

SECTION **SEC**

SECURITY CONTROL SYSTEM

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

CONTENTS

| | |
|---|--|
| <p>WITH INTELLIGENT KEY SYSTEM</p> <p>BASIC INSPECTION 8</p> <p>DIAGNOSIS AND REPAIR WORK FLOW 8 Work Flow8</p> <p>INSPECTION AND ADJUSTMENT11</p> <p>ECM RECOMMUNICATING FUNCTION 11 ECM RECOMMUNICATING FUNCTION : De- scription 11 ECM RECOMMUNICATING FUNCTION : Special Repair Requirement 11</p> <p>FUNCTION DIAGNOSIS12</p> <p>INTELLIGENT KEY SYSTEM/ENGINE</p> <p>START FUNCTION12 System Diagram 12 System Description 12 Component Parts Location 15 Component Description 16</p> <p>NISSAN VEHICLE IMMOBILIZER SYSTEM- NATS18 System Diagram 18 System Description 18 Component Parts Location 20 Component Description 22</p> <p>VEHICLE SECURITY SYSTEM23 System Diagram 23 System Description 23 Component Parts Location 25 Component Description 26</p> <p>DIAGNOSIS SYSTEM (BCM)28</p> <p>COMMON ITEM28 COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM) 28</p> | <p>INTELLIGENT KEY29 INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)29</p> <p>THEFT ALM33 THEFT ALM : CONSULT-III Function (BCM - THEFT) 33</p> <p>IMMU34 IMMU : CONSULT-III Function (BCM - IMMU)34</p> <p>COMPONENT DIAGNOSIS36</p> <p>U1000 CAN COMM CIRCUIT36</p> <p>BCM36 BCM : Description36 BCM : DTC Logic36 BCM : Diagnosis Procedure36</p> <p>IPDM E/R36 IPDM E/R : Description36 IPDM E/R : DTC Logic36 IPDM E/R : Diagnosis Procedure36</p> <p>U1010 CONTROL UNIT (CAN)38</p> <p>BCM38 BCM : DTC Logic38 BCM : Diagnosis Procedure38 BCM : Special Repair Requirement38</p> <p>P1610 LOCK MODE39 Description39 DTC Logic39 Diagnosis Procedure39</p> <p>P1611 ID DISCORD, IMMU-ECM40 Description40 DTC Logic40 Diagnosis Procedure40</p> <p>P1612 CHAIN OF ECM-IMMU42</p> |
|---|--|

SEC

| | | | |
|---|-----------|--|-----------|
| Description | 42 | Description | 63 |
| DTC Logic | 42 | DTC Logic | 63 |
| Diagnosis Procedure | 42 | Diagnosis Procedure | 63 |
| P1614 CHAIN OF IMMU-KEY | 43 | B2560 STARTER CONTROL RELAY | 64 |
| Description | 43 | Description | 64 |
| DTC Logic | 43 | DTC Logic | 64 |
| Diagnosis Procedure | 43 | Diagnosis Procedure | 64 |
| P1615 DIFFERENCE OF KEY | 46 | B2601 SHIFT POSITION | 65 |
| Description | 46 | Description | 65 |
| DTC Logic | 46 | DTC Logic | 65 |
| Diagnosis Procedure | 46 | Diagnosis Procedure | 65 |
| B2190 NATS ANTENNA AMP. | 47 | Component Inspection | 67 |
| Description | 47 | B2602 SHIFT POSITION | 68 |
| DTC Logic | 47 | Description | 68 |
| Diagnosis Procedure | 47 | DTC Logic | 68 |
| B2191 DIFFERENCE OF KEY | 50 | Diagnosis Procedure | 68 |
| Description | 50 | B2603 SHIFT POSITION STATUS | 70 |
| DTC Logic | 50 | Description | 70 |
| Diagnosis Procedure | 50 | DTC Logic | 70 |
| B2192 ID DISCORD, IMMU-ECM | 51 | Diagnosis Procedure | 70 |
| Description | 51 | B2604 PNP SWITCH | 73 |
| DTC Logic | 51 | Description | 73 |
| Diagnosis Procedure | 51 | DTC Logic | 73 |
| B2193 CHAIN OF ECM-IMMU | 53 | Diagnosis Procedure | 73 |
| Description | 53 | B2605 PNP SWITCH | 75 |
| DTC Logic | 53 | Description | 75 |
| Diagnosis Procedure | 53 | DTC Logic | 75 |
| B2195 ANTI-SCANNING | 54 | Diagnosis Procedure | 75 |
| Description | 54 | B2606 STEERING LOCK RELAY | 77 |
| DTC Logic | 54 | Description | 77 |
| Diagnosis Procedure | 54 | DTC Logic | 77 |
| B2013 ID DISCORD, IMMU-STRG | 55 | Diagnosis Procedure | 77 |
| Description | 55 | B2607 STEERING LOCK RELAY | 78 |
| DTC Logic | 55 | Description | 78 |
| Diagnosis Procedure | 55 | DTC Logic | 78 |
| B2014 CHAIN OF STRG-IMMU | 56 | Diagnosis Procedure | 78 |
| Description | 56 | B2608 STARTER RELAY | 80 |
| DTC Logic | 56 | Description | 80 |
| Diagnosis Procedure | 56 | DTC Logic | 80 |
| B2555 STOP LAMP | 59 | Diagnosis Procedure | 80 |
| Description | 59 | B2609 STEERING STATUS | 82 |
| DTC Logic | 59 | Description | 82 |
| Diagnosis Procedure | 59 | DTC Logic | 82 |
| Component Inspection | 60 | Diagnosis Procedure | 82 |
| B2556 PUSH-BUTTON IGNITION SWITCH | 61 | B260B STEERING LOCK UNIT | 86 |
| Description | 61 | Description | 86 |
| DTC Logic | 61 | DTC Logic | 86 |
| Diagnosis Procedure | 61 | Diagnosis Procedure | 86 |
| Component Inspection | 62 | B260C STEERING LOCK UNIT | 87 |
| B2557 VEHICLE SPEED | 63 | Description | 87 |

| | | | |
|---|------------|---|------------|
| DTC Logic | 87 | Diagnosis Procedure | 105 |
| Diagnosis Procedure | 87 | | |
| B260D STEERING LOCK UNIT | 88 | B210B STARTER CONTROL RELAY | 109 |
| Description | 88 | Description | 109 |
| DTC Logic | 88 | DTC Logic | 109 |
| Diagnosis Procedure | 88 | Diagnosis Procedure | 109 |
| B260F ENGINE STATUS | 89 | B210C STARTER CONTROL RELAY | 110 |
| Description | 89 | Description | 110 |
| DTC Logic | 89 | DTC Logic | 110 |
| Diagnosis Procedure | 89 | Diagnosis Procedure | 110 |
| B26E9 STEERING STATUS | 90 | B210D STARTER RELAY | 111 |
| Description | 90 | Description | 111 |
| DTC Logic | 90 | DTC Logic | 111 |
| Diagnosis Procedure | 90 | Diagnosis Procedure | 111 |
| B26EA KEY REGISTRATION | 91 | B210E STARTER RELAY | 112 |
| Description | 91 | Description | 112 |
| DTC Logic | 91 | DTC Logic | 112 |
| Diagnosis Procedure | 91 | Diagnosis Procedure | 112 |
| B2612 STEERING STATUS | 92 | B210F PNP/CLUTCH INTERLOCK SWITCH . | 114 |
| Description | 92 | Description | 114 |
| DTC Logic | 92 | DTC Logic | 114 |
| Diagnosis Procedure | 92 | Diagnosis Procedure | 114 |
| B2617 STARTER RELAY CIRCUIT | 96 | B2110 PNP/CLUTCH INTERLOCK SWITCH . | 116 |
| Description | 96 | Description | 116 |
| DTC Logic | 96 | DTC Logic | 116 |
| Diagnosis Procedure | 96 | Diagnosis Procedure | 116 |
| B2619 BCM | 98 | POWER SUPPLY AND GROUND CIRCUIT .. | 118 |
| Description | 98 | BCM | 118 |
| DTC Logic | 98 | BCM : Diagnosis Procedure | 118 |
| Diagnosis Procedure | 98 | IPDM E/R | 118 |
| B261A PUSH-BUTTON IGNITION SWITCH | 99 | IPDM E/R : Diagnosis Procedure | 118 |
| Description | 99 | SECURITY INDICATOR LAMP | 120 |
| DTC Logic | 99 | Description | 120 |
| Diagnosis Procedure | 99 | Component Function Check | 120 |
| B261E VEHICLE TYPE | 102 | Diagnosis Procedure | 120 |
| Description | 102 | KEY WARNING LAMP | 122 |
| DTC Logic | 102 | Description | 122 |
| Diagnosis Procedure | 102 | Component Function Check | 122 |
| B2108 STEERING LOCK RELAY | 103 | Diagnosis Procedure | 122 |
| Description | 103 | INTELLIGENT KEY SYSTEM/ENGINE | |
| DTC Logic | 103 | START FUNCTION | 123 |
| Diagnosis Procedure | 103 | Wiring Diagram - INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION - | 123 |
| B2109 STEERING LOCK RELAY | 104 | NISSAN VEHICLE IMMOBILIZER SYSTEM- | |
| Description | 104 | NATS | 142 |
| DTC Logic | 104 | Wiring Diagram - NISSAN VEHICLE IMMOBILIZ- ER SYSTEM - | 142 |
| Diagnosis Procedure | 104 | VEHICLE SECURITY SYSTEM | 161 |
| B210A STEERING LOCK CONDITION | | | |
| SWITCH | 105 | | |
| Description | 105 | | |
| DTC Logic | 105 | | |

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

SEC

| | | | |
|--|------------|--|------------|
| Wiring Diagram - VEHICLE SECURITY SYSTEM - | 161 | PRECAUTIONS | 235 |
| ECU DIAGNOSIS | 168 | Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER" | 235 |
| BCM (BODY CONTROL MODULE) | 168 | Precaution for Procedure without Cowl Top Cover. | 235 |
| Reference Value | 168 | Precaution Necessary for Steering Wheel Rota- tion after Battery Disconnect | 235 |
| Wiring Diagram - BCM - | 192 | ON-VEHICLE REPAIR | 237 |
| Fail-safe | 206 | KEY SLOT | 237 |
| DTC Inspection Priority Chart | 209 | Exploded View | 237 |
| DTC Index | 210 | Removal and Installation | 237 |
| IPDM E/R (INTELLIGENT POWER DISTRI- BUTION MODULE ENGINE ROOM) | 213 | PUSH BUTTON IGNITION SWITCH | 238 |
| Reference Value | 213 | Exploded View | 238 |
| Wiring Diagram - IPDM E/R - | 221 | Removal and Installation | 238 |
| Fail-safe | 224 | SECURITY INDICATOR LAMP | 239 |
| DTC Index | 226 | Exploded View | 239 |
| SYMPTOM DIAGNOSIS | 227 | Removal and Installation | 239 |
| ENGINE DOES NOT START WHEN INTELLI- GENT KEY IS INSIDE OF VEHICLE | 227 | WITHOUT INTELLIGENT KEY SYSTEM | |
| Description | 227 | BASIC INSPECTION | 240 |
| Diagnosis Procedure | 227 | DIAGNOSIS AND REPAIR WORK FLOW | 240 |
| STEERING DOES NOT LOCK | 228 | Work Flow | 240 |
| Description | 228 | INSPECTION AND ADJUSTMENT | 243 |
| Diagnosis Procedure | 228 | ECM RECOMMUNICATING FUNCTION | 243 |
| SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK | 229 | ECM RECOMMUNICATING FUNCTION : De- scription | 243 |
| Description | 229 | ECM RECOMMUNICATING FUNCTION : Special Repair Requirement | 243 |
| Diagnosis Procedure | 229 | FUNCTION DIAGNOSIS | 244 |
| VEHICLE SECURITY SYSTEM CANNOT BE SET | 230 | NISSAN VEHICLE IMMOBILIZER SYSTEM- NATS | 244 |
| INTELLIGENT KEY | 230 | ENGINE START FUNCTION | 244 |
| INTELLIGENT KEY : Description | 230 | ENGINE START FUNCTION : System Diagram . | 244 |
| INTELLIGENT KEY : Diagnosis Procedure | 230 | ENGINE START FUNCTION : System Descrip- tion | 244 |
| DOOR REQUEST SWITCH | 230 | ENGINE START FUNCTION : Component Parts Location | 246 |
| DOOR REQUEST SWITCH : Description | 230 | ENGINE START FUNCTION : Component Description | 247 |
| DOOR REQUEST SWITCH : Diagnosis Proce- dure | 230 | WARNING FUNCTION | 248 |
| DOOR KEY CYLINDER | 230 | WARNING FUNCTION : System Description | 248 |
| DOOR KEY CYLINDER : Description | 231 | WARNING FUNCTION : Component Parts Loca- tion | 251 |
| DOOR KEY CYLINDER : Diagnosis Procedure ... | 231 | VEHICLE SECURITY SYSTEM | 253 |
| VEHICLE SECURITY ALARM DOES NOT ACTIVATE | 232 | System Diagram | 253 |
| Description | 232 | System Description | 253 |
| Diagnosis Procedure | 232 | Component Parts Location | 255 |
| INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE | 233 | Component Description | 256 |
| Description | 233 | DIAGNOSIS SYSTEM (BCM) | 257 |
| Diagnosis Procedure | 233 | | |
| PRECAUTION | 235 | | |

| | | | | |
|---|------------|--|------------|-----|
| COMMON ITEM | 257 | Diagnosis Procedure | 276 | |
| COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM) | 257 | B2190 NATS ANTENNA AMP. | 277 | A |
| INTELLIGENT KEY | 258 | Description | 277 | |
| INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY) | 258 | DTC Logic | 277 | B |
| MULTIREMOTE ENT | 261 | Diagnosis Procedure | 277 | |
| MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTI REMOTE ENT) | 261 | B2191 DIFFERENCE OF KEY | 280 | C |
| THEFT ALM | 263 | Description | 280 | |
| THEFT ALM : CONSULT-III Function (BCM - THEFT) | 263 | DTC Logic | 280 | |
| IMMU | 264 | Diagnosis Procedure | 280 | D |
| IMMU : CONSULT-III Function (BCM - IMMU) | 264 | B2192 ID DISCORD, IMMU-ECM | 281 | |
| COMPONENT DIAGNOSIS | 266 | Description | 281 | E |
| U1000 CAN COMM CIRCUIT | 266 | DTC Logic | 281 | |
| BCM | 266 | Diagnosis Procedure | 281 | F |
| BCM : Description | 266 | B2193 CHAIN OF ECM-IMMU | 283 | |
| BCM : DTC Logic | 266 | Description | 283 | |
| BCM : Diagnosis Procedure | 266 | DTC Logic | 283 | G |
| IPDM E/R | 266 | Diagnosis Procedure | 283 | |
| IPDM E/R : Description | 266 | B2195 ANTI-SCANNING | 284 | |
| IPDM E/R : DTC Logic | 266 | Description | 284 | |
| IPDM E/R : Diagnosis Procedure | 266 | DTC Logic | 284 | H |
| U1010 CONTROL UNIT (CAN) | 268 | Diagnosis Procedure | 284 | |
| BCM | 268 | B2555 STOP LAMP | 285 | |
| BCM : DTC Logic | 268 | Description | 285 | |
| BCM : Diagnosis Procedure | 268 | DTC Logic | 285 | I |
| BCM : Special Repair Requirement | 268 | Diagnosis Procedure | 285 | |
| P1610 LOCK MODE | 269 | Component Inspection | 286 | J |
| Description | 269 | B2556 PUSH-BUTTON IGNITION SWITCH ... | 287 | |
| DTC Logic | 269 | Description | 287 | |
| Diagnosis Procedure | 269 | DTC Logic | 287 | |
| P1611 ID DISCORD, IMMU-ECM | 270 | Diagnosis Procedure | 287 | |
| Description | 270 | Component Inspection | 288 | SEC |
| DTC Logic | 270 | B2557 VEHICLE SPEED | 289 | |
| Diagnosis Procedure | 270 | Description | 289 | L |
| P1612 CHAIN OF ECM-IMMU | 272 | DTC Logic | 289 | |
| Description | 272 | Diagnosis Procedure | 289 | M |
| DTC Logic | 272 | B2560 STARTER CONTROL RELAY | 290 | |
| Diagnosis Procedure | 272 | Description | 290 | |
| P1614 CHAIN OF IMMU-KEY | 273 | DTC Logic | 290 | N |
| Description | 273 | Diagnosis Procedure | 290 | |
| DTC Logic | 273 | B2601 SHIFT POSITION | 291 | |
| Diagnosis Procedure | 273 | Description | 291 | O |
| P1615 DIFFERENCE OF KEY | 276 | DTC Logic | 291 | |
| Description | 276 | Diagnosis Procedure | 291 | |
| DTC Logic | 276 | Component Inspection | 293 | P |
| | | B2602 SHIFT POSITION | 294 | |
| | | Description | 294 | |
| | | DTC Logic | 294 | |
| | | Diagnosis Procedure | 294 | |
| | | B2603 SHIFT POSITION STATUS | 296 | |
| | | Description | 296 | |

| | | | |
|--|------------|--|------------|
| DTC Logic | 296 | B2612 STEERING STATUS | 318 |
| Diagnosis Procedure | 296 | Description | 318 |
| B2604 PNP SWITCH | 299 | DTC Logic | 318 |
| Description | 299 | Diagnosis Procedure | 318 |
| DTC Logic | 299 | B2617 STARTER RELAY CIRCUIT | 322 |
| Diagnosis Procedure | 299 | Description | 322 |
| B2605 PNP SWITCH | 301 | DTC Logic | 322 |
| Description | 301 | Diagnosis Procedure | 322 |
| DTC Logic | 301 | B2619 BCM | 324 |
| Diagnosis Procedure | 301 | Description | 324 |
| B2606 STEERING LOCK RELAY | 303 | DTC Logic | 324 |
| Description | 303 | Diagnosis Procedure | 324 |
| DTC Logic | 303 | B261A PUSH-BUTTON IGNITION SWITCH ... | 325 |
| Diagnosis Procedure | 303 | Description | 325 |
| B2607 STEERING LOCK RELAY | 304 | DTC Logic | 325 |
| Description | 304 | Diagnosis Procedure | 325 |
| DTC Logic | 304 | B261E VEHICLE TYPE | 328 |
| Diagnosis Procedure | 304 | Description | 328 |
| B2608 STARTER RELAY | 306 | DTC Logic | 328 |
| Description | 306 | Diagnosis Procedure | 328 |
| DTC Logic | 306 | B2108 STEERING LOCK RELAY | 329 |
| Diagnosis Procedure | 306 | Description | 329 |
| B2609 STEERING STATUS | 308 | DTC Logic | 329 |
| Description | 308 | Diagnosis Procedure | 329 |
| DTC Logic | 308 | B2109 STEERING LOCK RELAY | 330 |
| Diagnosis Procedure | 308 | Description | 330 |
| B260B STEERING LOCK UNIT | 312 | DTC Logic | 330 |
| Description | 312 | Diagnosis Procedure | 330 |
| DTC Logic | 312 | B210A STEERING LOCK CONDITION | |
| Diagnosis Procedure | 312 | SWITCH | 331 |
| B260C STEERING LOCK UNIT | 313 | Description | 331 |
| Description | 313 | DTC Logic | 331 |
| DTC Logic | 313 | Diagnosis Procedure | 331 |
| Diagnosis Procedure | 313 | B210B STARTER CONTROL RELAY | 335 |
| B260D STEERING LOCK UNIT | 314 | Description | 335 |
| Description | 314 | DTC Logic | 335 |
| DTC Logic | 314 | Diagnosis Procedure | 335 |
| Diagnosis Procedure | 314 | B210C STARTER CONTROL RELAY | 336 |
| B260F ENGINE STATUS | 315 | Description | 336 |
| Description | 315 | DTC Logic | 336 |
| DTC Logic | 315 | Diagnosis Procedure | 336 |
| Diagnosis Procedure | 315 | B210D STARTER RELAY | 337 |
| B26E9 STEERING STATUS | 316 | Description | 337 |
| Description | 316 | DTC Logic | 337 |
| DTC Logic | 316 | Diagnosis Procedure | 337 |
| Diagnosis Procedure | 316 | B210E STARTER RELAY | 338 |
| B26EA KEY REGISTRATION | 317 | Description | 338 |
| Description | 317 | DTC Logic | 338 |
| DTC Logic | 317 | Diagnosis Procedure | 338 |
| Diagnosis Procedure | 317 | B210F PNP/CLUTCH INTERLOCK SWITCH.. | 340 |

| | | | | |
|---|------------|--|------------|---|
| Description | 340 | STEERING DOES NOT LOCK | 434 | A |
| DTC Logic | 340 | Description | 434 | |
| Diagnosis Procedure | 340 | Diagnosis Procedure | 434 | |
| B2110 PNP/CLUTCH INTERLOCK SWITCH .. | 342 | SECURITY INDICATOR LAMP DOES NOT | | B |
| Description | 342 | TURN ON OR BLINK | 435 | |
| DTC Logic | 342 | Description | 435 | |
| Diagnosis Procedure | 342 | Diagnosis Procedure | 435 | C |
| POWER SUPPLY AND GROUND CIRCUIT ... | 344 | VEHICLE SECURITY SYSTEM CANNOT BE | | |
| BCM | 344 | SET | 436 | D |
| BCM : Diagnosis Procedure | 344 | KEYFOB | 436 | |
| IPDM E/R | 344 | KEYFOB : Description | 436 | E |
| IPDM E/R : Diagnosis Procedure | 344 | KEYFOB : Diagnosis Procedure | 436 | |
| SECURITY INDICATOR LAMP | 346 | DOOR KEY CYLINDER | 436 | F |
| Description | 346 | DOOR KEY CYLINDER : Description | 436 | |
| Component Function Check | 346 | DOOR KEY CYLINDER : Diagnosis Procedure ... | 436 | |
| Diagnosis Procedure | 346 | VEHICLE SECURITY ALARM DOES NOT | | G |
| KEY WARNING LAMP | 348 | ACTIVATE | 437 | |
| Description | 348 | Description | 437 | |
| Component Function Check | 348 | Diagnosis Procedure | 437 | |
| Diagnosis Procedure | 348 | KEYFOB INSERT INFORMATION DOES | | H |
| NISSAN VEHICLE IMMOBILIZER SYSTEM- | | NOT OPERATE | 438 | |
| NATS | 349 | Description | 438 | I |
| Wiring Diagram - NISSAN VEHICLE IMMOBILIZ- | | Diagnosis Procedure | 438 | |
| ER SYSTEM - | 349 | PRECAUTION | 440 | J |
| VEHICLE SECURITY SYSTEM | 368 | PRECAUTIONS | 440 | |
| Wiring Diagram - VEHICLE SECURITY SYSTEM | | Precaution for Supplemental Restraint System | | |
| - | 368 | (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- | | |
| ECU DIAGNOSIS | 375 | SIONER" | 440 | |
| BCM (BODY CONTROL MODULE) | 375 | Precaution for Procedure without Cowl Top Cover. | 440 | |
| Reference Value | 375 | Precaution Necessary for Steering Wheel Rota- | | |
| Wiring Diagram - BCM - | 399 | tion after Battery Disconnect | 440 | |
| Fail-safe | 413 | ON-VEHICLE REPAIR | 442 | L |
| DTC Inspection Priority Chart | 416 | KEY SLOT | 442 | |
| DTC Index | 417 | Exploded View | 442 | M |
| IPDM E/R (INTELLIGENT POWER DISTRI- | | Removal and Installation | 442 | |
| BUTION MODULE ENGINE ROOM) | 420 | PUSH BUTTON IGNITION SWITCH | 443 | N |
| Reference Value | 420 | Exploded View | 443 | |
| Wiring Diagram - IPDM E/R - | 428 | Removal and Installation | 443 | |
| Fail-safe | 431 | SECURITY INDICATOR LAMP | 444 | O |
| DTC Index | 433 | Exploded View | 444 | |
| SYMPTOM DIAGNOSIS | 434 | Removal and Installation | 444 | P |

SEC

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

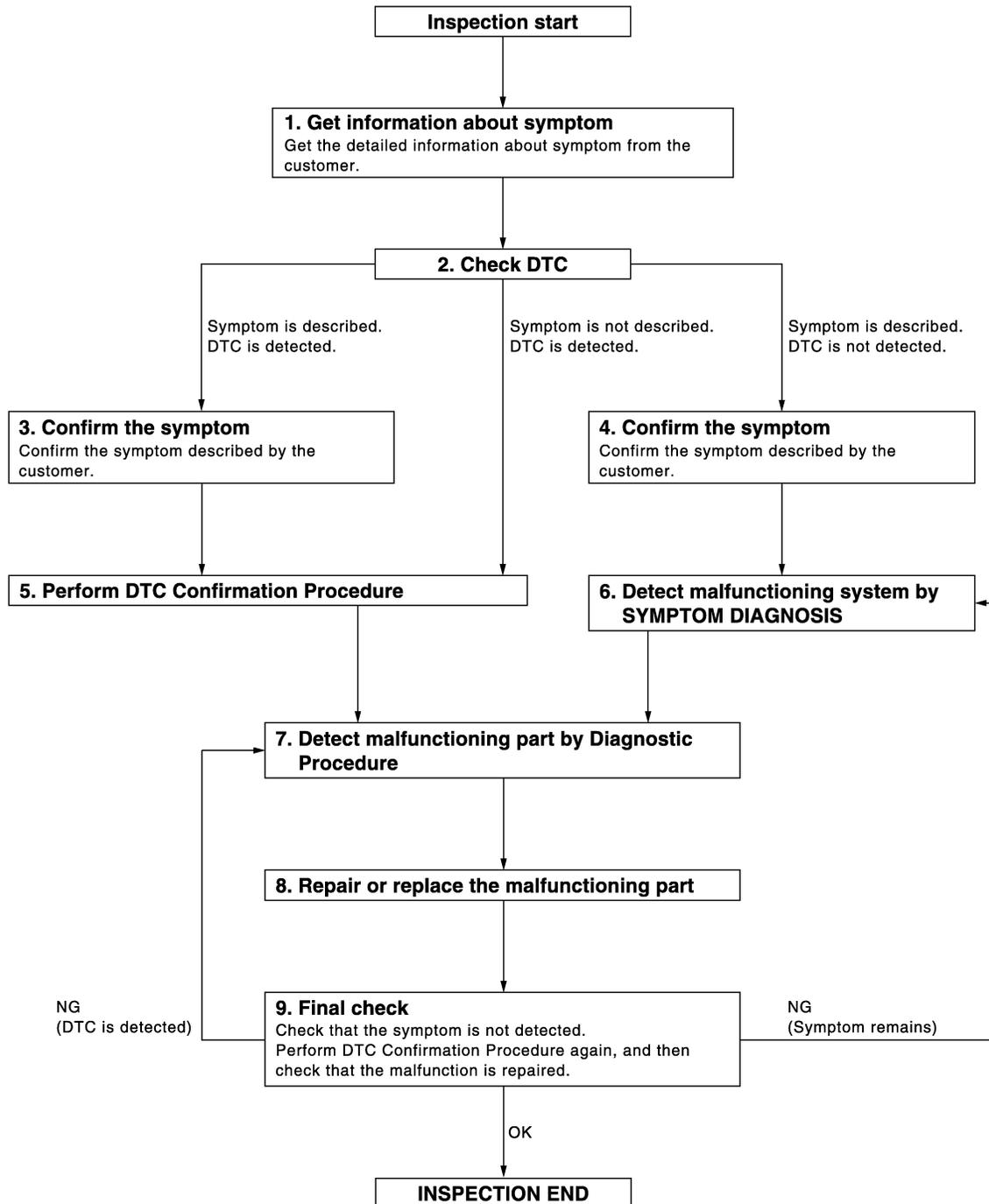
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000003375577

OVERALL SEQUENCE



DETAILED FLOW

JMKIA3449GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

1.GET INFORMATION ABOUT 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 and IPDM E/R.
2. Perform the following procedure if DTC is detected.
 - Record DTC and freeze frame data (Print them out with CONSULT-III.)
 - 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 detected>>GO TO 3.
- Symptom is described, DTC is not detected>>GO TO 4.
- Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

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 detected DTC, and then check that DTC is detected again.
At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to [SEC-209, "DTC Inspection Priority Chart"](#) (BCM) or [SEC-226, "DTC Index"](#) (IPDM E/R), and determine trouble diagnosis order.

Is DTC detected?

- YES >> GO TO 7.
- NO >> Refer to [GI-40, "Intermittent Incident"](#).

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

>> GO TO 7.

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

Is malfunctioning part detected?

- YES >> GO TO 8.
- NO >> Check voltage of related BCM terminals using CONSULT-III.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

SEC

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

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 detected, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction has been repaired securely.

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

Does the symptom reappear?

YES (DTC is detected)>>GO TO 7.

YES (Symptom remains)>>GO TO 6.

NO >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT ECM RECOMMUNICATING FUNCTION

ECM RECOMMUNICATING FUNCTION : Description

INFOID:000000003375578

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

*: 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-IVIS/NVIS.
- 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 RECOMMUNICATING FUNCTION : Special Repair Requirement

INFOID:000000003375579

1. PERFORM ECM RECOMMUNICATING FUNCTION

1. Install ECM.
2. Insert the registered Intelligent Key*, turn ignition switch to "ON".
*: 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-IVIS/NVIS.

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

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

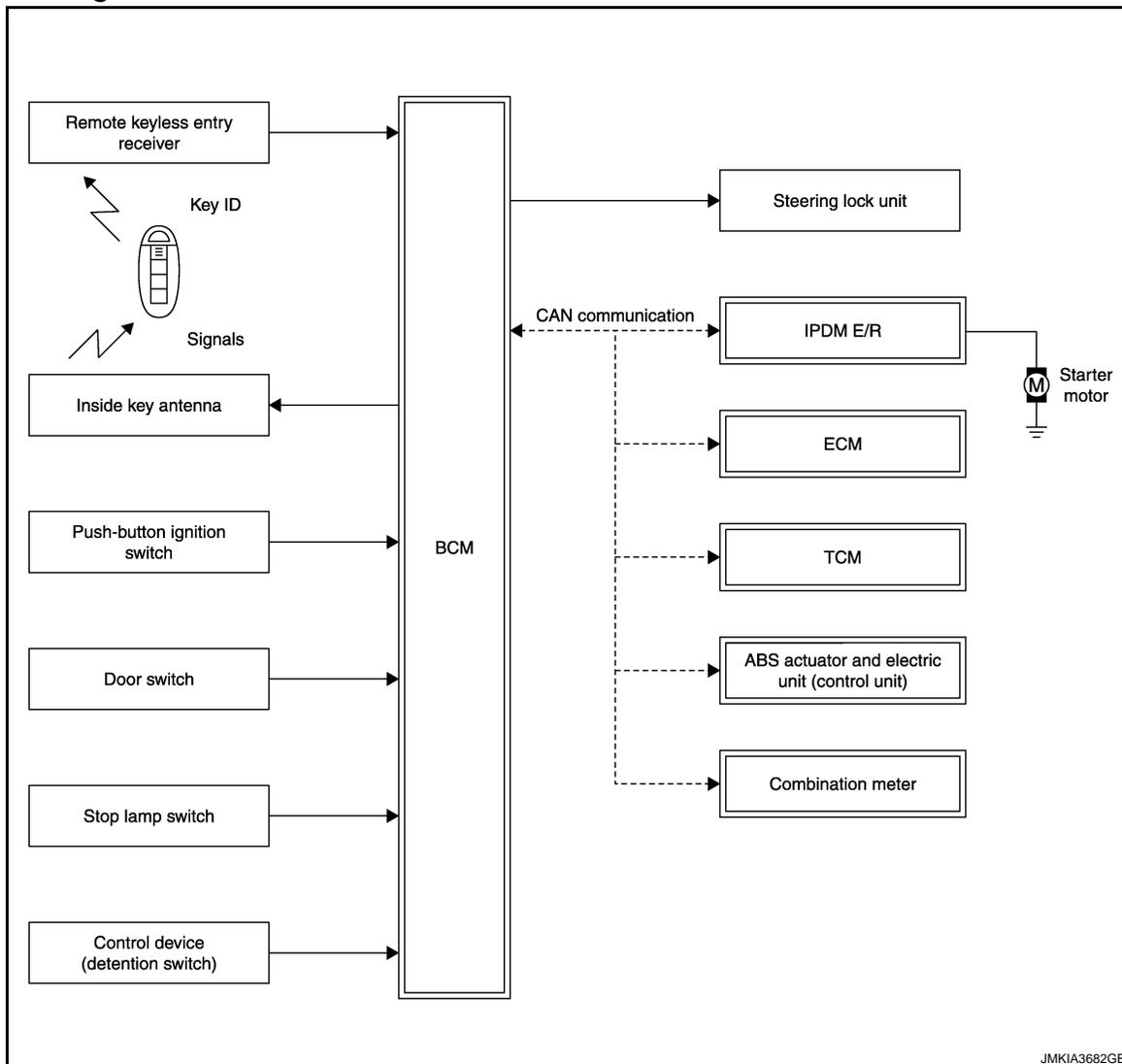
[WITH INTELLIGENT KEY SYSTEM]

FUNCTION DIAGNOSIS

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

System Diagram

INFOID:000000003375580



System Description

INFOID:000000003375581

SYSTEM DESCRIPTION

- The engine start function of Intelligent Key system is a system that makes it possible to start and stop the engine without removing the key. It verifies the electronic ID using two-way communications when pressing the push-button ignition 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.

- Intelligent Key has 2 IDs [for Intelligent Key and for NVIS (NATS)]. It can perform the door lock/unlock operation and the push-button ignition switch operation when the registered Intelligent Key is carried.
- When the Intelligent Key battery is discharged, it can be used as emergency back-up by inserting the Intelligent Key to the key slot. At that time, perform the NVIS (NATS) ID verification. If it is used when the Intelligent Key is carried, perform the Intelligent Key ID verification.
- If the ID is successfully verified, and when push-button ignition switch is pressed, steering lock will be released and initiating the engine will be possible.

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- If the door lock/unlock operation is performed when the Intelligent Key battery is discharged, all doors lock/unlock can be performed by operating the driver door key cylinder using the mechanical key set in the Intelligent Key.
 - Intelligent Key can be registered up to 4 keys (Including the standard Intelligent Key) on request from the owner.
- NOTE:**
- Refer to [DLK-22, "INTELLIGENT KEY SYSTEM : System Description"](#) for any functions other than engine start function of Intelligent Key system.

PRECAUTIONS FOR INTELLIGENT KEY SYSTEM

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

OPERATION WHEN INTELLIGENT KEY IS CARRIED

1. When the push-button ignition switch is pressed, the BCM signals the inside key antenna and transmits the request signal to the Intelligent Key.
 2. The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the BCM via the remote keyless entry receiver.
 3. The Intelligent Key receives the Intelligent Key ID signal and verifies it with the registered ID.
 4. BCM transmits the steering lock unlock signal to steering lock unit and IPDM E/R if the verification results are OK.
 5. IPDM E/R turns the steering lock relay ON and supplies power to the steering lock unit.
 6. Release of the steering lock.
 7. BCM transmits the power supply stop signal to IPDM E/R when it confirms that the steering lock is in the unlock condition.
 8. IPDM E/R turns the steering lock relay OFF and stops power supply to the steering lock unit.
 9. BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
 10. IPDM E/R turns the ignition relay ON and starts the ignition power supply.
 11. BCM confirms that the shift position is P or N.
 12. 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.
 13. IPDM E/R turns the starter control relay ON when receiving the starter request signal.
 14. Battery power is supplied through the starter relay and the starter control relay to operate the starter motor and to start the cranking.
- CAUTION:**
- If a malfunction is detected in the Intelligent Key system, the “KEY” warning lamp in the combination meter illuminates. At that time, the engine cannot be started.**
15. When BCM received feedback signal from ECM acknowledging the engine has been initiated, the BCM transmits a stop signal to IPDM E/R and stops the cranking by turning OFF the starter motor relay. (If the engine initiating has failed, the cranking will stop automatically within 5 seconds.)

CAUTION:

When the Intelligent Key is carried outside of the vehicle (inside key antenna detection area) with the power supply in ACC or ON position, even if the engine start condition* is satisfied, the engine cannot be started.

*: For the engine start condition, refer to “PUSH-BUTTON IGNITION SWITCH OPERATION PROCEDURE”.

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 KEY SLOT IS USED

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

For details relating to starting the engine using key slot, refer to [SEC-18, "System Description"](#).

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

BATTERY SAVER SYSTEM

When all the following conditions are met for 60 minutes, the battery saver system will cut off the power supply to prevent battery discharge.

- The ignition switch is in the ACC position
- All doors are closed
- Selector lever is in the P position

Reset Condition of Battery Saver System

In order to prevent the battery from discharging, the battery saver system will cut off the power supply when all doors are closed, the selector lever is on P position and the ignition switch is left on ACC position for 60 minutes. If any of the following conditions are met the battery saver system is released and the steering will change automatically to lock position from OFF position.

- Opening any door
- Operating with request switch on door lock
- Operating with Intelligent Key on door lock

Press push-button ignition switch and ignition switch will change to ACC position from OFF position.

STEERING LOCK OPERATION

Steering is locked by steering lock unit when ignition switch is in the OFF position, selector lever is in the P position and any of the following conditions are met.

- Opening door
- Closing door
- Door is locked with request switch
- Door is locked with Intelligent Key

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

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

NOTE:

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

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

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

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

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

Emergency stop operation

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

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

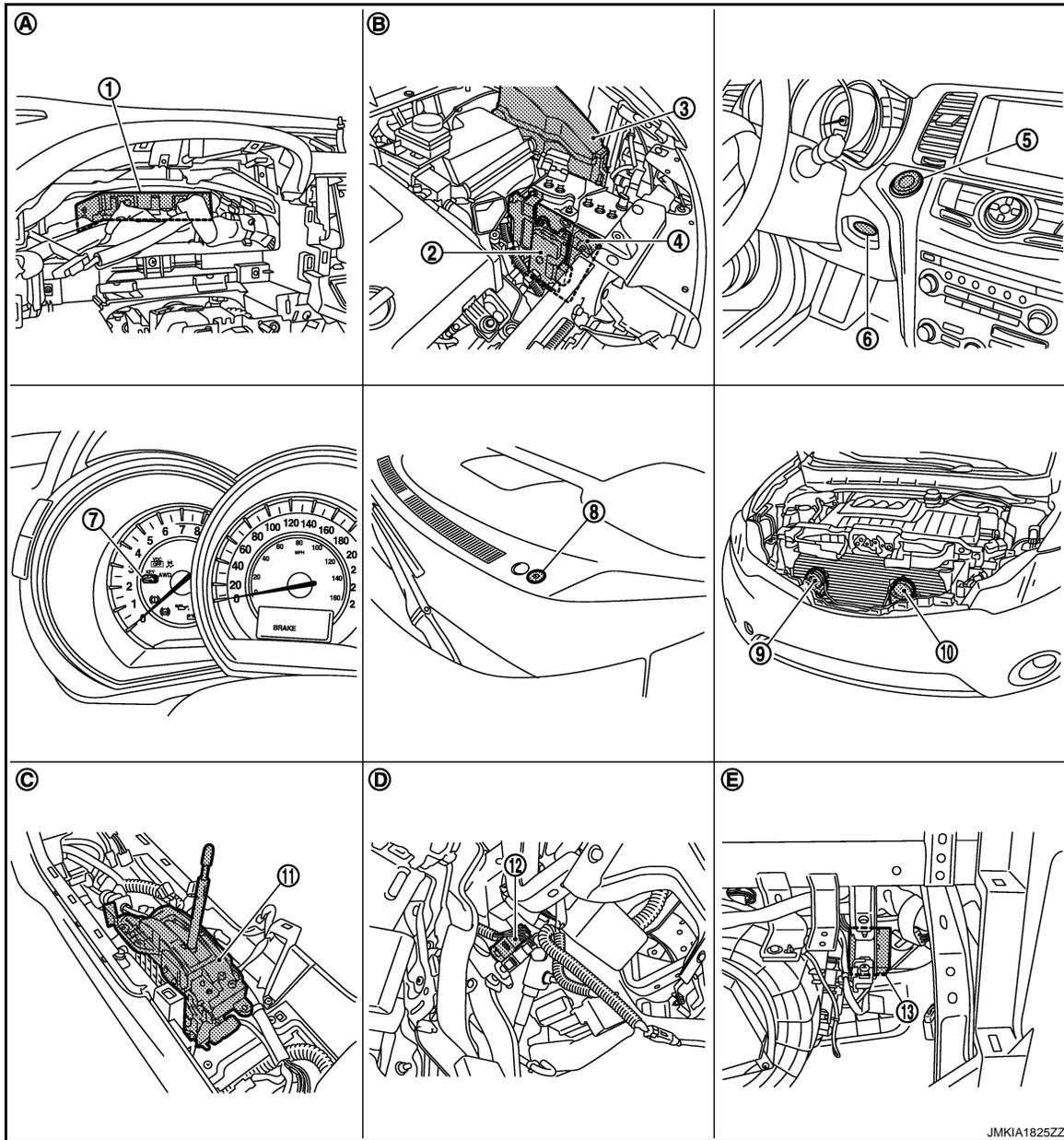
< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

Component Parts Location

INFOID:000000003375582



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

SEC

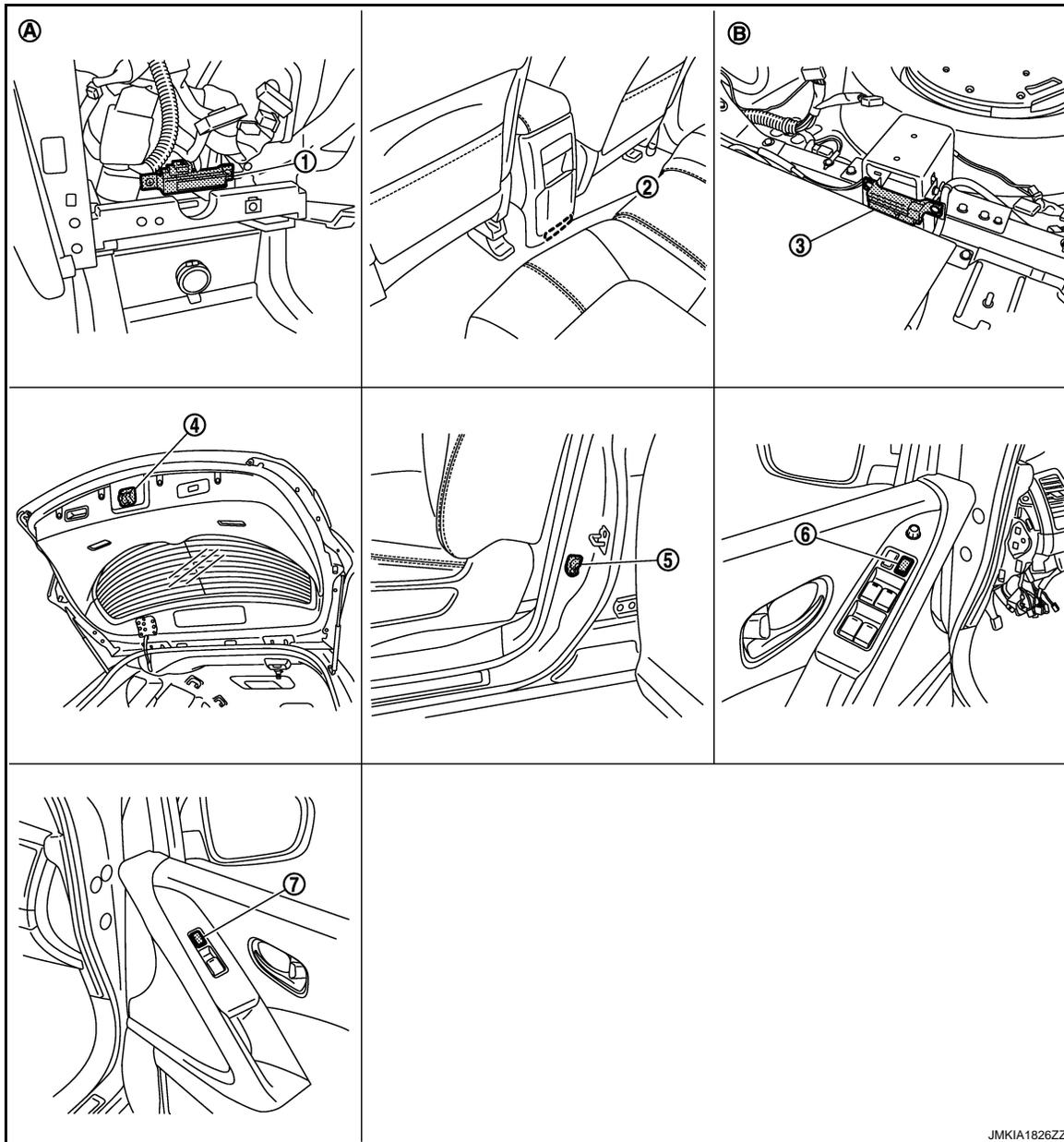
- | | | |
|---|---|--|
| 1. BCM M118, M119, M121, M122, M123 | 2. TCM F23 | 3. IPDM E/R E10, E11, F12 |
| 4. ECM E16 | 5. Push-button ignition switch M101 | 6. Key slot M99 |
| 7. Combination meter (key warning lamp) M34 | 8. Security indicator lamp M100 | 9. Horn (high) E340, E341 |
| 10. Horn (low) E342, E343 | 11. Control device (detention switch) M57 | 12. Stop lamp switch TYPE A: E115 TYPE B: E116 |
| 13. Remote keyless entry receiver M78 | | |
- A. Behind the combination meter B. Engine room (LH) C. View with the center console assembly removed
- D. Behind the instrument lower panel LH E. Behind the instrument lower panel RH

JMKIA1825ZZ

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



- | | | |
|--|--|--|
| 1. Inside key antenna (instrument center) M105 | 2. Inside key antenna (console) M305 | 3. Inside key antenna (luggage room) B86 |
| 4. Back door lock assembly (back door switch) D180 | 5. Front door switch (driver side) B34 | 6. power window main switch (door lock and unlock switch) D5, D6 |
| 7. Front power window switch (passenger side) D45 | | |
| A. Behind the cluster lid C assembly | B. Under the rear seat seatback | |

Component Description

INFOID:000000003375583

| Component | Reference |
|-----------------------------|-------------------------|
| BCM | SEC-98 |
| Steering lock unit | SEC-86 |
| Push-button ignition switch | SEC-99 |
| Door switch | DLK-103 |

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Component | Reference |
|-----------------------------------|-------------------------|
| Control device (detention switch) | SEC-65 |
| Inside key antenna | DLK-95 |
| Remote keyless entry receiver | DLK-120 |
| Stop lamp switch | SEC-59 |
| Park/neutral position switch | SEC-73 |
| Steering lock relay | SEC-77 |
| Starter relay | SEC-80 |
| Starter control relay | SEC-109 |
| Security indicator lamp | SEC-120 |
| Key warning lamp | SEC-122 |

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

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

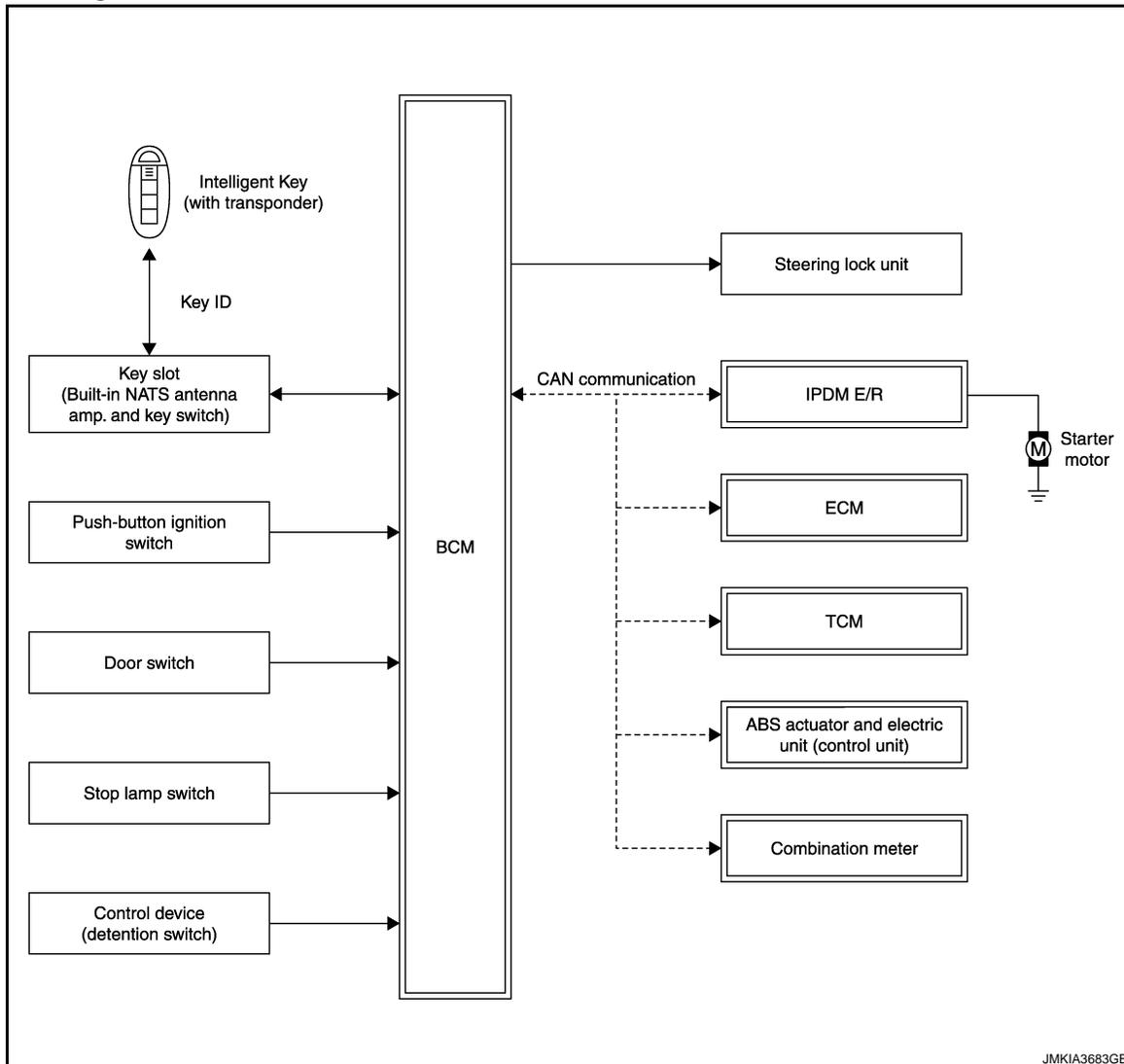
< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

System Diagram

INFOID:000000003375584



System Description

INFOID:000000003375585

SYSTEM DESCRIPTION

- The NVIS (NATS) is an anti-theft system by registering an Intelligent Key ID in to the vehicle and prevents the engine being started by an unregistered Intelligent Key. It has a higher protection against auto thefts that duplicate mechanical key.
- It performs the ID verification when starting the engine in the same way as the Intelligent Key system. But, it performs the NVIS (NATS) ID verification when inserting the Intelligent Key and performs the Intelligent Key ID verification when carrying the Intelligent Key.
- The mechanical key integrated in the Intelligent Key cannot start the engine. When the Intelligent Key battery is discharged, the NVIS (NATS) ID verification memorized to the transponder integrated with Intelligent Key is performed by inserting the Intelligent Key into the key slot. If the verification results are OK, the engine start operation can be performed by the push-button ignition switch operation.
- Locate the security indicator and apply the anti-theft system equipment sticker, forewarn that the NVIS (NATS) is onboard with the model.
- Security indicator lamp always blinks when the power supply position is in any position except the ON position.
- Intelligent Key can be registered up to 4 keys (Including the standard ignition key) on request from the owner.

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

- The specified registration is required when replacing ECM, BCM or Intelligent Key. The registrations procedure for NVIS (NATS) and registration procedure for Intelligent Key when installing the BCM, refer to CONSULT-III Operation Manual NATS-IVIS/NVIS.
- Possible symptom of NVIS (NATS) malfunction is "Engine can not start". The engine can be started with the Intelligent Key system and NVIS (NATS). Identify the possible causes according to "Work Flow", Refer to [SEC-8, "Work Flow"](#).
- If ECM other than Genuine NISSAN is installed, the engine cannot be started. For ECM replacement procedure, refer to [SEC-11, "ECM RECOMMUNICATING FUNCTION : Special Repair Requirement"](#).

PRECAUTIONS FOR KEY REGISTRATION

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

SECURITY INDICATOR LAMP

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

NOTE:

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

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

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

NOTE:

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

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

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

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

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

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

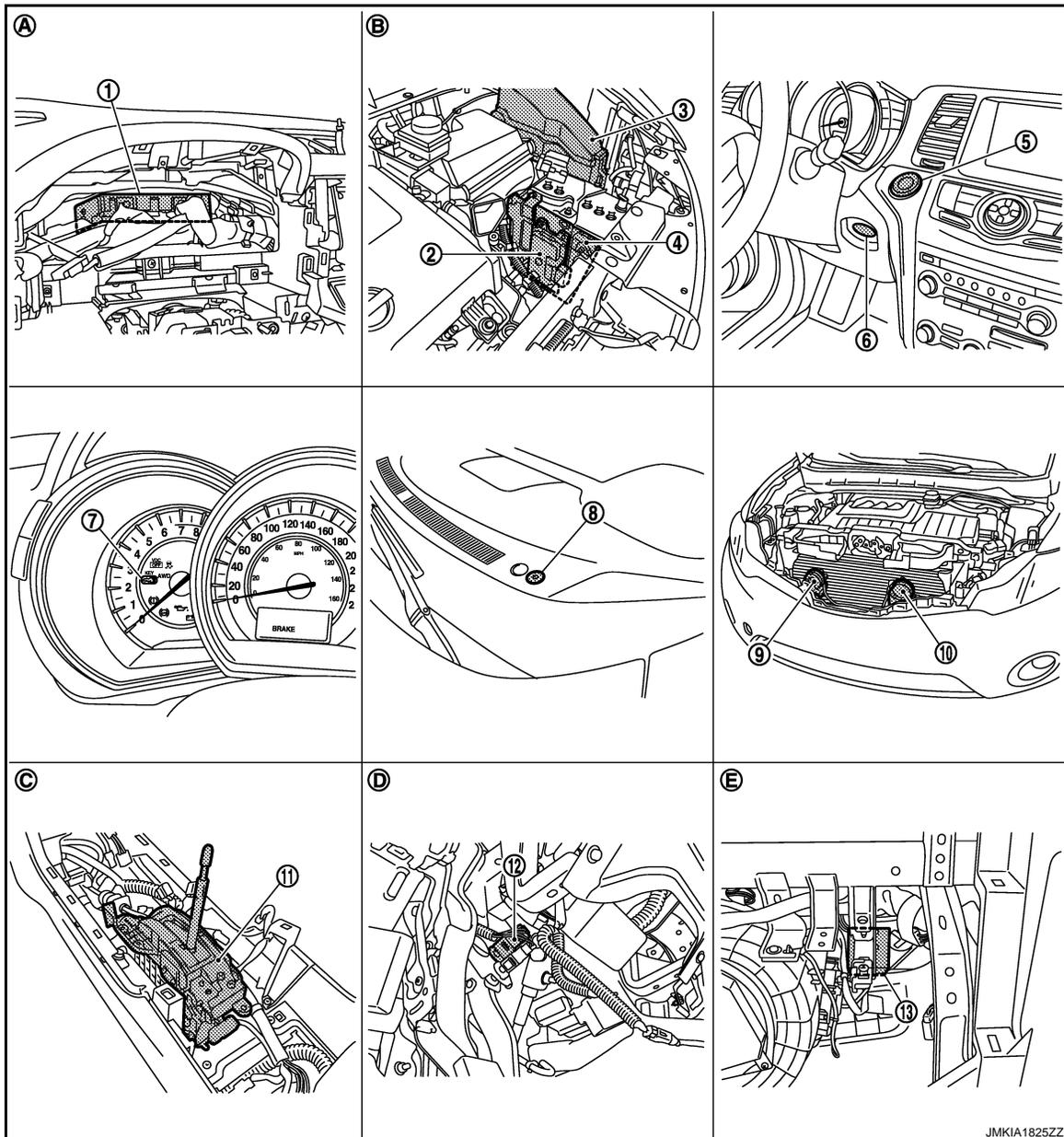
| Power supply position | Engine start/stop condition | | Push-button ignition switch operation frequency |
|---|-----------------------------|---------------------------------|---|
| | Selector lever | Brake pedal operation condition | |
| Engine is running → ACC | — | — | Emergency stop operation |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

Emergency stop operation

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

Component Parts Location

INFOID:000000003468562



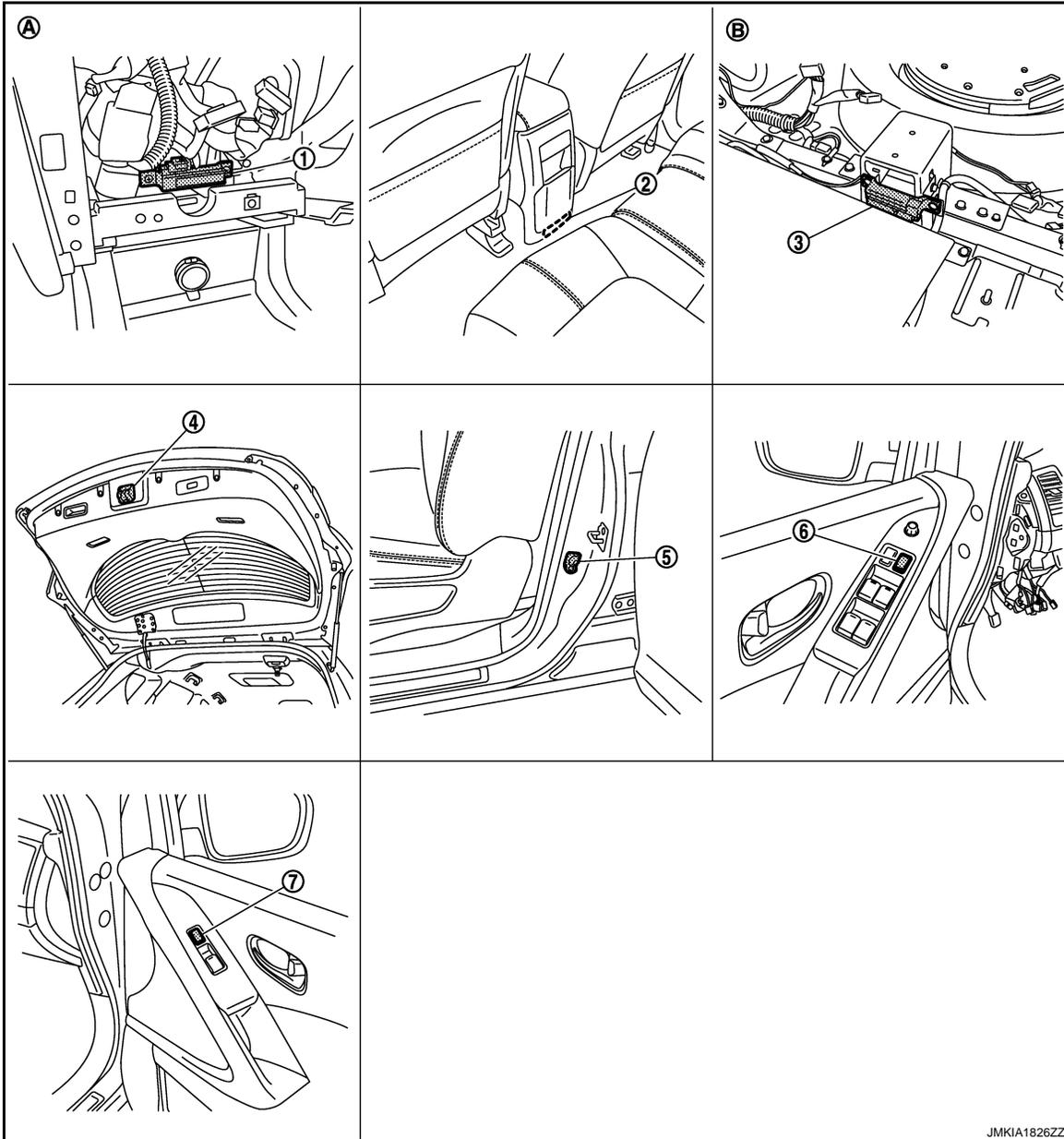
- | | | |
|---|-------------------------------------|---------------------------|
| 1. BCM M118, M119, M121, M122, M123 | 2. TCM F23 | 3. IPDM E/R E10, E11, F12 |
| 4. ECM E16 | 5. Push-button ignition switch M101 | 6. Key slot M99 |
| 7. Combination meter (key warning lamp) M34 | 8. Security indicator lamp M100 | 9. Horn (high) E340, E341 |

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

- | | | | |
|---|---|--|---|
| 10. Horn (low) E342, E343 | 11. Control device (detention switch) M57 | 12. Stop lamp switch TYPE A: E115 TYPE B: E116 | A |
| 13. Remote keyless entry receiver M78 | | | |
| A. Behind the combination meter | B. Engine room (LH) | C. View with the center console assembly removed | B |
| D. Behind the instrument lower panel LH | E. Behind the instrument lower panel RH | | C |



- | | | | |
|--|--|--|---|
| 1. Inside key antenna (instrument center) M105 | 2. Inside key antenna (console) M305 | 3. Inside key antenna (luggage room) B86 | D |
| 4. Back door lock assembly (back door switch) D180 | 5. Front door switch (driver side) B34 | 6. power window main switch (door lock and unlock switch) D5, D6 | E |
| 7. Front power window switch (passenger side) D45 | | | F |
| A. Behind the cluster lid C assembly | B. Under the rear seat seatback | | G |

SEC

L

M

N

O

P

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Component Description

INFOID:000000003375587

| Component | Reference |
|-----------------------------------|-------------------------|
| BCM | SEC-98 |
| Steering lock unit | SEC-86 |
| Push-button ignition switch | SEC-99 |
| Door switch | DLK-103 |
| key slot | DLK-137 |
| Control device (detention switch) | SEC-65 |
| Inside key antenna | DLK-95 |
| Remote keyless entry receiver | DLK-120 |
| Stop lamp switch | SEC-59 |
| Park/neutral position switch | SEC-73 |
| Steering lock relay | SEC-103 |
| Starter relay | SEC-80 |
| Starter control relay | SEC-103 |
| Security indicator lamp | SEC-120 |
| Key warning lamp | SEC-122 |

VEHICLE SECURITY SYSTEM

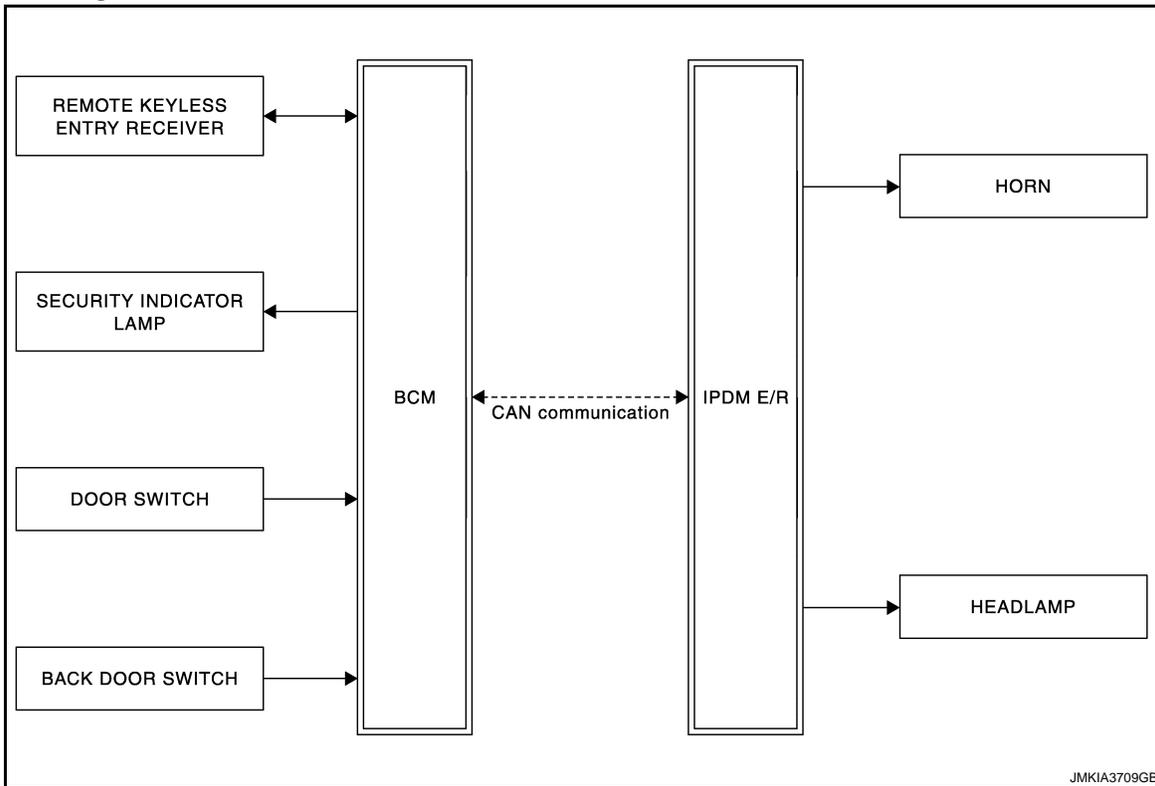
< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

System Diagram

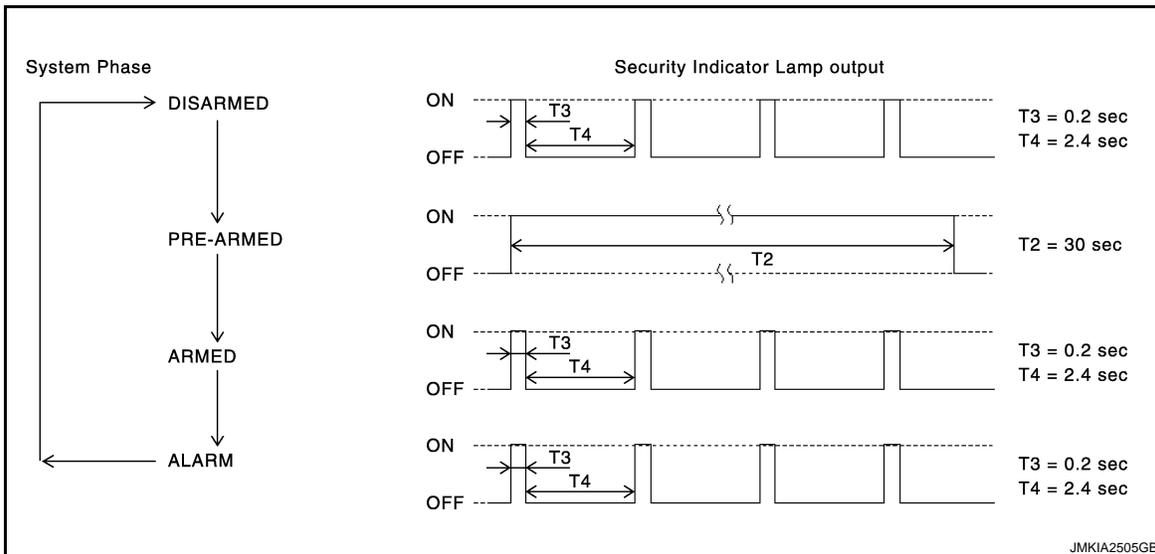
INFOID:000000003375588



System Description

INFOID:000000003375589

OPERATION FLOW



SETTING THE VEHICLE SECURITY SYSTEM

Initial Condition

- Ignition switch is in OFF position.

Disarmed Phase

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

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

SEC

VEHICLE SECURITY SYSTEM

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

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

Pre-armed Phase and Armed Phase

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

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

CANCELING THE SET VEHICLE SECURITY SYSTEM

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

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

CANCELING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

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

ACTIVATING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

Check that the system is in the armed phase. (The security indicator lamp blinks every 2.4 seconds.)

When the following operation 1 or 2 is performed, the system sounds the horns and flashes the headlamps for about 50 seconds.

1. Back door or any door is opened during armed phase.
2. Disconnecting and connecting the battery connector before canceling armed phase.

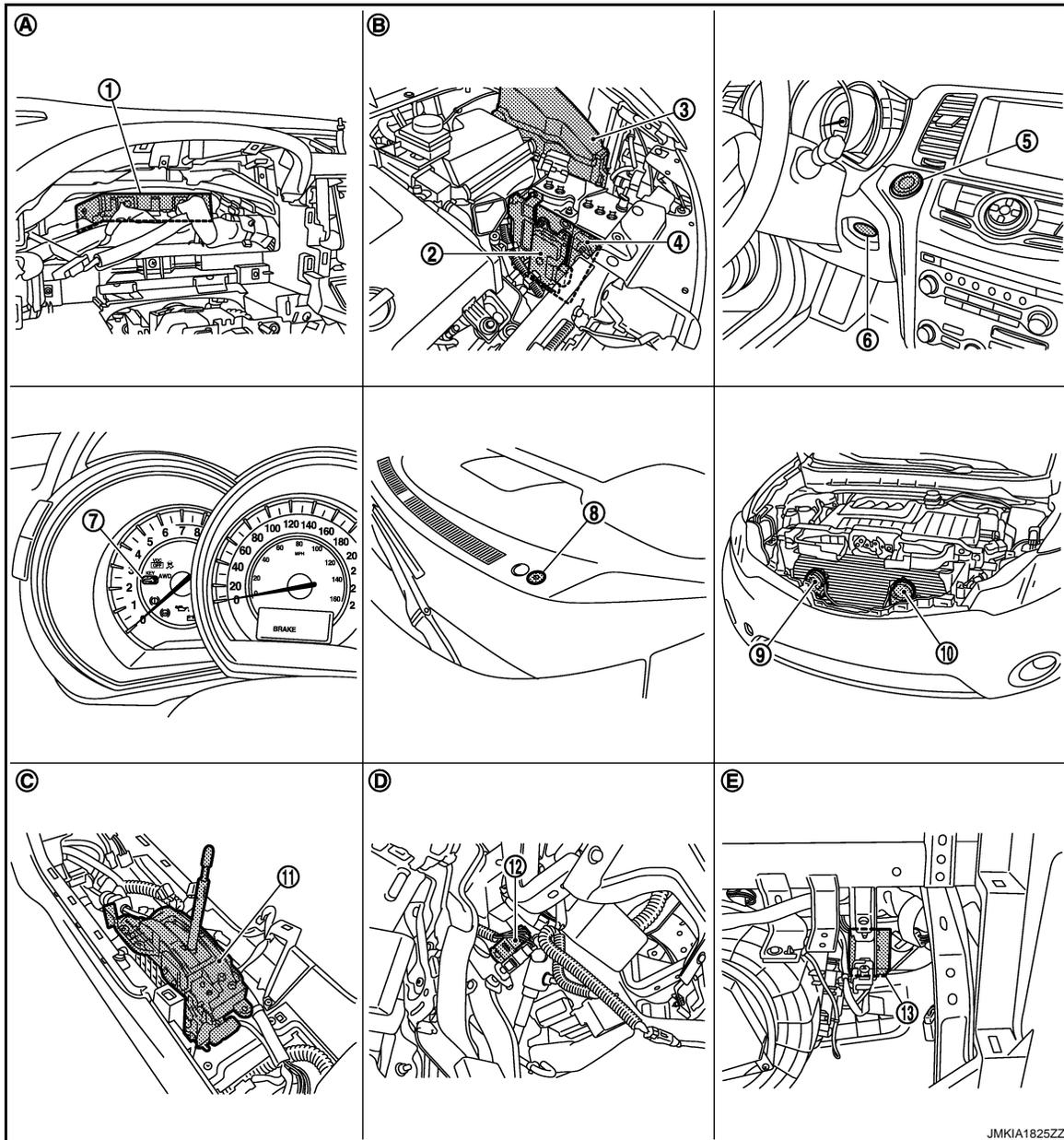
VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Component Parts Location

INFOID:000000003468563



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

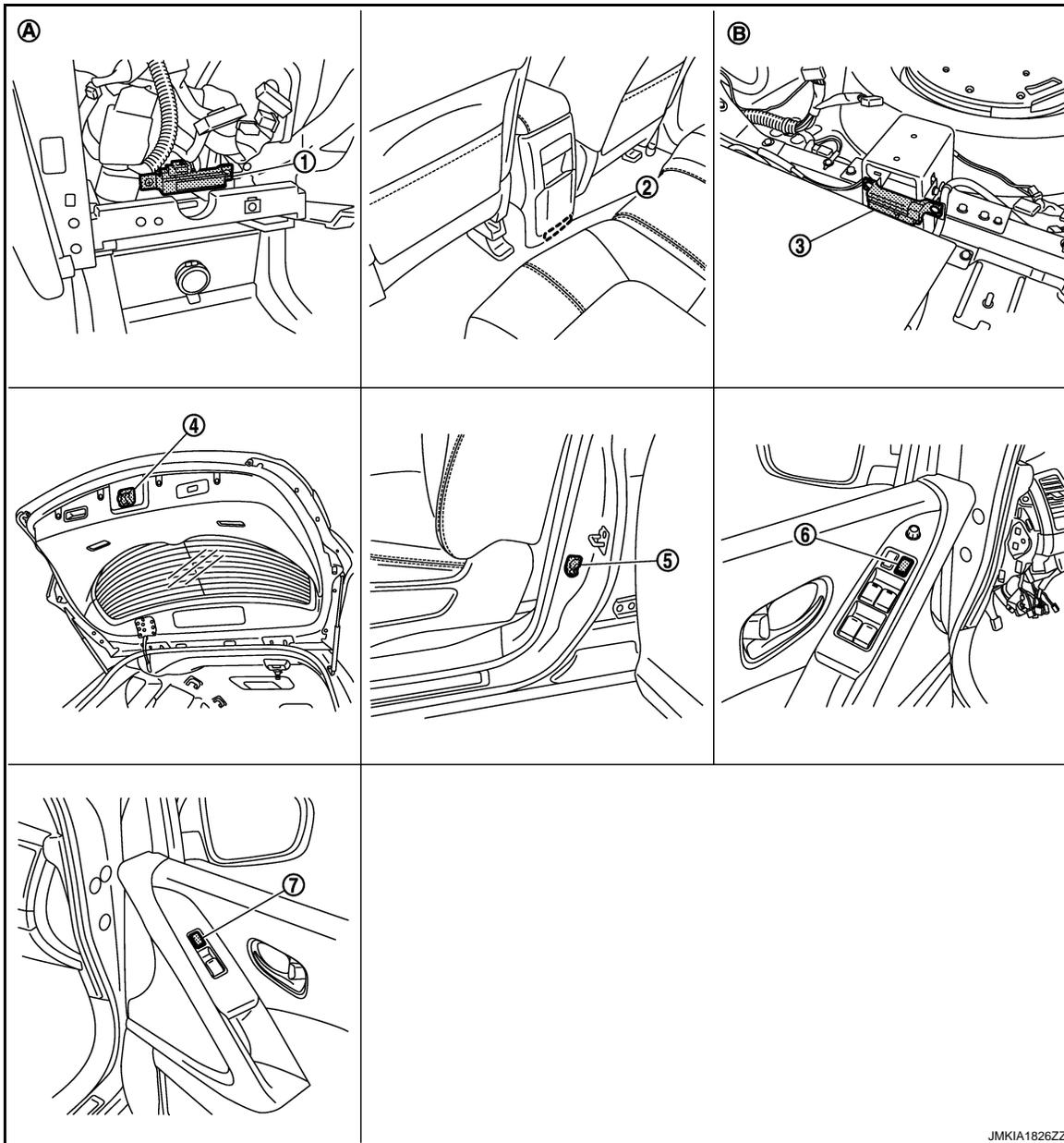
SEC

- | | | |
|---|---|--|
| 1. BCM M118, M119, M121, M122, M123 | 2. TCM F23 | 3. IPDM E/R E10, E11, F12 |
| 4. ECM E16 | 5. Push-button ignition switch M101 | 6. Key slot M99 |
| 7. Combination meter (key warning lamp) M34 | 8. Security indicator lamp M100 | 9. Horn (high) E340, E341 |
| 10. Horn (low) E342, E343 | 11. Control device (detention switch) M57 | 12. Stop lamp switch TYPE A: E115 TYPE B: E116 |
| 13. Remote keyless entry receiver M78 | | |
| A. Behind the combination meter | B. Engine room (LH) | C. View with the center console assembly removed |
| D. Behind the instrument lower panel LH | E. Behind the instrument lower panel RH | |

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JMKIA1826ZZ

- | | | |
|--|--|--|
| 1. Inside key antenna (instrument center) M105 | 2. Inside key antenna (console) M305 | 3. Inside key antenna (luggage room) B86 |
| 4. Back door lock assembly (back door switch) D180 | 5. Front door switch (driver side) B34 | 6. power window main switch (door lock and unlock switch) D5, D6 |
| 7. Front power window switch (passenger side) D45 | | |
| A. Behind the cluster lid C assembly | B. Under the rear seat seatback | |

Component Description

INFOID:000000003375591

| Component | Reference |
|-------------------------|-------------------------|
| BCM | SEC-98 |
| Horn relay 1 | DLK-141 |
| Horn relay 2 | DLK-141 |
| Security indicator lamp | SEC-120 |

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Component | Reference |
|---|-------------------------|
| Door switch | DLK-103 |
| Back door lock assembly (back door witch) | DLK-105 |
| Door key cylinder switch | DLK-118 |

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000003566303

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. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | <ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM. |

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|-----------------------------|----------------|--------------|-------------|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp timer | INT LAMP | × | × | × |
| Remote keyless entry system | MULTI REMOTE ENT*1 | × | × | × |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | ×*2 | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| — | AIR CONDITONER*3 | | | |
| <ul style="list-style-type: none"> Intelligent Key system Engine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| NVIS - NATS | IMMU | | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Back door opener system | TRUNK | | × | × |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × |

NOTE:

- *1: At models with Intelligent Key system this item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

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

FREEZE FRAME DATA (FFD)

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

| CONSULT screen item | Indication/Unit | Description | |
|---------------------|---|--|--|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | |
| Vehicle Condition | SLEEP>LOCK | Power position status of the moment a particular DTC is detected | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK") |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) |
| | LOCK>ACC | | While turning power supply position from "LOCK" to "ACC" |
| | ACC>ON | | While turning power supply position from "ACC" to "IGN" |
| | RUN>ACC | | While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) |
| | CRANK>RUN | | While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it) |
| | RUN>URGENT | | While turning power supply position from "RUN" to "ACC" (Emergency stop operation) |
| | ACC>OFF | | While turning power supply position from "ACC" to "OFF" |
| | OFF>LOCK | | While turning power supply position from "OFF" to "LOCK" |
| | OFF>ACC | | While turning power supply position from "OFF" to "ACC" |
| | ON>CRANK | | While turning power supply position from "IGN" to "CRANKING" |
| | OFF>SLEEP | | While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode |
| | LOCK>SLEEP | | While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode |
| | LOCK | | Power supply position is "LOCK" (Ignition switch OFF with steering is locked.) |
| | OFF | | Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.) |
| | ACC | | Power supply position is "ACC" (Ignition switch ACC) |
| | ON | | Power supply position is "IGN" (Ignition switch ON with engine stopped) |
| ENGINE RUN | Power supply position is "RUN" (Ignition switch ON with engine running) | | |
| CRANKING | Power supply position is "CRANKING" (At engine cranking) | | |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | |

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)

INFOID:000000003375593

BCM CONSULT-III FUNCTION

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

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Diagnosis mode | Function Description |
|-------------------|--|
| WORK SUPPORT | Changes the setting for each system function. |
| SELF-DIAG RESULTS | Displays the diagnosis results judged by BCM. |
| DATA MONITOR | The BCM input/output signals are displayed. |
| ACTIVE TEST | The signals used to activate each device are forcibly supplied from BCM. |

WORK SUPPORT

| Monitor item | Description |
|--------------------------|--|
| REMO CONT ID CONFIR | It can be checked whether Intelligent Key ID code is registered or not in this mode. |
| AUTO LOCK SET | Auto door lock time can be changed in this mode. <ul style="list-style-type: none"> • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes |
| LOCK/UNLOCK BY I-KEY | Door lock/unlock function by door request switch (driver side, passenger side and back door) mode can be changed to operate (ON) or not operate (OFF) in this mode. |
| ENGINE START BY I-KEY | Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode. |
| TRUNK/GLASS HATCH OPEN | Buzzer reminder function mode by back door request switch can be changed to operate (ON) or not operate (OFF) with this mode. |
| PANIC ALARM SET | Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. <ul style="list-style-type: none"> • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec. |
| PW DOWN SET | Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. <ul style="list-style-type: none"> • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec. |
| TRUNK OPEN DELAY | NOTE: This item is displayed, but cannot be supported. |
| LO- BATT OF KEY FOB WARN | Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode. |
| ANTI KEY LOCK IN FUNCTI | Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode. |
| HAZARD ANSWER BACK | Hazard reminder function mode can be selected from the following with this mode. <ul style="list-style-type: none"> • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK/UNLOCK: Lock/unlock operation • OFF: Non-operation |
| ANS BACK I-KEY LOCK | Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode. <ul style="list-style-type: none"> • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation |
| ANS BACK I-KEY UNLOCK | Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode. |
| SHORT CRANKING OUTPUT | Starter motor can operate during the times below. <ul style="list-style-type: none"> • 70 msec • 100 msec • 200 msec |
| INSIDE ANT DIAGNOSIS | This function allows inside key antenna self-diagnosis. |
| HORN WITH KEYLESS LOCK | Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode. |

SELF-DIAG RESULT

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

Refer to [SEC-210, "DTC Index"](#).

DATA MONITOR

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

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]

| Monitor Item | Condition |
|---------------|--|
| RKE-TR/BD | NOTE: This item is displayed, but cannot be monitored. |
| RKE-PANIC | Indicates [ON/OFF] condition of PANIC button of Intelligent Key. |
| RKE-P/W OPEN | Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key. |
| RKE-MODE CHG | Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key. |
| RKE OPE COUN1 | When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing. |
| RKE OPE COUN2 | NOTE: This item is displayed, but cannot be monitored. |

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

ACTIVE TEST

| Test item | Description |
|--------------------|--|
| BATTERY SAVER | This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched. |
| PW REMOTO DOWN SET | This test is able to check power window down operation. The power window down will be activated after "ON" on CONSULT-III screen is touched. |
| INSIDE BUZZER | This test is able to check warning chime in combination meter operation. <ul style="list-style-type: none"> • Take away warning chime sounds when "TAKE OUT" on CONSULT-III screen is touched. • Key warning chime sounds when "KEY WARN" on CONSULT-III screen is touched. • P position warning chime sounds when "P RNG WARN" on CONSULT-III screen is touched. • ACC warning chime sounds when "ACC WARN" on CONSULT-III screen is touched. |
| OUTSIDE BUZZER | This test is able to check Intelligent Key warning buzzer operation. The Intelligent Key warning buzzer will be activated after "ON" on CONSULT-III screen is touched. |
| INDICATOR | This test is able to check warning lamp operation. <ul style="list-style-type: none"> • "KEY" Warning lamp illuminates when "KEY ON" on CONSULT-III screen is touched. • "KEY" Warning lamp flashes when "KEY IND" on CONSULT-III screen is touched. |
| INT LAMP | This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched. |
| LCD | This test is able to check meter display information <ul style="list-style-type: none"> • Engine start information displays when "BP N" on CONSULT-III screen is touched. • Engine start information displays when "BP I" on CONSULT-III screen is touched. • Key ID warning displays when "ID NG" on CONSULT-III screen is touched. • Steering lock information displays when "ROTAT" on CONSULT-III screen is touched. • P position warning displays when "SFT P" on CONSULT-III screen is touched. • Intelligent Key insert information displays when "INSRT" on CONSULT-III screen is touched. • Intelligent Key low battery warning displays when "BATT" on CONSULT-III screen is touched. • Take away through window warning displays when "NO KY" on CONSULT-III screen is touched. • Take away warning display when "OUTKEY" on CONSULT-III screen is touched. • OFF position warning display when "LK WN" on CONSULT-III screen is touched. |
| TRUNK/GLASS HATCH | This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched. |
| FLASHER | This test is able to check hazard warning lamp operation. The hazard warning lamps will be activated after "ON" on CONSULT-III screen is touched. |
| HORN | This test is able to check horn operation. The horn will be activated after "ON" on CONSULT-III screen is touched. |
| IGN CONT2 | This test is able to check ignition relay operation. The ignition relay will be activated after "ON" on CONSULT-III screen is touched. |
| P RANGE | This test is able to check control device power supply Control device power is supplied when "ON" on CONSULT-III screen is touched. |
| ENGINE SW ILLUMI | This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT-III screen is touched. |
| LOCK INDICATOR | NOTE: This item is displayed, but cannot be tested. |

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Test item | Description |
|------------------------|---|
| ACC INDICATOR | This test is able to check indicator in push-ignition switch operation. Indicator in push-button ignition switch illuminates when "ON" on CONSULT-III screen is touched. |
| IGNITION ON IND | This test is able to check indicator in push-ignition switch operation. Indicator in push-button ignition switch illuminates when "ON" on CONSULT-III screen is touched. |
| KEY SLOT ILLUMI | This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT-III screen is touched. |
| AUTOMATIC BACK DOOR | NOTE: This item is displayed, but cannot be tested. |
| AUTOMATIC SLIDING DOOR | NOTE: This item is displayed, but cannot be tested. |

THEFT ALM

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

INFOID:0000000003375594

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

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

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

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

WORK SUPPORT

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

ACTIVE TEST

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

IMMU

IMMU : CONSULT-III Function (BCM - IMMU)

INFOID:000000003375595

APPLICATION ITEM

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

| 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 BCM. |

DATA MONITOR

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

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Test item | Description |
|-----------|--|
| THEFT IND | This test is able to check security indicator lamp operation. The lamp will be turned on when "ON" on CONSULT-III screen touched. |

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

U1000 CAN COMM CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

BCM

BCM : Description

INFOID:000000003375596

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"](#).

BCM : DTC Logic

INFOID:000000003375597

DTC DETECTION LOGIC

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

BCM : Diagnosis Procedure

INFOID:000000003375598

1.PERFORM SELF DIAGNOSTIC

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

Is "U1000: CAN COMM CIRCUIT" displayed?

YES >> Refer to [LAN-16. "Trouble Diagnosis Flow Chart"](#).

NO >> Refer to [GI-40. "Intermittent Incident"](#).

IPDM E/R

IPDM E/R : Description

INFOID:000000003586759

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"](#).

IPDM E/R : DTC Logic

INFOID:000000003586760

DTC DETECTION LOGIC

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

IPDM E/R : Diagnosis Procedure

INFOID:000000003586761

1.PERFORM SELF DIAGNOSTIC

U1000 CAN COMM CIRCUIT

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

Is DTC "U1000" displayed?

- YES >> Refer to [LAN-16, "Trouble Diagnosis Flow Chart"](#).
NO >> Refer to [GI-40, "Intermittent Incident"](#).

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

U1010 CONTROL UNIT (CAN)

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

BCM

BCM : DTC Logic

INFOID:000000003375599

DTC DETECTION LOGIC

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

BCM : Diagnosis Procedure

INFOID:000000003375600

1.REPLACE BCM

When DTC "U1010: CONTROL UNIT (CAN)" is detected, replace BCM.

>> Replace BCM. Refer to [BCS-96. "Exploded View"](#).

BCM : Special Repair Requirement

INFOID:000000003375601

1.REQUIRED WORK WHEN REPLACING BCM

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:000000003375602

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 Intelligent Key is used.
- BCM or ECM is malfunctioning.

DTC Logic

INFOID:000000003375603

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 Intelligent Key• BCM or ECM is malfunctioning. | — |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-39. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375604

1.CHECK ENGINE START FUNCTION

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

>> INSPECTION END

P1611 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1611 ID DISCORD, IMMUECM

Description

INFOID:000000003375605

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

DTC Logic

INFOID:000000003375606

DTC DETECTION LOGIC

NOTE:

- If DTC B1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| P1611 | ID DISCORD, IMMUECM | The ID verification result between BCM and ECM is 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 under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375607

1.PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all Intelligent Keys. For initialization and registration of Intelligent Key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

3.REPLACE ECM

1. Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).
2. Perform initialization with CONSULT-III.

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

P1611 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "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:000000003375608

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

DTC Logic

INFOID:000000003375609

DTC DETECTION LOGIC

NOTE:

- If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-42, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375610

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "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 >> INSPECTION END
NO >> GO TO 2.

2. REPLACE ECM

Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

P1614 CHAIN OF IMMU-KEY

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

P1614 CHAIN OF IMMU-KEY

Description

INFOID:000000003375611

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

DTC Logic

INFOID:000000003375612

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| P1614 | CHAIN OF IMMU-KEY | Inactive communication between key slot and BCM. | <ul style="list-style-type: none">• Harness or connectors (The key slot circuit is open or shorted)• Key slot• BCM |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Insert Intelligent Key into the key slot.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-43, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

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

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375613

SEC

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2.CHECK KEY SLOT INPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 2 | Ground | Battery voltage |

Is the inspection result normal?

- YES >> Replace key slot. Refer to [SEC-237, "Removal and Installation"](#).
NO >> GO TO 3.

3.CHECK KEY SLOT CIRCUIT

P1614 CHAIN OF IMMU-KEY

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 2 | M122 | 80 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 2 | | Not existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

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

Does ignition switch turn to ON?

YES >> GO TO 5.

NO >> GO TO 7.

5.CHECK KEY SLOT COMMUNICATION SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace key slot. Refer to [SEC-237. "Removal and Installation"](#).

NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 3 | M122 | 81 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

7.CHECK KEY SLOT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key slot connector.

P1614 CHAIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M99 | 7 | | Existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

P1615 DIFFERENCE OF KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

P1615 DIFFERENCE OF KEY

Description

INFOID:000000003375614

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

DTC Logic

INFOID:000000003375615

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|-----------------|
| P1615 | DIFFERENCE OF KEY | The ID verification result between BCM and Intelligent Key is NG. The registration is necessary. | Intelligent Key |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-46. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375616

1.PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all Intelligent Keys. For initialization and registration of Intelligent Key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

2.REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Perform initialization with CONSULT-III.
For initialization and registration of Intelligent Key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2190 NATS ANTENNA AMP.

Description

INFOID:000000003375617

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

DTC Logic

INFOID:000000003375618

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B2190 | NATS ANTENNA AMP | Inactive communication between key slot and BCM. | <ul style="list-style-type: none"> • Harness or connectors (The key slot circuit is open or shorted) • Key slot • BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Insert Intelligent Key into the key slot.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-47, "Diagnosis Procedure"](#).
 NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-47, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375619

SEC

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK KEY SLOT INPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 2 | Ground | Battery voltage |

Is the inspection result normal?

- YES >> Replace key slot. Refer to [SEC-237, "Removal and Installation"](#).
 NO >> GO TO 3.

3. CHECK KEY SLOT CIRCUIT

B2190 NATS ANTENNA AMP.

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 2 | M122 | 80 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 2 | | Not existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

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

Does ignition switch turn to ON?

YES >> GO TO 5.

NO >> GO TO 7.

5.CHECK KEY SLOT COMMUNICATION SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace key slot. Refer to [SEC-237. "Removal and Installation"](#).

NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 3 | M122 | 81 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

7.CHECK KEY SLOT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key slot connector.

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M99 | 7 | | Existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2191 DIFFERENCE OF KEY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2191 DIFFERENCE OF KEY

Description

INFOID:000000003375620

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

DTC Logic

INFOID:000000003375621

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|-----------------|
| B2191 | DIFFERENCE OF KEY | The ID verification result between BCM and Intelligent Key is NG. The registration is necessary. | Intelligent Key |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375622

1.PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all Intelligent Keys. For initialization and registration of Intelligent Key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

2.REPLACE INTELLIGENT KEY

1. Replace Intelligent Key.
2. Perform initialization with CONSULT-III.
For initialization and registration of Intelligent Key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2192 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2192 ID DISCORD, IMMUECM

Description

INFOID:000000003375623

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

DTC Logic

INFOID:000000003375624

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2192 | ID DISCORD, IMMUECM | The ID verification result between BCM and ECM is 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 under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-51, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375625

1. PERFORM INITIALIZATION

Perform initialization with CONSULT-III. Re-register all Intelligent Keys. For initialization and registration of Intelligent Key. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

2. REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

3. REPLACE ECM

1. Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).
2. Perform initialization with CONSULT-III.

Can the system be initialized and can the engine be started with re-registered Intelligent Key?

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

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

SEC

B2192 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2193 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2193 CHAIN OF ECM-IMMU

Description

INFOID:000000003375626

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

DTC Logic

INFOID:000000003375627

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375628

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "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 >> INSPECTION END
NO >> GO TO 2.

2. REPLACE ECM

Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

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

SEC

B2195 ANTI-SCANNING

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2195 ANTI-SCANNING

Description

INFOID:000000004747816

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

DTC Logic

INFOID:000000004747817

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position
 - Do not depress brake pedal
- Check "Self-diagnostic result" using CONSULT-III.

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000004747818

1. CHECK SELF-DIAGNOSTIC RESULT-1

- Perform "Self-diagnostic result" of BCM using CONSULT-III.
- Erase DTC.
- Perform DTC Confirmation Procedure. Refer to [SEC-54. "DTC Logic"](#).

Is DTC 2195 detected?

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

2. CHECK EQUIPMENT OF THE VEHICLE

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

Is unspecified accessory part related to engine start installed?

- YES >> GO TO 3.
NO >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

3. CHECK SELF-DIAGNOSTIC RESULT-2

- Obtain the customers approval to remove unspecified accessory part related to engine start, and then remove it.
- Perform "Self-diagnostic result" of BCM using CONSULT-III.
- Erase DTC.
- Perform DTC Confirmation Procedure. Refer to [SEC-54. "DTC Logic"](#).

Is DTC 2195 detected?

- YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).
NO >> INSPECTION END

B2013 ID DISCORD, IMMU-STRG

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2013 ID DISCORD, IMMU-STRG

Description

INFOID:000000003375632

BCM performs the ID verification with the steering lock unit and releases the steering lock if both BCM and steering lock unit ID are same. BCM starts the communication with the steering lock unit when Intelligent Key is carried into the passenger compartment and the push-button ignition switch is pressed.

DTC Logic

INFOID:000000003375633

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--------------------|
| B2013 | ID DISCORD, IMMU-STRG | The ID verification result between BCM and steering lock unit is NG. The registration is necessary. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Lock steering.
2. Press the push-button ignition switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375634

1.PERFORM INITIALIZATION

Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Does steering lock operate?

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

2.REPLACE STEERING LOCK UNIT

1. Replace steering lock unit.
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

Does steering lock operate?

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

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2014 CHAIN OF STRG-IMMU

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2014 CHAIN OF STRG-IMMU

Description

INFOID:000000003375635

BCM performs the ID verification with the steering lock unit to release the steering. BCM starts the communication with the steering lock unit when Intelligent Key is carried into the passenger compartment and the push-button ignition switch is pressed.

DTC Logic

INFOID:000000003375636

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2014 | CHAIN OF STRG-IMMU | Inactive communication between steering lock unit and BCM | <ul style="list-style-type: none"> • Harness or connectors (steering lock unit circuit is open or shorted) • Steering lock unit • BCM |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Lock steering.
2. Press the push-button ignition switch.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375637

1.CHECK STEERING LOCK UNIT POWER SUPPLY

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|--------------------|----------|--------|-----------------|--------------------------|
| Steering lock unit | | | | |
| Connector | Terminal | | | |
| M12 | 7 | Ground | Ignition switch | OFF or ACC |
| | | | | ON |

Is the inspection normal?

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

2.CHECK STEERING LOCK UNIT POWER SUPPLY CIRCUIT

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 7 | M122 | 106 | Existed |

4. Check continuity between steering lock unit harness connector and ground.

B2014 CHAIN OF STRG-IMMU

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 7 | | Not existed |

Is the inspection normal?

- YES >> GO TO 6.
- NO >> Repair or replace harness or connector.

3.CHECK STEERING LOCK UNIT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between steering lock unit and ground.

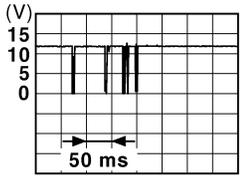
| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|------------|
| Connector | Terminal | | |
| M12 | 5 | | Existed |
| | 6 | | |

Is the inspection normal?

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

4.CHECK STEERING LOCK UNIT COMMUNICATION SIGNAL

1. Connect steering lock unit connector.
2. Read voltage signal between steering lock unit harness connector and ground.

| (+) | | (-) | Condition | Voltage (V) (Approx.) | |
|--------------------|----------|--------|--------------------|-----------------------------------|---|
| Steering lock unit | | | | | |
| Connector | Terminal | | | | |
| M12 | 2 | Ground | Steering lock unit | Lock status | Battery voltage |
| | | | | Lock or unlock |  <p style="text-align: right; font-size: small;">JMkia0066GB</p> |
| | | | | For 15 seconds after unlock | Battery voltage |
| | | | | 15 seconds or later after unlock. | 0 |

- Steering is locked** : Opening the door when ignition switch is ON to OFF.
- Steering is unlocked** : Ignition switch is OFF to ACC.

Is the inspection normal?

- YES >> Replace steering lock unit.
- NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT COMMUNICATION CIRCUIT

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

SEC

B2014 CHAIN OF STRG-IMMU

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 2 | M122 | 111 | Existed |

4. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 2 | | Not existed |

Is the inspection normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

6. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2555 STOP LAMP

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2555 STOP LAMP

Description

INFOID:000000003375638

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

DTC Logic

INFOID:000000003375639

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|---|
| B2555 | STOP LAMP | BCM makes a comparison between the upper voltage and lower voltage of stop lamp switch. It judges from their values to detect the malfunctioning circuit. | <ul style="list-style-type: none"> Harness or connectors (Stop lamp switch circuit is open or shorted) Stop lamp switch Fuse |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Depress the brake pedal and wait for at least 1 second.
- Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-59, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375640

1. CHECK STOP LAMP SWITCH INPUT SIGNAL

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

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

Is the inspection normal?

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

2. CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|------------------|----------|--------|--------------------------|
| Stop lamp switch | | | |
| Connector | Terminal | | |
| E115 (TYPE A) | 3 | Ground | Battery voltage |
| E116 (TYPE B) | 1 | | |

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Check harness for open or short between stop lamp switch and fuse.

B2555 STOP LAMP

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

3. CHECK STOP LAMP SWITCH CIRCUIT

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

| Stop lamp switch | | BCM | | Continuity |
|------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E115 (TYPE A) | 4 | M123 | 118 | Existed |
| E116 (TYPE B) | 2 | | | |

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

| Stop lamp switch | | Ground | Continuity |
|------------------|----------|--------|-------------|
| Connector | Terminal | | |
| E115 (TYPE A) | 4 | | Not existed |
| E116 (TYPE B) | 2 | | |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK STOP LAMP SWITCH

Refer to [SEC-60, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace stop lamp switch. Refer to [BR-20, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000003375641

1. CHECK STOP LAMP SWITCH

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

| Stop lamp switch | | | Condition | Continuity | |
|------------------|---|---|-------------|---------------|-------------|
| Terminal | | | | | |
| TYPE A | 3 | 4 | Brake pedal | Not depressed | Not existed |
| | | | | Depressed | Existed |
| TYPE B | 1 | 2 | Brake pedal | Not depressed | Not existed |
| | | | | Depressed | Existed |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace stop lamp switch. Refer to [BR-20, "Removal and Installation"](#).

B2556 PUSH-BUTTON IGNITION SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2556 PUSH-BUTTON IGNITION SWITCH

Description

INFOID:000000003375642

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

DTC Logic

INFOID:000000003375643

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|-----------------------------|---|---|
| B2556 | PUSH-BUTTON IGNITION SWITCH | BCM detects the push-button ignition switch stuck to ON for 100 seconds or more | <ul style="list-style-type: none"> • Harness or connectors (Push-button ignition switch circuit is shorted.) • Push-button ignition switch • BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine and wait for at least 100 seconds.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-61, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375644

1. CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------|----------|--------|--------------------------|
| Push-button ignition switch | | | |
| Connector | Terminal | Ground | Battery voltage |
| M101 | 4 | | |

Is the inspection normal?

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

2. CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

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

| Push-button ignition switch | | BCM | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 4 | M122 | 89 | Existed |

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M101 | 4 | | Not existed |

Is the inspection normal?

B2556 PUSH-BUTTON IGNITION SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK PUSH-BUTTON IGNITION SWITCH GROUND CIRCUIT

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|------------|
| Connector | Terminal | | |
| M101 | 1 | | Existed |

Is the inspection normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH

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

Is the inspection normal?

YES >> GO TO 5.

NO >> Replace push-button ignition switch. Refer to [SEC-238. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000003375645

1.CHECK PUSH-BUTTON IGNITION SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace push-button ignition switch. Refer to [SEC-238. "Removal and Installation"](#).

B2557 VEHICLE SPEED

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2557 VEHICLE SPEED

Description

INFOID:000000003375646

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

DTC Logic

INFOID:000000003375647

DTC DETECTION LOGIC

NOTE:

- If DTC B2557 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2557 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|---------------------|---|---|
| B2557 | VEHICLE SPEED | BCM detects the following difference between the vehicle speed from “unified meter and A/C amp” and the one from “ABS actuator and electric unit” for 10 seconds continuously <ul style="list-style-type: none"> • One is 10 km/h (6.2 MPH) or more and the other is 4 km/h (2.5 MPH) or less. | <ul style="list-style-type: none"> • Wheel sensor • Unified meter and A/C amp. • ABS actuator and electric unit (control unit) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-63, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375648

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

Check “Self diagnostic result” with CONSULT-III. Refer to [BRC-102, "DTC No. Index"](#).

Is the inspection result normal?

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

2. CHECK DTC WITH “UNIFIED METER AND A/C AMP.”

Check “Self diagnostic result” with CONSULT-III. Refer to [MWI-75, "DTC Index"](#).

Is the inspection result normal?

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

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2560 STARTER CONTROL RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2560 STARTER CONTROL RELAY

Description

INFOID:000000003375649

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

DTC Logic

INFOID:000000003375650

DTC DETECTION LOGIC

NOTE:

- If DTC B2560 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#)
- If DTC B2560 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|-----------------------|--|-----------------|
| B2560 | STARTER CONTROL RELAY | BCM detects a mismatch between the OFF request of starter control relay to IPDM E/R and the feedback. (The feedback is ON instead of OFF.) | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 2 seconds.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-64, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375651

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [PCS-32, "DTC Index"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#)

>> INSPECTION END

B2601 SHIFT POSITION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2601 SHIFT POSITION

Description

INFOID:000000003375652

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003375653

DTC DETECTION LOGIC

NOTE:

- If DTC B2601 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2601 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).
- If DTC B2601 is displayed with DTC B2603, first perform the trouble diagnosis for DTC B2603. Refer to [SEC-75, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2601 | SHIFT POSITION | BCM detects when a difference between the shift P input signal and the shift position signal received from IPDM E/R via CAN communication continues for 2 seconds or more | <ul style="list-style-type: none">• Harness or connectors (Control device circuit is open or shorted.)• Control device (detention switch) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions, and wait for at least 2 seconds.
 - Selector lever is in the P position.
 - Do not depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-65, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375654

1. CHECK CONTROL DEVICE POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect control device (detention switch) connector.
3. Check voltage between control device (detention switch) harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--|----------|--------|--------------------------|
| Control device (detention switch) Connector | Terminal | | |
| M57 | 8 | Ground | Battery voltage |

Is the inspection result normal?

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

2. CHECK CONTROL DEVICE POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

B2601 SHIFT POSITION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 8 | M122 | 96 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 8 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK CONTROL DEVICE CIRCUIT (BCM)

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | M122 | 99 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 9 | | Not existed |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK CONTROL DEVICE CIRCUIT (IPDM E/R)

1. Check continuity between control device (detention switch) harness connector and IPDM E/R harness connector.

| Control device (detention switch) | | IPDM E/R | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | E11 | 43 | Existed |

2. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 9 | | Not existed |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

5.CHECK CONTROL DEVICE (DETENTION SWITCH)

Refer to [SEC-67, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace control device. Refer to [TM-165, "Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

B2601 SHIFT POSITION

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000003375655

1. CHECK CONTROL DEVICE (DETENTION SWITCH)

1. Turn ignition switch OFF.
2. Disconnect control device connector.
3. Check continuity between control device (detention switch) terminals.

| Control device (detention switch) | | Condition | | Continuity |
|-----------------------------------|---|----------------|------------------|-------------|
| Terminal | | | | |
| 8 | 9 | Selector lever | P position | Not existed |
| | | | Other than above | Existed |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace control device. Refer to [TM-165. "Removal and Installation"](#).

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

SEC

B2602 SHIFT POSITION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2602 SHIFT POSITION

Description

INFOID:000000003375656

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003375657

DTC DETECTION LOGIC

NOTE:

- If DTC B2602 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2602 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2602 | SHIFT POSITION | BCM detects the following status for 10 seconds. <ul style="list-style-type: none">• Shift position is in P position• Vehicle speed is 4 km/h (2.5 MPH) or more• Ignition switch is in the ON position | <ul style="list-style-type: none">• Harness or connectors (Control device circuit is open or shorted)• Control device (detention switch)• ABS actuator and electric unit (control unit)• BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 10 seconds.
 - Selector lever is in the P or N position
 - Depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-68, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375658

1. CHECK DTC WITH "ABS ACTUATOR AND ELECTRIC UNIT"

Check "Self diagnostic result" with CONSULT-III. Refer to [BRC-102, "DTC No. Index"](#).

Is the inspection result normal?

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

2. CHECK CONTROL DEVICE POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect control device (detention switch) connector.
3. Check voltage between control device (detention switch) harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------------|----------|--------|--------------------------|
| Control device (detention switch) | | | |
| Connector | Terminal | | |
| M57 | 8 | Ground | Battery voltage |

Is the inspection result normal?

B2602 SHIFT POSITION

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

3.CHECK CONTROL DEVICE POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 8 | M122 | 96 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|------------|
| Connector | Terminal | | |
| M57 | 8 | | No existed |

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).
- NO >> Repair or replace harness or connector.

4.CHECK CONTROL DEVICE CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | M122 | 99 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|------------|
| Connector | Terminal | | |
| M57 | 9 | | No existed |

Is the inspection result normal?

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

5.CHECK CONTROL DEVICE (DETENTION SWITCH)

Refer to [SEC-67. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 6.
- NO >> Replace control device. Refer to [TM-165. "Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2603 SHIFT POSITION STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2603 SHIFT POSITION STATUS

Description

INFOID:000000003375659

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003375660

DTC DETECTION LOGIC

NOTE:

- If DTC B2603 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2603 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|-----------------------|---|---|
| B2603 | SHIFT POSITION STATUS | BCM detects the followings status for 500 ms or more when shift is in P position, and ignition switch is in ON position. <ul style="list-style-type: none">• Park/neutral position (PNP) switch: approx. 0V• Control device (detention switch): approx. 0V | <ul style="list-style-type: none">• Harness or connector (Control device circuit is open or shorted.)• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted.]• Control device (detention switch)• Park/neutral position (PNP) switch• BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 1 second.
 - Selector lever is in the P position.
 - Do not depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

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

Diagnosis Procedure

INFOID:000000003375661

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT-III. Refer to [TM-129, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH CIRCUIT

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

| TCM | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| F23 | 20 | M123 | 140 | Existed |

4. Check continuity between TCM harness connector and ground.

B2603 SHIFT POSITION STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| TCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| F23 | 20 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK CONTROL DEVICE POWER SUPPLY

1. Disconnect control device (detention switch) connector.
2. Check voltage between control device (detention switch) harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Connector | Terminal | | |
| M57 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK CONTROL DEVICE POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 8 | M122 | 96 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 8 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK CONTROL DEVICE CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | M122 | 99 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 9 | | Not existed |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

B2603 SHIFT POSITION STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

6. CHECK CONTROL DEVICE (DETENTION SWITCH)

Refer to [SEC-67, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace control device. Refer to [TM-165, "Removal and Installation"](#).

7. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2604 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2604 PNP SWITCH

Description

INFOID:000000003375662

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003375663

DTC DETECTION LOGIC

NOTE:

- If DTC B2604 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36. "BCM : DTC Logic"](#).
- If DTC B2604 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38. "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2604 | PNP SWITCH | BCM detects the following status for 500 ms or more when the ignition switch is in the ON position. <ul style="list-style-type: none"> • N position input signal exists. Shift position signal from TCM does not exist. • N position input signal does not exist. Shift position signal from TCM exists. | <ul style="list-style-type: none"> • Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted.] • Park/ neutral position (PNP) switch |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position
 - Do not depress the brake pedal
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-73. "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375664

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT-III. Refer to [TM-129. "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH CIRCUIT

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

| TCM | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| F23 | 20 | M123 | 140 | Existed |

4. Check continuity between TCM harness connector and ground.

B2604 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| TCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| F23 | 20 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2605 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2605 PNP SWITCH

Description

INFOID:000000003375665

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003375666

DTC DETECTION LOGIC

NOTE:

- If DTC B2605 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36. "BCM : DTC Logic"](#).
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38. "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2605 | PNP SWITCH | BCM detects the following status for 500 ms or more when the ignition switch is in ON position <ul style="list-style-type: none"> • N position input signal exists. Shift position signal from IPDM E/R does not exist. • N position input signal does not exist. Shift position signal from IPDM E/R exists. | <ul style="list-style-type: none"> • Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted.] • Park/neutral position (PNP) switch • IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position
 - Do not depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-75. "Diagnosis Procedure"](#).
- NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375667

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-226. "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH CIRCUIT

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

| TCM | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| F23 | 20 | M123 | 140 | Existed |

4. Check continuity between TCM harness connector and ground.

B2605 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| TCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| F23 | 20 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2606 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2606 STEERING LOCK RELAY

Description

INFOID:000000003375668

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication. IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:000000003375669

DTC DETECTION LOGIC

NOTE:

- If DTC B2606 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2606 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|-----------------------------------|
| B2606 | STEERING LOCK RELAY | BCM detects that there is a mismatch between the following statuses. <ul style="list-style-type: none">• Steering lock unit ON signal transmitted by IPDM E/R• The steering lock unit status feedback | Steering lock relay (in IPDM E/R) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-77, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375670

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-226, "DTC Index"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2607 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2607 STEERING LOCK RELAY

Description

INFOID:000000003375671

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

DTC Logic

INFOID:000000003375672

DTC DETECTION LOGIC

NOTE:

- If DTC B2607 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2607 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|---|
| B2607 | STEERING LOCK RELAY | BCM detects that there is a difference between the following statuses. <ul style="list-style-type: none"> • Steering lock unit ON signal transmitted by IPDM E/R • The steering lock unit status feedback | <ul style="list-style-type: none"> • Harness or connectors (steering lock unit power supply circuit is open or shorted) • Steering lock relay (in IPDM E/R) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-78, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375673

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-226, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK STEERING LOCK UNIT POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|--------------------|----------|--------|--|--------------------------|
| Steering lock unit | | | | |
| Connector | Terminal | | | |
| M12 | 1 | Ground | Press push-button ignition switch when steering lock is in lock condition. | Battery voltage |

Is the inspection result normal?

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

B2607 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

3. CHECK STEERING LOCK UNIT CIRCUIT

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

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 1 | E10 | 11 | Existed |

4. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 1 | | Not existed |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2608 STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2608 STARTER RELAY

Description

INFOID:000000003375674

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

DTC Logic

INFOID:000000003375675

DTC DETECTION LOGIC

NOTE:

- If DTC B2608 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2608 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).
- If DTC B2608 is displayed with DTC B210D for IPDM E/R, first perform the trouble diagnosis for DTC B210D. Refer to [SEC-111, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2608 | STARTER RELAY | BCM receives starter relay ON signal (CAN) from IPDM E/R even if BCM turns the starter relay OFF. | <ul style="list-style-type: none">• Harness or connectors (starter relay circuit is open or shorted.)• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-80, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375676

1. CHECK BCM POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|----------------|------------------------------------|
| BCM | | | | |
| Connector | Terminal | | | |
| M121 | 52 | Ground | Selector lever | N or P position Battery voltage |
| | | | | Other than above 0 |

Is the inspection result normal?

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

2. CHECK STARTER RELAY CIRCUIT

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

B2608 STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| IPDM E/R | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E11 | 46 | M121 | 52 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E11 | 46 | | Not existed |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2609 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2609 STEERING STATUS

Description

INFOID:000000003375677

There are 2 switches in the steering lock unit (steering lock/unlock switch 1 and 2). BCM compares those 2 switches conditions to judge the present steering status.

DTC Logic

INFOID:000000003375678

DTC DETECTION LOGIC

NOTE:

- If DTC B2609 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2609 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2609 | STEERING STATUS | BCM detects the malfunction of steering lock unit switches for 1 second. | <ul style="list-style-type: none">• Harness or connectors [steering lock unit circuit (BCM side) is open or shorted]• Harness or connectors [steering lock unit circuit (IPDM E/R side) is open or shorted.]• Steering lock unit• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-82, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-82, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375679

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK BCM OUTPUT SIGNAL

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

B2609 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK STEERING LOCK UNIT CIRCUIT-1

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | M122 | 98 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

4.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | E10 | 33 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

B2609 STEERING STATUS

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness or connector.

6. CHECK BCM OUTPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 7.

7. CHECK STEERING LOCK UNIT CIRCUIT-3

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | M122 | 97 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

8. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 9.

9. CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | E10 | 32 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

B2609 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

10.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B260B STEERING LOCK UNIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B260B STEERING LOCK UNIT

Description

INFOID:000000003375680

The steering lock unit performs the check by itself according to the steering status.

DTC Logic

INFOID:000000003375681

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--------------------|
| B260B | STEERING LOCK UNIT | BCM detects malfunctioning of steering lock unit before steering unlocking. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch, when steering is locked.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-86. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375682

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-86. "DTC Logic"](#).

Is the DTC B260B displayed again?

- YES >> Replace steering lock unit.
NO >> INSPECTION END

B260C STEERING LOCK UNIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B260C STEERING LOCK UNIT

Description

INFOID:000000003375683

The steering lock unit performs the check by itself according to the steering status.

DTC Logic

INFOID:000000003375684

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--------------------|
| B260C | STEERING LOCK UNIT | BCM detects malfunctioning of steering lock unit before steering locking. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-87. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375685

1.INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-87. "DTC Logic"](#).

Is the DTC B260C displayed again?

- YES >> Replace steering lock unit.
NO >> INSPECTION END

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

SEC

B260D STEERING LOCK UNIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B260D STEERING LOCK UNIT

Description

INFOID:000000003375686

The steering lock unit performs the check by itself according to the steering lock status (before lock, after lock and unlock).

DTC Logic

INFOID:000000003375687

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--------------------|
| B260D | STEERING LOCK UNIT | BCM detects malfunctioning of steering lock unit after steering locking. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-88, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375688

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-88, "DTC Logic"](#).

Is the DTC B260D displayed again?

- YES >> Replace steering lock unit.
NO >> INSPECTION END

B260F ENGINE STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B260F ENGINE STATUS

Description

INFOID:000000003375689

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

DTC Logic

INFOID:000000003375690

DTC DETECTION LOGIC

NOTE:

- If DTC B260F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B260F is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-89, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375691

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-89, "DTC Logic"](#).

Is the DTC B260F displayed again?

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

2. REPLACE ECM

Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B26E9 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B26E9 STEERING STATUS

Description

INFOID:000000003420410

There are 2 switches in the steering lock unit (steering lock/unlock switch 1 and 2). BCM compares those 2 switches conditions to judge the present steering status.

DTC Logic

INFOID:000000003420411

DTC DETECTION LOGIC

NOTE:

If DTC B26E9 is displayed with DTC B2609, first perform the trouble diagnosis for DTC B2609. Refer to [SEC-82, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--------------------|
| B26E9 | S/L STATUS | BCM requests lock to steering lock unit, then steering lock unit transmits a recognitions signal to BCM, but steering lock unit remain unlock. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Turn ignition switch ON.
5. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-90, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003420412

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. Perform DTC Confirmation Procedure.
Refer to [SEC-90, "DTC Logic"](#).

Is the DTC B26E9 displayed again?

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

2. REPLACE STEERING LOCK UNIT

1. Replace steering lock unit.
2. Perform DTC confirmation procedure. Refer to [SEC-90, "DTC Logic"](#).

Is the DTC B26E9 displayed again?

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

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B26EA KEY REGISTRATION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B26EA KEY REGISTRATION

Description

INFOID:000000003719157

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

DTC Logic

INFOID:000000003719158

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|---|
| B26EA | KEY REGISTRATION | Intelligent Key is not registered successfully. | <ul style="list-style-type: none">Improper registration operationIntelligent KeyBCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-91. "Diagnosis Procedure"](#)
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003719159

1. PERFORM INITIALIZATION

1. Perform initialization with CONSULT-III. Re-register all Intelligent Keys.
For initialization and registration of Intelligent 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 >> INSPECTION END

2. REPLACE INTELLIGENT KEY

1. Replace Intelligent Key. Re-register all Intelligent Keys
2. Perform initialization with CONSULT-III. For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).
NO >> INSPECTION END

B2612 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2612 STEERING STATUS

Description

INFOID:000000003375695

There are 2 switches in the steering lock unit. IPDM E/R compares those 2 switches conditions to judge the present steering status and transmit the result to BCM via CAN communication.

DTC Logic

INFOID:000000003375696

DTC DETECTION LOGIC

NOTE:

- If DTC B2612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|---------------------|---|---|
| B2612 | STEERING STATUS | BCM detects the mismatch between the following status for 1 second <ul style="list-style-type: none">• Steering lock or unlock• Feedback of steering lock status from IPDM E/R (CAN) | <ul style="list-style-type: none">• Harness or connectors [steering lock unit circuit (BCM side) is open or shorted]• Harness or connectors [steering lock unit circuit (IPDM E/R side) is open or shorted.]• Steering lock unit• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-92, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press door switch.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-92, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375697

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK BCM OUTPUT SIGNAL

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

B2612 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK STEERING LOCK UNIT CIRCUIT-1

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | M122 | 98 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

4.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | E10 | 33 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

B2612 STEERING STATUS

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness or connector.

6.CHECK BCM OUTPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 7.

7.CHECK STEERING LOCK UNIT CIRCUIT-3

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | M122 | 97 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

8.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 9.

9.CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | E10 | 32 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

B2612 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

10.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2617 STARTER RELAY CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2617 STARTER RELAY CIRCUIT

Description

INFOID:000000003375698

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

DTC Logic

INFOID:000000003375699

DTC DETECTION LOGIC

NOTE:

- If DTC B2617 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B2617 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).
- If DTC B2617 is displayed with DTC B210E for IPDM E/R, first perform the trouble diagnosis for DTC B210E. Refer to [SEC-112, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2617 | STARTER RELAY CIRCUIT | An immediate operation of starter relay is requested by BCM, but there is no response for more than 1 second | <ul style="list-style-type: none"> • Harness or connectors (Starter relay circuit is open or shorted.) • IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-96, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375700

1. CHECK STARTER RELAY

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|----------------|------------------------------------|
| BCM | | | | |
| Connector | Terminal | | | |
| M121 | 52 | Ground | Selector lever | N or P position Battery voltage |
| | | | | Other than above 0 |

Is the inspection result normal?

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

2. CHECK STARTER RELAY CIRCUIT

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

B2617 STARTER RELAY CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| IPDM E/R | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E11 | 46 | M121 | 52 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E11 | 46 | | Not existed |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2619 BCM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2619 BCM

Description

INFOID:000000003375701

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

DTC Logic

INFOID:000000003375702

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-98. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375703

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-98. "DTC Logic"](#).

Is the DTC B2619 displayed again?

- YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).
NO >> INSPECTION END

B261A PUSH-BUTTON IGNITION SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B261A PUSH-BUTTON IGNITION SWITCH

Description

INFOID:000000003375704

BCM transmits the change in the power supply position with the push-button ignition switch to IPDM E/R via the CAN communication. IPDM E/R transmits the power supply position status via CAN communication to BCM.

DTC Logic

INFOID:000000003375705

DTC DETECTION LOGIC

NOTE:

- If DTC B261A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B261A is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|-----------------------------|--|---|
| B261A | PUSH-BUTTON IGNITION SWITCH | BCM detects the mismatch between the following for 1 second or more <ul style="list-style-type: none">• Power supply position with push-button ignition switch• Power supply position from IPDM E/R (CAN) | <ul style="list-style-type: none">• Harness or connectors (Push-button ignition switch circuit is open or shorted)• Between BCM and push-button ignition switch• Between IPDM E/R and push-button ignition switch |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press push-button ignition switch for 1 second under the following condition.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-99, "Diagnosis Procedure"](#)
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

1. Insert Intelligent Key into the key slot.
2. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-99, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375706

1.INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH OUTPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Disconnect push-button ignition switch connector and IPDM E/R connector.

B261A PUSH-BUTTON IGNITION SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------|----------|--------|--------------------------|
| Push-button ignition switch | | | |
| Connector | Terminal | Ground | Battery voltage |
| M101 | 4 | | |

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 3.

3.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 1

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

| Push-button ignition switch | | BCM | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 4 | M122 | 89 | Existed |

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|-------------|------------|
| Connector | Terminal | | |
| M101 | 4 | Not existed | |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH OUTPUT SIGNAL 2

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------|----------|--------|--------------------------|
| Push-button ignition switch | | | |
| Connector | Terminal | Ground | Battery voltage |
| M101 | 4 | | |

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 2

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

| Push-button ignition switch | | IPDM E/R | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 4 | E10 | 28 | Existed |

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|-------------|------------|
| Connector | Terminal | | |
| M101 | 4 | Not existed | |

B261A PUSH-BUTTON IGNITION SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

B261E VEHICLE TYPE

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B261E VEHICLE TYPE

Description

INFOID:000000003375707

There are two types of vehicle.

- HEV
- Conventional

DTC Logic

INFOID:000000003375708

DTC DETECTION LOGIC

NOTE:

- If DTC B261E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B261E is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-38, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-102, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375709

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-102, "DTC Logic"](#).

Is the 1st trip DTC B261E displayed again?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
NO >> INSPECTION END

B2108 STEERING LOCK RELAY

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B2108 STEERING LOCK RELAY

Description

INFOID:000000003375710

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication. IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:000000003375711

DTC DETECTION LOGIC

NOTE:

If DTC B2108 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|----------------|
| B2108 | STRG LCK RELAY ON | IPDM E/R detects that the relay is stuck at ON position for about 1 second even if the IPDM E/R receives steering lock relay ON/OFF signal from BCM. | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-103, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375712

1. CHECK STEERING LOCK RELAY

Check voltage between IPDM E/R harness connector and ground.

| (+) | | (-) | Condition | Voltage (V) (Approx.) | |
|-----------|----------|--------|---------------------------|---|-----------------|
| IPDM E/R | | | | | |
| Connector | Terminal | | | | |
| E10 | 11 | Ground | Ignition switch OFF | A few seconds after opening the driver door | Battery voltage |
| | | | Ignition switch LOCK | Press the push-button ignition switch | Battery voltage |
| | | | Ignition switch ACC or ON | | 0 |

Is the inspection normal?

- YES >> GO TO 2.
 NO >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2109 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2109 STEERING LOCK RELAY

Description

INFOID:000000003375713

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication. IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:000000003375714

DTC DETECTION LOGIC

NOTE:

- If DTC B2109 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B2109 may be detected.

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2109 | STRG LCK RELAY OFF | IPDM E/R detects that the relay is stuck at OFF position for about 1 second even if the IPDM E/R receives steering lock relay ON/OFF signal from BCM. | <ul style="list-style-type: none">• Harness or connector (power supply circuit)• IPDM E/R• Battery |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-104, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375715

1.CHECK POWER SUPPLY CIRCUIT

Check IPDM E/R power supply circuit. Refer to [PCS-18, "Diagnosis Procedure"](#).

Is the circuit normal?

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

2.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse (No. 48, located in IPDM E/R).

Is the inspection normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> Check the following.
 - Harness for open or short between IPDM E/R and battery
 - Fuse

B210A STEERING LOCK CONDITION SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210A STEERING LOCK CONDITION SWITCH

Description

INFOID:000000003375716

There are 2 switches in the steering lock unit. IPDM E/R compares those 2 switches conditions to judge the present steering status and transmit the result to BCM via CAN communication.

DTC Logic

INFOID:000000003375717

DTC DETECTION LOGIC

NOTE:

If DTC B210A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B210A | STRG LCK STATE SW | IPDM E/R detects the mismatch between steering condition switches 1 and 2 for 1 second | <ul style="list-style-type: none">• Harness or connectors [steering lock unit circuit (BCM side) is open or shorted]• Harness or connectors [steering lock unit circuit (IPDM E/R side) is open or shorted.]• Steering lock unit• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-105, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-105, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375718

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK BCM OUTPUT SIGNAL

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

B210A STEERING LOCK CONDITION SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK STEERING LOCK UNIT CIRCUIT-1

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | M122 | 98 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

4.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | E10 | 33 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

B210A STEERING LOCK CONDITION SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness or connector.

6. CHECK BCM OUTPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | Ground | Battery voltage |
| M12 | 3 | | |

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 7.

7. CHECK STEERING LOCK UNIT CIRCUIT-3

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | M122 | 97 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

8. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | Ground | Battery voltage |
| M12 | 3 | | |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 9.

9. CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | E10 | 32 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

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

SEC

B210A STEERING LOCK CONDITION SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

10.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B210B STARTER CONTROL RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210B STARTER CONTROL RELAY

Description

INFOID:000000003375719

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

DTC Logic

INFOID:000000003375720

DTC DETECTION LOGIC

NOTE:

If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|----------------|
| B210B | START CONT RLY ON | IPDM E/R detects that the relay is stuck at ON position even if the followings condition are met for about 1 second. <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Park neutral position (PNP) switch input signal | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the power supply position to start under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-109, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375721

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" for IPDM E/R with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-226, "DTC Index"](#).

Is the DTC B210B displayed again?

- YES >> Replace IPDM E/R. Refer [PCS-34, "Removal and Installation"](#).
NO >> INSPECTION END

B210C STARTER CONTROL RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210C STARTER CONTROL RELAY

Description

INFOID:000000003375722

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

DTC Logic

INFOID:000000003375723

DTC DETECTION LOGIC

NOTE:

- If DTC B210C is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210C may be detected.

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B210C | START CONT RLY OFF | IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second. <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Park neutral position (PNP) switch input signal | <ul style="list-style-type: none">• IPDM E/R• Battery |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the power supply position to start under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-110, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375724

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" for IPDM E/R with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-110, "DTC Logic"](#).

Is the DTC B210C displayed again?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> INSPECTION END

B210D STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210D STARTER RELAY

Description

INFOID:000000003375725

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

DTC Logic

INFOID:000000003375726

DTC DETECTION LOGIC

NOTE:

- If DTC B210D is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B210D is displayed with DTC B2617, first perform the trouble diagnosis for DTC B2617. Refer to [SEC-96, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|----------------|
| B210D | STARTER RELAY ON | IPDM E/R detects that the relay is stuck at ON position even if the followings condition are met for about 1 second. <ul style="list-style-type: none"> • Starter control relay ON/OFF signal from BCM • Park neutral position (PNP) switch input | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-111, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375727

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" for IPDM E/R with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-111, "DTC Logic"](#).

Is the DTC B210D displayed again?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> INSPECTION END

B210E STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210E STARTER RELAY

Description

INFOID:000000003375728

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

DTC Logic

INFOID:000000003375729

DTC DETECTION LOGIC

NOTE:

- If DTC B210E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).
- If DTC B210E is displayed with DTC B2110 for IPDM E/R, first perform the trouble diagnosis for DTC B2110. Refer to [SEC-116, "DTC Logic"](#).
- If DTC B210E is displayed with DTC B2617 for BCM, first perform the trouble diagnosis for DTC B2617. Refer to [SEC-96, "DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210F may be detected.

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B210E | STARTER RELAY OFF | IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second. <ul style="list-style-type: none"> • Starter control relay ON/OFF signal from BCM • Park neutral position (PNP) switch input | <ul style="list-style-type: none"> • IPDM E/R • Battery |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-112, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375730

1. CHECK STARTER RELAY OUTPUT SIGNAL

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

| (+) BCM connector | | (-) | Condition | | | Voltage (V) (Approx.) |
|-------------------|----------|--------|-----------------|-------------|------------------|-----------------------|
| Connector | Terminal | | Ignition switch | Brake pedal | Selector lever | |
| M121 | 52 | Ground | ON | Depressed | P or N | Battery voltage |
| | | | | | Other than above | 0 |

Is the inspection result normal?

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

2. CHECK STARTER RELAY OUTPUT SIGNAL CIRCUIT

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

B210E STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| BCM | | IPDM E/R | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M121 | 52 | E11 | 46 | Existed |

3. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M121 | 52 | | Not existed |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3. CHECK STARTER RELAY POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| IPDM E/R | | | |
| Connector | Terminal | | |
| E10 | 36 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Check harness for open or short between IPDM E/R and battery. Refer to [PCS-27, "Wiring Diagram - IPDM E/R -"](#).

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

SEC

B210F PNP/CLUTCH INTERLOCK SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B210F PNP/CLUTCH INTERLOCK SWITCH

Description

INFOID:000000003375731

IPDM E/R confirms the shift position with the following signals.

- Park/neutral position (PNP) switch
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:000000003375732

DTC DETECTION LOGIC

NOTE:

If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#)

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B210F | INTER LOCK/PNP SW ON | IPDM E/R detects a mismatch between the signals below for 1 second or more. <ul style="list-style-type: none">• PNP switch input signal• Shift position signal from BCM (CAN) | <ul style="list-style-type: none">• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted• Park/neutral position (PNP) switch |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-114, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375733

1. CHECK DTC WITH BCM

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-210, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH INPUT SIGNAL

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|-----------|--------------------------|
| IPDM E/R | | | | |
| Connector | Terminal | Ground | P or N | Battery voltage |
| E10 | 30 | | Ground | |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK PNP SWITCH CIRCUIT

1. Turn ignition switch OFF.

B210F PNP/CLUTCH INTERLOCK SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

- Disconnect TCM connector.
- Check continuity between IPDM E/R harness connector and TCM harness connector.

| IPDM E/R | | TCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E10 | 30 | F23 | 20 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E10 | 30 | | Not existed |

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2110 PNP/CLUTCH INTERLOCK SWITCH

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

B2110 PNP/CLUTCH INTERLOCK SWITCH

Description

INFOID:000000003375735

IPDM E/R confirms the shift position with the following signals.

- Park/neutral position (PNP) switch
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:000000003375736

DTC DETECTION LOGIC

NOTE:

If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-36, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B2110 | INTER LOCK/PNP SW | IPDM E/R detects mismatch between the signals below for 1 second or more. <ul style="list-style-type: none">• PNP switch input signal• Shift position signal from BCM (CAN) | <ul style="list-style-type: none">• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted• Park/neutral position (PNP) switch• IPDM E/R• BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-116, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003375737

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT-III. Refer to [TM-129, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH INPUT SIGNAL

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|------------------|--------------------------|
| Connector | Terminal | | | |
| E10 | 30 | Ground | Selector lever | Battery voltage |
| | | | Other than above | 0 |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> GO TO 3.

B2110 PNP/CLUTCH INTERLOCK SWITCH

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

3. CHECK PNP SWITCH CIRCUIT

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

| IPDM E/R | | TCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E10 | 30 | F23 | 20 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E10 | 30 | | Not existed |

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000003375739

1.CHECK FUSE AND FUSIBLE LINK

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

| Signal name | Fuse and fusible link No. |
|----------------------|---------------------------|
| Battery power supply | L |
| | 10 |

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| BCM | | | |
| Connector | Terminal | Ground | Battery voltage |
| M118 | 1 | | |
| M119 | 11 | | |

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M119 | 13 | | Existed |

Does continuity exist?

YES >> INSPECTION END

NO >> Repair or replace harness or connector.

IPDM E/R

IPDM E/R : Diagnosis Procedure

INFOID:000000003585304

1.CHECK FUSES AND FUSIBLE LINK

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

| Signal name | Fuses No. |
|----------------------|-----------|
| Battery power supply | 50 |
| | 51 |

Is the fuse fusing?

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

POWER SUPPLY AND GROUND CIRCUIT

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| Terminals | | Voltage (Approx.) |
|-----------|----------|----------------------|
| (+) | (-) | |
| IPDM E/R | | Battery voltage |
| Connector | Terminal | |
| E9 | 1 | |

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| E10 | 12 | | Existed |
| E11 | 41 | | |

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

SECURITY INDICATOR LAMP

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP

Description

INFOID:000000003375768

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

Component Function Check

INFOID:000000003375769

1. CHECK FUNCTION

1. Perform "THEFT IND" in the "ACTIVE TEST" mode with CONSULT-III.
2. Check security indicator lamp operation.

| Test item | | Description | |
|-----------|-----|-------------------------|----------------|
| THEFT IND | ON | Security indicator lamp | Illuminate |
| | OFF | | Not illuminate |

Is the inspection result normal?

- YES >> INSPECTION END
NO >> Go to [SEC-120, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000033732733

1. CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-------------------------|----------|--------|--------------------------|
| Security indicator lamp | | | |
| Connector | Terminal | Ground | Battery voltage |
| M100 | 1 | | |

Is the inspection result normal?

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

2. CHECK SECURITY INDICATOR LAMP SIGNAL

1. Connect security indicator lamp connector.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

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

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK SECURITY INDICATOR LAMP SIGNAL CIRCUIT

1. Disconnect security indicator lamp connector.
2. Check continuity between security indicator lamp harness connector and BCM harness connector.

SECURITY INDICATOR LAMP

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Security indicator lamp | | BCM | | Continuity |
|-------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M100 | 2 | M123 | 141 | Existed |

3. Check continuity between security indicator lamp harness connector and ground.

| Security indicator lamp | | Ground | Continuity |
|-------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M100 | 2 | | Not existed |

Is the inspection result normal?

- YES >> Replace security indicator lamp. Refer to [SEC-239, "Removal and Installation"](#).
- NO >> Repair or replace harness.

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

SEC

KEY WARNING LAMP

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

KEY WARNING LAMP

Description

INFOID:000000003737098

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:000000003737099

1.CHECK FUNCTION

Check the operation with "INDICATOR" in "Active Test" mode with CONSULT-III.

| Test item | Condition | |
|-----------|-----------|------------------------------|
| INDICATOR | KEY ON | Key warning lamp illuminates |
| | KEY IND | Key warning lamp flashes |

Is the inspection result normal?

YES >> Key warning lamp in combination meter is OK.

NO >> Refer to [SEC-122, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000003737100

1.CHECK KEY WARNING LAMP

Refer to [MWI-4, "Work flow"](#).

Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace key warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

Wiring Diagram - INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION -

INFOID:000000004747778

NOTE:

- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)
- Type B: From to VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO), JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)

Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

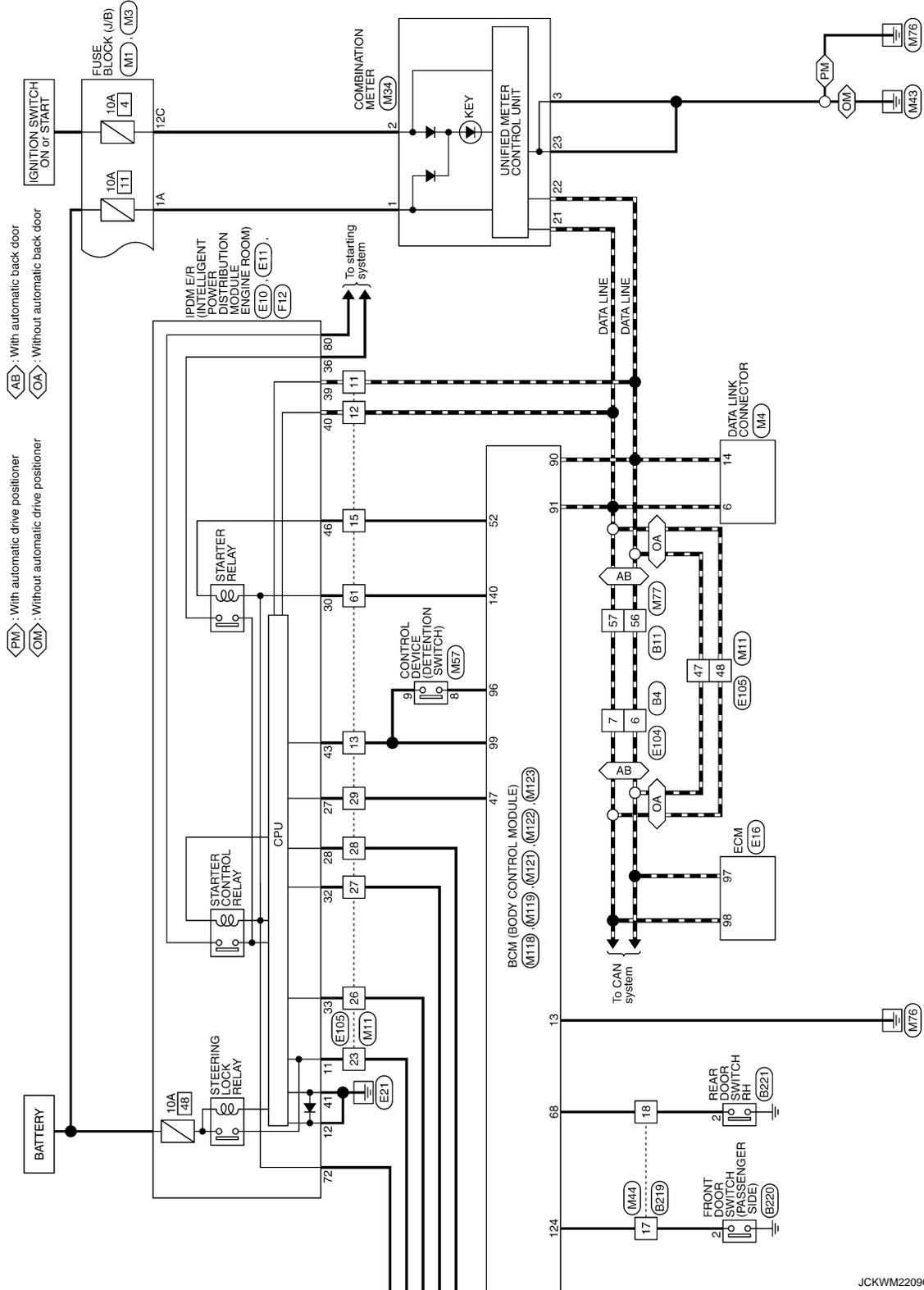
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JCKWM2209G1

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

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE A)

| | | | | | | | |
|----------------|--------------|----------------|------------------|----------------|--------------|----------------|---------------------------------|
| Connector No. | B4 | Connector No. | B6 | Connector No. | B11 | Connector No. | B34 |
| Connector Name | WIRE TO WIRE | Connector Name | FUSE BLOCK (J/B) | Connector Name | WIRE TO WIRE | Connector Name | FRONT DOOR SWITCH (DRIVER SIDE) |
| Connector Type | NS16MW-CS | Connector Type | NS12FBR-CS | Connector Type | TH82MW-CS 9 | Connector Type | A03FW |

| | | | | | | | |
|-----------------------------|---|---|----|----|----|----|----|
| Terminal No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Color of Wire | B | L | LG | LG | LG | LG | LG |
| Signal Name [Specification] | | | | | | | |

| | | | | | | | |
|-----------------------------|----|--------------|----|----|----|--------|--------------------------|
| Terminal No. | 5G | Terminal No. | 14 | 15 | 56 | 78 | 80 |
| Color of Wire | P | BR | SB | P | L | LG | W/R |
| Signal Name [Specification] | | | | | | SHIELD | - [Type A] - [Type A] |

| | | |
|-----------------------------|---|---|
| Terminal No. | 6 | 7 |
| Color of Wire | P | L |
| Signal Name [Specification] | | |

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

| | | | | | | | |
|----------------|---------------------|----------------|--------------|----------------|-----------------------------------|----------------|--------------|
| Connector No. | B71 | Connector No. | B78 | Connector No. | B88 | Connector No. | B219 |
| Connector Name | REAR DOOR SWITCH LH | Connector Name | WIRE TO WIRE | Connector Name | INSIDE KEY ANTENNA (LUGGAGE ROOM) | Connector Name | WIRE TO WIRE |
| Connector Type | A03FW | Connector Type | NS16MW-CS | Connector Type | FK02FGY | Connector Type | TH32MW-NH |

| | | | |
|-----------------------------|---|---|----|
| Terminal No. | 1 | 2 | 3 |
| Color of Wire | B | L | LG |
| Signal Name [Specification] | | | |

| | | | | | | | | | |
|-----------------------------|---|---|----|----|----|----|----|----|----|
| Terminal No. | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Color of Wire | B | L | LG |
| Signal Name [Specification] | | | | | | | | | |

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

| | | |
|-----------------------------|----|----|
| Terminal No. | 17 | 18 |
| Color of Wire | R | W |
| Signal Name [Specification] | | |

JCKWMM2210GI

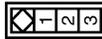
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

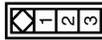
INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE A)

| | |
|----------------|------------------------------------|
| Connector No. | B220 |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | A03FW |



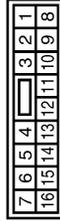
| | | | | |
|--------------|---|---|-----------------------------|---|
| Terminal No. | 2 | R | Signal Name [Specification] | - |
|--------------|---|---|-----------------------------|---|

| | |
|----------------|---------------------|
| Connector No. | B221 |
| Connector Name | REAR DOOR SWITCH RH |
| Connector Type | A03FW |



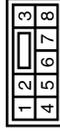
| | | | | |
|--------------|---|---|-----------------------------|---|
| Terminal No. | 2 | W | Signal Name [Specification] | - |
|--------------|---|---|-----------------------------|---|

| | |
|----------------|--------------|
| Connector No. | D153 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS18FW-CS |



| | | | | |
|--------------|---|----|-----------------------------|---|
| Terminal No. | 1 | LG | Signal Name [Specification] | - |
| Terminal No. | 8 | B | Signal Name [Specification] | - |

| | |
|----------------|--|
| Connector No. | D179 |
| Connector Name | BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) |
| Connector Type | NS30FW-CS |



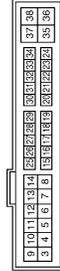
| | | | | |
|--------------|---|----|-----------------------------|---|
| Terminal No. | 7 | LG | Signal Name [Specification] | - |
| Terminal No. | 8 | B | Signal Name [Specification] | - |

| | |
|----------------|---|
| Connector No. | D180 |
| Connector Name | BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) |
| Connector Type | NS04FW-CS |



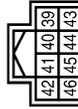
| | | | | |
|--------------|---|----|-----------------------------|---|
| Terminal No. | 3 | LG | Signal Name [Specification] | - |
| Terminal No. | 4 | B | Signal Name [Specification] | - |

| | |
|----------------|--|
| Connector No. | E10 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4-1V |



| | | | | |
|--------------|----|----|-----------------------------|---|
| Terminal No. | 11 | P | Signal Name [Specification] | - |
| Terminal No. | 12 | B | Signal Name [Specification] | - |
| Terminal No. | 27 | W | Signal Name [Specification] | - |
| Terminal No. | 28 | SB | Signal Name [Specification] | - |
| Terminal No. | 30 | BR | Signal Name [Specification] | - |
| Terminal No. | 32 | V | Signal Name [Specification] | - |
| Terminal No. | 33 | G | Signal Name [Specification] | - |
| Terminal No. | 36 | G | Signal Name [Specification] | - |

| | |
|----------------|--|
| Connector No. | E11 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH08FW-NH |



| | | | | |
|--------------|----|----|-----------------------------|---|
| Terminal No. | 39 | P | Signal Name [Specification] | - |
| Terminal No. | 40 | L | Signal Name [Specification] | - |
| Terminal No. | 41 | B | Signal Name [Specification] | - |
| Terminal No. | 43 | Y | Signal Name [Specification] | - |
| Terminal No. | 46 | BR | Signal Name [Specification] | - |

| | |
|----------------|-----------------|
| Connector No. | E16 |
| Connector Name | ECM |
| Connector Type | RH24FB-R28-L-LH |



| | | | | |
|--------------|----|---|-----------------------------|----------|
| Terminal No. | 97 | P | Signal Name [Specification] | VEHOAN-L |
| Terminal No. | 98 | L | Signal Name [Specification] | VEHOAN-H |

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

SEC

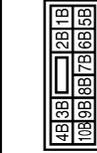
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

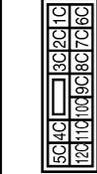
INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE A)

| | |
|----------------|------------------|
| Connector No. | M2 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS10FW-CS |



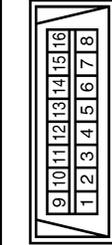
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3B | L | - |
| 9B | GR | - |

| | |
|----------------|------------------|
| Connector No. | M3 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |



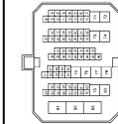
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 12C | O | - |

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



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

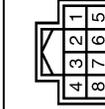
| | |
|----------------|----------------|
| Connector No. | M1 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | V | - |
| 15 | R | - |
| 23 | P | - |
| 26 | L | - |
| 27 | O | - |
| 28 | BR | - |
| 29 | L | - |
| 47 | P | - |
| 48 | L | - |

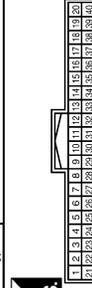
| | | |
|----|----|---|
| 61 | GR | - |
| 82 | W | - |

| | |
|----------------|--------------------|
| Connector No. | M12 |
| Connector Name | STEERING LOCK UNIT |
| Connector Type | TH88FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | P | S/L 12V MECHANICAL(V1) |
| 2 | LG | S/L COM |
| 3 | O | S/L CONDITION 1 |
| 5 | B | GND 1 |
| 6 | B | GND 2 |
| 7 | Y | S/L 12V GPL(V2) |
| 8 | L | S/L CONDITION 2 |

| | |
|----------------|-------------------|
| Connector No. | M24 |
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 21 | L | GAIN-H |
| 22 | P | GAIN-L |
| 23 | B | GROUND |

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

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

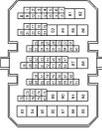
INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE A)

| | |
|----------------|-------------------------------|
| Connector No. | M78 |
| Connector Name | REMOTE KEYLESS ENTRY RECEIVER |
| Connector Type | UAG04FB |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | P | GND |
| 2 | P | SIGNAL |
| 4 | L | +12V |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 14 | R | - |
| 15 | SB | - |
| 56 | P | - |
| 57 | L | - |
| 73 | Y | - |
| 78 | SHIELD | - |
| 79 | B | - |
| 80 | W | - |

| | |
|----------------|----------------|
| Connector No. | M57 |
| Connector Name | CONTROL DEVICE |
| Connector Type | TK10FW |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 8 | Y | - |
| 9 | V | - |

| | |
|----------------|--------------|
| Connector No. | M44 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH22FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 17 | R | - |
| 18 | W | - |

| | |
|----------------|--|
| Connector No. | M105 |
| Connector Name | INSIDE KEY ANTENNA (INSTRUMENT CENTER) |
| Connector Type | RK02FGY |



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

| | |
|----------------|-----------------------------|
| Connector No. | M101 |
| Connector Name | PUSH-BUTTON IGNITION SWITCH |
| Connector Type | TK08FBR |



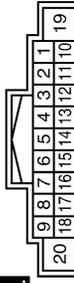
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | B | - |
| 4 | BR | - |
| 6 | L | - |
| 8 | GR | - |

| | |
|----------------|-------------------------|
| Connector No. | M100 |
| Connector Name | SECURITY INDICATOR LAMP |
| Connector Type | TK02FBR |



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

| | |
|----------------|--------------|
| Connector No. | M97 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH18FW-CS2 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | - |
| 2 | SHIELD | - |
| 10 | B | - |
| 11 | B | - |

JCKWM2214G1

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE A)

| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | MD2FB-LC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | BAT (F/L) |

| | |
|----------------|---------------------------|
| Connector No. | M119 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS16FY-CS |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 15 | L | ACC IND |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 34 | B | LUGGAGE ROOM ANTI- |
| 35 | W | LUGGAGE ROOM ANTI+ |
| 47 | L | IGN RELAY FROM F/R CONT |
| 52 | R | STARTER RELAY CONT |
| 66 | Y | BACK DOOR SW |
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-------------------------------|
| 72 | B | ROOM ANTI2- |
| 73 | W | ROOM ANTI2+ |
| 78 | R | ROOM ANTI- |
| 79 | G | ROOM ANTI+ |
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 93 | L | ON IND |
| 96 | Y | A/T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 124 | R | PASSENGER DOOR SW |
| 137 | P | RECEIVER/SENSOR GND |
| 140 | GR | SHIFT IN/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 150 | SB | DRIVER DOOR SW |

| | |
|----------------|--------------|
| Connector No. | M251 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH18MM-CS2 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | - |
| 2 | SHIELD | - |
| 10 | B | - |
| 11 | SHIELD | - |

JCKWM22156G

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

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE A)

| | |
|----------------|------------------------------|
| Connector No. | W232 |
| Connector Name | INSIDE KEY ANTENNA (CONSOLE) |
| Connector Type | RK2FGY |



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

JCKWM2216Gf

From to VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),

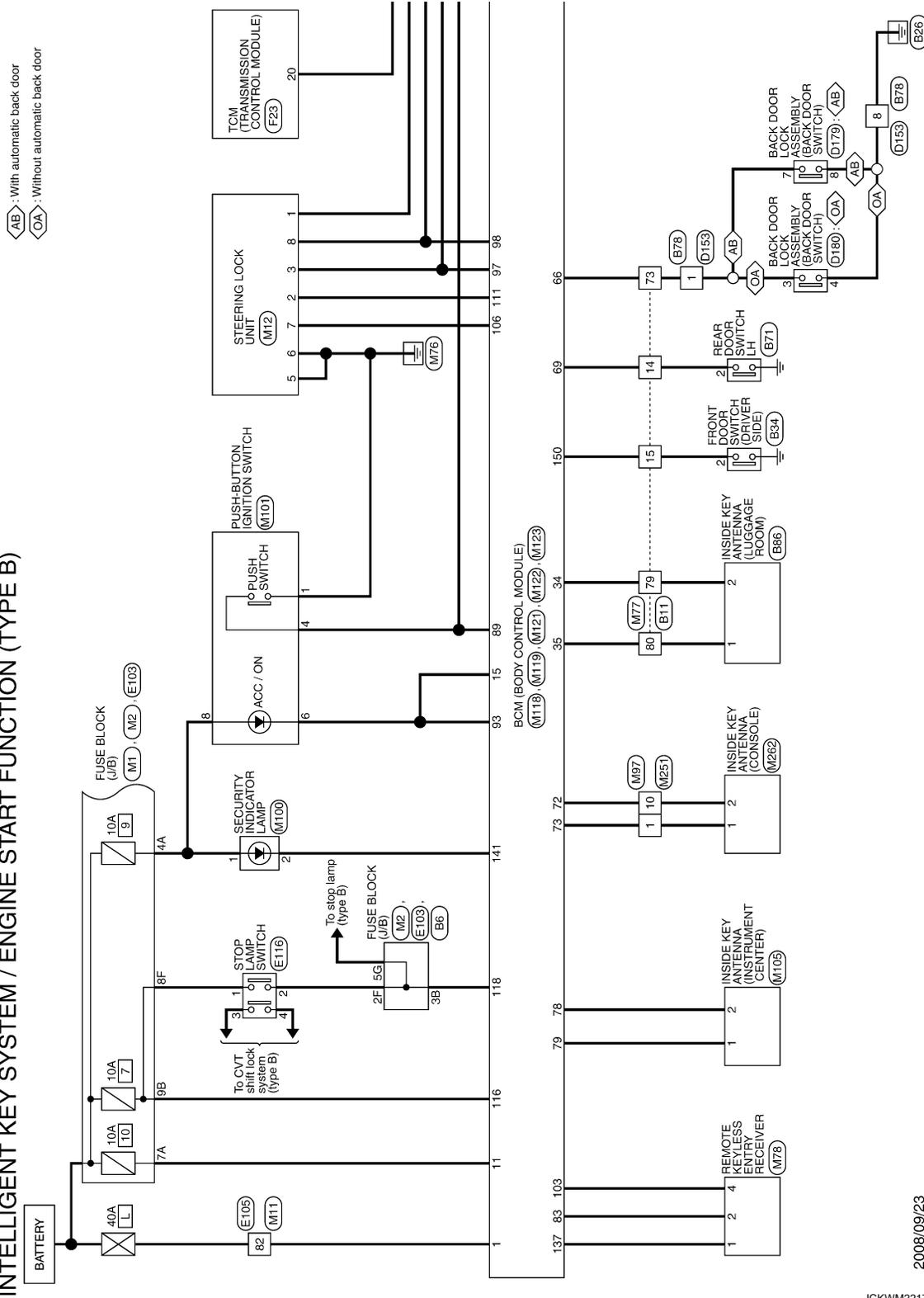
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)



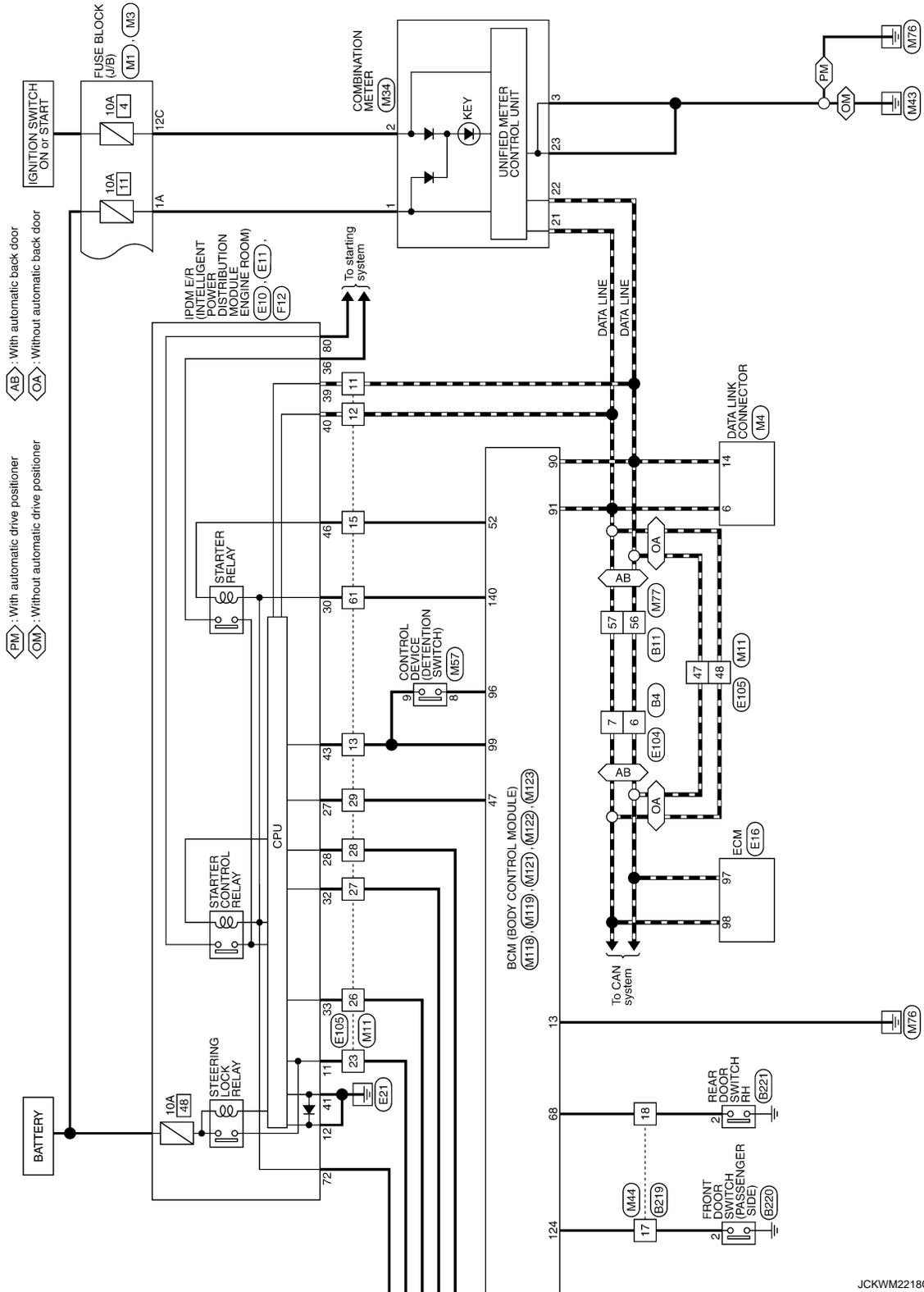
2008/09/23

JCKWM2217GI

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JCKWM2218G1

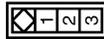
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

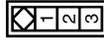
INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)

| | |
|----------------|------------------------------------|
| Connector No. | B220 |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | AG3FW |



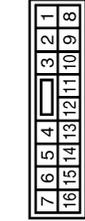
| | | | | | |
|--------------|---|---------------|---|-----------------------------|---|
| Terminal No. | 2 | Color of Wire | R | Signal Name [Specification] | - |
|--------------|---|---------------|---|-----------------------------|---|

| | |
|----------------|---------------------|
| Connector No. | B221 |
| Connector Name | REAR DOOR SWITCH RH |
| Connector Type | AG3FW |



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

| | |
|----------------|--------------|
| Connector No. | D153 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |



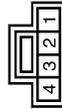
| | | | | | |
|--------------|---|---------------|----|-----------------------------|---|
| Terminal No. | 1 | Color of Wire | LG | Signal Name [Specification] | - |
| Terminal No. | 8 | Color of Wire | B | Signal Name [Specification] | - |

| | |
|----------------|--|
| Connector No. | D179 |
| Connector Name | BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) |
| Connector Type | NS30FW-CS |



| | | | | | |
|--------------|---|---------------|----|-----------------------------|---|
| Terminal No. | 7 | Color of Wire | LG | Signal Name [Specification] | - |
| Terminal No. | 8 | Color of Wire | B | Signal Name [Specification] | - |

| | |
|----------------|---|
| Connector No. | D180 |
| Connector Name | BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) |
| Connector Type | NS04FW-CS |



| | | | | | |
|--------------|---|---------------|----|-----------------------------|---|
| Terminal No. | 3 | Color of Wire | LG | Signal Name [Specification] | - |
| Terminal No. | 4 | Color of Wire | B | Signal Name [Specification] | - |

| | |
|----------------|--|
| Connector No. | E10 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4-1V |



| | | | | | |
|--------------|----|---------------|----|-----------------------------|---|
| Terminal No. | 11 | Color of Wire | P | Signal Name [Specification] | - |
| Terminal No. | 12 | Color of Wire | B | Signal Name [Specification] | - |
| Terminal No. | 27 | Color of Wire | W | Signal Name [Specification] | - |
| Terminal No. | 28 | Color of Wire | SB | Signal Name [Specification] | - |
| Terminal No. | 30 | Color of Wire | BR | Signal Name [Specification] | - |
| Terminal No. | 32 | Color of Wire | V | Signal Name [Specification] | - |
| Terminal No. | 33 | Color of Wire | G | Signal Name [Specification] | - |
| Terminal No. | 36 | Color of Wire | G | Signal Name [Specification] | - |

| | |
|----------------|--|
| Connector No. | E11 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH08FW-NH |



| | | | | | |
|--------------|----|---------------|----|-----------------------------|---|
| Terminal No. | 39 | Color of Wire | P | Signal Name [Specification] | - |
| Terminal No. | 40 | Color of Wire | L | Signal Name [Specification] | - |
| Terminal No. | 41 | Color of Wire | B | Signal Name [Specification] | - |
| Terminal No. | 43 | Color of Wire | Y | Signal Name [Specification] | - |
| Terminal No. | 46 | Color of Wire | BR | Signal Name [Specification] | - |

| | |
|----------------|-----------------|
| Connector No. | E16 |
| Connector Name | ECM |
| Connector Type | RH24FB-R28-L-LH |



| | | | | | |
|--------------|----|---------------|---|-----------------------------|----------|
| Terminal No. | 97 | Color of Wire | P | Signal Name [Specification] | VEHOAN-L |
| Terminal No. | 98 | Color of Wire | L | Signal Name [Specification] | VEHOAN-H |

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)

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

| | | | |
|----------------|--------------|--|--|
| Connector No. | E104 | | |
| Connector Name | WIRE TO WIRE | | |
| Connector Type | NS16FW-CS | | |

| | | | |
|----------------|-----------------|--|--|
| Connector No. | E105 | | |
| Connector Name | WIRE TO WIRE | | |
| Connector Type | TH20MW-CS1.0-M3 | | |

| | | | |
|----------------|--------------|--|--|
| Connector No. | E104 | | |
| Connector Name | WIRE TO WIRE | | |
| Connector Type | NS16FW-CS | | |

| | | | | | | | |
|-----------------------------|----|----|----|----|----|----|----|
| Terminal No. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Color of Wire | LG | BR | BR | BR | BR | BR | BR |
| Signal Name [Specification] | | | | | | | |

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

| | | | | | | | |
|-----------------------------|----|----|--|--|--|--|--|
| Terminal No. | 2F | 8F | | | | | |
| Color of Wire | LG | R | | | | | |
| Signal Name [Specification] | | | | | | | |

| | | | | | | | | | | | |
|-----------------------------|----|----|----|----|----|----|----|----|----|----|----|
| Terminal No. | 11 | 12 | 13 | 15 | 23 | 28 | 21 | 28 | 29 | 47 | 48 |
| Color of Wire | P | L | Y | BR | P | G | V | SB | W | P | L |
| Signal Name [Specification] | | | | | | | | | | | |

| | | | |
|----------------|-----------------------------------|--|--|
| Connector No. | F23 | | |
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) | | |
| Connector Type | RH40FB-R28-L-RH | | |

| | | | | | | | |
|-----------------------------|---|---|--|--|--|--|--|
| Terminal No. | 6 | 7 | | | | | |
| Color of Wire | P | L | | | | | |
| Signal Name [Specification] | | | | | | | |

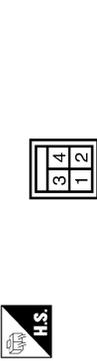
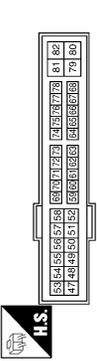
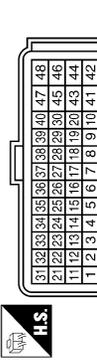
| | | | | | | | |
|-----------------------------|----|----|--|--|--|--|--|
| Terminal No. | 2F | 8F | | | | | |
| Color of Wire | LG | R | | | | | |
| Signal Name [Specification] | | | | | | | |

| | | | |
|----------------|------------------|--|--|
| Connector No. | M1 | | |
| Connector Name | FUSE BLOCK (J/B) | | |
| Connector Type | NS30FW-M2 | | |

| | | | |
|----------------|--|--|--|
| Connector No. | F12 | | |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | | |
| Connector Type | TH20FW-CS12-M4 | | |

| | | | |
|----------------|---------------------------|--|--|
| Connector No. | E116 | | |
| Connector Name | STOP LAMP SWITCH (TYPE B) | | |
| Connector Type | MG4FW-LC | | |

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



| | | | | | |
|-----------------------------|----|----|----|--|--|
| Terminal No. | 1A | 4A | 7A | | |
| Color of Wire | Y | GR | LG | | |
| Signal Name [Specification] | | | | | |

| | | | |
|-----------------------------|---------------|--|--|
| Terminal No. | 20 | | |
| Color of Wire | R/B | | |
| Signal Name [Specification] | STARTER RELAY | | |

| | | | | | |
|-----------------------------|-----|----|--|--|--|
| Terminal No. | 72 | 80 | | | |
| Color of Wire | R/B | B | | | |
| Signal Name [Specification] | | | | | |

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

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

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)

| | |
|----------------|------------------|
| Connector No. | M2 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS10FW-CS |



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

| | |
|----------------|------------------|
| Connector No. | M3 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 12C | O | - |

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



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

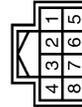
| | |
|----------------|----------------|
| Connector No. | M1 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 11 | P | - |
| 12 | L | - |
| 13 | V | - |
| 15 | R | - |
| 23 | P | - |
| 26 | L | - |
| 27 | O | - |
| 28 | BR | - |
| 29 | L | - |
| 47 | P | - |
| 48 | L | - |

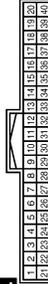
| | | |
|----|----|---|
| 61 | GR | - |
| 82 | W | - |

| | |
|----------------|--------------------|
| Connector No. | M12 |
| Connector Name | STEERING LOCK UNIT |
| Connector Type | TH88FW-NH |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | P | S/L 12V MECHANICAL(V1) |
| 2 | LG | S/L COM |
| 3 | O | S/L CONDITION 1 |
| 5 | B | GND 1 |
| 6 | B | GND 2 |
| 7 | Y | S/L 12V GPL(V2) |
| 8 | L | S/L CONDITION 2 |

| | |
|----------------|-------------------|
| Connector No. | M24 |
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GROUND |

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)

| | | | | | | | |
|-----------------------|--|--------------------|---------------------|---------------------------------------|--------------------|---------------------|---------------------------------------|
| Connector No. M44 | WIRE TO WIRE TH2FW-NH | Terminal No. 17 | Color of Wire R | Signal Name [Specification] - | Terminal No. 18 | Color of Wire W | Signal Name [Specification] - |
| Connector No. M44 | WIRE TO WIRE TH2FW-NH | Terminal No. 18 | Color of Wire W | Signal Name [Specification] - | Terminal No. 17 | Color of Wire R | Signal Name [Specification] - |
| Connector No. M77 | WIRE TO WIRE TH8FW-CS19 | Terminal No. 14 | Color of Wire R | Signal Name [Specification] - | Terminal No. 15 | Color of Wire SB | Signal Name [Specification] - |
| Connector No. M77 | WIRE TO WIRE TH8FW-CS19 | Terminal No. 15 | Color of Wire SB | Signal Name [Specification] - | Terminal No. 56 | Color of Wire P | Signal Name [Specification] - |
| Connector No. M77 | WIRE TO WIRE TH8FW-CS19 | Terminal No. 56 | Color of Wire P | Signal Name [Specification] - | Terminal No. 57 | Color of Wire L | Signal Name [Specification] - |
| Connector No. M77 | WIRE TO WIRE TH8FW-CS19 | Terminal No. 57 | Color of Wire L | Signal Name [Specification] - | Terminal No. 72 | Color of Wire Y | Signal Name [Specification] - |
| Connector No. M77 | WIRE TO WIRE TH8FW-CS19 | Terminal No. 72 | Color of Wire Y | Signal Name [Specification] - | Terminal No. 78 | Color of Wire B | Signal Name [Specification] - |
| Connector No. M77 | WIRE TO WIRE TH8FW-CS19 | Terminal No. 78 | Color of Wire B | Signal Name [Specification] - | Terminal No. 80 | Color of Wire W | Signal Name [Specification] - |
| Connector No. M78 | REMOTE KEYLESS ENTRY RECEIVER JAB04FB | Terminal No. 1 | Color of Wire P | Signal Name [Specification] GND | Terminal No. 2 | Color of Wire P | Signal Name [Specification] SIGNAL |
| Connector No. M78 | REMOTE KEYLESS ENTRY RECEIVER JAB04FB | Terminal No. 2 | Color of Wire P | Signal Name [Specification] SIGNAL | Terminal No. 4 | Color of Wire L | Signal Name [Specification] +12V |
| Connector No. M100 | SECURITY INDICATOR LAMP TK0ZFBR | Terminal No. 1 | Color of Wire GR | Signal Name [Specification] - | Terminal No. 2 | Color of Wire O | Signal Name [Specification] - |
| Connector No. M100 | SECURITY INDICATOR LAMP TK0ZFBR | Terminal No. 2 | Color of Wire O | Signal Name [Specification] - | Terminal No. 1 | Color of Wire B | Signal Name [Specification] - |
| Connector No. M101 | PUSH-BUTTON IGNITION SWITCH TK08FBR | Terminal No. 1 | Color of Wire B | Signal Name [Specification] - | Terminal No. 4 | Color of Wire BR | Signal Name [Specification] - |
| Connector No. M101 | PUSH-BUTTON IGNITION SWITCH TK08FBR | Terminal No. 4 | Color of Wire BR | Signal Name [Specification] - | Terminal No. 6 | Color of Wire L | Signal Name [Specification] - |
| Connector No. M105 | INSIDE KEY ANTENNA (INSTRUMENT CENTER) RK02ZFGY | Terminal No. 1 | Color of Wire G | Signal Name [Specification] - | Terminal No. 2 | Color of Wire R | Signal Name [Specification] - |
| Connector No. M105 | INSIDE KEY ANTENNA (INSTRUMENT CENTER) RK02ZFGY | Terminal No. 2 | Color of Wire R | Signal Name [Specification] - | Terminal No. 1 | Color of Wire G | Signal Name [Specification] - |
| Connector No. M97 | WIRE TO WIRE TH18FW-CS2 | Terminal No. 1 | Color of Wire W | Signal Name [Specification] - | Terminal No. 10 | Color of Wire B | Signal Name [Specification] - |
| Connector No. M97 | WIRE TO WIRE TH18FW-CS2 | Terminal No. 10 | Color of Wire B | Signal Name [Specification] - | Terminal No. 1 | Color of Wire W | Signal Name [Specification] - |

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

SEC

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)

| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH02FB-LC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | BAT (F/L) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 15 | L | ACC.IND |

| | |
|----------------|---------------------------|
| Connector No. | M121 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 34 | B | LUGGAGE ROOM ANTI- |
| 35 | W | LUGGAGE ROOM ANTI+ |
| 47 | L | IGN RELAY FROM F/R CONT |
| 52 | R | STARTER RELAY CONT |
| 66 | Y | BACK DOOR SW |
| 68 | W | REAR LH DOOR SW |
| 69 | R | REAR LH DOOR SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-------------------------------|
| 72 | B | ROOM AN2- |
| 73 | W | ROOM AN2+ |
| 78 | R | ROOM AN1- |
| 79 | G | ROOM AN1+ |
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 93 | L | ON IND |
| 96 | Y | A/T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 124 | R | PASSENGER DOOR SW |
| 137 | P | RECEIVER/SENSOR GND |
| 140 | GR | SHIFT IN/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 150 | SB | DRIVER DOOR SW |

| | |
|----------------|--------------|
| Connector No. | M251 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH18MW-CSZ |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | |
| 10 | B | |

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY SYSTEM / ENGINE START FUNCTION (TYPE B)

| | |
|----------------|------------------------------|
| Connector No. | M282 |
| Connector Name | INSIDE KEY ANTENNA (CONSOLE) |
| Connector Type | RK2FGY |



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

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

SEC

JCKWM2225Gf

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

Wiring Diagram - NISSAN VEHICLE IMMOBILIZER SYSTEM -

INFOID:000000004747780

NOTE:

- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)
- Type B: From to VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO), JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)

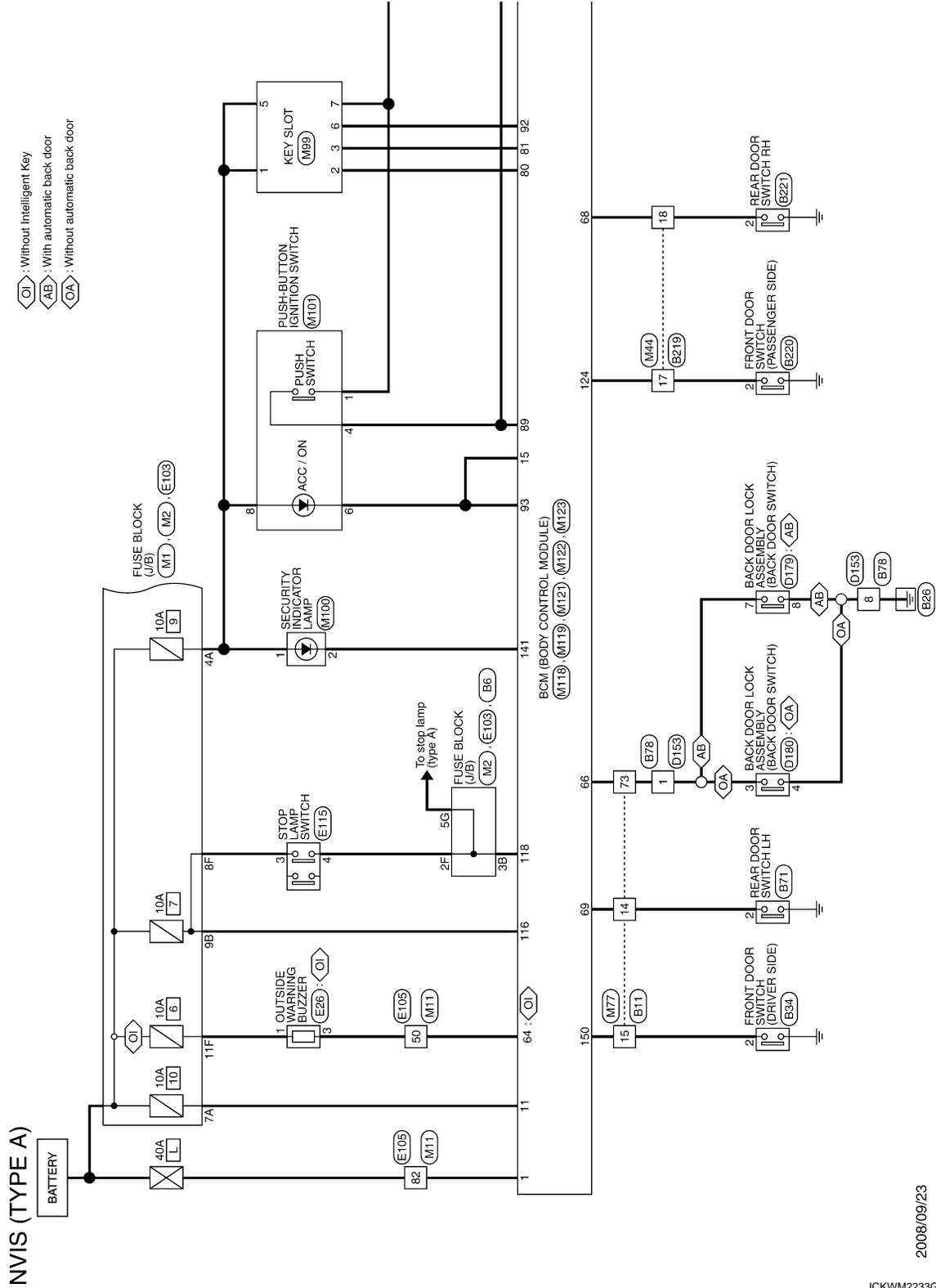
Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)



2008/09/23

JCKWM2233GF

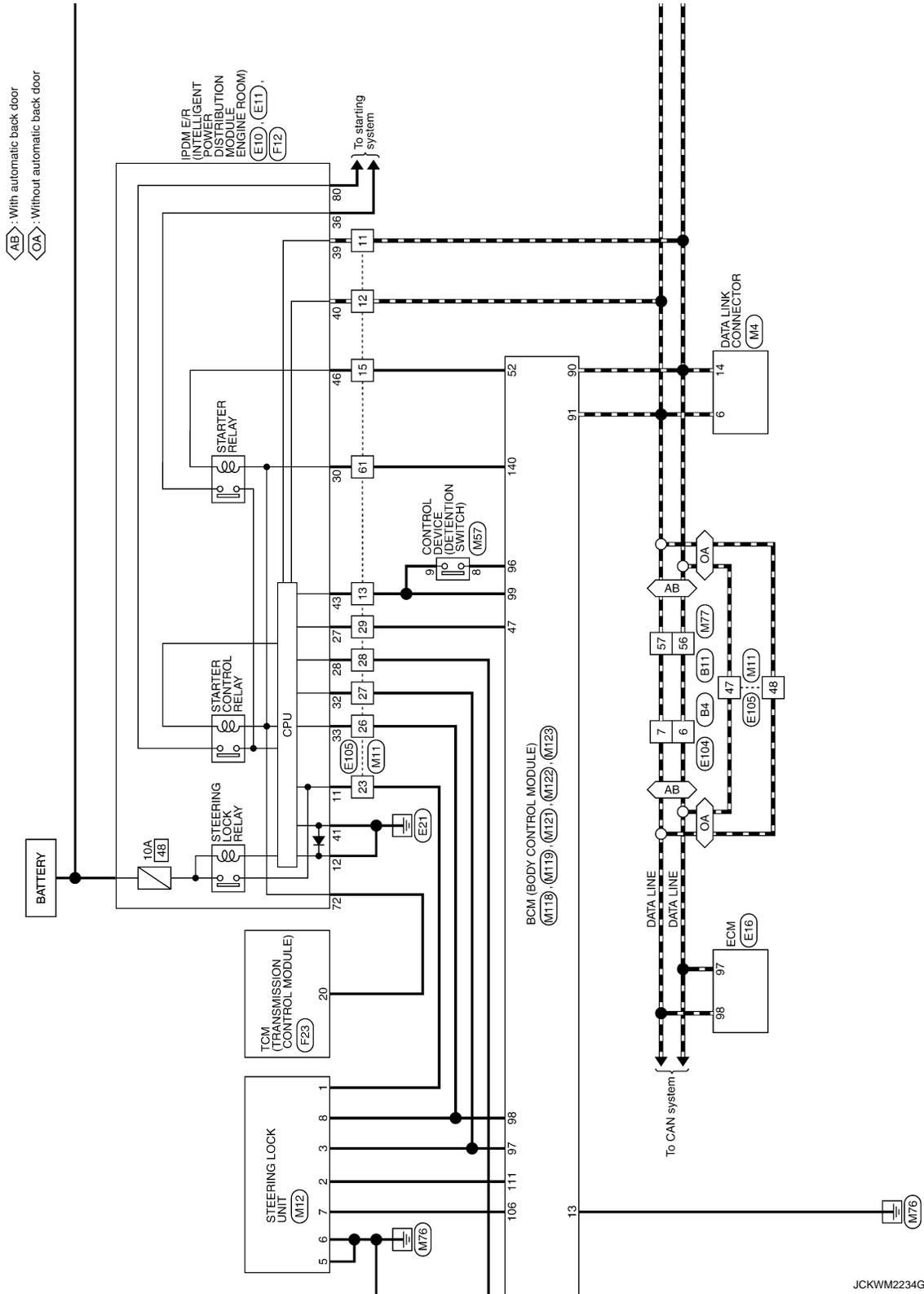
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

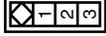
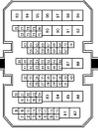
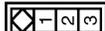


NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NVIS (TYPE A)

| | | | | | |
|---|---|---|--------------|---------------|-----------------------------|
| Connector No. B4 | WIRE TO WIRE NS16MW-CS |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 6 | P | - |
| Connector Type | | | 7 | L | - |
|  | | | | | |
| Connector No. B34 | FRONT DOOR SWITCH (DRIVER SIDE) AG3FW |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 2 | SB | - |
| Connector Type | | | | | |
|  | | | | | |
| Connector No. B11 | WIRE TO WIRE TH32MW-CS 9 |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 14 | BR | - |
| Connector Type | | | 15 | SB | - |
| | | | 56 | P | - |
| | | | 57 | L | - |
| | | | 78 | LG | - |
|  | | | | | |
| Connector No. B6 | FUSE BLOCK (J/B) NS17FBR-CS |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 5G | P | - |
| Connector Type | | | | | |
|  | | | | | |
| Connector No. B78 | WIRE TO WIRE NS16MW-CS |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 1 | LG | - |
| Connector Type | | | 8 | B | - |
|  | | | | | |
| Connector No. B71 | REAR DOOR SWITCH LH AG3FW |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 2 | BR | - |
| Connector Type | | | | | |
|  | | | | | |
| Connector No. B20 | FRONT DOOR SWITCH (PASSENGER SIDE) AG3FW |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 2 | R | - |
| Connector Type | | | | | |
|  | | | | | |
| Connector No. B219 | WIRE TO WIRE TH32MW-NH |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 17 | R | - |
| Connector Type | | | 18 | W | - |
|  | | | | | |
| Connector No. B78 | WIRE TO WIRE NS16MW-CS |  | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name | | | 1 | LG | - |
| Connector Type | | | 8 | B | - |
|  | | | | | |

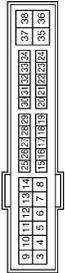
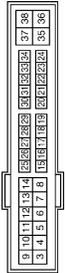
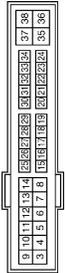
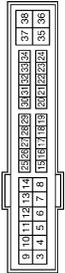
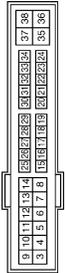
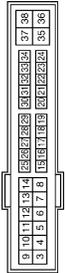
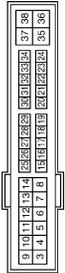
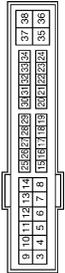
JCKW2236G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NVIS (TYPE A)

| | | | | | | | | | |
|-----------------------|--|-------------------------------------|--|--------------------|---------------------|-----------------------------|--------------------|---------------------|-----------------------------|
| Connector No. B221 | Connector Name REAR DOOR SWITCH RH | Connector Type A03FW |   | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | Terminal No. 2 | Color of Wire W | Signal Name [Specification] |
| Connector No. D153 | Connector Name WIRE TO WIRE | Connector Type NS16FW-CS |   | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] |
| Connector No. D179 | Connector Name BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) | Connector Type NS36FW-CS |   | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] |
| Connector No. D180 | Connector Name BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) | Connector Type NS34FW-CS |   | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 36 | Color of Wire G | Signal Name [Specification] | Terminal No. 36 | Color of Wire G | Signal Name [Specification] |
| Connector No. E11 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH08FW-NH |   | Terminal No. 40 | Color of Wire L | Signal Name [Specification] | Terminal No. 40 | Color of Wire L | Signal Name [Specification] |
| Connector No. E16 | Connector Name ECM | Connector Type RH24FB-R28-L-LH |   | Terminal No. 97 | Color of Wire P | Signal Name [Specification] | Terminal No. 97 | Color of Wire P | Signal Name [Specification] |
| Connector No. E18 | Connector Name OUTSIDE WARNING BUZZER | Connector Type RK03FBR |   | Terminal No. 1 | Color of Wire G | Signal Name [Specification] | Terminal No. 1 | Color of Wire G | Signal Name [Specification] |
| Connector No. E11 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH08FW-NH |   | Terminal No. 46 | Color of Wire BR | Signal Name [Specification] | Terminal No. 46 | Color of Wire BR | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 11 | Color of Wire P | Signal Name [Specification] | Terminal No. 11 | Color of Wire P | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 12 | Color of Wire B | Signal Name [Specification] | Terminal No. 12 | Color of Wire B | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 27 | Color of Wire W | Signal Name [Specification] | Terminal No. 27 | Color of Wire W | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 28 | Color of Wire SB | Signal Name [Specification] | Terminal No. 28 | Color of Wire SB | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 30 | Color of Wire BR | Signal Name [Specification] | Terminal No. 30 | Color of Wire BR | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 32 | Color of Wire V | Signal Name [Specification] | Terminal No. 32 | Color of Wire V | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 33 | Color of Wire G | Signal Name [Specification] | Terminal No. 33 | Color of Wire G | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M4-TV |   | Terminal No. 36 | Color of Wire G | Signal Name [Specification] | Terminal No. 36 | Color of Wire G | Signal Name [Specification] |

JCKWM2237G1

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

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

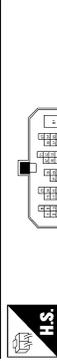
NVIS (TYPE A)

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

| | | | |
|----------------|----------------|--|--|
| Connector No. | E105 | | |
| Connector Name | WIRE TO WIRE | | |
| Connector Type | TH10MW-CS10-M3 | | |

| | | | |
|----------------|--------------|--|--|
| Connector No. | E104 | | |
| Connector Name | WIRE TO WIRE | | |
| Connector Type | NS16FW-CS | | |

| | | | |
|--------------|-----|----|---|
| Terminal No. | 2F | LG | - |
| Terminal No. | 8F | R | - |
| Terminal No. | 11F | G | - |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | Y | - |
| 15 | BR | - |
| 23 | P | - |
| 26 | G | - |
| 27 | V | - |
| 28 | SB | - |
| 29 | W | - |
| 47 | P | - |
| 48 | L | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 6 | P | - |
| 7 | L | - |

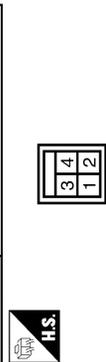
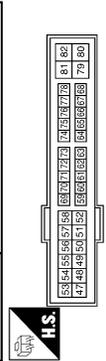
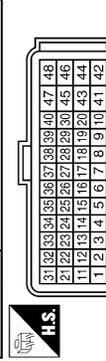
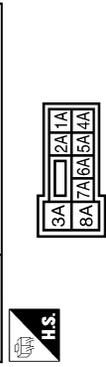
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2F | LG | - |
| 8F | R | - |
| 11F | G | - |

| | | | |
|----------------|------------------|--|--|
| Connector No. | M1 | | |
| Connector Name | FUSE BLOCK (J/B) | | |
| Connector Type | NS30FW-M2 | | |

| | | | |
|----------------|-----------------------------------|--|--|
| Connector No. | F23 | | |
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) | | |
| Connector Type | RH40FB-RZ8-L-RH | | |

| | | | |
|----------------|--|--|--|
| Connector No. | F12 | | |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | | |
| Connector Type | TH20FW-CS12-M4 | | |

| | | | |
|----------------|---------------------------|--|--|
| Connector No. | E115 | | |
| Connector Name | STOP LAMP SWITCH (TYPE A) | | |
| Connector Type | MG4FW-LC | | |



| | | | |
|--------------|----|----|---|
| Terminal No. | 1A | Y | - |
| Terminal No. | 4A | GR | - |
| Terminal No. | 7A | LG | - |

| | | | |
|--------------|----|-----|---|
| Terminal No. | 20 | R/B | - |
|--------------|----|-----|---|

| | | | |
|--------------|----|-----|---|
| Terminal No. | 72 | R/B | B |
| Terminal No. | 80 | B | - |

| | | | |
|--------------|---|----|---|
| Terminal No. | 3 | R | - |
| Terminal No. | 4 | LG | - |

JCKWMM2238G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NVIS (TYPE A)

| | |
|----------------|------------------|
| Connector No. | M2 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS10FW-CS |



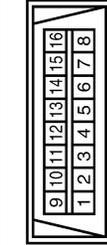
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3B | L | - |
| 9B | GR | - |

| | |
|----------------|------------------|
| Connector No. | M3 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |



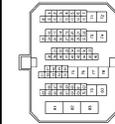
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 12C | O | - |

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



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

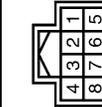
| | |
|----------------|----------------|
| Connector No. | M1 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | V | - |
| 15 | R | - |
| 23 | P | - |
| 26 | L | - |
| 27 | O | - |
| 28 | BR | - |
| 29 | L | - |
| 47 | P | - |
| 48 | L | - |

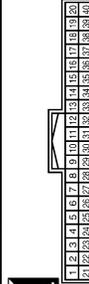
| | | |
|----|----|---|
| 50 | GR | - |
| 61 | GR | - |
| 82 | W | - |

| | |
|----------------|--------------------|
| Connector No. | M12 |
| Connector Name | STEERING LOCK UNIT |
| Connector Type | TH80FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | P | S/L 12V MECHANICAL(V1) |
| 2 | LG | S/L COM |
| 3 | O | S/L CONDITION 1 |
| 5 | B | GND 1 |
| 6 | B | GND 2 |
| 7 | Y | S/L 12V GPL(V2) |
| 8 | L | S/L CONDITION 2 |

| | |
|----------------|-------------------|
| Connector No. | M34 |
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GROUND |

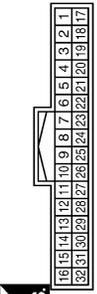
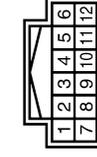
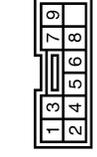
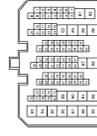
A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NVIS (TYPE A)

| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M44</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH22FW-NH</td></tr> </table> | Connector No. | M44 | Connector Name | WIRE TO WIRE | Connector Type | TH22FW-NH |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>17</td><td>R</td><td>-</td></tr> <tr><td>18</td><td>W</td><td>-</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 17 | R | - | 18 | W | - | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M89</td></tr> <tr><td>Connector Name</td><td>KEY SLOT</td></tr> <tr><td>Connector Type</td><td>TH12FW-NH</td></tr> </table> | Connector No. | M89 | Connector Name | KEY SLOT | Connector Type | TH12FW-NH |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>1</td><td>GR</td><td>BAT</td></tr> <tr><td>2</td><td>SB</td><td>GLOCK</td></tr> <tr><td>3</td><td>O</td><td>DATA</td></tr> <tr><td>5</td><td>GR</td><td>ILL BAT</td></tr> <tr><td>6</td><td>R</td><td>ILL [With Intelligent Key]</td></tr> <tr><td>8</td><td>L</td><td>ILL [Without Intelligent Key]</td></tr> <tr><td>7</td><td>B</td><td>GRD</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | BAT | 2 | SB | GLOCK | 3 | O | DATA | 5 | GR | ILL BAT | 6 | R | ILL [With Intelligent Key] | 8 | L | ILL [Without Intelligent Key] | 7 | B | GRD |
|---|-----------------------------|-------------------------------|----------------|---------------------------|----------------|-----------|---|--|--------------|---------------|-----------------------------|----|----|-----------|--|---------------|------|--|---------------------------|----------------|----------------|---|---|--------------|---|---|--------------|---------------|-----------------------------|----|----|-----|----|----|---------|----|---|------|----|----|---------|----|---|----------------------------|---|---|-------------------------------|---|---|-----|
| Connector No. | M44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | WIRE TO WIRE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH22FW-NH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | W | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. | M89 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | KEY SLOT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH12FW-NH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | BAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | SB | GLOCK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | O | DATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | GR | ILL BAT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | R | ILL [With Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | L | ILL [Without Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | B | GRD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M57</td></tr> <tr><td>Connector Name</td><td>CONTROL DEVICE</td></tr> <tr><td>Connector Type</td><td>TK10FW</td></tr> </table> | Connector No. | M57 | Connector Name | CONTROL DEVICE | Connector Type | TK10FW |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>8</td><td>Y</td><td>-</td></tr> <tr><td>9</td><td>V</td><td>-</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 8 | Y | - | 9 | V | - | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M77</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80FW-CS19</td></tr> </table> | Connector No. | M77 | Connector Name | WIRE TO WIRE | Connector Type | TH80FW-CS19 |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>14</td><td>R</td><td>-</td></tr> <tr><td>15</td><td>SB</td><td>-</td></tr> <tr><td>56</td><td>P</td><td>-</td></tr> <tr><td>57</td><td>L</td><td>-</td></tr> <tr><td>73</td><td>Y</td><td>-</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 14 | R | - | 15 | SB | - | 56 | P | - | 57 | L | - | 73 | Y | - | | | | | | |
| Connector No. | M57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | CONTROL DEVICE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TK10FW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | V | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. | M77 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | WIRE TO WIRE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH80FW-CS19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | SB | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 56 | P | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 57 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 73 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M100</td></tr> <tr><td>Connector Name</td><td>SECURITY INDICATOR LAMP</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table> | Connector No. | M100 | Connector Name | SECURITY INDICATOR LAMP | Connector Type | TK02FBR |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>1</td><td>GR</td><td>-</td></tr> <tr><td>2</td><td>O</td><td>-</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | - | 2 | O | - | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M101</td></tr> <tr><td>Connector Name</td><td>PUSH-BUTTON IGNITION SWITCH</td></tr> <tr><td>Connector Type</td><td>TK08FBR</td></tr> </table> | Connector No. | M101 | Connector Name | PUSH-BUTTON IGNITION SWITCH | Connector Type | TK08FBR |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>1</td><td>B</td><td>-</td></tr> <tr><td>4</td><td>BR</td><td>-</td></tr> <tr><td>6</td><td>L</td><td>-</td></tr> <tr><td>8</td><td>GR</td><td>-</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | B | - | 4 | BR | - | 6 | L | - | 8 | GR | - | | | | | | | | | |
| Connector No. | M100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | SECURITY INDICATOR LAMP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TK02FBR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | O | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. | M101 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | PUSH-BUTTON IGNITION SWITCH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TK08FBR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | B | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BR | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M1018</td></tr> <tr><td>Connector Name</td><td>BCM (BODY CONTROL MODULE)</td></tr> <tr><td>Connector Type</td><td>M03FEF-LC</td></tr> </table> | Connector No. | M1018 | Connector Name | BCM (BODY CONTROL MODULE) | Connector Type | M03FEF-LC |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>1</td><td>W</td><td>BAT (7/L)</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | W | BAT (7/L) | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Connector No.</td><td>M119</td></tr> <tr><td>Connector Name</td><td>BCM (BODY CONTROL MODULE)</td></tr> <tr><td>Connector Type</td><td>NS16FW-CS</td></tr> </table> | Connector No. | M119 | Connector Name | BCM (BODY CONTROL MODULE) | Connector Type | NS16FW-CS |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr><th>Terminal No.</th><th>Color of Wire</th><th>Signal Name [Specification]</th></tr> </thead> <tbody> <tr><td>11</td><td>LG</td><td>BAT (FUSE)</td></tr> <tr><td>13</td><td>B</td><td>GRD</td></tr> <tr><td>15</td><td>L</td><td>ACC IND</td></tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 11 | LG | BAT (FUSE) | 13 | B | GRD | 15 | L | ACC IND | | | | | | | | | | | | | | | |
| Connector No. | M1018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | BCM (BODY CONTROL MODULE) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | M03FEF-LC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | W | BAT (7/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. | M119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | BCM (BODY CONTROL MODULE) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | NS16FW-CS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | LG | BAT (FUSE) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | B | GRD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | L | ACC IND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

JCKWMM2240G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NVIS (TYPE A)

| | |
|----------------|---------------------------|
| Connector No. | M123 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-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 | 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 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|

| | | |
|-----|----|------------------|
| 99 | V | SHIFT P |
| 106 | Y | S/T POWER SUPPLY |
| 111 | LG | S/L COMM |

| | |
|----------------|---------------------------|
| Connector No. | M122 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FE-NH |



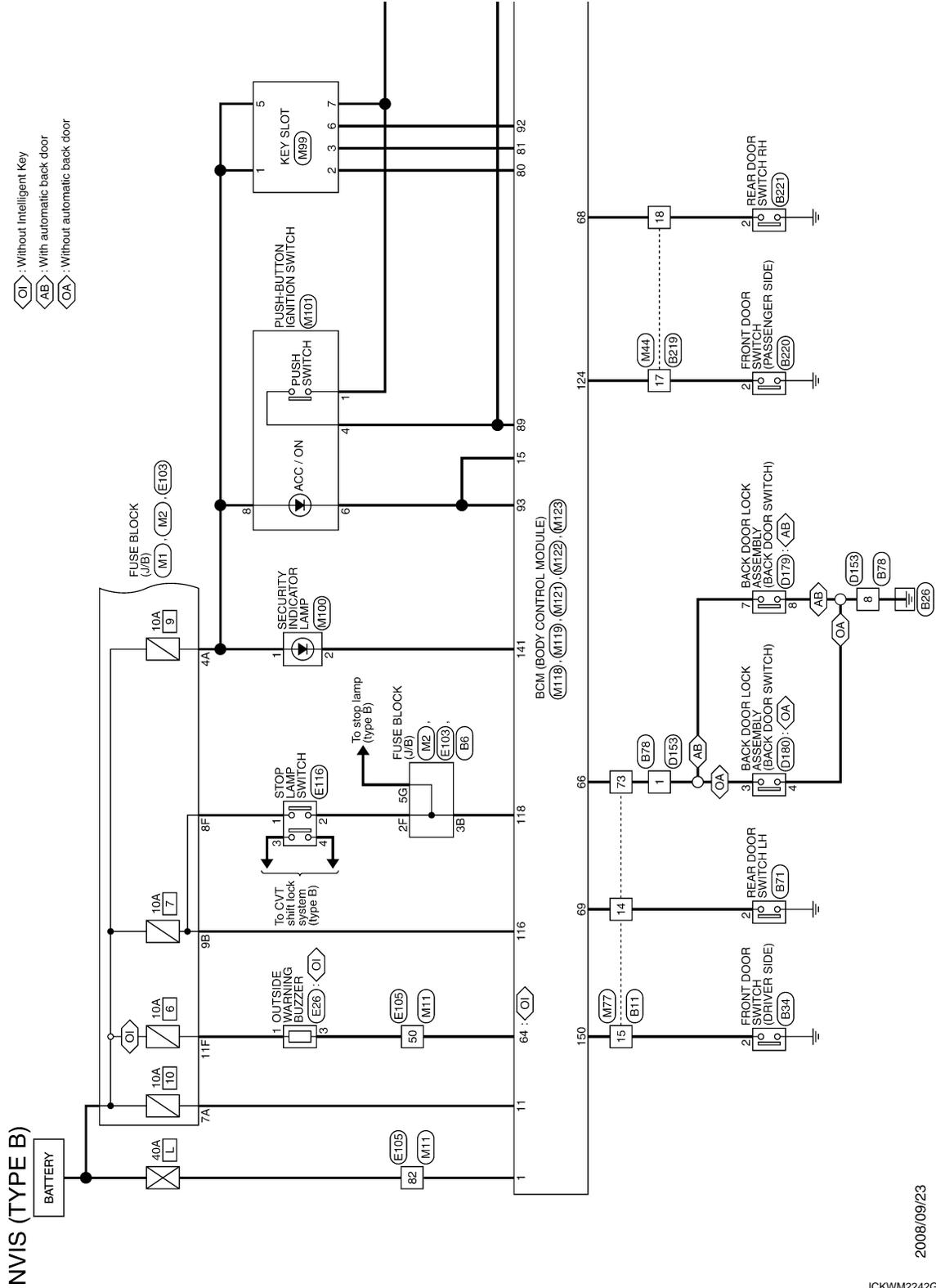
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 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 | 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 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 48 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

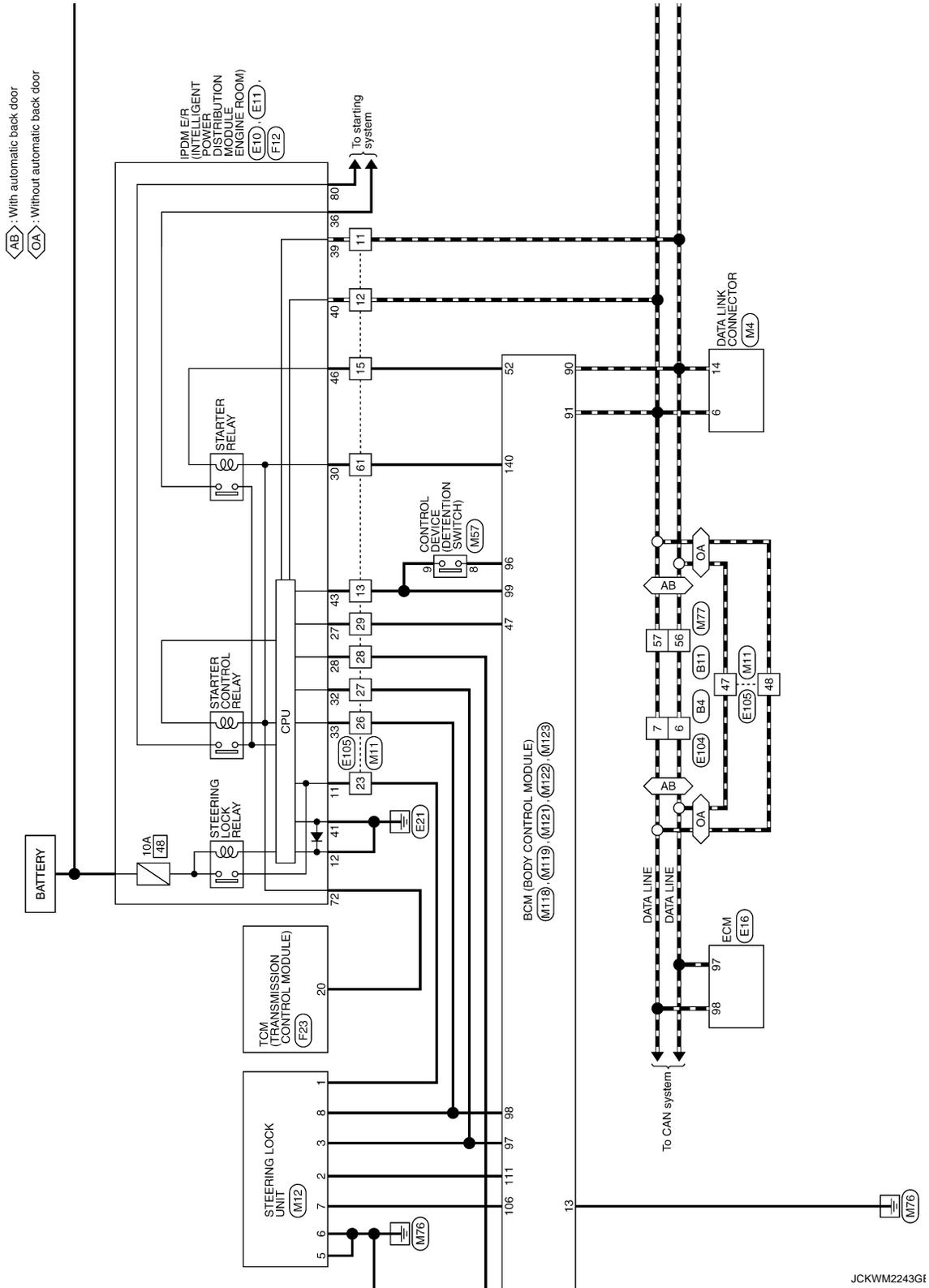
JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)



NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



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

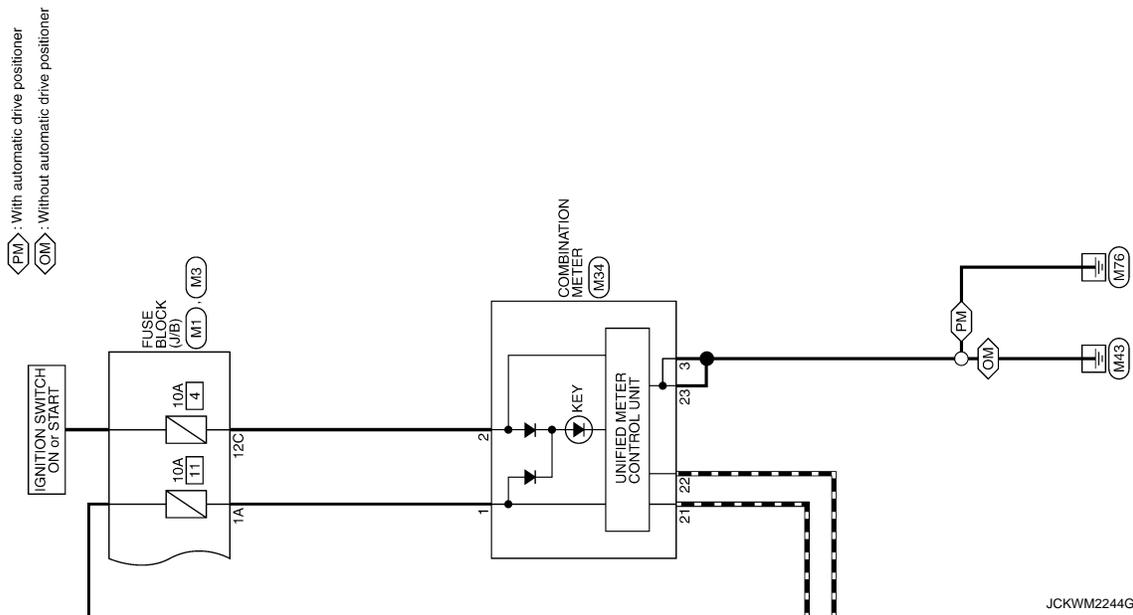
SEC

JCKWM2243Gf

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]



JCKWM2244Gf

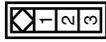
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

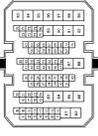
NVIS (TYPE B)

| | |
|----------------|---------------------------------|
| Connector No. | B34 |
| Connector Name | FRONT DOOR SWITCH (DRIVER SIDE) |
| Connector Type | AG3FW |

| | | | |
|--------------|---|----|-----------------------------|
| Terminal No. | 2 | SB | Signal Name [Specification] |
|--------------|---|----|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B11 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH82MW-CS:9 |

| | | | |
|--------------|----|----|-----------------------------|
| Terminal No. | 14 | BR | Signal Name [Specification] |
| 15 | SB | - | - |
| 56 | P | - | - |
| 57 | L | - | - |
| 73 | LG | - | - |

| | |
|----------------|------------------|
| Connector No. | B6 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FER-CS |



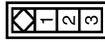

| | | | |
|--------------|----|---|-----------------------------|
| Terminal No. | 5G | P | Signal Name [Specification] |
|--------------|----|---|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B4 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |



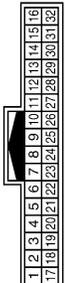

| | | | |
|--------------|---|---|-----------------------------|
| Terminal No. | 6 | P | Signal Name [Specification] |
| 7 | L | - | - |

| | |
|----------------|------------------------------------|
| Connector No. | B220 |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | AG3FW |

| | | | |
|--------------|---|---|-----------------------------|
| Terminal No. | 2 | R | Signal Name [Specification] |
|--------------|---|---|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B219 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32MW-NH |

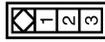
| | | | |
|--------------|----|---|-----------------------------|
| Terminal No. | 17 | R | Signal Name [Specification] |
| 18 | W | - | - |

| | |
|----------------|--------------|
| Connector No. | B78 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |




| | | | |
|--------------|---|----|-----------------------------|
| Terminal No. | 1 | LG | Signal Name [Specification] |
| 8 | B | - | - |

| | |
|----------------|---------------------|
| Connector No. | B71 |
| Connector Name | REAR DOOR SWITCH LH |
| Connector Type | AG3FW |

| | | | |
|--------------|---|----|-----------------------------|
| Terminal No. | 2 | BR | Signal Name [Specification] |
|--------------|---|----|-----------------------------|

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

SEC

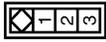
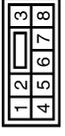
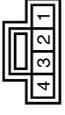
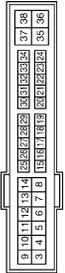
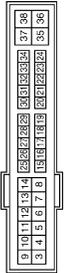
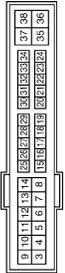
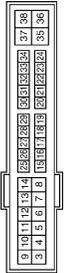
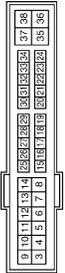
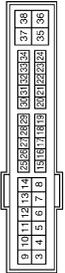
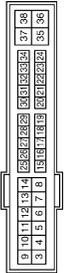
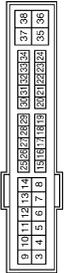
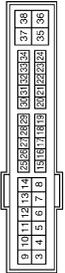
JCKKWM2245G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NVIS (TYPE B)

| | | | | | | | | |
|-----------------------|--|------------------|---|---|--------------------|---------------------|-----------------------------|----------|
| Connector No. B221 | REAR DOOR SWITCH RH | A03FW |  H.S. |  | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | |
| Connector No. D153 | WIRE TO WIRE | NS16FW-CS |  H.S. |  | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | |
| Connector No. D179 | BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) | NS58FW-CS |  H.S. |  | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] | |
| Connector No. D180 | BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) | NS50FW-CS |  H.S. |  | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | |
| Connector No. E11 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH08FW-NH |  H.S. |  | Terminal No. 39 | Color of Wire P | Signal Name [Specification] | |
| Connector No. E16 | ECM | RH24FB-RZ8-L-UH |  H.S. |  | Terminal No. 97 | Color of Wire P | Signal Name [Specification] | VEHCAN-L |
| Connector No. E16 | ECM | RH24FB-RZ8-L-UH |  H.S. |  | Terminal No. 98 | Color of Wire L | Signal Name [Specification] | VEHCAN-H |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 11 | Color of Wire P | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 12 | Color of Wire B | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 27 | Color of Wire W | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 28 | Color of Wire SB | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 30 | Color of Wire BR | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 32 | Color of Wire V | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 33 | Color of Wire G | Signal Name [Specification] | |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M-IV |  H.S. |  | Terminal No. 36 | Color of Wire G | Signal Name [Specification] | |

JCKWMM2246G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

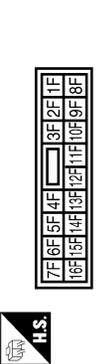
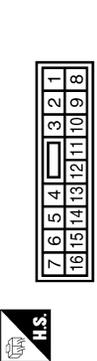
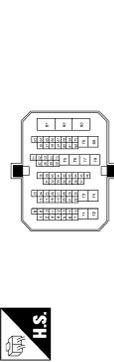
NVIS (TYPE B)

| | | | |
|----------------|------------------|----|----|
| Connector No. | E103 | 50 | GR |
| Connector Name | FUSE BLOCK (J/B) | 61 | BR |
| Connector Type | NS16FW-CS | 82 | LG |

| | |
|----------------|-----------------|
| Connector No. | E105 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH10MW-CS1.0-M3 |

| | |
|----------------|--------------|
| Connector No. | E104 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | |
| 12 | L | |
| 13 | Y | |
| 15 | BR | |
| 23 | P | |
| 28 | G | |
| Z1 | V | |
| Z8 | SB | |
| Z9 | W | |
| 47 | P | |
| 48 | L | |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 6 | P | |
| 7 | L | |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 7 | L | |
| 6 | P | |

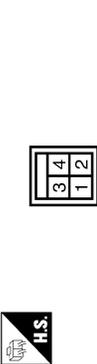
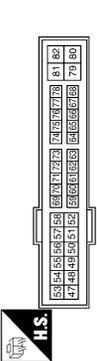
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2F | LG | |
| 8F | R | |
| 11F | G | |

| | |
|----------------|------------------|
| Connector No. | M1 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS30FW-M2 |

| | |
|----------------|-----------------------------------|
| Connector No. | F23 |
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) |
| Connector Type | RH40FB-R28-L-RH |

| | |
|----------------|--|
| Connector No. | F12 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4 |

| | |
|----------------|---------------------------|
| Connector No. | E116 |
| Connector Name | STOP LAMP SWITCH (TYPE B) |
| Connector Type | MG4FW-LC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1A | Y | |
| 4A | GR | |
| 7A | LG | |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 20 | R/B | STARTER RELAY |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | R/B | |
| 80 | B | |

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

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

SEC

JCKWM2247G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

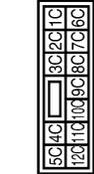
NVIS (TYPE B)

| | |
|----------------|------------------|
| Connector No. | M2 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS10FW-CS |



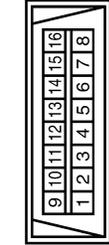
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 3B | L | - |
| 9B | GR | - |

| | |
|----------------|------------------|
| Connector No. | M3 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |



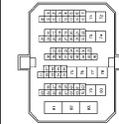
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 12C | O | - |

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



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

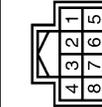
| | |
|----------------|----------------|
| Connector No. | M1 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 11 | P | - |
| 12 | L | - |
| 13 | V | - |
| 15 | R | - |
| 23 | P | - |
| 26 | L | - |
| 27 | O | - |
| 28 | BR | - |
| 29 | L | - |
| 47 | P | - |
| 48 | L | - |

| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 50 | GR | - |
| 61 | GR | - |
| 82 | W | - |

| | |
|----------------|--------------------|
| Connector No. | M12 |
| Connector Name | STEERING LOCK UNIT |
| Connector Type | TH88FW-NH |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | P | S/L 12V MECHANICAL(V1) |
| 2 | LG | S/L COM |
| 3 | O | S/L CONDITION 1 |
| 5 | B | GND 1 |
| 6 | B | GND 2 |
| 7 | Y | S/L 12V CPL(V2) |
| 8 | L | S/L CONDITION 2 |

| | |
|----------------|-------------------|
| Connector No. | M24 |
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GROUND |

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NVIS (TYPE B)

| Connector No. M44 | WIRE TO WIRE | TH22FW-NH | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>R</td> <td>-</td> </tr> <tr> <td>18</td> <td>W</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 17 | R | - | 18 | W | - | | | | | | | | | | | | | | | |
|-----------------------|-----------------------------|-------------------------------|--|--|--------------|---------------|-----------------------------|----|----|------------|----|----|------|----|---|---------|----|----|---------|----|---|----------------------------|---|---|-------------------------------|---|---|-----|
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | W | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M57 | CONTROL DEVICE | TK10FW | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>Y</td> <td>-</td> </tr> <tr> <td>9</td> <td>V</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 8 | Y | - | 9 | V | - | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | V | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M77 | WIRE TO WIRE | TH80FW-CS19 | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>14</td> <td>R</td> <td>-</td> </tr> <tr> <td>15</td> <td>SB</td> <td>-</td> </tr> <tr> <td>56</td> <td>P</td> <td>-</td> </tr> <tr> <td>57</td> <td>L</td> <td>-</td> </tr> <tr> <td>73</td> <td>Y</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 14 | R | - | 15 | SB | - | 56 | P | - | 57 | L | - | 73 | Y | - | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | SB | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 56 | P | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 57 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 73 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M89 | KEY SLOT | TH12FW-NH | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GR</td> <td>BAT</td> </tr> <tr> <td>2</td> <td>SB</td> <td>LOCK</td> </tr> <tr> <td>3</td> <td>O</td> <td>DATA</td> </tr> <tr> <td>5</td> <td>GR</td> <td>ILL BAT</td> </tr> <tr> <td>6</td> <td>R</td> <td>ILL [With Intelligent Key]</td> </tr> <tr> <td>6</td> <td>L</td> <td>ILL [Without Intelligent Key]</td> </tr> <tr> <td>7</td> <td>B</td> <td>GND</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | BAT | 2 | SB | LOCK | 3 | O | DATA | 5 | GR | ILL BAT | 6 | R | ILL [With Intelligent Key] | 6 | L | ILL [Without Intelligent Key] | 7 | B | GND |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | BAT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | SB | LOCK | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | O | DATA | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | GR | ILL BAT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | R | ILL [With Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | L | ILL [Without Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | B | GND | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M100 | SECURITY INDICATOR LAMP | TK02FBR | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GR</td> <td>-</td> </tr> <tr> <td>2</td> <td>O</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | - | 2 | O | - | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | O | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M101 | PUSH-BUTTON IGNITION SWITCH | TK08FBR | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B</td> <td>-</td> </tr> <tr> <td>4</td> <td>BR</td> <td>-</td> </tr> <tr> <td>6</td> <td>L</td> <td>-</td> </tr> <tr> <td>8</td> <td>GR</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | B | - | 4 | BR | - | 6 | L | - | 8 | GR | - | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | B | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M118 | BCM (BODY CONTROL MODULE) | M03FE-LC | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>W</td> <td>BAT (F/L)</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | W | BAT (F/L) | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | W | BAT (F/L) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M119 | BCM (BODY CONTROL MODULE) | NS16FW-CS | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>LG</td> <td>BAT (FUSE)</td> </tr> <tr> <td>13</td> <td>B</td> <td>GND</td> </tr> <tr> <td>15</td> <td>L</td> <td>ACC IND</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 11 | LG | BAT (FUSE) | 13 | B | GND | 15 | L | ACC IND | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | LG | BAT (FUSE) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | B | GND | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | L | ACC IND | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

SEC

JCKW2249G1

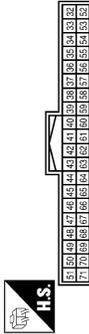
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

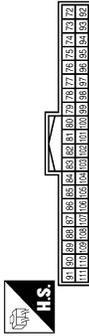
NVIS (TYPE B)

| | |
|----------------|---------------------------|
| Connector No. | M121 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 47 | L | IGN RELAY (PDM E/R CONT) |
| 52 | R | STARTER RELAY CONT |
| 64 | GR | REQUEST SW BUZZER |
| 66 | Y | BACK DOOR SW |
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

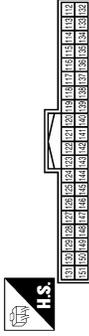
| | |
|----------------|---------------------------|
| Connector No. | M122 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|--|
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 92 | R | KEY SLOT (L [With Intelligent Key]) |
| 93 | L | KEY SLOT (L [Without Intelligent Key]) |
| 96 | Y | ON IND |
| 97 | O | A/T DEVICE POWER SUPPLY |
| 98 | L | S/L CONDITION 1 |
| | | S/L CONDITION 2 |

| | | |
|-----|----|------------------|
| 99 | V | SHIFT P |
| 106 | Y | S/A POWER SUPPLY |
| 111 | LG | S/L COMM |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 124 | R | PASSENGER DOOR SW |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 150 | SB | DRIVER DOOR SW |

JCKWM2250G1

VEHICLE SECURITY SYSTEM

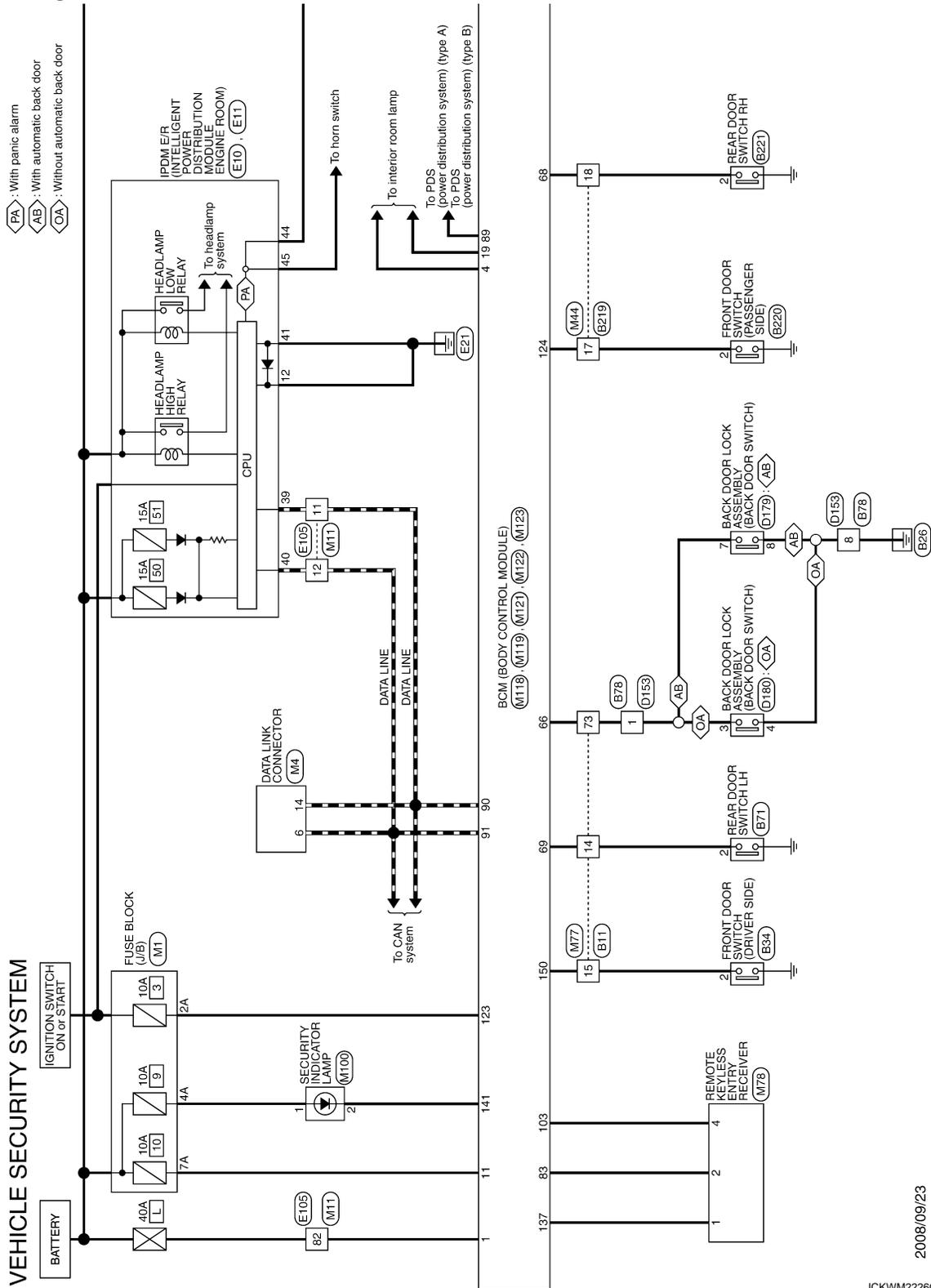
[WITH INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

VEHICLE SECURITY SYSTEM

Wiring Diagram - VEHICLE SECURITY SYSTEM -

INFOID:000000004747782



2008/09/23

JCKWM22266I

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

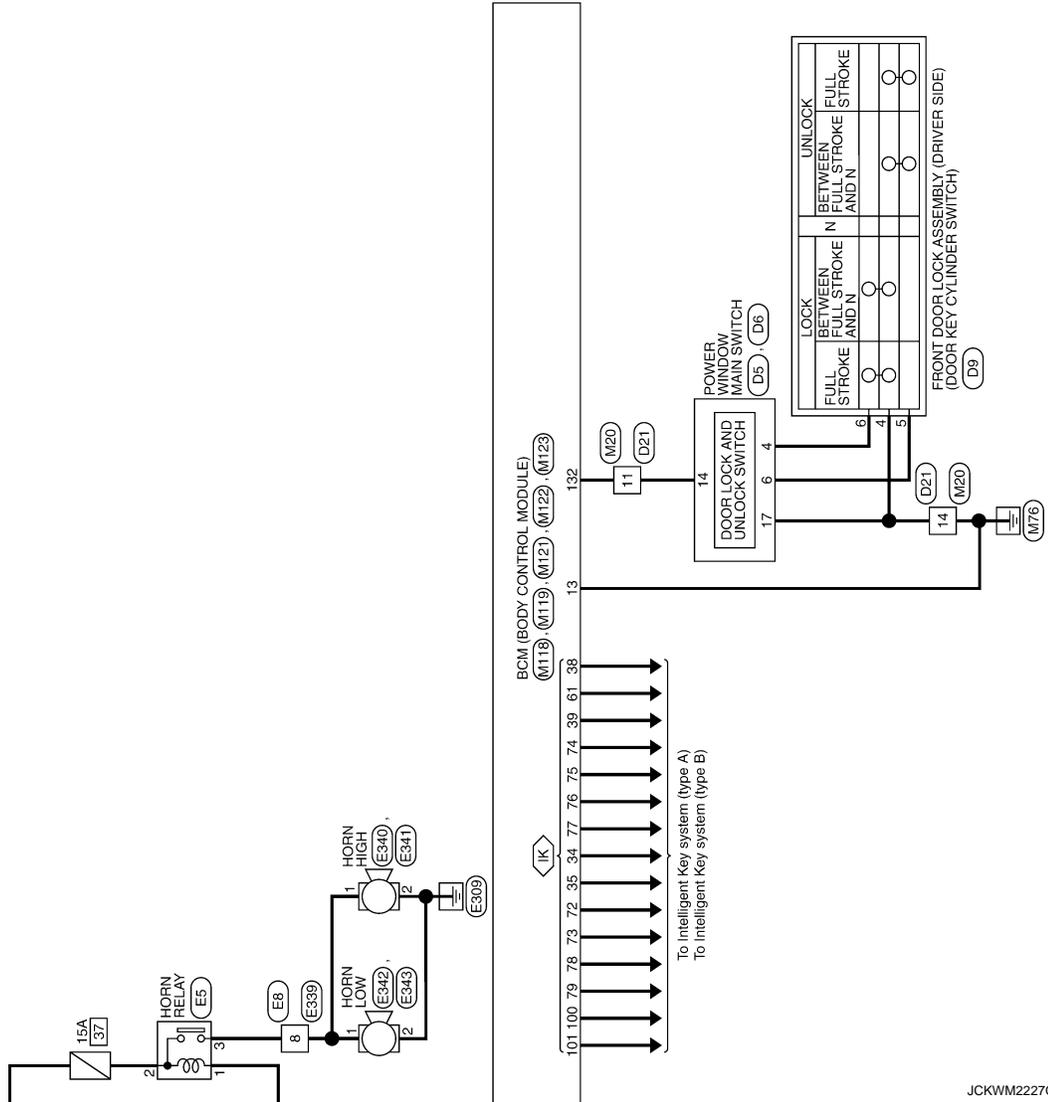
SEC

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

 : With Intelligent Key



JCKWM2227G1

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | | | | | | | | | | | | | | | | |
|-----------------------|------------------------------------|-------------|--|--|--------------------|---------------------|-----------------------------|--|--------------------|---------------------|-----------------------------|--|--------------------|---------------------|-----------------------------|--|
| Connector No. B11 | WIRE TO WIRE | TH80MW-CS-9 | | | Terminal No. 14 | Color of Wire BR | Signal Name [Specification] | | Terminal No. 15 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 73 | Color of Wire LG | Signal Name [Specification] | |
| Connector No. B171 | REAR DOOR SWITCH LH | A03FW | | | Terminal No. 2 | Color of Wire BR | Signal Name [Specification] | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | | Terminal No. 4 | Color of Wire L | Signal Name [Specification] | |
| Connector No. B178 | WIRE TO WIRE | NS16MF-CS | | | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | | Terminal No. 8 | Color of Wire B | Signal Name [Specification] | | Terminal No. 6 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B219 | WIRE TO WIRE | TH82MW-NH | | | Terminal No. 17 | Color of Wire R | Signal Name [Specification] | | Terminal No. 18 | Color of Wire W | Signal Name [Specification] | | Terminal No. 14 | Color of Wire O | Signal Name [Specification] | |
| Connector No. B220 | FRONT DOOR SWITCH (PASSENGER SIDE) | A03FW | | | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | | Terminal No. 4 | Color of Wire L | Signal Name [Specification] | |
| Connector No. B221 | REAR DOOR SWITCH RH | A03FW | | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | | Terminal No. 6 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B234 | FRONT DOOR SWITCH (DRIVER SIDE) | A03FW | | | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 14 | Color of Wire O | Signal Name [Specification] | |
| Connector No. D5 | POWER WINDOW MAIN SWITCH | NS16FW-CS | | | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | | Terminal No. 8 | Color of Wire B | Signal Name [Specification] | | Terminal No. 14 | Color of Wire O | Signal Name [Specification] | |

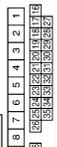
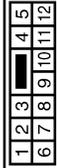
A
B
C
D
E
F
G
H
I
J
SEC
L
M
N
O
P

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | | | | | | | | | | |
|---|---|---------------------------------------|------------------------------|-----------------------------|------------------------------------|------------------------------|-----------------------------|---|-------------------------------|-----------------------------|
| Connector No. D16 POWER WINDOW MAIN SWITCH NS36FW-CS | Connector No. D153 WIRE TO WIRE NS36FW-CS | Terminal No. 17 B | Color of Wire B | Signal Name [Specification] | Terminal No. 1 LG | Color of Wire LG | Signal Name [Specification] | Terminal No. 8 G | Color of Wire G | Signal Name [Specification] |
|   |   | | | | | | | | | |
| Connector No. D9 FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) E86GY-RS | Connector No. D21 WIRE TO WIRE TH40FW-CS15 | Terminal No. 4 5 6 R L | Color of Wire B R L | Signal Name [Specification] | Terminal No. 11 14 O B | Color of Wire O B | Signal Name [Specification] | Terminal No. 1 2 3 W SB G | Color of Wire W SB G | Signal Name [Specification] |
|   |   | | | | | | | | | |
| Connector No. D179 BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) NS36FW-CS | Connector No. E8 WIRE TO WIRE NS12MR-CS | Terminal No. 7 LG | Color of Wire LG | Signal Name [Specification] | Terminal No. 8 G | Color of Wire G | Signal Name [Specification] | Terminal No. 1 2 3 4 5 6 7 8 9 10 11 12 | Color of Wire G | Signal Name [Specification] |
|   |   | | | | | | | | | |
| Connector No. D180 BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) NS36FW-CS | Connector No. E5 HORN RELAY - | Terminal No. 3 4 B | Color of Wire B | Signal Name [Specification] | Terminal No. 2 3 1 | Color of Wire 1 2 3 | Signal Name [Specification] | Terminal No. 1 2 3 G | Color of Wire G | Signal Name [Specification] |
|   |   | | | | | | | | | |

JCKW2229G1

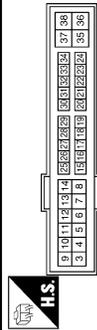
VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | |
|----------------|--|
| Connector No. | E10 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20PW-CS12-M4-TV |



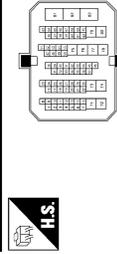
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 12 | B | - |

| | |
|----------------|--|
| Connector No. | E11 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH06FW-NH |



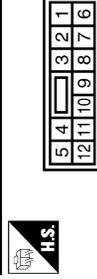
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 39 | P | - |
| 40 | L | - |
| 41 | B | - |
| 44 | W | - |
| 45 | O | - |

| | |
|----------------|----------------|
| Connector No. | E105 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70MW-CS10-M3 |



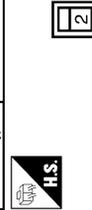
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 82 | LG | - |

| | |
|----------------|--------------|
| Connector No. | E339 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FBR-OS |



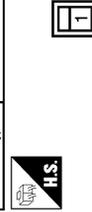
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 8 | G | - |

| | |
|----------------|-----------|
| Connector No. | E340 |
| Connector Name | HORN HIGH |
| Connector Type | P01FE-A |



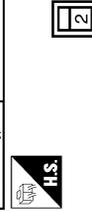
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2 | B | - |

| | |
|----------------|-----------|
| Connector No. | E341 |
| Connector Name | HORN HIGH |
| Connector Type | P01FB-A |



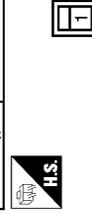
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | G | - |

| | |
|----------------|----------|
| Connector No. | E342 |
| Connector Name | HORN LOW |
| Connector Type | P01FB-A |



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

| | |
|----------------|----------|
| Connector No. | E343 |
| Connector Name | HORN LOW |
| Connector Type | P01FB-A |



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

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

SEC

JCKWM2230G1

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | | | | | | | | | |
|---------------------------------------|---------------------|---|-------------------------------|--------------|---------------|-----------------------------|--------------|---------------|-----------------------------|
| Connector No. M1 | FUSE BLOCK (J/B) | Connector No. M20 | WIRE TO WIRE | Terminal No. | Color of Wire | Signal Name [Specification] | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name FUSE BLOCK (J/B) | NS06FW-M2 | Connector Name WIRE TO WIRE | TH40MM-CS15 | 2A | G | - | 11 | G | - |
| Connector Type NS06FW-M2 | | Connector Type TH40MM-CS15 | | 4A | GR | - | 14 | B | - |
| | | | | 7A | LG | - | | | |
| | | | | | | | | | |
| Connector No. M4 | DATA LINK CONNECTOR | Connector No. M11 | WIRE TO WIRE | Terminal No. | Color of Wire | Signal Name [Specification] | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name DATA LINK CONNECTOR | BD16FW | Connector Name WIRE TO WIRE | TH10FW-CS10-M3 | 6 | L | - | 11 | P | - |
| Connector Type BD16FW | | Connector Type TH10FW-CS10-M3 | | 14 | P | - | 12 | L | - |
| | | | | | | | 82 | W | - |
| | | | | | | | | | |
| Connector No. M44 | WIRE TO WIRE | Connector No. M78 | REMOTE KEYLESS ENTRY RECEIVER | Terminal No. | Color of Wire | Signal Name [Specification] | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name WIRE TO WIRE | TH42FW-NH | Connector Name REMOTE KEYLESS ENTRY RECEIVER | JAB04FB | 16 | L | - | 1 | P | GND |
| Connector Type TH42FW-NH | | Connector Type JAB04FB | | 32 | LG | - | 2 | P | SIGNAL |
| | | | | 17 | R | - | 4 | L | +12V |
| | | | | 18 | W | - | | | |
| | | | | | | | | | |
| Connector No. M77 | WIRE TO WIRE | Connector No. M100 | SECURITY INDICATOR LAMP | Terminal No. | Color of Wire | Signal Name [Specification] | Terminal No. | Color of Wire | Signal Name [Specification] |
| Connector Name WIRE TO WIRE | TH80FW-CS19 | Connector Name SECURITY INDICATOR LAMP | TK02FBR | 14 | R | - | 1 | GR | - |
| Connector Type TH80FW-CS19 | | Connector Type TK02FBR | | 15 | SB | - | 2 | O | - |
| | | | | 73 | Y | - | | | |
| | | | | | | | | | |

JCKWM2231G1

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | MD2FB-LC |



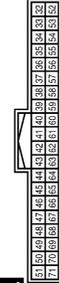
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | BAT (E/L) |

| | |
|----------------|---------------------------|
| Connector No. | M119 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS16FY-CS |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 19 | Y | ROOM LAMP TIMER CONTROL |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------------|
| 34 | B | LUGGAGE ROOM ANT1- |
| 35 | W | LUGGAGE ROOM ANT1+ |
| 38 | L | REAR BUMPER ANT- |
| 39 | BR | REAR BUMPER ANT+ |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 68 | Y | BACK DOOR SW |
| 69 | R | REAR RH DOOR SW REAR LH DOOR SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-------------------------------|
| 72 | B | ROOM ANT2- |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT- |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1- |
| 79 | G | ROOM ANT1+ |
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 89 | BR | PUSH SW |
| 90 | P | CAN L |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---|
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 132 | G | POWER WINDOW SW COMM |
| 137 | P | RECEIVER/SENSOR GND |
| 150 | SB | SECURITY INDICATOR OUTPUT DRIVER DOOR SW |

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

SEC

JCKWM2232G1

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000004747790

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

| Monitor Item | Condition | Value/Status |
|----------------|---|----------------------------------|
| FR WIPER HI | Other than front wiper switch HI | Off |
| | Front wiper switch HI | On |
| FR WIPER LOW | Other than front wiper switch LO | Off |
| | Front wiper switch LO | On |
| FR WASHER SW | Front washer switch OFF | Off |
| | Front washer switch ON | On |
| FR WIPER INT | Other than front wiper switch INT/AUTO | Off |
| | Front wiper switch INT/AUTO | On |
| FR WIPER STOP | Front wiper is not in STOP position | Off |
| | Front wiper is in STOP position | On |
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | Wiper intermittent dial position |
| RR WIPER ON | Other than rear wiper switch ON | Off |
| | Rear wiper switch ON | On |
| RR WIPER INT | Other than rear wiper switch INT | Off |
| | Rear wiper switch INT | On |
| RR WASHER SW | Rear washer switch OFF | Off |
| | Rear washer switch ON | On |
| RR WIPER STOP | Rear wiper is in STOP position | Off |
| | Rear wiper is not in STOP position | On |
| TURN SIGNAL R | Other than turn signal switch RH | Off |
| | Turn signal switch RH | On |
| TURN SIGNAL L | Other than turn signal switch LH | Off |
| | Turn signal switch LH | On |
| TAIL LAMP SW | Other than lighting switch 1ST and 2ND | Off |
| | Lighting switch 1ST or 2ND | On |
| HI BEAM SW | Other than lighting switch HI | Off |
| | Lighting switch HI | On |
| HEAD LAMP SW 1 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| HEAD LAMP SW 2 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| PASSING SW | Other than lighting switch PASS | Off |
| | Lighting switch PASS | On |
| AUTO LIGHT SW | Other than lighting switch AUTO | Off |
| | Lighting switch AUTO | On |
| FR FOG SW | Front fog lamp switch OFF | Off |
| | Front fog lamp switch ON | On |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Monitor Item | Condition | Value/Status | |
|---|---|--------------|---|
| RR FOG SW | NOTE: The item is indicated, but not monitored. | Off | A |
| DOOR SW-DR | Driver door closed | Off | B |
| | Driver door opened | On | |
| DOOR SW-AS | Passenger door closed | Off | C |
| | Passenger door opened | On | |
| DOOR SW-RR | Rear RH door closed | Off | D |
| | Rear RH door opened | On | |
| DOOR SW-RL | Rear LH door closed | Off | E |
| | Rear LH door opened | On | |
| DOOR SW-BK | Back door closed | Off | F |
| | Back door opened | On | |
| CDL LOCK SW | Other than power door lock switch LOCK | Off | G |
| | Power door lock switch LOCK | On | |
| CDL UNLOCK SW | Other than power door lock switch UNLOCK | Off | H |
| | Power door lock switch UNLOCK | On | |
| KEY CYL LK-SW | Other than driver door key cylinder LOCK position | Off | I |
| | Driver door key cylinder LOCK position | On | |
| KEY CYL UN-SW | Other than driver door key cylinder UNLOCK position | Off | J |
| | Driver door key cylinder UNLOCK position | On | |
| KEY CYL SW-TR | NOTE: The item is indicated, but not monitored. | Off | K |
| HAZARD SW | Hazard switch is OFF | Off | L |
| | Hazard switch is ON | On | |
| REAR DEF SW | Rear window defogger switch OFF | Off | M |
| NOTE: At model with BOSE audio system this item is not monitored. | Rear window defogger switch ON | On | |
| TR CANCEL SW | NOTE: The item is indicated, but not monitored. | Off | N |
| TR/BD OPEN SW | Back door opener switch OFF | Off | O |
| | While the back door opener switch is turned ON | On | |
| TRNK/HAT MNTR | NOTE: The item is indicated, but not monitored. | Off | P |
| RKE-LOCK | LOCK button of the key is not pressed | Off | Q |
| | LOCK button of the key is pressed | On | |
| RKE-UNLOCK | UNLOCK button of the key is not pressed | Off | R |
| | UNLOCK button of the key is pressed | On | |
| RKE-TR/BD | BACK DOOR OPEN button of the key is not pressed | Off | S |
| | BACK DOOR OPEN button of the key is pressed | On | |
| RKE-PANIC | PANIC button of the key is not pressed | Off | T |
| | PANIC button of the key is pressed | On | |
| RKE-P/W OPEN | UNLOCK button of the key is not pressed | Off | U |
| | UNLOCK button of the key is pressed and held | On | |

SEC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Monitor Item | Condition | Value/Status |
|----------------|--|--------------|
| RKE-MODE CHG | LOCK/UNLOCK button of the key is not pressed and held simultaneously | Off |
| | LOCK/UNLOCK button of the key is pressed and held simultaneously | On |
| OPTICAL SENSOR | Bright outside of the vehicle | Close to 5 V |
| | Dark outside of the vehicle | Close to 0 V |
| REQ SW -DR | Driver door request switch is not pressed | Off |
| | Driver door request switch is pressed | On |
| REQ SW -AS | Passenger door request switch is not pressed | Off |
| | Passenger door request switch is pressed | On |
| REQ SW -RR | NOTE: The item is indicated, but not monitored. | Off |
| REQ SW -RR | NOTE: The item is indicated, but not monitored. | Off |
| REQ SW -BD/TR | Back door request switch is not pressed | Off |
| | Back door request switch is pressed | On |
| PUSH SW | Push-button ignition switch (push switch) is not pressed | Off |
| | Push-button ignition switch (push switch) is pressed | On |
| IGN RLY2 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| ACC RLY -F/B | NOTE: The item is indicated, but not monitored. | Off |
| CLUCH SW | NOTE: The item is indicated, but not monitored. | Off |
| BRAKE SW 1 | The brake pedal is depressed when No. 7 fuse is blown | Off |
| | The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal | On |
| BRAKE SW 2 | The brake pedal is not depressed | Off |
| | Stop lamp switch 1 signal circuit is normal | On |
| DETE/CANCL SW | Selector lever in P position | Off |
| | Selector lever in any position other than P | On |
| SFT PN/N SW | Selector lever in any position other than P and N | Off |
| | Selector lever in P or N position | On |
| S/L -LOCK | Steering is unlocked | Off |
| | Steering is locked | On |
| S/L -UNLOCK | Steering is locked | Off |
| | Steering is unlocked | On |
| S/L RELAY-F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| UNLK SEN -DR | Driver door is unlocked | Off |
| | Driver door is locked | On |
| PUSH SW -IPDM | Push-button ignition switch (push-switch) is not pressed | Off |
| | Push-button ignition switch (push-switch) is pressed | On |
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| DETE SW -IPDM | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Monitor Item | Condition | Value/Status | |
|----------------|---|-----------------------------------|-----|
| SFT PN -IPDM | Selector lever in any position other than P and N | Off | A |
| | Selector lever in P or N position | On | |
| SFT P -MET | Selector lever in any position other than P | Off | B |
| | Selector lever in P position | On | |
| SFT N -MET | Selector lever in any position other than N | Off | C |
| | Selector lever in N position | On | |
| ENGINE STATE | Engine stopped | Stop | |
| | While the engine stalls | Stall | D |
| | At engine cranking | Crank | |
| | Engine running | Run | |
| S/L LOCK-IPDM | Steering is unlocked | Off | E |
| | Steering is locked | On | |
| S/L UNLK-IPDM | Steering is locked | Off | F |
| | Steering is unlocked | On | |
| S/L RELAY-REQ | Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK. | Off | G |
| | Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK. | On | |
| VEH SPEED 1 | While driving | Equivalent to speedometer reading | H |
| VEH SPEED 2 | While driving | Equivalent to speedometer reading | |
| DOOR STAT-DR | Driver door is locked | LOCK | |
| | Wait with selective UNLOCK operation (5 seconds) | READY | I |
| | Driver door is unlocked | UNLOCK | |
| DOOR STAT-AS | Passenger door is locked | LOCK | J |
| | Wait with selective UNLOCK operation (5 seconds) | READY | |
| | Passenger door is unlocked | UNLOCK | |
| ID OK FLAG | Steering is locked | Reset | SEC |
| | Steering is unlocked | Set | |
| PRMT ENG STRT | The engine start is prohibited | Reset | L |
| | The engine start is permitted | Set | |
| PRMT RKE STRT | NOTE: The item is indicated, but not monitored. | Reset | M |
| KEY SW -SLOT | The key is not inserted into key slot | Off | |
| | The key is inserted into key slot | On | |
| RKE OPE COUN1 | During the operation of the key | Operation frequency of the key | N |
| RKE OPE COUN2 | NOTE: The item is indicated, but not monitored. | — | |
| CONFIRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet | O |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done | P |
| CONFIRM ID4 | The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM. | Yet | |
| | The key ID that the key slot receives is recognized by the fourth key ID registered to BCM. | Done | |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

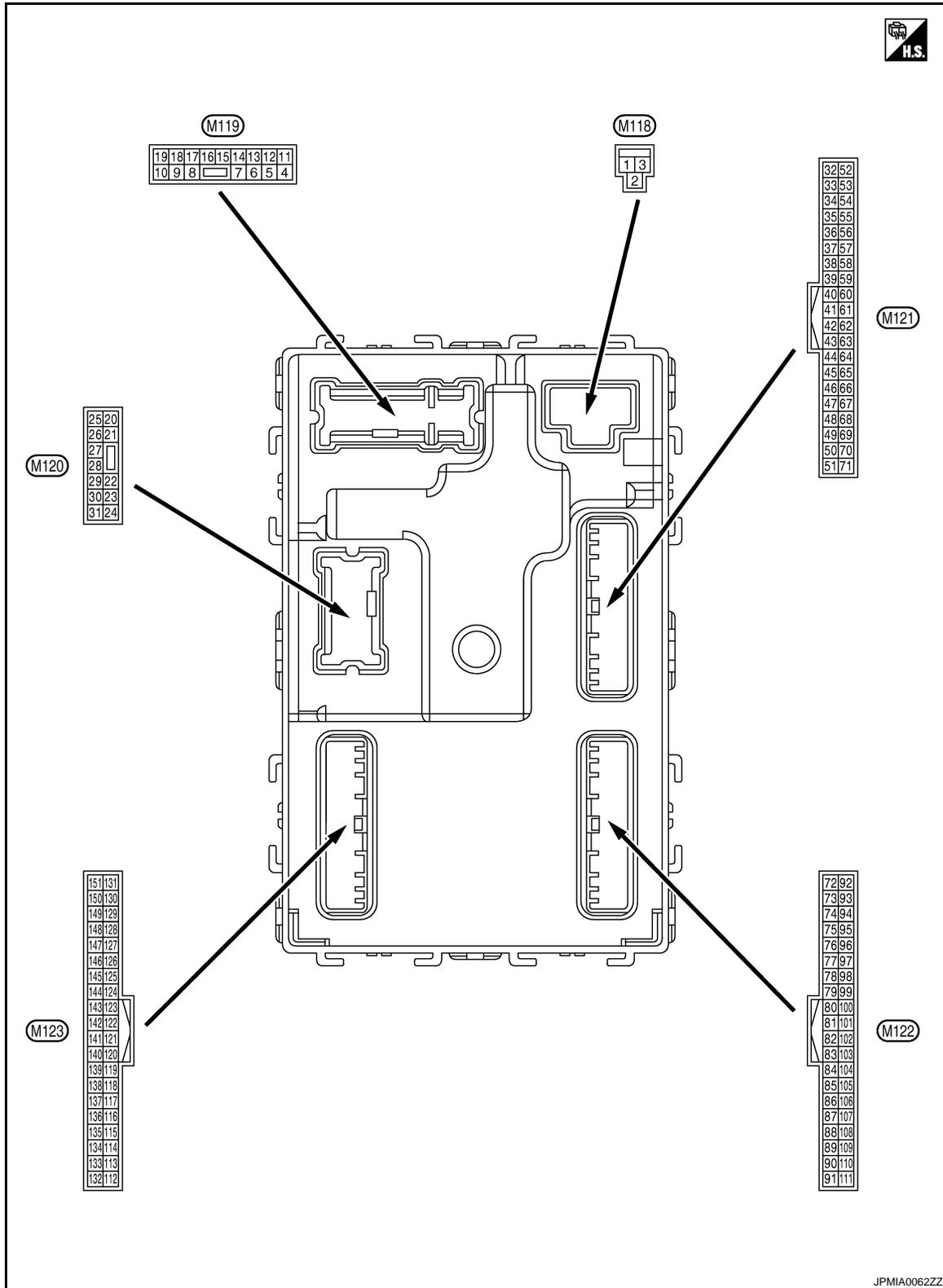
| Monitor Item | Condition | Value/Status |
|--------------|---|-------------------------------|
| CONFIRM ID3 | The key ID that the key slot receives is not recognized by the third key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the third key ID registered to BCM. | Done |
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done |
| CONFIRM ID1 | The key ID that the key slot receives is not recognized by the first key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the first key ID registered to BCM. | Done |
| TP 4 | The ID of fourth key is not registered to BCM | Yet |
| | The ID of fourth key is registered to BCM | Done |
| TP 3 | The ID of third key is not registered to BCM | Yet |
| | The ID of third key is registered to BCM | Done |
| TP 2 | The ID of second key is not registered to BCM | Yet |
| | The ID of second key is registered to BCM | Done |
| TP 1 | The ID of first key is not registered to BCM | Yet |
| | The ID of first key is registered to BCM | Done |
| AIR PRESS FL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front LH tire |
| AIR PRESS FR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front RH tire |
| AIR PRESS RR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear RH tire |
| AIR PRESS RL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear LH tire |
| ID REGST FL1 | ID of front LH tire transmitter is registered | Done |
| | ID of front LH tire transmitter is not registered | Yet |
| ID REGST FR1 | ID of front RH tire transmitter is registered | Done |
| | ID of front RH tire transmitter is not registered | Yet |
| ID REGST RR1 | ID of rear RH tire transmitter is registered | Done |
| | ID of rear RH tire transmitter is not registered | Yet |
| ID REGST RL1 | ID of rear LH tire transmitter is registered | Done |
| | ID of rear LH tire transmitter is not registered | Yet |
| WARNING LAMP | Tire pressure indicator OFF | Off |
| | Tire pressure indicator ON | On |
| BUZZER | Tire pressure warning alarm is not sounding | Off |
| | Tire pressure warning alarm is sounding | On |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

TERMINAL LAYOUT



PHYSICAL VALUES

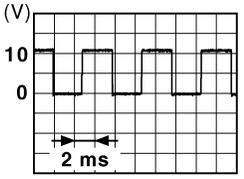
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

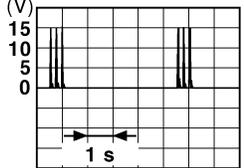
[WITH INTELLIGENT KEY SYSTEM]

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|---|------------------|---|---|--|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (GR) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | Battery voltage |
| 3 (L) | Ground | P/W power supply (RAP) | Output | Ignition switch ON | | Battery voltage |
| 4 (P) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply) | | 0 V |
| | | | | Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply) | | Battery voltage |
| 5 (G) | Ground | Passenger door UN- LOCK | Output | Passenger door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 7 (W) | Ground | Step lamp | Output | Step lamp | ON | 0 V |
| | | | | | OFF | Battery voltage |
| 8 (V) | Ground | All doors LOCK | Output | All doors | LOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than LOCK (Actuator is not activated) | 0 V |
| 9 (G) | Ground | Driver door UNLOCK | Output | Driver door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 10 (P) | Ground | Rear RH door and rear LH door UN- LOCK | Output | Rear RH door and rear LH door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 11 (LG) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 13 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 14 (O) | Ground | Push-button ignition switch illumination ground | Output | Tail lamp | OFF | 0 V |
| | | | | | ON | <p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p> |
| 15 (L) | Ground | ACC indicator lamp | Output | Ignition switch | OFF | Battery voltage |
| | | | | | ACC | 0.2 V |
| | | | | | ON | 0 V |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|--------------------------|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| | | | | | |
| 17 (G) | Ground | Turn signal RH | Output | Ignition switch ON | Turn signal switch RH |
| | | | | | |
| | | | | Turn signal switch OFF | 0 V |
| 18 (BR) | Ground | Turn signal LH | Output | Ignition switch ON | Turn signal switch LH |
| | | | | | |
| 19 (Y) | Ground | Room lamp timer control | Output | Interior room lamp | OFF |
| | | | | | |
| 23 (BR) | Ground | Back door open | Output | Back door | OPEN (Back door opener actuator is activated) |
| | | | | | |
| 26 (G) | Ground | Rear wiper | Output | Rear wiper | OFF (Stopped) |
| | | | | | |
| 34*1 (B) | Ground | Luggage room antenna (-) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compartment |
| | | | | | |
| | | | | When Intelligent Key is not in the passenger compartment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |

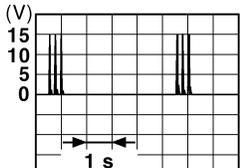
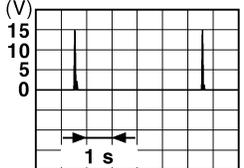
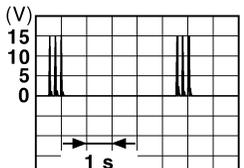
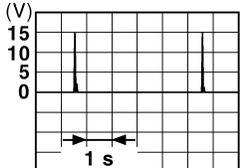
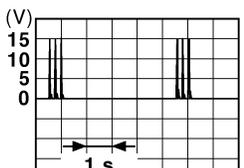
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

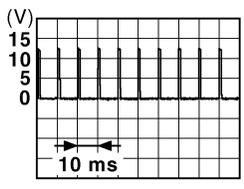
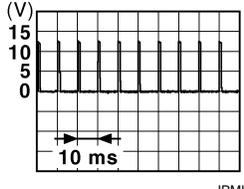
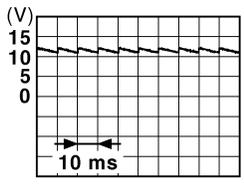
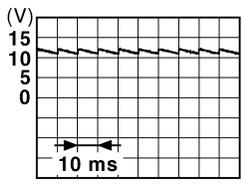
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|-----------------------------------|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| 35*1 (W) | Ground | Luggage room antenna (+) | Output | | |
| | | | | When Intelligent Key is not in the passenger compartment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 38*1 (L) | Ground | Rear bumper antenna (-) | Output | When the back door request switch is operated with ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 39*1 (BR) | Ground | Rear bumper antenna (+) | Output | When the back door request switch is operated with ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 47 (L) | Ground | Ignition relay (IPDM E/R) control | Output | Ignition switch | OFF or ACC |
| | | | | ON | Battery voltage |
| | | | | | 0 V |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|-------------------------------|------------------|-------------------------------|--|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 52 (R) | Ground | Starter relay control | Output | Ignition switch ON | When selector lever is in P or N position | Battery voltage |
| | | | | | When selector lever is not in P or N position | 0.3 V |
| | | | | Ignition switch OFF | 0 V | |
| 61*1 (R) | Ground | Back door request switch | Input | Back door re- quest switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  1.0 V |
| 64*1 (GR) | Ground | Warning buzzer | Output | Warning buzzer | Sounding | 0 V |
| | | | | | Not sounding | Battery voltage |
| 65 (O) | Ground | Rear wiper stop posi- tion | Input | Rear wiper | In stop position |  1.0 V |
| | | | | | Not in stop position | 0 V |
| 66 (Y) | Ground | Back door switch | Input | Back door switch | OFF (When back door closes) |  11.8 V |
| | | | | | ON (When back door opens) | 0 V |
| 67 (LG) | Ground | Back door opener switch | Input | Back door opener switch | Pressed | 0 V |
| | | | | | Not pressed |  11.8 V |

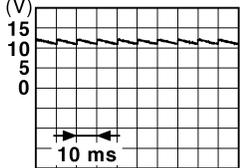
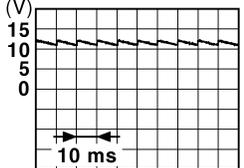
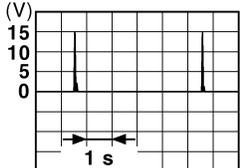
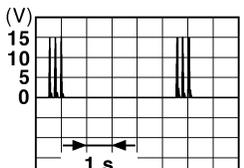
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|------------------------|--|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 68 (W) | Ground | Rear RH door switch | Input | Rear RH door switch | OFF (When rear RH door closes) |  <small>JPMIA0011GB</small> 11.8 V |
| | | | | | ON (When rear RH door opens) | 0 V |
| 69 (R) | Ground | Rear LH door switch | Input | Rear LH door switch | OFF (When rear LH door closes) |  <small>JPMIA0011GB</small> 11.8 V |
| | | | | | ON (When rear LH door opens) | 0 V |
| 72*1 (B) | Ground | Room antenna 2 (-) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compart- ment |  <small>JMKIA0062GB</small> |
| | | | | | When Intelligent Key is not in the passenger compart- ment |  <small>JMKIA0063GB</small> |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|--|------------------|---|--------------------|
| + | - | Signal name | Input/ Output | | |
| 73*1 (W) | Ground | Room antenna 2 (+) (Center console) | Output | Ignition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the passenger compart- ment | <p>JMKIA0063GB</p> |
| 74*1 (Y) | Ground | Passenger door an- tenna (-) | Output | When the pas- senger door re- quest switch is operated with ig- nition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area | <p>JMKIA0063GB</p> |
| 75*1 (LG) | Ground | Passenger door an- tenna (+) | Output | When the pas- senger door re- quest switch is operated with ig- nition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area | <p>JMKIA0063GB</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]

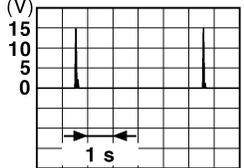
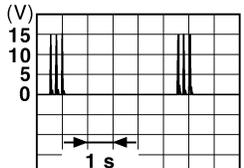
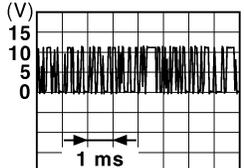
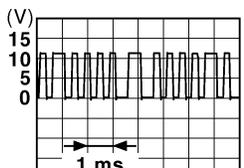
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|--|------------------|--|--------------------|
| + | - | Signal name | Input/ Output | | |
| 76*1 (V) | Ground | Driver door antenna (-) | Output | When Intelligent Key is in the antenna detection area | <p>JMKIA0062GB</p> |
| | | | | When the driver door request switch is operat- ed with ignition switch OFF | <p>JMKIA0063GB</p> |
| 77*1 (P) | Ground | Driver door antenna (+) | Output | When Intelligent Key is in the antenna detection area | <p>JMKIA0062GB</p> |
| | | | | When the driver door request switch is operat- ed with ignition switch OFF | <p>JMKIA0063GB</p> |
| 78*1 (R) | Ground | Room antenna 1 (-) (Instrument panel) | Output | Ignition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is in the passenger compart- ment | <p>JMKIA0063GB</p> |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|---|------------------|--|---|-----------------|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 79*1 (G) | Ground | Room antenna 1 (+) (Instrument panel) | Output | Ignition switch OFF |  | |
| | | | | When Intelligent Key is not in the passenger compart- ment |  | |
| 80 (SB) | Ground | NATS antenna amp (built in key slot) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | |
| 81 (O) | Ground | NATS antenna amp (built in key slot) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | |
| 82 (BR) | Ground | Ignition relay [fuse block (J/B)] control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 83 (P) | Ground | Remote keyless entry receiver communica- tion | Input/ Output | During waiting |  | |
| | | | | When operating either button on the key |  | |

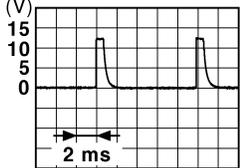
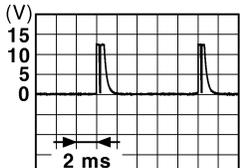
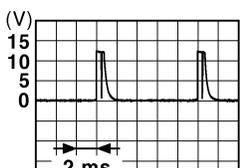
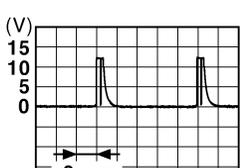
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

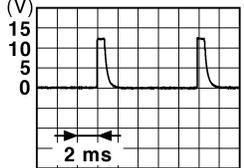
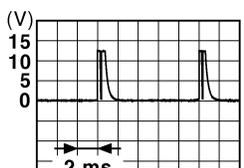
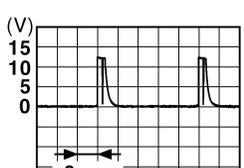
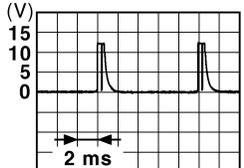
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|-------------------------------|------------------|-----------------------|---|
| + | - | Signal name | Input/ Output | | |
| 87 (R) | Ground | Combination switch INPUT 5 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) <div style="text-align: right;">  <p style="font-size: small; margin-top: 5px;">JPMIA0041GB</p> </div> |
| | | | | Combination switch | Front fog lamp switch ON (Wiper intermittent dial 4) <div style="text-align: right;">  <p style="font-size: small; margin-top: 5px;">JPMIA0037GB</p> </div> |
| | | | | Combination switch | Rear wiper switch ON (Wiper intermittent dial 4) <div style="text-align: right;">  <p style="font-size: small; margin-top: 5px;">JPMIA0039GB</p> </div> |
| | | | | Combination switch | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 <div style="text-align: right;">  <p style="font-size: small; margin-top: 5px;">JPMIA0040GB</p> </div> |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|---|--|--|
| + | - | Signal name | Input/ Output | | | |
| 88 (GR) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  <p style="text-align: right;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p> |
| | | | | | Lighting switch HI (Wiper intermittent dial 4) |  <p style="text-align: right;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Lighting switch 2ND (Wiper intermittent dial 4) |  <p style="text-align: right;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) |  <p style="text-align: right;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Any of the conditions below with all switches OFF |  <p style="text-align: right;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p> |
| 89 (BR) | Ground | Push-button ignition switch (push switch) | Input | Push-button igni- tion switch (push switch) | Pressed | 0 V |
| | | | | Not pressed | Battery voltage | |
| 90 (P) | Ground | CAN - L | Input/ Output | — | — | |
| 91 (L) | Ground | CAN - H | Input/ Output | — | — | |

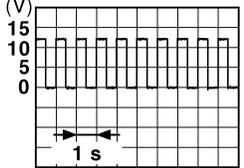
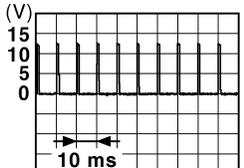
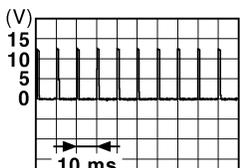
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

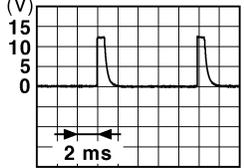
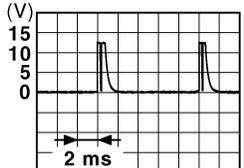
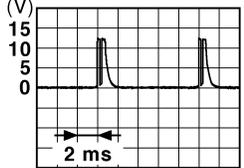
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|----------------------------------|---------------------------|---|
| + | - | Signal name | Input/ Output | | | |
| 92 (R)*1 (L)*2 | Ground | Key slot illumination | Output | Key slot illumination | OFF | 0 V |
| | | | | | Blinking |  <p style="text-align: right; font-size: small;">JPMIA0015GB</p> |
| | | | | | ON | Battery voltage |
| 93 (L) | Ground | ON indicator lamp | Output | Ignition switch | OFF or ACC | Battery voltage |
| | | | | | ACC | 0.2 V |
| | | | | | ON | 0 V |
| 95 (L) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | Battery voltage |
| 96 (Y) | Ground | Control device (de- tention switch) power supply | Output | — | — | Battery voltage |
| 97 (O) | Ground | Steering lock condi- tion No. 1 | Input | Steering lock | LOCK status | 0 V |
| | | | | | UNLOCK status | Battery voltage |
| 98 (L) | Ground | Steering lock condi- tion No. 2 | Input | Steering lock | LOCK status | Battery voltage |
| | | | | | UNLOCK status | 0 V |
| 99 (V) | Ground | Selector lever P posi- tion switch | Input | Selector lever | P position | 0 V |
| | | | | | Any position other than P | Battery voltage |
| 100*1 (P) | Ground | Passenger door re- quest switch | Input | Passenger door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  <p style="text-align: right; font-size: small;">JPMIA0016GB</p> |
| 101*1 (W) | Ground | Driver door request switch | Input | Driver door re- quest switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  <p style="text-align: right; font-size: small;">JPMIA0016GB</p> |
| 102 (Y) | Ground | Blower fan motor re- lay control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 103 (L) | Ground | Remote keyless entry receiver power sup- ply | Output | Ignition switch OFF | — | Battery voltage |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|------------------------------------|------------------|---|--|
| + | - | Signal name | Input/ Output | | |
| 106 (Y) | Ground | Steering lock unit power supply | Output | | |
| | | | | ON | 0 V |
| | | | | All switches OFF |  <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p> |
| | | | | Turn signal switch LH |  <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p> |
| 107 (O) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | Turn signal switch RH |
| | | | | Turn signal switch RH |  <p style="text-align: right; font-size: small;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | Front wiper switch LO |  <p style="text-align: right; font-size: small;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | Front washer switch ON |  <p style="text-align: right; font-size: small;">JPMIA0039GB</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)

[WITH INTELLIGENT KEY SYSTEM]

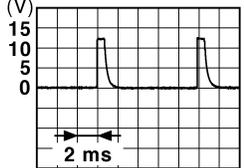
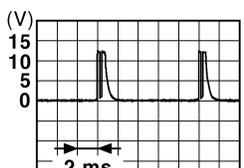
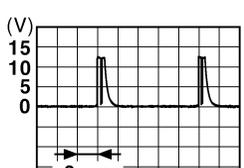
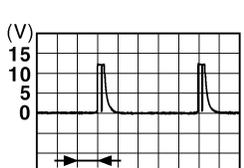
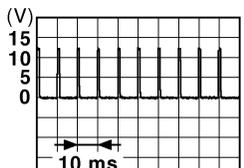
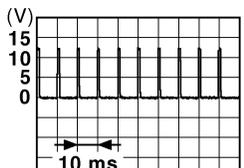
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|-------------------------------|------------------|-----------|--|
| + | - | Signal name | Input/ Output | | |
| 108 (P) | Ground | Combination switch INPUT 4 | Input | | |
| | | | | | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: right; font-size: small;">JPMIA0038GB</p> </div> <p style="text-align: center;">1.3 V</p> |
| | | | | | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: right; font-size: small;">JPMIA0036GB</p> </div> <p style="text-align: center;">1.3 V</p> |
| | | | | | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: right; font-size: small;">JPMIA0040GB</p> </div> <p style="text-align: center;">1.3 V</p> |
| | | | | | <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: right; font-size: small;">JPMIA0039GB</p> </div> <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 | | | |
| 109 (SB) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermit- tent dial 4) | All switches OFF |  1.4 V |
| | | | | | Lighting switch PASS |  1.3 V |
| | | | | | Lighting switch 2ND |  1.3 V |
| | | | | | Front wiper switch INT/ AUTO |  1.3 V |
| | | | | | Front wiper switch HI |  1.3 V |
| | | | | | ON | 0 V |
| 110 (G) | Ground | Hazard switch | Input | Hazard switch |  1.1 V | |
| | | | | OFF |  1.1 V | |

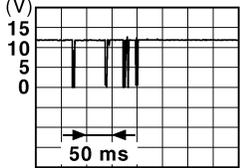
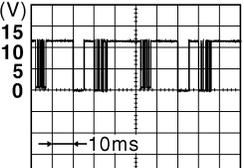
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

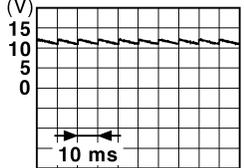
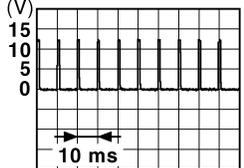
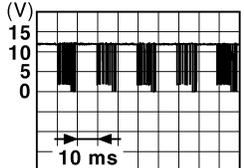
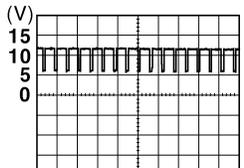
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|--|---|---|
| + | - | Signal name | Input/ Output | | | |
| 111 (LG) | Ground | Steering lock unit communication | Input/ Output | Steering lock | LOCK status | Battery voltage |
| | | | | | LOCK or UNLOCK |  <p style="text-align: right; font-size: small;">JMKIA0066GB</p> |
| | | | | | For 15 seconds after UN- LOCK | Battery voltage |
| | | | | 15 seconds or later after UNLOCK | 0 V | |
| 112 (R) | Ground | Rain sensor serial link | Input/ Output | Ignition switch ON |  <p style="text-align: right; font-size: small;">JPMIA0156GB</p> | |
| | | | | 8.7 V | | |
| 113*3 (O) | Ground | Optical sensor | Input | Ignition switch ON | When bright outside of the vehicle | Close to 5 V |
| | | | | | When dark outside of the vehicle | Close to 0 V |
| 116 (GR) | Ground | Stop lamp switch 1 | Input | — | | Battery voltage |
| 118 (L) | Ground | Stop lamp switch 2 | Input | Stop lamp switch | OFF (Brake pedal is not depressed) | 0 V |
| | | | | | ON (Brake pedal is de- pressed) | Battery voltage |
| 119*1 (W) | Ground | Front door lock as- sembly driver side (Unlock sensor) | Input | Driver door | LOCK status (unlock sen- sor switch OFF) |  <p style="text-align: right; font-size: small;">JPMIA0012GB</p> |
| | | | | | | |
| | | | | UNLOCK status (unlock sensor switch ON) | 0 V | |
| 121 (Y) | Ground | Key slot switch | Input | When the key is inserted into key slot | | Battery voltage |
| | | | | When the key is not inserted into key slot | | 0 V |
| 122 (R) | Ground | ACC feedback | Input | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | Battery voltage |
| 123 (G) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|--|------------------|--|---|
| | | Signal name | Input/ Output | | |
| + | - | | | | |
| 124 (R) | Ground | Passenger door switch | Input | Passenger door switch |  <p style="text-align: right; font-size: small;">JPMIA0011GB</p> <p style="text-align: center;">11.8 V</p> |
| | | | | OFF (When passenger door closes) | 0 V |
| 130*4 (BR) | Ground | Rear window defogger switch | Input | Ignition switch ON |  <p style="text-align: right; font-size: small;">JPMIA0012GB</p> <p style="text-align: center;">1.1 V</p> |
| | | | | Rear window defogger switch OFF | 0 V |
| 132 (G) | Ground | Power window switch communication | Input/ Output | Ignition switch ON |  <p style="text-align: right; font-size: small;">JPMIA0013GB</p> <p style="text-align: center;">10.2 V</p> |
| | | | | Ignition switch OFF or ACC | Battery voltage |
| 133 (W) | Ground | Push-button ignition switch illumination | Output | Push-button ignition switch illumination | <p style="text-align: center;">NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p>  <p style="text-align: right; font-size: small;">JPMIA0159GB</p> |
| | | | | ON (When tail lamps ON) | 0 V |
| 137 (P) | Ground | Receiver and sensor ground | Input | Ignition switch ON | 0 V |
| 138 (V) | Ground | Receiver and sensor power supply | Output | Ignition switch | 0 V |
| | | | | OFF | 5.0 V |
| | | | | ACC or ON | 5.0 V |

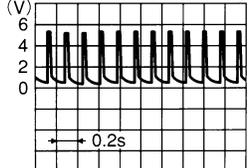
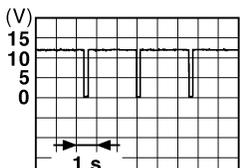
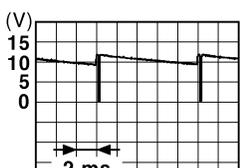
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

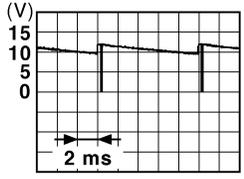
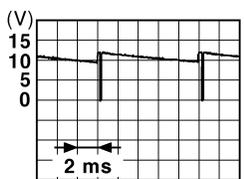
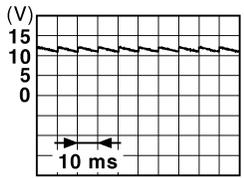
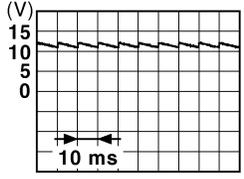
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--------------------------------------|------------------|---|---|--|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 139*5 (O) | Ground | Tire pressure receiver communication | Input/ Output | Ignition switch ON | Standby state |  <small>OCC3881D</small> |
| | | | | When receiving the signal from the transmitter |  <small>OCC3880D</small> | |
| 140 (GR) | Ground | Selector lever P/N position | Input | Selector lever | P or N position | Battery voltage |
| | | | | Except P and N positions | 0 V | |
| 141 (O) | Ground | Security indicator | Output | Security indicator | ON | 0 V |
| | | | | Blinking |  <small>JPMIA0014GB</small> | |
| | | | | OFF | Battery voltage | |
| 142 (L) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF | 0 V |
| | | | | Lighting switch 1ST |  <small>JPMIA0031GB</small> | |
| | | | | Lighting switch HI | | |
| | | | | Lighting switch 2ND | | |
| Turn signal switch RH | 10.7 V | | | | | |
| 143 (W) | Ground | Combination switch OUTPUT 1 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V |
| | | | | Front wiper switch HI (Wiper intermittent dial 4) |  <small>JPMIA0032GB</small> | |
| | | | | Rear wiper switch INT (Wiper intermittent dial 4) | | |
| | | | | Any of the conditions below with all switches 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 | | 10.7 V |

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | | |
|------------------------------|--------|---|------------------|---|--|---|--------|
| | | Signal name | Input/ Output | | | | |
| + | - | | | | | | |
| 144 (P) | Ground | Combination switch OUTPUT 2 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V | |
| | | | | | Front washer switch ON (Wiper intermittent dial 4) |  | |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) | | |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) | | |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 | | 10.7 V |
| 145 (V) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper intermit- tent dial 4) | All switches OFF | 0 V | |
| | | | | | Front wiper switch INT/ AUTO |  | |
| | | | | | Front wiper switch LO | | |
| | | | | | Lighting switch AUTO | | 10.7 V |
| 146 (Y) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper intermit- tent dial 4) | All switches OFF | 0 V | |
| | | | | | Front fog lamp switch ON |  | |
| | | | | | Lighting switch 2ND | | |
| | | | | | Lighting switch PASS | | |
| | | | | | Turn signal switch LH | | 10.7 V |
| 149*5 (W) | Ground | Tire pressure warn- ing check switch | Input | Ignition switch ON |  | 11.8 V | |
| 150 (SB) | Ground | Driver door switch | Input | Driver door switch | OFF (When driver door closes) |  | 11.8 V |
| | | | | | ON (When driver door opens) | 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 | | | |
| 151 (G) | Ground | Rear window defogger relay control | Output | Rear window defogger | Active | 0 V |
| | | | | | Not activated | Battery voltage |

NOTE:

- *1: With Intelligent Key system
- *2: Without Intelligent Key system
- *3: With auto light system
- *4: Without BOSE audio system
- *5: With TPMS

Wiring Diagram - BCM -

INFOID:000000004747791

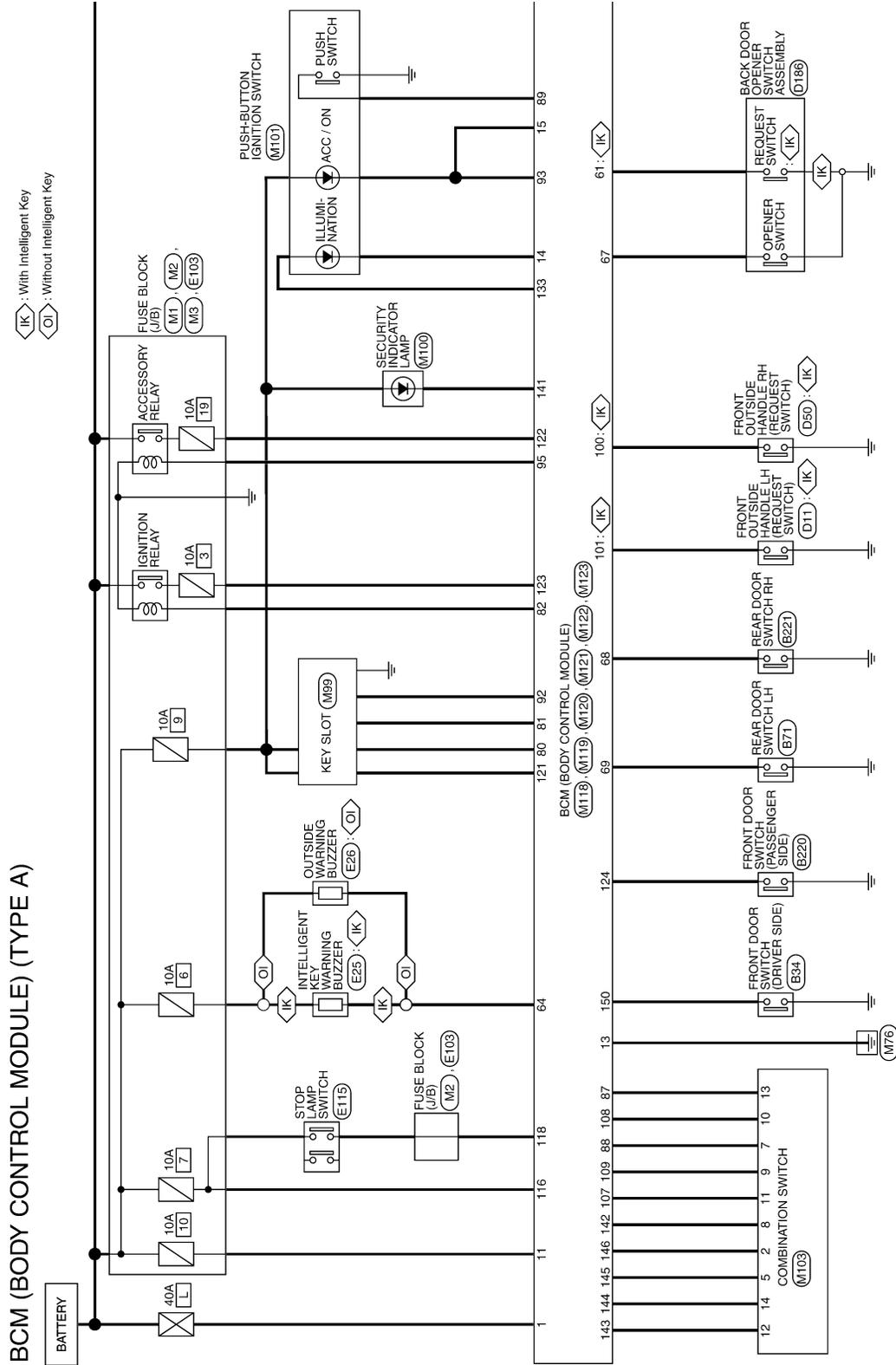
UP TO VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)



2008/09/23

JCMWM3152GI

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

SEC

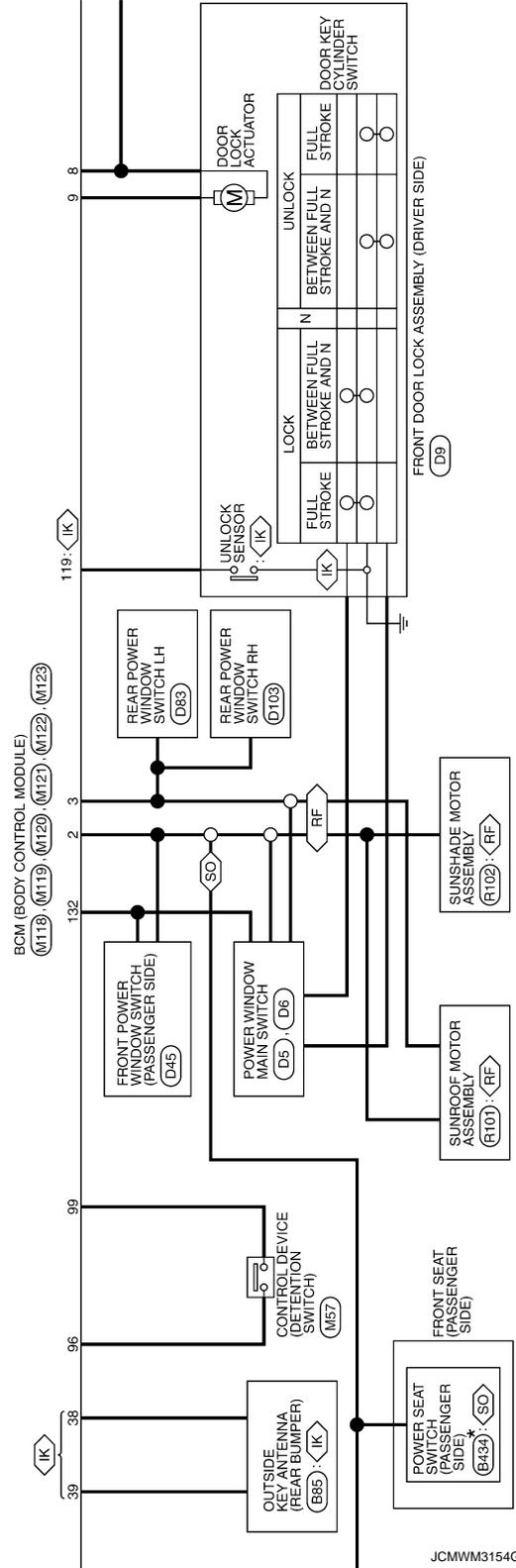
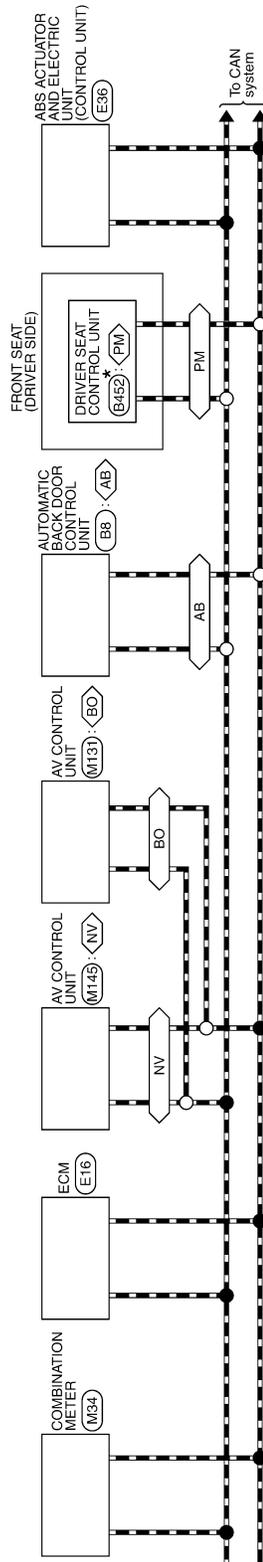
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

- ◊ IK : With Intelligent Key
- ◊ NV : With navigation system
- ◊ BO : With BOSE system without navigation system
- ◊ RF : With sunroof
- ◊ PM : With automatic drive positioner
- ◊ SO : With power seat without automatic drive positioner
- ◊ AB : With automatic back door

* : This connector is not shown in "Harness Layout".



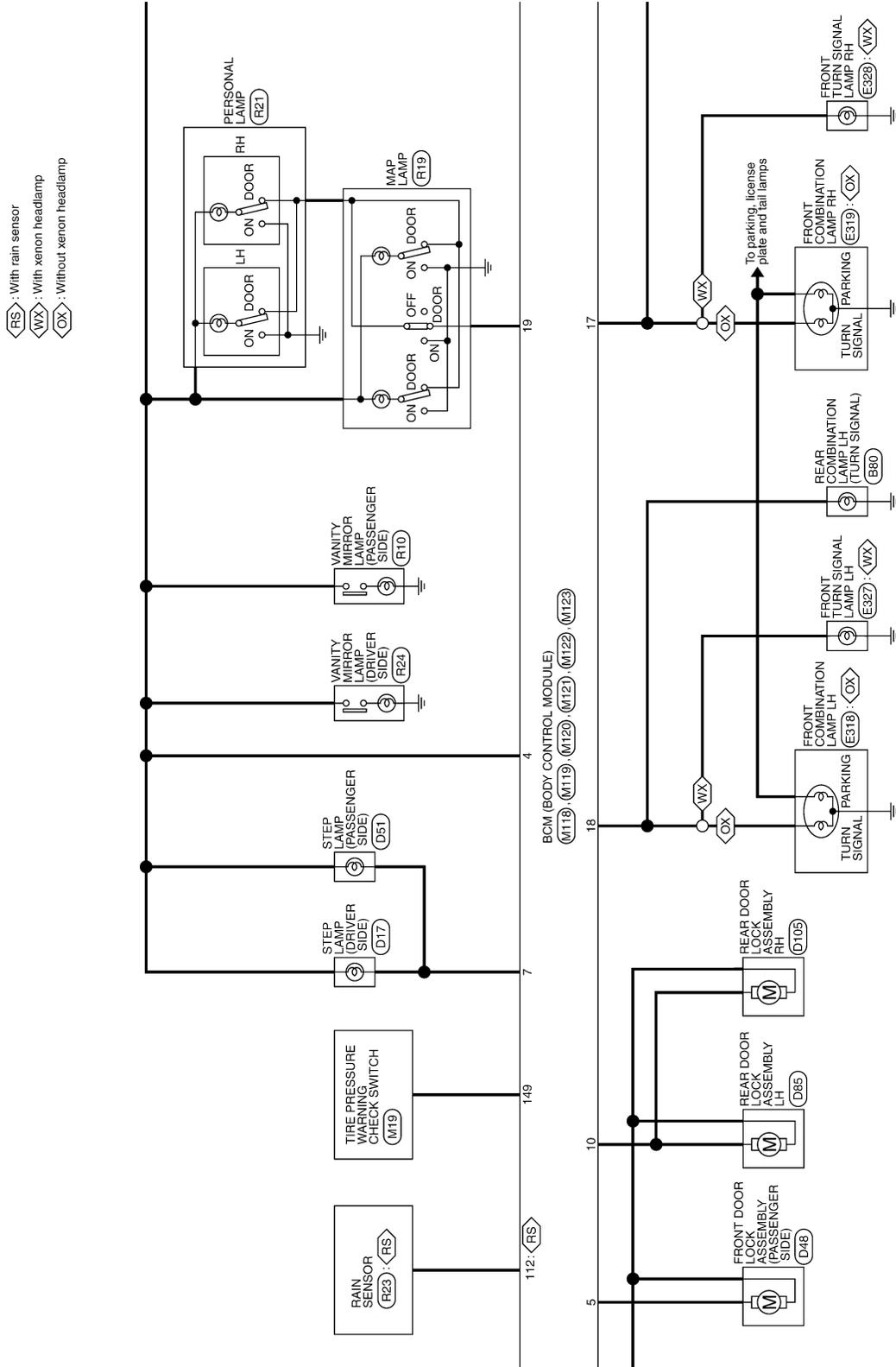
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

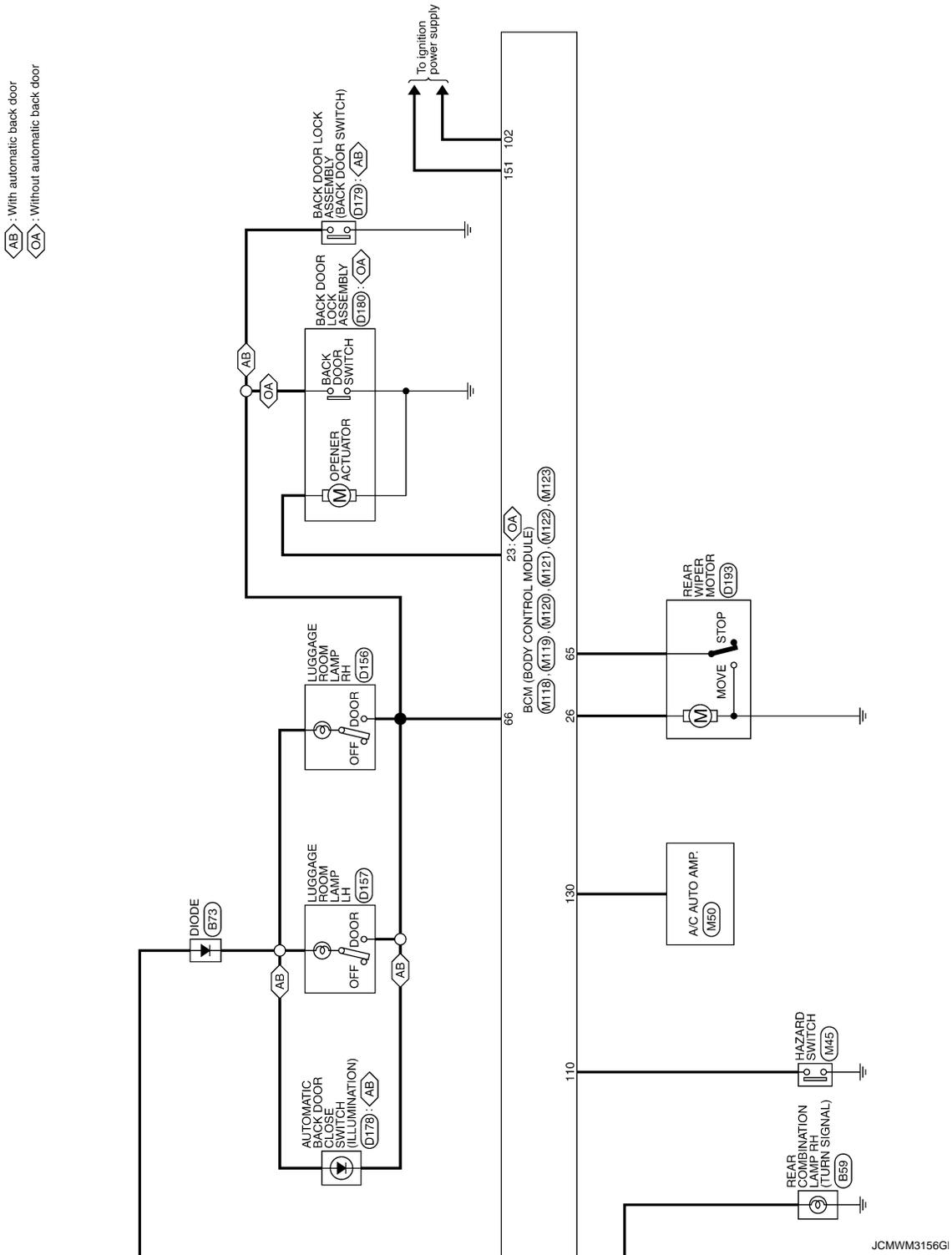


JCMW3155G

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCMWM3156G1

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

SEC

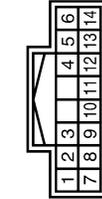
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE A)

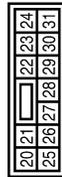
| | |
|----------------|--------------------|
| Connector No. | M103 |
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2 | Y | OUTPUT 4 |
| 5 | V | OUTPUT 3 |
| 7 | GR | INPUT 3 |
| 8 | L | OUTPUT 5 |
| 9 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |



| | |
|----------------|---------------------------|
| Connector No. | M120 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS12FW-CS |

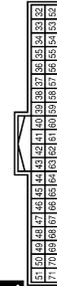


| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LC |



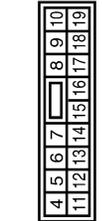
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 1 | W | BAT (F/L) |
| 2 | GR | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | L | POWER WINDOW POWER SUPPLY (RAP) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 23 | BR | BACK DOOR OPEN OUTPUT |
| 26 | G | REAR WIPER OUTPUT |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------------|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | G | PASSENGER DOOR UNLOCK OUTPUT |
| 7 | W | STEP LAMP OUTPUT |
| 8 | V | ALL DOOR FUEL LID LOCK OUTPUT |
| 9 | G | DRIVER DOOR FUEL LID UNLOCK OUTPUT |
| 10 | P | REAR DOOR UNLOCK OUTPUT |
| 11 | LG | BAT (GUSE) |
| 13 | B | GND |
| 14 | O | PUSH-BUTTON IGNITION SW ILL GND |
| 15 | L | ACC IND |
| 17 | G | TURN SIGNAL RH |

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

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 34 | B | LUGGAGE ROOM ANTI- |
| 35 | W | LUGGAGE ROOM ANTI+ |
| 38 | L | REAR BUMPER ANTI- |
| 39 | BR | REAR BUMPER ANTI+ |
| 47 | L | IGN RELAY IPDM E/R CONT |
| 52 | R | STARTER RELAY CONT |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 64 | GR | REQUEST SW BUZZER |
| 65 | O | REAR WIPER STOP POSITION |
| 66 | Y | BACK DOOR SW |
| 67 | LG | BACK DOOR OPENER SW |

| | | |
|----|----|-------------------------|
| 18 | BR | TURN SIGNAL LH |
| 19 | Y | ROOM LAMP TIMER CONTROL |

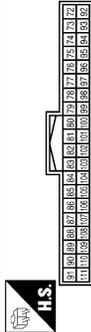
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE A)

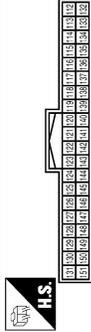
| | |
|----------------|---------------------------|
| Connector No. | M122 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | B | ROOM ANT2- |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT- |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1- |
| 79 | G | ROOM ANT1+ |
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 82 | BR | IGN RELAY (F/B) CONT |

| | | |
|-----|----|---------------------------------------|
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 92 | R | KEY SLOT ILL[With Intelligent Key] |
| 93 | L | KEY SLOT ILL[Without Intelligent Key] |
| 94 | L | ON IND |
| 95 | L | ACC RELAY CONT |
| 96 | Y | A-T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |
| 98 | L | S/L CONDITION 2 |
| 99 | V | SHIFT P |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 102 | Y | BLOWER FAN MOTOR RELAY CONT |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |
| 106 | Y | S/L POWER SUPPLY |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |
| 110 | G | HAZARD SW |
| 111 | LG | S/L COMM |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 112 | R | RAIN SENSOR SERIAL LINK |
| 113 | O | OPTICAL SENSOR |
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 119 | W | DR DOOR UNL OCK SENSOR |
| 121 | Y | KEY SLOT SW |
| 122 | R | ACC F/B |
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 130 | BR | REAR DEFOGGER SW |
| 132 | G | POWER WINDOW SW COMM |

| | | |
|-----|----|-----------------------------------|
| 133 | W | PUSH-BUTTON IGNITION SW ILL POWER |
| 137 | P | RECEIVER SENSOR GND |
| 138 | V | RECEIVER SENSOR POWER SUPPLY |
| 139 | O | TIRE PRESS RECEIVER SIGNAL |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 149 | W | TIRE PRESS WARNING CHECK SW |
| 150 | SB | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFOGGER RELAY |

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

SEC

FROM VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),

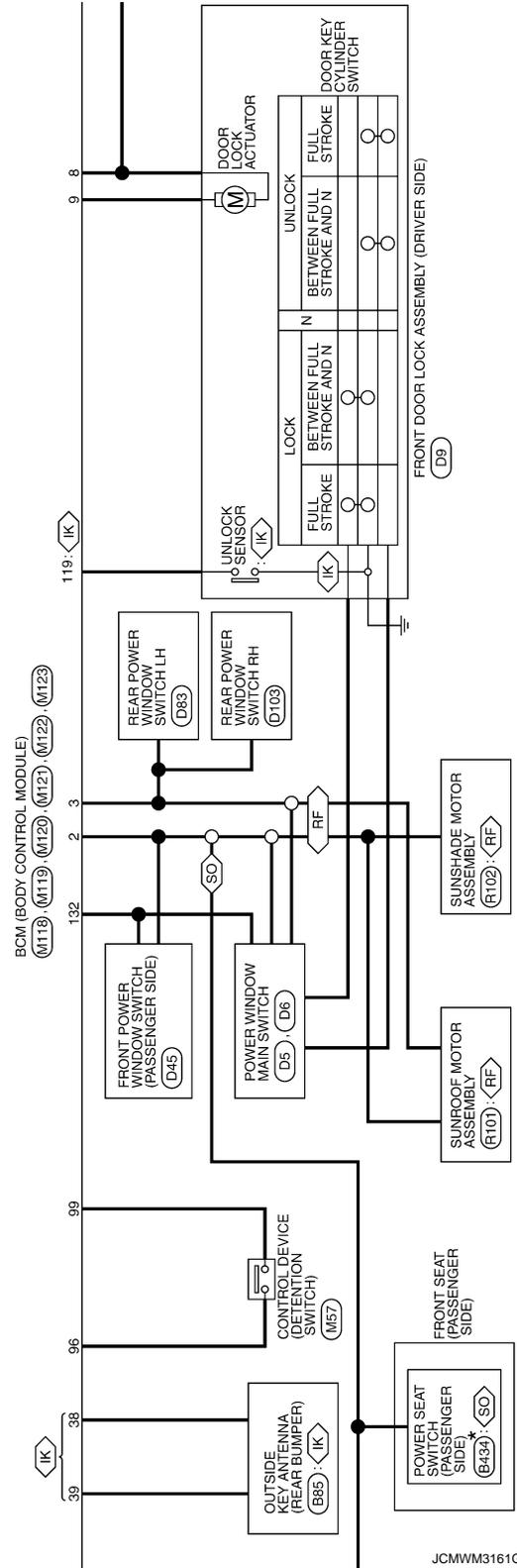
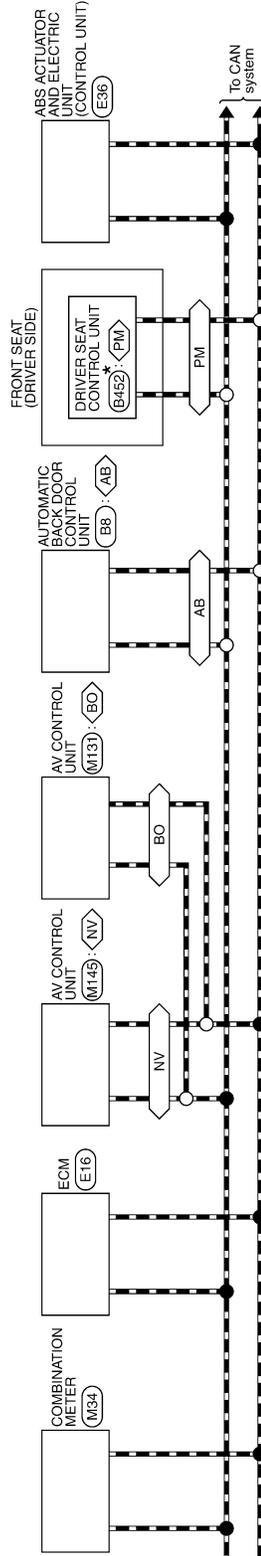
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

- ◊ IK : With Intelligent Key
- ◊ NV : With navigation system
- ◊ BC : With BOSE system without navigation system
- ◊ FE : With sunroof
- ◊ PM : With automatic drive positioner
- ◊ SO : With power seat without automatic drive positioner
- ◊ AB : With automatic back door

*: This connector is not shown in "Harness Layout".

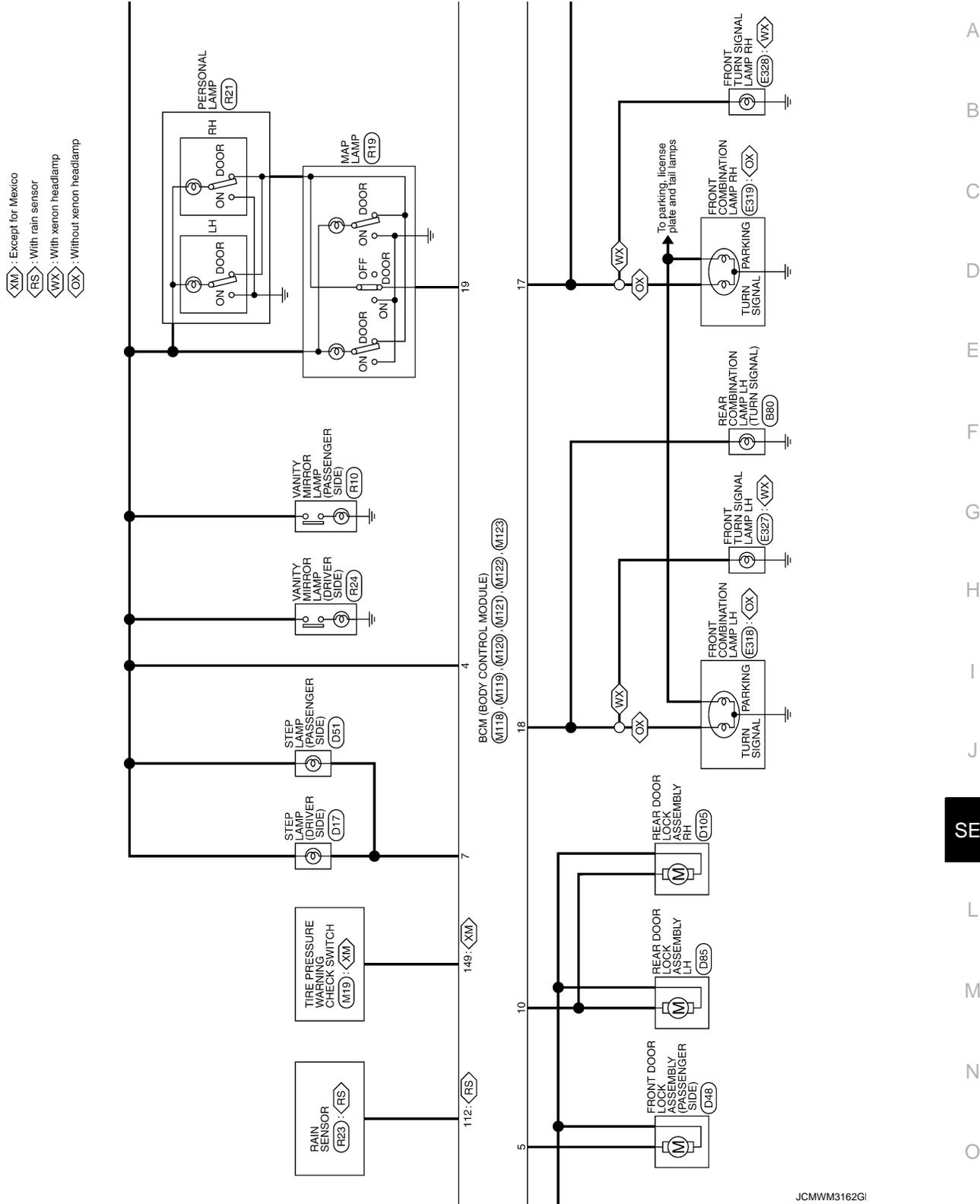


JCMWWM3161G

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCMWM3162GI

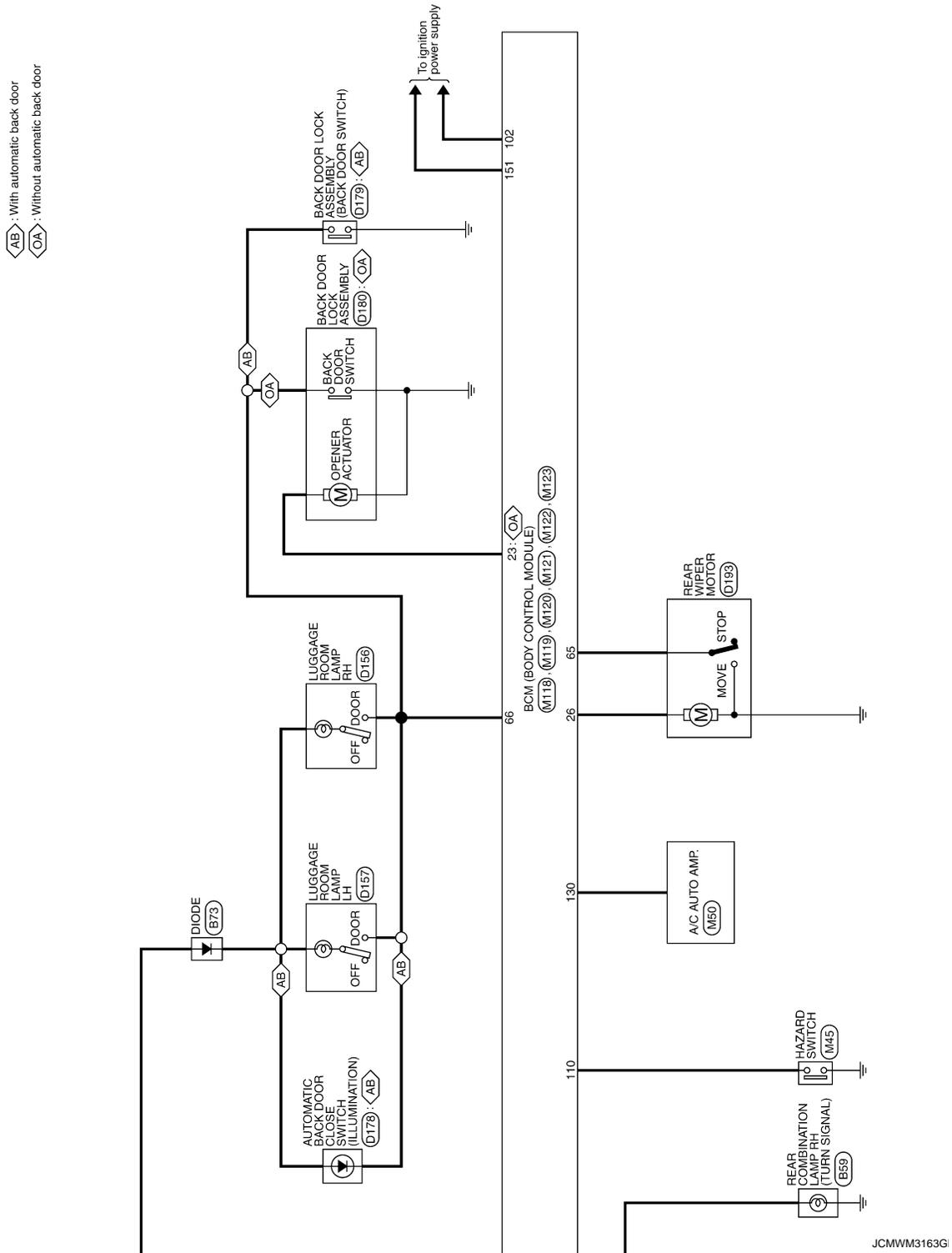
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



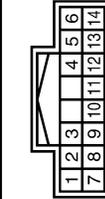
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE B)

| | |
|----------------|--------------------|
| Connector No. | M113 |
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2 | Y | OUTPUT 4 |
| 3 | V | OUTPUT 3 |
| 5 | GR | INPUT 3 |
| 7 | L | OUTPUT 5 |
| 8 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |



| | |
|----------------|---------------------------|
| Connector No. | M120 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS12FW-CS |

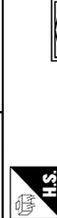


| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LC |



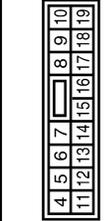
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 1 | W | BAT (F/L) |
| 2 | GR | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | L | POWER WINDOW POWER SUPPLY (RAP) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 34 | B | LUGGAGE ROOM ANTI- |
| 35 | W | LUGGAGE ROOM ANTI+ |
| 38 | L | REAR BUMPER ANTI- |
| 39 | BR | REAR BUMPER ANTI+ |
| 47 | L | IGN RELAY /PDM E/R CONT |
| 52 | R | STARTER RELAY CONT |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 64 | GR | REQUEST SW BUZZER |
| 65 | O | REAR WIPER STOP POSITION |
| 66 | Y | BACK DOOR SW |
| 67 | LG | BACK DOOR OPENER SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------------|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | G | PASSENGER DOOR UNLOCK OUTPUT |
| 7 | W | STEP LAMP OUTPUT |
| 8 | V | ALL DOOR FUEL LID LOCK OUTPUT |
| 9 | G | DRIVER DOOR FUEL LID UNLOCK OUTPUT |
| 10 | P | REAR DOOR UNLOCK OUTPUT |
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 14 | O | PUSH-BUTTON IGNITION SW ILL GND |
| 15 | L | ACC IND |
| 17 | G | TURN SIGNAL RH |

| | | |
|----|---|-----------------|
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

| | | |
|----|----|-------------------------|
| 18 | BR | TURN SIGNAL LH |
| 19 | Y | ROOM LAMP TIMER CONTROL |

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

SEC

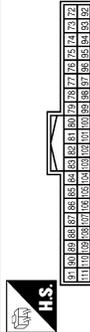
BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE B)

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | B | ROOM ANT2- |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT- |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1- |
| 79 | G | ROOM ANT1+ |
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 82 | BR | IGN RELAY (F/B) CONT |

| | | |
|-----|----|---------------------------------------|
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 92 | R | KEY SLOT ILL[With Intelligent Key] |
| 93 | L | KEY SLOT ILL[Without Intelligent Key] |
| 94 | L | ON IND |
| 95 | L | ACC RELAY CONT |
| 96 | Y | A/T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |
| 98 | L | S/L CONDITION 2 |
| 99 | V | SHIFT P |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 102 | Y | BLOWER FAN MOTOR RELAY CONT |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |
| 106 | Y | S/L POWER SUPPLY |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |
| 110 | G | HAZARD SW |
| 111 | LG | S/L COMM |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 112 | R | RAIN SENSOR SERIAL LINK |
| 113 | O | OPTICAL SENSOR |
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 119 | W | DR DOOR UNLOCK SENSOR |
| 121 | Y | KEY SLOT SW |
| 122 | R | ACC F/B |
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 130 | BR | REAR DEFOGGER SW |
| 132 | G | POWER WINDOW SW COMM |

| | | |
|-----|----|-----------------------------------|
| 133 | W | PUSH-BUTTON IGNITION SW ILL POWER |
| 137 | P | RECEIVER SENSOR GND |
| 138 | V | RECEIVER SENSOR POWER SUPPLY |
| 139 | O | TIRE PRESS RECEIVER SIGNAL |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 149 | W | TIRE PRESS WARNING CHECK SW |
| 150 | SB | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFOGGER RELAY |

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

JCMWM3165G

INFOID:000000004747792

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Display contents of CONSULT | Fail-safe | Cancellation |
|-----------------------------|-------------------------|---|
| B2013: ID DISCORD BCM-S/L | Inhibit engine cranking | Erase DTC |
| B2014: CHAIN OF S/L-BCM | Inhibit engine cranking | Erase DTC |
| B2190: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC |
| B2191: DIFFERENCE OF KEY | Inhibit engine cranking | Erase DTC |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2195: ANTI SCANNING | Inhibit engine cranking | Ignition switch ON → OFF |
| B2557: VEHICLE SPEED | Inhibit steering lock | When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms |
| B2560: STARTER CONT RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal |
| B2601: SHIFT POSITION | Inhibit steering lock | 500 ms after the following signal reception status becomes consistent <ul style="list-style-type: none"> • Selector lever P position switch signal • P range signal (CAN) |
| B2602: SHIFT POSITION | Inhibit steering lock | 5 seconds after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more |
| B2603: SHIFT POSI STATUS | Inhibit steering lock | 500 ms after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V) |
| B2604: PNP SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF |
| B2605: PNP SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position <ul style="list-style-type: none"> - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON |
| B2606: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal) |

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 >

| Display contents of CONSULT | Fail-safe | Cancellation |
|-----------------------------|--|---|
| B2607: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal) |
| B2608: STARTER RELAY | Inhibit engine cranking | 500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> Starter motor relay control signal Starter relay status signal (CAN) |
| B2609: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When the following steering lock conditions agree <ul style="list-style-type: none"> BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status |
| B260A: IGNITION RELAY | Inhibit engine cranking | 500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) |
| B260F: ENG STATE SIG LOST | Maintains the power supply position attained at the time of DTC detection | When any of the following conditions are fulfilled <ul style="list-style-type: none"> Power position changes to ACC Receives engine status signal (CAN) |
| B2612: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When any of the following conditions are fulfilled <ul style="list-style-type: none"> Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R) |
| B2617: STARTER RELAY CIRC | Inhibit engine cranking | 1 second after the starter motor relay control inside BCM becomes normal |
| B2618: BCM | Inhibit engine cranking | 1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal |
| B2619: BCM | Inhibit engine cranking | 1 second after the steering lock unit power supply output control inside BCM becomes normal |
| B261E: VEHICLE TYPE | Inhibit engine cranking | BCM initialization |
| B26E9: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled <ul style="list-style-type: none"> Steering condition No. 1 signal: LOCK (0V) Steering condition No. 2 signal: LOCK (Battery voltage) |

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

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

NOTE:

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

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

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

NOTE:

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

REAR WIPER MOTOR PROTECTION

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

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

Condition of cancellation

- More than 1 minute is passed after the rear wiper stop.

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

A

DTC Inspection Priority Chart

INFOID:000000004747793

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

B

| Priority | DTC |
|----------|--|
| 1 | B2562: LOW VOLTAGE |
| 2 | <ul style="list-style-type: none"> • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN) |
| 3 | <ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING |
| 4 | <ul style="list-style-type: none"> • B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG |

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

BCM (BODY CONTROL MODULE)

[WITH INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Priority | DTC |
|----------|---|
| 5 | <ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT |
| 6 | <ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA |

DTC Index

INFOID:000000004747794

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-17, "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)"](#).

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|--|-----------|--|---------------------------------|---------------------------------------|------------------------|
| No DTC is detected. further testing may be required. | — | — | — | — | — |
| U1000: CAN COMM CIRCUIT | — | — | — | — | BCS-40 |
| U1010: CONTROL UNIT (CAN) | — | — | — | — | BCS-41 |
| U0415: VEHICLE SPEED SIG | — | — | — | — | BCS-42 |
| B2013: ID DISCORD BCM-S/L | × | × | — | — | SEC-55 |
| B2014: CHAIN OF S/L-BCM | × | × | — | — | SEC-56 |
| B2190: NATS ANTENNA AMP | × | — | — | — | SEC-47 |
| B2191: DIFFERENCE OF KEY | × | — | — | — | SEC-50 |
| B2192: ID DISCORD BCM-ECM | × | — | — | — | SEC-51 |
| B2193: CHAIN OF BCM-ECM | × | — | — | — | SEC-53 |
| B2195: ANTI SCANNING | × | — | — | — | SEC-54 |
| B2553: IGNITION RELAY | — | × | — | — | PCS-49 |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|---------------------------|-----------|--|---------------------------------|---------------------------------------|-------------------------|
| B2555: STOP LAMP | — | × | — | — | SEC-59 |
| B2556: PUSH-BTN IGN SW | — | × | × | — | SEC-61 |
| B2557: VEHICLE SPEED | × | × | × | — | SEC-63 |
| B2560: STARTER CONT RELAY | × | × | × | — | SEC-64 |
| B2562: LOW VOLTAGE | — | × | — | — | BCS-43 |
| B2601: SHIFT POSITION | × | × | × | — | SEC-65 |
| B2602: SHIFT POSITION | × | × | × | — | SEC-68 |
| B2603: SHIFT POSI STATUS | × | × | × | — | SEC-70 |
| B2604: PNP SW | × | × | × | — | SEC-73 |
| B2605: PNP SW | × | × | × | — | SEC-75 |
| B2606: S/L RELAY | × | × | × | — | SEC-77 |
| B2607: S/L RELAY | × | × | × | — | SEC-78 |
| B2608: STARTER RELAY | × | × | × | — | SEC-80 |
| B2609: S/L STATUS | × | × | × | — | SEC-82 |
| B260A: IGNITION RELAY | × | × | × | — | PCS-51 |
| B260B: STEERING LOCK UNIT | — | × | × | — | SEC-86 |
| B260C: STEERING LOCK UNIT | — | × | × | — | SEC-87 |
| B260D: STEERING LOCK UNIT | — | × | × | — | SEC-88 |
| B260F: ENG STATE SIG LOST | × | × | × | — | SEC-89 |
| B2612: S/L STATUS | × | × | × | — | SEC-92 |
| B2614: ACC RELAY CIRC | — | × | × | — | PCS-53 |
| B2615: BLOWER RELAY CIRC | — | × | × | — | PCS-56 |
| B2616: IGN RELAY CIRC | — | × | × | — | PCS-59 |
| B2617: STARTER RELAY CIRC | × | × | × | — | SEC-96 |
| B2618: BCM | × | × | × | — | PCS-62 |
| B2619: BCM | × | × | × | — | SEC-98 |
| B261A: PUSH-BTN IGN SW | — | × | × | — | SEC-99 |
| B261E: VEHICLE TYPE | × | × | × (Turn ON for 15 seconds) | — | SEC-102 |
| B2621: INSIDE ANTENNA | — | × | — | — | DLK-95 |
| B2622: INSIDE ANTENNA | — | × | — | — | DLK-97 |
| B2623: INSIDE ANTENNA | — | × | — | — | DLK-99 |
| B26E9: S/L STATUS | × | × | × (Turn ON for 15 seconds) | — | SEC-90 |
| B26EA: KEY REGISTRATION | — | × | × (Turn ON for 15 seconds) | — | SEC-91 |
| C1704: LOW PRESSURE FL | — | — | — | × | WT-16 |
| C1705: LOW PRESSURE FR | — | — | — | × | |
| C1706: LOW PRESSURE RR | — | — | — | × | |
| C1707: LOW PRESSURE RL | — | — | — | × | |

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]

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|---------------------------|-----------|--|---------------------------------|---------------------------------------|-----------------------|
| C1708: [NO DATA] FL | — | — | — | × | WT-18 |
| C1709: [NO DATA] FR | — | — | — | × | |
| C1710: [NO DATA] RR | — | — | — | × | |
| C1711: [NO DATA] RL | — | — | — | × | |
| C1712: [CHECKSUM ERR] FL | — | — | — | × | WT-21 |
| C1713: [CHECKSUM ERR] FR | — | — | — | × | |
| C1714: [CHECKSUM ERR] RR | — | — | — | × | |
| C1715: [CHECKSUM ERR] RL | — | — | — | × | |
| C1716: [PRESSDATA ERR] FL | — | — | — | × | WT-24 |
| C1717: [PRESSDATA ERR] FR | — | — | — | × | |
| C1718: [PRESSDATA ERR] RR | — | — | — | × | |
| C1719: [PRESSDATA ERR] RL | — | — | — | × | |
| C1720: [CODE ERR] FL | — | — | — | × | WT-26 |
| C1721: [CODE ERR] FR | — | — | — | × | |
| C1722: [CODE ERR] RR | — | — | — | × | |
| C1723: [CODE ERR] RL | — | — | — | × | |
| C1724: [BATT VOLT LOW] FL | — | — | — | × | WT-29 |
| C1725: [BATT VOLT LOW] FR | — | — | — | × | |
| C1726: [BATT VOLT LOW] RR | — | — | — | × | |
| C1727: [BATT VOLT LOW] RL | — | — | — | × | |
| C1729: VHCL SPEED SIG ERR | — | — | — | × | WT-32 |
| C1734: CONTROL UNIT | — | — | — | × | WT-33 |

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:000000004747801

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. | 1/2/3/4 |
| 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, HI or AUTO (Light is illuminated) | | On |
| HL LO REQ | Lighting switch OFF | | Off |
| | Lighting switch 2ND HI or AUTO (Light is illuminated) | | On |
| HL HI REQ | Lighting switch OFF | | Off |
| | Lighting switch HI | | On |
| FR FOG REQ | Lighting switch 2ND or AUTO (Light is illuminated) | Front fog lamp switch OFF | Off |
| | | <ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) | On |
| FR WIP REQ | Ignition switch ON | Front wiper switch OFF | Stop |
| | | Front wiper switch INT | 1LOW |
| | | Front wiper switch LO | Low |
| | | Front wiper switch HI | Hi |
| WIP AUTO STOP | Ignition switch ON | Front wiper stop position | STOP P |
| | | Any position other than front wiper stop position | ACT P |
| WIP PROT | Ignition switch ON | Front wiper operates normally | Off |
| | | Front wiper stops at fail-safe operation | BLOCK |
| IGN RLY1 -REQ | Ignition switch OFF or ACC | | Off |
| | Ignition switch ON | | On |
| IGN RLY | Ignition switch OFF or ACC | | Off |
| | Ignition switch ON | | On |
| PUSH SW | Release the push-button ignition switch | | Off |
| | Press the push-button ignition switch | | On |
| INTER/NP SW | Ignition switch ON | Selector lever in any position other than P or N | Off |
| | | Selector lever in P or N position | On |
| ST RLY CONT | Ignition switch ON | | Off |
| | At engine cranking | | On |
| IHBT RLY -REQ | Ignition switch ON | | Off |
| | At engine cranking | | On |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

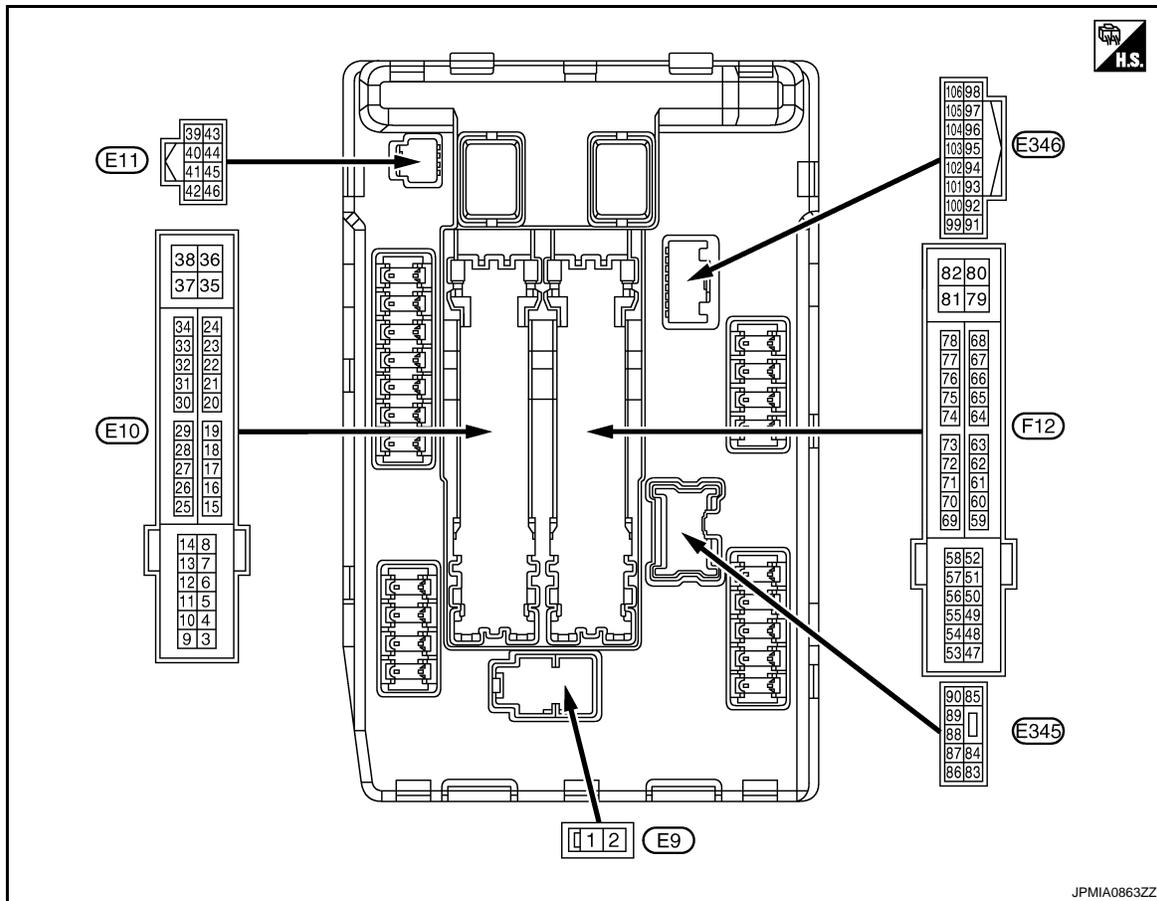
| Monitor Item | Condition | Value/Status |
|----------------|---|-----------------|
| ST/INHI RLY | Ignition switch ON | Off |
| | At engine cranking | INHI ON → ST ON |
| | The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF | UNKWN |
| DETENT SW | Ignition switch ON <ul style="list-style-type: none"> • Press the selector button with selector lever in P position • Selector lever in any position other than P | Off |
| | Release the selector button with selector lever in P position | On |
| S/L RLY -REQ | None of the conditions below are present | Off |
| | <ul style="list-style-type: none"> • Open the driver door after the ignition switch is turned OFF (for a few seconds) • Press the push-button ignition switch when the steering lock is activated | On |
| S/L STATE | Steering lock is activated | LOCK |
| | Steering lock is deactivated | UNLOCK |
| | [DTC: B210A] is detected | UNKWN |
| DTRL REQ | NOTE: The item is indicated, but not monitored. | Off |
| OIL P SW | Ignition switch OFF, ACC or engine running | Open |
| | Ignition switch ON | Close |
| HOOD SW | NOTE: The item is indicated, but not monitored. | Off |
| HL WASHER REQ | NOTE: The item is indicated, but not monitored. | Off |
| THFT HRN REQ | Not operating | Off |
| | <ul style="list-style-type: none"> • Panic alarm is activated • Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM | On |
| HORN CHIRP | Not operating | Off |
| | <ul style="list-style-type: none"> • Door locking with Intelligent Key (horn chirp mode) • Door locking with key fob (horn chirp mode) | On |
| CRNRNG LMP REQ | NOTE: The item is indicated, but not monitored. | Off |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

TERMINAL LAYOUT



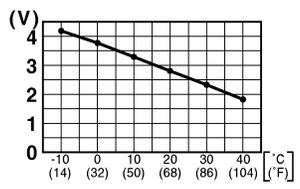
PHYSICAL VALUES

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|---|------------------|---|------------------------|--------------------|
| + | - | Signal name | Input/ Output | | | |
| 1 (R) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (L) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 4 (LG) | Ground | Front wiper LO | Output | Ignition switch OFF | Front wiper switch OFF | 0 V |
| | | | | Ignition switch ON | Front wiper switch LO | Battery voltage |
| 5 (Y) | Ground | Front wiper HI | Output | Ignition switch OFF | Front wiper switch OFF | 0 V |
| | | | | Ignition switch ON | Front wiper switch HI | Battery voltage |
| 7 (GR) | Ground | Tail, license plate lamps & illuminations | Output | Ignition switch OFF | Lighting switch OFF | 0 V |
| | | | | Ignition switch ON | Lighting switch 1ST | Battery voltage |
| 10 (BR) | Ground | ECM relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V |
| | | | | <ul style="list-style-type: none"> Ignition switch ON Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | 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 | | | |
| 11 (P) | Ground | Steering lock unit power supply | Output | Ignition switch OFF | A few seconds after opening the driver door | Battery voltage |
| | | | | Ignition switch LOCK | Press the push-button ignition switch | Battery voltage |
| | | | | Ignition switch ACC or ON | | 0 V |
| 12 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 13 (SB) | Ground | Fuel pump power supply | Output | Approximately 1 second or more after turning the ignition switch ON | | 0 V |
| | | | | <ul style="list-style-type: none"> Approximately 1 second after turning the ignition switch ON Engine running | | Battery voltage |
| 15 (W) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 16 (L/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 |
| 19 (Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 20 (L) | Ground | Ambient sensor ground | Output | Ignition switch ON | | 0 V |
| 21 (O) | Ground | Ambient sensor | Input | Ignition switch ON NOTE: Changes depending to ambient temperature | |  <p style="text-align: right; font-size: small;">JSNIA0014GB</p> |
| 22 (SB) | Ground | Refrigerant pressure sensor ground | Output | Engine running | <ul style="list-style-type: none"> Warm-up condition Idle speed | 0 V |
| 23 (GR) | Ground | Refrigerant pressure sensor | Output | Engine running | <ul style="list-style-type: none"> Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates) | 1.0 - 4.0 V |
| 24 (G) | Ground | Refrigerant pressure sensor power supply | Input | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | 5.0 V |
| 25 (GR) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 26* (Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 27 (W) | Ground | Ignition relay monitor | Input | Ignition switch OFF or ACC | | Battery voltage |
| | | | | Ignition switch ON | | 0 V |
| 28 (SB) | Ground | Push-button ignition switch | Input | Press the push-button ignition switch | | 0 V |
| | | | | Release the push-button ignition switch | | 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 | | | | |
| 30 (BR) | Ground | Starter relay control | Input | Ignition switch ON | Selector lever in any position other than P or N | 0 V | |
| | | | | | Selector lever P or N | Battery voltage | |
| 32 (V) | Ground | Steering lock unit condition-1 | Input | Steering lock is activated | | 0 V | |
| | | | | Steering lock is deactivated | | Battery voltage | |
| 33 (G) | Ground | Steering lock unit condition-2 | Input | Steering lock is activated | | Battery voltage | |
| | | | | Steering lock is deactivated | | 0 V | |
| 34 (O) | Ground | Cooling fan relay-3 control | Input | Cooling fan stopped | | Battery voltage | |
| | | | | Cooling fan at HI operation | | 0 V | |
| 35 (P) | Ground | Cooling fan relay-1 power supply | Input | Cooling fan stopped | | Battery voltage | |
| | | | | Cooling fan at LO operation | | 6.0 V | |
| 36 (G) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage | |
| 38 (GR) | Ground | Cooling fan relay-1 power supply | Output | Cooling fan not operating | | 0 V | |
| | | | | Cooling fan at LO operation | | 6.0 V | |
| 39 (P) | — | CAN-L | Input/ Output | — | | — | |
| 40 (L) | — | CAN-H | Input/ Output | — | | — | |
| 41 (B) | Ground | Ground | — | Ignition switch ON | | 0 V | |
| 42 (SB) | Ground | Cooling fan relay-2 control | Input | Cooling fan stopped | | Battery voltage | |
| | | | | <ul style="list-style-type: none"> • Cooling fan MID operating • Cooling fan HI operating | | 0 V | |
| 43 (Y) | Ground | Control device (Detention switch) | Input | Ignition switch ON | Press the selector button (selector lever P) | Battery voltage | |
| | | | | | <ul style="list-style-type: none"> • Selector lever in any position other than P • Release the selector button (selector lever P) | | 0 V |
| 44 (W) | Ground | Horn relay control | Input | The horn is deactivated | | Battery voltage | |
| | | | | The horn is activated | | 0 V | |
| 45 (O) | Ground | Horn switch | Input | The horn is deactivated | | Battery voltage | |
| | | | | The horn is activated | | 0 V | |
| 46 (BR) | Ground | Starter relay control | Input | Ignition switch ON | Selector lever in any position other than P or N | 0 V | |
| | | | | | Selector lever P or N | Battery voltage | |
| 48 (W) | Ground | A/C relay power supply | Output | Engine running | A/C switch OFF | | 0 V |
| | | | | | A/C switch ON (A/C compressor is operating) | | Battery voltage |
| 49 (R/B) | Ground | ECM relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V | |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | 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 >

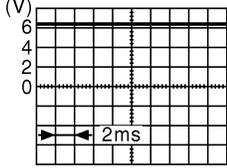
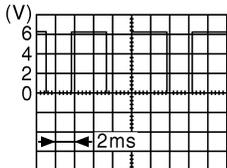
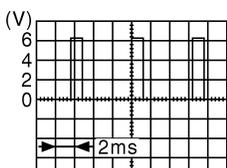
[WITH INTELLIGENT KEY SYSTEM]

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|---|---|---|
| + | - | Signal name | Input/ Output | | | |
| 51 (LG) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 52 (Y/G) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 53 (R/W) | Ground | ECM relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning igni- tion switch OFF) | | Battery voltage |
| 54 (G/W) | Ground | Throttle control motor re- lay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning igni- tion switch OFF) | | Battery voltage |
| 55 (W/L) | Ground | ECM power supply | Output | Ignition switch OFF | | Battery voltage |
| 56 (R/Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 57 (O) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 58 (Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 69 (W/B) | Ground | ECM relay control | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | Battery voltage |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning igni- tion switch OFF) | | 0 - 1.5 V |
| 70 (O) | Ground | Throttle control motor re- lay control | Output | Ignition switch ON → OFF | | 0 - 1.0 V ↓ Battery voltage ↓ 0 V |
| | | | | Ignition switch ON | | 0 - 1.0 V |
| 72 (R/B) | Ground | Starter relay control | Input | Ignition switch ON | Selector lever in any posi- tion other than P or N | 0 V |
| | | | | | Selector lever P or N | Battery voltage |
| 75 (LG) | 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 | | | |
| 76 (SB) | Ground | Power generation command signal | Output | Ignition switch ON | |  6.3 V |
| | | | | 40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE" | |  3.8 V |
| | | | | 80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE" | |  1.4 V |
| 77 (GR) | Ground | Fuel pump relay control | Output | <ul style="list-style-type: none"> • Approximately 1 second after turning the ignition switch ON • Engine running | | 0 - 1.5 V |
| | | | | Approximately 1 second or more after turning the ignition switch ON | | Battery voltage |
| 80 (B) | Ground | Starter motor | Output | At engine cranking | | Battery voltage |
| 83 (Y) | Ground | Headlamp LO (RH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 2ND | Battery voltage |
| 84 (L) | Ground | Headlamp LO (LH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 2ND | Battery voltage |
| 86 (SB) | Ground | Front fog lamp (RH) | Output | Lighting switch 2ND | Front fog lamp switch OFF | 0 V |
| | | | | | <ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) | |
| 87 (GR) | Ground | Front fog lamp (LH) | Output | Lighting switch 2ND | Front fog lamp switch OFF | 0 V |
| | | | | | <ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) | |
| 88 (W) | Ground | Washer pump power supply | Output | Ignition switch ON | | Battery voltage |

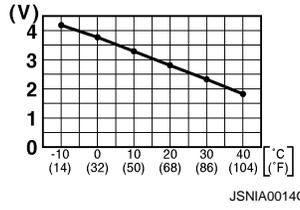
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

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 | | | |
| 89 (L) | Ground | Headlamp HI (RH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | • Lighting switch HI • Lighting switch PASS | Battery voltage |
| 90 (G) | Ground | Headlamp HI (LH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | • Lighting switch HI • Lighting switch PASS | Battery voltage |
| 91 (R) | Ground | Parking lamp (RH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 1ST | Battery voltage |
| 92 (LG) | Ground | Parking lamp (LH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 1ST | Battery voltage |
| 93 (R) | Ground | Headlamp aiming motor (RH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 1ST | Battery voltage |
| 94 (L) | Ground | Headlamp aiming motor (LH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 1ST | Battery voltage |
| 99 (BR) | Ground | Ambient sensor ground | Input | Ignition switch ON | | 0 V |
| 100 (SB) | Ground | Ambient sensor | Output | Ignition switch ON NOTE: Changes depending to ambient temperature | |  <p style="text-align: right; font-size: small;">JSNIA0014GB</p> |
| 101 (L) | Ground | Refrigerant pressure sensor ground | Input | Engine running | • Warm-up condition • Idle speed | 0 V |
| 102 (B) | Ground | Refrigerant pressure sensor | Input | Engine running | • Warm-up condition • Both A/C switch and blower fan motor switch ON (Compressor operates) | 1.0 - 4.0 V |
| 103 (P) | Ground | Refrigerant pressure sensor power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | 5.0 V |

*: AWD models only

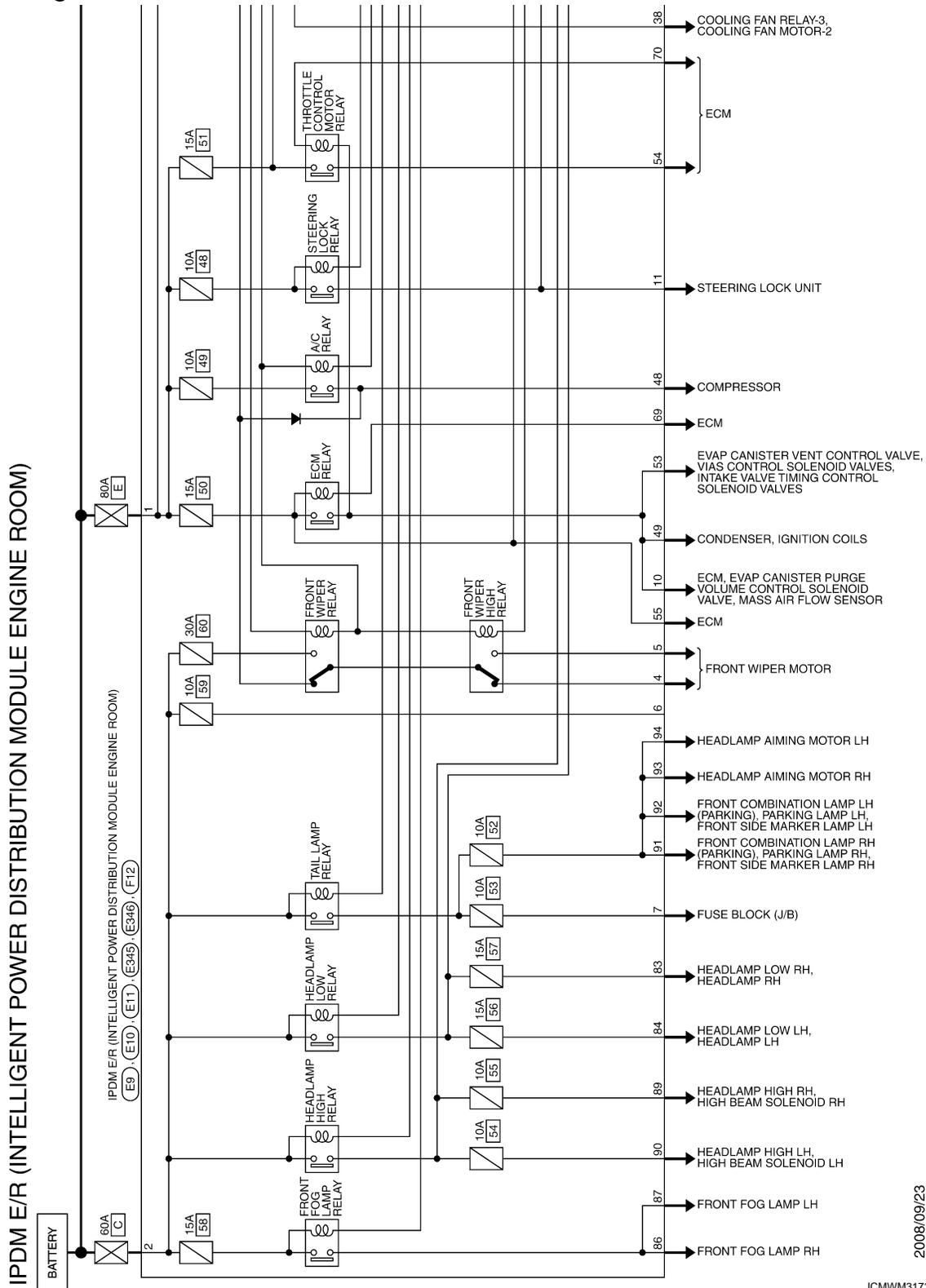
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Wiring Diagram - IPDM E/R -

INFOID:000000004747802



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

SEC

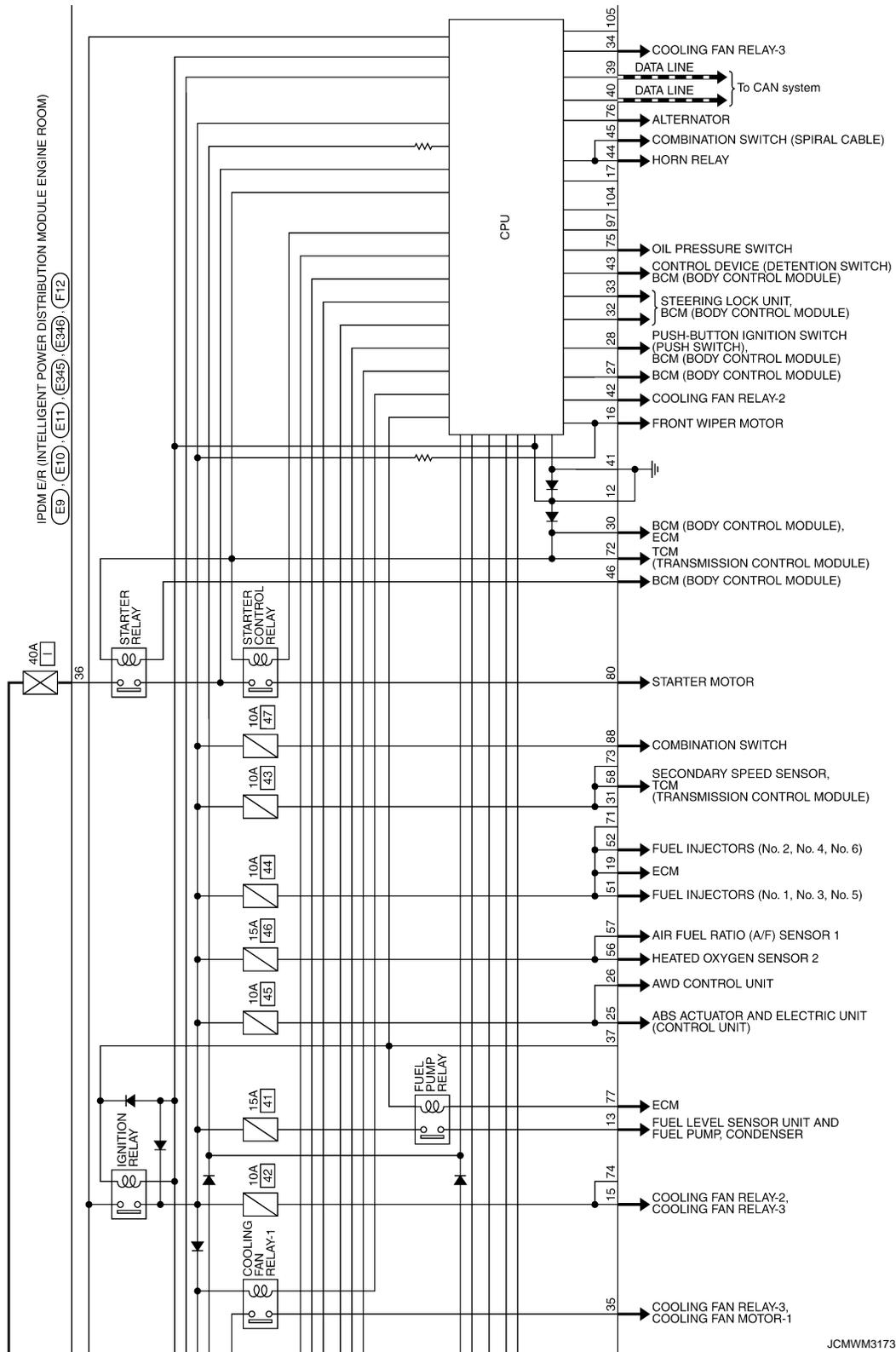
2008/09/23

JCMWM3172GI

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

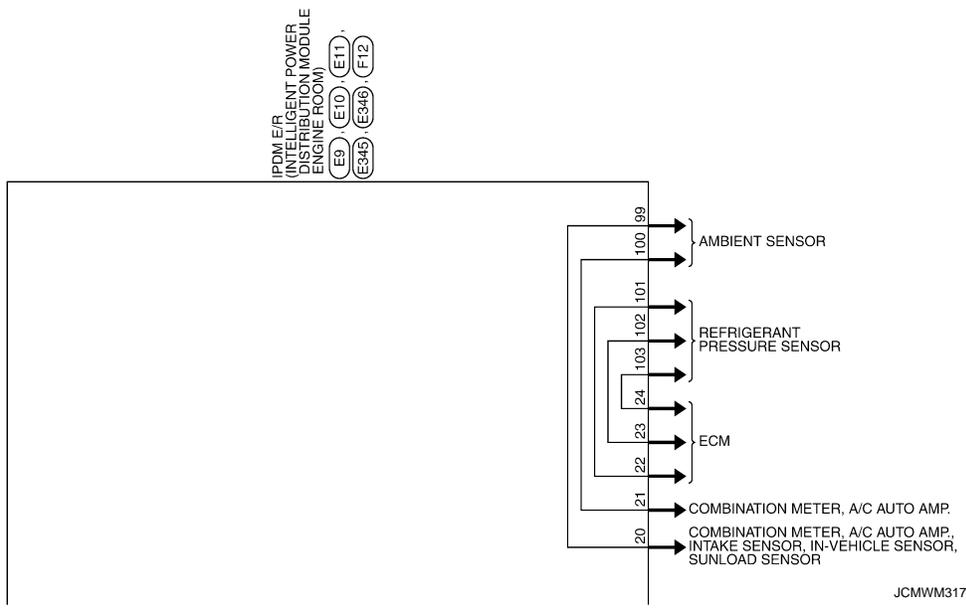


JCMWM3173G

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITH INTELLIGENT KEY SYSTEM]
 < ECU DIAGNOSIS >

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]

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

| | |
|----------------|--|
| Connector No. | E11 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH08FW-NH |



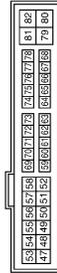
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 39 | P | - |
| 40 | L | - |
| 41 | B | - |
| 42 | SB | - |
| 43 | Y | - |
| 44 | W | - |
| 45 | O | - |
| 46 | BR | - |

| | | |
|----|----|---|
| 21 | O | - |
| 22 | SB | - |
| 23 | GR | - |
| 24 | G | - |
| 25 | GR | - |
| 26 | Y | - |
| 27 | W | - |
| 28 | SB | - |
| 30 | BR | - |
| 32 | V | - |
| 33 | G | - |
| 34 | O | - |
| 35 | P | - |
| 36 | G | - |
| 38 | GR | - |

| | | |
|----|-----|---|
| 70 | O | - |
| 72 | R/B | - |
| 75 | LG | - |
| 76 | SB | - |
| 77 | GR | - |
| 80 | B | - |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

| | |
|----------------|--|
| Connector No. | F12 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 48 | W | - |
| 49 | R/B | - |
| 51 | LG | - |
| 52 | Y/G | - |
| 53 | R/W | - |
| 54 | G/W | - |
| 55 | W/L | - |
| 56 | R/Y | - |
| 57 | O | - |
| 58 | Y | - |
| 68 | W/B | - |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

| | |
|----------------|--|
| Connector No. | E10 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4-1V |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 4 | LG | - |
| 5 | Y | - |
| 7 | GR | - |
| 10 | BR | - |
| 11 | P | - |
| 12 | B | - |
| 13 | SB | - |
| 15 | W | - |
| 16 | L/Y | - |
| 19 | Y | - |
| 20 | L | - |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

| | |
|----------------|--|
| Connector No. | E346 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 91 | R | - |
| 92 | LG | - |
| 93 | R | - |
| 94 | L | - |
| 99 | BR | - |
| 100 | SB | - |
| 101 | L | - |
| 102 | B | - |
| 103 | P | - |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

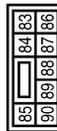
| | |
|----------------|--|
| Connector No. | E9 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | LC2FB-MC |



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

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

| | |
|----------------|--|
| Connector No. | E345 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | NS08FW-CS |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 83 | Y | - |
| 84 | L | - |
| 86 | SB | - |
| 87 | GR | - |
| 88 | W | - |
| 89 | L | - |
| 90 | G | - |

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

JCMWM3175G

INFOID:000000004747803

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Control part | Fail-safe operation |
|----------------|---|
| Cooling fan | <ul style="list-style-type: none"> • Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) • Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate) |
| A/C compressor | A/C relay OFF |
| Alternator | Outputs the power generation command signal (PWM signal) 0% |

If No CAN Communication Is Available With BCM

| Control part | Fail-safe operation |
|---|---|
| Headlamp | <ul style="list-style-type: none"> • Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF |
| <ul style="list-style-type: none"> • Parking lamps • License plate lamps • Side maker lamps • Illuminations • Tail lamps | <ul style="list-style-type: none"> • Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay 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 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/AUTO mode and the front wiper motor is operating. |
| Front fog lamps | Front fog lamp relay OFF |
| Horn | Horn OFF |
| Ignition relay | The status just before activation of fail-safe is maintained. |
| Starter motor | Starter control relay OFF |
| Steering lock unit | Steering lock relay OFF |

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

SEC

| Voltage judgment | | IPDM E/R judgment | Operation |
|-----------------------------|-------------------------------------|---------------------------|--|
| Ignition relay contact side | Ignition relay excitation coil side | | |
| ON | ON | Ignition relay ON normal | — |
| OFF | OFF | Ignition relay OFF normal | — |
| ON | OFF | Ignition relay ON stuck | <ul style="list-style-type: none"> • Detects DTC "B2098: IGN RELAY ON" • Turns ON the tail lamp relay for 10 minutes |
| OFF | ON | Ignition relay OFF stuck | Detects DTC "B2099: IGN RELAY OFF" |

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper auto stop signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

| Ignition switch | Front wiper switch | Front wiper stop position signal |
|-----------------|--------------------|--|
| ON | OFF | The front wiper stop position signal (stop position) cannot be input for 10 seconds. |
| | ON | The front wiper 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.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

INFOID:000000004747804

NOTE:

- The details of time display are as follows.
 - CRNT: A malfunction is detected now.
 - PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
 - The number is 0 when is detected now.
 - The number increases like 1 → 2 ... 38 → 39 after returning to the normal condition whenever IGN OFF → ON.
 - The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

×: Applicable

| CONSULT display | Fail-safe | Refer to |
|--|-----------|-------------------------|
| No DTC is detected. further testing may be required. | — | — |
| U1000: CAN COMM CIRCUIT | × | PCS-15 |
| B2098: IGN RELAY ON | × | PCS-16 |
| B2099: IGN RELAY OFF | — | PCS-17 |
| B2108: STRG LCK RELAY ON | — | SEC-103 |
| B2109: STRG LCK RELAY OFF | — | SEC-104 |
| B210A: STRG LCK STATE SW | — | SEC-105 |
| B210B: START CONT RLY ON | — | SEC-109 |
| B210C: START CONT RLY OFF | — | SEC-110 |
| B210D: STARTER RELAY ON | — | SEC-111 |
| B210E: STARTER RELAY OFF | — | SEC-112 |
| B210F: INTRLCK/PNP SW ON | — | SEC-114 |
| B2110: INTRLCK/PNP SW OFF | — | SEC-116 |

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE

Description

INFOID:000000003375785

Engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

NOTE:

- Check that vehicle is under the condition shown in “Conditions of vehicle” before starting diagnosis, and check each symptom.
- The engine start function, door lock function, power distribution system, and NATS-IVIS/NVIS in the Intelligent Key system are closely related to each other regarding control. The vehicle security function can operate only when the door lock and power distribution system are operating normally.

Conditions of Vehicle (Operating Conditions)

- “ENGINE START BY I-KEY” in “WORK SUPPORT” is ON when setting on CONSULT-III.
- Intelligent Key is not inserted in key slot.
- One or more of Intelligent Keys with registered Intelligent Key ID is in the vehicle.

Diagnosis Procedure

INFOID:000000003375786

1.PERFORM WORK SUPPORT

Perform “INSIDE ANT DIAGNOSIS” on Work Support in “INTELLIGENT KEY”.

Refer to [SEC-29, "INTELLIGENT KEY : CONSULT-III Function \(BCM - INTELLIGENT KEY\)"](#).

>> GO TO 2.

2.PERFORM SELF-DIAGNOSTIC RESULT

Perform Self-Diagnostic Result in “BCM”, and check whether or not DTC of inside key antenna is detected.

Is DTC detected?

YES >> Refer to [DLK-95, "DTC Logic"](#) (instrument center), [DLK-97, "DTC Logic"](#) (console) or [DLK-99, "DTC Logic"](#) (luggage room).

NO >> GO TO 3.

3.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to [PCS-66, "Component Function Check"](#).

Is the operation normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts.

4.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to [GI-40, "Intermittent Incident"](#).

NO >> GO TO 1.

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

SEC

STEERING DOES NOT LOCK

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

STEERING DOES NOT LOCK

Description

INFOID:000000003375787

Steering does not lock when door is open while ignition switch is OFF.

NOTE:

Before performing the diagnosis, check "Work Flow". Refer to [SEC-8, "Work Flow"](#).

Diagnosis Procedure

INFOID:000000003375788

1. CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-103, "WITH AUTOMATIC BACK DOOR : Component Function Check"](#).

Is the inspection normal?

YES >> GO TO 2.

NO >> Repair or replace malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to [GI-40, "Intermittent Incident"](#).

NO >> GO TO 1.

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

Description

INFOID:000000003375791

Security indicator lamp does not blink when ignition switch is in a position other than ON

NOTE:

- Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-8, "Work Flow"](#).
- Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Conditions of Vehicle (Operating Conditions)

- Intelligent Key is not inserted in key slot.
- Ignition switch position is not in the ON position.

Diagnosis Procedure

INFOID:000000003375792

1. CHECK SECURITY INDICATOR LAMP

Check security indicator lamp.

Refer to [SEC-120, "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-40, "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 CANNOT BE SET

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CANNOT BE SET INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:000000003375793

Armed phase is not activated when door is locked using Intelligent Key.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of "SECURITY ALARM SET" in "WORK SUPPORT" in "THEFT ALM" using CONSULT-III.

INTELLIGENT KEY : Diagnosis Procedure

INFOID:000000003375794

1.CHECK INTELLIGENT KEY SYSTEM (REMOTE KEYLESS ENTRY FUNCTION)

Lock/unlock door with Intelligent Key.

Refer to [DLK-34. "REMOTE KEYLESS ENTRY FUNCTION : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (remote keyless entry function). Refer to [DLK-277. "Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-40. "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH : Description

INFOID:000000003514791

Armed phase is not activated when door is locked using door request switch.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of "SECURITY ALARM SET" in "WORK SUPPORT" in "THEFT ALM" using CONSULT-III.

DOOR REQUEST SWITCH : Diagnosis Procedure

INFOID:000000003514792

1.CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Lock/unlock door with door request switch.

Refer to [DLK-25. "DOOR LOCK FUNCTION : System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check Intelligent Key system (door lock function). Refer to [DLK-283. "DRIVER SIDE : Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-40. "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR KEY CYLINDER

VEHICLE SECURITY SYSTEM CANNOT BE SET

[WITH INTELLIGENT KEY SYSTEM]

< SYMPTOM DIAGNOSIS >

DOOR KEY CYLINDER : Description

INFOID:000000003514793

Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-8. "Work Flow"](#).

DOOR KEY CYLINDER : Diagnosis Procedure

INFOID:000000003514794

1. CHECK POWER DOOR LOCK SYSTEM

Lock/unlock door with mechanical key.
Refer to [DLK-18. "System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check power door lock system. Refer to [DLK-272. "Diagnosis Procedure"](#).

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-40. "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 >

[WITH INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:000000003375795

Alarm does not operate when alarm operating condition is satisfied.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

"SECURITY ALARM SET" in "WORK SUPPORT" of "THEFT ALM" is ON when setting on CONSULT-III.

Diagnosis Procedure

INFOID:000000003375796

1.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-103, "WITH AUTOMATIC BACK DOOR : Component Function Check"](#) (with automatic back door) or [DLK-106, "WITHOUT AUTOMATIC BACK DOOR : Component Function Check"](#) (without automatic back door).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the malfunctioning door switch

2.CHECK HEADLAMP

Check headlamp.

Refer to [EXL-36, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK HORN

Check horn.

Refer to [HRN-2, "Wiring Diagram - HORN -"](#).

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-40, "Intermittent Incident"](#).

NO >> GO TO 1.

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

Description

INFOID:000000003375801

Intelligent Key insert information does not operate when push-button ignition switch is operated while Intelligent Key is not inside vehicle.

NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-41, "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:000000003375802

1. CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to [PCS-66, "Component Function Check"](#).

Is the inspection result normal?

YES >> Check BCM for DTC. Refer to [SEC-210, "DTC Index"](#).

NO >> Repair or replace the malfunctioning parts.

3. CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-103, "WITH AUTOMATIC BACK DOOR : Component Function Check"](#) (with automatic back door) or [DLK-106, "WITHOUT AUTOMATIC BACK DOOR : Component Function Check"](#) (without automatic back door).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. CHECK KEY SLOT

Check key slot.

Refer to [DLK-137, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5. CHECK COMBINATION METER DISPLAY

Check combination meter display.

Refer to [DLK-143, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6. CHECK KEY SLOT INDICATOR

Check key slot indicator.

Refer to [DLK-139, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7. CONFIRM THE OPERATION

Confirm the operation again.

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

INTELLIGENT KEY INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-40, "Intermittent Incident"](#).

NO >> GO TO 1.

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000003566321

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS 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".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

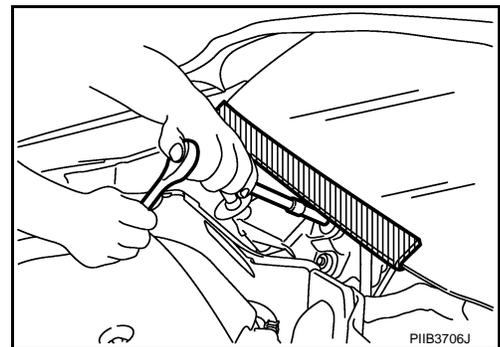
PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

Precaution for Procedure without Cowl Top Cover

INFOID:000000003566325

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc.



A
B
C
D
E
F
G
H
I
J
SEC

Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000003566323

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit. If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned. If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

L
M
N
O
P

PRECAUTIONS

< PRECAUTION >

[WITH INTELLIGENT KEY SYSTEM]

1. Connect both battery cables.
NOTE:
Supply power using jumper cables if battery is discharged.
2. Turn the push-button ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

KEY SLOT

< ON-VEHICLE REPAIR >

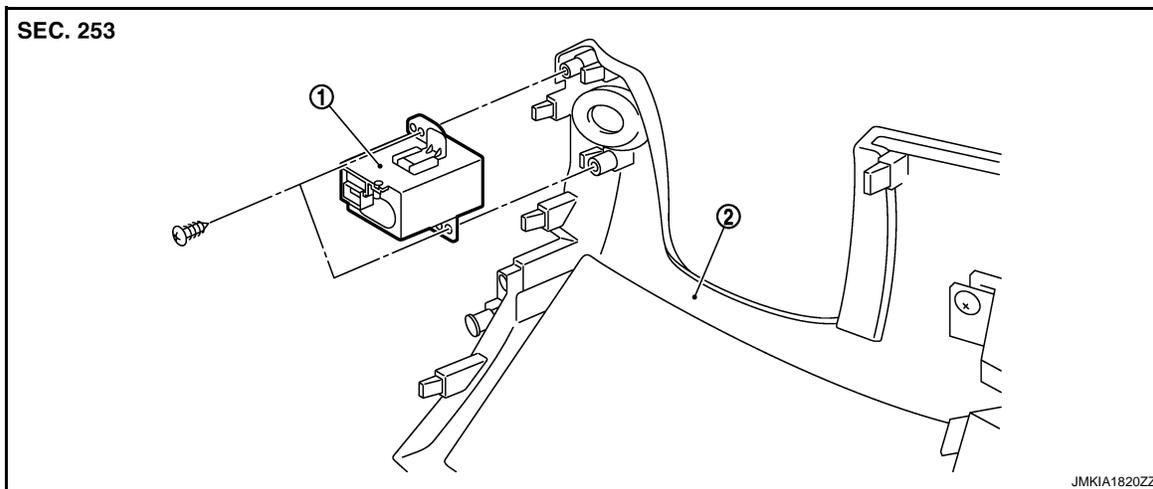
[WITH INTELLIGENT KEY SYSTEM]

ON-VEHICLE REPAIR

KEY SLOT

Exploded View

INFOID:000000003375806



1. Key slot

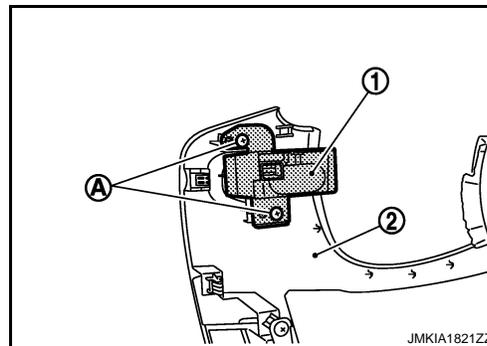
2. Instrument lower panel LH

Removal and Installation

INFOID:000000003375807

REMOVAL

1. Remove the instrument lower panel LH (2). Refer to [IP-12](#), "[Removal and Installation](#)".
2. Disconnect key slot connector.
3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument lower panel LH (2).



INSTALLATION

Install in the reverse order of removal.

PUSH BUTTON IGNITION SWITCH

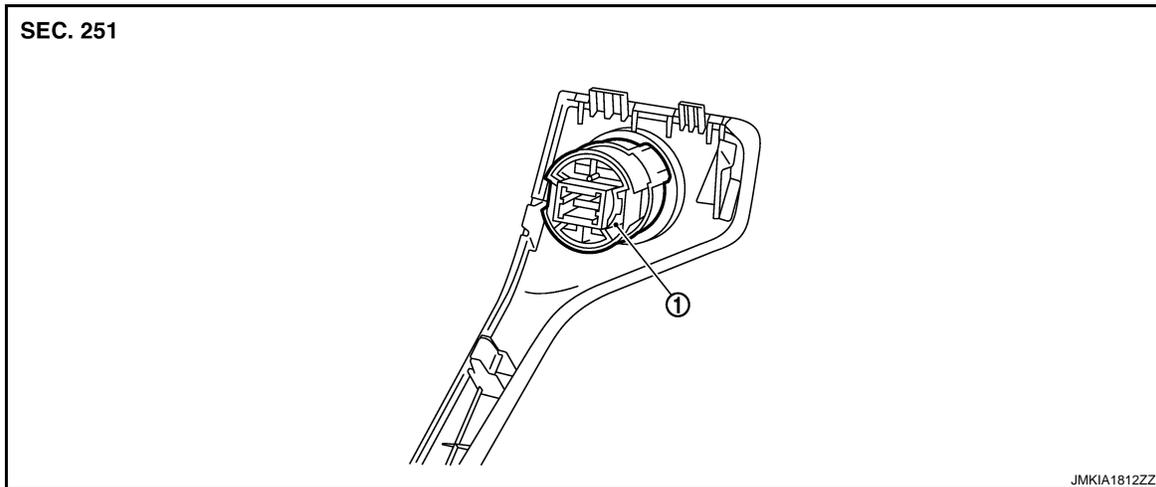
< ON-VEHICLE REPAIR >

[WITH INTELLIGENT KEY SYSTEM]

PUSH BUTTON IGNITION SWITCH

Exploded View

INFOID:000000003375808



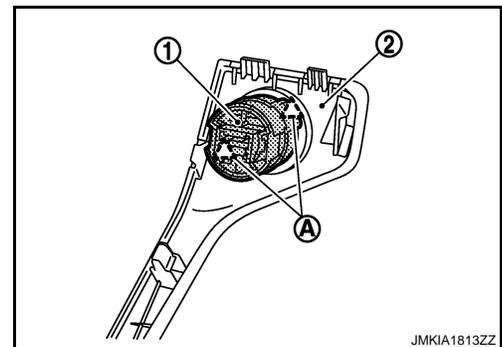
1. Push-button ignition switch

Removal and Installation

INFOID:000000003375809

REMOVAL

1. Remove the instrument stay cover LH. Refer to [IP-12, "Removal and Installation"](#).
2. Remove the push-button ignition switch (1) from instrument stay cover LH, after removing pawl (A). Press push-button ignition switch (1) back to disengage from instrument stay cover LH (2).



INSTALLATION

Install in the reverse order of removal.

SECURITY INDICATOR LAMP

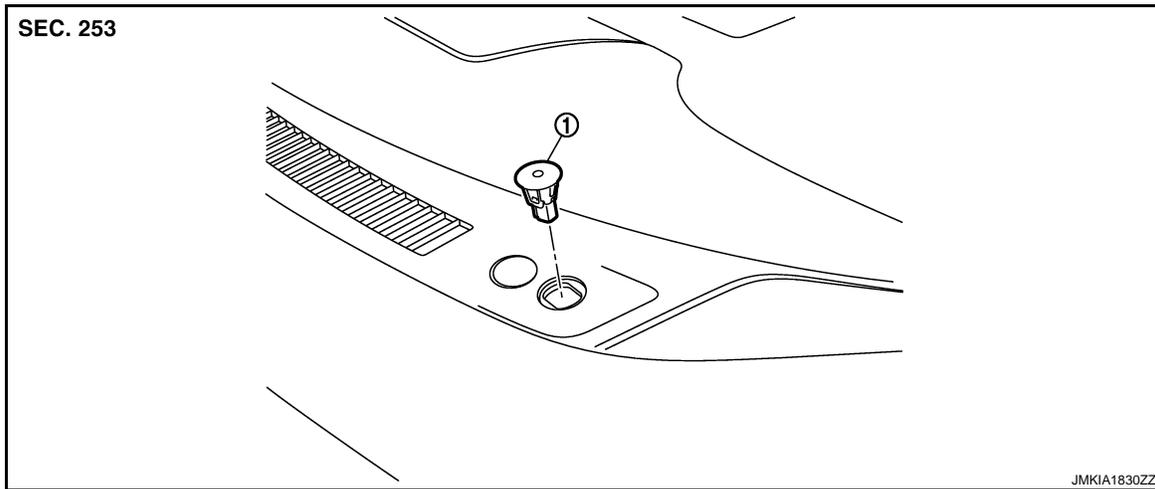
< ON-VEHICLE REPAIR >

[WITH INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP

Exploded View

INFOID:000000003515165



1. Security indicator lamp

Removal and Installation

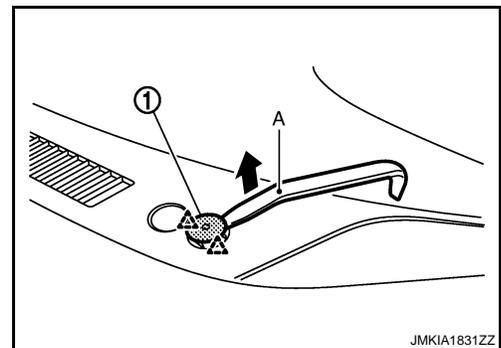
INFOID:000000003515166

REMOVAL

Remove the security indicator lamp (1).

- Disengage pawls with tool (A) and pull up the security indicator lamp.

 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

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

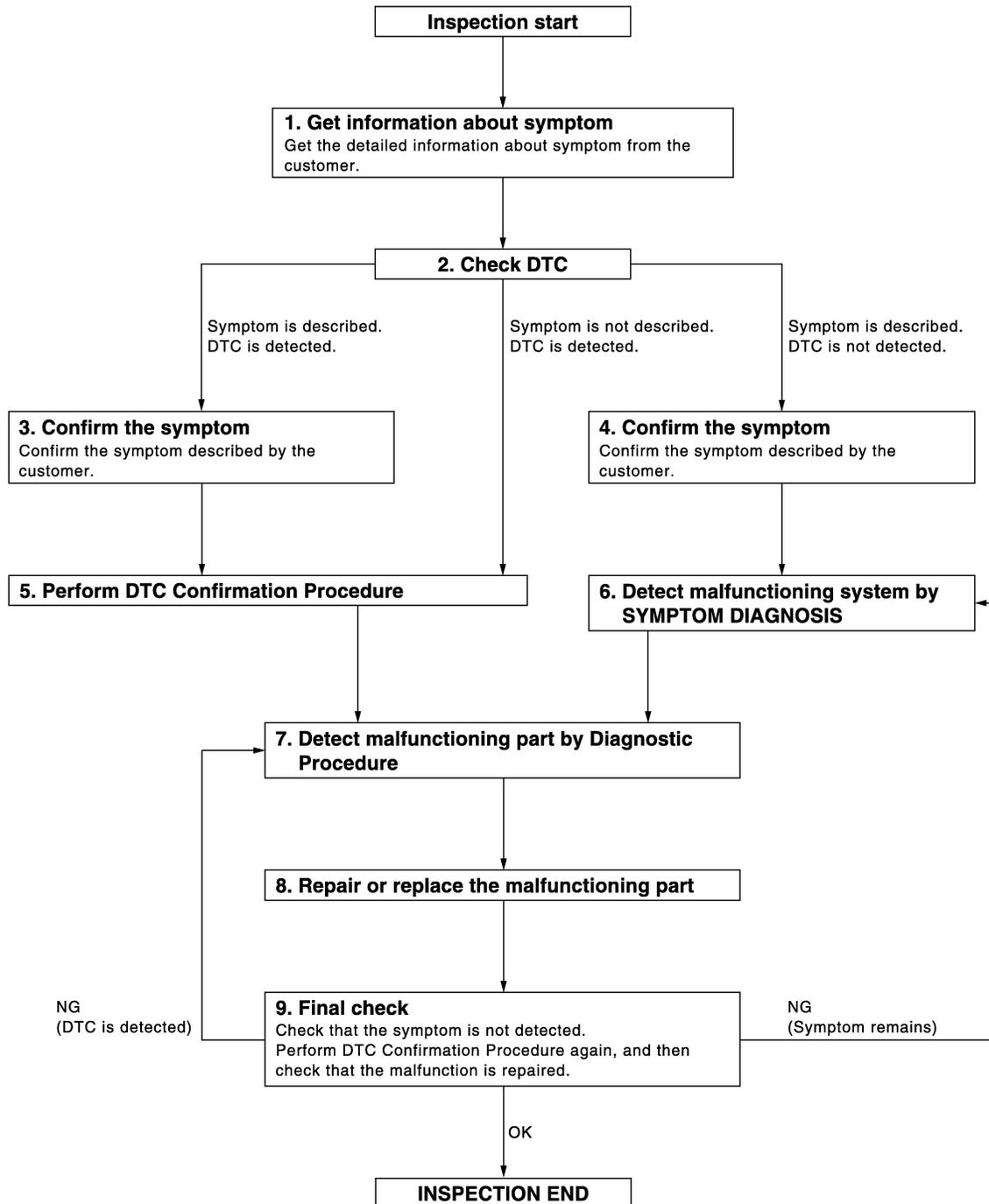
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000003389153

OVERALL SEQUENCE



DETAILED FLOW

JMKIA3449GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

1.GET INFORMATION ABOUT 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 and IPDM E/R.
2. Perform the following procedure if DTC is detected.
 - Record DTC and freeze frame data (Print them out with CONSULT-III.)
 - 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 detected>>GO TO 3.
- Symptom is described, DTC is not detected>>GO TO 4.
- Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

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 detected DTC, and then check that DTC is detected again.
At this time, always connect CONSULT-III to the vehicle, and check diagnostic results in real time.
If two or more DTCs are detected, refer to [SEC-416, "DTC Inspection Priority Chart"](#) (BCM) or [SEC-433, "DTC Index"](#) (IPDM E/R), and determine trouble diagnosis order.

Is DTC detected?

- YES >> GO TO 7.
- NO >> Refer to [GI-40, "Intermittent Incident"](#).

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

>> GO TO 7.

7.DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

NOTE:

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

Is malfunctioning part detected?

- YES >> GO TO 8.
- NO >> Check voltage of related BCM terminals using CONSULT-III.

8.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

SEC

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

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 detected, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC was detected in step 2, perform DTC Confirmation Procedure or Component Function Check again, and then check that the malfunction has been repaired securely.

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

Does the symptom reappear?

YES (DTC is detected)>>GO TO 7.

YES (Symptom remains)>>GO TO 6.

NO >> **INSPECTION END**

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

INSPECTION AND ADJUSTMENT ECM RECOMMUNICATING FUNCTION

ECM RECOMMUNICATING FUNCTION : Description

INFOID:000000003389154

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

*: 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-IVIS/NVIS.
- 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 RECOMMUNICATING FUNCTION : Special Repair Requirement

INFOID:000000003389155

1. PERFORM ECM RECOMMUNICATING FUNCTION

1. Install ECM.
2. Insert the registered Intelligent Key*, turn ignition switch to "ON".
*: 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-IVIS/NVIS.

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

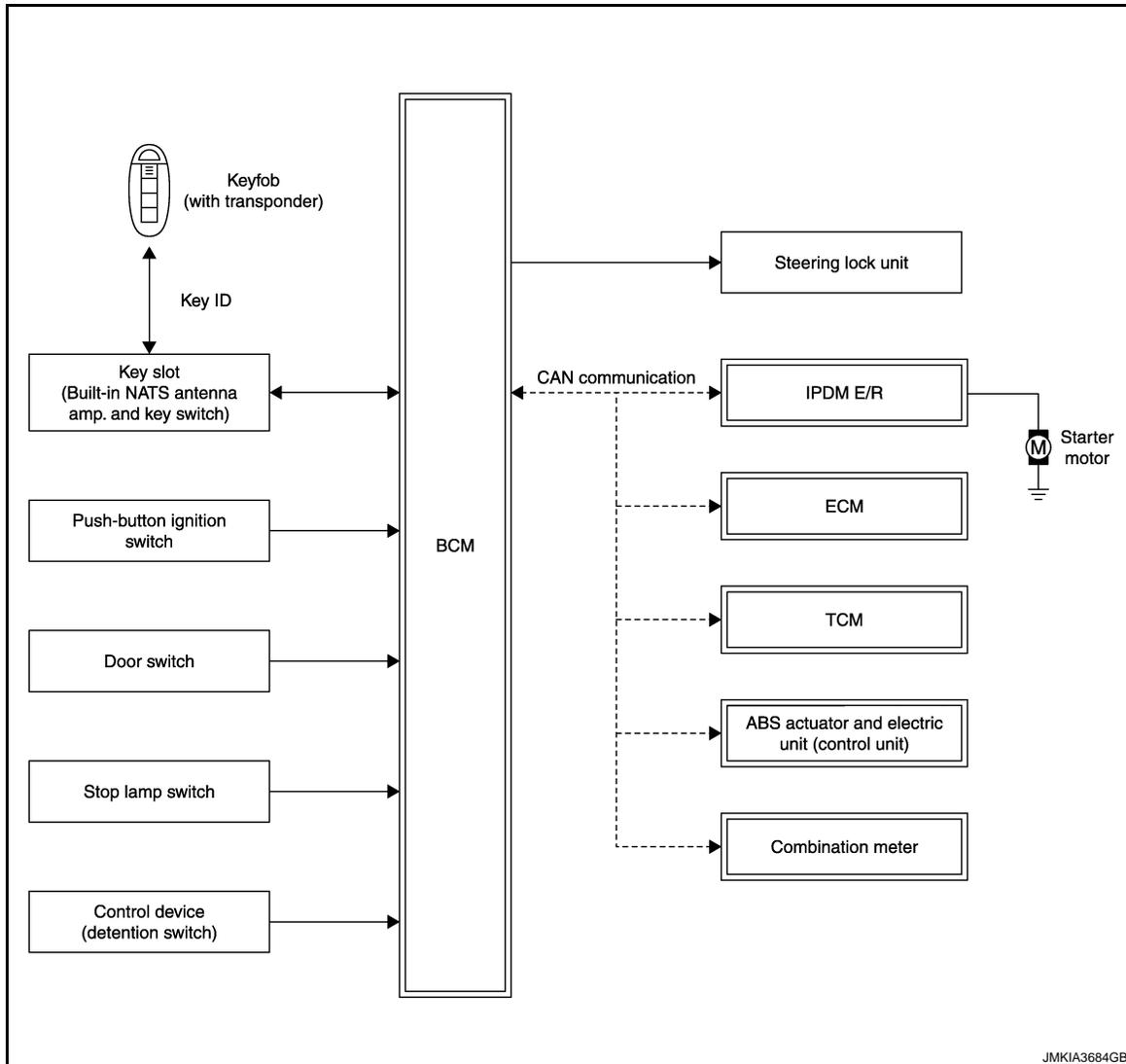
SEC

FUNCTION DIAGNOSIS

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS ENGINE START FUNCTION

ENGINE START FUNCTION : System Diagram

INFOID:000000003465851



JMKIA3684GB

ENGINE START FUNCTION : System Description

INFOID:000000003465852

SYSTEM DESCRIPTION

- The NVIS (NATS) is an anti-theft system by registering an key ID in to the vehicle and prevents the engine being started by an unregistered keyfob. It has a higher protection against auto thefts that duplicate mechanical key.
- It performs the NVIS (NATS) ID verification when inserting the keyfob into the key slot and performs the key ID verification.
- The mechanical key integrated in the keyfob can not start the engine. When the keyfob battery is discharged, the NVIS (NATS) ID verification memorized to the transponder integrated with keyfob is performed by inserting the keyfob into the key slot. If the verification results are OK, the engine start operation can be performed by the push-button ignition switch operation.
- Locate the security indicator and apply the anti-theft system equipment sticker, forewarn that the NVIS (NATS) is onboard with the model.
- Security indicator always blinks when the power supply position is in any position except the ON position.
- Keyfob can be registered up to 4 keys (Including the standard ignition key) on request from the owner.

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

- The specified registration is required when replacing ECM, BCM or keyfob. The registrations procedure for NVIS (NATS) and registration procedure for keyfob when installing the BCM, refer to CONSULT-III Operation Manual NATS-IVIS/NVIS.
- Possible symptom of NVIS (NATS) malfunction is "Engine can not start". The engine can be started with the NVIS (NATS). Identify the possible causes according to "Work Flow", Refer to [SEC-240. "Work Flow"](#).
- If ECM other than Genuine NISSAN is installed, the engine cannot be started. For ECM replacement procedure, refer to [SEC-243. "ECM RECOMMUNICATING FUNCTION : Special Repair Requirement"](#).

PRECAUTIONS FOR KEY REGISTRATION

- The key registration is a procedure that erases the current NVIS (NATS) ID once, and then re-registers a new ID operation. Therefore the registered keyfob is necessary for this procedure. Before starting the registration operation collect all registered keyfob from the customer
- When registering the keyfob, performs only one procedure to register simultaneously both ID (NVIS "NATS" ID registration and key ID registration).
The NVIS (NATS) ID registration is the procedure that registers the ID stored into the transponder (integrated in keyfob) to BCM.
The key ID registration is the procedure that registers the ID to BCM.

STEERING LOCK OPERATION

Steering is locked by steering lock unit when ignition switch is in the OFF position, selector lever is in the P position and any of the following conditions are met.

- Opening door
- Closing door
- Door is locked with keyfob

SECURITY INDICATOR LAMP

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

NOTE:

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

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

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

NOTE:

- When a keyfob is inserted to the key slot, it is equivalent to the operations below.
- When starting the engine, the BCM monitors under the engine start conditions,
 - Brake pedal operating condition
 - Selector lever position
 - Vehicle speed

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

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

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

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

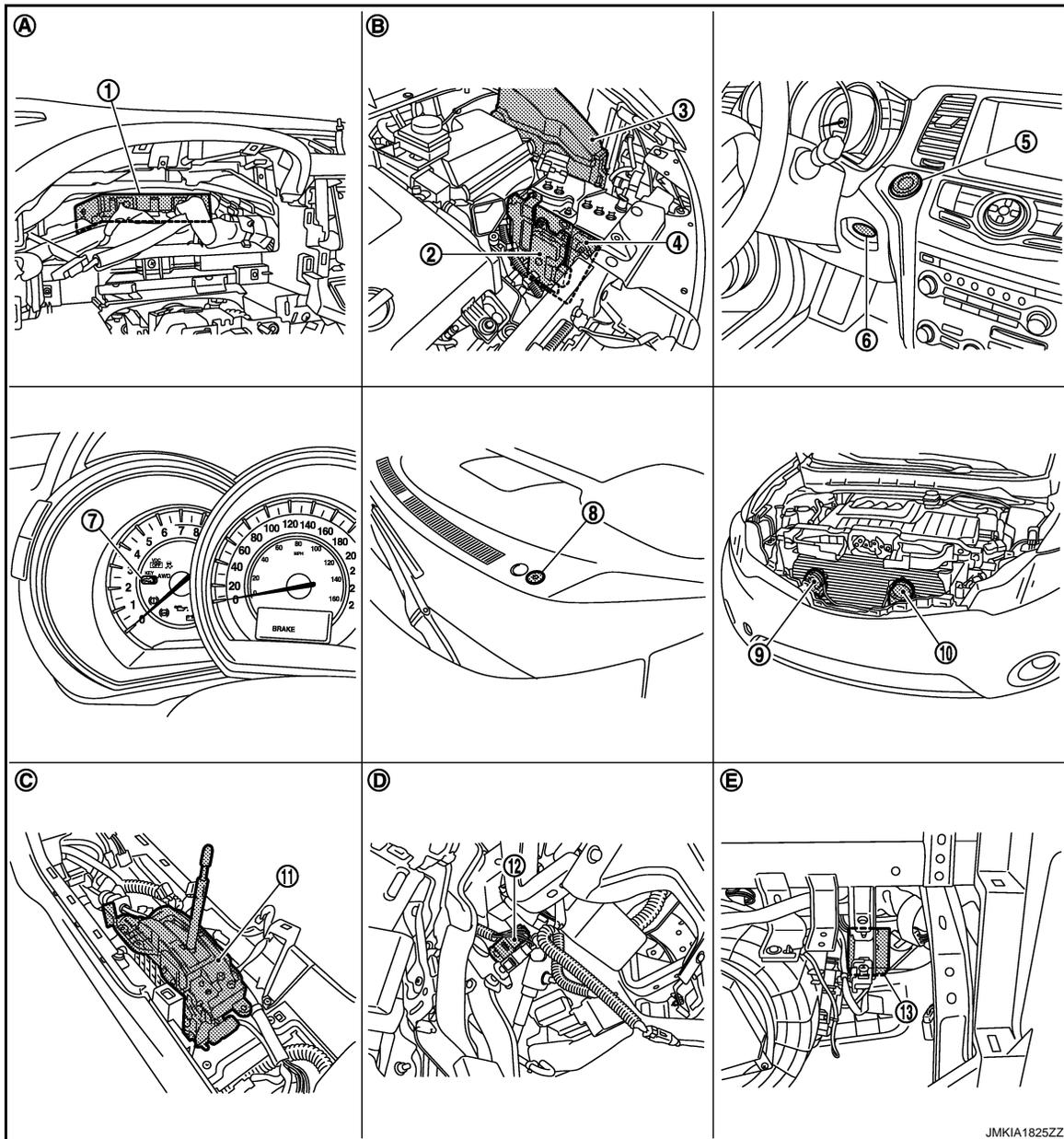
| Power supply position | Engine start/stop condition | | Push-button ignition switch operation frequency |
|---|-----------------------------|---------------------------------|---|
| | Selector lever | Brake pedal operation condition | |
| Engine is running → ACC | — | — | Emergency stop operation |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

Emergency stop operation

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

ENGINE START FUNCTION : Component Parts Location

INFOID:000000003465853



1. BCM M118, M119, M121, M122, M123
4. ECM E16
7. Combination meter (key warning lamp) M34

2. TCM F23
5. Push-button ignition switch M101
8. Security indicator lamp M100

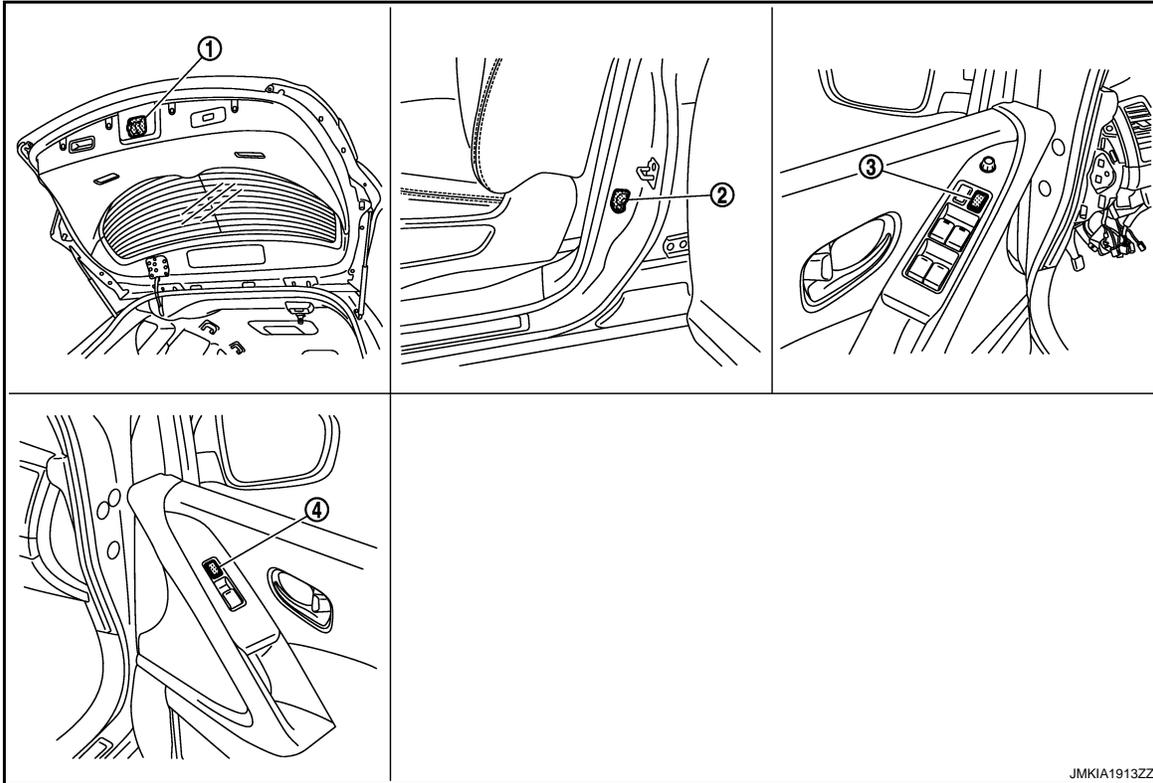
3. IPDM E/R E10, E11, F12
6. Key slot M99
9. Horn (high) E340, E341

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

- | | | |
|---|---|--|
| 10. Horn (low) E342, E343 | 11. Control device (detection switch) M57 | 12. Stop lamp switch TYPE A: E115 TYPE B: E116 |
| 13. Remote keyless entry receiver | | |
| A. Behind the combination meter | B. Engine room (LH) | C. View with the center console assembly removed |
| D. Behind the instrument lower panel LH | E. Behind the instrument lower panel RH | |



- | | | |
|--|--|--|
| 1. Back door lock assembly (back door switch) D180 | 2. Front door switch (driver side) B34 | 3. Power window main switch (door lock and unlock switch) D5, D6 |
| 4. Front power window switch (passenger side) D45 | | |

ENGINE START FUNCTION : Component Description

INFOID:000000003465854

| Component | Reference |
|-----------------------------------|-------------------------|
| BCM | SEC-324 |
| Steering lock unit | SEC-312 |
| Push-button ignition switch | SEC-325 |
| Door switch | DLK-411 |
| key slot | DLK-434 |
| Control device (detention switch) | SEC-291 |
| Stop lamp switch | SEC-285 |
| Park/neutral position switch | SEC-299 |
| Steering lock relay | SEC-329 |
| Starter relay | SEC-306 |
| Starter control relay | SEC-335 |

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Component | Reference |
|--------------------|-------------------------|
| Security indicator | SEC-346 |
| Key warning lamp | SEC-348 |

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:000000003510971

OPERATION DESCRIPTION

The warning function are as follows and are given to the user as warning information and warnings using combinations of outside warning buzzer, KEY warning lamp, key slot illumination and combination meter display in combination meter.

- Engine start function malfunction
- OFF position warning
- P position warning
- ACC warning
- Key warning
- Keyfob insert information
- Engine start information
- Steering lock information
- Key ID warning

OPERATION CONDITION

Once the following condition from below is established, alert or warning will be executed.

| Warning/Information functions | Operation procedure |
|-----------------------------------|---|
| Engine start function malfunction | When a malfunction is detected on BCM, "KEY" warning lamp will illuminate. |
| OFF position warning | <ul style="list-style-type: none"> • Ignition switch: ACC position. • Door switch (driver side): ON (Door is open). • Keyfob is removed from key slot. |
| | <ul style="list-style-type: none"> • OFF position warning (For internal) is in active mode, each door has been closed. • Keyfob is removed from key slot. <p>NOTE: OFF position (For external) active only when each of the sequence has occurred as below: P position warning → ACC warning → OFF position warning (For internal) → OFF position warning (For internal)</p> |
| ACC warning | <ul style="list-style-type: none"> • During P position warning is in active mode, shift position has changed P position. • Ignition switch: ACC position. |
| P position warning | <ul style="list-style-type: none"> • Shift position: Except P position • Ignition switch: Except ON position. |
| | <ul style="list-style-type: none"> • Door switch: ON (Door is open) |
| Key warning | <ul style="list-style-type: none"> • Keyfob is removed from key slot. • Door switch: ON to OFF (door is open to close). |
| | <ul style="list-style-type: none"> • Ignition switch is OFF position. • Driver side door switch: ON (Driver side door is open). • Keyfob is inserted in key slot. |
| Keyfob insert information | <ul style="list-style-type: none"> • Ignition switch: Except OFF position. • Keyfob is removed from key slot. |
| Engine start information | <ul style="list-style-type: none"> • Ignition switch: ON position. • Shift position: P position • Engine is stopped |
| | <ul style="list-style-type: none"> • Ignition switch: Except ON position. • Shift position: P position • Keyfob is inserted in key slot. |

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

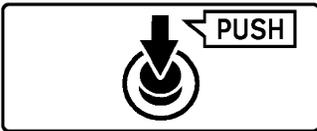
[WITHOUT INTELLIGENT KEY SYSTEM]

| Warning/Information functions | Operation procedure |
|-------------------------------|--|
| Steering lock information | When steering lock can not be released after ignition switch is turned ON. |
| Key ID warning | <ul style="list-style-type: none"> Ignition switch: Except OFF position. Keyfob is remove from key slot. |

WARNING METHOD

The following table shows the alarm or warning methods with chime.

Meter display, "KEY" indicator or key slot illumination when the warning conditions are met.

| Warning/Information functions | | "KEY" warning lamp | Combination meter display | Key slot illumination | Warning chime | | |
|-----------------------------------|---------------------------------|--------------------|--|-----------------------|--------------------------|------------------------|----------|
| | | | | | Combination meter buzzer | Outside warning buzzer | |
| Engine start function malfunction | | Illuminate | — | — | — | — | |
| OFF position warning | For internal | — |  <small>JMKIA0036GB</small> | — | Activate | — | |
| | For external | — | — | — | — | Activate | |
| ACC warning | | — |  <small>JMKIA0047GB</small> | — | — | — | |
| P position warning | | — |  <small>JMKIA0037GB</small> | — | Activate | — | |
| | Door is open | — | | — | — | Activate | — |
| | Keyfob is removed from key slot | — | | — | — | Activate | Activate |
| Key ID warning | | — |  <small>JMKIA0036GB</small> | Flash | — | — | |
| Key warning | | — |  <small>JMKIA0035GB</small> | Flash | Activate | — | |

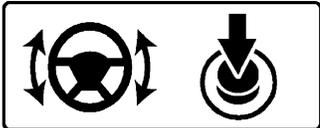
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Warning/Information functions | "KEY" warning lamp | Combination meter display | Key slot illumination | Warning chime | |
|-------------------------------|--------------------|--|-----------------------|--------------------------|------------------------|
| | | | | Combination meter buzzer | Outside warning buzzer |
| Keyfob insert information | — |  <small>JMKIA0034GB</small> | Flash | — | — |
| Engine start information | — |  <small>JMKIA0032GB</small> | — | — | — |
| Steering lock information | — |  <small>JMKIA0033GB</small> | — | — | — |
| Keyfob low battery warning | — |  <small>JMKIA0048GB</small> | — | — | — |

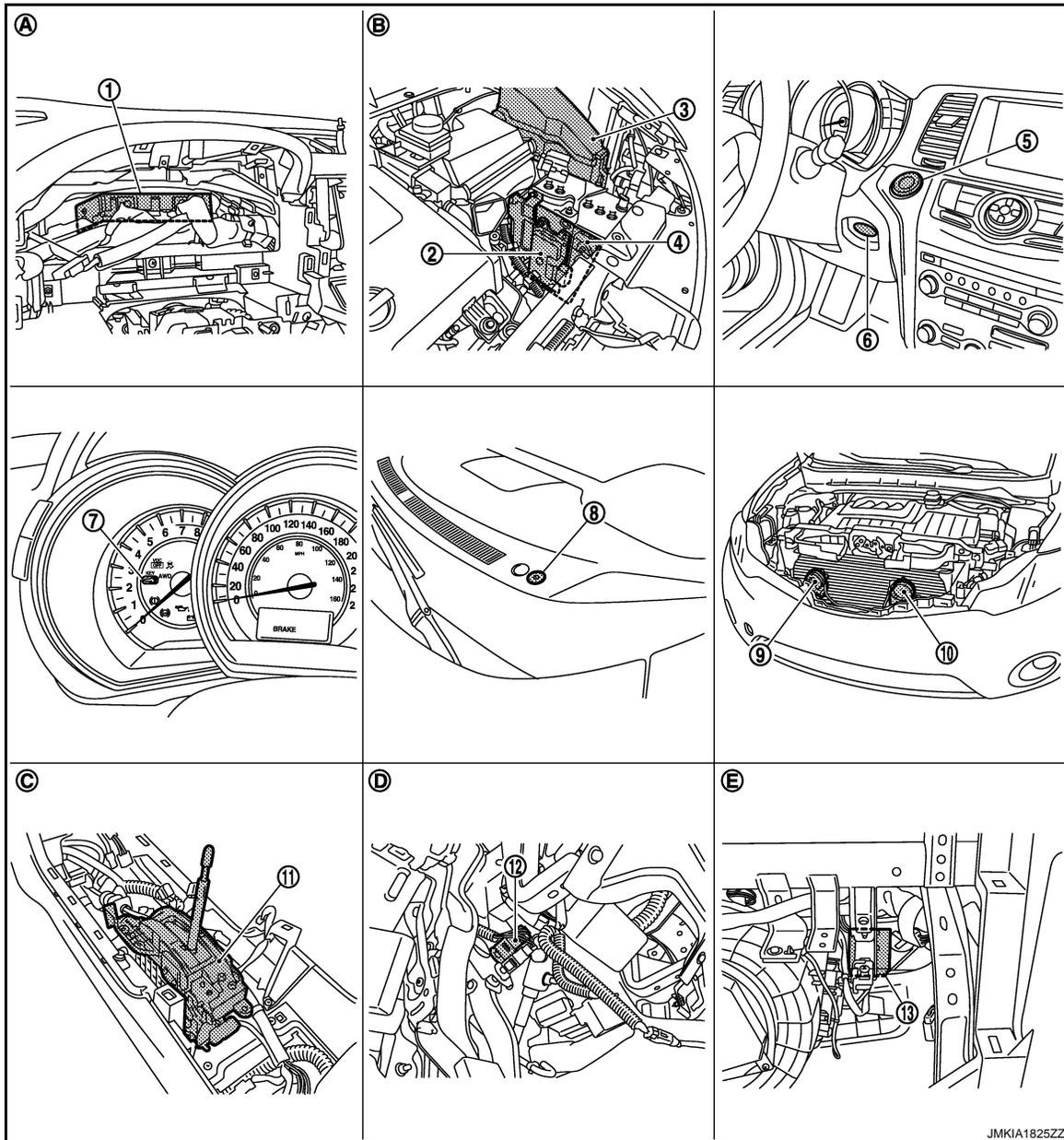
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

WARNING FUNCTION : Component Parts Location

INFOID:000000003511005



- | | | |
|---|---|--|
| 1. BCM M118, M119, M121, M122, M123 | 2. TCM F23 | 3. IPDM E/R E10, E11, F12 |
| 4. ECM E16 | 5. Push-button ignition switch M101 | 6. Key slot M99 |
| 7. Combination meter (key warning lamp) M34 | 8. Security indicator lamp M100 | 9. Horn (high) E340, E341 |
| 10. Horn (low) E342, E343 | 11. Control device (detection switch) M57 | 12. Stop lamp switch TYPE A: E115 TYPE B: E116 |
| 13. Remote keyless entry receiver | | |
| A. Behind the combination meter | B. Engine room (LH) | C. View with the center console assembly removed |
| D. Behind the instrument lower panel LH | E. Behind the instrument lower panel RH | |

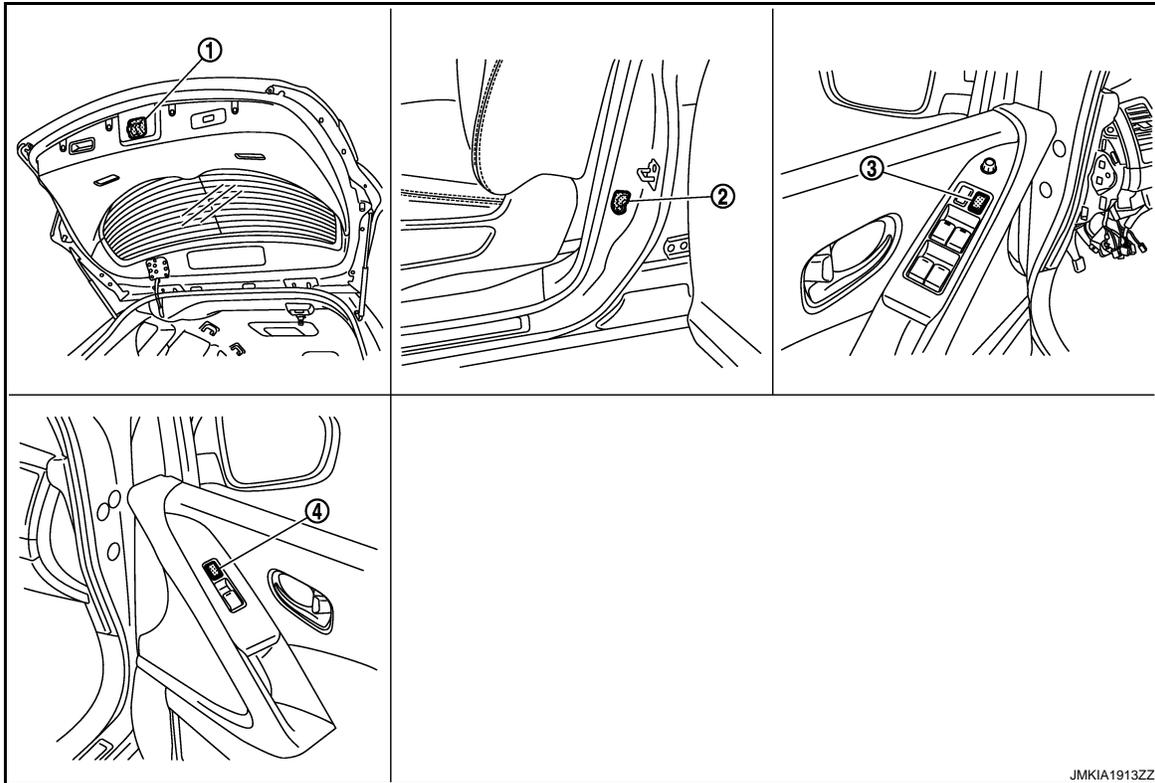
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]



1. Back door lock assembly (back door switch) D180
2. Front door switch (driver side) B34
3. Power window main switch (door lock and unlock switch) D5, D6
4. Front power window switch (passenger side) D45

VEHICLE SECURITY SYSTEM

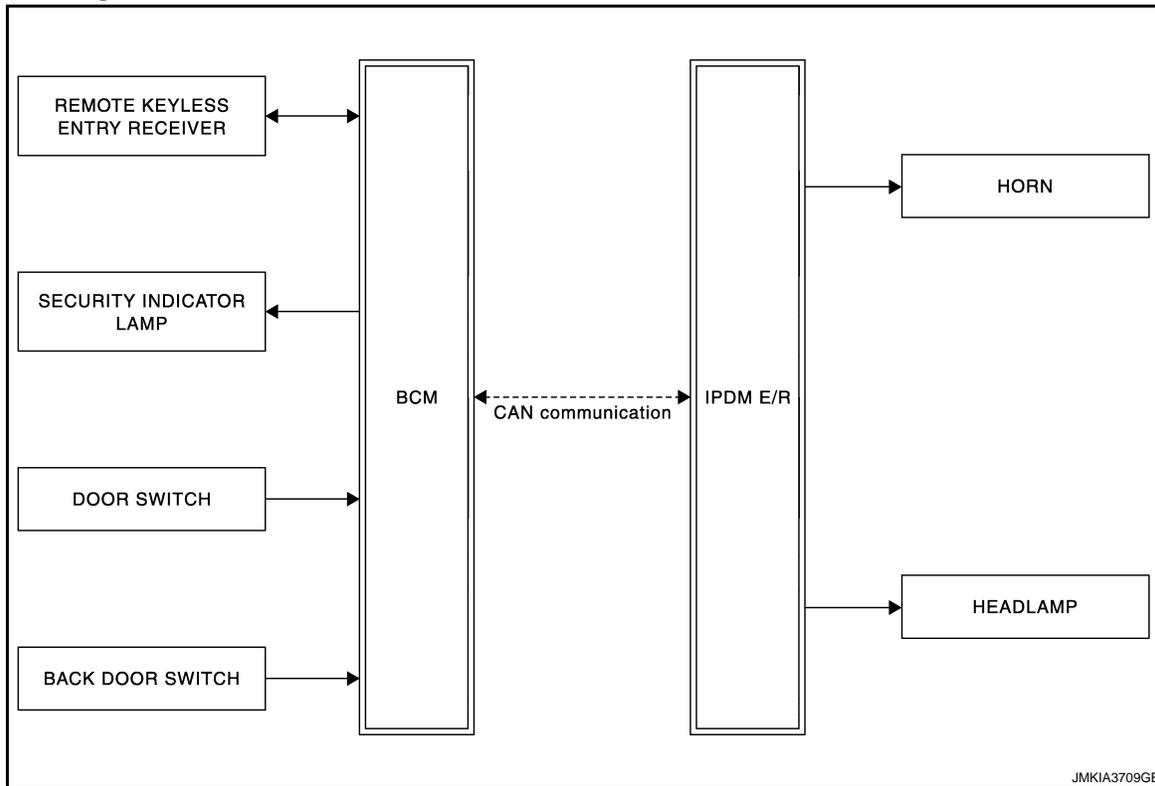
< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

System Diagram

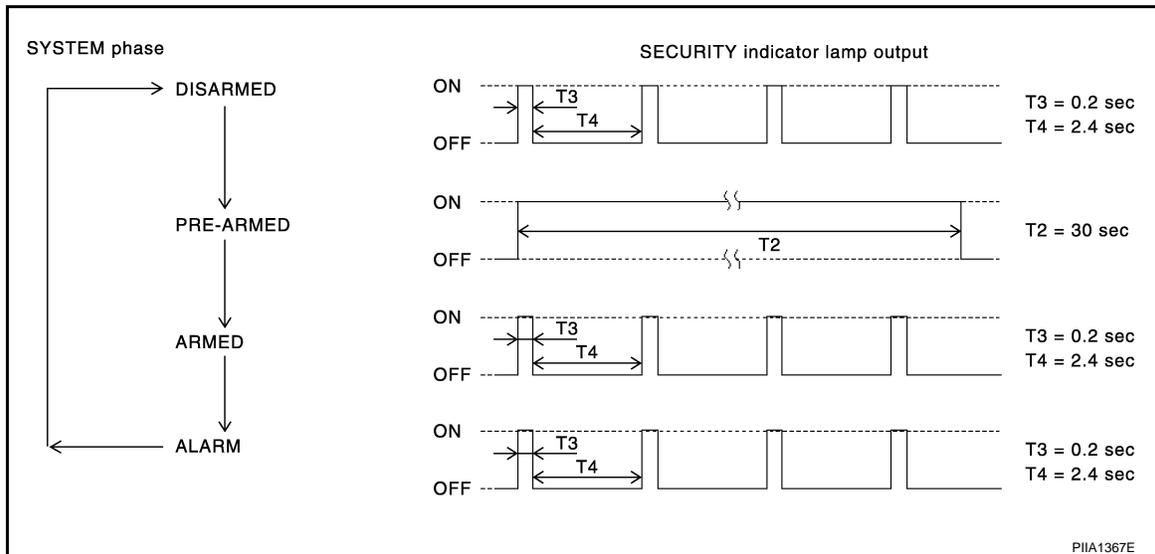
INFOID:000000003465855



System Description

INFOID:000000003465856

OPERATION FLOW



SETTING THE VEHICLE SECURITY SYSTEM

Initial Condition

- Ignition switch is in OFF position.

Disarmed Phase

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

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

SEC

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

Pre-armed Phase and Armed Phase

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

1. BCM receives LOCK signal from keyfob or door key cylinder, after back door and all doors are closed.
2. Security indicator lamp illuminates for 30 seconds. Then, the system automatically shifts into the “armed” phase.

CANCELING THE SET VEHICLE SECURITY SYSTEM

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

1. Unlock the all doors with keyfob or door key cylinder.
2. Turn ignition switch “ON” or “ACC” position.

CANCELING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

When unlocking the all doors with keyfob or door key cylinder the alarm operation is canceled.

ACTIVATING THE ALARM OPERATION OF THE VEHICLE SECURITY SYSTEM

Check that the system is in the armed phase. (The security indicator lamp blinks every 2.4 seconds.)

When the following operation 1 or 2 is performed, the system sounds the horns and flashes the headlamps for about 50 seconds.

1. Back door or any door is opened during armed phase.
2. Disconnecting and connecting the battery connector before canceling armed phase.

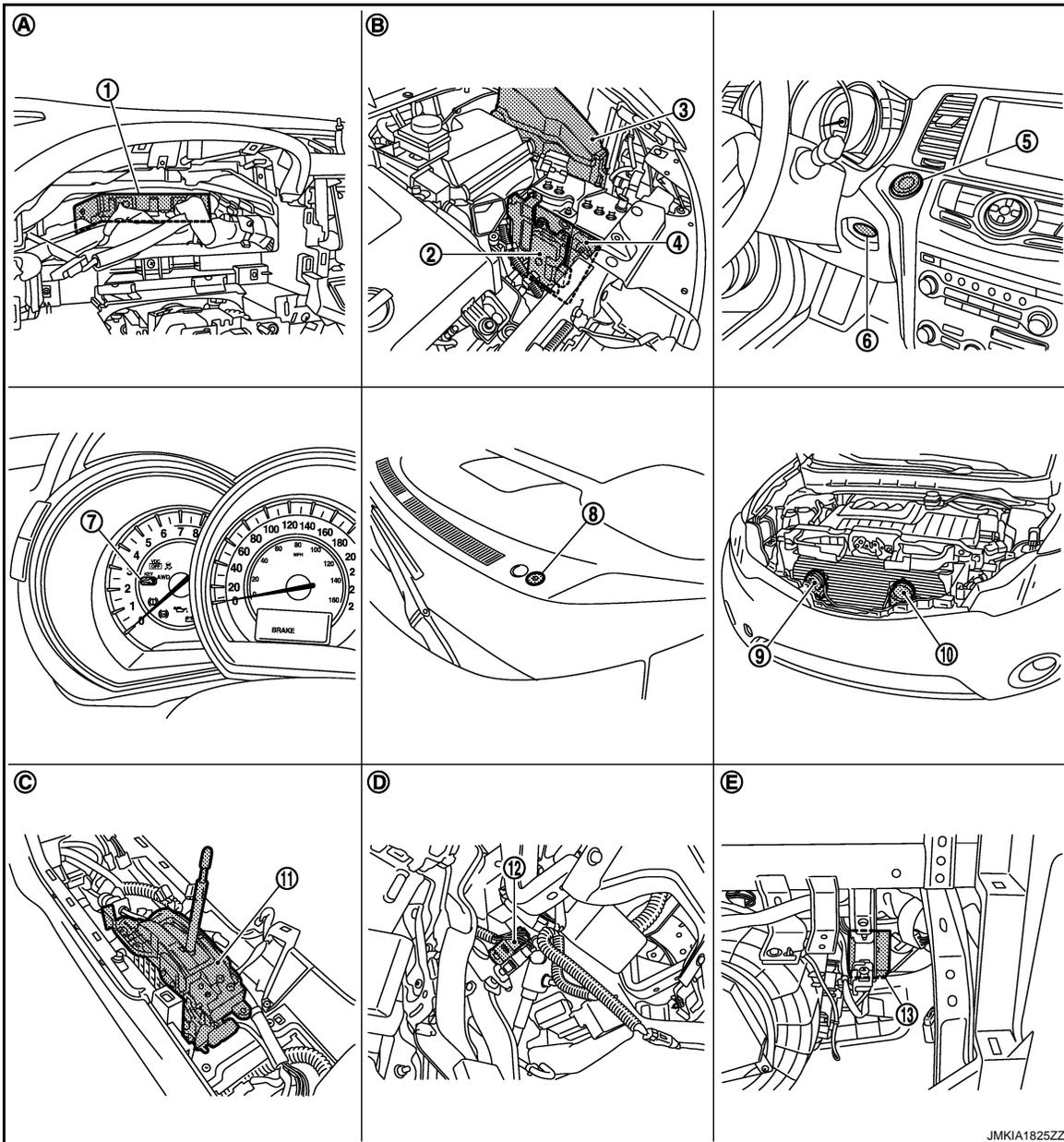
VEHICLE SECURITY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

Component Parts Location

INFOID:000000003508922



- 1. BCM M118, M119, M121, M122, M123
- 4. ECM E16
- 7. Combination meter (key warning lamp) M34
- 10. Horn (low) E342, E343

- 2. TCM F23
- 5. Push-button ignition switch M101
- 8. Security indicator lamp M100
- 11. Control device (detection switch) M57

- 3. IPDM E/R E10, E11, F12
- 6. Key slot M99
- 9. Horn (high) E340, E341

- 12. Stop lamp switch
TYPE A: E115
TYPE B: E116

- 13. Remote keyless entry receiver
- A. Behind the combination meter

- B. Engine room (LH)

- C. View with the center console assembly removed

- D. Behind the instrument lower panel LH

- E. Behind the instrument lower panel RH

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

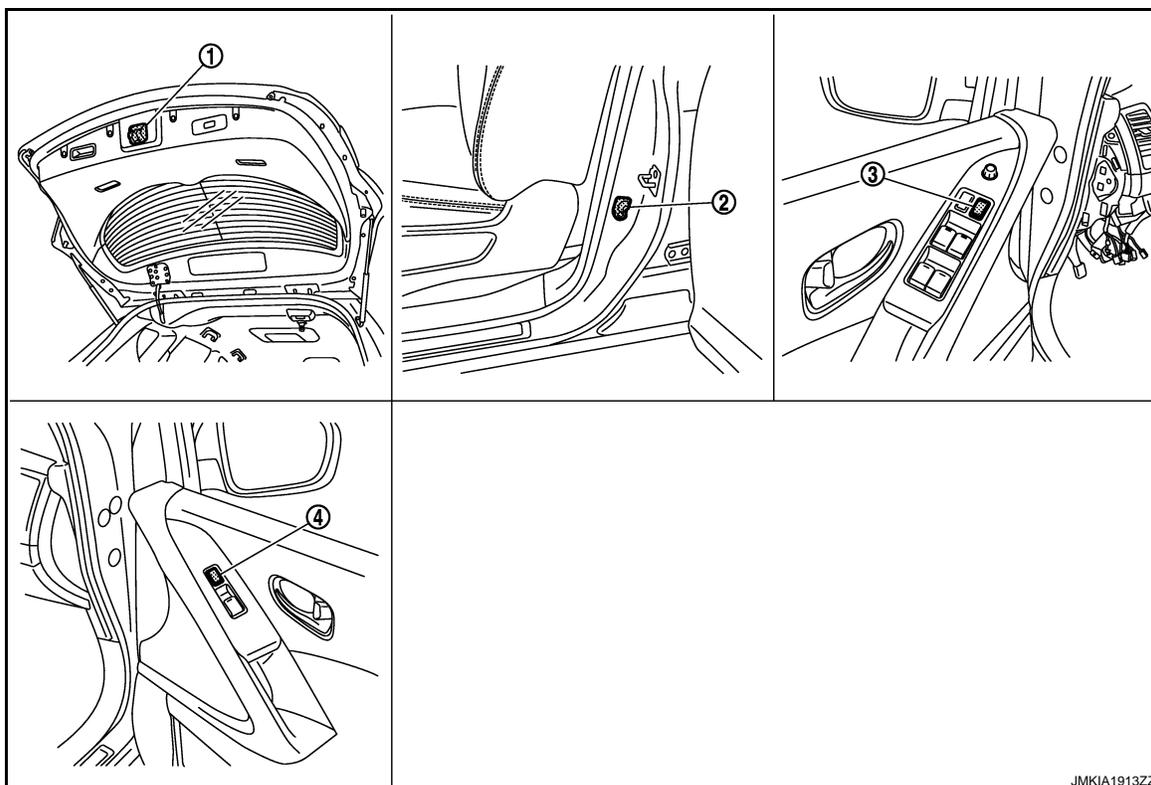
SEC

JMKIA1825ZZ

VEHICLE SECURITY SYSTEM

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]



1. Back door lock assembly (back door switch) D180
2. Front door switch (driver side) B34
3. Power window main switch (door lock and unlock switch) D5, D6
4. Front power window switch (passenger side) D45

Component Description

INFOID:000000003465858

| Component | Reference |
|---|-------------------------|
| BCM | SEC-324 |
| Horn relay 1 | DLK-438 |
| Horn relay 2 | DLK-438 |
| Security indicator | SEC-346 |
| Door switch | DLK-411 |
| Back door lock assembly (back door witch) | DLK-411 |
| Door key cylinder switch | DLK-423 |

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000003566304

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. |
| Self Diagnostic Result | Displays the diagnosis results judged by BCM. |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual. |
| Data Monitor | The BCM input/output signals are displayed. |
| Active Test | The signals used to activate each device are forcibly supplied from BCM. |
| Ecu Identification | The BCM part number is displayed. |
| Configuration | <ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM. |

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|-----------------------------|----------------|--------------|-------------|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | x | x | x |
| Rear window defogger | REAR DEFOGGER | | x | x |
| Warning chime | BUZZER | | x | x |
| Interior room lamp timer | INT LAMP | x | x | x |
| Remote keyless entry system | MULTI REMOTE ENT*1 | x | x | x |
| Exterior lamp | HEAD LAMP | x | x | x |
| Wiper and washer | WIPER | x*2 | x | x |
| Turn signal and hazard warning lamps | FLASHER | x | x | x |
| — | AIR CONDITONER*3 | | | |
| <ul style="list-style-type: none"> Intelligent Key system Engine start system | INTELLIGENT KEY | x | x | x |
| Combination switch | COMB SW | | x | |
| Body control system | BCM | x | | |
| NVIS - NATS | IMMU | | x | x |
| Interior room lamp battery saver | BATTERY SAVER | x | x | x |
| Back door opener system | TRUNK | | x | x |
| Vehicle security system | THEFT ALM | x | x | x |
| RAP system | RETAINED PWR | | x | |
| Signal buffer system | SIGNAL BUFFER | | x | x |
| TPMS | TPMS (AIR PRESSURE MONITOR) | x | x | x |

NOTE:

- *1: At models with Intelligent Key system this item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

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

FREEZE FRAME DATA (FFD)

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

| CONSULT screen item | Indication/Unit | Description | |
|---------------------|---|---|--|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | |
| Vehicle Condition | SLEEP>LOCK | Power position status of the moment a particular DTC is detected | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK") |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) |
| | LOCK>ACC | | While turning power supply position from "LOCK" to "ACC" |
| | ACC>ON | | While turning power supply position from "ACC" to "IGN" |
| | RUN>ACC | | While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) |
| | CRANK>RUN | | While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it) |
| | RUN>URGENT | | While turning power supply position from "RUN" to "ACC" (Emergency stop operation) |
| | ACC>OFF | | While turning power supply position from "ACC" to "OFF" |
| | OFF>LOCK | | While turning power supply position from "OFF" to "LOCK" |
| | OFF>ACC | | While turning power supply position from "OFF" to "ACC" |
| | ON>CRANK | | While turning power supply position from "IGN" to "CRANKING" |
| | OFF>SLEEP | | While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode |
| | LOCK>SLEEP | | While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode |
| | LOCK | | Power supply position is "LOCK" (Ignition switch OFF with steering is locked.) |
| | OFF | | Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.) |
| | ACC | | Power supply position is "ACC" (Ignition switch ACC) |
| | ON | | Power supply position is "IGN" (Ignition switch ON with engine stopped) |
| ENGINE RUN | Power supply position is "RUN" (Ignition switch ON with engine running) | | |
| CRANKING | Power supply position is "CRANKING" (At engine cranking) | | |
| IGN Counter | 0 - 39 | <p>The number of times that ignition switch is turned ON after DTC is detected</p> <ul style="list-style-type: none"> The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | |

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)

INFOID:000000003671442

BCM CONSULT-III FUNCTION

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

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Diagnosis mode | Function Description |
|-------------------|--|
| WORK SUPPORT | Changes the setting for each system function. |
| SELF-DIAG RESULTS | Displays the diagnosis results judged by BCM. |
| DATA MONITOR | The BCM input/output signals are displayed. |
| ACTIVE TEST | The signals used to activate each device are forcibly supplied from BCM. |

WORK SUPPORT

| Monitor item | Description |
|-----------------------|--|
| REMO CONT ID CONFIR | It can be checked whether Intelligent Key ID code is registered or not in this mode. |
| AUTO LOCK SET | Auto door lock time can be changed in this mode. <ul style="list-style-type: none"> • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes |
| PANIC ALARM SET | Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode. <ul style="list-style-type: none"> • MODE 1: 0.5 sec. • MODE 2: Non-operation • MODE 3: 1.5 sec. |
| PW DOWN SET | Unlock button pressing time on Intelligent Key button can be selected from the following with this mode. <ul style="list-style-type: none"> • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 sec. |
| TRUNK OPEN DELAY | NOTE: This item is displayed, but cannot be supported. |
| SHORT CRANKING OUTPUT | Starter motor can operate during the times below. <ul style="list-style-type: none"> • 70 msec • 100 msec • 200 msec |
| INSIDE ANT DIAGNOSIS | This function allows inside key antenna self-diagnosis. |

SELF-DIAG RESULT

Refer to [SEC-417, "DTC Index"](#).

DATA MONITOR

| Monitor Item | Condition |
|---------------|--|
| REQ SW -DR | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -AS | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -RR | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -RL | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -BD/TR | NOTE: This item is displayed, but cannot be monitored. |
| PUSH SW | Indicates [ON/OFF] condition of push-button ignition switch. |
| IGN RLY2 -F/B | Indicates [ON/OFF] condition of ignition relay 2. |
| ACC RLY-FB | NOTE: This item is displayed, but cannot be monitored. |
| CLUCH SW | NOTE: This item is displayed, but cannot be monitored. |

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Monitor Item | Condition |
|----------------|---|
| BRAKE SW 1 | Indicates [ON/OFF]* ¹ condition of brake switch power supply. |
| BRAKE SW 2 | Indicates [ON/OFF] condition of brake switch. |
| DETE/CANCL SW | Indicates [ON/OFF] condition of P position. |
| SFT PN/N SW | Indicates [ON/OFF] condition of P or N position. |
| S/L -LOCK | Indicates [ON/OFF] condition of steering lock unit (LOCK). |
| S/L -UNLOCK | Indicates [ON/OFF] condition of steering lock unit (UNLOCK). |
| S/L RELAY -F/B | Indicates [ON/OFF] condition of ignition switch. |
| UNLK SEN -DR | Indicates [ON/OFF] condition of driver door UNLOCK status. |
| PUSH SW -IPDM | Indicates [ON/OFF] condition of push-button ignition switch. |
| IGN RLY1 -F/B | Indicates [ON/OFF] condition of ignition relay 1. |
| DETE SW -IPDM | Indicates [ON/OFF] condition of P position. |
| SFT PN -IPDM | Indicates [ON/OFF] condition of P or N position. |
| SFT P -MET | Indicates [ON/OFF] condition of P position. |
| SFT N -MET | Indicates [ON/OFF] condition of N position. |
| ENGINE STATE | Indicates [STOP/START/CRANK/RUN] condition of engine states. |
| S/L LOCK-IPDM | Indicates [ON/OFF] condition of steering lock unit (LOCK). |
| S/L UNLK-IPDM | Indicates [ON/OFF] condition of steering lock unit (UNLOCK). |
| S/L RELAY-REQ | Indicates [ON/OFF] condition of steering lock relay. |
| VEH SPEED 1 | Display the vehicle speed signal received from combination meter by numerical value [Km/h]. |
| VEH SPEED 2 | Display the vehicle speed signal received from ABS or VDC or CVT by numerical value [Km/h]. |
| DOOR STAT-DR | Indicates [LOCK/READY/UNLOCK] condition of driver side door status. |
| DOOR STAT-AS | Indicates [LOCK/READY/UNLOCK] condition of passenger side door status. |
| ID OK FLAG | Indicates [SET/RESET] condition of key ID. |
| PRMT ENG STRT | Indicates [SET/RESET] condition of engine start possibility. |
| PRMT RKE STRT | NOTE: This item is displayed, but cannot be monitored. |
| KEY SW -SLOT | Indicates [ON/OFF] condition of key slot. |
| TRNK/HAT MNTR | NOTE: This item is displayed, but cannot be monitored. |
| RKE-LOCK | Indicates [ON/OFF] condition of LOCK signal from keyfob. |
| RKE-UNLOCK | Indicates [ON/OFF] condition of UNLOCK signal from keyfob. |
| RKE-TR/BD | NOTE: This item is displayed, but cannot be monitored. |
| RKE-PANIC | Indicates [ON/OFF] condition of PANIC button of keyfob. |
| RKE-P/W OPEN | Indicates [ON/OFF] condition of P/W DOWN signal from keyfob. |
| RKE-MODE CHG | Indicates [ON/OFF] condition of MODE CHANGE signal from keyfob. |
| RKE OPE COUN1 | When remote keyless entry receiver receives the signal transmitted while operating on keyfob, the numerical value start changing. |
| RKE OPE COUN2 | NOTE: This item is displayed, but cannot be monitored. |

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Test item | Description |
|------------------------|---|
| BATTERY SAVER | This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched. |
| PW REMOTO DOWN SET | This test is able to check power window down operation. The power window down will be activated after "ON" on CONSULT-III screen is touched. |
| INT LAMP | This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched. |
| LCD | This test is able to check meter display information <ul style="list-style-type: none"> • Engine start information displays when "B&P N" on CONSULT-III screen is touched. • Engine start information displays when "B&P I" on CONSULT-III screen is touched. • Key ID warning displays when "ID NG" on CONSULT-III screen is touched. • Steering lock information displays when "ROTAT" on CONSULT-III screen is touched. • P position warning displays when "SFT P" on CONSULT-III screen is touched. • Intelligent Key insert information displays when "INSRT" on CONSULT-III screen is touched. • Intelligent Key low battery warning displays when "BATT" on CONSULT-III screen is touched. • Take away through window warning displays when "NO KY" on CONSULT-III screen is touched. • Take away warning display when "OUTKY" on CONSULT-III screen is touched. • OFF position warning display when "LK WN" on CONSULT-III screen is touched. |
| TRUNK/GLASS HATCH | This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched. |
| FLASHER | This test is able to check security hazard lamp operation. The hazard lamps will be activated after "ON" on CONSULT-III screen is touched. |
| HORN | This test is able to check horn operation. The horn will be activated after "ON" on CONSULT-III screen is touched. |
| IGN CONT2 | This test is able to check ignition relay operation. The ignition relay will be activated after "ON" on CONSULT-III screen is touched. |
| P RANGE | This test is able to check control device power supply Control device power is supplied when "ON" on CONSULT-III screen is touched. |
| ENGINE SW ILLUMI | This test is able to check push-ignition switch illumination operation. Push-ignition switch illumination illuminates when "ON" on CONSULT-III screen is touched. |
| LOCK INDICATOR | NOTE: This item is displayed, but cannot be tested. |
| ACC INDICATOR | This test is able to check indicator in push-ignition switch operation. Indicator in push-ignition switch illuminates when "ON" on CONSULT-III screen is touched. |
| IGNITION ON IND | This test is able to check indicator in push-ignition switch operation. Indicator in push-ignition switch illuminates when "ON" on CONSULT-III screen is touched. |
| KEY SLOT ILLUMI | This test is able to check key slot illumination operation. Key slot illumination flash when "ON" on CONSULT-III screen is touched. |
| AUTOMATIC BACK DOOR | NOTE: This item is displayed, but cannot be tested. |
| AUTOMATIC SLIDING DOOR | NOTE: This item is displayed, but cannot be tested. |

MULTIREMOTE ENT

MULTIREMOTE ENT : CONSULT-III Function (BCM - MULTI REMOTE ENT)

INFOID:0000000003737109

BCM CONSULT-III FUNCTION

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. |

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

DATA MONITOR

| Monitor Item | Condition |
|---------------|---|
| 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. |
| DOOR SW-BK | 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. |
| RKE-LOCK | Indicates [ON/OFF] condition of LOCK signal from keyfob. |
| RKE-UNLOCK | Indicates [ON/OFF] condition of UNLOCK signal from keyfob. |
| RKE-TR/BD | Indicates [ON/OFF] condition of TRUNK OPEN signal from keyfob. |
| RKE-PANIC | Indicates [ON/OFF] condition of PANIC button of keyfob. |
| RKE-P/W OPEN | Indicates [ON/OFF] condition of P/W DOWN signal from keyfob. |
| RKE-MODE CHG | Indicates [ON/OFF] condition of MODE CHANGE signal from keyfob. |
| KEY CYL LK-SW | Indicated [ON/OFF] condition of lock signal from door key cylinder. |
| KEY CYL UN-SW | Indicated [ON/OFF] condition of unlock signal from door key cylinder. |
| KEY CYL SW-TR | NOTE: This item is displayed, but cannot be monitored. |

ACTIVE TEST

| Test item | Description |
|---------------------|--|
| INT LAMP | This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT-III screen is touched. |
| LUGGAGE LAMP TEST | NOTE: This item is displayed, but cannot be tested. |
| DOOR LOCK | This test is able to check door lock/unlock operation. <ul style="list-style-type: none"> • The all door lock actuators are locked when "ALL LCK" on CONSULT-III screen is touched. • The all door lock actuators are unlocked when "ALL UNLK" on CONSULT-III screen is touched. • The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT-III screen is touched. • The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT- III screen is touched. • The door lock actuator (rear LH and RH) is unlocked when "OTR ULK" on CONSULT-III screen is touched. |
| FLASHER | This test is able to check flasher operation [LH/RH/OFF]. |
| HORN | This test is able to check horn operation [ON/OFF]. |
| TRUNK/GLASS HATCH | This test is able to check trunk lid opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched. |
| TRUNK/BACK DOOR | This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched. |
| AUTOMATIC BACK DOOR | This test is able to check back door opener actuator open operation. This actuator opens when "ON" on CONSULT-III screen is touched. |

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Test item | Description |
|----------------------|--|
| DOOR LOCK-UNLOCK SET | Selective unlock function mode can be changed to operate (WITH) or not operate (WITHOUT) with this mode. |
| HORN CHIRP SET | Answer back function (horn) mode can be changed in this mode. For the detail of the setting. |
| HAZARD LAMP SET | Answer back function (hazard) mode can be changed in this mode. <ul style="list-style-type: none"> • MODE1: Non-operation • MODE2: Lock (non-operation) Unlock (blink once) • MODE3: Lock (blink twice) Unlock (non-operation) • MODE4: Lock (blink twice) Unlock (blink once) |
| AUTO LOCK SET | Auto door lock time can be changed in this mode. <ul style="list-style-type: none"> • MODE 1: 1 minute • MODE 2: 5 minutes |
| PANIC ALARM SET | Panic alarm button pressing time on keyfob remote control button can be selected from the following with this mode. <ul style="list-style-type: none"> • MODE1: 0.5 sec. • MODE2: 1.5 sec. • MODE3: Non-operation |
| PW DOWN SET | Unlock button pressing time on keyfob button can be selected from the following with this mode. <ul style="list-style-type: none"> • MODE 1: 3 sec. • MODE 2: Non-operation • MODE 3: 5 se |

THEFT ALM

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

INFOID:000000003465861

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

| Monitored Item | Description |
|----------------|--|
| REQ SW -DR | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -AS | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -RR | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -RL | NOTE: This item is displayed, but cannot be monitored. |
| REQ SW -BD/TR | NOTE: This item is displayed, but cannot be monitored. |
| PUSH SW | Indicates [ON/OFF] condition of push-button ignition switch |
| UNLK SEN -DR | NOTE: This item is displayed, but cannot be monitored. |
| KEY SW -SLOT | Indicates [ON/OFF] condition of key slot. |
| DOOR SW-DR | Indicates [ON/OFF] condition of front door switch LH. |
| DOOR SW-AS | Indicates [ON/OFF] condition of front door switch RH. |

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Monitored Item | Description |
|----------------|---|
| DOOR SW-RR | Indicates [ON/OFF] condition of rear door switch RH. |
| DOOR SW-RL | Indicates [ON/OFF] condition of rear door switch LH. |
| DOOR SW-BK | Indicates [ON/OFF] condition of back door switch. |
| CDL LOCK SW | Indicates [ON/OFF] condition of lock signal from door lock/unlock switch LH and RH. |
| CDL UNLOCK SW | Indicates [ON/OFF] condition of unlock signal from door lock/unlock switch LH and RH. |
| KEY CYL LK-SW | Indicates [ON/OFF] condition of lock signal from front door key cylinder switch. |
| KEY CYL UN-SW | Indicates [ON/OFF] condition of unlock signal from front door key cylinder switch. |
| KEY CYL SW-TR | NOTE: This item is displayed, but cannot be monitored. |
| TR/BD OPEN SW | Indicates [ON/OFF] condition of back door opener switch. |
| TRNK/HAT MNTR | NOTE: This item is displayed, but cannot be monitored. |
| RKE-LOCK | Indicates [ON/OFF] condition of LOCK signal from keyfob. |
| RKE-UNLOCK | Indicates [ON/OFF] condition of UNLOCK signal from keyfob. |
| RKE-TR/BD | NOTE: This item is displayed, but cannot be monitored. |

WORK SUPPORT

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

ACTIVE TEST

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

IMMU

IMMU : CONSULT-III Function (BCM - IMMU)

INFOID:000000003465862

APPLICATION ITEM

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

| 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 BCM. |

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

[WITHOUT INTELLIGENT KEY SYSTEM]

< FUNCTION DIAGNOSIS >

| Monitor item | Content | |
|----------------|--|---|
| CONFIRM ID ALL | Indicates [YET] at all time. Switch to [DONE] when a registered keyfob is inserted into the key slot. | A |
| CONFIRM ID4 | | B |
| CONFIRM ID3 | | |
| CONFIRM ID2 | | |
| CONFIRM ID1 | | C |
| TP 4 | Indicates the number of ID which has been registered. | |
| TP 3 | | D |
| TP 2 | | |
| TP 1 | | |
| PUSH SW | Indicates [ON/OFF] condition of push-button ignition switch. | E |
| KEY SW -SLOT | Indicates [ON/OFF] condition of key slot. | |

ACTIVE TEST

| Test item | Description | |
|-----------|--|--------|
| THEFT IND | This test is able to check security indicator lamp operation. The lamp will be turned on when "ON" on CONSULT-III screen touched. | F G |

SEC

U1000 CAN COMM CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

COMPONENT DIAGNOSIS

U1000 CAN COMM CIRCUIT

BCM

BCM : Description

INFOID:000000003465923

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"](#).

BCM : DTC Logic

INFOID:000000003465924

DTC DETECTION LOGIC

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

BCM : Diagnosis Procedure

INFOID:000000003465925

1.PERFORM SELF DIAGNOSTIC

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

Is "U1000: CAN COMM CIRCUIT" displayed?

YES >> Refer to [LAN-16, "Trouble Diagnosis Flow Chart"](#).

NO >> Refer to [GI-40, "Intermittent Incident"](#).

IPDM E/R

IPDM E/R : Description

INFOID:000000003586762

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"](#).

IPDM E/R : DTC Logic

INFOID:000000003586763

DTC DETECTION LOGIC

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

IPDM E/R : Diagnosis Procedure

INFOID:000000003586764

1.PERFORM SELF DIAGNOSTIC

U1000 CAN COMM CIRCUIT

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

Is DTC "U1000" displayed?

- YES >> Refer to [LAN-16, "Trouble Diagnosis Flow Chart"](#).
NO >> Refer to [GI-40, "Intermittent Incident"](#).

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

U1010 CONTROL UNIT (CAN)

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

BCM

BCM : DTC Logic

INFOID:000000003465926

DTC DETECTION LOGIC

| DTC | CONSULT-III display de- scription | DTC Detection Condition | Possible cause |
|-------|--------------------------------------|--|----------------|
| U1010 | CONTROL UNIT (CAN) | BCM detected internal CAN communication circuit malfunction. | BCM |

BCM : Diagnosis Procedure

INFOID:000000003465927

1.REPLACE BCM

When DTC "U1010: CONTROL UNIT (CAN)" is detected, replace BCM.

>> Replace BCM. Refer to [BCS-96. "Exploded View"](#).

BCM : Special Repair Requirement

INFOID:000000003465928

1.REQUIRED WORK WHEN REPLACING BCM

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

>> Work end.

P1610 LOCK MODE

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1610 LOCK MODE

Description

INFOID:000000003465929

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 keyfob is used.
- BCM or ECM is malfunctioning.

DTC Logic

INFOID:000000003465930

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 keyfob• BCM or ECM is 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 >> Go to [SEC-269, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465931

1.CHECK ENGINE START FUNCTION

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

>> INSPECTION END

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

SEC

P1611 ID DISCORD, IMMUECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1611 ID DISCORD, IMMUECM

Description

INFOID:000000003465932

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

DTC Logic

INFOID:000000003465933

DTC DETECTION LOGIC

NOTE:

- If DTC P1611 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC P1611 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| P1611 | ID DISCORD, IMMUECM | The ID verification result between BCM and ECM is 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 under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-270, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465934

1.PERFORM INITIALIZATION

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

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

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

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

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

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

3.REPLACE ECM

1. Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).
2. Perform initialization with CONSULT-III.

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

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

P1611 ID DISCORD, IMMU-ECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

P1612 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1612 CHAIN OF ECM-IMMU

Description

INFOID:000000003465935

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

DTC Logic

INFOID:000000003465936

DTC DETECTION LOGIC

NOTE:

- If DTC P1612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC P1612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-272, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465937

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "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 >> INSPECTION END
NO >> GO TO 2.

2. REPLACE ECM

Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

P1614 CHAIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

P1614 CHAIN OF IMMU-KEY

Description

INFOID:000000003465938

Performs ID verification through BCM and keyfob when push-button ignition switch is pressed. Prohibits the release of steering lock or start of engine when an unregistered ID of keyfob is used.

DTC Logic

INFOID:000000003465939

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| P1614 | CHAIN OF IMMU-KEY | Inactive communication between key slot and BCM. | <ul style="list-style-type: none">• Harness or connectors (The key slot circuit is open or shorted)• Key slot• BCM |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE 1

1. Insert keyfob into the key slot.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-273, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 2

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

Is DTC detected?

- YES >> Go to [SEC-273, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465940

SEC

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirm DTC?

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

2.CHECK KEY SLOT INPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 2 | Ground | Battery voltage |

Is the inspection result normal?

- YES >> Replace key slot. Refer to [SEC-442, "Removal and Installation"](#).
NO >> GO TO 3.

3.CHECK KEY SLOT CIRCUIT

P1614 CHAIN OF IMMU-KEY

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 2 | M122 | 80 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 2 | | Not existed |

Is the inspection result normal?

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

4.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

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

Does ignition switch turn to ON?

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

5.CHECK KEY SLOT COMMUNICATION SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 3 | Ground | Battery voltage |

Is the inspection result normal?

- YES >> Replace key slot. Refer to [SEC-442. "Removal and Installation"](#).
NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 3 | M122 | 81 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 3 | | Not existed |

Is the inspection result normal?

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

7.CHECK KEY SLOT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key slot connector.

P1614 CHAIN OF IMMU-KEY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M99 | 7 | | Existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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:000000003465941

Performs ID verification through BCM and keyfob when push-button ignition switch is pressed. Prohibits the release of steering lock or start of engine when an unregistered ID of keyfob is used.

DTC Logic

INFOID:000000003465942

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|----------------|
| P1615 | DIFFERENCE OF KEY | The ID verification result between BCM and keyfob is NG. The registration is necessary. | keyfob |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-276, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465943

1.PERFORM INITIALIZATION

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

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

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

2.REPLACE KEYFOB

1. Replace keyfob.
2. Perform initialization with CONSULT-III.
For initialization and registration of keyfob. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

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

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

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2190 NATS ANTENNA AMP.

Description

INFOID:000000003465944

Performs ID verification through BCM and keyfob when push-button ignition switch is pressed. Prohibits the release of steering lock or start of engine when an unregistered ID of keyfob is used.

DTC Logic

INFOID:000000003465945

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B2190 | NATS ANTENNA AMP | Inactive communication between key slot and BCM. | <ul style="list-style-type: none"> • Harness or connectors (The key slot circuit is open or shorted) • Key slot • BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Insert keyfob into the key slot.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-277, "Diagnosis Procedure"](#).
 NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-277, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465946

SEC

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirm DTC?

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

2. CHECK KEY SLOT INPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 2 | Ground | Battery voltage |

Is the inspection result normal?

- YES >> Replace key slot. Refer to [SEC-442, "Removal and Installation"](#).
 NO >> GO TO 3.

3. CHECK KEY SLOT CIRCUIT

B2190 NATS ANTENNA AMP.

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 2 | M122 | 80 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 2 | | Not existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH OPERATION

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

Does ignition switch turn to ON?

YES >> GO TO 5.

NO >> GO TO 7.

5.CHECK KEY SLOT COMMUNICATION SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Key slot | | | |
| Connector | Terminal | | |
| M99 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace key slot. Refer to [SEC-442. "Removal and Installation"](#).

NO >> GO TO 6.

6.CHECK KEY SLOT COMMUNICATION SIGNAL CIRCUIT

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

| Key slot | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M99 | 3 | M122 | 81 | Existed |

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M99 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

7.CHECK KEY SLOT GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key slot connector.

B2190 NATS ANTENNA AMP.

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

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

| Key slot | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M99 | 7 | | Existed |

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness or connector.

8. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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:000000003465947

Performs ID verification through BCM and keyfob when push-button ignition switch is pressed. Prohibits the release of steering lock or start of engine when an unregistered ID of keyfob is used.

DTC Logic

INFOID:000000003465948

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|----------------|
| B2191 | DIFFERENCE OF KEY | The ID verification result between BCM and keyfob is NG. The registration is necessary. | keyfob |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-280, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465949

1.PERFORM INITIALIZATION

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

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

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

2.REPLACE KEYFOB

1. Replace keyfob.
2. Perform initialization with CONSULT-III.
For initialization and registration of keyfob. Refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

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

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

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2192 ID DISCORD, IMMU-ECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2192 ID DISCORD, IMMU-ECM

Description

INFOID:000000003465950

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

DTC Logic

INFOID:000000003465951

DTC DETECTION LOGIC

NOTE:

- If DTC B2192 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2192 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2192 | ID DISCORD, IMMU-ECM | The ID verification result between BCM and ECM is 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 under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-281, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465952

1.PERFORM INITIALIZATION

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

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

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

2.REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
2. Perform initialization with CONSULT-III.
For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".

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

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

3.REPLACE ECM

1. Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).
2. Perform initialization with CONSULT-III.

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

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

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

SEC

B2192 ID DISCORD, IMMU-ECM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

4.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2193 CHAIN OF ECM-IMMU

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2193 CHAIN OF ECM-IMMU

Description

INFOID:000000003465953

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

DTC Logic

INFOID:000000003465954

DTC DETECTION LOGIC

NOTE:

- If DTC B2193 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2193 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-283, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465955

1. REPLACE BCM

1. Replace BCM. Refer to [BCS-96, "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 >> INSPECTION END
NO >> GO TO 2.

2. REPLACE ECM

Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

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

SEC

B2195 ANTI-SCANNING

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2195 ANTI-SCANNING

Description

INFOID:000000004747819

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

DTC Logic

INFOID:000000004747820

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position
 - Do not depress brake pedal
- Check "Self-diagnostic result" using CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-284, "Diagnosis Procedure"](#).
NO >> INSPECTION END.

Diagnosis Procedure

INFOID:000000004747821

1. CHECK SELF-DIAGNOSTIC RESULT-1

- Perform "Self-diagnostic result" of BCM using CONSULT-III.
- Erase DTC.
- Perform DTC Confirmation Procedure. Refer to [SEC-284, "DTC Logic"](#).

Is DTC 2195 detected?

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

2. CHECK EQUIPMENT OF THE VEHICLE

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

Is unspecified accessory part related to engine start installed?

- YES >> GO TO 3.
NO >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

3. CHECK SELF-DIAGNOSTIC RESULT-2

- Obtain the customers approval to remove unspecified accessory part related to engine start, and then remove it.
- Perform "Self-diagnostic result" of BCM using CONSULT-III.
- Erase DTC.
- Perform DTC Confirmation Procedure. Refer to [SEC-284, "DTC Logic"](#).

Is DTC 2195 detected?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
NO >> INSPECTION END

B2555 STOP LAMP

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2555 STOP LAMP

Description

INFOID:000000003465962

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

DTC Logic

INFOID:000000003465963

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|---|
| B2555 | STOP LAMP | BCM makes a comparison between the upper voltage and lower voltage of stop lamp switch. It judges from their values to detect the malfunctioning circuit. | <ul style="list-style-type: none"> Harness or connectors (Stop lamp switch circuit is open or shorted) Stop lamp switch Fuse |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Depress the brake pedal and wait for at least 1 second.
- Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-285, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465964

1. CHECK STOP LAMP SWITCH INPUT SIGNAL

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

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

Is the inspection normal?

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

2. CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|------------------|----------|--------|--------------------------|
| Stop lamp switch | | | |
| Connector | Terminal | | |
| E115 (TYPE A) | 3 | Ground | Battery voltage |
| E116 (TYPE B) | 1 | | |

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Check harness for open or short between stop lamp switch and fuse.

B2555 STOP LAMP

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. CHECK STOP LAMP SWITCH CIRCUIT

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

| Stop lamp switch | | BCM | | Continuity |
|------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E115 (TYPE A) | 4 | M123 | 118 | Existed |
| E116 (TYPE B) | 2 | | | |

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

| Stop lamp switch | | Ground | Continuity |
|------------------|----------|--------|-------------|
| Connector | Terminal | | |
| E115 (TYPE A) | 4 | | Not existed |
| E116 (TYPE B) | 2 | | |

Is the inspection result normal?

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

4. CHECK STOP LAMP SWITCH

Refer to [SEC-286, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace stop lamp switch. Refer to [BR-20, "Removal and Installation"](#).

5. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000003465965

1. CHECK STOP LAMP SWITCH

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

| Stop lamp switch | | | Condition | Continuity |
|------------------|---|---|------------------------------|-------------|
| Terminal | | | | |
| TYPE A | 3 | 4 | Brake pedal Not depressed | Not existed |
| | | | Depressed | Existed |
| TYPE B | 1 | 2 | Brake pedal Not depressed | Not existed |
| | | | Depressed | Existed |

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace stop lamp switch. Refer to [BR-20, "Removal and Installation"](#).

B2556 PUSH-BUTTON IGNITION SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2556 PUSH-BUTTON IGNITION SWITCH

Description

INFOID:000000003465966

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

DTC Logic

INFOID:000000003465967

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|-----------------------------|---|---|
| B2556 | PUSH-BUTTON IGNITION SWITCH | BCM detects the push-button ignition switch stuck to ON for 100 seconds or more | <ul style="list-style-type: none"> • Harness or connectors (Push-button ignition switch circuit is shorted.) • Push-button ignition switch • BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine and wait for at least 100 seconds.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-287, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465968

1. CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Connector | Terminal | | |
| M101 | 4 | Ground | Battery voltage |

Is the inspection normal?

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

2. CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT

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

| Push-button ignition switch | | BCM | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 4 | M122 | 89 | Existed |

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M101 | 4 | | Not existed |

Is the inspection normal?

B2556 PUSH-BUTTON IGNITION SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK PUSH-BUTTON IGNITION SWITCH GROUND CIRCUIT

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|------------|
| Connector | Terminal | | Existed |
| M101 | 1 | | |

Is the inspection normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH

Refer to [SEC-288. "Component Inspection"](#).

Is the inspection normal?

YES >> GO TO 5.

NO >> Replace push-button ignition switch. Refer to [SEC-443. "Removal and Installation"](#).

5.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000003465969

1.CHECK PUSH-BUTTON IGNITION SWITCH

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace push-button ignition switch. Refer to [SEC-443. "Removal and Installation"](#).

B2557 VEHICLE SPEED

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2557 VEHICLE SPEED

Description

INFOID:000000003465970

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

DTC Logic

INFOID:000000003465971

DTC DETECTION LOGIC

NOTE:

- If DTC B2557 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2557 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|---------------------|---|---|
| B2557 | VEHICLE SPEED | BCM detects the following difference between the vehicle speed from “unified meter and A/C amp” and the one from “ABS actuator and electric unit” for 10 seconds continuously <ul style="list-style-type: none">• One is 10 km/h (6.2 MPH) or more and the other is 4 km/h (2.5 MPH) or less. | <ul style="list-style-type: none">• Wheel sensor• Unified meter and A/C amp.• ABS actuator and electric unit (control unit) |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-289, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465972

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

Check “Self diagnostic result” with CONSULT-III. Refer to [BRC-102, "DTC No. Index"](#).

Is the inspection result normal?

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

2.CHECK DTC WITH “UNIFIED METER AND A/C AMP.”

Check “Self diagnostic result” with CONSULT-III. Refer to [MWI-75, "DTC Index"](#).

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2560 STARTER CONTROL RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2560 STARTER CONTROL RELAY

Description

INFOID:000000003465973

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

DTC Logic

INFOID:000000003465974

DTC DETECTION LOGIC

NOTE:

- If DTC B2560 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#)
- If DTC B2560 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|-----------------------|--|-----------------|
| B2560 | STARTER CONTROL RELAY | BCM detects a mismatch between the OFF request of starter control relay to IPDM E/R and the feedback. (The feedback is ON instead of OFF.) | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 2 seconds.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-290, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465975

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-433, "DTC Index"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#)

>> INSPECTION END

B2601 SHIFT POSITION

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2601 SHIFT POSITION

Description

INFOID:000000003465976

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003465977

DTC DETECTION LOGIC

NOTE:

- If DTC B2601 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2601 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).
- If DTC B2601 is displayed with DTC B2603, first perform the trouble diagnosis for DTC B2603. Refer to [SEC-301, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|---|
| B2601 | SHIFT POSITION | BCM detects when a difference between the shift P input signal and the shift position signal received from IPDM E/R via CAN communication continues for 2 seconds or more | <ul style="list-style-type: none"> • Harness or connectors (Control device circuit is open or shorted.) • Control device (detention switch) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions, and wait for at least 2 seconds.
 - Selector lever is in the P position.
 - Do not depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-291, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465978

1. CHECK CONTROL DEVICE POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect control device (detention switch) connector.
3. Check voltage between control device (detention switch) harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--|----------|--------|--------------------------|
| Control device (detention switch) Connector | Terminal | | |
| M57 | 8 | Ground | Battery voltage |

Is the inspection result normal?

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

2. CHECK CONTROL DEVICE POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

B2601 SHIFT POSITION

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 8 | M122 | 96 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 8 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3.CHECK CONTROL DEVICE CIRCUIT (BCM)

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | M122 | 99 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 9 | | Not existed |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK CONTROL DEVICE CIRCUIT (IPDM E/R)

1. Check continuity between control device (detention switch) harness connector and IPDM E/R harness connector.

| Control device (detention switch) | | IPDM E/R | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | E11 | 43 | Existed |

2. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 9 | | Not existed |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

5.CHECK CONTROL DEVICE (DETENTION SWITCH)

Refer to [SEC-293, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace control device. Refer to [TM-165, "Removal and Installation"](#).

6.CHECK INTERMITTENT INCIDENT

B2601 SHIFT POSITION

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

Component Inspection

INFOID:000000003465979

1. CHECK CONTROL DEVICE (DETENTION SWITCH)

1. Turn ignition switch OFF.
2. Disconnect control device connector.
3. Check continuity between control device (detention switch) terminals.

| Control device (detention switch) | | Condition | | Continuity |
|-----------------------------------|---|----------------|------------------|-------------|
| Terminal | | | | |
| 8 | 9 | Selector lever | P position | Not existed |
| | | | Other than above | Existed |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace control device. Refer to [TM-165. "Removal and Installation"](#).

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

SEC

B2602 SHIFT POSITION

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2602 SHIFT POSITION

Description

INFOID:000000003465980

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003465981

DTC DETECTION LOGIC

NOTE:

- If DTC B2602 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2602 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B2602 | SHIFT POSITION | BCM detects the following status for 10 seconds. <ul style="list-style-type: none"> • Shift position is in P position • Vehicle speed is 4 km/h (2.5 MPH) or more • Ignition switch is in the ON position | <ul style="list-style-type: none"> • Harness or connectors (Control device circuit is open or shorted) • Control device (detention switch) • ABS actuator and electric unit (control unit) • BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 10 seconds.
 - Selector lever is in the P or N position
 - Depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-294, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465982

1. CHECK DTC WITH "ABS ACTUATOR AND ELECTRIC UNIT"

Check "Self diagnostic result" with CONSULT-III. Refer to [BRC-102, "DTC No. Index"](#).

Is the inspection result normal?

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

2. CHECK CONTROL DEVICE POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect control device (detention switch) connector.
3. Check voltage between control device (detention switch) harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------------|----------|--------|--------------------------|
| Control device (detention switch) | | | |
| Connector | Terminal | | |
| M57 | 8 | Ground | Battery voltage |

Is the inspection result normal?

B2602 SHIFT POSITION

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

3. CHECK CONTROL DEVICE POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 8 | M122 | 96 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|------------|
| Connector | Terminal | | |
| M57 | 8 | | No existed |

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).
- NO >> Repair or replace harness or connector.

4. CHECK CONTROL DEVICE CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | M122 | 99 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|------------|
| Connector | Terminal | | |
| M57 | 9 | | No existed |

Is the inspection result normal?

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

5. CHECK CONTROL DEVICE (DETENTION SWITCH)

Refer to [SEC-293. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 6.
- NO >> Replace control device. Refer to [TM-165. "Removal and Installation"](#).

6. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2603 SHIFT POSITION STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2603 SHIFT POSITION STATUS

Description

INFOID:000000003465983

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003465984

DTC DETECTION LOGIC

NOTE:

- If DTC B2603 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2603 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|-----------------------|---|---|
| B2603 | SHIFT POSITION STATUS | BCM detects the followings status for 500 ms or more when shift is in P position, and ignition switch is in ON position. <ul style="list-style-type: none">• Park/neutral position (PNP) switch: approx. 0V• Control device (detention switch): approx. 0V | <ul style="list-style-type: none">• Harness or connector (Control device circuit is open or shorted.)• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted.]• Control device (detention switch)• Park/neutral position (PNP) switch• BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 1 second.
 - Selector lever is in the P position.
 - Do not depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-296, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465985

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT-III. Refer to [TM-129, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH CIRCUIT

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

| TCM | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| F23 | 20 | M123 | 140 | Existed |

4. Check continuity between TCM harness connector and ground.

B2603 SHIFT POSITION STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| TCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| F23 | 20 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK CONTROL DEVICE POWER SUPPLY

1. Disconnect control device (detention switch) connector.
2. Check voltage between control device (detention switch) harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Connector | Terminal | | |
| M57 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK CONTROL DEVICE POWER SUPPLY CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 8 | M122 | 96 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 8 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

5.CHECK CONTROL DEVICE CIRCUIT

1. Disconnect BCM connector and IPDM E/R connector.
2. Check continuity between control device (detention switch) harness connector and BCM harness connector.

| Control device (detention switch) | | BCM | | Continuity |
|-----------------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M57 | 9 | M122 | 99 | Existed |

3. Check continuity between control device (detention switch) harness connector and ground.

| Control device (detention switch) | | Ground | Continuity |
|-----------------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M57 | 9 | | Not existed |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

B2603 SHIFT POSITION STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

6. CHECK CONTROL DEVICE (DETENTION SWITCH)

Refer to [SEC-293, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace control device. Refer to [TM-165, "Removal and Installation"](#).

7. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2604 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2604 PNP SWITCH

Description

INFOID:000000003465986

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003465987

DTC DETECTION LOGIC

NOTE:

- If DTC B2604 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266. "BCM : DTC Logic"](#).
- If DTC B2604 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268. "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2604 | PNP SWITCH | BCM detects the following status for 500 ms or more when the ignition switch is in the ON position. <ul style="list-style-type: none">• N position input signal exists. Shift position signal from TCM does not exist.• N position input signal does not exist. Shift position signal from TCM exists. | <ul style="list-style-type: none">• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted.]• Park/ neutral position (PNP) switch |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Start the engine under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position
 - Do not depress the brake pedal
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-299. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465988

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT-III. Refer to [TM-129. "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH CIRCUIT

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

| TCM | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| F23 | 20 | M123 | 140 | Existed |

4. Check continuity between TCM harness connector and ground.

B2604 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| TCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| F23 | 20 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2605 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2605 PNP SWITCH

Description

INFOID:000000003465989

BCM confirms the shift position with the following 4 signals.

- Selector lever
- P/N position switch
- P position signal from IPDM E/R (CAN)
- P position signal from TCM (CAN)

DTC Logic

INFOID:000000003465990

DTC DETECTION LOGIC

NOTE:

- If DTC B2605 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266. "BCM : DTC Logic"](#).
- If DTC B2605 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268. "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2605 | PNP SWITCH | BCM detects the following status for 500 ms or more when the ignition switch is in ON position <ul style="list-style-type: none"> • N position input signal exists. Shift position signal from IPDM E/R does not exist. • N position input signal does not exist. Shift position signal from IPDM E/R exists. | <ul style="list-style-type: none"> • Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted.] • Park/neutral position (PNP) switch • IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position
 - Do not depress the brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-301. "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465991

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-433. "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH CIRCUIT

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

| TCM | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| F23 | 20 | M123 | 140 | Existed |

4. Check continuity between TCM harness connector and ground.

B2605 PNP SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| TCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| F23 | 20 | | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B2606 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2606 STEERING LOCK RELAY

Description

INFOID:000000003465992

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication. IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:000000003465993

DTC DETECTION LOGIC

NOTE:

- If DTC B2606 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2606 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|-----------------------------------|
| B2606 | STEERING LOCK RELAY | BCM detects that there is a mismatch between the following statuses. <ul style="list-style-type: none">• Steering lock unit ON signal transmitted by IPDM E/R• The steering lock unit status feedback | Steering lock relay (in IPDM E/R) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-303, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465994

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-433, "DTC Index"](#).

Is the inspection result normal?

- YES >> GO TO 2.
NO >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2607 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2607 STEERING LOCK RELAY

Description

INFOID:000000003465995

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

DTC Logic

INFOID:000000003465996

DTC DETECTION LOGIC

NOTE:

- If DTC B2607 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2607 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B2607 | STEERING LOCK RELAY | BCM detects that there is a difference between the following statuses. <ul style="list-style-type: none">• Steering lock unit ON signal transmitted by IPDM E/R• The steering lock unit status feedback | <ul style="list-style-type: none">• Harness or connectors (steering lock unit power supply circuit is open or shorted)• Steering lock relay (in IPDM E/R) |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-304, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003465997

1. CHECK DTC WITH IPDM E/R

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-433, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK STEERING LOCK UNIT POWER SUPPLY CIRCUIT

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

| (+) Steering lock unit | | (-) | Condition | Voltage (V) (Approx.) |
|------------------------|----------|--------|--|--------------------------|
| Connector | Terminal | | | |
| M12 | 1 | Ground | Press push-button ignition switch when steering lock is in lock condition. | Battery voltage |

Is the inspection result normal?

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

B2607 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. CHECK STEERING LOCK UNIT CIRCUIT

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

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 1 | E10 | 11 | Existed |

4. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 1 | | Not existed |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> Repair or replace harness or connector.

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2608 STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2608 STARTER RELAY

Description

INFOID:000000003465998

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

DTC Logic

INFOID:000000003465999

DTC DETECTION LOGIC

NOTE:

- If DTC B2608 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2608 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).
- If DTC B2608 is displayed with DTC B210D for IPDM E/R, first perform the trouble diagnosis for DTC B210D. Refer to [SEC-337, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|---|
| B2608 | STARTER RELAY | BCM receives starter relay ON signal (CAN) from IPDM E/R even if BCM turns the starter relay OFF. | <ul style="list-style-type: none"> • Harness or connectors (starter relay circuit is open or shorted.) • IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-306, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466000

1. CHECK BCM POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|----------------|------------------------------------|
| BCM | | | | |
| Connector | Terminal | | | |
| M121 | 52 | Ground | Selector lever | N or P position Battery voltage |
| | | | | Other than above 0 |

Is the inspection result normal?

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

2. CHECK STARTER RELAY CIRCUIT

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

B2608 STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| IPDM E/R | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E11 | 46 | M121 | 52 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E11 | 46 | | Not existed |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2609 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2609 STEERING STATUS

Description

INFOID:000000003466001

There are 2 switches in the steering lock unit (steering lock/unlock switch 1 and 2). BCM compares those 2 switches conditions to judge the present steering status.

DTC Logic

INFOID:000000003466002

DTC DETECTION LOGIC

NOTE:

- If DTC B2609 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2609 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2609 | STEERING STATUS | BCM detects the malfunction of steering lock unit switches for 1 second. | <ul style="list-style-type: none">• Harness or connectors [steering lock unit circuit (BCM side) is open or shorted]• Harness or connectors [steering lock unit circuit (IPDM E/R side) is open or shorted.]• Steering lock unit• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-308, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-308, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466003

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK BCM OUTPUT SIGNAL

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

B2609 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK STEERING LOCK UNIT CIRCUIT-1

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | M122 | 98 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

4.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | E10 | 33 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

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

SEC

B2609 STEERING STATUS

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness or connector.

6. CHECK BCM OUTPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | Ground | Battery voltage |
| M12 | 3 | | |

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 7.

7. CHECK STEERING LOCK UNIT CIRCUIT-3

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | M122 | 97 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

8. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | Ground | Battery voltage |
| M12 | 3 | | |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 9.

9. CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | E10 | 32 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

B2609 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

10.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B260B STEERING LOCK UNIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B260B STEERING LOCK UNIT

Description

INFOID:000000003466004

The steering lock unit performs the check by itself according to the steering status.

DTC Logic

INFOID:000000003466005

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--------------------|
| B260B | STEERING LOCK UNIT | BCM detects malfunctioning of steering lock unit before steering unlocking. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch, when steering is locked.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-312. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466006

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-312. "DTC Logic"](#).

Is the DTC B260B displayed again?

- YES >> Replace steering lock unit.
NO >> INSPECTION END

B260C STEERING LOCK UNIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B260C STEERING LOCK UNIT

Description

INFOID:000000003466007

The steering lock unit performs the check by itself according to the steering status.

DTC Logic

INFOID:000000003466008

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--------------------|
| B260C | STEERING LOCK UNIT | BCM detects malfunctioning of steering lock unit before steering locking. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-313. "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466009

1.INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-313. "DTC Logic"](#).

Is the DTC B260C displayed again?

- YES >> Replace steering lock unit.
NO >> INSPECTION END

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

SEC

B260D STEERING LOCK UNIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B260D STEERING LOCK UNIT

Description

INFOID:000000003466010

The steering lock unit performs the check by itself according to the steering lock status (before lock, after lock and unlock).

DTC Logic

INFOID:000000003466011

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--------------------|
| B260D | STEERING LOCK UNIT | BCM detects malfunctioning of steering lock unit after steering locking. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-314, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466012

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-314, "DTC Logic"](#).

Is the DTC B260D displayed again?

- YES >> Replace steering lock unit.
NO >> INSPECTION END

B260F ENGINE STATUS

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B260F ENGINE STATUS

Description

INFOID:000000003466013

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

DTC Logic

INFOID:000000003466014

DTC DETECTION LOGIC

NOTE:

- If DTC B260F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B260F is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-315, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466015

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-315, "DTC Logic"](#).

Is the DTC B260F displayed again?

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

2. REPLACE ECM

Replace ECM. Refer to [EC-15, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description"](#).

>> INSPECTION END

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B26E9 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B26E9 STEERING STATUS

Description

INFOID:000000003466019

There are 2 switches in the steering lock unit (steering lock/unlock switch 1 and 2). BCM compares those 2 switches conditions to judge the present steering status.

DTC Logic

INFOID:000000003466020

DTC DETECTION LOGIC

NOTE:

If DTC B26E9 is displayed with DTC B2609, first perform the trouble diagnosis for DTC B2609. Refer to [SEC-308, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--------------------|
| B26E9 | S/L STATUS | BCM requests lock to steering lock unit, then steering lock unit transmits a recognitions signal to BCM, but steering lock unit remain unlock. | Steering lock unit |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Turn ignition switch ON.
5. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Refer to [SEC-316, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466021

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. Perform DTC Confirmation Procedure.
Refer to [SEC-316, "DTC Logic"](#).

Is the DTC B26E9 displayed again?

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

2. REPLACE STEERING LOCK UNIT

1. Replace steering lock unit.
2. Perform DTC confirmation procedure. Refer to [SEC-316, "DTC Logic"](#).

Is the DTC B26E9 displayed again?

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

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B26EA KEY REGISTRATION

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B26EA KEY REGISTRATION

Description

INFOID:000000003719178

When the registered keyfob is inserted into the key slot, the push-button ignition switch operation become possible.

DTC Logic

INFOID:000000003719179

DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B26EA | KEY REGISTRATION | keyfob is not registered successfully. | <ul style="list-style-type: none">Improper registration operationkeyfobBCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

YES >> Go to [SEC-317. "Diagnosis Procedure"](#)
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003719180

1. PERFORM INITIALIZATION

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

Is DTC detected?

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

2. REPLACE KEYFOB

1. Replace keyfobs. Re-register all keyfobs
2. Perform initialization with CONSULT-III. For initialization, refer to "CONSULT-III Operation Manual NATS-IVIS/NVIS".
3. Check "Self diagnosis result" with CONSULT-III.

Is DTC detected?

YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).
NO >> INSPECTION END

B2612 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2612 STEERING STATUS

Description

INFOID:000000003466022

There are 2 switches in the steering lock unit. IPDM E/R compares those 2 switches conditions to judge the present steering status and transmit the result to BCM via CAN communication.

DTC Logic

INFOID:000000003466023

DTC DETECTION LOGIC

NOTE:

- If DTC B2612 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2612 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC | Self-diagnosis name | DTC detecting condition | Possible causes |
|-------|---------------------|---|---|
| B2612 | STEERING STATUS | BCM detects the mismatch between the following status for 1 second <ul style="list-style-type: none">• Steering lock or unlock• Feedback of steering lock status from IPDM E/R (CAN) | <ul style="list-style-type: none">• Harness or connectors [steering lock unit circuit (BCM side) is open or shorted]• Harness or connectors [steering lock unit circuit (IPDM E/R side) is open or shorted.]• Steering lock unit• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

YES >> Go to [SEC-318, "Diagnosis Procedure"](#).

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press door switch.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

YES >> Go to [SEC-318, "Diagnosis Procedure"](#).

NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466024

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

DTC confirmation procedure 1 >> GO TO 2.

DTC confirmation procedure 2 >> GO TO 4.

2. CHECK BCM OUTPUT SIGNAL

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

B2612 STEERING STATUS

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK STEERING LOCK UNIT CIRCUIT-1

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | M122 | 98 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

4.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | E10 | 33 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

B2612 STEERING STATUS

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness or connector.

6. CHECK BCM OUTPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 7.

7. CHECK STEERING LOCK UNIT CIRCUIT-3

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | M122 | 97 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

8. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 3 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 9.

9. CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | E10 | 32 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

B2612 STEERING STATUS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

10.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2617 STARTER RELAY CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2617 STARTER RELAY CIRCUIT

Description

INFOID:000000003466025

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

DTC Logic

INFOID:000000003466026

DTC DETECTION LOGIC

NOTE:

- If DTC B2617 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B2617 is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).
- If DTC B2617 is displayed with DTC B210E for IPDM E/R, first perform the trouble diagnosis for DTC B210E. Refer to [SEC-338, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B2617 | STARTER RELAY CIRCUIT | An immediate operation of starter relay is requested by BCM, but there is no response for more than 1 second | <ul style="list-style-type: none"> • Harness or connectors (Starter relay circuit is open or shorted.) • IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-322, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466027

1. CHECK STARTER RELAY

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|----------------|------------------------------------|
| BCM | | | | |
| Connector | Terminal | | | |
| M121 | 52 | Ground | Selector lever | N or P position Battery voltage |
| | | | | Other than above 0 |

Is the inspection result normal?

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

2. CHECK STARTER RELAY CIRCUIT

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

B2617 STARTER RELAY CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| IPDM E/R | | BCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E11 | 46 | M121 | 52 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E11 | 46 | | Not existed |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2619 BCM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2619 BCM

Description

INFOID:000000003466028

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

DTC Logic

INFOID:000000003466029

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-324, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466030

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-324, "DTC Logic"](#).

Is the DTC B2619 displayed again?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
NO >> INSPECTION END

B261A PUSH-BUTTON IGNITION SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B261A PUSH-BUTTON IGNITION SWITCH

Description

INFOID:000000003466031

BCM transmits the change in the power supply position with the push-button ignition switch to IPDM E/R via the CAN communication. IPDM E/R transmits the power supply position status via CAN communication to BCM.

DTC Logic

INFOID:000000003466032

DTC DETECTION LOGIC

NOTE:

- If DTC B261A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B261A is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|-----------------------------|--|---|
| B261A | PUSH-BUTTON IGNITION SWITCH | BCM detects the mismatch between the following for 1 second or more <ul style="list-style-type: none">• Power supply position with push-button ignition switch• Power supply position from IPDM E/R (CAN) | <ul style="list-style-type: none">• Harness or connectors (Push-button ignition switch circuit is open or shorted)- Between BCM and push-button ignition switch- Between IPDM E/R and push-button ignition switch |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press push-button ignition switch for 1 second under the following condition.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-325, "Diagnosis Procedure"](#)
NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Insert keyfob into the key slot.
2. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
3. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-325, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466033

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK PUSH-BUTTON IGNITION SWITCH OUTPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Disconnect push-button ignition switch connector and IPDM E/R connector.

B261A PUSH-BUTTON IGNITION SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------|----------|--------|--------------------------|
| Push-button ignition switch | | | |
| Connector | Terminal | Ground | Battery voltage |
| M101 | 4 | | |

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 3.

3.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 1

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

| Push-button ignition switch | | BCM | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 4 | M122 | 89 | Existed |

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M101 | 4 | | Not existed |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

4.CHECK PUSH-BUTTON IGNITION SWITCH OUTPUT SIGNAL 2

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------------------------|----------|--------|--------------------------|
| Push-button ignition switch | | | |
| Connector | Terminal | Ground | Battery voltage |
| M101 | 4 | | |

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 5.

5.CHECK PUSH-BUTTON IGNITION SWITCH CIRCUIT 2

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

| Push-button ignition switch | | IPDM E/R | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 4 | E10 | 28 | Existed |

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

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M101 | 4 | | Not existed |

B261A PUSH-BUTTON IGNITION SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness or connector.

6.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

B261E VEHICLE TYPE

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B261E VEHICLE TYPE

Description

INFOID:000000003466034

There are two types of vehicle.

- HEV
- Conventional

DTC Logic

INFOID:000000003466035

DTC DETECTION LOGIC

NOTE:

- If DTC B261E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B261E is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to [SEC-268, "BCM : DTC Logic"](#).

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

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

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

Is DTC detected?

- YES >> Go to [SEC-328, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466036

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-328, "DTC Logic"](#).

Is the 1st trip DTC B261E displayed again?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
NO >> INSPECTION END

B2108 STEERING LOCK RELAY

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

B2108 STEERING LOCK RELAY

Description

INFOID:000000003466037

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication. IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:000000003466038

DTC DETECTION LOGIC

NOTE:

If DTC B2108 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|----------------|
| B2108 | STRG LCK RELAY ON | IPDM E/R detects that the relay is stuck at ON position for about 1 second even if the IPDM E/R receives steering lock relay ON/OFF signal from BCM. | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
- Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-329, "Diagnosis Procedure"](#).
 NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466039

1. CHECK STEERING LOCK RELAY

Check voltage between IPDM E/R harness connector and ground.

| (+) | | (-) | Condition | | Voltage (V) (Approx.) |
|-----------|----------|--------|---------------------------|---|--------------------------|
| IPDM E/R | | | | | |
| Connector | Terminal | | | | |
| E10 | 11 | Ground | Ignition switch OFF | A few seconds after opening the driver door | Battery voltage |
| | | | Ignition switch LOCK | Press the push-button ignition switch | Battery voltage |
| | | | Ignition switch ACC or ON | | 0 |

Is the inspection normal?

- YES >> GO TO 2.
 NO >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

2. CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

B2109 STEERING LOCK RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2109 STEERING LOCK RELAY

Description

INFOID:000000003466040

The steering lock relay ON signal is transmitted to IPDM E/R by BCM via CAN communication. IPDM E/R turns the steering lock relay ON and transmits the release of the steering to BCM.

DTC Logic

INFOID:000000003466041

DTC DETECTION LOGIC

NOTE:

- If DTC B2109 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B2109 may be detected.

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B2109 | STRG LCK RELAY OFF | IPDM E/R detects that the relay is stuck at OFF position for about 1 second even if the IPDM E/R receives steering lock relay ON/OFF signal from BCM. | <ul style="list-style-type: none">• Harness or connector (power supply circuit)• IPDM E/R• Battery |

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-330, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466042

1.CHECK POWER SUPPLY CIRCUIT

Check IPDM E/R power supply circuit. Refer to [PCS-18, "Diagnosis Procedure"](#).

Is the circuit normal?

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

2.CHECK FUSE

1. Turn ignition switch OFF.
2. Check 10A fuse (No. 48, located in IPDM E/R).

Is the inspection normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> Check the following.
 - Harness for open or short between IPDM E/R and battery
 - Fuse

B210A STEERING LOCK CONDITION SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B210A STEERING LOCK CONDITION SWITCH

Description

INFOID:000000003466043

There are 2 switches in the steering lock unit. IPDM E/R compares those 2 switches conditions to judge the present steering status and transmit the result to BCM via CAN communication.

DTC Logic

INFOID:000000003466044

DTC DETECTION LOGIC

NOTE:

If DTC B210A is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B210A | STRG LCK STATE SW | IPDM E/R detects the mismatch between steering condition switches 1 and 2 for 1 second | <ul style="list-style-type: none">• Harness or connectors [steering lock unit circuit (BCM side) is open or shorted]• Harness or connectors [steering lock unit circuit (IPDM E/R side) is open or shorted.]• Steering lock unit• IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE 1

1. Press the push-button ignition switch under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-331, "Diagnosis Procedure"](#).
NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE 2

1. Turn ignition switch ON.
2. Turn ignition switch OFF.
3. Press driver side door switch and wait for at least 1 second.
4. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-331, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466045

1. INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

Which procedure confirms DTC?

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

2. CHECK BCM OUTPUT SIGNAL

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

B210A STEERING LOCK CONDITION SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK STEERING LOCK UNIT CIRCUIT-1

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | M122 | 98 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

4.CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | | |
| M12 | 8 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 5.

5.CHECK STEERING LOCK UNIT CIRCUIT-2

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 8 | E10 | 33 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 8 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

B210A STEERING LOCK CONDITION SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NO >> Repair or replace harness or connector.

6. CHECK BCM OUTPUT SIGNAL

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

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | Ground | Battery voltage |
| M12 | 3 | | |

Is the inspection result normal?

YES >> GO TO 8.

NO >> GO TO 7.

7. CHECK STEERING LOCK UNIT CIRCUIT-3

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

| Steering lock unit | | BCM | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | M122 | 97 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

8. CHECK IPDM E/R OUTPUT SIGNAL

1. Connect IPDM E/R connector.
2. Disconnect BCM connector.
3. Check voltage between steering lock unit harness connector and ground.

| (+) | | (-) | Voltage (V) (Approx.) |
|--------------------|----------|--------|--------------------------|
| Steering lock unit | | | |
| Connector | Terminal | Ground | Battery voltage |
| M12 | 3 | | |

Is the inspection result normal?

YES >> Replace steering lock unit.

NO >> GO TO 9.

9. CHECK STEERING LOCK UNIT CIRCUIT-4

1. Disconnect IPDM E/R connector.
2. Check continuity between steering lock unit harness connector and IPDM E/R harness connector.

| Steering lock unit | | IPDM E/R | | Continuity |
|--------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M12 | 3 | E10 | 32 | Existed |

3. Check continuity between steering lock unit harness connector and ground.

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

SEC

B210A STEERING LOCK CONDITION SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Steering lock unit | | Ground | Continuity |
|--------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M12 | 3 | | Not existed |

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness or connector.

10.CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

B210B STARTER CONTROL RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B210B STARTER CONTROL RELAY

Description

INFOID:000000003466046

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

DTC Logic

INFOID:000000003466047

DTC DETECTION LOGIC

NOTE:

If DTC B210B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|----------------|
| B210B | START CONT RLY ON | IPDM E/R detects that the relay is stuck at ON position even if the followings condition are met for about 1 second. <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Park neutral position (PNP) switch input signal | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the power supply position to start under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-335, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466048

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" for IPDM E/R with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-433, "DTC Index"](#).

Is the DTC B210B displayed again?

- YES >> Replace IPDM E/R. Refer [PCS-34, "Removal and Installation"](#).
NO >> INSPECTION END

B210C STARTER CONTROL RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B210C STARTER CONTROL RELAY

Description

INFOID:000000003466049

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

DTC Logic

INFOID:000000003466050

DTC DETECTION LOGIC

NOTE:

- If DTC B210C is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210C may be detected.

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B210C | START CONT RLY OFF | IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second. <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Park neutral position (PNP) switch input signal | <ul style="list-style-type: none">• IPDM E/R• Battery |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the power supply position to start under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-336, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466051

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" for IPDM E/R with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-433, "DTC Index"](#).

Is the DTC B210C displayed again?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> INSPECTION END

B210D STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B210D STARTER RELAY

Description

INFOID:000000003466052

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

DTC Logic

INFOID:000000003466053

DTC DETECTION LOGIC

NOTE:

- If DTC B210D is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B210D is displayed with DTC B2617, first perform the trouble diagnosis for DTC B2617. Refer to [SEC-322, "DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|----------------|
| B210D | STARTER RELAY ON | IPDM E/R detects that the relay is stuck at ON position even if the followings condition are met for about 1 second. <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Park neutral position (PNP) switch input | IPDM E/R |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-337, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466054

1. INSPECTION START

1. Turn ignition switch ON.
2. Check "Self diagnostic result" for IPDM E/R with CONSULT-III.
3. Touch "ERASE".
4. **Perform DTC Confirmation Procedure.**
See [SEC-433, "DTC Index"](#).

Is the DTC B210D displayed again?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> INSPECTION END

B210E STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B210E STARTER RELAY

Description

INFOID:000000003466055

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

DTC Logic

INFOID:000000003466056

DTC DETECTION LOGIC

NOTE:

- If DTC B210E is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).
- If DTC B210E is displayed with DTC B2110 for IPDM E/R, first perform the trouble diagnosis for DTC B2110. Refer to [SEC-342, "DTC Logic"](#).
- If DTC B210E is displayed with DTC B2617 for BCM, first perform the trouble diagnosis for DTC B2617. Refer to [SEC-322, "DTC Logic"](#).
- When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210F may be detected.

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|---|--|
| B210E | STARTER RELAY OFF | IPDM E/R detects that the relay is stuck at OFF position even if the followings condition are met for about 1 second. <ul style="list-style-type: none">• Starter control relay ON/OFF signal from BCM• Park neutral position (PNP) switch input | <ul style="list-style-type: none">• IPDM E/R• Battery |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-338, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466057

1. CHECK STARTER RELAY OUTPUT SIGNAL

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

| (+) BCM connector | | (-) | Condition | | | Voltage (V) (Approx.) |
|-------------------|----------|--------|-----------------|-------------|------------------|-----------------------|
| Connector | Terminal | | Ignition switch | Brake pedal | Selector lever | |
| M121 | 52 | Ground | ON | Depressed | P or N | Battery voltage |
| | | | | | Other than above | 0 |

Is the inspection result normal?

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

2. CHECK STARTER RELAY OUTPUT SIGNAL CIRCUIT

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

B210E STARTER RELAY

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| BCM | | IPDM E/R | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M121 | 52 | E11 | 46 | Existed |

3. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M121 | 52 | | Not existed |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

3. CHECK STARTER RELAY POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| IPDM E/R | | | |
| Connector | Terminal | | |
| E10 | 36 | Ground | Battery voltage |

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).

NO >> Check harness for open or short between IPDM E/R and battery. Refer to [PCS-27, "Wiring Diagram - IPDM E/R -"](#).

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

SEC

B210F PNP/CLUTCH INTERLOCK SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B210F PNP/CLUTCH INTERLOCK SWITCH

Description

INFOID:000000003466058

IPDM E/R confirms the shift position with the following signals.

- Park/neutral position (PNP) switch
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:000000003466059

DTC DETECTION LOGIC

NOTE:

If DTC B210F is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#)

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|---|
| B210F | INTER LOCK/PNP SW ON | IPDM E/R detects a mismatch between the signals below for 1 second or more. <ul style="list-style-type: none">• PNP switch input signal• Shift position signal from BCM (CAN) | <ul style="list-style-type: none">• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted• Park/neutral position (PNP) switch |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-340, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466060

1. CHECK DTC WITH BCM

Check "Self diagnostic result" with CONSULT-III. Refer to [SEC-417, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH INPUT SIGNAL

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|-----------|--------------------------|
| IPDM E/R | | | | |
| Connector | Terminal | Ground | P or N | Battery voltage |
| E10 | 30 | | Ground | |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> GO TO 3.

3. CHECK PNP SWITCH CIRCUIT

1. Turn ignition switch OFF.

B210F PNP/CLUTCH INTERLOCK SWITCH

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

2. Disconnect TCM connector.
3. Check continuity between IPDM E/R harness connector and TCM harness connector.

| IPDM E/R | | TCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E10 | 30 | F23 | 20 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E10 | 30 | | Not existed |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

B2110 PNP/CLUTCH INTERLOCK SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

B2110 PNP/CLUTCH INTERLOCK SWITCH

Description

INFOID:000000003466061

IPDM E/R confirms the shift position with the following signals.

- Park/neutral position (PNP) switch
- Shift position signal from BCM (CAN)

DTC Logic

INFOID:000000003466062

DTC DETECTION LOGIC

NOTE:

If DTC B2110 is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to [SEC-266, "BCM : DTC Logic"](#).

| DTC No. | Trouble diagnosis name | DTC detecting condition | Possible cause |
|---------|------------------------|--|--|
| B2110 | INTER LOCK/PNP SW | IPDM E/R detects mismatch between the signals below for 1 second or more. <ul style="list-style-type: none">• PNP switch input signal• Shift position signal from BCM (CAN) | <ul style="list-style-type: none">• Harness or connectors [Park/neutral position (PNP) switch circuit is open or shorted• Park/neutral position (PNP) switch• IPDM E/R• BCM |

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn the ignition switch ON under the following conditions and wait for at least 1 second.
 - Selector lever is in the P or N position.
 - Do not depress brake pedal.
2. Check "Self diagnostic result" with CONSULT-III.

Is DTC detected?

- YES >> Go to [SEC-342, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000003466063

1. CHECK DTC WITH TCM

Check "Self diagnostic result" with CONSULT-III. Refer to [TM-129, "DTC Index"](#).

Is the inspection result normal?

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

2. CHECK PNP SWITCH INPUT SIGNAL

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

| (+) | | (-) | Condition | Voltage (V) (Approx.) |
|-----------|----------|--------|------------------|--------------------------|
| Connector | Terminal | | | |
| E10 | 30 | Ground | Selector lever | Battery voltage |
| | | | Other than above | 0 |

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-34, "Removal and Installation"](#).
NO >> GO TO 3.

B2110 PNP/CLUTCH INTERLOCK SWITCH

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

3. CHECK PNP SWITCH CIRCUIT

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

| IPDM E/R | | TCM | | Continuity |
|-----------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| E10 | 30 | F23 | 20 | Existed |

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| E10 | 30 | | Not existed |

Is the inspection result normal?

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

4. CHECK INTERMITTENT INCIDENT

Refer to [GI-40. "Intermittent Incident"](#).

>> INSPECTION END

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

SEC

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000003466064

1.CHECK FUSE AND FUSIBLE LINK

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

| Signal name | Fuse and fusible link No. |
|----------------------|---------------------------|
| Battery power supply | L |
| | 10 |

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| (+) BCM | | (-) | Voltage (V) (Approx.) |
|-----------|----------|--------|--------------------------|
| Connector | Terminal | | |
| M118 | 1 | Ground | Battery voltage |
| M119 | 11 | | |

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M119 | 13 | | Existed |

Does continuity exist?

YES >> INSPECTION END

NO >> Repair or replace harness or connector.

IPDM E/R

IPDM E/R : Diagnosis Procedure

INFOID:000000003685481

1.CHECK FUSES AND FUSIBLE LINK

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

| Signal name | Fuses No. |
|----------------------|-----------|
| Battery power supply | 50 |
| | 51 |

Is the fuse fusing?

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

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| Terminals | | Voltage (Approx.) |
|-----------|----------|----------------------|
| (+) | (-) | |
| IPDM E/R | | Battery voltage |
| Connector | Terminal | |
| E9 | 1 | |

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

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

| IPDM E/R | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| E10 | 12 | | Existed |
| E11 | 41 | | |

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

SECURITY INDICATOR LAMP

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP

Description

INFOID:000000003732856

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

Component Function Check

INFOID:000000003732857

1.CHECK FUNCTION

1. Perform "THEFT IND" in the "ACTIVE TEST" mode with CONSULT-III.
2. Check security indicator lamp operation.

| Test item | | Description | |
|-----------|-----|-------------------------|----------------|
| THEFT IND | ON | Security indicator lamp | Illuminate |
| | OFF | | Not illuminate |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Go to [SEC-346, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000003732858

1.CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

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

| (+) | | (-) | Voltage (V) (Approx.) |
|-------------------------|----------|--------|--------------------------|
| Security indicator lamp | | | |
| Connector | Terminal | Ground | Battery voltage |
| M100 | 1 | | |

Is the inspection result normal?

YES >> GO TO 2.

NO-1 >> Check 10A fuse [No. 9, located in the fuse block (J/B)].

NO-2 >> Check harness for open or short between security indicator lamp and fuse.

2.CHECK SECURITY INDICATOR LAMP SIGNAL

1. Connect security indicator lamp connector.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

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

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

NO >> GO TO 3.

3.CHECK SECURITY INDICATOR LAMP SIGNAL CIRCUIT

1. Disconnect security indicator lamp connector.
2. Check continuity between security indicator lamp harness connector and BCM harness connector.

SECURITY INDICATOR LAMP

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Security indicator lamp | | BCM | | Continuity |
|-------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M100 | 2 | M123 | 141 | Existed |

3. Check continuity between security indicator lamp harness connector and ground.

| Security indicator lamp | | Ground | Continuity |
|-------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M100 | 2 | | Not existed |

Is the inspection result normal?

- YES >> Replace security indicator lamp. Refer to [SEC-444, "Removal and Installation"](#).
- NO >> Repair or replace harness.

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

SEC

KEY WARNING LAMP

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

KEY WARNING LAMP

Description

INFOID:000000003737101

Performs operation method guide and warning together with buzzer.

Component Function Check

INFOID:000000003737102

1.CHECK FUNCTION

Check the operation with "INDICATOR" in "Active Test" mode with CONSULT-III.

| Test item | Condition | |
|-----------|-----------|------------------------------|
| INDICATOR | KEY ON | Key warning lamp illuminates |
| | KEY IND | Key warning lamp flashes |

Is the inspection result normal?

YES >> Key warning lamp in combination meter is OK.

NO >> Refer to [SEC-348, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000003737103

1.CHECK KEY WARNING LAMP

Refer to [MWI-4, "Work flow"](#).

Is the inspection result normal?

Yes >> GO TO 2.

No >> Repair or replace key warning lamp circuit.

2.CHECK INTERMITTENT INCIDENT

Refer to [GI-40, "Intermittent Incident"](#).

>> INSPECTION END

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

Wiring Diagram - NISSAN VEHICLE IMMOBILIZER SYSTEM -

INFOID:000000004786351

NOTE:

- Type A: Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO), JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)
- Type B: From to VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO), JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)

Up to VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

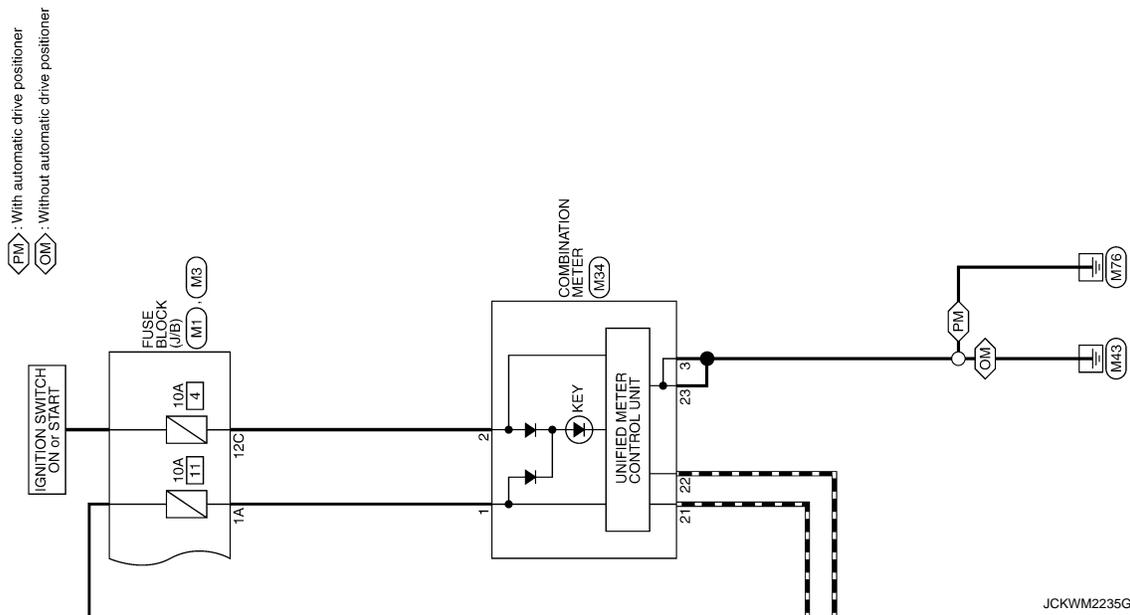
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]



JCKWM2235Gf

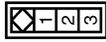
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

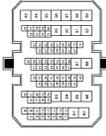
NVIS (TYPE A)

| | |
|----------------|---------------------------------|
| Connector No. | B34 |
| Connector Name | FRONT DOOR SWITCH (DRIVER SIDE) |
| Connector Type | AG3FW |

| | | | |
|--------------|---|----|-----------------------------|
| Terminal No. | 2 | SB | Signal Name [Specification] |
|--------------|---|----|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B11 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH82MW-CS:9 |

| | | | |
|--------------|----|----|-----------------------------|
| Terminal No. | 14 | BR | Signal Name [Specification] |
| 15 | SB | - | - |
| 56 | P | - | - |
| 57 | L | - | - |
| 73 | LG | - | - |

| | |
|----------------|------------------|
| Connector No. | B6 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FER-CS |



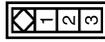

| | | | |
|--------------|----|---|-----------------------------|
| Terminal No. | 5G | P | Signal Name [Specification] |
|--------------|----|---|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B4 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |




| | | | |
|--------------|---|---|-----------------------------|
| Terminal No. | 6 | P | Signal Name [Specification] |
| 7 | L | - | - |

| | |
|----------------|------------------------------------|
| Connector No. | B220 |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | AG3FW |

| | | | |
|--------------|---|---|-----------------------------|
| Terminal No. | 2 | R | Signal Name [Specification] |
|--------------|---|---|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B219 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH32MW-NH |



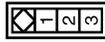

| | | | |
|--------------|----|---|-----------------------------|
| Terminal No. | 17 | R | Signal Name [Specification] |
| 18 | W | - | - |

| | |
|----------------|--------------|
| Connector No. | B78 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |




| | | | |
|--------------|---|----|-----------------------------|
| Terminal No. | 1 | LG | Signal Name [Specification] |
| 8 | B | - | - |

| | |
|----------------|---------------------|
| Connector No. | B71 |
| Connector Name | REAR DOOR SWITCH LH |
| Connector Type | AG3FW |

| | | | |
|--------------|---|----|-----------------------------|
| Terminal No. | 2 | BR | Signal Name [Specification] |
|--------------|---|----|-----------------------------|

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

SEC

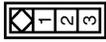
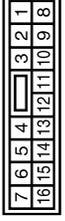
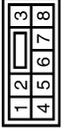
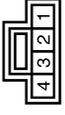
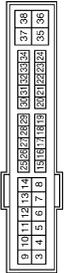
JCKW2236G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NVIS (TYPE A)

| | | | | | | | | | |
|-----------------------|--|------------------------------------|--|--------------------|---------------------|-----------------------------|--------------------|---------------------|-----------------------------|
| Connector No. B221 | Connector Name REAR DOOR SWITCH RH | Connector Type A03FW |   | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | Terminal No. 2 | Color of Wire W | Signal Name [Specification] |
| Connector No. D153 | Connector Name WIRE TO WIRE | Connector Type NS16FW-CS |   | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] |
| Connector No. D179 | Connector Name BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) | Connector Type NS58FW-CS |   | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] |
| Connector No. D180 | Connector Name BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) | Connector Type NS50FW-CS |   | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] |
| Connector No. E10 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH20FW-CS12-M-IV |   | Terminal No. 11 | Color of Wire P | Signal Name [Specification] | Terminal No. 11 | Color of Wire P | Signal Name [Specification] |
| Connector No. E11 | Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | Connector Type TH08FW-NH |   | Terminal No. 39 | Color of Wire P | Signal Name [Specification] | Terminal No. 39 | Color of Wire P | Signal Name [Specification] |
| Connector No. E16 | Connector Name ECM | Connector Type RH24FB-RZ8-L-UH |   | Terminal No. 97 | Color of Wire P | Signal Name [Specification] | Terminal No. 97 | Color of Wire P | Signal Name [Specification] |
| Connector No. E26 | Connector Name OUTSIDE WARNING BUZZER | Connector Type RK03FB |   | Terminal No. 1 | Color of Wire G | Signal Name [Specification] | Terminal No. 1 | Color of Wire G | Signal Name [Specification] |

JCKWM2237G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

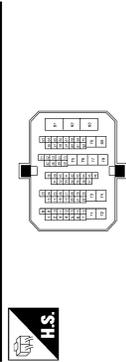
< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

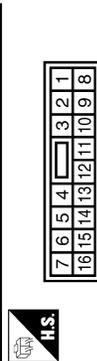
NVIS (TYPE A)

| | | | |
|----------------|----|----|---|
| Connector No. | 50 | GR | - |
| Connector Name | 61 | BR | - |
| Connector Type | 82 | LG | - |

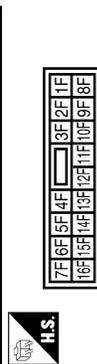
| | | |
|----------------|-----------------|--|
| Connector No. | E105 | |
| Connector Name | WIRE TO WIRE | |
| Connector Type | TH10MW-CS1.0-M3 | |



| | | |
|----------------|--------------|--|
| Connector No. | E104 | |
| Connector Name | WIRE TO WIRE | |
| Connector Type | NS16FW-CS | |



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



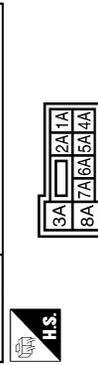
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | Y | - |
| 15 | BR | - |
| 23 | P | - |
| 28 | G | - |
| Z1 | V | - |
| Z8 | SB | - |
| Z9 | W | - |
| 47 | P | - |
| 48 | L | - |

| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | |
|--------------|---------------|-----------------------------|----|----|----|----|----|----|----|----|----|
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 43 | 44 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 45 | 46 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 47 | 48 |

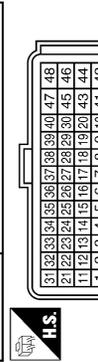
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 6 | P | - |
| 7 | L | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2F | LG | - |
| 8F | R | - |
| 11F | G | - |

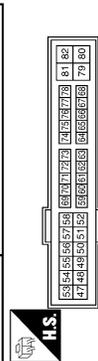
| | |
|----------------|------------------|
| Connector No. | M1 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS30FW-M2 |



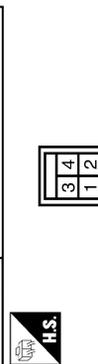
| | |
|----------------|-----------------------------------|
| Connector No. | F23 |
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) |
| Connector Type | RH40FB-R28-L-RH |



| | |
|----------------|--|
| Connector No. | F12 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4 |



| | |
|----------------|---------------------------|
| Connector No. | E115 |
| Connector Name | STOP LAMP SWITCH (TYPE A) |
| Connector Type | MG4FW-LC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1A | Y | - |
| 4A | GR | - |
| 7A | LG | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 20 | R/B | STARTER RELAY |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | R/B | - |
| 80 | B | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3 | R | - |
| 4 | LG | - |

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

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

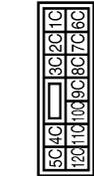
NVIS (TYPE A)

| | |
|----------------|------------------|
| Connector No. | M2 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS10FW-CS |



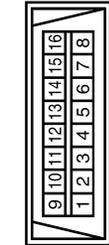
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 3B | L | - |
| 9B | GR | - |

| | |
|----------------|------------------|
| Connector No. | M3 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |



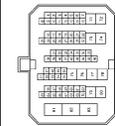
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 12C | O | - |

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



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

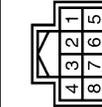
| | |
|----------------|----------------|
| Connector No. | M1 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 11 | P | - |
| 12 | L | - |
| 13 | V | - |
| 15 | R | - |
| 23 | P | - |
| 26 | L | - |
| 27 | O | - |
| 28 | BR | - |
| 29 | L | - |
| 47 | P | - |
| 48 | L | - |

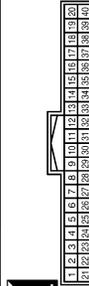
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 50 | GR | - |
| 61 | GR | - |
| 82 | W | - |

| | |
|----------------|--------------------|
| Connector No. | M12 |
| Connector Name | STEERING LOCK UNIT |
| Connector Type | TH88FW-NH |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | P | S/L 12V MECHANICAL(V1) |
| 2 | LG | S/L COM |
| 3 | O | S/L CONDITION 1 |
| 5 | B | GND 1 |
| 6 | B | GND 2 |
| 7 | Y | S/L 12V GPL(V2) |
| 8 | L | S/L CONDITION 2 |

| | |
|----------------|-------------------|
| Connector No. | M24 |
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GROUND |

JCKWM2239G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

NVIS (TYPE A)

| Connector No. M44 | WIRE TO WIRE | TH22FW-NH | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>R</td> <td>-</td> </tr> <tr> <td>18</td> <td>W</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 17 | R | - | 18 | W | - | | | | | | | | | | | | | | | |
|-----------------------|-----------------------------|-------------------------------|--|--|--------------|---------------|-----------------------------|----|----|------------|----|----|------|----|---|---------|----|----|---------|----|---|----------------------------|---|---|-------------------------------|---|---|-----|
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | W | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M57 | CONTROL DEVICE | TK10FW | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>Y</td> <td>-</td> </tr> <tr> <td>9</td> <td>V</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 8 | Y | - | 9 | V | - | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | V | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M77 | WIRE TO WIRE | TH80FW-CS19 | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>14</td> <td>R</td> <td>-</td> </tr> <tr> <td>15</td> <td>SB</td> <td>-</td> </tr> <tr> <td>56</td> <td>P</td> <td>-</td> </tr> <tr> <td>57</td> <td>L</td> <td>-</td> </tr> <tr> <td>73</td> <td>Y</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 14 | R | - | 15 | SB | - | 56 | P | - | 57 | L | - | 73 | Y | - | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | SB | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 56 | P | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 57 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 73 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M89 | KEY SLOT | TH12FW-NH | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GR</td> <td>BAT</td> </tr> <tr> <td>2</td> <td>SB</td> <td>LOCK</td> </tr> <tr> <td>3</td> <td>O</td> <td>DATA</td> </tr> <tr> <td>5</td> <td>GR</td> <td>ILL BAT</td> </tr> <tr> <td>6</td> <td>R</td> <td>ILL [With Intelligent Key]</td> </tr> <tr> <td>6</td> <td>L</td> <td>ILL [Without Intelligent Key]</td> </tr> <tr> <td>7</td> <td>B</td> <td>GND</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | BAT | 2 | SB | LOCK | 3 | O | DATA | 5 | GR | ILL BAT | 6 | R | ILL [With Intelligent Key] | 6 | L | ILL [Without Intelligent Key] | 7 | B | GND |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | BAT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | SB | LOCK | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | O | DATA | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | GR | ILL BAT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | R | ILL [With Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | L | ILL [Without Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | B | GND | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M100 | SECURITY INDICATOR LAMP | TK02FBR | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GR</td> <td>-</td> </tr> <tr> <td>2</td> <td>O</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | - | 2 | O | - | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | O | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M101 | PUSH-BUTTON IGNITION SWITCH | TK08FBR | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B</td> <td>-</td> </tr> <tr> <td>4</td> <td>BR</td> <td>-</td> </tr> <tr> <td>6</td> <td>L</td> <td>-</td> </tr> <tr> <td>8</td> <td>GR</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | B | - | 4 | BR | - | 6 | L | - | 8 | GR | - | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | B | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M118 | BCM (BODY CONTROL MODULE) | M03FEB-LC | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>W</td> <td>BAT (F/L)</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | W | BAT (F/L) | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | W | BAT (F/L) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M119 | BCM (BODY CONTROL MODULE) | NS16FW-CS | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>LG</td> <td>BAT (FUSE)</td> </tr> <tr> <td>13</td> <td>B</td> <td>GND</td> </tr> <tr> <td>15</td> <td>L</td> <td>ACC IND</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 11 | LG | BAT (FUSE) | 13 | B | GND | 15 | L | ACC IND | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | LG | BAT (FUSE) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | B | GND | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | L | ACC IND | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

SEC

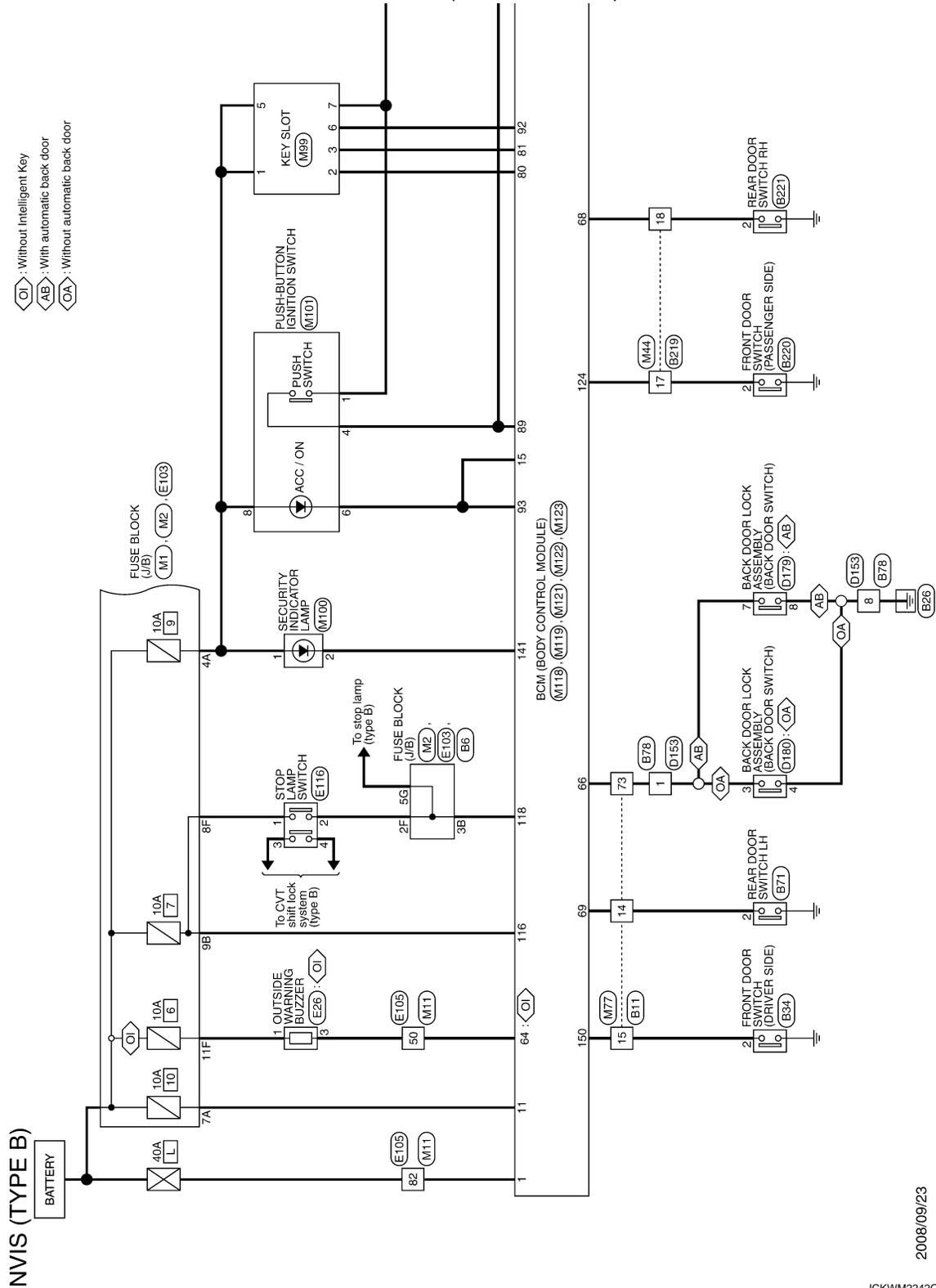
JCKW2240G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)



2008/09/23

JCKWM2242GI

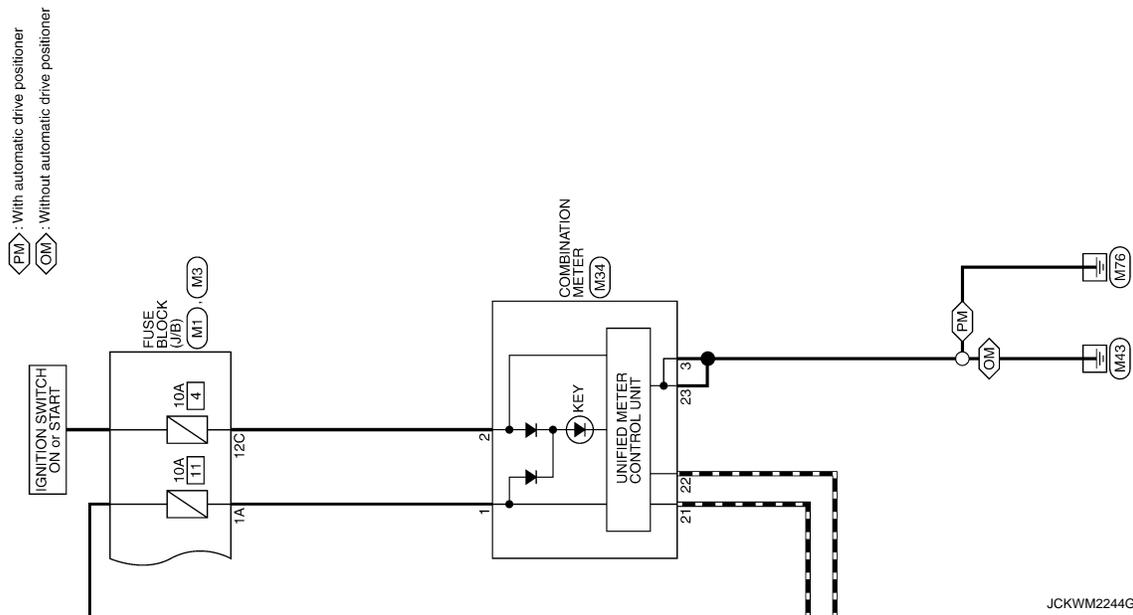
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]



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

SEC

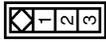
NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

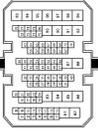
NVIS (TYPE B)

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

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

| | |
|----------------|--------------|
| Connector No. | B11 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH82MW-CS 9 |

| | | | | |
|--------------|----|---------------|----|-----------------------------|
| Terminal No. | 14 | Color of Wire | BR | Signal Name [Specification] |
| 15 | SB | | | |
| 56 | P | | | |
| 57 | L | | | |
| 78 | LG | | | |

| | |
|----------------|------------------|
| Connector No. | B6 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS17FBR-CS |



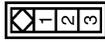

| | | | | |
|--------------|----|---------------|---|-----------------------------|
| Terminal No. | 5G | Color of Wire | P | Signal Name [Specification] |
|--------------|----|---------------|---|-----------------------------|

| | |
|----------------|--------------|
| Connector No. | B4 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |




| | | | | |
|--------------|---|---------------|---|-----------------------------|
| Terminal No. | 6 | Color of Wire | P | Signal Name [Specification] |
| 7 | L | | | |

| | |
|----------------|------------------------------------|
| Connector No. | B220 |
| Connector Name | FRONT DOOR SWITCH (PASSENGER SIDE) |
| Connector Type | A03FW |

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

| | |
|----------------|--------------|
| Connector No. | B219 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH82MW-NH |



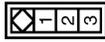

| | | | | |
|--------------|----|---------------|---|-----------------------------|
| Terminal No. | 17 | Color of Wire | R | Signal Name [Specification] |
| 18 | W | | | |

| | |
|----------------|--------------|
| Connector No. | B78 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16MW-CS |




| | | | | |
|--------------|---|---------------|----|-----------------------------|
| Terminal No. | 1 | Color of Wire | LG | Signal Name [Specification] |
| 8 | B | | | |

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

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

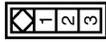
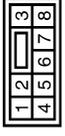
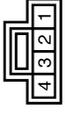
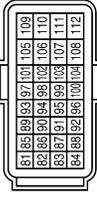
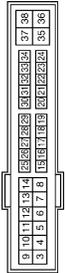
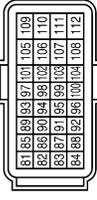
JCKWM2245G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NVIS (TYPE B)

| | | | | | | | | | |
|-----------------------|--|-------------------|---|--------------------|---------------------|-----------------------------|--------------------|---------------------|-----------------------------|
| Connector No. B221 | REAR DOOR SWITCH RH | A03FW |  | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | Terminal No. 2 | Color of Wire W | Signal Name [Specification] |
| Connector No. D153 | WIRE TO WIRE | NS16FW-CS |  | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] |
| Connector No. D179 | BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) | NS36FW-CS |  | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] |
| Connector No. D180 | BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) | NS34FW-CS |  | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M4-TV |  | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | Terminal No. 2 | Color of Wire W | Signal Name [Specification] |
| Connector No. E11 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH08FW-NH |  | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] |
| Connector No. E16 | ECM | RH24FB-R28-L-LH |  | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] | Terminal No. 7 | Color of Wire LG | Signal Name [Specification] |
| Connector No. E26 | OUTSIDE WARNING BUZZER | RK03FBR |  | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] | Terminal No. 3 | Color of Wire LG | Signal Name [Specification] |
| Connector No. E11 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH08FW-NH |  | Terminal No. 39 | Color of Wire P | Signal Name [Specification] | Terminal No. 39 | Color of Wire P | Signal Name [Specification] |
| Connector No. E10 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH20FW-CS12-M4-TV |  | Terminal No. 40 | Color of Wire L | Signal Name [Specification] | Terminal No. 40 | Color of Wire L | Signal Name [Specification] |
| Connector No. E16 | ECM | RH24FB-R28-L-LH |  | Terminal No. 41 | Color of Wire B | Signal Name [Specification] | Terminal No. 41 | Color of Wire B | Signal Name [Specification] |
| Connector No. E26 | OUTSIDE WARNING BUZZER | RK03FBR |  | Terminal No. 43 | Color of Wire Y | Signal Name [Specification] | Terminal No. 43 | Color of Wire Y | Signal Name [Specification] |
| Connector No. E11 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH08FW-NH |  | Terminal No. 46 | Color of Wire BR | Signal Name [Specification] | Terminal No. 46 | Color of Wire BR | Signal Name [Specification] |
| Connector No. E16 | ECM | RH24FB-R28-L-LH |  | Terminal No. 97 | Color of Wire P | Signal Name [Specification] | Terminal No. 97 | Color of Wire P | Signal Name [Specification] |
| Connector No. E26 | OUTSIDE WARNING BUZZER | RK03FBR |  | Terminal No. 98 | Color of Wire L | Signal Name [Specification] | Terminal No. 98 | Color of Wire L | Signal Name [Specification] |
| Connector No. E11 | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) | TH08FW-NH |  | Terminal No. 99 | Color of Wire L | Signal Name [Specification] | Terminal No. 99 | Color of Wire L | Signal Name [Specification] |
| Connector No. E16 | ECM | RH24FB-R28-L-LH |  | Terminal No. 1 | Color of Wire G | Signal Name [Specification] | Terminal No. 1 | Color of Wire G | Signal Name [Specification] |
| Connector No. E26 | OUTSIDE WARNING BUZZER | RK03FBR |  | Terminal No. 3 | Color of Wire GR | Signal Name [Specification] | Terminal No. 3 | Color of Wire GR | Signal Name [Specification] |

JCKWM2246G1

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

SEC

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

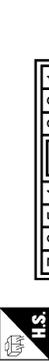
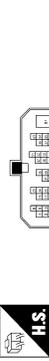
NVIS (TYPE B)

| | | | |
|----------------|------------------|----|----|
| Connector No. | E103 | 50 | GR |
| Connector Name | FUSE BLOCK (J/B) | 61 | BR |
| Connector Type | NS16FW-CS | 82 | LG |

| | |
|----------------|----------------|
| Connector No. | E105 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH10MW-CS10-M3 |

| | |
|----------------|--------------|
| Connector No. | E104 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | Y | - |
| 15 | BR | - |
| 23 | P | - |
| 26 | G | - |
| 27 | V | - |
| 28 | SB | - |
| 29 | W | - |
| 47 | P | - |
| 48 | L | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | Y | - |
| 15 | BR | - |
| 23 | P | - |
| 26 | G | - |
| 27 | V | - |
| 28 | SB | - |
| 29 | W | - |
| 47 | P | - |
| 48 | L | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 6 | P | - |
| 7 | L | - |

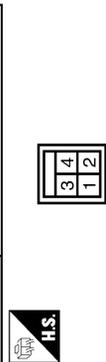
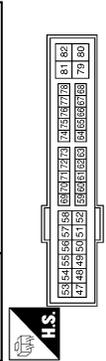
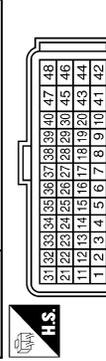
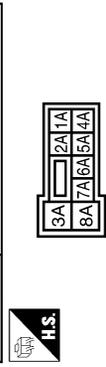
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2F | LG | - |
| 8F | R | - |
| 11F | G | - |

| | |
|----------------|------------------|
| Connector No. | M1 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS08FW-M2 |

| | |
|----------------|-----------------------------------|
| Connector No. | F23 |
| Connector Name | TCM (TRANSMISSION CONTROL MODULE) |
| Connector Type | RH40FB-RZ8-L-RH |

| | |
|----------------|--|
| Connector No. | F12 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4 |

| | |
|----------------|---------------------------|
| Connector No. | E116 |
| Connector Name | STOP LAMP SWITCH (TYPE B) |
| Connector Type | MG4FW-LC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1A | Y | - |
| 4A | GR | - |
| 7A | LG | - |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 20 | R/B | STARTER RELAY |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | R/B | - |
| 80 | B | - |

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

JCKWMM2247G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

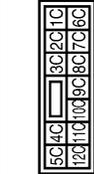
NVIS (TYPE B)

| | |
|----------------|------------------|
| Connector No. | M2 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS10FW-CS |



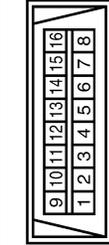
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3B | L | - |
| 9B | GR | - |

| | |
|----------------|------------------|
| Connector No. | M3 |
| Connector Name | FUSE BLOCK (J/B) |
| Connector Type | NS12FW-CS |



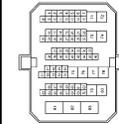
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 12C | O | - |

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



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

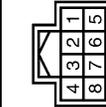
| | |
|----------------|----------------|
| Connector No. | M1 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH70FW-CS10-M3 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 13 | V | - |
| 15 | R | - |
| 23 | P | - |
| 26 | L | - |
| 27 | O | - |
| 28 | BR | - |
| 29 | L | - |
| 47 | P | - |
| 48 | L | - |

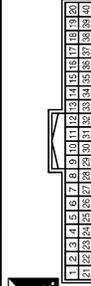
| | | |
|----|----|---|
| 50 | GR | - |
| 61 | GR | - |
| 82 | W | - |

| | |
|----------------|--------------------|
| Connector No. | M12 |
| Connector Name | STEERING LOCK UNIT |
| Connector Type | TH88FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | P | S/L 12V MECHANICAL(V1) |
| 2 | LG | S/L COM |
| 3 | O | S/L CONDITION 1 |
| 5 | B | GND 1 |
| 6 | B | GND 2 |
| 7 | Y | S/L 12V GPL(V2) |
| 8 | L | S/L CONDITION 2 |

| | |
|----------------|-------------------|
| Connector No. | M34 |
| Connector Name | COMBINATION METER |
| Connector Type | TH40FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | Y | BAT |
| 2 | O | IGN |
| 3 | B | GROUND |
| 21 | L | CAN-H |
| 22 | P | CAN-L |
| 23 | B | GROUND |

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

SEC

JCKWM2248G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NVIS (TYPE B)

| Connector No. M44 | WIRE TO WIRE | TH22FW-NH | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>17</td> <td>R</td> <td>-</td> </tr> <tr> <td>18</td> <td>W</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 17 | R | - | 18 | W | - | | | | | | | | | | | | | | | |
|-----------------------|-----------------------------|-------------------------------|--|---|--------------|---------------|-----------------------------|----|----|------------|----|----|-------|----|---|---------|----|----|---------|----|---|----------------------------|---|---|-------------------------------|---|---|-----|
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | W | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M57 | CONTROL DEVICE | TK10FW | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>Y</td> <td>-</td> </tr> <tr> <td>9</td> <td>V</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 8 | Y | - | 9 | V | - | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | V | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M77 | WIRE TO WIRE | TH80FW-CS19 | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>14</td> <td>R</td> <td>-</td> </tr> <tr> <td>15</td> <td>SB</td> <td>-</td> </tr> <tr> <td>56</td> <td>P</td> <td>-</td> </tr> <tr> <td>57</td> <td>L</td> <td>-</td> </tr> <tr> <td>78</td> <td>Y</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 14 | R | - | 15 | SB | - | 56 | P | - | 57 | L | - | 78 | Y | - | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | R | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | SB | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 56 | P | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 57 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 78 | Y | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M89 | KEY SLOT | TH12FW-NH | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GR</td> <td>BAT</td> </tr> <tr> <td>2</td> <td>SB</td> <td>GLOCK</td> </tr> <tr> <td>3</td> <td>O</td> <td>DATA</td> </tr> <tr> <td>5</td> <td>GR</td> <td>ILL BAT</td> </tr> <tr> <td>6</td> <td>R</td> <td>ILL [With Intelligent Key]</td> </tr> <tr> <td>8</td> <td>L</td> <td>ILL [Without Intelligent Key]</td> </tr> <tr> <td>7</td> <td>B</td> <td>GRD</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | BAT | 2 | SB | GLOCK | 3 | O | DATA | 5 | GR | ILL BAT | 6 | R | ILL [With Intelligent Key] | 8 | L | ILL [Without Intelligent Key] | 7 | B | GRD |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | BAT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | SB | GLOCK | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | O | DATA | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | GR | ILL BAT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | R | ILL [With Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | L | ILL [Without Intelligent Key] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | B | GRD | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M100 | SECURITY INDICATOR LAMP | TK02FBR | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GR</td> <td>-</td> </tr> <tr> <td>2</td> <td>O</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | GR | - | 2 | O | - | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | O | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M101 | PUSH-BUTTON IGNITION SWITCH | TK08FBR | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>B</td> <td>-</td> </tr> <tr> <td>4</td> <td>BR</td> <td>-</td> </tr> <tr> <td>6</td> <td>L</td> <td>-</td> </tr> <tr> <td>8</td> <td>GR</td> <td>-</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | B | - | 4 | BR | - | 6 | L | - | 8 | GR | - | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | B | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | L | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | GR | - | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M118 | BCM (BODY CONTROL MODULE) | M03FE-LC | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>W</td> <td>BAT (7/L)</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 1 | W | BAT (7/L) | | | | | | | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | W | BAT (7/L) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector No. M119 | BCM (BODY CONTROL MODULE) | NS16FW-CS | | <table border="1"> <thead> <tr> <th>Terminal No.</th> <th>Color of Wire</th> <th>Signal Name [Specification]</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>LG</td> <td>BAT (FUSE)</td> </tr> <tr> <td>13</td> <td>B</td> <td>GRD</td> </tr> <tr> <td>15</td> <td>L</td> <td>ACC IND</td> </tr> </tbody> </table> | Terminal No. | Color of Wire | Signal Name [Specification] | 11 | LG | BAT (FUSE) | 13 | B | GRD | 15 | L | ACC IND | | | | | | | | | | | | |
| Terminal No. | Color of Wire | Signal Name [Specification] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | LG | BAT (FUSE) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | B | GRD | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | L | ACC IND | | | | | | | | | | | | | | | | | | | | | | | | | | |

JCKWMM2249G1

NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

NVIS (TYPE B)

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 124 | R | PASSENGER DOOR SW |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 150 | SB | DRIVER DOOR SW |

| | | |
|-----|----|------------------|
| 99 | V | SHIFT P |
| 106 | Y | S/T POWER SUPPLY |
| 111 | LG | S/L COMM |

| | |
|----------------|---------------------------|
| Connector No. | M122 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FE-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|--|
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 92 | R | KEY SLOT ILL [With Intelligent Key] |
| 93 | L | KEY SLOT ILL [Without Intelligent Key] |
| 96 | Y | ON IND |
| 97 | O | A/T DEVICE POWER SUPPLY |
| 98 | L | S/L CONDITION 1 S/L CONDITION 2 |

| | |
|----------------|---------------------------|
| Connector No. | M121 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 47 | L | IGN RELAY (PDM E/R CONT |
| 52 | R | STARTER RELAY CONT |
| 64 | GR | REQUEST SW BUZZER |
| 66 | Y | BACK DOOR SW |
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

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

SEC

JCKWM2250Gf

VEHICLE SECURITY SYSTEM

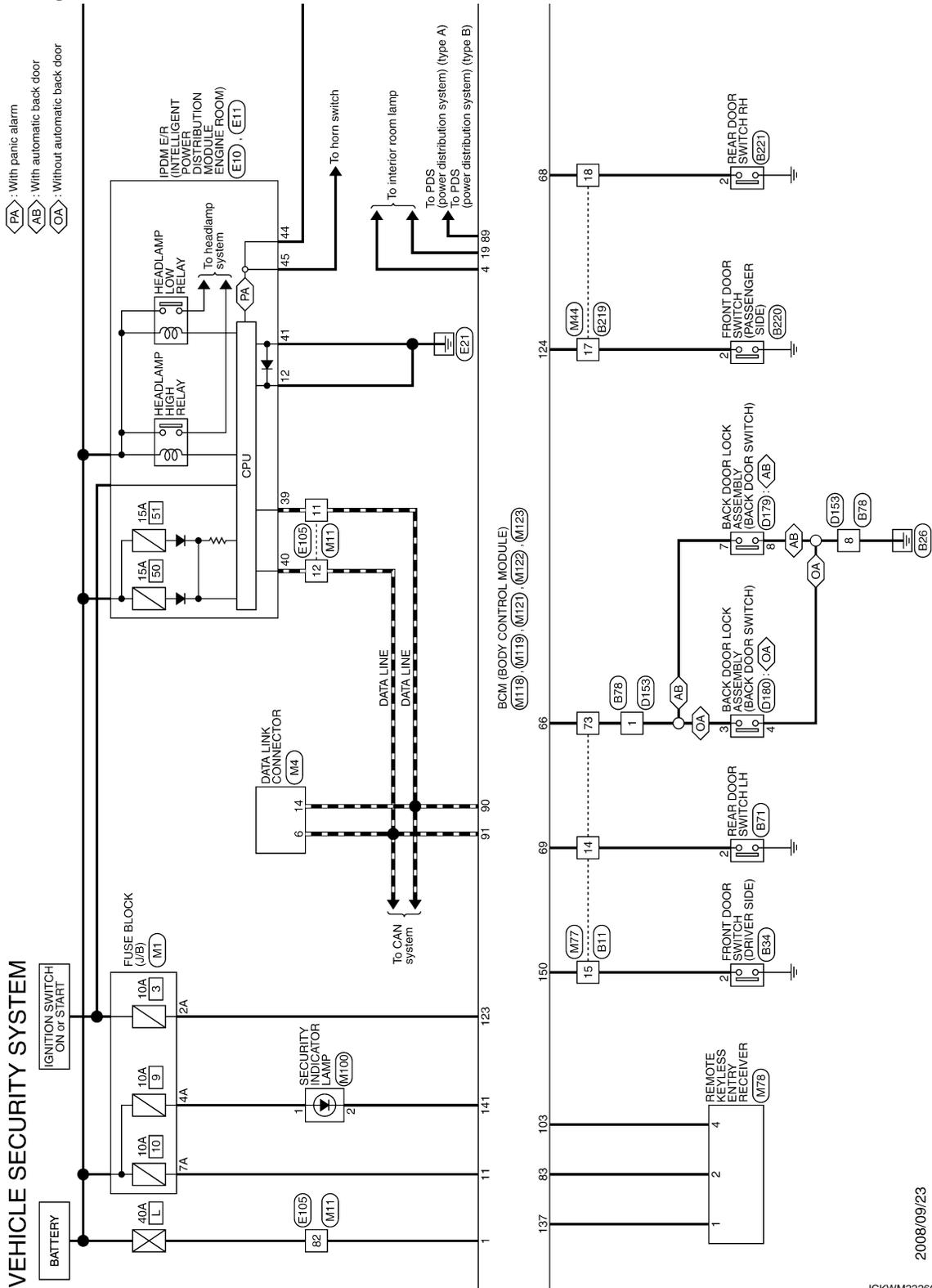
[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

VEHICLE SECURITY SYSTEM

Wiring Diagram - VEHICLE SECURITY SYSTEM -

INFOID:000000004786352



2008/09/23

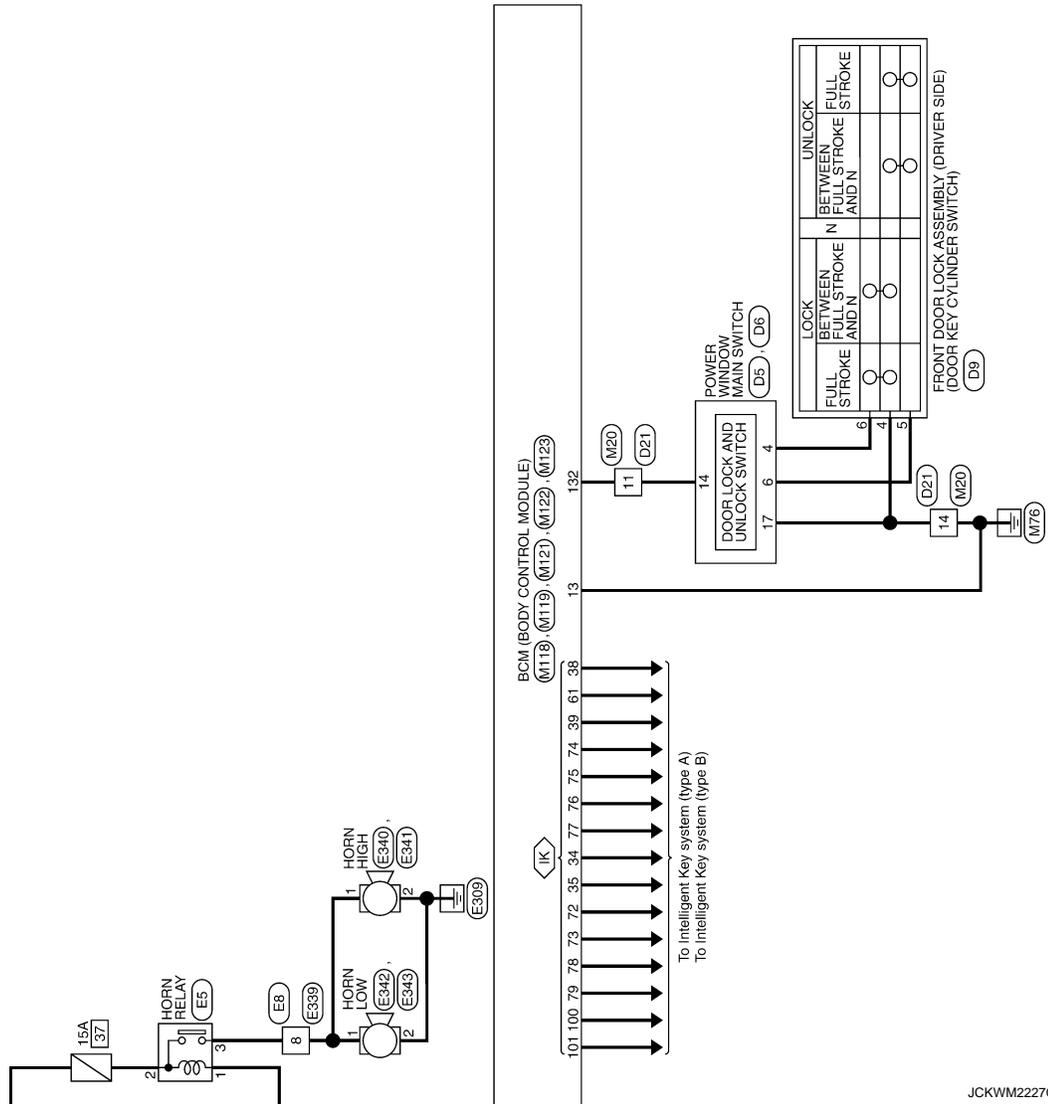
JCKWM2226Gf

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

Ⓚ : With Intelligent Key



JCKWM2227G1

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

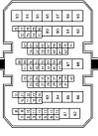
SEC

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | | | | | | | | | | | | | | |
|-----------------------|---|--|--------------------|---------------------|-----------------------------|--|--------------------|---------------------|-----------------------------|--|--------------------|---------------------|-----------------------------|--|
| Connector No. B11 | WIRE TO WIRE TH80MW-CS19 |   | Terminal No. 14 | Color of Wire BR | Signal Name [Specification] | | Terminal No. 15 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 73 | Color of Wire LG | Signal Name [Specification] | |
| Connector No. B71 | REAR DOOR SWITCH LH A03FW |   | Terminal No. 2 | Color of Wire BR | Signal Name [Specification] | | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B34 | FRONT DOOR SWITCH (DRIVER SIDE) A03FW |   | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B219 | WIRE TO WIRE TH82MW-NH |   | Terminal No. 17 | Color of Wire R | Signal Name [Specification] | | Terminal No. 18 | Color of Wire W | Signal Name [Specification] | | Terminal No. 17 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B71 | REAR DOOR SWITCH LH A03FW |   | Terminal No. 2 | Color of Wire BR | Signal Name [Specification] | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | |
| Connector No. B34 | FRONT DOOR SWITCH (DRIVER SIDE) A03FW |   | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B220 | FRONT DOOR SWITCH (PASSENGER SIDE) A03FW |   | Terminal No. 2 | Color of Wire SB | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | | Terminal No. 2 | Color of Wire R | Signal Name [Specification] | |
| Connector No. B221 | REAR DOOR SWITCH RH A03FW |   | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | | Terminal No. 2 | Color of Wire W | Signal Name [Specification] | |
| Connector No. B718 | WIRE TO WIRE NS16MW-CS |   | Terminal No. 1 | Color of Wire LG | Signal Name [Specification] | | Terminal No. 8 | Color of Wire B | Signal Name [Specification] | | Terminal No. 4 | Color of Wire L | Signal Name [Specification] | |
| Connector No. D5 | POWER WINDOW MAIN SWITCH NS16FW-CS |   | Terminal No. 4 | Color of Wire L | Signal Name [Specification] | | Terminal No. 6 | Color of Wire R | Signal Name [Specification] | | Terminal No. 14 | Color of Wire O | Signal Name [Specification] | |

JCKWM2228G1

VEHICLE SECURITY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

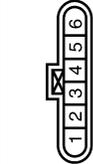
VEHICLE SECURITY SYSTEM

| | |
|----------------|--------------------------|
| Connector No. | D6 |
| Connector Name | POWER WINDOW MAIN SWITCH |
| Connector Type | NS08FW-CS |



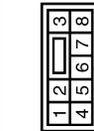
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 17 | B | - |

| | |
|----------------|--|
| Connector No. | D9 |
| Connector Name | FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE) |
| Connector Type | EB06GY-RS |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 4 | B | - |
| 5 | R | - |
| 6 | L | - |

| | |
|----------------|--|
| Connector No. | D179 |
| Connector Name | BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR) |
| Connector Type | NS08FW-CS |



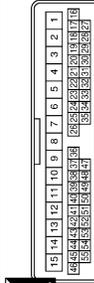
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 7 | LG | - |
| 8 | B | - |

| | |
|----------------|---|
| Connector No. | D180 |
| Connector Name | BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR) |
| Connector Type | NS04FW-CS |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 4 | B | - |

| | |
|----------------|--------------|
| Connector No. | D21 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH06FW-CS15 |



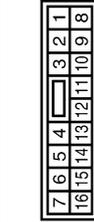
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 11 | O | - |
| 14 | B | - |

| | |
|----------------|------------|
| Connector No. | E5 |
| Connector Name | HORN RELAY |
| Connector Type | - |



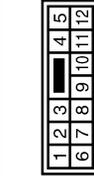
| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | W | - |
| 2 | SB | - |
| 3 | G | - |

| | |
|----------------|--------------|
| Connector No. | D153 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS16FW-CS |



| | | |
|--------------|---------------|-----------------------------|
| Terminal No. | Color of Wire | Signal Name [Specification] |
| 1 | LG | - |
| 8 | B | - |

| | |
|----------------|--------------|
| Connector No. | E8 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12MER-CS |



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

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

SEC

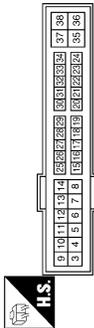
VEHICLE SECURITY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

VEHICLE SECURITY SYSTEM

| | |
|----------------|--|
| Connector No. | E10 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4-TV |



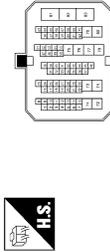
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 12 | B | - |

| | |
|----------------|--|
| Connector No. | E11 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH08FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 39 | P | - |
| 40 | L | - |
| 41 | B | - |
| 44 | W | - |
| 45 | O | - |

| | |
|----------------|-----------------|
| Connector No. | E105 |
| Connector Name | WIRE TO WIRE |
| Connector Type | TH170MW-CS10-M3 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 11 | P | - |
| 12 | L | - |
| 82 | LG | - |

| | |
|----------------|--------------|
| Connector No. | E339 |
| Connector Name | WIRE TO WIRE |
| Connector Type | NS12FBR-CS |



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

| | |
|----------------|-----------|
| Connector No. | E340 |
| Connector Name | HORN HIGH |
| Connector Type | P01FE-A |



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

| | |
|----------------|-----------|
| Connector No. | E341 |
| Connector Name | HORN HIGH |
| Connector Type | P01FB-A |



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

| | |
|----------------|----------|
| Connector No. | E342 |
| Connector Name | HORN LOW |
| Connector Type | P01FB-A |



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

| | |
|----------------|----------|
| Connector No. | E343 |
| Connector Name | HORN LOW |
| Connector Type | P01FB-A |



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

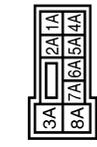
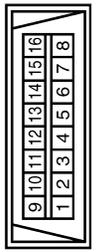
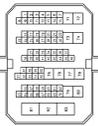
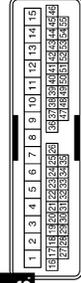
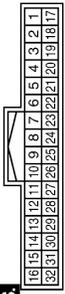
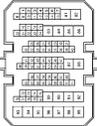
JCKWM2230G1

VEHICLE SECURITY SYSTEM

[WITHOUT INTELLIGENT KEY SYSTEM]

< COMPONENT DIAGNOSIS >

VEHICLE SECURITY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|------|----------------|-------------------------------|----------------|----------------|--|--------------|----|---------------|----|-----------------------------|-----|--------------|----|---------------|----|-----------------------------|--------|--------------|----|---------------|----|-----------------------------|------|
| <table border="1"> <tr><td>Connector No.</td><td>M1</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS06FW-M2</td></tr> </table>  <p>H.S.</p> | Connector No. | M1 | Connector Name | FUSE BLOCK (J/B) | Connector Type | NS06FW-M2 | <table border="1"> <tr><td>Terminal No.</td><td>2A</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>4A</td></tr> <tr><td>Color of Wire</td><td>GR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>7A</td></tr> <tr><td>Color of Wire</td><td>LG</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 2A | Color of Wire | G | Signal Name [Specification] | - | Terminal No. | 4A | Color of Wire | GR | Signal Name [Specification] | - | Terminal No. | 7A | Color of Wire | LG | Signal Name [Specification] | - |
| Connector No. | M1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | FUSE BLOCK (J/B) | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | NS06FW-M2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 2A | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | G | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 4A | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | GR | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 7A | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | LG | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M4</td></tr> <tr><td>Connector Name</td><td>DATA LINK CONNECTOR</td></tr> <tr><td>Connector Type</td><td>BD16FW</td></tr> </table>  <p>H.S.</p> | Connector No. | M4 | Connector Name | DATA LINK CONNECTOR | Connector Type | BD16FW | <table border="1"> <tr><td>Terminal No.</td><td>6</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>14</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 6 | Color of Wire | L | Signal Name [Specification] | - | Terminal No. | 14 | Color of Wire | P | Signal Name [Specification] | - | | | | | | |
| Connector No. | M4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | DATA LINK CONNECTOR | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | BD16FW | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | L | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 14 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | P | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M11</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH10FW-CS10-M3</td></tr> </table>  <p>H.S.</p> | Connector No. | M11 | Connector Name | WIRE TO WIRE | Connector Type | TH10FW-CS10-M3 | <table border="1"> <tr><td>Terminal No.</td><td>11</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>12</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>82</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 11 | Color of Wire | P | Signal Name [Specification] | - | Terminal No. | 12 | Color of Wire | L | Signal Name [Specification] | - | Terminal No. | 82 | Color of Wire | W | Signal Name [Specification] | - |
| Connector No. | M11 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | WIRE TO WIRE | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH10FW-CS10-M3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | P | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 12 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | L | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 82 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | W | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M20</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40MF-CS15</td></tr> </table>  <p>H.S.</p> | Connector No. | M20 | Connector Name | WIRE TO WIRE | Connector Type | TH40MF-CS15 | <table border="1"> <tr><td>Terminal No.</td><td>11</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>14</td></tr> <tr><td>Color of Wire</td><td>B</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 11 | Color of Wire | G | Signal Name [Specification] | - | Terminal No. | 14 | Color of Wire | B | Signal Name [Specification] | - | | | | | | |
| Connector No. | M20 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | WIRE TO WIRE | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH40MF-CS15 | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | G | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 14 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | B | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M44</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH22FW-NH</td></tr> </table>  <p>H.S.</p> | Connector No. | M44 | Connector Name | WIRE TO WIRE | Connector Type | TH22FW-NH | <table border="1"> <tr><td>Terminal No.</td><td>17</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>18</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 17 | Color of Wire | R | Signal Name [Specification] | - | Terminal No. | 18 | Color of Wire | W | Signal Name [Specification] | - | | | | | | |
| Connector No. | M44 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | WIRE TO WIRE | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH22FW-NH | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 17 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | R | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 18 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | W | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M77</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80FW-CS19</td></tr> </table>  <p>H.S.</p> | Connector No. | M77 | Connector Name | WIRE TO WIRE | Connector Type | TH80FW-CS19 | <table border="1"> <tr><td>Terminal No.</td><td>14</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>15</td></tr> <tr><td>Color of Wire</td><td>SB</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>73</td></tr> <tr><td>Color of Wire</td><td>Y</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 14 | Color of Wire | R | Signal Name [Specification] | - | Terminal No. | 15 | Color of Wire | SB | Signal Name [Specification] | - | Terminal No. | 73 | Color of Wire | Y | Signal Name [Specification] | - |
| Connector No. | M77 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | WIRE TO WIRE | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TH80FW-CS19 | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 14 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | R | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | SB | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 73 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | Y | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M78</td></tr> <tr><td>Connector Name</td><td>REMOTE KEYLESS ENTRY RECEIVER</td></tr> <tr><td>Connector Type</td><td>JAB04FB</td></tr> </table>  <p>H.S.</p> | Connector No. | M78 | Connector Name | REMOTE KEYLESS ENTRY RECEIVER | Connector Type | JAB04FB | <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>GND</td></tr> <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>SIGNAL</td></tr> <tr><td>Terminal No.</td><td>4</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>+12V</td></tr> </table> | Terminal No. | 1 | Color of Wire | P | Signal Name [Specification] | GND | Terminal No. | 2 | Color of Wire | P | Signal Name [Specification] | SIGNAL | Terminal No. | 4 | Color of Wire | L | Signal Name [Specification] | +12V |
| Connector No. | M78 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | REMOTE KEYLESS ENTRY RECEIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | JAB04FB | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | P | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | GND | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | P | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | SIGNAL | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | L | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | +12V | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>Connector No.</td><td>M100</td></tr> <tr><td>Connector Name</td><td>SECURITY INDICATOR LAMP</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  <p>H.S.</p> | Connector No. | M100 | Connector Name | SECURITY INDICATOR LAMP | Connector Type | TK02FBR | <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>GR</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table> | Terminal No. | 1 | Color of Wire | GR | Signal Name [Specification] | - | Terminal No. | 2 | Color of Wire | O | Signal Name [Specification] | - | | | | | | |
| Connector No. | M100 | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Name | SECURITY INDICATOR LAMP | | | | | | | | | | | | | | | | | | | | | | | | |
| Connector Type | TK02FBR | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | GR | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal No. | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Color of Wire | O | | | | | | | | | | | | | | | | | | | | | | | | |
| Signal Name [Specification] | - | | | | | | | | | | | | | | | | | | | | | | | | |

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

SEC

JCKWM2231GI

VEHICLE SECURITY SYSTEM

< COMPONENT DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM

| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M02FB-LC |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | W | BAT (F/L) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 19 | Y | ROOM LAMP TIMER CONTROL |

| | |
|----------------|---------------------------|
| Connector No. | M121 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 34 | B | LUGGAGE ROOM ANT1- |
| 35 | W | LUGGAGE ROOM ANT1+ |
| 38 | L | REAR BUMPER ANT- |
| 39 | BR | REAR BUMPER ANT+ |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 66 | Y | BACK DOOR SW |
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-------------------------------------|
| 91 | L | CAN-H |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-------------------------------|
| 72 | B | ROOM ANT2- |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT- |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1- |
| 79 | G | ROOM ANT1+ |
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |

| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 123 | G | IGN P/B |
| 124 | R | PASSENGER DOOR SW |
| 132 | G | POWER WINDOW SW COMM |
| 137 | P | RECEIVER/SENSOR GND |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 150 | SB | DRIVER DOOR SW |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000004747822

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

| Monitor Item | Condition | Value/Status |
|----------------|---|----------------------------------|
| FR WIPER HI | Other than front wiper switch HI | Off |
| | Front wiper switch HI | On |
| FR WIPER LOW | Other than front wiper switch LO | Off |
| | Front wiper switch LO | On |
| FR WASHER SW | Front washer switch OFF | Off |
| | Front washer switch ON | On |
| FR WIPER INT | Other than front wiper switch INT/AUTO | Off |
| | Front wiper switch INT/AUTO | On |
| FR WIPER STOP | Front wiper is not in STOP position | Off |
| | Front wiper is in STOP position | On |
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | Wiper intermittent dial position |
| RR WIPER ON | Other than rear wiper switch ON | Off |
| | Rear wiper switch ON | On |
| RR WIPER INT | Other than rear wiper switch INT | Off |
| | Rear wiper switch INT | On |
| RR WASHER SW | Rear washer switch OFF | Off |
| | Rear washer switch ON | On |
| RR WIPER STOP | Rear wiper is in STOP position | Off |
| | Rear wiper is not in STOP position | On |
| TURN SIGNAL R | Other than turn signal switch RH | Off |
| | Turn signal switch RH | On |
| TURN SIGNAL L | Other than turn signal switch LH | Off |
| | Turn signal switch LH | On |
| TAIL LAMP SW | Other than lighting switch 1ST and 2ND | Off |
| | Lighting switch 1ST or 2ND | On |
| HI BEAM SW | Other than lighting switch HI | Off |
| | Lighting switch HI | On |
| HEAD LAMP SW 1 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| HEAD LAMP SW 2 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| PASSING SW | Other than lighting switch PASS | Off |
| | Lighting switch PASS | On |
| AUTO LIGHT SW | Other than lighting switch AUTO | Off |
| | Lighting switch AUTO | On |
| FR FOG SW | Front fog lamp switch OFF | Off |
| | Front fog lamp switch ON | On |

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 >

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

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Monitor Item | Condition | Value/Status | |
|----------------|--|--------------|---|
| RKE-MODE CHG | LOCK/UNLOCK button of the key is not pressed and held simultaneously | Off | A |
| | LOCK/UNLOCK button of the key is pressed and held simultaneously | On | B |
| OPTICAL SENSOR | Bright outside of the vehicle | Close to 5 V | C |
| | Dark outside of the vehicle | Close to 0 V | |
| REQ SW -DR | Driver door request switch is not pressed | Off | D |
| | Driver door request switch is pressed | On | |
| REQ SW -AS | Passenger door request switch is not pressed | Off | E |
| | Passenger door request switch is pressed | On | |
| REQ SW -RR | NOTE: The item is indicated, but not monitored. | Off | F |
| REQ SW -RR | NOTE: The item is indicated, but not monitored. | Off | G |
| REQ SW -BD/TR | Back door request switch is not pressed | Off | H |
| | Back door request switch is pressed | On | |
| PUSH SW | Push-button ignition switch (push switch) is not pressed | Off | I |
| | Push-button ignition switch (push switch) is pressed | On | |
| IGN RLY2 -F/B | Ignition switch in OFF or ACC position | Off | J |
| | Ignition switch in ON position | On | |
| ACC RLY -F/B | NOTE: The item is indicated, but not monitored. | Off | K |
| CLUCH SW | NOTE: The item is indicated, but not monitored. | Off | L |
| BRAKE SW 1 | The brake pedal is depressed when No. 7 fuse is blown | Off | M |
| | The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal | On | |
| BRAKE SW 2 | The brake pedal is not depressed | Off | N |
| | Stop lamp switch 1 signal circuit is normal | On | |
| DETE/CANCL SW | Selector lever in P position | Off | O |
| | Selector lever in any position other than P | On | |
| SFT PN/N SW | Selector lever in any position other than P and N | Off | P |
| | Selector lever in P or N position | On | |
| S/L -LOCK | Steering is unlocked | Off | Q |
| | Steering is locked | On | |
| S/L -UNLOCK | Steering is locked | Off | R |
| | Steering is unlocked | On | |
| S/L RELAY-F/B | Ignition switch in OFF or ACC position | Off | S |
| | Ignition switch in ON position | On | |
| UNLK SEN -DR | Driver door is unlocked | Off | T |
| | Driver door is locked | On | |
| PUSH SW -IPDM | Push-button ignition switch (push-switch) is not pressed | Off | U |
| | Push-button ignition switch (push-switch) is pressed | On | |
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off | V |
| | Ignition switch in ON position | On | |
| DETE SW -IPDM | Selector lever in any position other than P | Off | W |
| | Selector lever in P position | On | |

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Monitor Item | Condition | Value/Status |
|----------------|---|-----------------------------------|
| SFT PN -IPDM | Selector lever in any position other than P and N | Off |
| | Selector lever in P or N position | On |
| SFT P -MET | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT N -MET | Selector lever in any position other than N | Off |
| | Selector lever in N position | On |
| ENGINE STATE | Engine stopped | Stop |
| | While the engine stalls | Stall |
| | At engine cranking | Crank |
| | Engine running | Run |
| S/L LOCK-IPDM | Steering is unlocked | Off |
| | Steering is locked | On |
| S/L UNLK-IPDM | Steering is locked | Off |
| | Steering is unlocked | On |
| S/L RELAY-REQ | Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK. | Off |
| | Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK. | On |
| VEH SPEED 1 | While driving | Equivalent to speedometer reading |
| VEH SPEED 2 | While driving | Equivalent to speedometer reading |
| DOOR STAT-DR | Driver door is locked | LOCK |
| | Wait with selective UNLOCK operation (5 seconds) | READY |
| | Driver door is unlocked | UNLOCK |
| DOOR STAT-AS | Passenger door is locked | LOCK |
| | Wait with selective UNLOCK operation (5 seconds) | READY |
| | Passenger door is unlocked | UNLOCK |
| ID OK FLAG | Steering is locked | Reset |
| | Steering is unlocked | Set |
| PRMT ENG STRT | The engine start is prohibited | Reset |
| | The engine start is permitted | Set |
| PRMT RKE STRT | NOTE: The item is indicated, but not monitored. | Reset |
| KEY SW -SLOT | The key is not inserted into key slot | Off |
| | The key is inserted into key slot | On |
| RKE OPE COUN1 | During the operation of the key | Operation frequency of the key |
| RKE OPE COUN2 | NOTE: The item is indicated, but not monitored. | — |
| CONFIRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done |
| CONFIRM ID4 | The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the fourth key ID registered to BCM. | Done |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

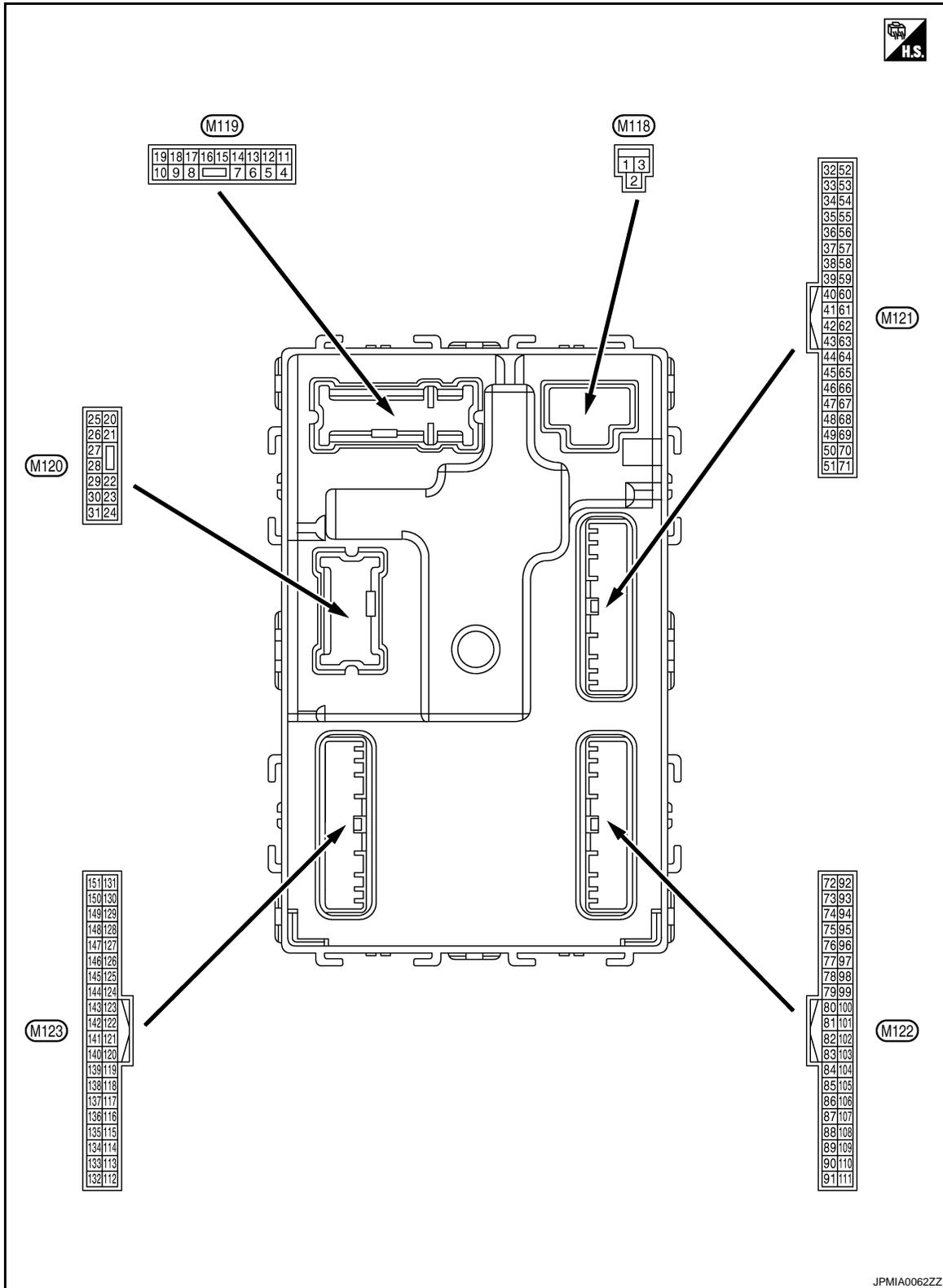
| Monitor Item | Condition | Value/Status | |
|--------------|---|-------------------------------|-----|
| CONFIRM ID3 | The key ID that the key slot receives is not recognized by the third key ID registered to BCM. | Yet | A |
| | The key ID that the key slot receives is recognized by the third key ID registered to BCM. | Done | B |
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet | C |
| | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done | |
| CONFIRM ID1 | The key ID that the key slot receives is not recognized by the first key ID registered to BCM. | Yet | D |
| | The key ID that the key slot receives is recognized by the first key ID registered to BCM. | Done | |
| TP 4 | The ID of fourth key is not registered to BCM | Yet | E |
| | The ID of fourth key is registered to BCM | Done | |
| TP 3 | The ID of third key is not registered to BCM | Yet | F |
| | The ID of third key is registered to BCM | Done | |
| TP 2 | The ID of second key is not registered to BCM | Yet | G |
| | The ID of second key is registered to BCM | Done | |
| TP 1 | The ID of first key is not registered to BCM | Yet | H |
| | The ID of first key is registered to BCM | Done | |
| AIR PRESS FL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front LH tire | I |
| AIR PRESS FR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front RH tire | J |
| AIR PRESS RR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear RH tire | |
| AIR PRESS RL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear LH tire | |
| ID REGST FL1 | ID of front LH tire transmitter is registered | Done | SEC |
| | ID of front LH tire transmitter is not registered | Yet | |
| ID REGST FR1 | ID of front RH tire transmitter is registered | Done | L |
| | ID of front RH tire transmitter is not registered | Yet | |
| ID REGST RR1 | ID of rear RH tire transmitter is registered | Done | M |
| | ID of rear RH tire transmitter is not registered | Yet | |
| ID REGST RL1 | ID of rear LH tire transmitter is registered | Done | N |
| | ID of rear LH tire transmitter is not registered | Yet | |
| WARNING LAMP | Tire pressure indicator OFF | Off | O |
| | Tire pressure indicator ON | On | |
| BUZZER | Tire pressure warning alarm is not sounding | Off | P |
| | Tire pressure warning alarm is sounding | On | |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

TERMINAL LAYOUT

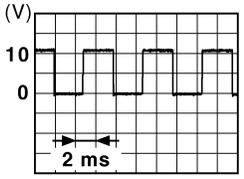


PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|---|--------|---|---|--|
| | | | | | | |
| + | - | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (GR) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | Battery voltage |
| 3 (L) | Ground | P/W power supply (RAP) | Output | Ignition switch ON | | Battery voltage |
| 4 (P) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply) | | 0 V |
| | | | | Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply) | | Battery voltage |
| 5 (G) | Ground | Passenger door UN- LOCK | Output | Passenger door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 7 (W) | Ground | Step lamp | Output | Step lamp | ON | 0 V |
| | | | | | | OFF |
| 8 (V) | Ground | All doors LOCK | Output | All doors | LOCK (Actuator is activated) | Battery voltage |
| | | | | | | Other than LOCK (Actuator is not activated) |
| 9 (G) | Ground | Driver door UNLOCK | Output | Driver door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | | Other than UNLOCK (Actuator is not activated) |
| 10 (P) | Ground | Rear RH door and rear LH door UN- LOCK | Output | Rear RH door and rear LH door | UNLOCK (Actuator is activated) | Battery voltage |
| | | | | | | Other than UNLOCK (Actuator is not activated) |
| 11 (LG) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 13 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 14 (O) | Ground | Push-button ignition switch illumination ground | Output | Tail lamp | OFF | 0 V |
| | | | | | ON | <p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p> |
| 15 (L) | Ground | ACC indicator lamp | Output | Ignition switch | OFF | Battery voltage |
| | | | | | ACC | 0.2 V |
| | | | | | ON | 0 V |

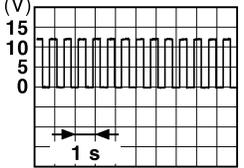
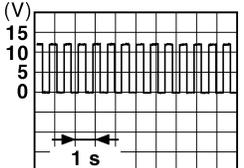
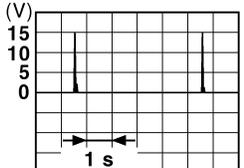
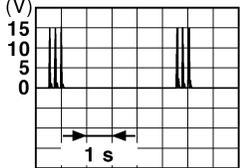
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|-------------------------------|------------------|------------------------|--|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 17 (G) | 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> |
| 18 (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> |
| 19 (Y) | Ground | Room lamp timer control | Output | Interior room lamp | OFF | Battery voltage |
| | | | | | ON | 0 V |
| 23 (BR) | Ground | Back door open | Output | Back door | OPEN (Back door opener actuator is activated) | Battery voltage |
| | | | | | Other than OPEN (Back door opener actuator is not activated) | 0 V |
| 26 (G) | Ground | Rear wiper | Output | Rear wiper | OFF (Stopped) | 0 V |
| | | | | | ON (Operated) | Battery voltage |
| 34*1 (B) | Ground | Luggage room anten- na (-) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | | When Intelligent Key is not in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|-----------------------------------|------------------|--|--------------------|
| + | - | Signal name | Input/ Output | | |
| 35*1 (W) | Ground | Luggage room antenna (+) | Output | Ignition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the passenger compartment | <p>JMKIA0063GB</p> |
| 38*1 (L) | Ground | Rear bumper antenna (-) | Output | When the back door request switch is operated with ignition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area | <p>JMKIA0063GB</p> |
| 39*1 (BR) | Ground | Rear bumper antenna (+) | Output | When the back door request switch is operated with ignition switch OFF | <p>JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area | <p>JMKIA0063GB</p> |
| 47 (L) | Ground | Ignition relay (IPDM E/R) control | Output | Ignition switch | Battery voltage |
| | | | | OFF or ACC | 0 V |

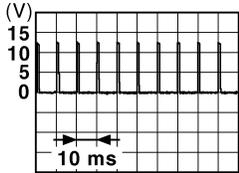
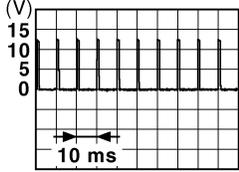
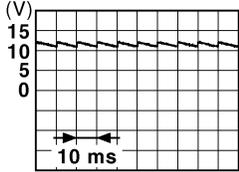
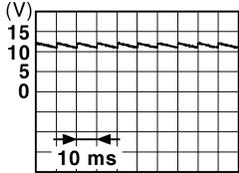
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

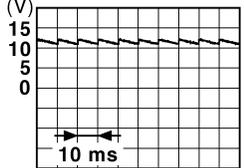
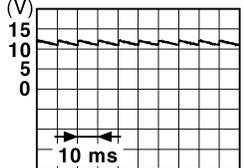
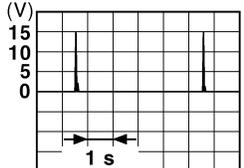
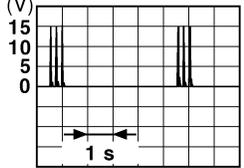
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|-------------------------------|------------------|-------------------------------|--|---|
| + | - | Signal name | Input/ Output | | | |
| 52 (R) | Ground | Starter relay control | Output | Ignition switch ON | When selector lever is in P or N position | Battery voltage |
| | | | | | When selector lever is not in P or N position | 0.3 V |
| | | | | Ignition switch OFF | 0 V | |
| 61*1 (R) | Ground | Back door request switch | Input | Back door re- quest switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  <p style="text-align: right; font-size: small;">JPMIA0016GB</p> |
| 64*1 (GR) | Ground | Warning buzzer | Output | Warning buzzer | Sounding | 0 V |
| | | | | | Not sounding | Battery voltage |
| 65 (O) | Ground | Rear wiper stop posi- tion | Input | Rear wiper | In stop position |  <p style="text-align: right; font-size: small;">JPMIA0016GB</p> |
| | | | | | Not in stop position | 0 V |
| | | | | | OFF (When back door closes) |  <p style="text-align: right; font-size: small;">JPMIA0011GB</p> |
| 66 (Y) | Ground | Back door switch | Input | Back door switch | ON (When back door opens) | 0 V |
| | | | | | Pressed | 0 V |
| 67 (LG) | Ground | Back door opener switch | Input | Back door opener switch | Not pressed |  <p style="text-align: right; font-size: small;">JPMIA0011GB</p> |
| | | | | | 11.8 V | |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|------------------------|--|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 68 (W) | Ground | Rear RH door switch | Input | Rear RH door switch | OFF (When rear RH door closes) |  11.8 V |
| | | | | Rear RH door switch | ON (When rear RH door opens) | 0 V |
| 69 (R) | Ground | Rear LH door switch | Input | Rear LH door switch | OFF (When rear LH door closes) |  11.8 V |
| | | | | Rear LH door switch | ON (When rear LH door opens) | 0 V |
| 72*1 (B) | Ground | Room antenna 2 (-) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compart- ment |  12 V |
| | | | | Ignition switch OFF | When Intelligent Key is not in the passenger compart- ment |  12 V |

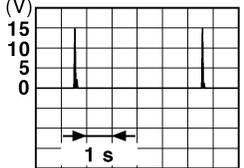
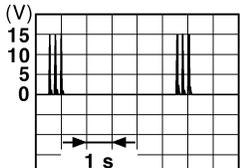
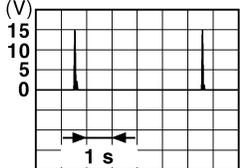
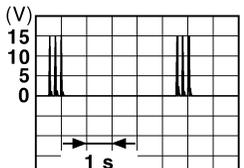
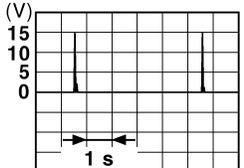
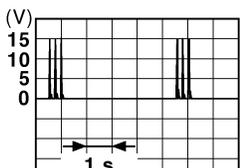
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

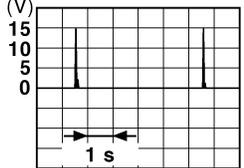
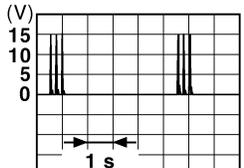
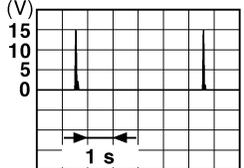
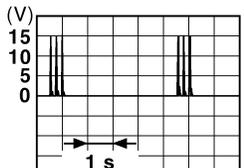
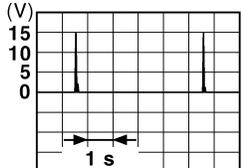
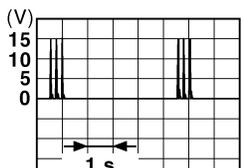
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|--|------------------|---|---|
| | | Signal name | Input/ Output | | |
| + | - | | | | |
| 73*1 (W) | Ground | Room antenna 2 (+) (Center console) | Output | Ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 74*1 (Y) | Ground | Passenger door an- tenna (-) | Output | When the pas- senger door re- quest switch is operated with ig- nition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 75*1 (LG) | Ground | Passenger door an- tenna (+) | Output | When the pas- senger door re- quest switch is operated with ig- nition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|--|------------------|--|---|
| | | Signal name | Input/ Output | | |
| + | - | | | | |
| 76*1 (V) | Ground | Driver door antenna (-) | Output | When Intelligent Key is in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When the driver door request switch is operat- ed with ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 77*1 (P) | Ground | Driver door antenna (+) | Output | When Intelligent Key is in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When the driver door request switch is operat- ed with ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 78*1 (R) | Ground | Room antenna 1 (-) (Instrument panel) | Output | When Intelligent Key is in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | Ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |

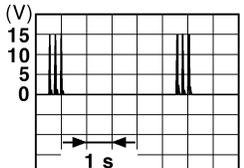
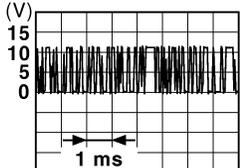
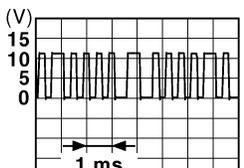
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

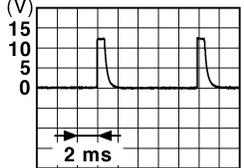
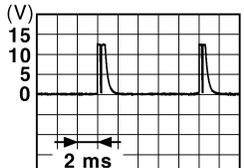
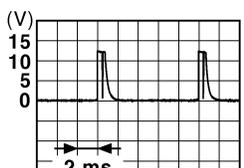
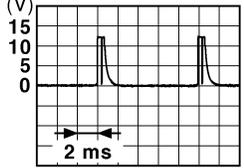
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|---|------------------|--|--|
| + | - | Signal name | Input/ Output | | |
| 79*1 (G) | Ground | Room antenna 1 (+) (Instrument panel) | Output | | |
| | | | | When Intelligent Key is not in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 80 (SB) | Ground | NATS antenna amp (built in key slot) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. Just after pressing ignition switch. Pointer of tester should move. |
| 81 (O) | Ground | NATS antenna amp (built in key slot) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. Just after pressing ignition switch. Pointer of tester should move. |
| 82 (BR) | Ground | Ignition relay [fuse block (J/B)] control | Output | Ignition switch | OFF or ACC ON 0 V Battery voltage |
| 83 (P) | Ground | Remote keyless entry receiver communica- tion | Input/ Output | During waiting |  <p style="text-align: right; font-size: small;">JMKIA0064GB</p> |
| | | | | When operating either button on the key |  <p style="text-align: right; font-size: small;">JMKIA0065GB</p> |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|-------------------------------|------------------|-----------------------|---|
| + | - | Signal name | Input/ Output | | |
| 87 (R) | Ground | Combination switch INPUT 5 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4)  1.4 V <small>JPMIA0041GB</small> |
| | | | | | Front fog lamp switch ON (Wiper intermittent dial 4)  1.3 V <small>JPMIA0037GB</small> |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4)  1.3 V <small>JPMIA0039GB</small> |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7  1.3 V <small>JPMIA0040GB</small> |

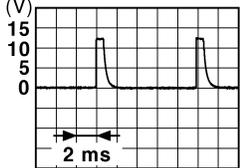
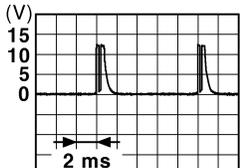
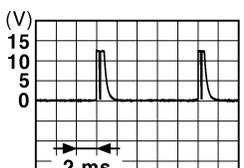
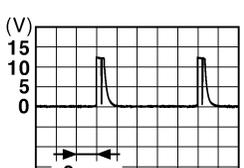
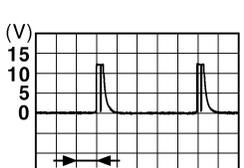
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

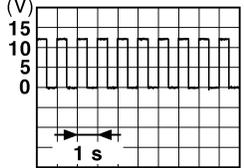
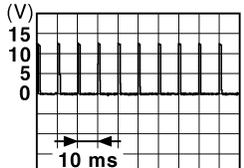
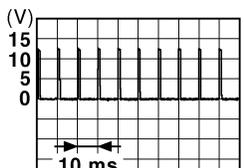
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|---|--|--|
| + | - | Signal name | Input/ Output | | | |
| 88 (GR) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  <p style="text-align: right; font-size: small;">JPMIA0041GB</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;">JPMIA0036GB</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;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) |  <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Any of the conditions below with all switches OFF |  <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p> |
| 89 (BR) | Ground | Push-button ignition switch (push switch) | Input | Push-button igni- tion switch (push switch) | Pressed | 0 V |
| | | | | | Not pressed | Battery voltage |
| 90 (P) | Ground | CAN - L | Input/ Output | — | — | |
| 91 (L) | Ground | CAN - H | Input/ Output | — | — | |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|----------------------------------|---------------------------|---|
| + | - | Signal name | Input/ Output | | | |
| 92 (R)*1 (L)*2 | Ground | Key slot illumination | Output | Key slot illumination | OFF | 0 V |
| | | | | | Blinking |  <p style="text-align: right; font-size: small;">JPMIA0015GB</p> |
| | | | | | ON | Battery voltage |
| 93 (L) | Ground | ON indicator lamp | Output | Ignition switch | OFF or ACC | Battery voltage |
| | | | | | ACC | 0.2 V |
| | | | | | ON | 0 V |
| 95 (L) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | Battery voltage |
| 96 (Y) | Ground | Control device (de- tention switch) power supply | Output | — | — | Battery voltage |
| 97 (O) | Ground | Steering lock condi- tion No. 1 | Input | Steering lock | LOCK status | 0 V |
| | | | | | UNLOCK status | Battery voltage |
| 98 (L) | Ground | Steering lock condi- tion No. 2 | Input | Steering lock | LOCK status | Battery voltage |
| | | | | | UNLOCK status | 0 V |
| 99 (V) | Ground | Selector lever P posi- tion switch | Input | Selector lever | P position | 0 V |
| | | | | | Any position other than P | Battery voltage |
| 100*1 (P) | Ground | Passenger door re- quest switch | Input | Passenger door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  <p style="text-align: right; font-size: small;">JPMIA0016GB</p> |
| 101*1 (W) | Ground | Driver door request switch | Input | Driver door re- quest switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  <p style="text-align: right; font-size: small;">JPMIA0016GB</p> |
| 102 (Y) | Ground | Blower fan motor re- lay control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 103 (L) | Ground | Remote keyless entry receiver power sup- ply | Output | Ignition switch OFF | — | Battery voltage |

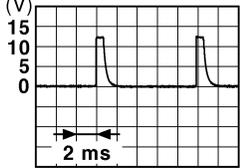
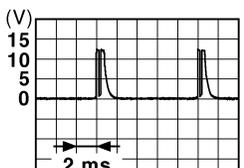
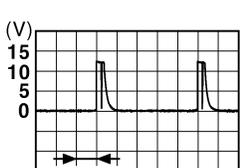
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

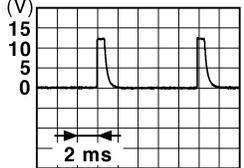
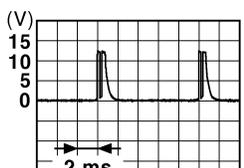
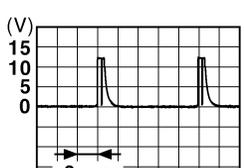
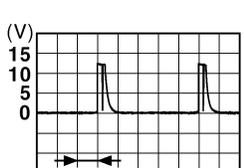
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|------------------------------------|------------------|---|------------------------|---|
| + | - | Signal name | Input/ Output | | | |
| 106 (Y) | Ground | Steering lock unit power supply | Output | | | Ignition switch |
| | | | | ON | 0 V | |
| 107 (O) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  <p style="text-align: right;">1.4 V</p> |
| | | | | | Turn signal switch LH |  <p style="text-align: right;">1.3 V</p> |
| | | | | | Turn signal switch RH |  <p style="text-align: right;">1.3 V</p> |
| | | | | | Front wiper switch LO |  <p style="text-align: right;">1.3 V</p> |
| | | | | | Front washer switch ON |  <p style="text-align: right;">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 | | | |
| + | - | | | | | |
| 108 (P) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper intermittent dial 4) |  1.4 V |
| | | | | | Lighting switch AUTO (Wiper intermittent dial 4) |  1.3 V |
| | | | | | Lighting switch 1ST (Wiper intermittent dial 4) |  1.3 V |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) |  1.3 V |
| | | | | | Any of the conditions below with all switches OFF |  1.3 V |

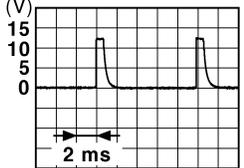
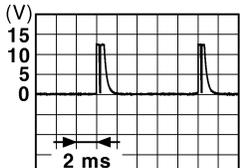
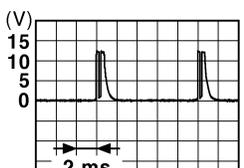
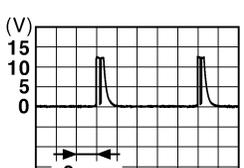
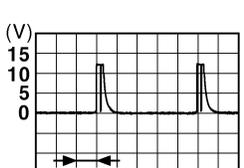
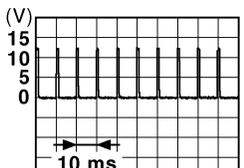
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

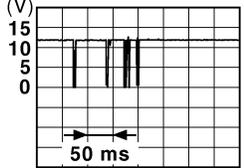
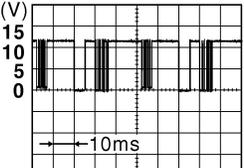
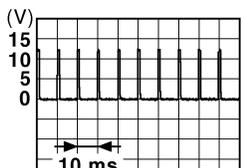
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|-------------------------------|------------------|--|--|--|
| + | - | Signal name | Input/ Output | | | |
| 109 (SB) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper intermittent dial 4) | All switches OFF |  <small>JPMIA0041GB</small> 1.4 V |
| | | | | | Lighting switch PASS |  <small>JPMIA0037GB</small> 1.3 V |
| | | | | | Lighting switch 2ND |  <small>JPMIA0036GB</small> 1.3 V |
| | | | | | Front wiper switch INT/ AUTO |  <small>JPMIA0038GB</small> 1.3 V |
| | | | | | Front wiper switch HI |  <small>JPMIA0040GB</small> 1.3 V |
| | | | | | ON | 0 V |
| 110 (G) | Ground | Hazard switch | Input | Hazard switch |  <small>JPMIA0012GB</small> 1.1 V | |
| | | | | OFF | | |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|--|---|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 111 (LG) | Ground | Steering lock unit communication | Input/ Output | Steering lock | LOCK status | Battery voltage |
| | | | | | LOCK or UNLOCK |  <p style="text-align: right; font-size: small;">JMKIA0066GB</p> |
| | | | | | For 15 seconds after UN- LOCK | Battery voltage |
| | | | | 15 seconds or later after UNLOCK | 0 V | |
| 112 (R) | Ground | Rain sensor serial link | Input/ Output | Ignition switch ON |  <p style="text-align: right; font-size: small;">JPMIA0156GB</p> | |
| | | | | | 8.7 V | |
| 113*3 (O) | Ground | Optical sensor | Input | Ignition switch ON | When bright outside of the vehicle | Close to 5 V |
| | | | | | When dark outside of the vehicle | Close to 0 V |
| 116 (GR) | Ground | Stop lamp switch 1 | Input | — | Battery voltage | |
| 118 (L) | Ground | Stop lamp switch 2 | Input | Stop lamp switch | OFF (Brake pedal is not depressed) | 0 V |
| | | | | | ON (Brake pedal is de- pressed) | Battery voltage |
| 119*1 (W) | Ground | Front door lock as- sembly driver side (Unlock sensor) | Input | Driver door | LOCK status (unlock sen- sor switch OFF) |  <p style="text-align: right; font-size: small;">JPMIA0012GB</p> |
| | | | | | | 1.1 V |
| | | | | | UNLOCK status (unlock sensor switch ON) | 0 V |
| 121 (Y) | Ground | Key slot switch | Input | When the key is inserted into key slot | Battery voltage | |
| | | | | When the key is not inserted into key slot | 0 V | |
| 122 (R) | Ground | ACC feedback | Input | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | Battery voltage |
| 123 (G) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |

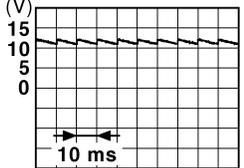
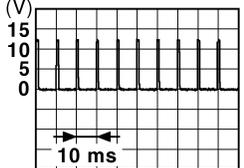
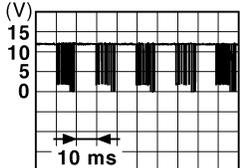
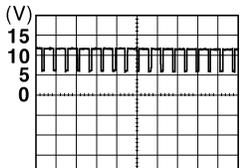
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

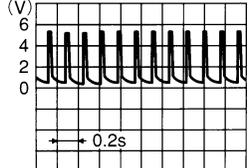
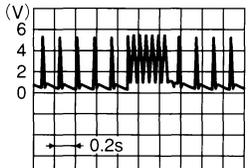
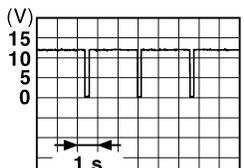
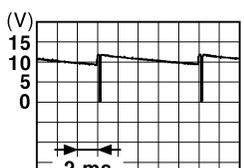
< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|--|--|--|
| + | - | Signal name | Input/ Output | | | |
| 124 (R) | Ground | Passenger door switch | Input | Passenger door switch | OFF (When passenger door closes) |  11.8 V |
| | | | | | ON (When passenger door opens) | 0 V |
| 130*4 (BR) | Ground | Rear window defogger switch | Input | Ignition switch ON | Rear window defogger switch OFF |  1.1 V |
| | | | | | Rear window defogger switch ON | 0 V |
| 132 (G) | Ground | Power window switch communication | Input/ Output | Ignition switch ON |  10.2 V | |
| | | | | Ignition switch OFF or ACC | Battery voltage | |
| 133 (W) | Ground | Push-button ignition switch illumination | Output | Push-button ignition switch illumination | ON (When tail lamps OFF) | 9.5 V |
| | | | | | ON (When tail lamps ON) | <p style="text-align: center;">NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p>  9.5 V |
| 137 (P) | Ground | Receiver and sensor ground | Input | Ignition switch ON | OFF | 0 V |
| | | | | | ACC or ON | 5.0 V |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|---|------------------|---|--|
| | | Signal name | Input/ Output | | |
| + | - | | | | |
| 139*5 (O) | Ground | Tire pressure receiver communication | Input/ Output | Ignition switch ON | Standby state  OCC3881D |
| | | | | | When receiving the signal from the transmitter  OCC3880D |
| 140 (GR) | Ground | Selector lever P/N position | Input | Selector lever | P or N position Battery voltage |
| | | | | | Except P and N positions 0 V |
| 141 (O) | Ground | Security indicator | Output | Security indicator | ON 0 V |
| | | | | Blinking  JPMIA0014GB 11.3 V | |
| | | | | OFF | Battery voltage |
| | | | | | |
| 142 (L) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper intermittent dial 4) | All switches OFF 0 V |
| | | | | | Lighting switch 1ST |
| | | | | | Lighting switch HI |
| | | | | | Lighting switch 2ND |
| | | Turn signal switch RH  JPMIA0031GB 10.7 V | | | |
| 143 (W) | Ground | Combination switch OUTPUT 1 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) 0 V |
| | | | | | Front wiper switch HI (Wiper intermittent dial 4) |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) |
| | | | | | Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7  JPMIA0032GB 10.7 V |

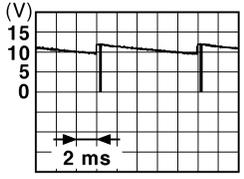
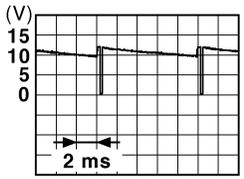
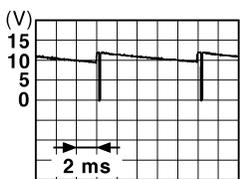
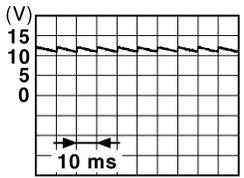
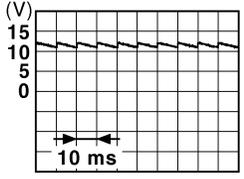
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | | |
|------------------------------|--------|---|------------------|---|--|---|--------|
| + | - | Signal name | Input/ Output | | | | |
| 144 (P) | Ground | Combination switch OUTPUT 2 | Output | Combination switch | All switches OFF (Wiper intermittent dial 4) | 0 V | |
| | | | | | Front washer switch ON (Wiper intermittent dial 4) |  | |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) | | |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) | | |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 | | 10.7 V |
| 145 (V) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper intermit- tent dial 4) | All switches OFF | 0 V | |
| | | | | | Front wiper switch INT/ AUTO |  | |
| | | | | | Front wiper switch LO | | |
| | | | | | Lighting switch AUTO | | 10.7 V |
| 146 (Y) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper intermit- tent dial 4) | All switches OFF | 0 V | |
| | | | | | Front fog lamp switch ON |  | |
| | | | | | Lighting switch 2ND | | |
| | | | | | Lighting switch PASS | | |
| | | | | | Turn signal switch LH | | 10.7 V |
| 149*5 (W) | Ground | Tire pressure warn- ing check switch | Input | Ignition switch ON |  | 11.8 V | |
| 150 (SB) | Ground | Driver door switch | Input | Driver door switch | OFF (When driver door closes) |  | 11.8 V |
| | | | | | ON (When driver door opens) | 0 V | |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|------------------------------------|------------------|----------------------|---------------|--------------------|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 151 (G) | Ground | Rear window defogger relay control | Output | Rear window defogger | Active | 0 V |
| | | | | | Not activated | Battery voltage |

NOTE:

- *1: With Intelligent Key system
- *2: Without Intelligent Key system
- *3: With auto light system
- *4: Without BOSE audio system
- *5: With TPMS

Wiring Diagram - BCM -

INFOID:000000004747823

UP TO VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

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

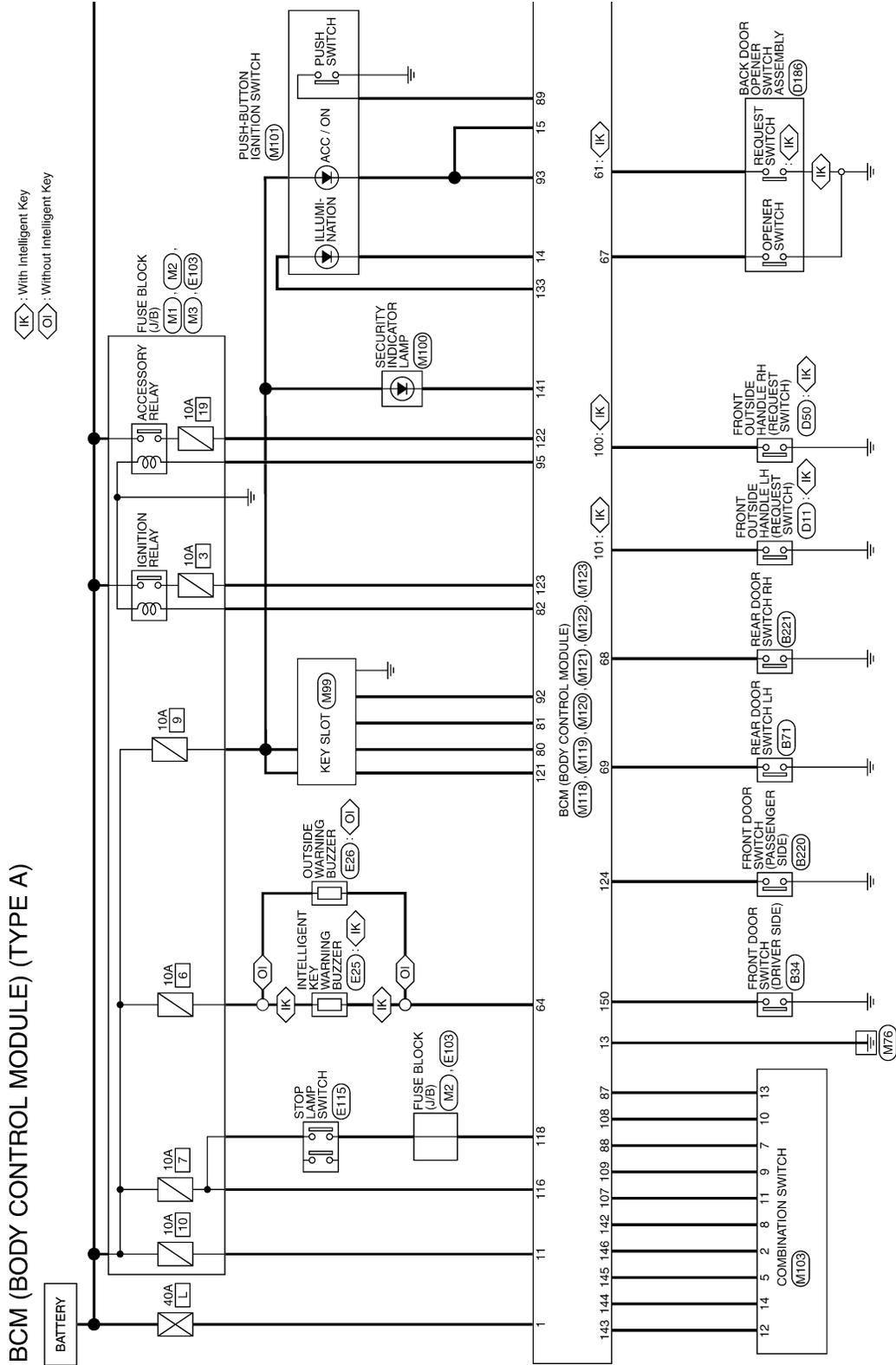
SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

JN8AZ18U*9W710000, JN8AZ18W*9W810000 (FOR MEXICO)



2008/09/23

JCMWM3152G

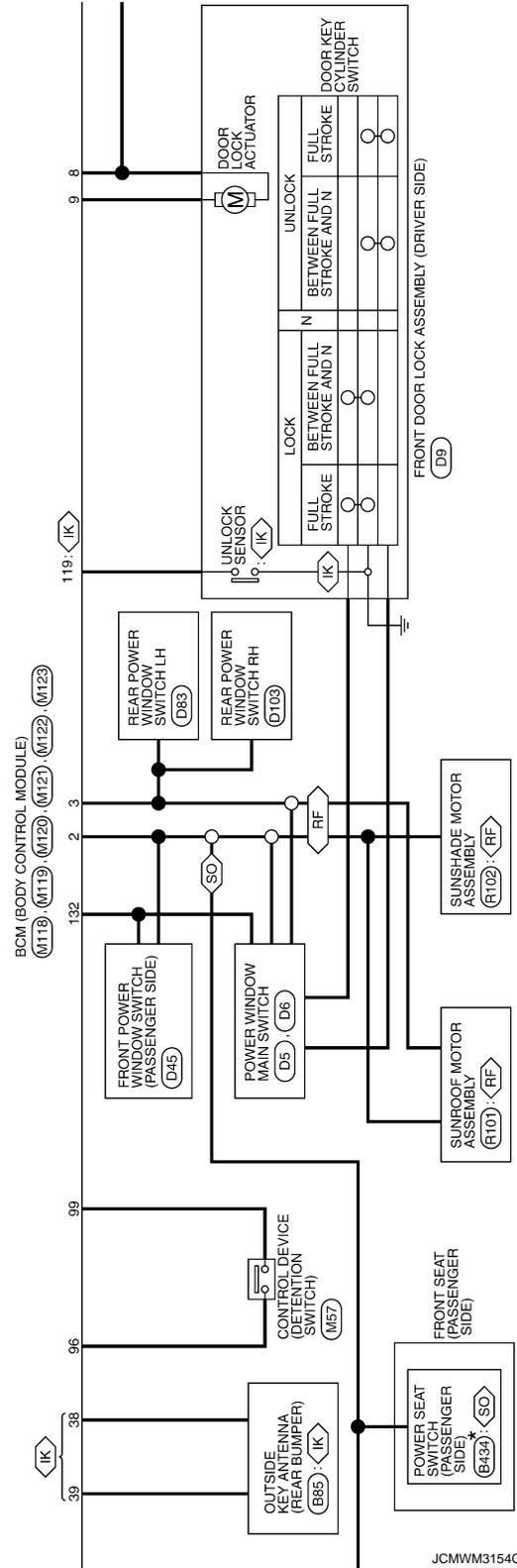
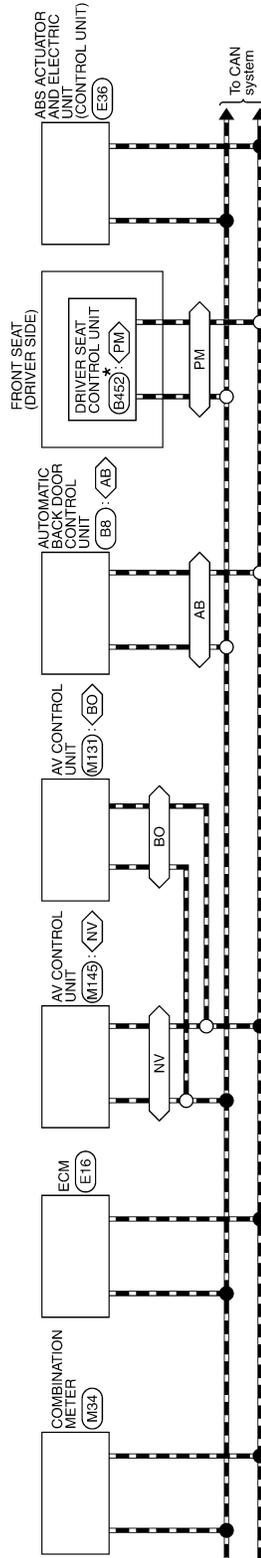
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

- ◊ IK : With Intelligent Key
- ◊ NV : With navigation system
- ◊ BC : With BOSE system without navigation system
- ◊ FE : With sunroof
- ◊ PM : With automatic drive positioner
- ◊ SO : With power seat without automatic drive positioner
- ◊ AB : With automatic back door

*: This connector is not shown in "Harness Layout".

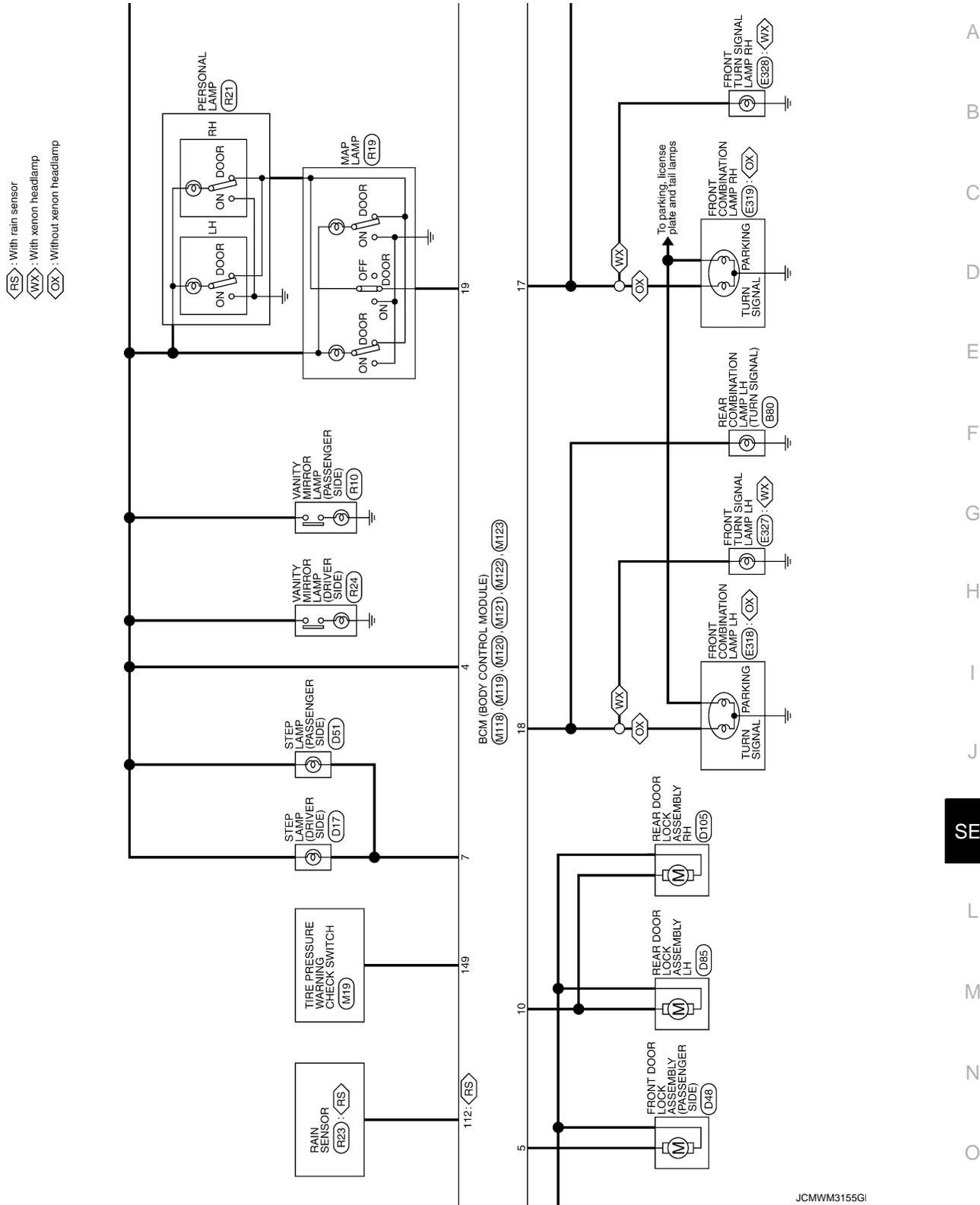


JCMWWM3154G

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCMWM3155G1

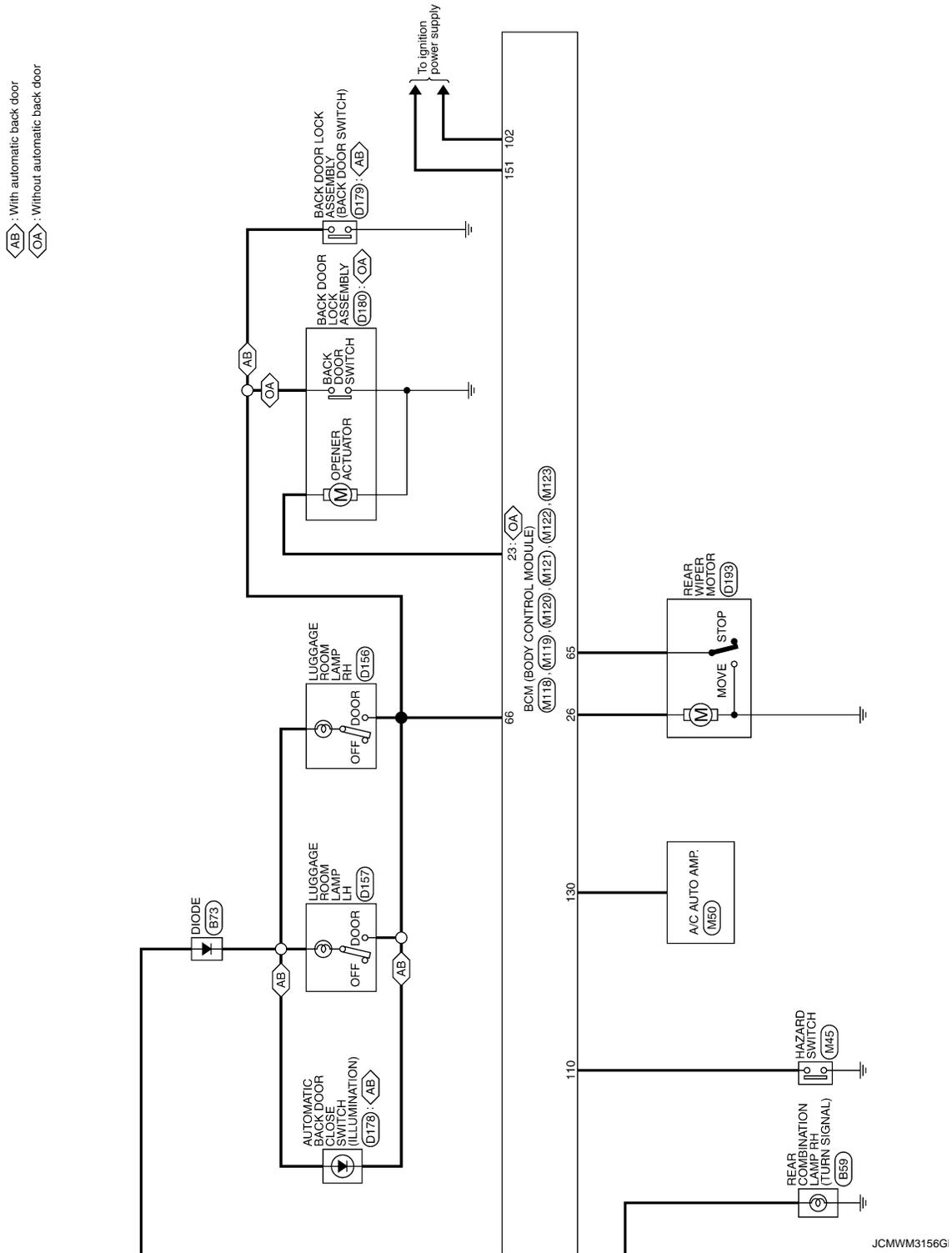
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



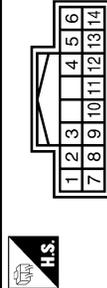
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

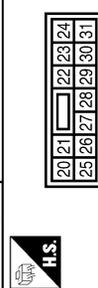
BCM (BODY CONTROL MODULE) (TYPE A)

| | |
|----------------|--------------------|
| Connector No. | M113 |
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2 | Y | OUTPUT 4 |
| 3 | V | OUTPUT 3 |
| 5 | GR | INPUT 3 |
| 7 | L | OUTPUT 5 |
| 8 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |

| | |
|----------------|---------------------------|
| Connector No. | M120 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS12FW-CS |



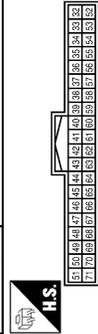
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 23 | BR | BACK DOOR OPEN OUTPUT |
| 26 | G | REAR WIPER OUTPUT |

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



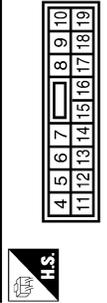
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 1 | W | BAT (F/L) |
| 2 | GR | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | L | POWER WINDOW POWER SUPPLY (RAP) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 34 | B | LUGGAGE ROOM ANTI- |
| 35 | W | LUGGAGE ROOM ANTI+ |
| 38 | L | REAR BUMPER ANTI- |
| 39 | BR | REAR BUMPER ANTI+ |
| 47 | L | IGN RELAY /PDM E/R CONT |
| 52 | R | STARTER RELAY CONT |
| 61 | R | BACK DOOR OPENER REQUEST SW |
| 64 | GR | REQUEST SW BUZZER |
| 65 | O | REAR WIPER STOP POSITION |
| 66 | Y | BACK DOOR SW |
| 67 | LG | BACK DOOR OPENER SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------------|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | G | PASSENGER DOOR UNLOCK OUTPUT |
| 7 | W | STEP LAMP OUTPUT |
| 8 | V | ALL DOOR FUEL LID LOCK OUTPUT |
| 9 | G | DRIVER DOOR FUEL LID UNLOCK OUTPUT |
| 10 | P | REAR DOOR UNLOCK OUTPUT |
| 11 | LG | BAT (FUSE) |
| 13 | B | GND |
| 14 | O | PUSH-BUTTON IGNITION SW ILL GND |
| 15 | L | ACC IND |
| 17 | G | TURN SIGNAL RH |

| | | |
|----|---|-----------------|
| 68 | W | REAR RH DOOR SW |
| 69 | R | REAR LH DOOR SW |

| | | |
|----|----|-------------------------|
| 18 | BR | TURN SIGNAL LH |
| 19 | Y | ROOM LAMP TIMER CONTROL |

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

SEC

JCMWM3157G1

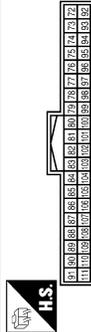
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE A)

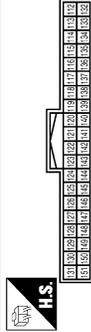
| | |
|----------------|---------------------------|
| Connector No. | M122 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | B | ROOM ANT2- |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT- |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1- |
| 79 | G | ROOM ANT1+ |
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 82 | BR | IGN RELAY (F/B) CONT |

| | | |
|-----|----|---------------------------------------|
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 92 | R | KEY SLOT ILL[With Intelligent Key] |
| 93 | L | KEY SLOT ILL[Without Intelligent Key] |
| 94 | L | ON IND |
| 95 | L | ACC RELAY CONT |
| 96 | Y | A/T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |
| 98 | L | S/L CONDITION 2 |
| 99 | V | SHIFT P |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 102 | Y | BLOWER FAN MOTOR RELAY CONT |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |
| 106 | Y | S/L POWER SUPPLY |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |
| 110 | G | HAZARD SW |
| 111 | LG | S/L COMM |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 112 | R | RAIN SENSOR SERIAL LINK |
| 113 | O | OPTICAL SENSOR |
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 119 | W | DR DOOR UNLOCK SENSOR |
| 121 | Y | KEY SLOT SW |
| 122 | R | ACC F/B |
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 130 | BR | REAR DEFOGGER SW |
| 132 | G | POWER WINDOW SW COMM |

| | | |
|-----|----|-----------------------------------|
| 133 | W | PUSH-BUTTON IGNITION SW ILL POWER |
| 137 | P | RECEIVER SENSOR GND |
| 138 | V | RECEIVER SENSOR POWER SUPPLY |
| 139 | O | TIRE PRESS RECEIVER SIGNAL |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 149 | W | TIRE PRESS WARNING CHECK SW |
| 150 | SB | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFOGGER RELAY |

JCMW3158G

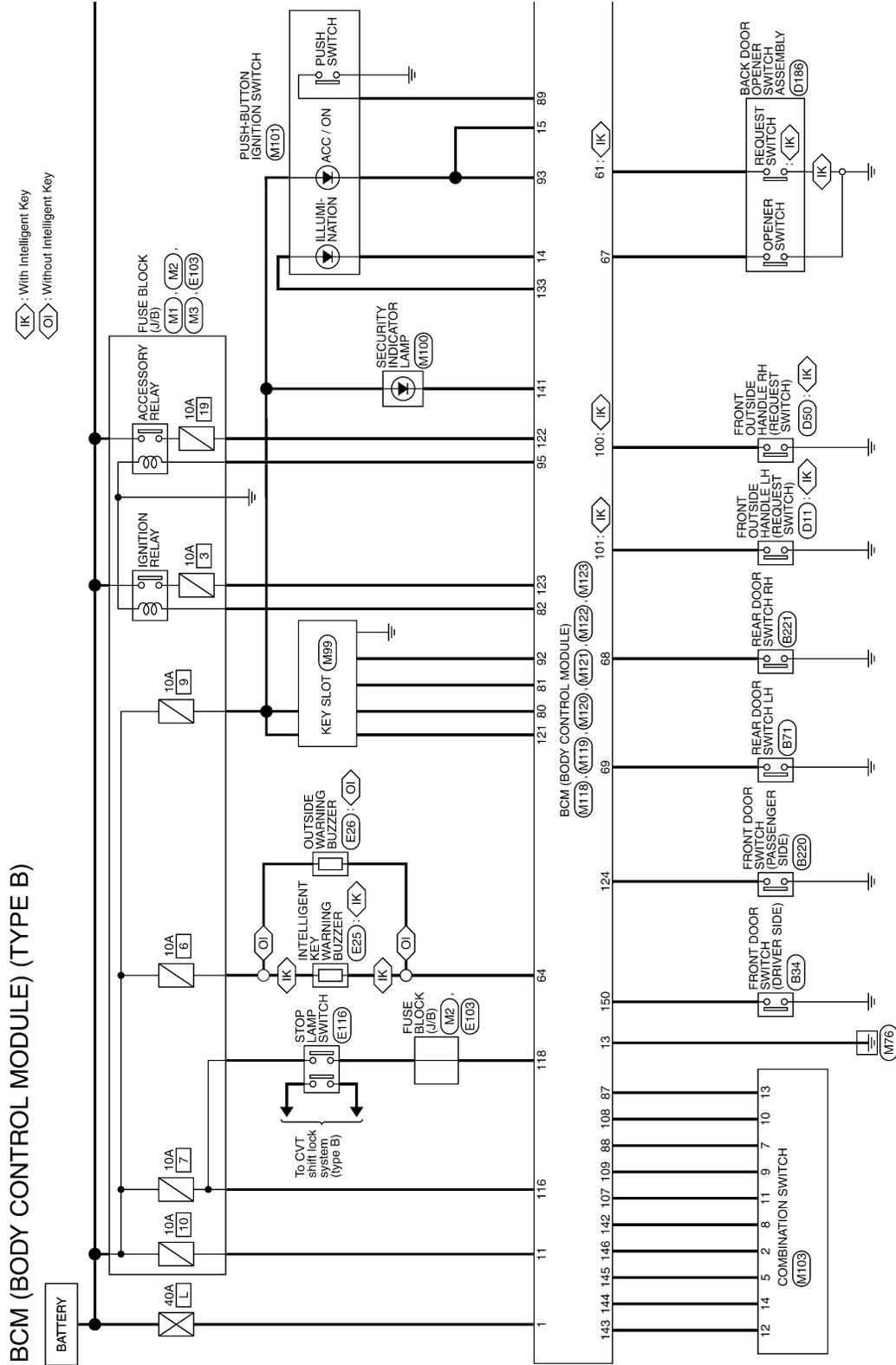
FROM VIN: JN8AZ18U*9W100001, JN8AZ18W*9W200001 (EXCEPT FOR MEXICO),

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

JN8AZ18U*9W710001, JN8AZ18W*9W810001 (FOR MEXICO)



2008/09/23

JCMWM3159GI

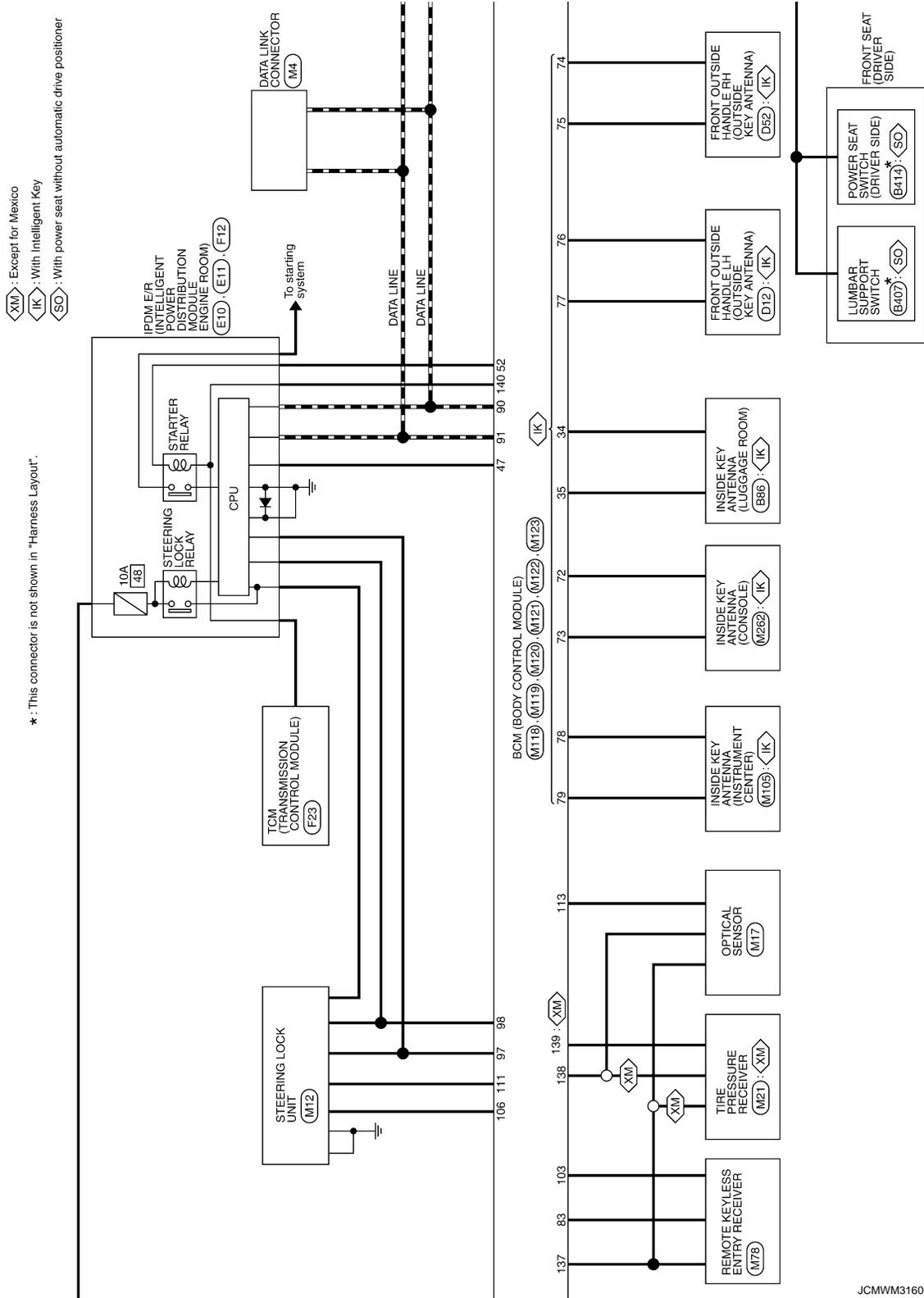
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



JCMWM3160G

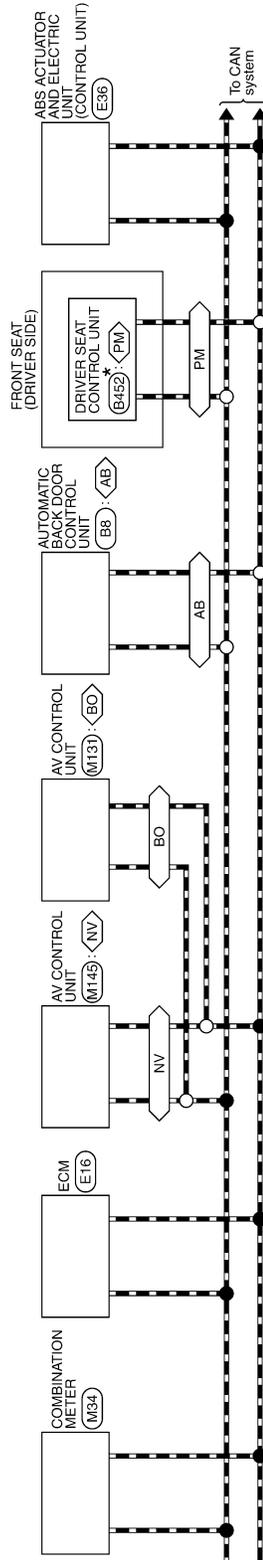
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

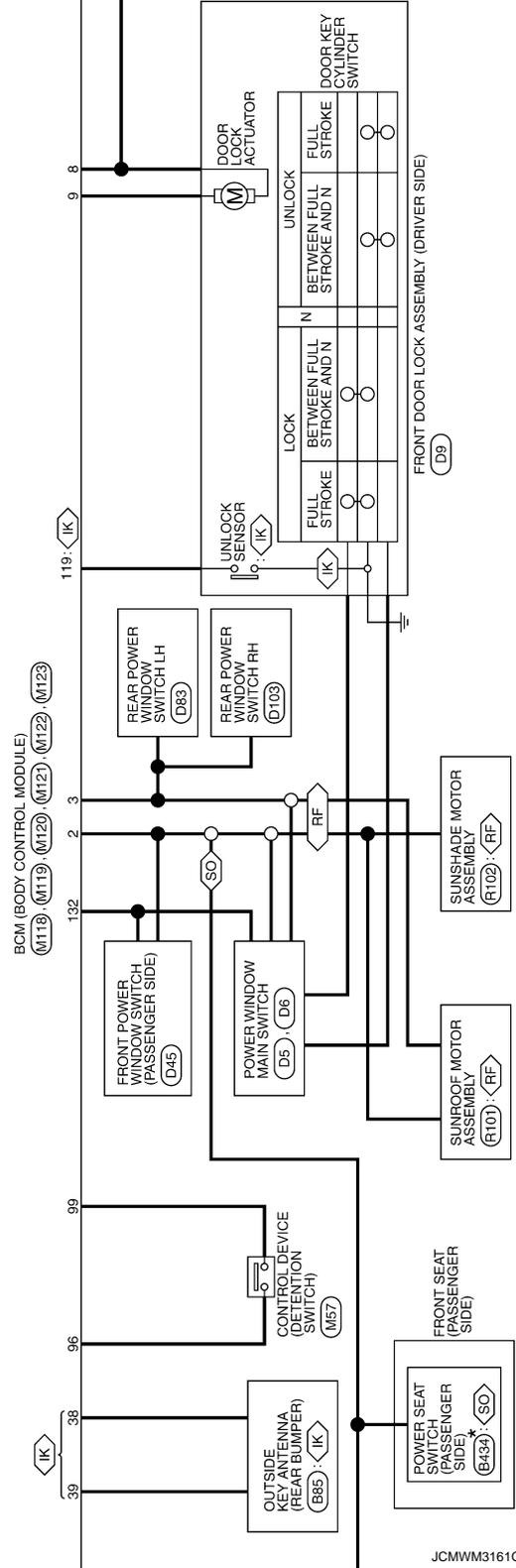
< ECU DIAGNOSIS >

- ◊ IK : With Intelligent Key
- ◊ NV : With navigation system
- ◊ BO : With BOSE system without navigation system
- ◊ PM : With sunroof
- ◊ SO : With automatic drive positioner
- ◊ AB : With automatic back door

* : This connector is not shown in "Harness Layout".



BCM (BODY CONTROL MODULE)



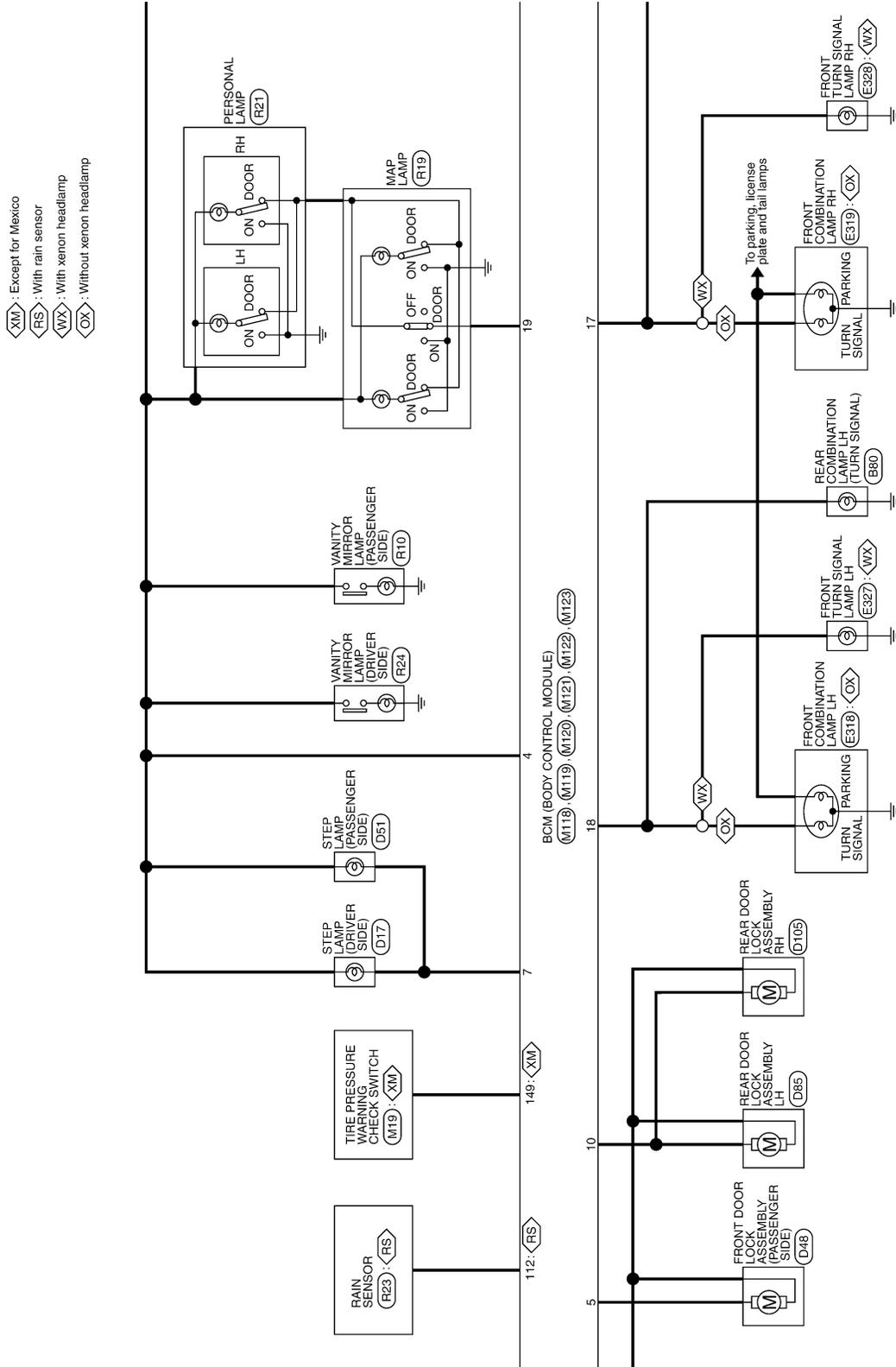
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

SEC

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

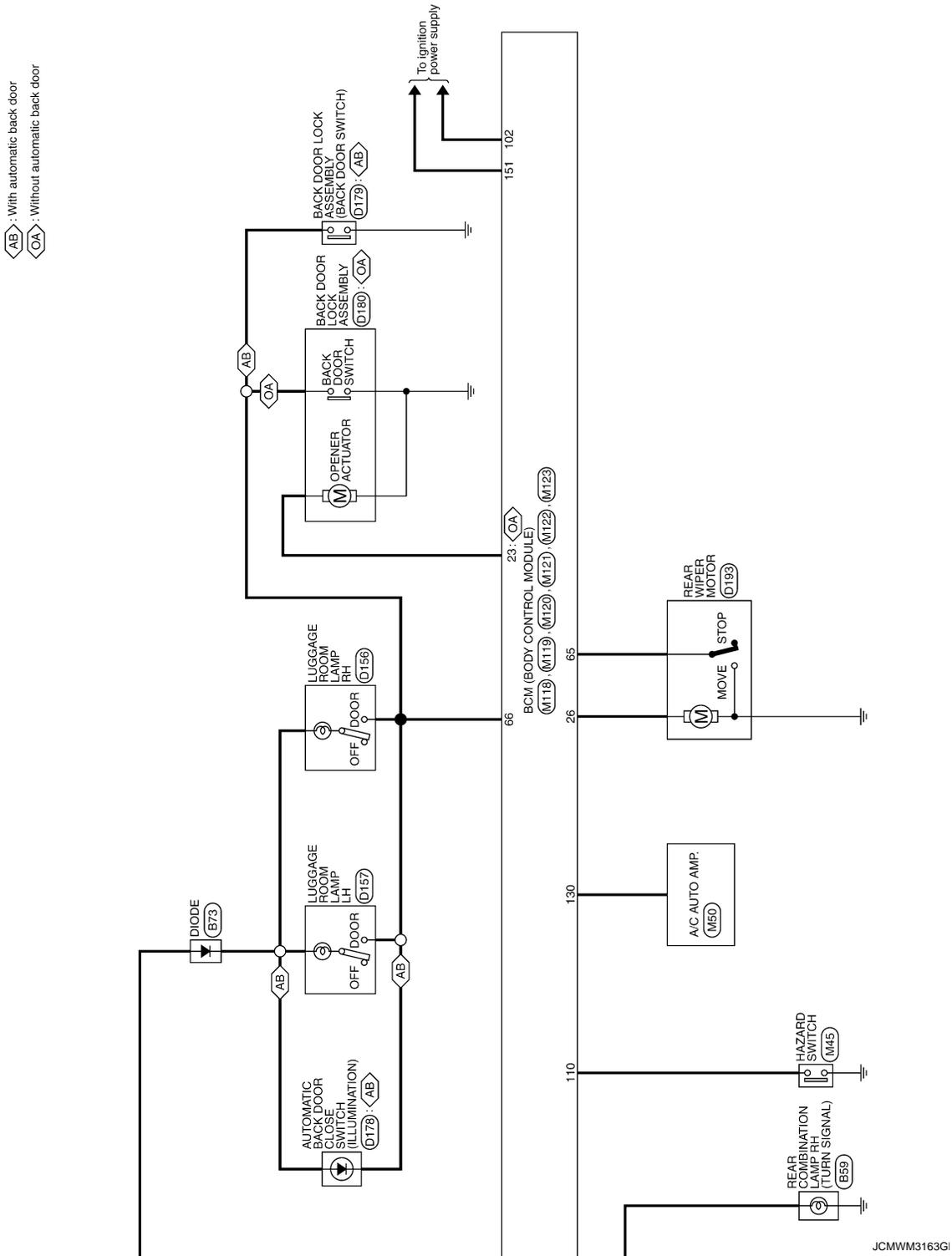


JCMW3162G

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >



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

SEC

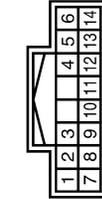
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE B)

| | |
|----------------|--------------------|
| Connector No. | M103 |
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2 | Y | OUTPUT 4 |
| 5 | V | OUTPUT 3 |
| 7 | GR | INPUT 3 |
| 8 | L | OUTPUT 5 |
| 9 | SB | INPUT 2 |
| 10 | P | INPUT 4 |
| 11 | O | INPUT 1 |
| 12 | W | OUTPUT 1 |
| 13 | R | INPUT 5 |
| 14 | P | OUTPUT 2 |



| | |
|----------------|---------------------------|
| Connector No. | M120 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS12FW-CS |

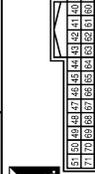


| | |
|----------------|---------------------------|
| Connector No. | M118 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LC |



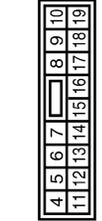
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 1 | W | BAT (F/L) |
| 2 | GR | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | L | POWER WINDOW POWER SUPPLY (RAP) |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 23 | BR | BACK DOOR OPEN OUTPUT |
| 26 | G | REAR WIPER OUTPUT |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------------|
| 4 | P | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | G | PASSENGER DOOR UNLOCK OUTPUT |
| 7 | W | STEP LAMP OUTPUT |
| 8 | V | ALL DOOR FUEL LID LOCK OUTPUT |
| 9 | G | DRIVER DOOR FUEL LID UNLOCK OUTPUT |
| 10 | P | REAR DOOR UNLOCK OUTPUT |
| 11 | LG | BAT (GUSE) |
| 13 | B | GND |
| 14 | O | PUSH-BUTTON IGNITION SW ILL GND |
| 15 | L | ACC IND |
| 17 | G | TURN SIGNAL RH |

| | | | | | |
|--------------|----|---------------|---|-----------------------------|-----------------|
| Terminal No. | 68 | Color of Wire | W | Signal Name [Specification] | REAR RH DOOR SW |
| 69 | R | Color of Wire | R | Signal Name [Specification] | REAR LH DOOR SW |

| | | | | | |
|--------------|----|---------------|----|-----------------------------|-------------------------|
| Terminal No. | 18 | Color of Wire | BR | Signal Name [Specification] | TURN SIGNAL LH |
| 19 | Y | Color of Wire | Y | Signal Name [Specification] | ROOM LAMP TIMER CONTROL |

JCMWM3164G

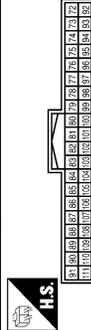
BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE) (TYPE B)

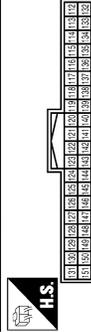
| | |
|----------------|---------------------------|
| Connector No. | M122 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | B | ROOM ANT2- |
| 73 | W | ROOM ANT2+ |
| 74 | Y | PASSENGER DOOR ANT- |
| 75 | LG | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | P | DRIVER DOOR ANT+ |
| 78 | R | ROOM ANT1- |
| 79 | G | ROOM ANT1+ |
| 80 | SB | IMMOBI ANTENNA CONTROL |
| 81 | O | IMMOBI ANTENNA SIGNAL |
| 82 | BR | IGN RELAY (F/B) CONT |

| | | |
|-----|----|---------------------------------------|
| 83 | P | KEYLESS ENTRY RECEIVER SIGNAL |
| 87 | R | COMBI SW INPUT 5 |
| 88 | GR | COMBI SW INPUT 3 |
| 89 | BR | PUSH SW |
| 90 | P | CAN-L |
| 91 | L | CAN-H |
| 92 | R | KEY SLOT ILL[With Intelligent Key] |
| 93 | L | KEY SLOT ILL[Without Intelligent Key] |
| 95 | L | ACC RELAY CONT |
| 96 | Y | A-T DEVICE POWER SUPPLY |
| 97 | O | S/L CONDITION 1 |
| 98 | L | S/L CONDITION 2 |
| 99 | V | SHIFT P |
| 100 | P | PASSENGER DOOR REQUEST SW |
| 101 | W | DRIVER DOOR REQUEST SW |
| 102 | Y | BLOWER FAN MOTOR RELAY CONT |
| 103 | L | KEYLESS ENTRY RECEIVER POWER SUPPLY |
| 106 | Y | S/L POWER SUPPLY |
| 107 | O | COMBI SW INPUT 1 |
| 108 | P | COMBI SW INPUT 4 |
| 109 | SB | COMBI SW INPUT 2 |
| 110 | G | HAZARD SW |
| 111 | LG | S/L COMM |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 112 | R | RAIN SENSOR SERIAL LINK |
| 113 | O | OPTICAL SENSOR |
| 116 | GR | FUSE CHECK |
| 118 | L | STOP LAMP SW |
| 119 | W | DR DOOR UNL OCK SENSOR |
| 121 | Y | KEY SLOT SW |
| 122 | R | ACC F/B |
| 123 | G | IGN F/B |
| 124 | R | PASSENGER DOOR SW |
| 130 | BR | REAR DEFOGGER SW |
| 132 | G | POWER WINDOW SW COMM |

| | | |
|-----|----|-----------------------------------|
| 133 | W | PUSH-BUTTON IGNITION SW ILL POWER |
| 137 | P | RECEIVER SENSOR GND |
| 138 | V | RECEIVER SENSOR POWER SUPPLY |
| 139 | O | TIRE PRESS RECEIVER SIGNAL |
| 140 | GR | SHIFT N/P |
| 141 | O | SECURITY INDICATOR OUTPUT |
| 142 | L | COMBI SW OUTPUT 5 |
| 143 | W | COMBI SW OUTPUT 1 |
| 144 | P | COMBI SW OUTPUT 2 |
| 145 | V | COMBI SW OUTPUT 3 |
| 146 | Y | COMBI SW OUTPUT 4 |
| 149 | W | TIRE PRESS WARNING CHECK SW |
| 150 | SB | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFOGGER RELAY |

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

SEC

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

JCMWM3165GI

INFOID:000000004747824

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Display contents of CONSULT | Fail-safe | Cancellation |
|-----------------------------|-------------------------|---|
| B2013: ID DISCORD BCM-S/L | Inhibit engine cranking | Erase DTC |
| B2014: CHAIN OF S/L-BCM | Inhibit engine cranking | Erase DTC |
| B2190: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC |
| B2191: DIFFERENCE OF KEY | Inhibit engine cranking | Erase DTC |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC |
| B2195: ANTI SCANNING | Inhibit engine cranking | Ignition switch ON → OFF |
| B2557: VEHICLE SPEED | Inhibit steering lock | When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms |
| B2560: STARTER CONT RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal |
| B2601: SHIFT POSITION | Inhibit steering lock | 500 ms after the following signal reception status becomes consistent <ul style="list-style-type: none"> • Selector lever P position switch signal • P range signal (CAN) |
| B2602: SHIFT POSITION | Inhibit steering lock | 5 seconds after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more |
| B2603: SHIFT POSI STATUS | Inhibit steering lock | 500 ms after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V) |
| B2604: PNP SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF |
| B2605: PNP SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position <ul style="list-style-type: none"> - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON |
| B2606: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal) |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Display contents of CONSULT | Fail-safe | Cancellation |
|-----------------------------|--|--|
| B2607: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal) |
| B2608: STARTER RELAY | Inhibit engine cranking | 500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> Starter motor relay control signal Starter relay status signal (CAN) |
| B2609: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When the following steering lock conditions agree <ul style="list-style-type: none"> BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status |
| B260A: IGNITION RELAY | Inhibit engine cranking | 500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) |
| B260F: ENG STATE SIG LOST | Maintains the power supply position attained at the time of DTC detection | When any of the following conditions are fulfilled <ul style="list-style-type: none"> Power position changes to ACC Receives engine status signal (CAN) |
| B2612: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When any of the following conditions are fulfilled <ul style="list-style-type: none"> Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R) |
| B2617: STARTER RELAY CIRC | Inhibit engine cranking | 1 second after the starter motor relay control inside BCM becomes normal |
| B2618: BCM | Inhibit engine cranking | 1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal |
| B2619: BCM | Inhibit engine cranking | 1 second after the steering lock unit power supply output control inside BCM becomes normal |
| B261E: VEHICLE TYPE | Inhibit engine cranking | BCM initialization |
| B26E9: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled <ul style="list-style-type: none"> Steering condition No. 1 signal: LOCK (0V) Steering condition No. 2 signal: LOCK (Battery voltage) |

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

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

NOTE:

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

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

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

NOTE:

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

REAR WIPER MOTOR PROTECTION

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

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

Condition of cancellation

- More than 1 minute is passed after the rear wiper stop.

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 >

2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:000000004747825

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

| Priority | DTC |
|----------|---|
| 1 | B2562: LOW VOLTAGE |
| 2 | <ul style="list-style-type: none">• U1000: CAN COMM CIRCUIT• U1010: CONTROL UNIT (CAN) |
| 3 | <ul style="list-style-type: none">• B2190: NATS ANTENNA AMP• B2191: DIFFERENCE OF KEY• B2192: ID DISCORD BCM-ECM• B2193: CHAIN OF BCM-ECM• B2195: ANTI SCANNING |
| 4 | <ul style="list-style-type: none">• B2013: ID DISCORD BCM-S/L• B2014: CHAIN OF S/L-BCM• B2553: IGNITION RELAY• B2555: STOP LAMP• B2556: PUSH-BTN IGN SW• B2557: VEHICLE SPEED• B2560: STARTER CONT RELAY• B2601: SHIFT POSITION• B2602: SHIFT POSITION• B2603: SHIFT POSI STATUS• B2604: PNP SW• B2605: PNP SW• B2606: S/L RELAY• B2607: S/L RELAY• B2608: STARTER RELAY• B2609: S/L STATUS• B260A: IGNITION RELAY• B260B: STEERING LOCK UNIT• B260C: STEERING LOCK UNIT• B260D: STEERING LOCK UNIT• B260F: ENG STATE SIG LOST• B2612: S/L STATUS• B2614: ACC RELAY CIRC• B2615: BLOWER RELAY CIRC• B2616: IGN RELAY CIRC• B2617: STARTER RELAY CIRC• B2618: BCM• B2619: BCM• B261A: PUSH-BTN IGN SW• B261E: VEHICLE TYPE• B26E9: S/L STATUS• B26EA: KEY REGISTRATION• C1729: VHCL SPEED SIG ERR• U0415: VEHICLE SPEED SIG |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Priority | DTC | |
|----------|---|---------------------------------|
| 5 | <ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1712: [CHECKSUM ERR] FL • C1713: [CHECKSUM ERR] FR • C1714: [CHECKSUM ERR] RR • C1715: [CHECKSUM ERR] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1720: [CODE ERR] FL • C1721: [CODE ERR] FR • C1722: [CODE ERR] RR • C1723: [CODE ERR] RL • C1724: [BATT VOLT LOW] FL • C1725: [BATT VOLT LOW] FR • C1726: [BATT VOLT LOW] RR • C1727: [BATT VOLT LOW] RL • C1734: CONTROL UNIT | A B C D E F G |
| 6 | <ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA | H |

DTC Index

INFOID:000000004747826

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-17. "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)"](#).

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|--|-----------|--|---------------------------------|---------------------------------------|-------------------------|
| No DTC is detected. further testing may be required. | — | — | — | — | — |
| U1000: CAN COMM CIRCUIT | — | — | — | — | BCS-40 |
| U1010: CONTROL UNIT (CAN) | — | — | — | — | BCS-41 |
| U0415: VEHICLE SPEED SIG | — | — | — | — | BCS-42 |
| B2013: ID DISCORD BCM-S/L | × | × | — | — | SEC-55 |
| B2014: CHAIN OF S/L-BCM | × | × | — | — | SEC-56 |
| B2190: NATS ANTENNA AMP | × | — | — | — | SEC-277 |
| B2191: DIFFERENCE OF KEY | × | — | — | — | SEC-280 |
| B2192: ID DISCORD BCM-ECM | × | — | — | — | SEC-281 |
| B2193: CHAIN OF BCM-ECM | × | — | — | — | SEC-283 |
| B2195: ANTI SCANNING | × | — | — | — | SEC-284 |
| B2553: IGNITION RELAY | — | × | — | — | PCS-49 |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|---------------------------|-----------|--|---------------------------------|---------------------------------------|-------------------------|
| B2555: STOP LAMP | — | × | — | — | SEC-285 |
| B2556: PUSH-BTN IGN SW | — | × | × | — | SEC-287 |
| B2557: VEHICLE SPEED | × | × | × | — | SEC-289 |
| B2560: STARTER CONT RELAY | × | × | × | — | SEC-290 |
| B2562: LOW VOLTAGE | — | × | — | — | BCS-43 |
| B2601: SHIFT POSITION | × | × | × | — | SEC-291 |
| B2602: SHIFT POSITION | × | × | × | — | SEC-294 |
| B2603: SHIFT POSI STATUS | × | × | × | — | SEC-296 |
| B2604: PNP SW | × | × | × | — | SEC-299 |
| B2605: PNP SW | × | × | × | — | SEC-301 |
| B2606: S/L RELAY | × | × | × | — | SEC-303 |
| B2607: S/L RELAY | × | × | × | — | SEC-304 |
| B2608: STARTER RELAY | × | × | × | — | SEC-306 |
| B2609: S/L STATUS | × | × | × | — | SEC-308 |
| B260A: IGNITION RELAY | × | × | × | — | PCS-51 |
| B260B: STEERING LOCK UNIT | — | × | × | — | SEC-312 |
| B260C: STEERING LOCK UNIT | — | × | × | — | SEC-313 |
| B260D: STEERING LOCK UNIT | — | × | × | — | SEC-314 |
| B260F: ENG STATE SIG LOST | × | × | × | — | SEC-315 |
| B2612: S/L STATUS | × | × | × | — | SEC-318 |
| B2614: ACC RELAY CIRC | — | × | × | — | PCS-53 |
| B2615: BLOWER RELAY CIRC | — | × | × | — | PCS-56 |
| B2616: IGN RELAY CIRC | — | × | × | — | PCS-59 |
| B2617: STARTER RELAY CIRC | × | × | × | — | SEC-322 |
| B2618: BCM | × | × | × | — | PCS-62 |
| B2619: BCM | × | × | × | — | SEC-324 |
| B261A: PUSH-BTN IGN SW | — | × | × | — | SEC-325 |
| B261E: VEHICLE TYPE | × | × | × (Turn ON for 15 seconds) | — | SEC-328 |
| B2621: INSIDE ANTENNA | — | × | — | — | DLK-95 |
| B2622: INSIDE ANTENNA | — | × | — | — | DLK-97 |
| B2623: INSIDE ANTENNA | — | × | — | — | DLK-99 |
| B26E9: S/L STATUS | × | × | × (Turn ON for 15 seconds) | — | SEC-316 |
| B26EA: KEY REGISTRATION | — | × | × (Turn ON for 15 seconds) | — | SEC-317 |
| C1704: LOW PRESSURE FL | — | — | — | × | WT-16 |
| C1705: LOW PRESSURE FR | — | — | — | × | |
| C1706: LOW PRESSURE RR | — | — | — | × | |
| C1707: LOW PRESSURE RL | — | — | — | × | |

BCM (BODY CONTROL MODULE)

[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|---------------------------|-----------|--|---------------------------------|---------------------------------------|-----------------------|
| C1708: [NO DATA] FL | — | — | — | × | WT-18 |
| C1709: [NO DATA] FR | — | — | — | × | |
| C1710: [NO DATA] RR | — | — | — | × | |
| C1711: [NO DATA] RL | — | — | — | × | |
| C1712: [CHECKSUM ERR] FL | — | — | — | × | WT-21 |
| C1713: [CHECKSUM ERR] FR | — | — | — | × | |
| C1714: [CHECKSUM ERR] RR | — | — | — | × | |
| C1715: [CHECKSUM ERR] RL | — | — | — | × | |
| C1716: [PRESSDATA ERR] FL | — | — | — | × | WT-24 |
| C1717: [PRESSDATA ERR] FR | — | — | — | × | |
| C1718: [PRESSDATA ERR] RR | — | — | — | × | |
| C1719: [PRESSDATA ERR] RL | — | — | — | × | |
| C1720: [CODE ERR] FL | — | — | — | × | WT-26 |
| C1721: [CODE ERR] FR | — | — | — | × | |
| C1722: [CODE ERR] RR | — | — | — | × | |
| C1723: [CODE ERR] RL | — | — | — | × | |
| C1724: [BATT VOLT LOW] FL | — | — | — | × | WT-29 |
| C1725: [BATT VOLT LOW] FR | — | — | — | × | |
| C1726: [BATT VOLT LOW] RR | — | — | — | × | |
| C1727: [BATT VOLT LOW] RL | — | — | — | × | |
| C1729: VHCL SPEED SIG ERR | — | — | — | × | WT-32 |
| C1734: CONTROL UNIT | — | — | — | × | WT-33 |

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]

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Reference Value

INFOID:000000004747827

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. | 1/2/3/4 |
| 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, HI or AUTO (Light is illuminated) | | On |
| HL LO REQ | Lighting switch OFF | | Off |
| | Lighting switch 2ND HI or AUTO (Light is illuminated) | | On |
| HL HI REQ | Lighting switch OFF | | Off |
| | Lighting switch HI | | On |
| FR FOG REQ | Lighting switch 2ND or AUTO (Light is illuminated) | Front fog lamp switch OFF | Off |
| | | <ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) | On |
| FR WIP REQ | Ignition switch ON | Front wiper switch OFF | Stop |
| | | Front wiper switch INT | 1LOW |
| | | Front wiper switch LO | Low |
| | | Front wiper switch HI | Hi |
| WIP AUTO STOP | Ignition switch ON | Front wiper stop position | STOP P |
| | | Any position other than front wiper stop position | ACT P |
| WIP PROT | Ignition switch ON | Front wiper operates normally | Off |
| | | Front wiper stops at fail-safe operation | BLOCK |
| IGN RLY1 -REQ | Ignition switch OFF or ACC | | Off |
| | Ignition switch ON | | On |
| IGN RLY | Ignition switch OFF or ACC | | Off |
| | Ignition switch ON | | On |
| PUSH SW | Release the push-button ignition switch | | Off |
| | Press the push-button ignition switch | | On |
| INTER/NP SW | Ignition switch ON | Selector lever in any position other than P or N | Off |
| | | Selector lever in P or N position | On |
| ST RLY CONT | Ignition switch ON | | Off |
| | At engine cranking | | On |
| IHBT RLY -REQ | Ignition switch ON | | Off |
| | At engine cranking | | On |

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

| Monitor Item | Condition | Value/Status |
|----------------|---|-----------------|
| ST/INHI RLY | Ignition switch ON | Off |
| | At engine cranking | INHI ON → ST ON |
| | The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF | UNKWN |
| DETENT SW | Ignition switch ON | Off |
| | Release the selector button with selector lever in P position | On |
| S/L RLY -REQ | None of the conditions below are present | Off |
| | <ul style="list-style-type: none"> • Open the driver door after the ignition switch is turned OFF (for a few seconds) • Press the push-button ignition switch when the steering lock is activated | On |
| S/L STATE | Steering lock is activated | LOCK |
| | Steering lock is deactivated | UNLOCK |
| | [DTC: B210A] is detected | UNKWN |
| DTRL REQ | NOTE: The item is indicated, but not monitored. | Off |
| OIL P SW | Ignition switch OFF, ACC or engine running | Open |
| | Ignition switch ON | Close |
| HOOD SW | NOTE: The item is indicated, but not monitored. | Off |
| HL WASHER REQ | NOTE: The item is indicated, but not monitored. | Off |
| THFT HRN REQ | Not operating | Off |
| | <ul style="list-style-type: none"> • Panic alarm is activated • Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM | On |
| HORN CHIRP | Not operating | Off |
| | <ul style="list-style-type: none"> • Door locking with Intelligent Key (horn chirp mode) • Door locking with key fob (horn chirp mode) | On |
| CRNRNG LMP REQ | NOTE: The item is indicated, but not monitored. | Off |

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

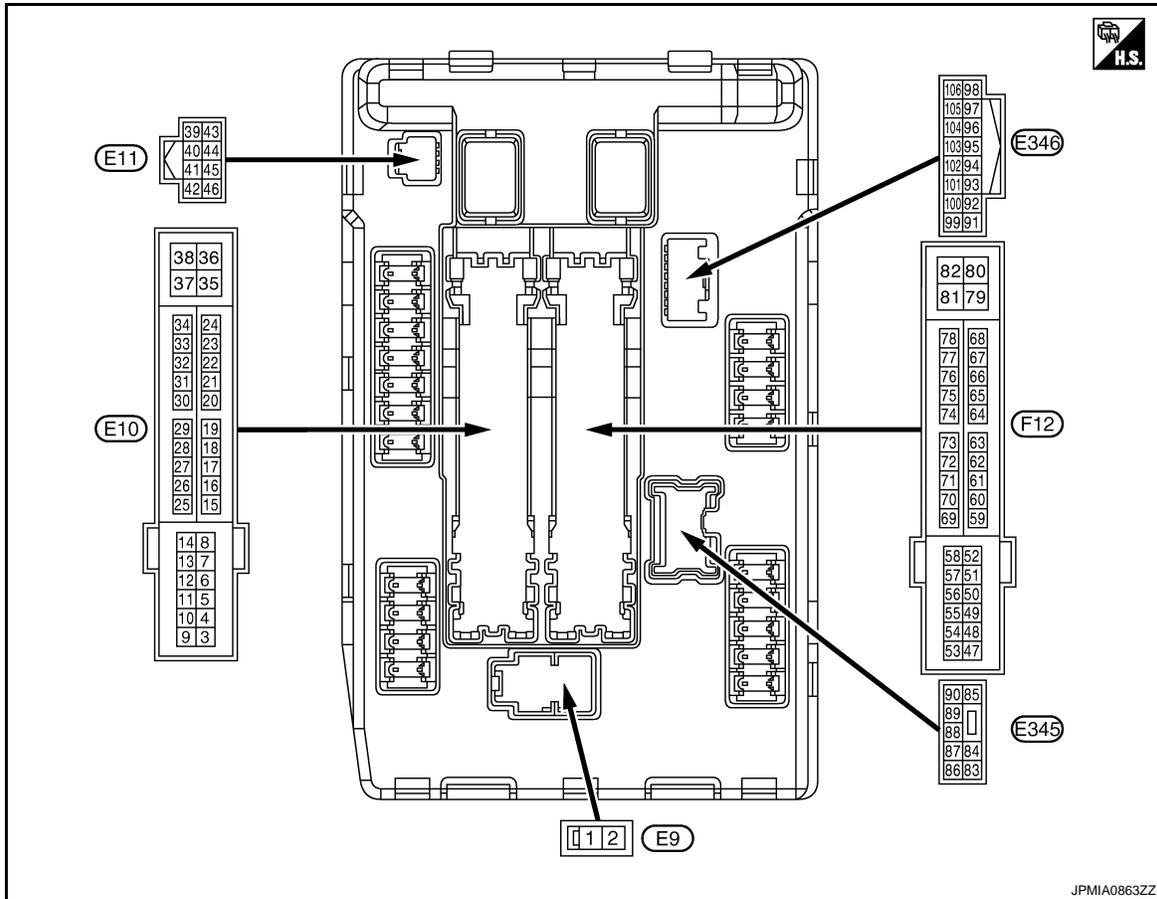
SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

TERMINAL LAYOUT



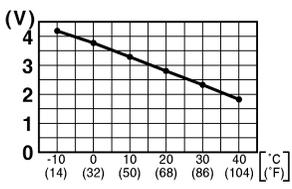
PHYSICAL VALUES

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|---|------------------|---|------------------------|--------------------|
| + | - | Signal name | Input/ Output | | | |
| 1 (R) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (L) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 4 (LG) | Ground | Front wiper LO | Output | Ignition switch OFF | Front wiper switch OFF | 0 V |
| | | | | Ignition switch ON | Front wiper switch LO | Battery voltage |
| 5 (Y) | Ground | Front wiper HI | Output | Ignition switch OFF | Front wiper switch OFF | 0 V |
| | | | | Ignition switch ON | Front wiper switch HI | Battery voltage |
| 7 (GR) | Ground | Tail, license plate lamps & illuminations | Output | Ignition switch OFF | Lighting switch OFF | 0 V |
| | | | | Ignition switch ON | Lighting switch 1ST | Battery voltage |
| 10 (BR) | Ground | ECM relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V |
| | | | | <ul style="list-style-type: none"> Ignition switch ON Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | 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 | | | |
| 11 (P) | Ground | Steering lock unit power supply | Output | Ignition switch OFF | A few seconds after opening the driver door | Battery voltage |
| | | | | Ignition switch LOCK | Press the push-button ignition switch | Battery voltage |
| | | | | Ignition switch ACC or ON | | 0 V |
| 12 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 13 (SB) | Ground | Fuel pump power supply | Output | Approximately 1 second or more after turning the ignition switch ON | | 0 V |
| | | | | <ul style="list-style-type: none"> Approximately 1 second after turning the ignition switch ON Engine running | | Battery voltage |
| 15 (W) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 16 (L/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 |
| 19 (Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 20 (L) | Ground | Ambient sensor ground | Output | Ignition switch ON | | 0 V |
| 21 (O) | Ground | Ambient sensor | Input | Ignition switch ON NOTE: Changes depending to ambient temperature | |  |
| 22 (SB) | Ground | Refrigerant pressure sensor ground | Output | Engine running | <ul style="list-style-type: none"> Warm-up condition Idle speed | 0 V |
| 23 (GR) | Ground | Refrigerant pressure sensor | Output | Engine running | <ul style="list-style-type: none"> Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates) | 1.0 - 4.0 V |
| 24 (G) | Ground | Refrigerant pressure sensor power supply | Input | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | 5.0 V |
| 25 (GR) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 26* (Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | Battery voltage |
| 27 (W) | Ground | Ignition relay monitor | Input | Ignition switch OFF or ACC | | Battery voltage |
| | | | | Ignition switch ON | | 0 V |
| 28 (SB) | Ground | Push-button ignition switch | Input | Press the push-button ignition switch | | 0 V |
| | | | | Release the push-button ignition switch | | 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 | | | |
| 30 (BR) | Ground | Starter relay control | Input | Ignition switch ON | Selector lever in any position other than P or N | 0 V |
| | | | | | Selector lever P or N | Battery voltage |
| 32 (V) | Ground | Steering lock unit condition-1 | Input | Steering lock is activated | | 0 V |
| | | | | Steering lock is deactivated | | Battery voltage |
| 33 (G) | Ground | Steering lock unit condition-2 | Input | Steering lock is activated | | Battery voltage |
| | | | | Steering lock is deactivated | | 0 V |
| 34 (O) | Ground | Cooling fan relay-3 control | Input | Cooling fan stopped | | Battery voltage |
| | | | | Cooling fan at HI operation | | 0 V |
| 35 (P) | Ground | Cooling fan relay-1 power supply | Input | Cooling fan stopped | | Battery voltage |
| | | | | Cooling fan at LO operation | | 6.0 V |
| 36 (G) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 38 (GR) | Ground | Cooling fan relay-1 power supply | Output | Cooling fan not operating | | 0 V |
| | | | | Cooling fan at LO operation | | 6.0 V |
| 39 (P) | — | CAN-L | Input/ Output | — | | — |
| 40 (L) | — | CAN-H | Input/ Output | — | | — |
| 41 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 42 (SB) | Ground | Cooling fan relay-2 control | Input | Cooling fan stopped | | Battery voltage |
| | | | | <ul style="list-style-type: none"> • Cooling fan MID operating • Cooling fan HI operating | | 0 V |
| 43 (Y) | Ground | Control device (Detention switch) | Input | Ignition switch ON | Press the selector button (selector lever P) | Battery voltage |
| | | | | | <ul style="list-style-type: none"> • Selector lever in any position other than P • Release the selector button (selector lever P) | 0 V |
| 44 (W) | Ground | Horn relay control | Input | The horn is deactivated | | Battery voltage |
| | | | | The horn is activated | | 0 V |
| 45 (O) | Ground | Horn switch | Input | The horn is deactivated | | Battery voltage |
| | | | | The horn is activated | | 0 V |
| 46 (BR) | Ground | Starter relay control | Input | Ignition switch ON | Selector lever in any position other than P or N | 0 V |
| | | | | | Selector lever P or N | Battery voltage |
| 48 (W) | Ground | A/C relay power supply | Output | Engine running | A/C switch OFF | 0 V |
| | | | | | A/C switch ON (A/C compressor is operating) | Battery voltage |
| 49 (R/B) | Ground | ECM relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | 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.) | |
|------------------------------|--------|---|--------|---|--|---|------------|
| | | | | | | | |
| 51 (LG) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V | A |
| | | | | Ignition switch ON | | Battery voltage | B |
| 52 (Y/G) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V | C |
| | | | | Ignition switch ON | | Battery voltage | D |
| 53 (R/W) | Ground | ECM relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V | E |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | Battery voltage | F |
| 54 (G/W) | Ground | Throttle control motor relay power supply | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | 0 V | G |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | Battery voltage | H |
| 55 (W/L) | Ground | ECM power supply | Output | Ignition switch OFF | | Battery voltage | I |
| 56 (R/Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V | J |
| | | | | Ignition switch ON | | Battery voltage | |
| 57 (O) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V | |
| | | | | Ignition switch ON | | Battery voltage | |
| 58 (Y) | Ground | Ignition relay power supply | Output | Ignition switch OFF | | 0 V | |
| | | | | Ignition switch ON | | Battery voltage | |
| 69 (W/B) | Ground | ECM relay control | Output | Ignition switch OFF (More than a few seconds after turning ignition switch OFF) | | Battery voltage | SEC |
| | | | | <ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) | | 0 - 1.5 V | L |
| 70 (O) | Ground | Throttle control motor relay control | Output | Ignition switch ON → OFF | | 0 - 1.0 V ↓ Battery voltage ↓ 0 V | M |
| | | | | Ignition switch ON | | 0 - 1.0 V | N |
| 72 (R/B) | Ground | Starter relay control | Input | Ignition switch ON | Selector lever in any position other than P or N | 0 V | O |
| | | | | | Selector lever P or N | Battery voltage | |
| 75 (LG) | Ground | Oil pressure switch | Input | Ignition switch ON | Engine stopped | 0 V | |
| | | | | | Engine running | Battery voltage | P |

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 | | | |
| 76 (SB) | Ground | Power generation command signal | Output | Ignition switch ON | | <p style="text-align: right;">JPMIA0001GB</p> <p style="text-align: center;">6.3 V</p> |
| | | | | 40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE" | | <p style="text-align: right;">JPMIA0002GB</p> <p style="text-align: center;">3.8 V</p> |
| | | | | 80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE" | | <p style="text-align: right;">JPMIA0003GB</p> <p style="text-align: center;">1.4 V</p> |
| 77 (GR) | Ground | Fuel pump relay control | Output | <ul style="list-style-type: none"> Approximately 1 second after turning the ignition switch ON Engine running | | 0 - 1.5 V |
| | | | | Approximately 1 second or more after turning the ignition switch ON | | Battery voltage |
| 80 (B) | Ground | Starter motor | Output | At engine cranking | | Battery voltage |
| 83 (Y) | Ground | Headlamp LO (RH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 2ND | Battery voltage |
| 84 (L) | Ground | Headlamp LO (LH) | Output | Ignition switch ON | Lighting switch OFF | 0 V |
| | | | | | Lighting switch 2ND | Battery voltage |
| 86 (SB) | Ground | Front fog lamp (RH) | Output | Lighting switch 2ND | Front fog lamp switch OFF | 0 V |
| | | | | | <ul style="list-style-type: none"> Front fog lamp switch ON Daytime running light activated (Only for Canada) | Battery voltage |
| 87 (GR) | Ground | Front fog lamp (LH) | Output | Lighting switch 2ND | Front fog lamp switch OFF | 0 V |
| | | | | | <ul style="list-style-type: none"> Front fog lamp switch ON Daytime running light activated (Only for Canada) | Battery voltage |
| 88 (W) | Ground | Washer pump power supply | Output | Ignition switch ON | | 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 | | | |
| 89 (L) | Ground | Headlamp HI (RH) | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | <ul style="list-style-type: none"> Lighting switch HI Lighting switch PASS | Battery voltage |
| 90 (G) | Ground | Headlamp HI (LH) | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | <ul style="list-style-type: none"> Lighting switch HI Lighting switch PASS | Battery voltage |
| 91 (R) | Ground | Parking lamp (RH) | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | Lighting switch 1ST | Battery voltage |
| 92 (LG) | Ground | Parking lamp (LH) | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | Lighting switch 1ST | Battery voltage |
| 93 (R) | Ground | Headlamp aiming motor (RH) | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | Lighting switch 1ST | Battery voltage |
| 94 (L) | Ground | Headlamp aiming motor (LH) | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | Lighting switch 1ST | Battery voltage |
| 99 (BR) | Ground | Ambient sensor ground | Input | Ignition switch ON | | 0 V |
| 100 (SB) | Ground | Ambient sensor | Output | Ignition switch ON | | <p>NOTE: Changes depending to ambient temperature</p> <p>JSNIA0014GB</p> |
| <p>NOTE: Changes depending to ambient temperature</p> | | | | | | |
| 101 (L) | Ground | Refrigerant pressure sensor ground | Input | Engine running | <ul style="list-style-type: none"> Warm-up condition Idle speed | 0 V |
| 102 (B) | Ground | Refrigerant pressure sensor | Input | Engine running | <ul style="list-style-type: none"> Warm-up condition Both A/C switch and blower fan motor switch ON (Compressor operates) | 1.0 - 4.0 V |
| 103 (P) | Ground | Refrigerant pressure sensor power supply | Output | Ignition switch OFF | | 0 V |
| | | | | Ignition switch ON | | 5.0 V |

*: AWD models only

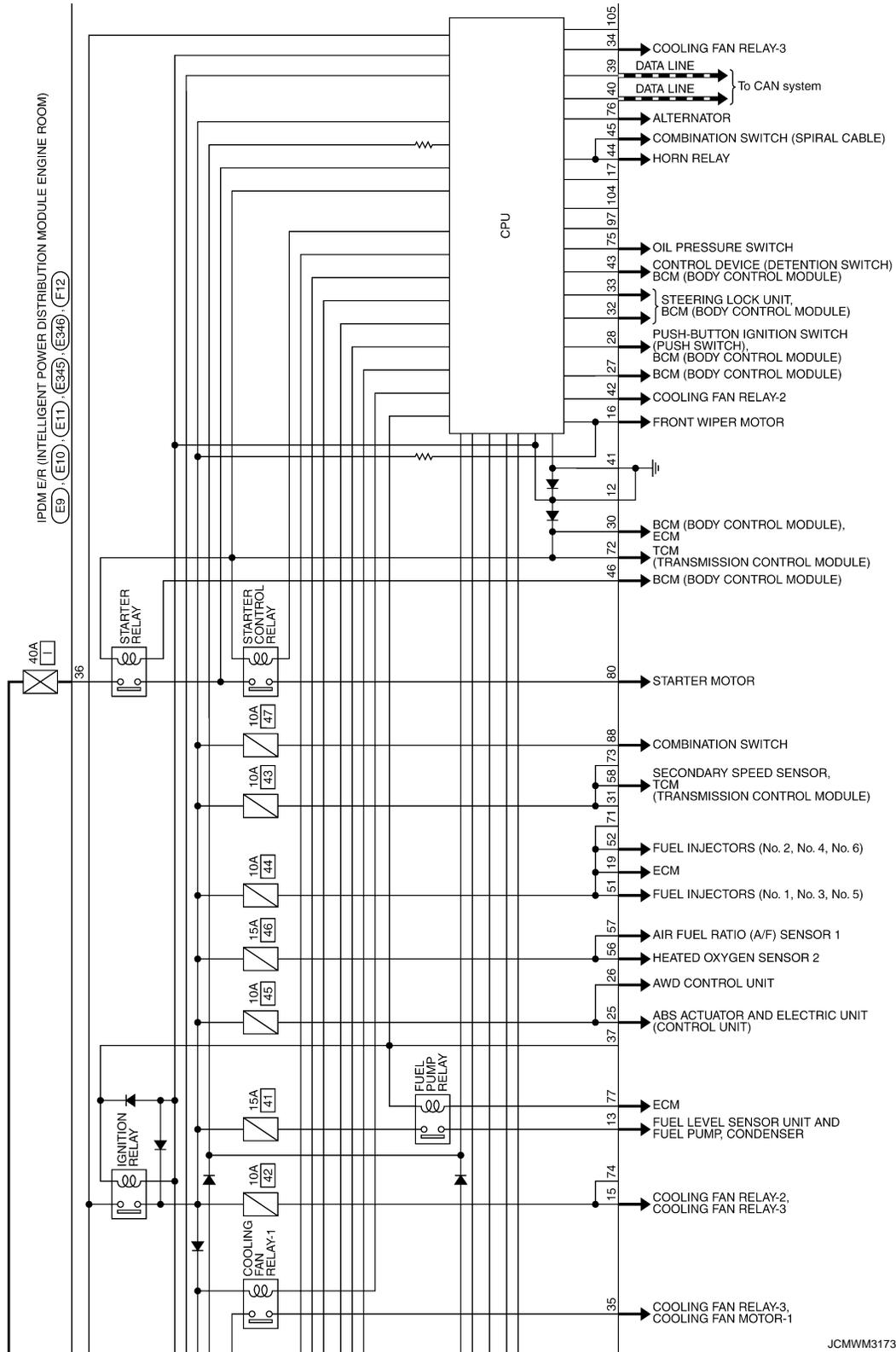
A
B
C
D
E
F
G
H
I
J
L
M
N
O
P

SEC

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

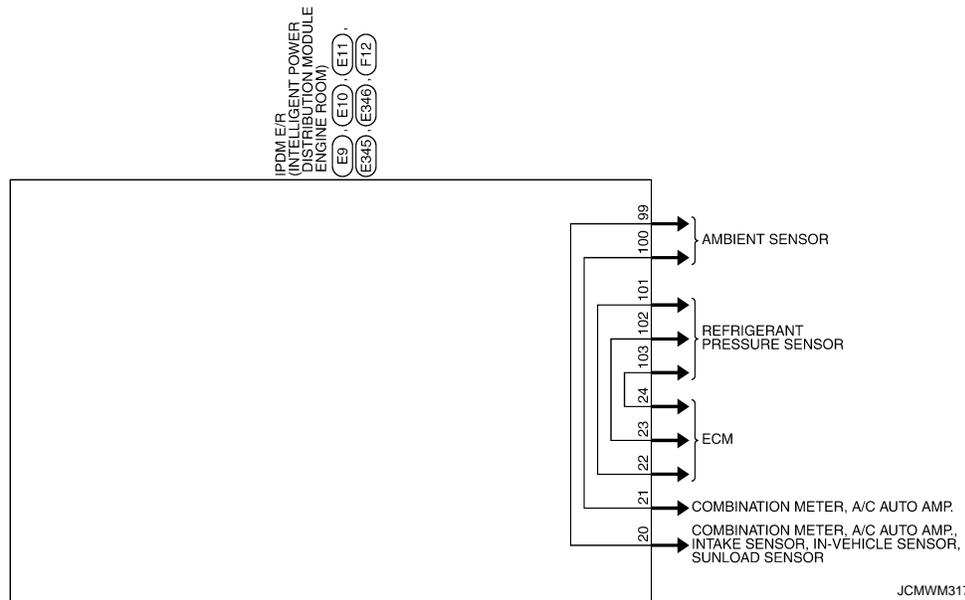


JCMWM3173GI

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]**



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

| | |
|----------------|--|
| Connector No. | E9 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | LC2FB-MC |



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

| | |
|----------------|--|
| Connector No. | E10 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4-1V |



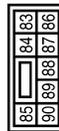
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 4 | LG | - |
| 5 | Y | - |
| 7 | GR | - |
| 10 | BR | - |
| 11 | P | - |
| 12 | B | - |
| 13 | SB | - |
| 15 | W | - |
| 16 | L/Y | - |
| 19 | Y | - |
| 20 | L | - |

| | | |
|----|----|---|
| 21 | O | - |
| 22 | SB | - |
| 23 | GR | - |
| 24 | G | - |
| 25 | GR | - |
| 26 | Y | - |
| 27 | W | - |
| 28 | SB | - |
| 30 | BR | - |
| 32 | V | - |
| 33 | G | - |
| 34 | O | - |
| 35 | P | - |
| 36 | G | - |
| 38 | GR | - |



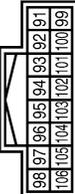
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 39 | P | - |
| 40 | L | - |
| 41 | B | - |
| 42 | SB | - |
| 43 | Y | - |
| 44 | W | - |
| 45 | O | - |
| 46 | BR | - |

| | |
|----------------|--|
| Connector No. | E345 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | NS08FW-CS |



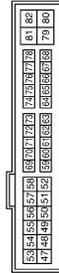
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 83 | Y | - |
| 84 | L | - |
| 86 | SB | - |
| 87 | GR | - |
| 88 | W | - |
| 89 | L | - |
| 90 | G | - |

| | |
|----------------|--|
| Connector No. | E346 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH16FW-NH |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 91 | R | - |
| 92 | LG | - |
| 93 | R | - |
| 94 | L | - |
| 98 | BR | - |
| 100 | SB | - |
| 101 | L | - |
| 102 | B | - |
| 103 | P | - |

| | |
|----------------|--|
| Connector No. | F12 |
| Connector Name | IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) |
| Connector Type | TH20FW-CS12-M4 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 48 | W | - |
| 49 | R/B | - |
| 51 | LG | - |
| 52 | Y/G | - |
| 53 | R/W | - |
| 54 | G/W | - |
| 55 | W/L | - |
| 56 | R/Y | - |
| 57 | O | - |
| 58 | Y | - |
| 69 | W/B | - |

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

JCMWM3175G1

INFOID:0000000004747829

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]

| Control part | Fail-safe operation |
|----------------|---|
| Cooling fan | <ul style="list-style-type: none"> • Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) • Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate) |
| A/C compressor | A/C relay OFF |
| Alternator | Outputs the power generation command signal (PWM signal) 0% |

If No CAN Communication Is Available With BCM

| Control part | Fail-safe operation |
|--|---|
| Headlamp | <ul style="list-style-type: none"> • Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF |
| <ul style="list-style-type: none"> • Parking lamps • License plate lamps • Side marker lamps • Illuminations • Tail lamps | <ul style="list-style-type: none"> • Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay 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 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/AUTO mode and the front wiper motor is operating. |
| Front fog lamps | Front fog lamp relay OFF |
| Horn | Horn OFF |
| Ignition relay | The status just before activation of fail-safe is maintained. |
| Starter motor | Starter control relay OFF |
| Steering lock unit | Steering lock relay OFF |

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

| Voltage judgment | | IPDM E/R judgment | Operation |
|-----------------------------|-------------------------------------|---------------------------|--|
| Ignition relay contact side | Ignition relay excitation coil side | | |
| ON | ON | Ignition relay ON normal | — |
| OFF | OFF | Ignition relay OFF normal | — |
| ON | OFF | Ignition relay ON stuck | <ul style="list-style-type: none"> • Detects DTC "B2098: IGN RELAY ON" • Turns ON the tail lamp relay for 10 minutes |
| OFF | ON | Ignition relay OFF stuck | Detects DTC "B2099: IGN RELAY OFF" |

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper auto stop signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
[WITHOUT INTELLIGENT KEY SYSTEM]

< ECU DIAGNOSIS >

| Ignition switch | Front wiper switch | Front wiper stop position signal |
|-----------------|--------------------|--|
| ON | OFF | The front wiper stop position signal (stop position) cannot be input for 10 seconds. |
| | ON | The front wiper 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.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

INFOID:000000004747830

NOTE:

- The details of time display are as follows.
 - CRNT: A malfunction is detected now.
 - PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
 - The number is 0 when is detected now.
 - The number increases like 1 → 2 ... 38 → 39 after returning to the normal condition whenever IGN OFF → ON.
 - The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

x: Applicable

| CONSULT display | Fail-safe | Refer to |
|--|-----------|-------------------------|
| No DTC is detected. further testing may be required. | — | — |
| U1000: CAN COMM CIRCUIT | x | PCS-15 |
| B2098: IGN RELAY ON | x | PCS-16 |
| B2099: IGN RELAY OFF | — | PCS-17 |
| B2108: STRG LCK RELAY ON | — | SEC-329 |
| B2109: STRG LCK RELAY OFF | — | SEC-330 |
| B210A: STRG LCK STATE SW | — | SEC-331 |
| B210B: START CONT RLY ON | — | SEC-335 |
| B210C: START CONT RLY OFF | — | SEC-336 |
| B210D: STARTER RELAY ON | — | SEC-337 |
| B210E: STARTER RELAY OFF | — | SEC-338 |
| B210F: INTRLCK/PNP SW ON | — | SEC-340 |
| B2110: INTRLCK/PNP SW OFF | — | SEC-342 |

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

SEC

STEERING DOES NOT LOCK

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

STEERING DOES NOT LOCK

Description

INFOID:000000003466143

Steering does not lock when door is open while ignition switch is OFF.

NOTE:

Before performing the diagnosis, check "Work Flow". Refer to [SEC-240, "Work Flow"](#).

Diagnosis Procedure

INFOID:000000003466144

1. CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-411, "Component Function Check"](#).

Is the inspection normal?

YES >> GO TO 2.

NO >> Repair or replace malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection normal?

YES >> Check intermittent incident. Refer to [GI-40, "Intermittent Incident"](#).

NO >> GO TO 1.

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

Description

INFOID:000000003466147

Security indicator lamp does not blink when ignition switch is in a position other than ON

NOTE:

- Before performing the diagnosis, check "Work Flow". Refer to [SEC-240, "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)

- Keyfob is not inserted in key slot.
- Ignition switch position is not in the ON position.

Diagnosis Procedure

INFOID:000000003466148

1. CHECK SECURITY INDICATOR LAMP

Check security indicator lamp.

Refer to [SEC-346, "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-40, "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 CANNOT BE SET

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY SYSTEM CANNOT BE SET KEYFOB

KEYFOB : Description

INFOID:000000003466149

Armed phase is not activated when door is locked using keyfob.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of "SECURITY ALARM SET" in "WORK SUPPORT" in "THEFT ALM" using CONSULT-III.

KEYFOB : Diagnosis Procedure

INFOID:000000003466150

1.CHECK REMOTE KEYLESS ENTRY SYSTEM

Lock/unlock door with keyfob.

Refer to [DLK-392. "System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check remote keyless entry system. Refer to [DLK-520. "Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-40. "Intermittent Incident"](#).

NO >> GO TO 1.

DOOR KEY CYLINDER

DOOR KEY CYLINDER : Description

INFOID:000000003514482

Armed phase is not activated when door is locked using mechanical key.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

Before performing the diagnosis in the following table, check "Work Flow". Refer to [SEC-240. "Work Flow"](#).

CONDITION OF VEHICLE (OPERATING CONDITION)

Confirm the setting of "SECURITY ALARM SET" in "WORK SUPPORT" in "THEFT ALM" using CONSULT-III.

DOOR KEY CYLINDER : Diagnosis Procedure

INFOID:000000003514483

1.CHECK POWER DOOR LOCK SYSTEM

Lock/unlock door with mechanical key.

Refer to [DLK-388. "System Description"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check power door lock system. Refer to [DLK-515. "Diagnosis Procedure"](#).

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to [GI-40. "Intermittent Incident"](#).

NO >> GO TO 1.

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

Description

INFOID:000000003466151

Alarm does not operate when alarm operating condition is satisfied.

NOTE:

Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

"SECURITY ALARM SET" in "WORK SUPPORT" of "THEFT ALM" is ON when setting on CONSULT-III.

Diagnosis Procedure

INFOID:000000003466152

1.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-411. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the malfunctioning door switch

2.CHECK HEADLAMP

Check headlamp.

Refer to [EXL-36. "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3.CHECK HORN

Check horn.

Refer to [HRN-2. "Wiring Diagram - HORN -"](#).

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-40. "Intermittent Incident"](#).

NO >> GO TO 1.

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

SEC

KEYFOB INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

KEYFOB INSERT INFORMATION DOES NOT OPERATE

Description

INFOID:000000003466157

Keyfob insert information does not operate when push-button ignition switch is operated while keyfob is not inserted in key slot.

NOTE:

Warning functions operating condition is extremely complicated. During operation confirmation reconfirm the list above twice in order to ensure proper operation. Refer to [DLK-41, "WARNING FUNCTION : System Description"](#).

Diagnosis Procedure

INFOID:000000003466158

1.CHECK POWER POSITION

Check if ignition switch position is changing or not.

Does ignition switch position change?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK PUSH-BUTTON IGNITION SWITCH

Check push-button ignition switch.

Refer to [PCS-66, "Component Function Check"](#).

Is the inspection result normal?

YES >> Check BCM for DTC. Refer to [SEC-417, "DTC Index"](#).

NO >> Repair or replace the malfunctioning parts.

3.CHECK DOOR SWITCH

Check door switch.

Refer to [DLK-411, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.CHECK KEY SLOT

Check key slot.

Refer to [DLK-434, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

5.CHECK COMBINATION METER DISPLAY

Check combination meter display.

Refer to [DLK-440, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

6.CHECK KEY SLOT INDICATOR

Check key slot indicator.

Refer to [DLK-436, "Component Function Check"](#).

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

KEYFOB INSERT INFORMATION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

[WITHOUT INTELLIGENT KEY SYSTEM]

YES >> Check intermittent incident. Refer to [GI-40. "Intermittent Incident"](#).
NO >> GO TO 1.

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

PRECAUTIONS

< PRECAUTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

PRECAUTION

PRECAUTIONS

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

INFOID:000000003566322

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS 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".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

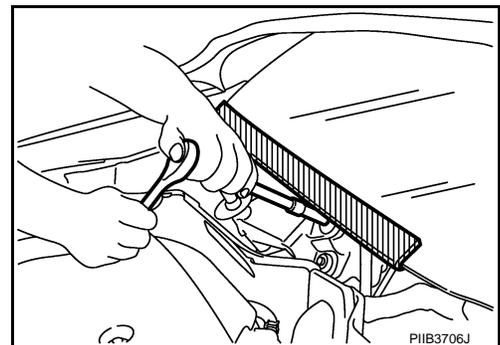
PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

Precaution for Procedure without Cowl Top Cover

INFOID:000000003566326

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc.



Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000003566324

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit. If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

PRECAUTIONS

< PRECAUTION >

[WITHOUT INTELLIGENT KEY SYSTEM]

1. Connect both battery cables.
NOTE:
Supply power using jumper cables if battery is discharged.
2. Turn the push-button ignition switch to ACC position.
(At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.

A

B

C

D

E

F

G

H

I

J

SEC

L

M

N

O

P

KEY SLOT

< ON-VEHICLE REPAIR >

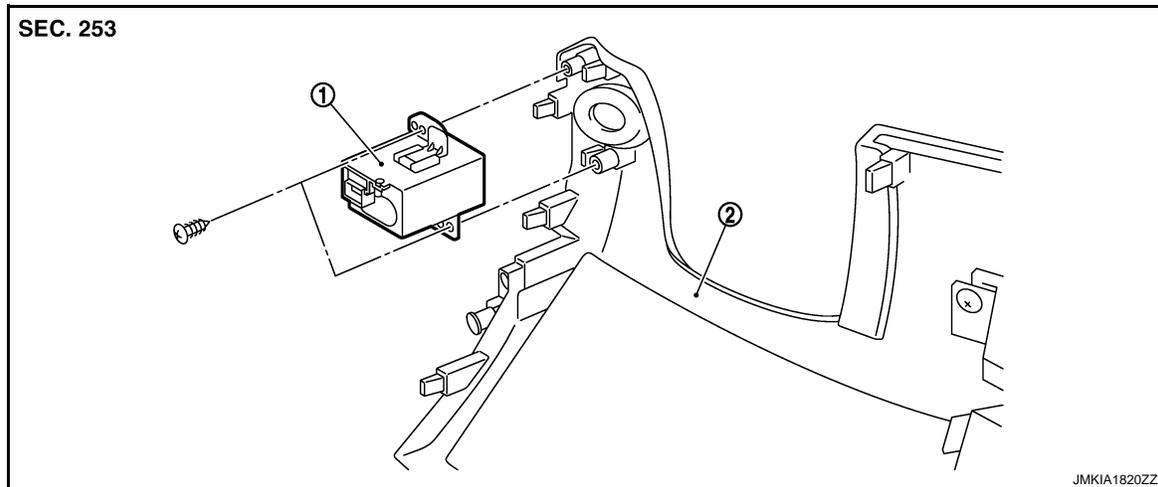
[WITHOUT INTELLIGENT KEY SYSTEM]

ON-VEHICLE REPAIR

KEY SLOT

Exploded View

INFOID:000000003466159



1. Key slot

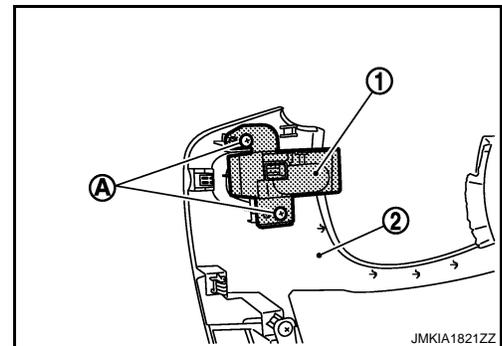
2. Instrument lower panel LH

Removal and Installation

INFOID:000000003466160

REMOVAL

1. Remove the instrument lower panel LH (2). Refer to [IP-12, "Removal and Installation"](#).
2. Disconnect key slot connector.
3. Remove the key slot mounting screw (A), and then remove key slot (1) from instrument lower panel LH (2).



INSTALLATION

Install in the reverse order of removal.

PUSH BUTTON IGNITION SWITCH

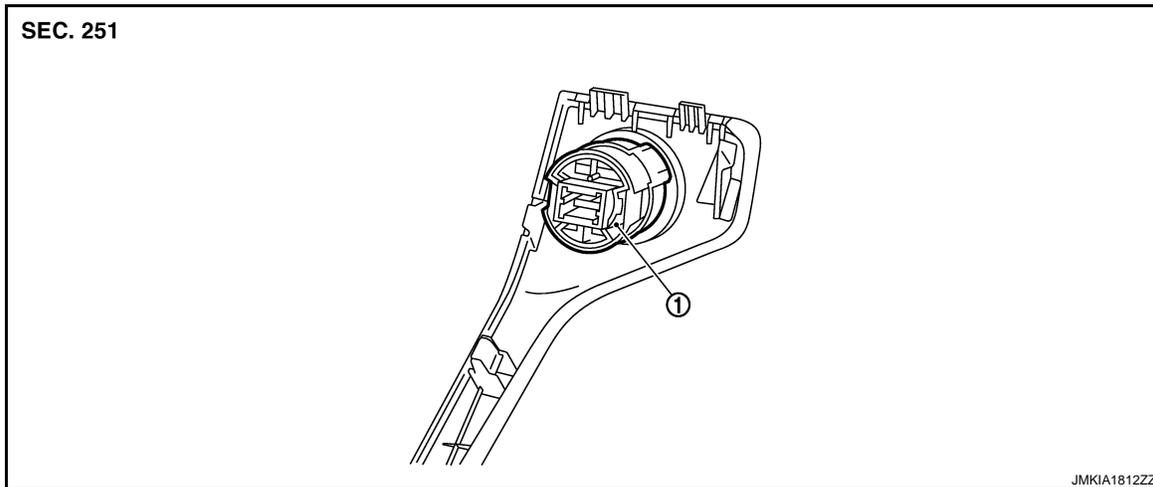
< ON-VEHICLE REPAIR >

[WITHOUT INTELLIGENT KEY SYSTEM]

PUSH BUTTON IGNITION SWITCH

Exploded View

INFOID:000000003466161



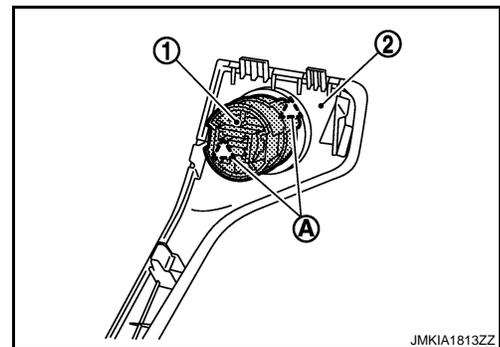
1. Push-button ignition switch

Removal and Installation

INFOID:000000003466162

REMOVAL

1. Remove the instrument stay cover LH. Refer to [IP-12, "Removal and Installation"](#).
2. Remove the push-button ignition switch (1) from instrument stay cover LH, after removing pawl (A). Press push-button ignition switch (1) back to disengage from instrument stay cover LH (2).



INSTALLATION

Install in the reverse order of removal.

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

SECURITY INDICATOR LAMP

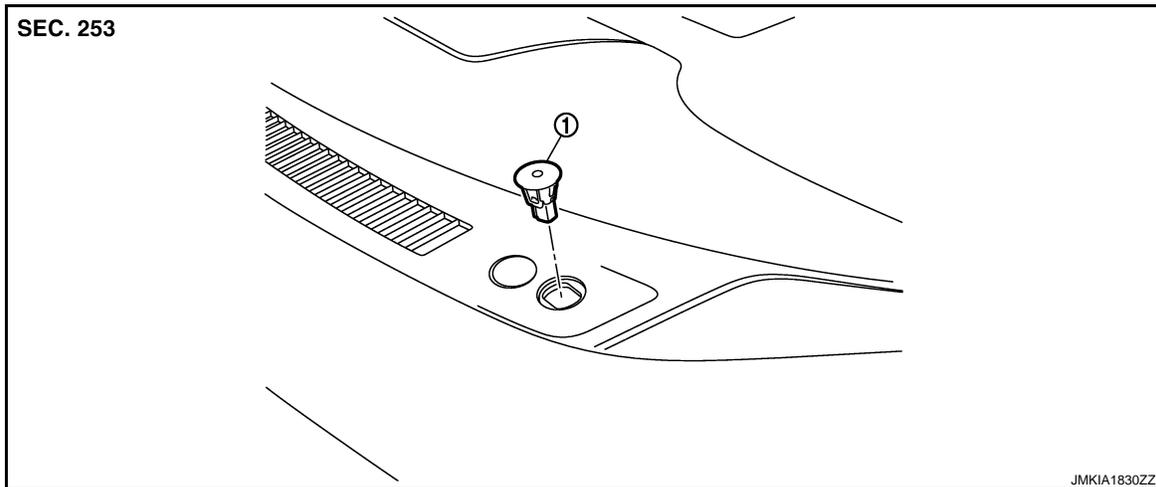
< ON-VEHICLE REPAIR >

[WITHOUT INTELLIGENT KEY SYSTEM]

SECURITY INDICATOR LAMP

Exploded View

INFOID:000000003515263



1. Security indicator lamp

Removal and Installation

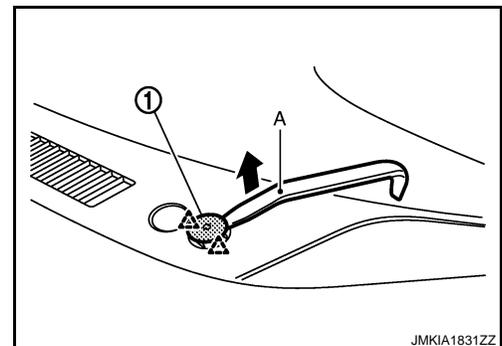
INFOID:000000003515264

REMOVAL

Remove the security indicator lamp (1).

- Disengage pawls with tool (A) and pull up the security indicator lamp.

 Pawl



INSTALLATION

Install in the reverse order of removal.