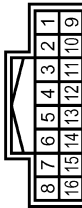
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



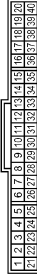
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

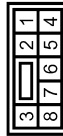
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



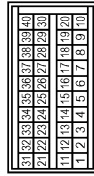
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



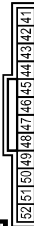
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	GAN-H
3	P	GAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	GAN-L
22	L	GAN-H
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



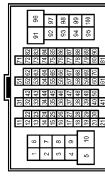
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0424GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS328MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FEGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

JCKWA0425GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

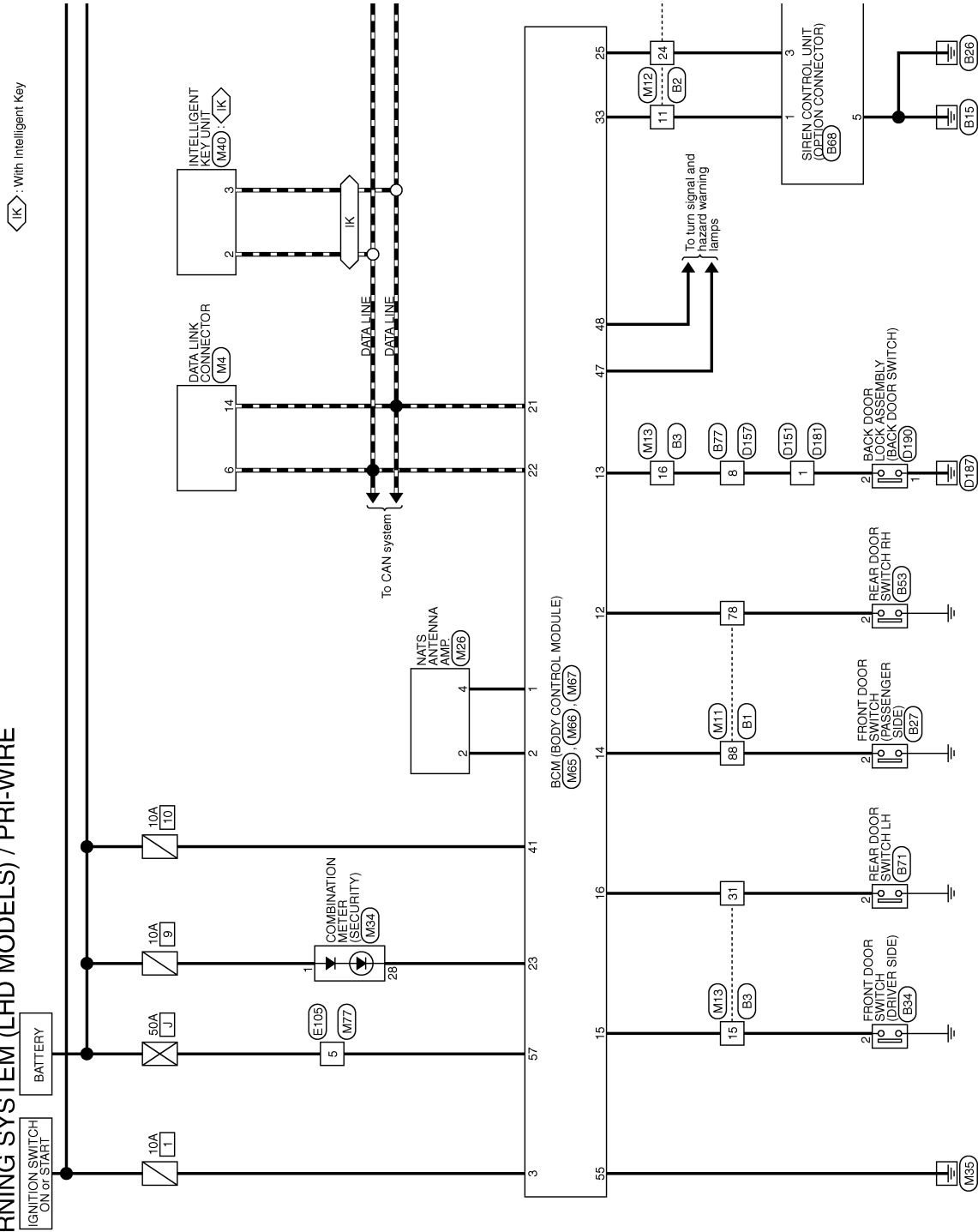
< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559381

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



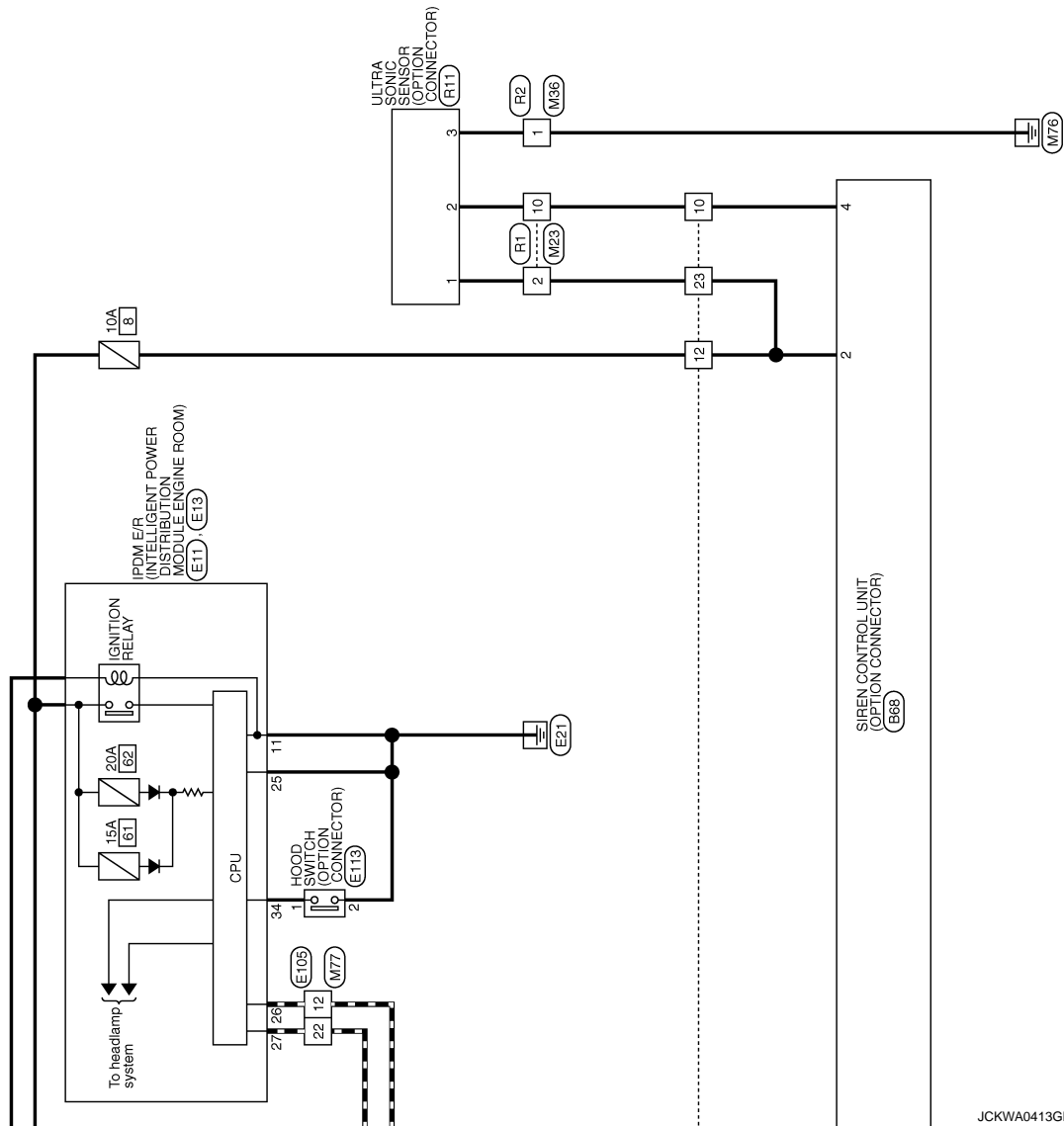
2007/02/28

JCKWA0412GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITHOUT INTELLIGENT KEY SYSTEM]
 < ECU DIAGNOSIS >



JCKWA0413GE


IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]


THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW




Terminal No.	2	Color of Wire	BR	Signal Name [Specification]	[LHD models]
--------------	---	---------------	----	-----------------------------	--------------

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	T1432MW-NH




Terminal No.	15	Color of Wire	P	Signal Name [Specification]	
	16		V		
	31		GR		

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	T1424MW-NH



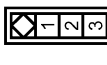
Terminal No.	10	Color of Wire	L	Signal Name [Specification]	
	11		W		
	12		Y		
	23		Y		
	24		G		

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	T180MW-CS16-TM4




Terminal No.	78	Color of Wire	Y	Signal Name [Specification]	
	88		BR		

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW




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

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB




Terminal No.	1	Color of Wire	W	Signal Name [Specification]	BLINKERCOMMAND
	2		Y		+B
	3		G		COM1
	4		L		SERIALLINE
	5		B		GND

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



Terminal No.	2	Color of Wire	Y	Signal Name [Specification]	
--------------	---	---------------	---	-----------------------------	--

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal No.	2	Color of Wire	P	Signal Name [Specification]	[LHD models]
--------------	---	---------------	---	-----------------------------	--------------

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

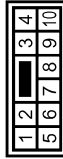
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS



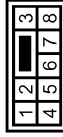
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



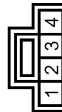
Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS08MBF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D130
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS



Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM08FB-LC



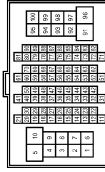
Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-
Terminal No.	34	Color of Wire	Y	Signal Name [Specification]	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-CS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-

JCKWA0415GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

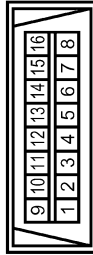
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



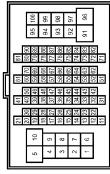
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



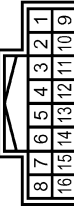
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	- [LHD models]
31	GR	- [LHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



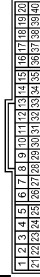
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



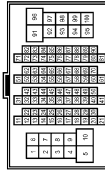
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Terminal No.	23	G	ALARM LINK
Terminal No.	33	W	HAZARD SW (With xenon headlamps and daytime light system)

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

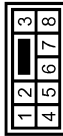


Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0417GE

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0418GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

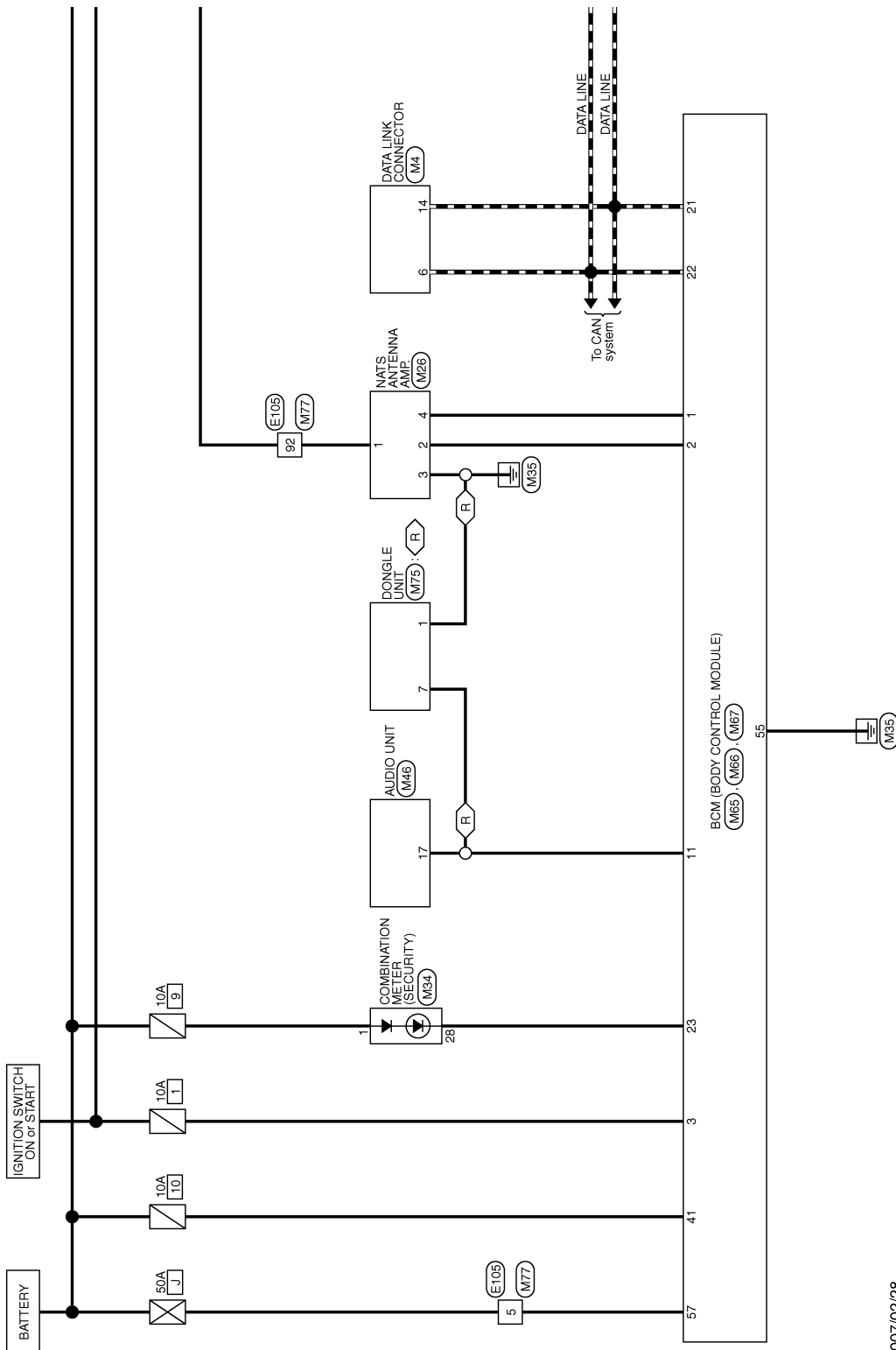
[WITHOUT INTELLIGENT KEY SYSTEM]

Wiring Diagram - NATS -

INFOID:000000001559382

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

◊ (R) : RHD models

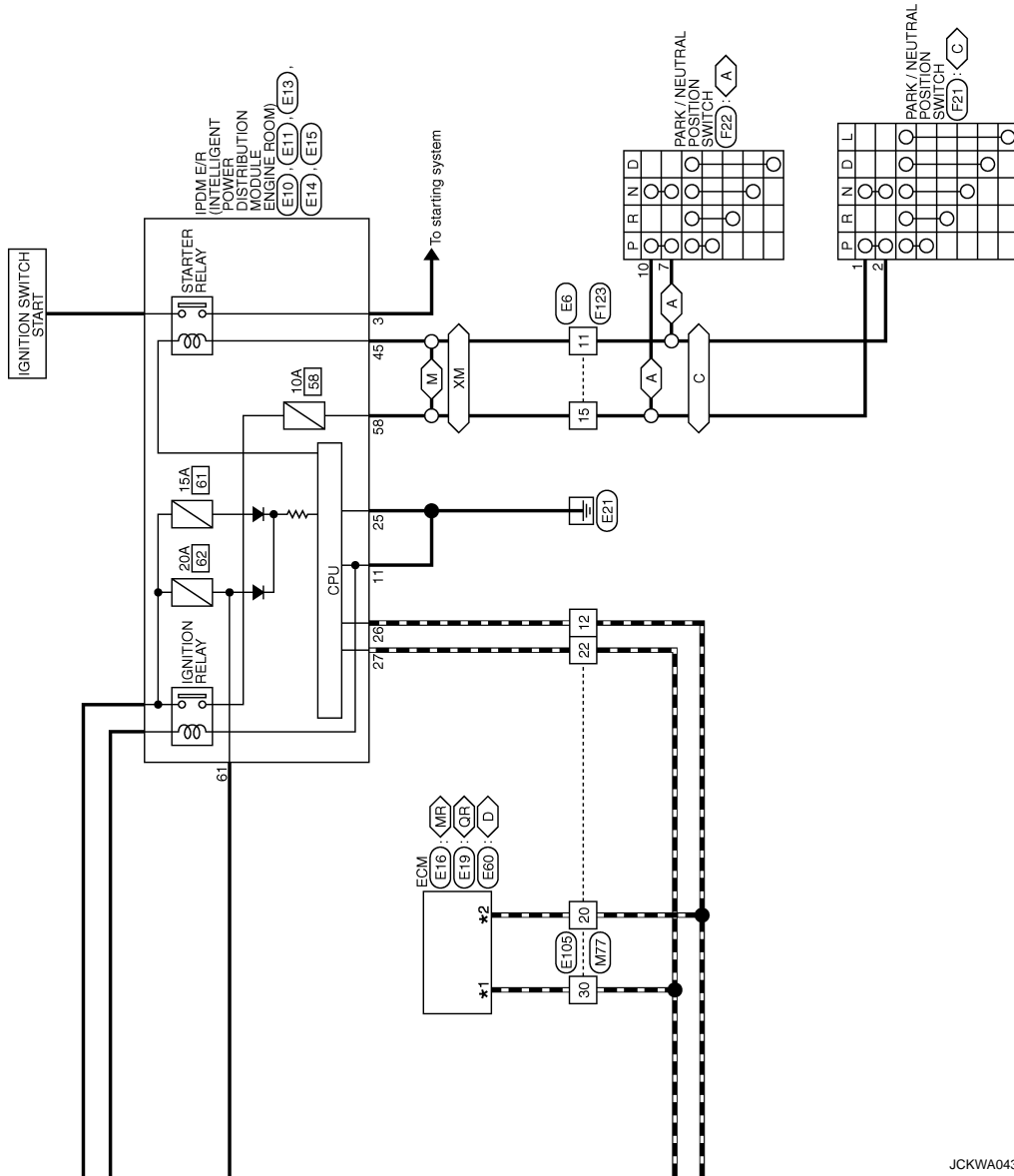


2007/02/28

JCKWA0432GE

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) < ECU DIAGNOSIS > [WITHOUT INTELLIGENT KEY SYSTEM]

- MR: With MR engine
 - QR: With QR engine
 - D: With diesel engine
 - A: With AT
 - C: With CVT
 - M: With MT
 - XM: Except MT
- *1 84: MR
 82: QR
 100: D
 *2 83: MR
 90: QR
 99: D



JCKWA0433GE

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

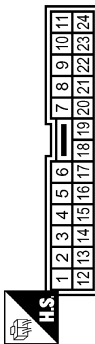
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	EB
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Connector No.	E10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M08FW-LC



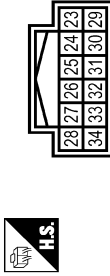
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M06FB-LC



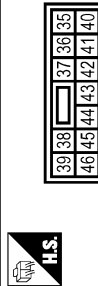
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



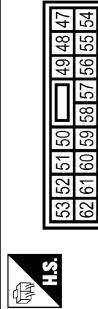
Terminal No.	Color of Wire	Signal Name [Specification]
25	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS12FBR-CS



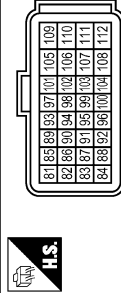
Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS16FW-CS



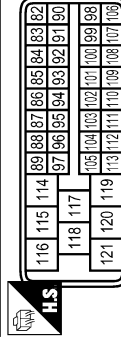
Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	- [Except M/T]
58	Y	- [With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA2FEB-MEA3-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32FB-AH18



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

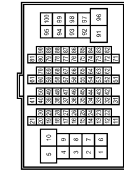
NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



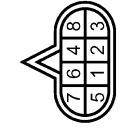
Terminal No.	Color of Wire	Signal Name [Specification]
99	P	MAIN CAN-LIBODY
100	L	MAIN CAN-HIBODY

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



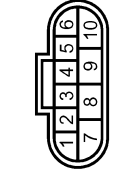
Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK08FG



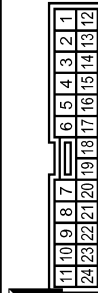
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



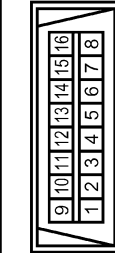
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK2FW-1V



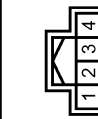
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

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



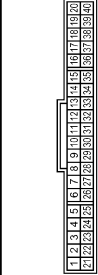
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FY-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

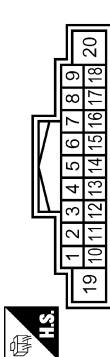
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

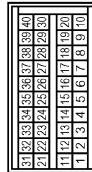
[WITHOUT INTELLIGENT KEY SYSTEM]

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

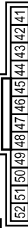
Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-CS2



Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAAB40FB



Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



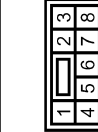
Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



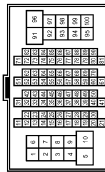
Terminal No.	17	B	IMMOBI
--------------	----	---	--------

Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
11	B	AUDIO DONGLE LINK(SIGNAL)
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR[LHD models]
23	B	SECURITY INDICATOR[RHD models]

Connector No.	M75
Connector Name	DONGLE UNIT
Connector Type	INS08FB-CS



Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS1B-TM4



Terminal No.	1	B	GND
7	SB	INTERFACE	

Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
35	B	GND
57	Y	BAT1F/L

Fail Safe

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

JCKWA0436GE

INFOID:000000001569735

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Control part	Fail-safe in operation
Cooling fan	<ul style="list-style-type: none"> The cooling fan relay-1, the cooling fan relay-2, the cooling fan relay-3 and the cooling fan relay-5 turn ON when the ignition switch is turned ON The cooling fan relay-1, the cooling fan relay-2, the cooling fan relay-3 and the cooling fan relay-5 turn OFF when the ignition switch is turned OFF Cooling fan relay-4 OFF
A/C compressor	A/C relay OFF

If no CAN communication is available with BCM

Control part	Fail-safe in operation
Headlamp	<ul style="list-style-type: none"> The headlamp low relay turns ON when the ignition switch is turned ON The headlamp low relay turns OFF when the ignition switch is turned OFF Headlamp high relay OFF
<ul style="list-style-type: none"> Parking lamps License plate lamps Tail lamps Illuminations 	<ul style="list-style-type: none"> The tail lamp relay and the daytime running light relay*¹ turn ON when the ignition switch is turned ON The tail lamp relay and the daytime running light relay*¹ turn OFF when the ignition switch is turned OFF
Front wiper	<ul style="list-style-type: none"> 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 front 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 INT mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Starter motor	Starter relay OFF
Rear window defogger	Rear window defogger relay OFF
Headlamp washer* ²	Headlamp washer relay OFF
Horn* ³	Horn relay OFF

NOTE:

- *1: With daytime running light system
- *2: With headlamp washer system
- *3: With vehicle security system

Ignition relay malfunction detection function

- IPDM E/R monitors status of ignition relay by the voltage at ignition relay contact circuit inside it.
- IPDM E/R judges that the ignition relay is error, if status of the ignition relay and ignition switch ON signal (CAN) *.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay and daytime running light relay* for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

DTC	Ignition switch	Ignition relay	Tail lamp relay and daytime running light relay*
—	ON	ON	—
—	OFF	OFF	—
—	OFF	ON	ON (10 minutes)
B2099: IGN RLY OFF	ON	OFF	—

NOTE:

- The tail lamp relay and the daytime running light relay* are turned OFF when the ignition switch is turned ON.
- *: With daytime running light system

Front wiper control

IPDM E/R detects the front wiper stop position with the front wiper auto stop signal.

When the front wiper auto stop signal is in the conditions listed below, IPDM E/R repeats a front wiper 10 seconds operation and 20 seconds stop five times.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Ignition switch	Front wiper switch	Front wiper auto stop signal
ON	OFF	The front wiper auto stop signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper auto stop 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.

DTC Index

INFOID:000000001569736

CONSULT display	Fail-safe	Timing ^{NOTE}		Reference page
No DTC is detected. further testing may be required.	—	—	—	—
U1000: CAN COMM CIRCUIT	×	CRNT	PAST	PCS-13
B2099: IGN RELAY OFF	—	CRNT	PAST	PCS-14

NOTE:

The details of time display are as follows.

- CRNT: The malfunctions that are detected now.
- PAST: The number is indicated when it is normal at present and a malfunction was detected in the past.

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

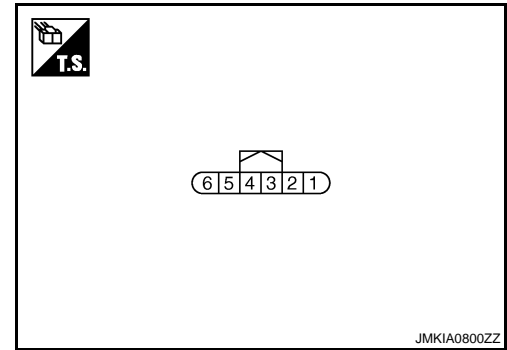
< ECU DIAGNOSIS >

SIREN CONTROL UNIT

Reference Value

INFOID:000000001507543

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
1 (W)	Ground	Hazard switch	Input	Hazard lamp is blinking	<p style="text-align: right;">JPMIA0165GB</p> <p style="text-align: center;">1.3 V</p>
				Hazard lamp is not blinking	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage
3 (G)	Ground	Communication line (BCM)	Input/ Output	Armed phase	<p style="text-align: right;">JMKIA0619ZZ</p>
				Disarmed phase	Battery voltage
4 (L)	Ground	Communication line (ultra sonic sensor)	Input/ Output	Armed phase	<p style="text-align: right;">JMKIA0619ZZ</p>
				Disarmed phase	Battery voltage
5 (B)	Ground	Ground	—	Ignition switch ON	0 V

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

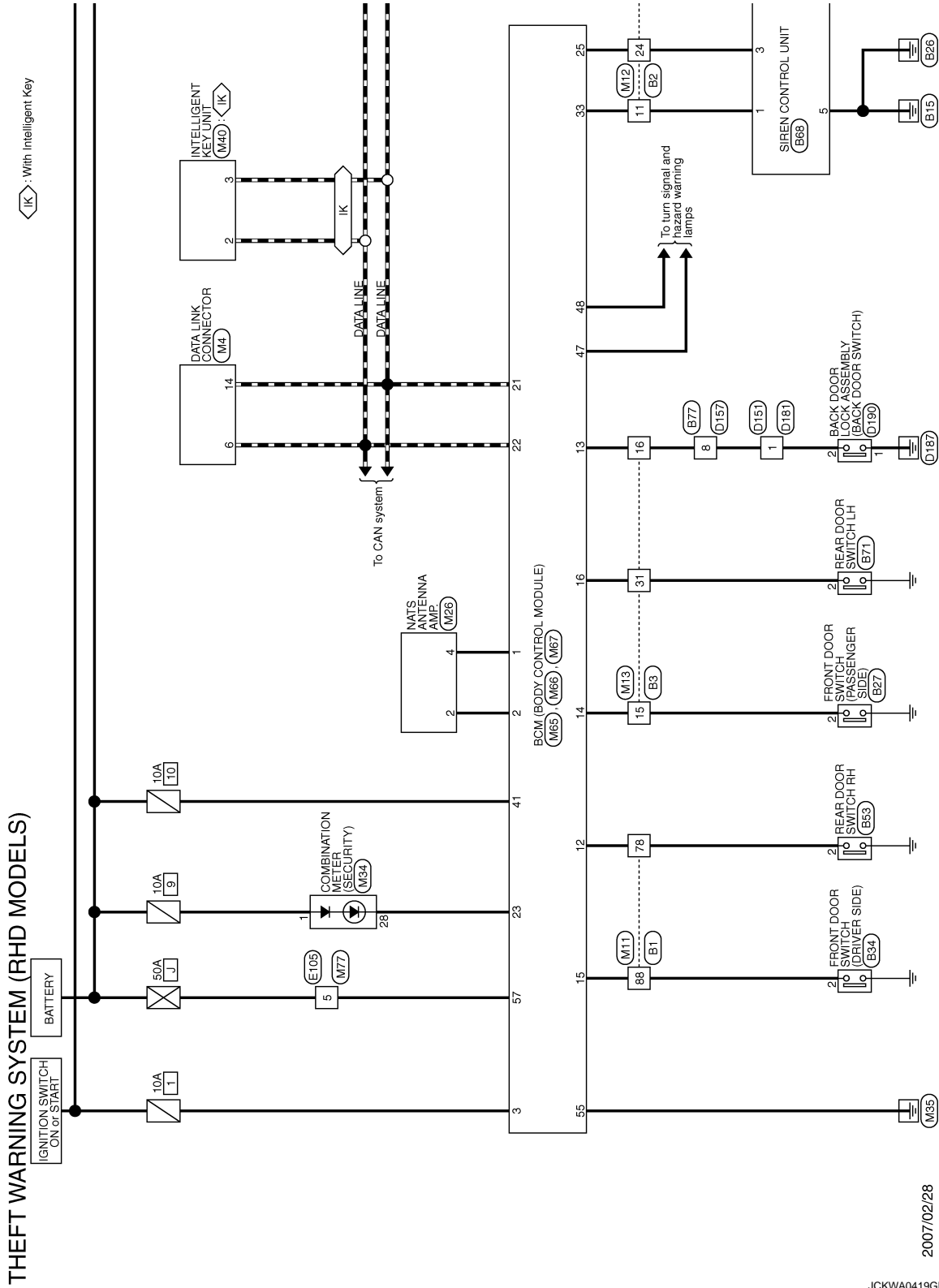
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM -

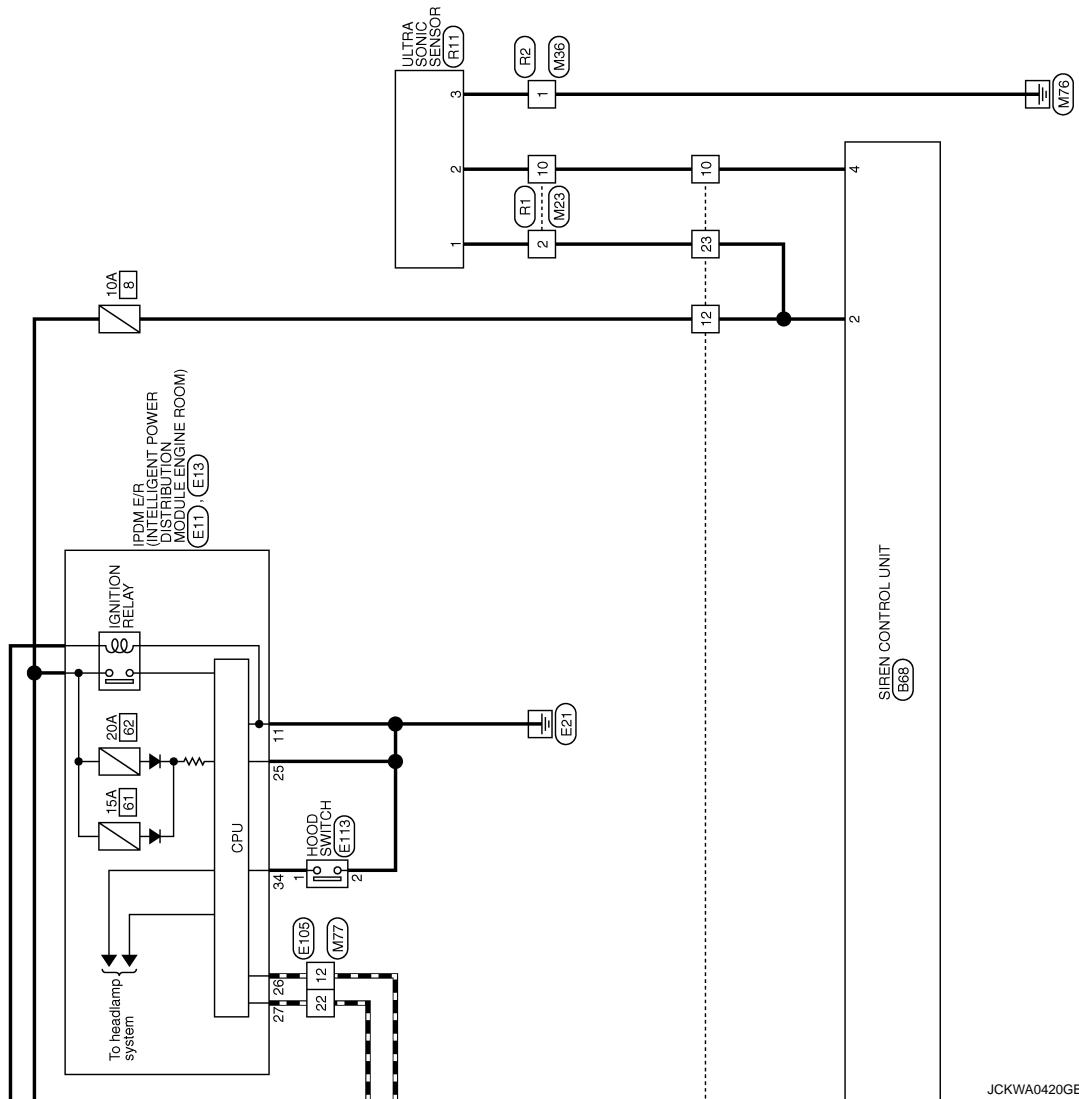
INFOID:000000001559383



SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0420GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

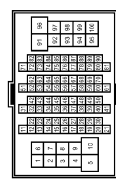
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

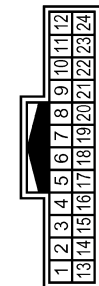
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



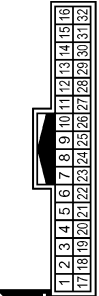
Terminal No.	Color of Wire	Signal Name [Specification]
78	Y	-
88	BR	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



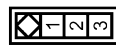
Terminal No.	Color of Wire	Signal Name [Specification]
10	L	-
11	W	-
12	Y	-
23	Y	-
24	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



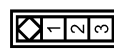
Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	-
31	GR	-

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



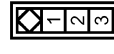
Terminal No.	Color of Wire	Signal Name [Specification]
2	P	- [RHD models]

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW




Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	- [RHD models]

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



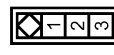
Terminal No.	Color of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B68
Connector Name	SIREN CONTROL UNIT
Connector Type	RH08FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BLINKERCOMMAND
2	Y	+B
3	G	COM1
4	L	SERIAL LINE
5	B	GND

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

JCKWA0421GE


SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >


THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NS28MRF-CS




Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS12DFW-CS




Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS308FBR-CS



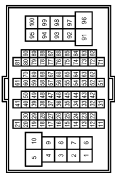
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS




Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4




Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
Terminal No.	12	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	22	Color of Wire	L	Signal Name [Specification]	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH




Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	26	Color of Wire	P	Signal Name [Specification]	-
Terminal No.	27	Color of Wire	L	Signal Name [Specification]	-
Terminal No.	34	Color of Wire	Y	Signal Name [Specification]	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM8FB-LC



Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	D190
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS



Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
Terminal No.	2	Color of Wire	V	Signal Name [Specification]	-

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

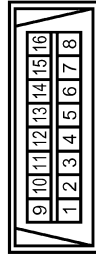
THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	E13
Connector Name	HOOD SWITCH
Connector Type	W02FW



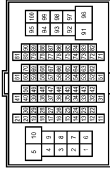
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

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



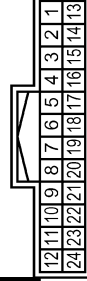
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH2FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	Y	-[RHD models]
31	R	-[RHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



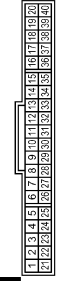
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH0FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

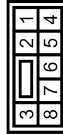
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS38FW-CS



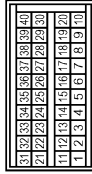
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



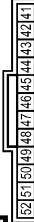
Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



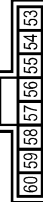
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LG	DOOR SW (RR)
13	Y	DOOR SW (BACK) [RHD models]
14	P	DOOR SW (AS) [RHD models]
15	BR	DOOR SW (DR) [RHD models]
16	R	DOOR SW (RL) [RHD models]
21	P	CAN-L
22	L	CAN-H
23	B	SECURITY INDICATOR [RHD models]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



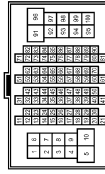
Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(F)USE
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F)L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS(6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

JCKWA0424GE

A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

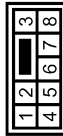
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (RHD MODELS)

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	MS38MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R1
Connector Name	ULTRA SONIC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

JCKWA0425GE

SIREN CONTROL UNIT

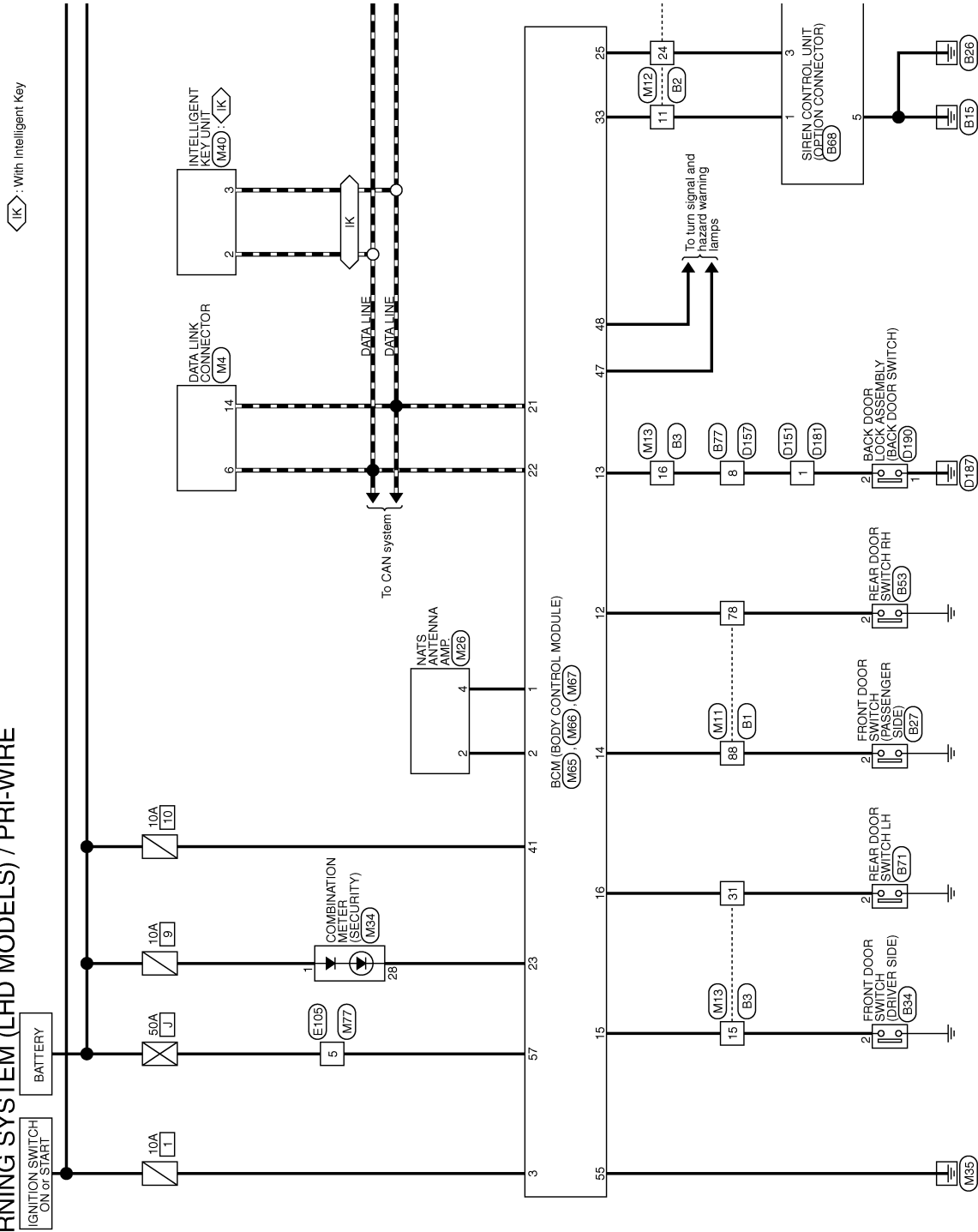
[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

Wiring Diagram - THEFT WARNING SYSTEM (PRI-WIRE) -

INFOID:000000001559384

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE



2007/02/28

JCKWA0412GE

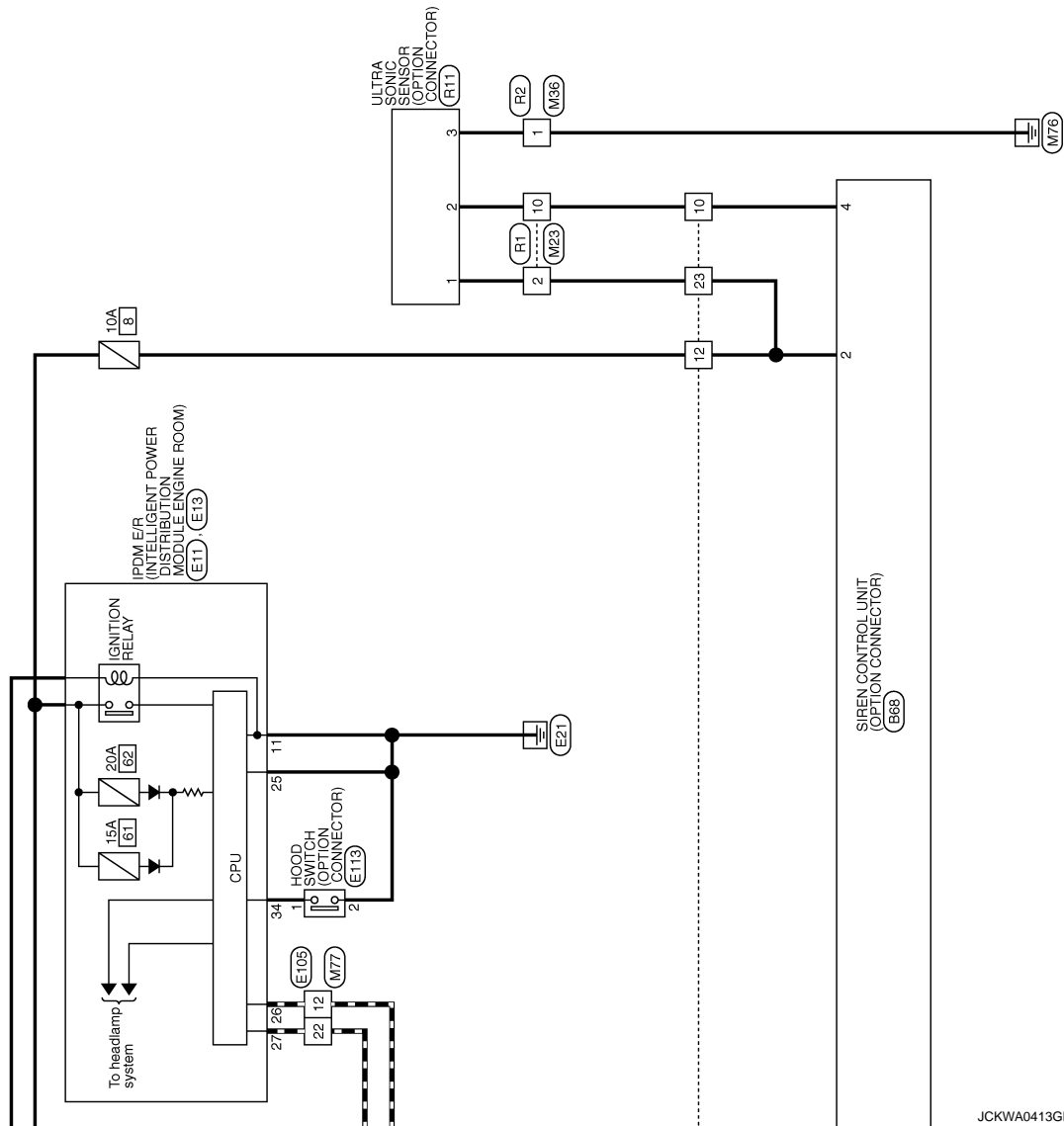
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCKWA0413GE


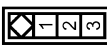
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >


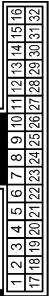
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	B27
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW


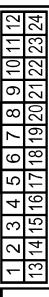
Terminal No.	2	Color of Wire	BR	Signal Name [Specification]	[LHD models]
--------------	---	---------------	----	-----------------------------	--------------

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	T1432MW-NH



Terminal No.	15	Color of Wire	P	Signal Name [Specification]	
	16	V			
	31	GR			

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	T1424MW-NH


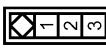
Terminal No.	10	Color of Wire	L	Signal Name [Specification]	
	11	W			
	12	Y			
	23	Y			
	24	G			

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	T180MW-CS16-TM4



Terminal No.	78	Color of Wire	Y	Signal Name [Specification]	
	88	BR			

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW


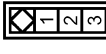
Terminal No.	2	Color of Wire	GR	Signal Name [Specification]	
--------------	---	---------------	----	-----------------------------	--

Connector No.	B88
Connector Name	SIREN CONTROL UNIT
Connector Type	FR08FB


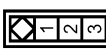
Terminal No.	1	Color of Wire	W	Signal Name [Specification]	BLINKERCOMMAND
	2	Y			+B
	3	G			COM1
	4	L			SERIALLINE
	5	B			GND

Connector No.	B53
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW

Terminal No.	2	Color of Wire	Y	Signal Name [Specification]	
--------------	---	---------------	---	-----------------------------	--

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW

Terminal No.	2	Color of Wire	P	Signal Name [Specification]	[LHD models]
--------------	---	---------------	---	-----------------------------	--------------

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC



SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	D181
Connector Name	WIRE TO WIRE
Connector Type	NSCBMBF-CS



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D157
Connector Name	WIRE TO WIRE
Connector Type	NS1DFW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	D151
Connector Name	WIRE TO WIRE
Connector Type	NS08FBR-CS


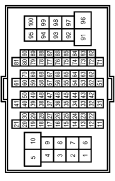
Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	B77
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	8	Color of Wire	V	Signal Name [Specification]	-
--------------	---	---------------	---	-----------------------------	---

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
	12	P	-	-	-
	22	L	-	-	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	25	Color of Wire	B	Signal Name [Specification]	-
	26	P	-	-	-
	27	L	-	-	-
	34	Y	-	-	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	IM8FB-LC

Terminal No.	11	Color of Wire	B	Signal Name [Specification]	-
--------------	----	---------------	---	-----------------------------	---

Connector No.	D130
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS24FW-CS

Terminal No.	1	Color of Wire	B	Signal Name [Specification]	-
	2	V	-	-	-

JCKWA0415GE

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

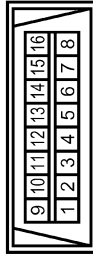
THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	E113
Connector Name	HOOD SWITCH
Connector Type	W02FW



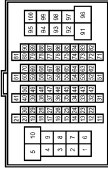
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



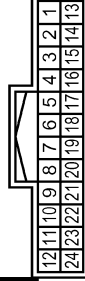
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
78	LG	-
88	BR	-

Connector No.	M12
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



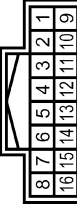
Terminal No.	Color of Wire	Signal Name [Specification]
10	SB	-
11	W	-
12	Y	-
23	BR	-
24	G	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
15	P	-
16	V	- [LHD models]
31	GR	- [LHD models]

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



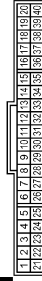
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
10	SB	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	G	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS



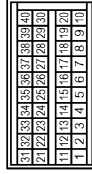
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	CAN-H
3	P	CAN-L

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	A4B40FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.
3	W	IGN SW
12	LQ	DOOR SW (RP)
13	V	DOOR SW (BACK) [LHD models]
14	BR	DOOR SW (AS) [LHD models]
15	P	DOOR SW (DR) [LHD models]
16	GR	DOOR SW (RL) [LHD models]
21	P	CAN-L
22	L	CAN-H
23	V	SECURITY INDICATOR [LHD models]

Terminal No.	23	G	ALARM LINK
Terminal No.	33	W	HAZARD SW [With xenon headlamps and daytime light system]

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



Terminal No.	Color of Wire	Signal Name [Specification]
41	LG	BAT(FUSE)
47	BR	FRASHER OUTPUT (LH)
48	GR	FRASHER OUTPUT (RH)

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FB



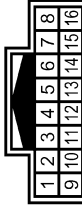
Terminal No.	Color of Wire	Signal Name [Specification]
55	B	GND
57	Y	BAT(F/L)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS (6-TM4)



Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
22	L	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
2	R	-
10	L	-

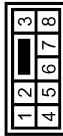
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

THEFT WARNING SYSTEM (LHD MODELS) / PRI-WIRE

Connector No.	R2
Connector Name	WIRE TO WIRE
Connector Type	NS28AW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

Connector No.	R11
Connector Name	ULTRA SOMC SENSOR
Connector Type	TK04FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	+B
2	L	SERIAL LINE
3	B	GND

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

JCKWA0418GE

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

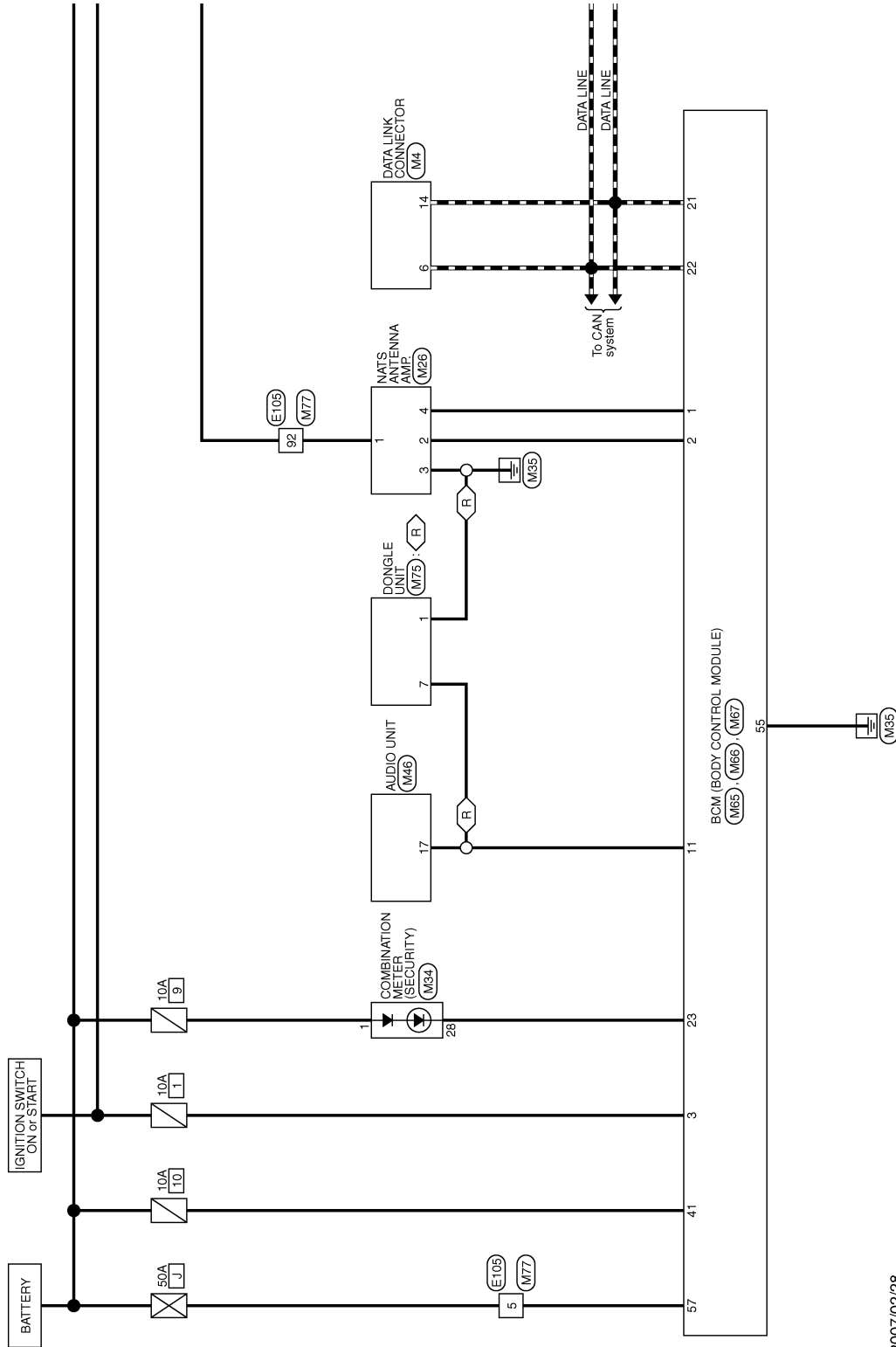
< ECU DIAGNOSIS >

Wiring Diagram - NATS -

INFOID:000000001559385

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

◊ : RHD models



2007/02/28

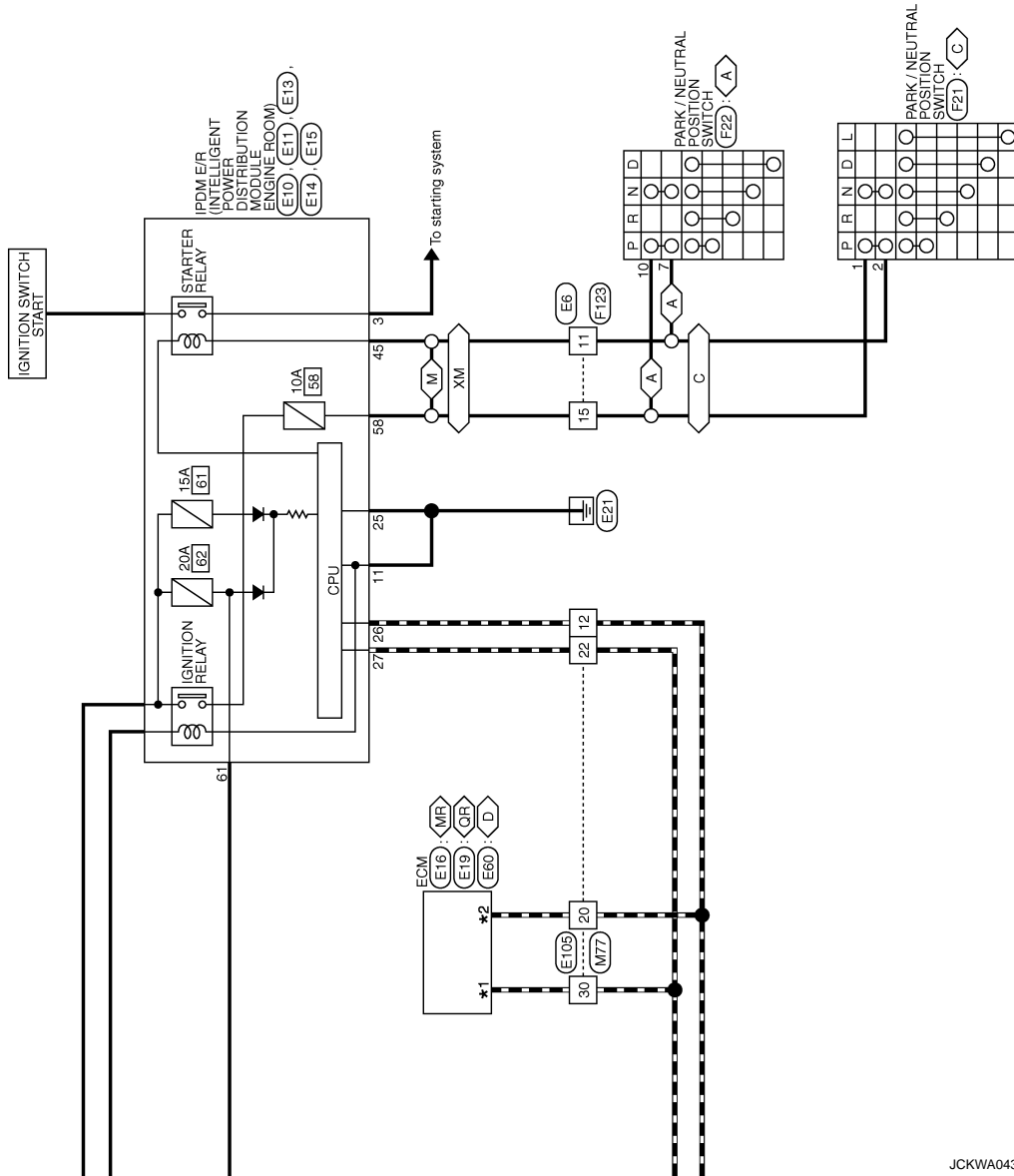
JCKWA0432GE

SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

- MR: With MR engine
 - QR: With QR engine
 - D: With diesel engine
 - A: With AT
 - C: With CVT
 - M: With MT
 - XM: Except MT
- *1 84: MR
82: QR
100: D
- *2 83: MR
90: QR
99: D



JCKWA0433GE

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

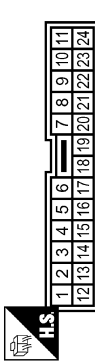
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	EB
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
11	Y	-
15	LG	-

Connector No.	E10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M08FW-LC



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-

Connector No.	E11
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	M08FB-LC



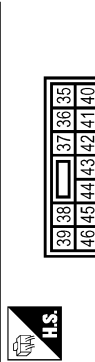
Terminal No.	Color of Wire	Signal Name [Specification]
11	B	-

Connector No.	E13
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH12FW-NH



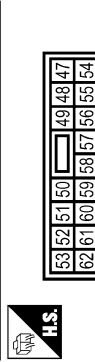
Terminal No.	Color of Wire	Signal Name [Specification]
25	B	-
26	P	-
27	L	-

Connector No.	E14
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS12FBF-CS



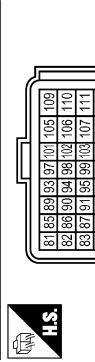
Terminal No.	Color of Wire	Signal Name [Specification]
45	Y	-

Connector No.	E15
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
58	LG	- [Except M/T]
58	Y	- [With M/T]
61	O	-

Connector No.	E16
Connector Name	ECM
Connector Type	MAA2FB-MEA3-LH



Terminal No.	Color of Wire	Signal Name [Specification]
83	P	CAN-L1
84	L	CAN-H1

Connector No.	E19
Connector Name	ECM
Connector Type	BAA32FB-AH3



Terminal No.	Color of Wire	Signal Name [Specification]
82	L	VEHCAN-H
90	P	VEHCAN-L

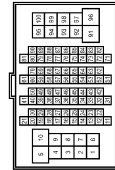
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

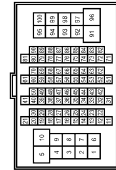
NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS1E-TM4



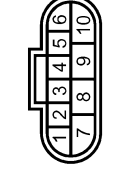
Terminal No.	Color of Wire	Signal Name [Specification]
5	Y	-
12	P	-
20	P	-
22	L	-
30	L	-
32	O	-

Connector No.	F21
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	RK08FG



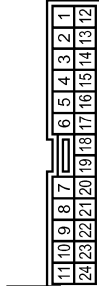
Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	Y	-

Connector No.	F22
Connector Name	PARK / NEUTRAL POSITION SWITCH
Connector Type	YAZAKI 7283-8700-30



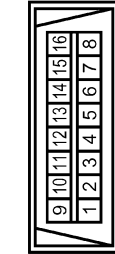
Terminal No.	Color of Wire	Signal Name [Specification]
7	Y	-
10	GR	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK2FW-1V



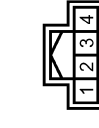
Terminal No.	Color of Wire	Signal Name [Specification]
11	LG	-
15	GR	-

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



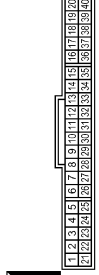
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M26
Connector Name	NATS ANTENNA AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	G	-
3	B	-
4	W	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	BAT
28	B	SECURITY

JCKWA0435GE

A B C D E F G H I J L M N O P

SEC

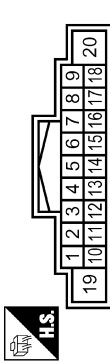
SIREN CONTROL UNIT

[WITHOUT INTELLIGENT KEY SYSTEM]

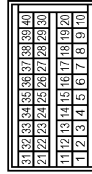
< ECU DIAGNOSIS >

NATS (NISSAN ANTI-THEFT SYSTEM) / WITHOUT INTELLIGENT KEY

Connector No.	M46
Connector Name	AUDIO UNIT
Connector Type	TH18FW-CS2



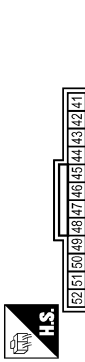
Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	AAAB40FB



Terminal No.	17	Color of Wire	B	Signal Name [Specification]	IMMOBI
--------------	----	---------------	---	-----------------------------	--------

Terminal No.	1	Color of Wire	W	Signal Name [Specification]	NATS ANTENNA AMP.
2	G	NATS ANTENNA AMP.			
3	W	IGN SW			
11	B	AUDIO DONGLE LINK(SIGNAL)			
21	P	CAN-L			
22	L	CAN-H			
23	V	SECURITY INDICATOR[LHD models]			
23	B	SECURITY INDICATOR[RHD models]			

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA12FBR



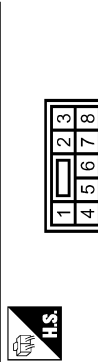
Terminal No.	41	Color of Wire	LG	Signal Name [Specification]	BAT(FUSE)
--------------	----	---------------	----	-----------------------------	-----------

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FHA08FEB



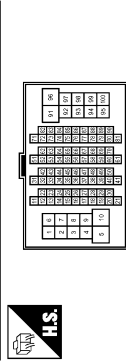
Terminal No.	57	Color of Wire	Y	Signal Name [Specification]	BAT(F/L)
35	B	GND			

Connector No.	M75
Connector Name	DONGLE UNIT
Connector Type	INS08FBR-CS



Terminal No.	7	Color of Wire	SB	Signal Name [Specification]	INTERFACE
1	B	GND			

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS1B-TM4



Terminal No.	5	Color of Wire	Y	Signal Name [Specification]	-
12	P	-			
20	P	-			
22	L	-			
30	L	-			
92	O	-			

JCKWA0436GE

SECURITY CONTROL SYSTEM

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

SECURITY CONTROL SYSTEM

Symptom Table

INFOID:000000001505566

Use the chart below to help you find the cause of the symptom. The numbers indicate the order of the inspection.

NO.	Function	Operation condition	Symptom	Reference page
1	VEHICLE SECURITY SYSTEM	Lock all doors with key fob	Vehicle security system can not be set	SEC-364
		Lock all doors with key fob	Security indicator does not turn ON	SEC-365
		In the armed phase, open the door	Vehicle security alarm does not activate	SEC-366
		When alarm sound, press Key fob button	Vehicle security system can not be canceled	SEC-367
2	NATS(NISSAN ANTI-THEFT SYSTEM)	Engine start	Engine can not start	SEC-368
		Ignition switch turn OFF	Security indicator does not turn ON or flash	SEC-369

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

VEHICLE SECURITY SYSTEM CAN NOT BE SET

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT BE SET

Description

INFOID:000000001505575

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-231, "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)

- Mechanical key is not inserted in key cylinder.

Diagnosis Procedure

INFOID:000000001505576

1. CHECK DOOR LOCK FUNCTION

Check door lock function.

Refer to [DLK-601, "DOOR LOCK AND UNLOCK SWITCH : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Refer to [DLK-597, "Work Flow"](#).

2. PERFORM SELF-DIAGNOSIS OF SIREN CONTROL UNIT

Perform self-diagnosis of siren control unit.

Refer to [SEC-246, "Diagnosis Description"](#).

Does hazard lamp blink?

YES >> GO TO 3.

NO >> GO TO 4.

3. CHECK HOOD SWITCH

Check hood switch.

Refer to [SEC-272, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

4. CHECK SIREN CONTROL UNIT CIRCUIT

Check siren control unit circuit.

Refer to [SEC-266, "SIREN CONTROL UNIT : Diagnosis Procedure"](#). (Power supply and ground circuit.)

Refer to [SEC-278, "Component Function Check"](#). (Siren control unit signal circuit.)

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-39, "Intermittent Incident"](#).

NO >> GO TO 1.

SECURITY INDICATOR DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR DOES NOT TURN ON

Description

INFOID:000000001505577

NOTE:

- Before performing the diagnosis in the following table, check “Work Flow”. Refer to [SEC-231, "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)

- Mechanical key is not inserted in key cylinder.

Diagnosis Procedure

INFOID:000000001505578

1. CHECK VEHICLE SECURITY INDICATOR

Check vehicle security indicator.

Refer to [SEC-274, "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-39, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:000000001505579

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-231, "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)

- Mechanical key is not inserted in key cylinder.

Diagnosis Procedure

INFOID:000000001505580

1. PERFORM SELF-DIAGNOSIS OF SIREN CONTROL UNIT

Check self-diagnosis of siren control unit.

Refer to [SEC-246, "Diagnosis Description"](#).

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-39, "Intermittent Incident"](#).

NO >> GO TO 1.

VEHICLE SECURITY SYSTEM CAN NOT CANCELED

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CAN NOT CANCELED

Description

INFOID:000000001505581

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-231, "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)

- Mechanical key is not inserted in key cylinder.

Diagnosis Procedure

INFOID:000000001505582

1. CHECK MULTI REMOTE CONTROL SYSTEM

Check multi remote control system.

Refer to [DLK-604, "KEYFOB : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Work Flow. Refer to [DLK-597, "Work Flow"](#).

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-39, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

ENGINE CAN NOT START WITH MECHANICAL KEY

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

ENGINE CAN NOT START WITH MECHANICAL KEY

Description

INFOID:000000001505585

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-231. "Work Flow"](#).

Diagnosis Procedure

INFOID:000000001505586

1. CHECK STOP LAMP SWITCH

Check stop lamp switch.

Refer to [SEC-270. "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-39. "Intermittent Incident"](#).

NO >> GO TO 1.

SECURITY INDICATOR DOES NOT TURN ON OR FLASH

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR DOES NOT TURN ON OR FLASH

Description

INFOID:000000001505587

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-231, "Work Flow"](#).

Diagnosis Procedure

INFOID:000000001505588

1. CHECK VEHICLE SECURITY INDICATOR

Check vehicle security indicator.

Refer to [SEC-274, "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-39, "Intermittent Incident"](#).

NO >> GO TO 1.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

PRECAUTION

PRECAUTIONS

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

INFOID:000000001524255

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 AIRBAG" and "SEAT BELT" of this Service Manual.

WARNING:

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

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:000000001524256

NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the "LOCK" position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.

For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.

If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

2. Use the Intelligent Key or mechanical key to turn the ignition switch to the "ACC" position. At this time, the steering lock will be released.
3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
4. Perform the necessary repair operation.
5. When the repair work is completed, return the ignition switch to the "LOCK" position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
6. Perform a self-diagnosis check of all control units using CONSULT-III.

NATS ANTENNA AMP.

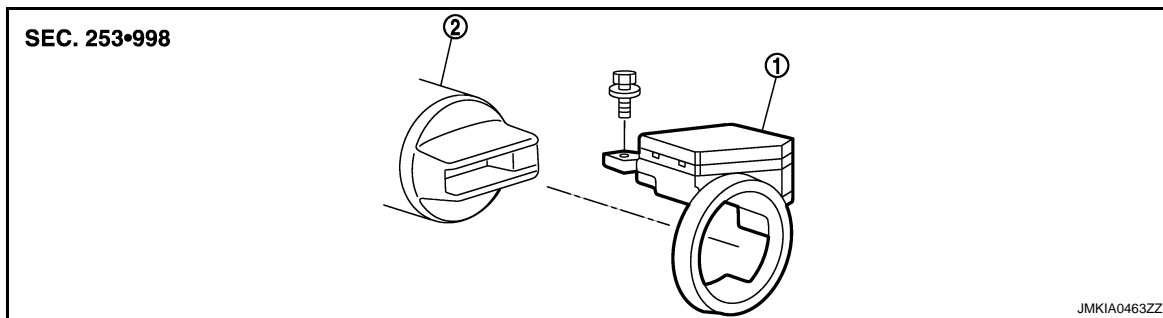
< ON-VEHICLE REPAIR >

[WITHOUT INTELLIGENT KEY SYSTEM]

ON-VEHICLE REPAIR

NATS ANTENNA AMP.

Exploded View



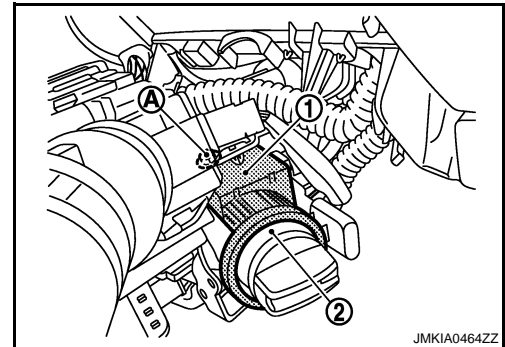
1. NATS antenna amp.
2. Steering lock assembly

Removal and Installation

INFOID:000000001495917

REMOVAL

1. Remove the steering column cover.
Refer to [IP-12. "Removal and Installation"](#).
2. Remove the NATS antenna amp. mounting screw (A), and then remove NATS antenna amp. (1) from steering lock assembly (2).



INSTALLATION

Install in the reverse order of removal.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

ULTRA SONIC SENSOR

< ON-VEHICLE REPAIR >

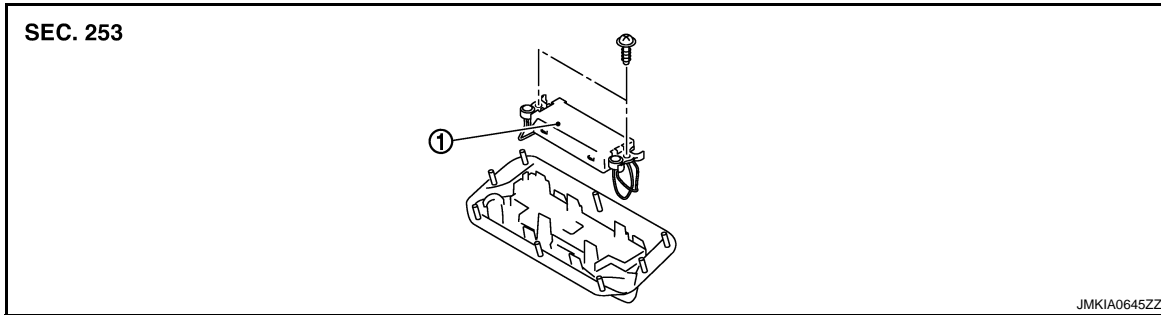
[WITHOUT INTELLIGENT KEY SYSTEM]

ULTRA SONIC SENSOR

Exploded View

INFOID:000000001495920

ULTRA SONIC SENSOR



1. Ultra sonic sensor

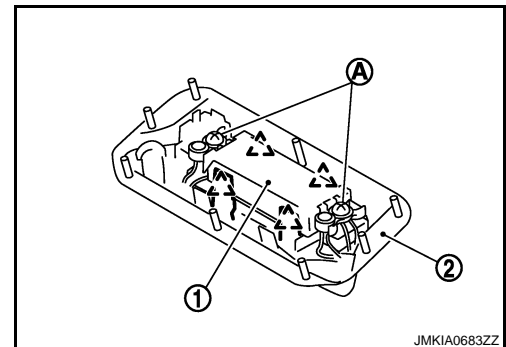
Removal and Installation

INFOID:000000001495921

REMOVAL

1. Remove the ultra sonic sensor finisher.
Refer to [SEC-372, "Exploded View"](#).
2. Remove the ultra sonic sensor mounting screw (A), and then remove pawl.
3. Remove the ultra sonic sensor (2) from ultra sonic sensor finisher (1).

 : Pawl



INSTALLATION

Install in the reverse order of removal.

HOOD SWITCH

< ON-VEHICLE REPAIR >

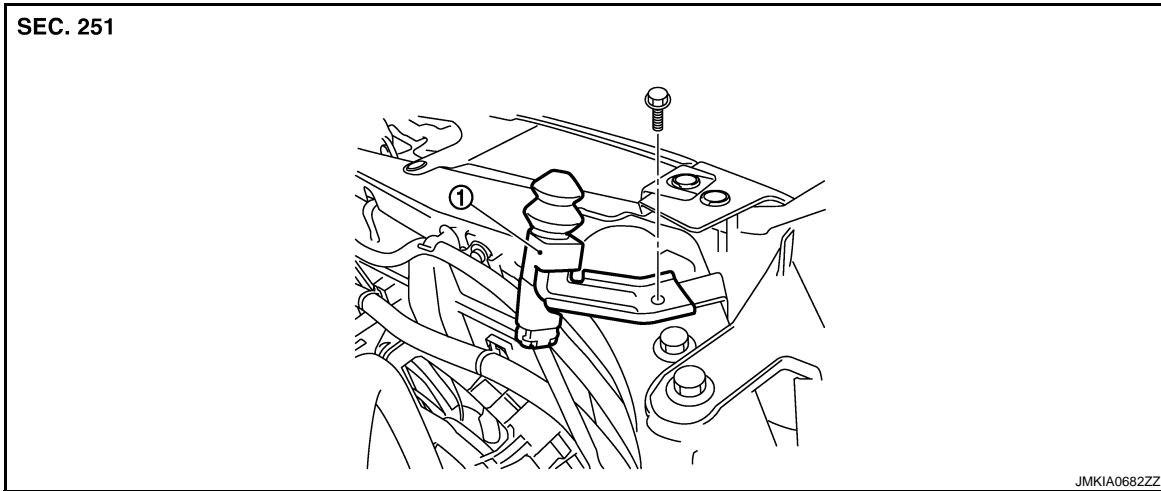
[WITHOUT INTELLIGENT KEY SYSTEM]

HOOD SWITCH

Exploded View

INFOID:000000001495922

HOOD SWITCH



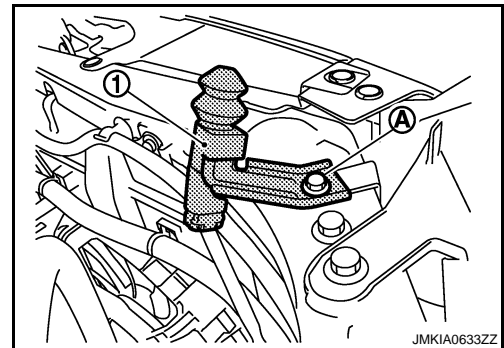
1. Hood switch

Removal and Installation

INFOID:000000001495923

REMOVAL

1. Remove the hood switch mounting bolt (A), and then remove hood switch (1).



INSTALLATION

Install in the reverse order of removal.

A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC