SECTION DLK
DOOR & LOCK

CONTENTS

WITH INTELLIGENT KEY SYSTEM

PRECAUTION 9

PRECAUTIONS 9
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" 9
Precaution for Servicing Doors and Locks 9

PREPARATION 10

PREPARATION 10
Special Service Tool 10
Commercial Service Tool 11

SYSTEM DESCRIPTION 12

COMPONENT PARTS 12

POWER DOOR LOCK SYSTEM 12
POWER DOOR LOCK SYSTEM : Component Parts Location 12

INTELLIGENT KEY SYSTEM 12
INTELLIGENT KEY SYSTEM : Component Parts Location 13

INTEGRATED HOMELINK TRANSMITTER 14
INTEGRATED HOMELINK TRANSMITTER : Component Parts Location 14

AUTOMATIC BACK DOOR SYSTEM 14
AUTOMATIC BACK DOOR SYSTEM : Component Parts Location 15
Automatic Back Door Control Unit 16
Automatic Back Door Switch 16
Automatic Back Door Main Switch 16
Automatic Back Door Warning Buzzer 17
Automatic Back Door Close Switch 17
Back Door Lock Assembly 17
Automatic Back Door Opener Switch 18
Back Door Opener Switch 18
Back Door Request Switch 18
Door Lock and Unlock Switch (Driver Side) 19
Door Lock and Unlock Switch (Passenger Side) 19
Remote Keyless Entry Receiver 19
Inside Key Antenna (Instrument Center) 19
Inside Key Antenna (Console) 20
Outside Key Antenna (Rear Bumper) 20
Outside Key Antenna (LH) 20
Outside Key Antenna (RH) 20
Intelligent Key Warning Buzzer 21
Front Door Request Switch (LH) 21
Front Door Request Switch (RH) 21
Front Door Switch 21
Rear Door Switch 22
Front Door Lock Assembly (LH) 22
Touch Sensor 22
Spindle Unit 22
Motion Activated Back Door Sensors 23
Motion Activated Back Door Control Unit 24
Integrated Homelink Transmitter 24

SYSTEM (POWER DOOR LOCK SYSTEM) 25
System Diagram 25
System Description 25

SYSTEM (INTELLIGENT KEY SYSTEM) 27

INTELLIGENT KEY SYSTEM 27
INTELLIGENT KEY SYSTEM : System Diagram 27
INTELLIGENT KEY SYSTEM : System Description 27

DOOR LOCK FUNCTION 28
DOOR LOCK FUNCTION : System Diagram 28
DOOR LOCK FUNCTION : System Description 28

BACK DOOR OPEN FUNCTION 30
BACK DOOR OPEN FUNCTION : System Diagram 30
BACK DOOR OPEN FUNCTION : System Description 30

REMOTE KEYLESS ENTRY FUNCTION 31
REMOTE KEYLESS ENTRY FUNCTION : System Diagram 32
REMOTE KEYLESS ENTRY FUNCTION : System Description 32

WARNING FUNCTION 34
WARNING FUNCTION : System Description 34

REMOTE ENGINE START FUNCTION 37
REMOTE ENGINE START FUNCTION : System Description 37

SYSTEM (AUTOMATIC BACK DOOR SYSTEM) 40
System Diagram 40
System Description 40

SYSTEM (INTEGRATED HOMELINK TRANSMITTER) 55
System Description 55

DIAGNOSIS SYSTEM (BCM) 56

COMMON ITEM 56
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM) 56

DOOR LOCK 56
DOOR LOCK : CONSULT Function (BCM - DOOR LOCK) 56

INTELLIGENT KEY 57
INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY) 57

TRUNK 60
TRUNK : CONSULT Function (BCM - TRUNK) 60

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT) 61
CONSULT Function 61

ECU DIAGNOSIS INFORMATION 63

AUTOMATIC BACK DOOR CONTROL UNIT... 63
Reference Value 63
Fail Safe 67
DTC Inspection Priority Chart 68
DTC Index 68

MOTION ACTIVATED BACK DOOR CONTROL UNIT 70
Reference Value 70

BCM 71
List of ECU Reference 71

WIRING DIAGRAM 72

POWER DOOR LOCK SYSTEM 72
Wiring Diagram 72

INTELLIGENT KEY SYSTEM 82
Wiring Diagram 82

AUTOMATIC BACK DOOR SYSTEM 99
Wiring Diagram 99

HOMELINK UNIVERSAL TRANSCEIVER 107
Wiring Diagram 107

BASIC INSPECTION 110

DIAGNOSIS AND REPAIR WORK FLOW 110
Work Flow 110

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL 113
Description 113
Work Procedure 113

ADDITIONAL SERVICE WHEN REPLACING BCM 114
Description 114
Work Procedure 114

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT..115
Description 115
Work Procedure 115

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION 116
Description 116
Work Procedure 116

DTC/CIRCUIT DIAGNOSIS 117

U1000 CAN COMM CIRCUIT 117
DTC Description 117
Diagnosis Procedure 117

U1010 CONTROL UNIT (CAN) 118
DTC Description 118
Diagnosis Procedure 118

B2401 IGNITION POWER SUPPLY CIRCUIT..119
DTC Description 119
Diagnosis Procedure (B2401-86) 119
Diagnosis Procedure (B2401-87) 120

B2409 HALF LATCH SWITCH 121
DTC Description 121
Diagnosis Procedure 121

B2416 TOUCH SENSOR RH 125
DTC Description 125
Diagnosis Procedure 125
Component Inspection 128

B2417 TOUCH SENSOR LH 129
DTC Description 129
Diagnosis Procedure 129
Component Inspection 132

B2419 OPEN SWITCH 133
DTC Description 133
Diagnosis Procedure 133

B2420 CLOSE SWITCH 137
DTC Description 137
Diagnosis Procedure 137

B2422 BACK DOOR STATE 141
DTC Description 141
Diagnosis Procedure (B2422-78) 141
Diagnosis Procedure (B2422-79) 146

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME 147
DTC Description 147
Diagnosis Procedure (B2423-11) 148
Diagnosis Procedure (B2423-12) 149
Diagnosis Procedure (B2423-13) 149
Diagnosis Procedure (B2423-63 or B2423-4B) 150

B2426 ENCODER 151
DTC Description 151
Diagnosis Procedure (B2426-11) 152
Diagnosis Procedure (B2426-23) 153
Diagnosis Procedure (B2426-24) 154
Diagnosis Procedure (B2426-29 or B2426-32) 155

B2427 ENCODER 157
DTC Description 157
Diagnosis Procedure (B2427-11) 158
Diagnosis Procedure (B2427-23) 159
Diagnosis Procedure (B2427-24) 160
Diagnosis Procedure (B2427-29 or B2427-32) 161

B2428 AUTOMATIC BACK DOOR CONTROL UNIT 163
DTC Description 163
Diagnosis Procedure 163

B242A CLOSURE CONDITION 164
DTC Description 164
Diagnosis Procedure (B242A-01) 165
Diagnosis Procedure (B242A-11) 168
Diagnosis Procedure (B242A-12) 169
Diagnosis Procedure (B242A-13) 169
Diagnosis Procedure (B242A-63) 170

B242C MOTION ACTIVATED BACK DOOR CONTROL MODULE 171
DTC Description 171
Diagnosis Procedure 171

B242D MOTION ACTIVATED BACK DOOR SENSOR 173
DTC Description 173
Diagnosis Procedure 173

B242E MOTION ACTIVATED BACK DOOR SENSOR 175
DTC Description 175
Diagnosis Procedure 175

B242F ABD BUZZER 177
DTC Description 177
Diagnosis Procedure 177

B261B REMOTE ENGINE START 179
DTC Description 179
Diagnosis Procedure 179

B2621 INSIDE ANTENNA 180
DTC Description 180
Diagnosis Procedure 180

B2622 INSIDE ANTENNA 183
DTC Description 183
Diagnosis Procedure 183

B26FE HOOD SWITCH 186
DTC Description 186
Diagnosis Procedure 186
Component Inspection 187

B2626 OUTSIDE ANTENNA 189
DTC Description 189
Diagnosis Procedure 189

B2627 OUTSIDE ANTENNA 192
DTC Description 192
Diagnosis Procedure 192

B2628 OUTSIDE ANTENNA 195
DTC Description 195
Diagnosis Procedure 195

U1320 REPROGRAMMING ERROR 198
DTC Description 198
Diagnosis Procedure 198

U1321 ABD CONFIGURATION 200
DTC Description 200
Diagnosis Procedure 200

U1322 ABD CONFIGURATION 201
DTC Description 201
Diagnosis Procedure (U1322-01) 201
Diagnosis Procedure (U1322-08) 202
Diagnosis Procedure (U1322-56) 202

U1325 CALIBRATION 203
DTC Description 203
Diagnosis Procedure 203

POWER SUPPLY AND GROUND CIRCUIT .. 204

AUTOMATIC BACK DOOR CONTROL UNIT 204
AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure 204

BCM 204
BCM : Diagnosis Procedure 204

DOOR SWITCH 206

Component Function Check 206
Diagnosis Procedure 206
Component Inspection 207

BACK DOOR SWITCH 208
Component Function Check 208
Diagnosis Procedure (With Automatic Back Door) 208
Diagnosis Procedure (Without Automatic Back Door) 209
Component Inspection (With Automatic Back Door) 210
Component Inspection (Without Automatic Back Door) 211

DOOR LOCK AND UNLOCK SWITCH 212

DRIVER SIDE 212
DRIVER SIDE : Description 212
DRIVER SIDE : Component Function Check 212
DRIVER SIDE : Diagnosis Procedure 212

PASSENGER SIDE 213
PASSENGER SIDE : Description 213
PASSENGER SIDE : Component Function Check 213
PASSENGER SIDE : Diagnosis Procedure 214

DOOR LOCK ACTUATOR 216

DRIVER SIDE 216
DRIVER SIDE : Component Function Check 216
DRIVER SIDE : Diagnosis Procedure 216

PASSENGER SIDE 217
PASSENGER SIDE : Component Function Check 217
PASSENGER SIDE : Diagnosis Procedure 217

REAR LH 218
REAR LH : Component Function Check 218
REAR LH : Diagnosis Procedure 218

REAR RH 219
REAR RH : Component Function Check 219
REAR RH : Diagnosis Procedure 220

UNLOCK SENSOR 221
Component Function Check 221
Diagnosis Procedure 221
Component Inspection 222

DOOR KEY CYLINDER SWITCH 223
Component Function Check 223
Diagnosis Procedure 223
Component Inspection 224

REMOTE KEYLESS ENTRY RECEIVER 225
Component Function Check 225
Diagnosis Procedure 225

DOOR REQUEST SWITCH 227
Component Function Check 227
Diagnosis Procedure 227
Component Inspection 228

BACK DOOR REQUEST SWITCH 229
Component Function Check 229
Diagnosis Procedure 229
Component Inspection 230

BACK DOOR OPENER SWITCH 231
Component Function Check 231
Diagnosis Procedure 231
Component Inspection 232

INTELLIGENT KEY WARNING BUZZER 233
Component Function Check 233
Diagnosis Procedure 233
Component Inspection 233

INTELLIGENT KEY 235
Component Function Check 235
Diagnosis Procedure 235

METER BUZZER CIRCUIT 236
Description 236
Component Function Check 236
Diagnosis Procedure 236

KEY WARNING LAMP 237
Component Function Check 237
Diagnosis Procedure 237

HAZARD FUNCTION 238
Component Function Check 238
Diagnosis Procedure 238

AUTOMATIC BACK DOOR CLOSE SWITCH 239
Component Function Check 239
Diagnosis Procedure 239
Component Inspection 240

AUTOMATIC BACK DOOR MAIN SWITCH 241
Component Function Check 241
Diagnosis Procedure 241
Component Inspection 242

AUTOMATIC BACK DOOR SWITCH 243
Component Function Check 243
Diagnosis Procedure 243
Component Inspection 244

HALF LATCH SWITCH 245
Component Function Check 245
Diagnosis Procedure 245
Component Inspection 246

TOUCH SENSOR 247

RH 247
RH : Component Function Check 247
RH : Diagnosis Procedure 247
RH : Component Inspection 248

LH 249
LH : Component Function Check 249
LH : Diagnosis Procedure 249
LH : Component Inspection 251

SPINDLE MOTOR 252

RH 252
RH : Diagnosis Procedure 252

LH 252
LH : Diagnosis Procedure 252

BACK DOOR CLOSURE MOTOR 254
Diagnosis Procedure 254

AUTOMATIC BACK DOOR WARNING BUZZER 255
Diagnosis Procedure 255
Component Inspection 256

INTEGRATED HOMELINK TRANSMITTER ... 257
Component Function Check 257
Diagnosis Procedure 257

SYMPTOM DIAGNOSIS 259

INTELLIGENT KEY SYSTEM SYMPTOMS 259
Diagnosis Procedure 259

ALL DOORS DO NOT LOCK/UNLOCK OR TRUNK/BACK DOOR DO NOT OPEN WITH REQUEST SWITCH 260
Description 260
Diagnosis Procedure 260

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (REQ SW/PUSH SW) (ALL KEYS) 262
Description 262
Diagnosis Procedure 262

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ALL I-KEY/REQ SW/PUSH SW) 264
Description 264
Diagnosis Procedure 264

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ALL KEYS) 265
Description 265
Diagnosis Procedure 265

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY 267
Description 267
Diagnosis Procedure 267

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH AND INTELLIGENT KEY 268
Description 268
Diagnosis Procedure 268

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ALL KEYS) 269
Description 269
Diagnosis Procedure 269

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY (ONE KEY) 271
Description 271
Diagnosis Procedure 271

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ONE I-KEY/REQ SW/PUSH SW) 272
Description 272
Diagnosis Procedure 272

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ONE KEY) 274
Description 274
Diagnosis Procedure 274

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ONE KEY) 276
Description 276
Diagnosis Procedure 276

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE 277

ALL SWITCHES 277
ALL SWITCHES : Description 277
ALL SWITCHES : Diagnosis Procedure 277

AUTOMATIC BACK DOOR SWITCH 278
AUTOMATIC BACK DOOR SWITCH : Description 278
AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure 278

AUTOMATIC BACK DOOR CLOSE SWITCH 278
AUTOMATIC BACK DOOR CLOSE SWITCH : Description 278
AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure 278

INTELLIGENT KEY 279
INTELLIGENT KEY : Description 279
INTELLIGENT KEY : Diagnosis Procedure 279

BACK DOOR OPENER SWITCH 279
BACK DOOR OPENER SWITCH : Description 279
BACK DOOR OPENER SWITCH : Diagnosis Procedure 279

OPEN/CLOSURE FUNCTION 280
OPEN/CLOSURE FUNCTION : Description 280
OPEN/CLOSURE FUNCTION : Diagnosis Procedure 280

OPEN FUNCTION 281
OPEN FUNCTION : Description 281
OPEN FUNCTION : Diagnosis Procedure 281

CLOSURE FUNCTION 281
CLOSURE FUNCTION : Description 281
CLOSURE FUNCTION : Diagnosis Procedure 282

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE 283

BUZZER 283
BUZZER : Description 283
BUZZER : Diagnosis Procedure 283

HAZARD WARNING LAMP 283
HAZARD WARNING LAMP : Description 283
HAZARD WARNING LAMP : Diagnosis Procedure 283

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL 285
Diagnosis Procedure 285

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE 286
Diagnosis Procedure 286

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE 287
Diagnosis Procedure 287

SQUEAK AND RATTLE TROUBLE DIAGNOSES 288
Work Flow 288
Generic Squeak and Rattle Troubleshooting 289
Diagnostic Worksheet 292

REMOVAL AND INSTALLATION 294

HOOD 294
Exploded View 294

HOOD ASSEMBLY 294
HOOD ASSEMBLY : Removal and Installation 294
HOOD ASSEMBLY : Adjustment 295

HOOD HINGE 296
HOOD HINGE : Removal and Installation 296

RADIATOR CORE SUPPORT 298
Exploded View 298
Removal and Installation 298

FRONT FENDER 299
Exploded View 299
Removal and Installation 299

FRONT DOOR 301
Exploded View 301

DOOR ASSEMBLY 302
DOOR ASSEMBLY : Removal and Installation 302
DOOR ASSEMBLY : Adjustment 302

DOOR STRIKER 304
DOOR STRIKER : Removal and Installation 304
DOOR STRIKER : Adjustment 304

DOOR HINGE 304
DOOR HINGE : Removal and Installation 304

DOOR CHECK LINK 305
DOOR CHECK LINK : Removal and Installation 305

REAR DOOR 306
Exploded View 306

DOOR ASSEMBLY 307
DOOR ASSEMBLY : Removal and Installation 307
DOOR ASSEMBLY : Adjustment 308

DOOR STRIKER 309
DOOR STRIKER : Removal and Installation 309
DOOR STRIKER : Adjustment 309

DOOR HINGE 309
DOOR HINGE : Removal and Installation 309

DOOR CHECK LINK 310
DOOR CHECK LINK : Removal and Installation 310

BACK DOOR 311
Exploded View 311

BACK DOOR ASSEMBLY 311
BACK DOOR ASSEMBLY : Removal and Installation 311
BACK DOOR ASSEMBLY : Adjustment 313

BACK DOOR STRIKER 314
BACK DOOR STRIKER : Removal and Installation 314
BACK DOOR STRIKER : Adjustment 315

BACK DOOR HINGE 315
BACK DOOR HINGE : Removal and Installation 315

BACK DOOR WEATHER-STRIP 315
BACK DOOR WEATHER-STRIP : Removal and Installation 315

HOOD LOCK 316
Exploded View 316

HOOD LOCK 316
HOOD LOCK : Removal and Installation 316
HOOD LOCK : Inspection 316

SECONDARY LATCH 317
SECONDARY LATCH : Removal and Installation 317

HOOD LOCK RELEASE CABLE 317
HOOD LOCK RELEASE CABLE : Removal and Installation 317

HOOD LOCK RELEASE HANDLE 318

HOOD LOCK RELEASE HANDLE : Removal and Installation 318

FRONT DOOR LOCK 319
Exploded View 319

DOOR LOCK 319
DOOR LOCK : Removal and Installation 319

INSIDE HANDLE 320
INSIDE HANDLE : Removal and Installation 320

OUTSIDE HANDLE 320
OUTSIDE HANDLE : Removal and Installation ... 320

REAR DOOR LOCK 323
Exploded View 323

DOOR LOCK 323
DOOR LOCK : Removal and Installation 323

INSIDE HANDLE 323
INSIDE HANDLE : Removal and Installation 323

OUTSIDE HANDLE 324
OUTSIDE HANDLE : Removal and Installation ... 324

BACK DOOR LOCK 326
Exploded View 326

DOOR LOCK 326
DOOR LOCK : Removal and Installation 326

SPINDLE UNIT 326
SPINDLE UNIT : Removal and Installation 326

BACK DOOR STAY 327
BACK DOOR STAY : Removal and Installation ... 327

TOUCH SENSOR 327
TOUCH SENSOR : Removal and Installation 327

EMERGENCY LEVER 328
EMERGENCY LEVER : Unlock procedures 328

FUEL FILLER LID OPENER 329
Exploded View 329

FUEL FILLER LID 329
FUEL FILLER LID : Removal and Installation 329

FUEL FILLER LID LOCK 330
FUEL FILLER LID LOCK : Removal and Installation 330

FUEL FILLER LID RELEASE CABLE 330
FUEL FILLER LID RELEASE CABLE : Removal and Installation 330

FUEL FILLER LID RELEASE HANDLE 331
FUEL FILLER LID RELEASE HANDLE : Removal and Installation 331

DOOR SWITCH 332
Removal and Installation 332

DOOR REQUEST SWITCH 333

DRIVER SIDE 333
DRIVER SIDE : Removal and Installation 333

PASSENGER SIDE 333
PASSENGER SIDE : Removal and Installation ... 333

BACK DOOR 333
BACK DOOR : Removal and Installation 333

INSIDE KEY ANTENNA 334

INSTRUMENT CENTER 334
INSTRUMENT CENTER : Removal and Installation 334

CONSOLE 334
CONSOLE : Removal and Installation 334

OUTSIDE KEY ANTENNA 335

DRIVER SIDE 335
DRIVER SIDE : Removal and Installation 335

PASSENGER SIDE 335
PASSENGER SIDE : Removal and Installation ... 335

REAR BUMPER 335
REAR BUMPER : Removal and Installation 335

INTELLIGENT KEY WARNING BUZZER 336
Removal and Installation 336

BACK DOOR WARNING CHIME 337
Removal and Installation 337

REMOTE KEYLESS ENTRY RECEIVER 338
Removal and Installation 338

INTELLIGENT KEY BATTERY 339
Removal and Installation 339

MOTION ACTIVATED BACK DOOR SYSTEM . 340
Exploded View 340

MOTION ACTIVATED BACK DOOR CONTROL UNIT 340
MOTION ACTIVATED BACK DOOR CONTROL UNIT : Removal and Installation 340

MOTION ACTIVATED BACK DOOR SENSOR 341
MOTION ACTIVATED BACK DOOR SENSOR : Removal and Installation 341

AUTOMATIC BACK DOOR CONTROL MODULE 343
Removal and Installation 343

AUTOMATIC BACK DOOR MAIN SWITCH ... 344
Exploded View 344
Removal and Installation 344

AUTOMATIC BACK DOOR SWITCH 345
Exploded View 345
Removal and Installation 345
AUTOMATIC BACK DOOR CLOSE SWITCH. 346
Removal and Installation 346

PRECAUTION

PRECAUTIONS

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

INFOID:0000000015272561

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries, and wait at least three minutes before performing any service.**

Precaution for Servicing Doors and Locks

INFOID:0000000014624967

WARNING:

Radio waves could adversely affect electric medical equipment. Those who use a pacemaker should contact the electric medical equipment manufacturer for the possible influences before use.

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

- Water soluble dirt:

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

- Oily dirt:

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

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

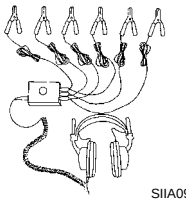
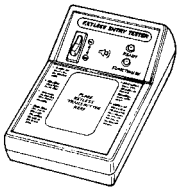
PREPARATION

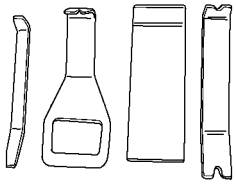
PREPARATION

Special Service Tool

INFOID:0000000014624968

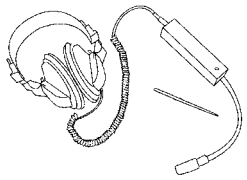
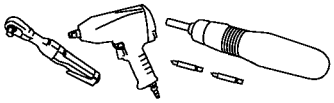
The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (J-39570) Chassis Ear  SIIA0993E	Locating the noise
— (J-50397) NISSAN Squeak and Rattle Kit  ALJIA1232ZZ	Repairing the cause of noise
— (J-43241) Remote Keyless Entry Tester 	Used to test keyfobs
— (J-50190) Signal Tech II  ALEIA0131ZZ	• Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength • Compatible with future sensors • Equipped with a display

Tool number (TechMate No.) Tool name	Description
KV48105501 (J-45295-A) Transmitter Activation Tool  ALEIA0183ZZ	• Activate TPMS transmitter IDs • Compatible with future sensors • Equipped with a display (KV48105501 only)
— (J-46534) Trim Tool Set  AWJIA0483ZZ	Removing trim components

Commercial Service Tool

INFOID:0000000014624969

(TechMate No.) Tool name	Description
(J-39565) Engine Ear  SIIA0995E	Locating the noise
(—) Power Tool  PIIB1407E	Loosening nuts, screws and bolts

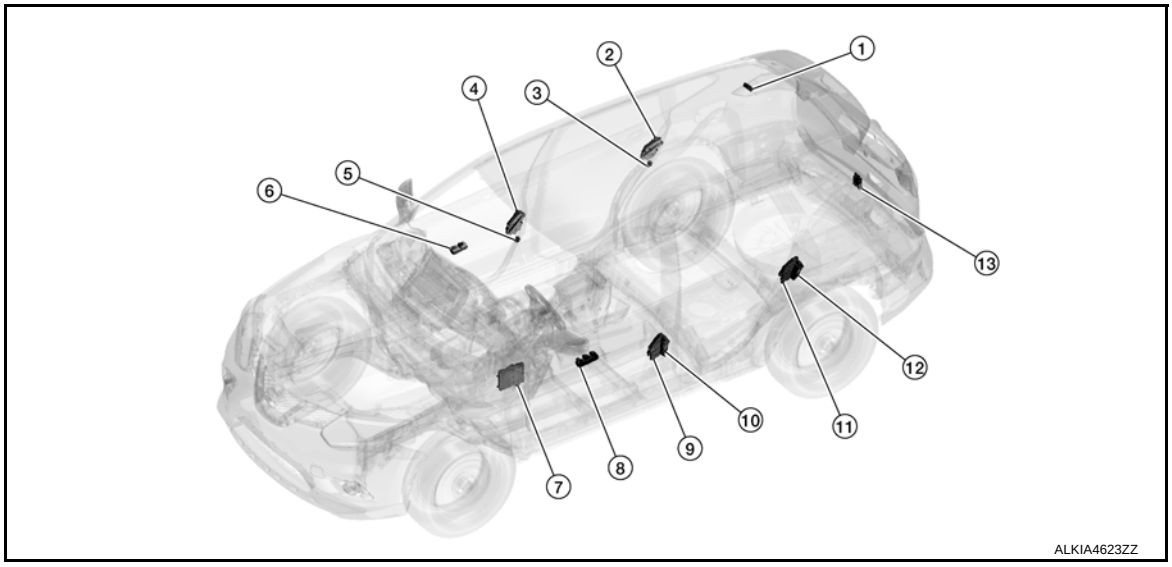
SYSTEM DESCRIPTION

COMPONENT PARTS

POWER DOOR LOCK SYSTEM

POWER DOOR LOCK SYSTEM : Component Parts Location

INFOID:0000000014910821

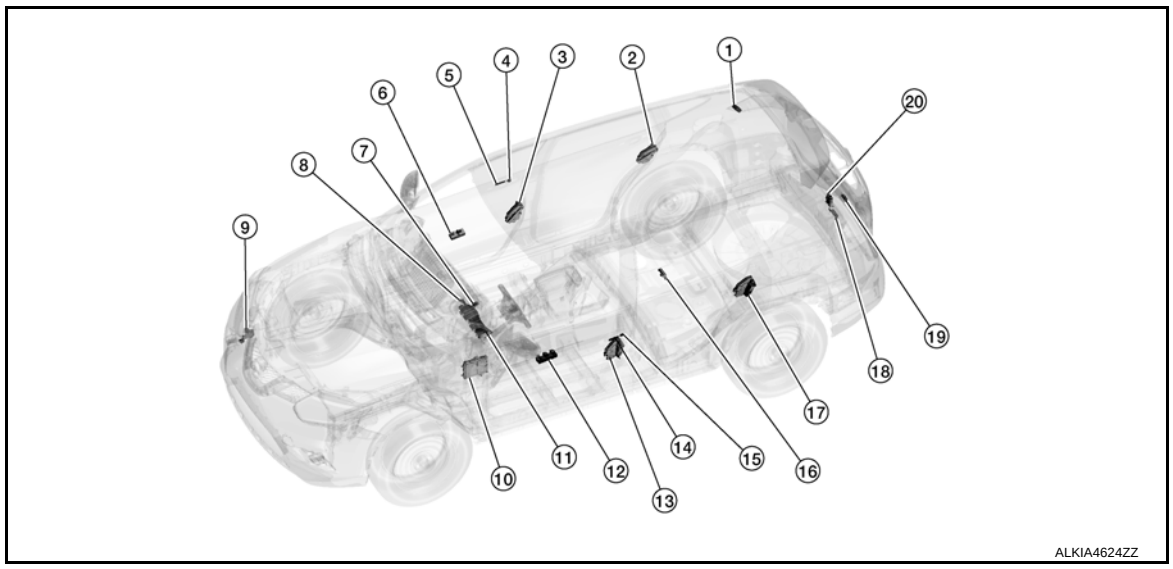


No.	Component	Function
1.	Remote keyless entry receiver	DLK-19, "Remote Keyless Entry Receiver"
2.	Rear door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
3.	Rear door switch RH	DLK-22, "Rear Door Switch"
4.	Front door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
5.	Front door switch RH	DLK-21, "Front Door Switch"
6.	Power window and door lock/unlock switch RH	DLK-19, "Door Lock and Unlock Switch (Passenger Side)"
7.	BCM	Controls the door lock system. Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location
8.	Main power window and door lock/unlock switch	DLK-19, "Door Lock and Unlock Switch (Driver Side)"
9.	Front door lock assembly LH	DLK-22, "Front Door Lock Assembly (LH)"
10.	Front door switch LH	DLK-21, "Front Door Switch"
11.	Rear door switch LH	DLK-22, "Rear Door Switch"
12.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.
13.	Back door lock assembly (door ajar switch)	DLK-17, "Back Door Lock Assembly"

INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : Component Parts Location

INFOID:0000000014910822



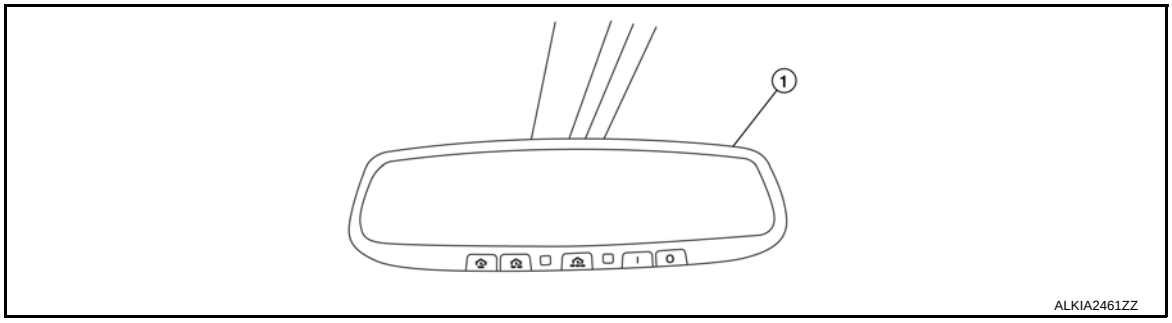
No.	Component	Function
1.	Remote keyless entry receiver	Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key and then transmits them to the BCM. Refer to DLK-19, "Remote Keyless Entry Receiver".
2.	Rear door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
3.	Front door lock actuator RH	Rear door lock actuator locks/unlocks the rear door latch assembly.
4.	Door request switch RH	Door request switch transmits door lock/unlock request signal to the BCM.
5.	Outside key antenna RH	Outside key antenna (RH) detects whether Intelligent Key is outside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-20, "Outside Key Antenna (RH)".
6.	Door lock/unlock switch RH	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.
7.	Push-button ignition switch	Push-button ignition switch has push switch inside which detects that push-button ignition switch is pressed, and then transmits ON/OFF signal to BCM. BCM changes the ignition switch position with the operation of push-button ignition switch. BCM maintains the ignition switch position status while push-button ignition switch is not operated.
8.	Inside key antenna (instrument center)	Inside key antenna (instrument center) detects whether Intelligent Key is inside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-19, "Inside Key Antenna (Instrument Center)".
9.	Intelligent Key warning buzzer	Intelligent Key warning buzzer warns the user, who is outside the vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.
10.	BCM	BCM controls INTELLIGENT KEY SYSTEM (ENGINE START FUNCTION), NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS [NVIS (NATS)] and VEHICLE SECURITY SYSTEM. BCM performs the ID verification between BCM and Intelligent Key when the Intelligent Key is carried into the detection area of inside key antenna, and push-button ignition switch is pressed. If the ID verification result is OK, ignition switch operation is available. Then, when the ignition switch is turned ON, BCM performs ID verification between BCM and ECM. If the ID verification result is OK, ECM can start engine. Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.

No.	Component	Function
11.	Combination meter	Combination meter transmits the vehicle speed signal to BCM via CAN communication. BCM also receives the vehicle speed signal from ABS actuator and electric unit (control unit) via CAN communication. BCM compares both signals to detect the vehicle speed. Security indicator lamp is located on combination meter. Security indicator lamp blinks when ignition switch is in any position other than ON to warn that NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS [NVIS (NATS)] is on board. Refer to MWI-5, "METER SYSTEM : Component Parts Location".
12.	Main power window and door lock/unlock switch	Door lock and unlock switch is integrated into the main power window and door lock/unlock switch. Door lock and unlock switch transmits door lock/unlock operation signal to BCM. Refer to DLK-19, "Door Lock and Unlock Switch (Driver Side)".
13.	Front door lock assembly LH	Door key cylinder switch is integrated into front door lock assembly (driver side). Door key cylinder switch detects door LOCK/UNLOCK operation using mechanical key, and then transmits the operation signal to BCM. Refer to DLK-22, "Front Door Lock Assembly (LH)".
14.	Outside key antenna LH	Outside key antenna (LH) detects whether Intelligent Key is outside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-20, "Outside Key Antenna (LH)".
15.	Door request switch LH	Door request switch transmits door lock/unlock request signal to the BCM.
16.	Inside key antenna (console)	Inside key antenna (console) detects whether Intelligent Key is inside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-20, "Inside Key Antenna (Console)".
17.	Rear door lock actuator LH	Rear door lock actuator locks/unlocks the rear door latch assembly.
18.	Outside key antenna (rear bumper)	Outside key antenna (Rear bumper) detects whether Intelligent Key is outside the vehicle or not, and then transmits the signal to the BCM. Refer to DLK-20, "Outside Key Antenna (Rear Bumper)".
19.	Back door opener switch	Back door request switch transmits door lock/unlock request signal to the BCM.
20.	Back door lock assembly	Back door lock actuator locks/unlocks the back door latch assembly.

INTEGRATED HOMELINK TRANSMITTER

INTEGRATED HOMELINK TRANSMITTER : Component Parts Location

INFOID:0000000014910823

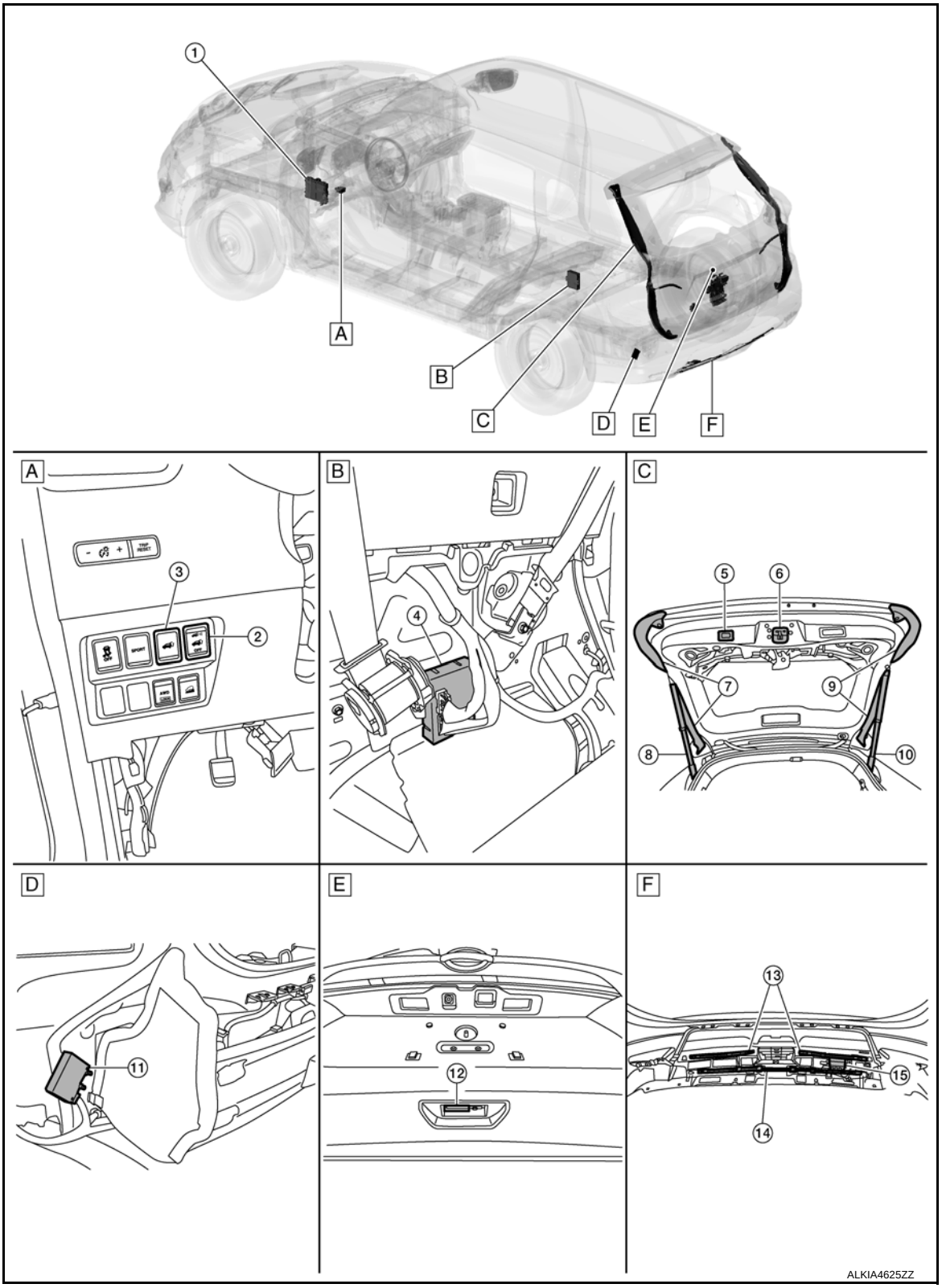


No.	Component	Function
1.	Auto anti-dazzling inside mirror	DLK-24, "Integrated Homelink Transmitter"

AUTOMATIC BACK DOOR SYSTEM

AUTOMATIC BACK DOOR SYSTEM : Component Parts Location

INFOID:0000000014910824



A. View of LH side of instrument panel.
B. View with luggage side lower finisher removed.
C. View of back door open.
D. View of rear bumper with rear fascia removed.
E. View of back door.
F. View with rear fascia removed.

No.	Component	Function
1.	BCM	Transmits and receives signal to the automatic back door control module. Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
2.	Automatic back door switch	DLK-16, "Automatic Back Door Switch"
3.	Automatic back door main switch	DLK-16, "Automatic Back Door Main Switch"
4.	Automatic back door control module	DLK-16, "Automatic Back Door Control Unit"
5.	Automatic back door close switch	DLK-17, "Automatic Back Door Close Switch"
6.	Back door lock assembly	DLK-17, "Back Door Lock Assembly"
7.	Touch sensor LH	DLK-22, "Touch Sensor"
8.	Spindle unit LH	DLK-22, "Spindle Unit"
9.	Touch sensor RH	DLK-22, "Touch Sensor"
10.	Spindle unit RH	DLK-22, "Spindle Unit"
11.	Automatic back door warning buzzer	DLK-17, "Automatic Back Door Warning Buzzer"
12.	Back door opener switch	DLK-18, "Back Door Opener Switch"
13.	Motion activated back door sensor (upper)	DLK-23, "Motion Activated Back Door Sensors"
14.	Motion activated back door sensor (lower)	DLK-23, "Motion Activated Back Door Sensors"
15.	Motion activated back door control unit	DLK-24, "Motion Activated Back Door Control Unit"

Automatic Back Door Control Unit

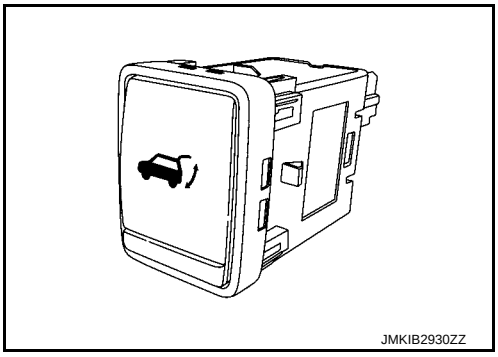
INFOID:0000000014910825

- Automatic back door control unit controls the automatic back door system.
- Automatic back door control unit is installed behind luggage side lower finisher LH.

Automatic Back Door Switch

INFOID:0000000014910826

- When automatic back door switch is pressed, back door auto open/close operation is detected and transmits automatic back door switch signal to automatic back door control unit. Pressing the switch while the automatic back door is in motion will stop the movement.
- Automatic back door switch is installed in the instrument lower panel LH.

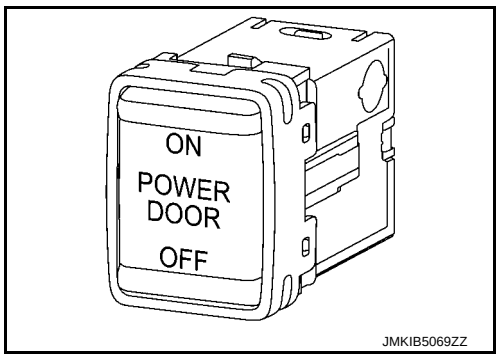


Automatic Back Door Main Switch

INFOID:0000000014910827

- Controls automatic back door open/close operation of automatic back door open/close function.

- Automatic back door main switch is installed in the instrument lower panel LH.

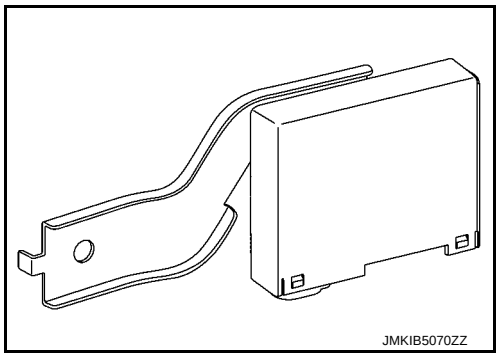


JMKIB5069ZZ

Automatic Back Door Warning Buzzer

INFOID:0000000014910828

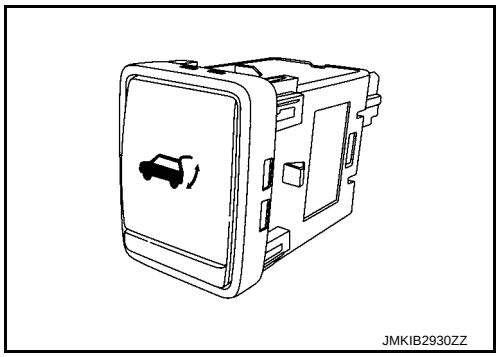
- Warns the user of the automatic back door condition and inappropriate operations with the buzzer sounds.
- Automatic back door warning buzzer is installed behind rear bumper fascia assembly.


JMKIB5070ZZ

Automatic Back Door Close Switch

INFOID:0000000014910829

- When automatic back door close switch is pressed, back door auto close or reverse operation is detected and transmits automatic back door close switch signal to automatic back door control unit.
- Automatic back door close switch is installed in the back door inner finisher.


JMKIB2930ZZ

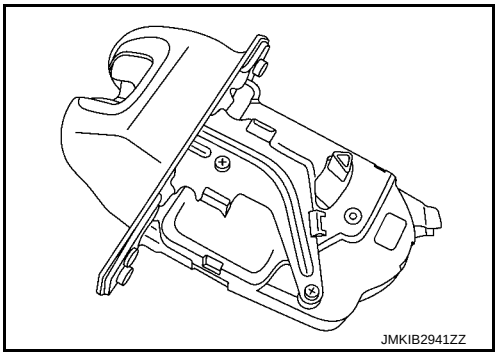
Back Door Lock Assembly

INFOID:0000000014910830

WITHOUT AUTOMATIC BACK DOOR SYSTEM MODELS

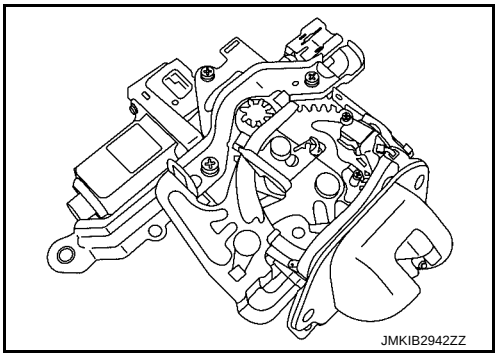
- Back door lock assembly integrates back door opener actuator and back door switch.
- Back door opener actuator opens the back door according to the back door open signal from BCM.
- Back door switch detects open/close status of back door.

- Back door lock assembly is installed in the back door panel.



WITH AUTOMATIC BACK DOOR SYSTEM MODELS

- Back door lock assembly integrates back door closure motor, half latch switch, open switch, close switch and back door switch.
- Closure motor: Inputs open/close signal from automatic back door control unit and activates the back door auto closure operation.
- Half latch switch: Detects the half latch status of back door.
- Open switch: Detects the open status of back door.
- Close switch: Detects the fully closed status of back door.
- Back door switch: Detects open/close status of back door.
- Back door lock assembly is installed in the back door panel.



Automatic Back Door Opener Switch

INFOID:0000000014910831

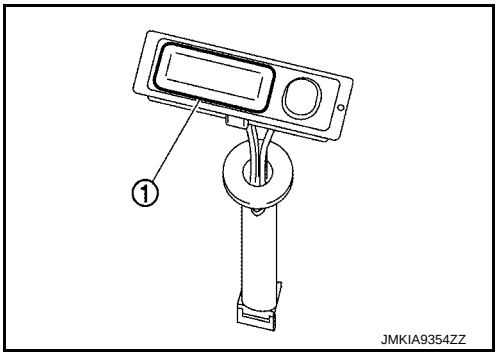
Door switch detects open/close status of door and transmits door switch signal to BCM.

- Detects open operation of automatic back door.
- Transmits automatic back door opener switch signal to automatic back door control module.

Back Door Opener Switch

INFOID:0000000014910833

- Back door opener switch (1) transmits back door opener switch signal to BCM.
- Back door opener switch (1) is integrated in outside handle (back door).

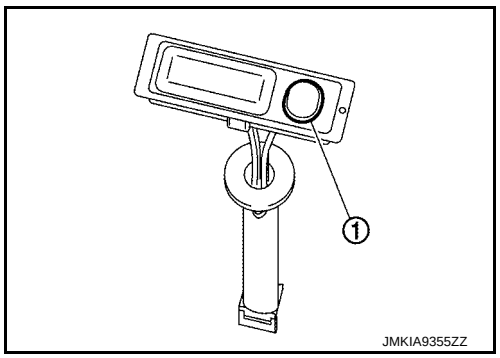


Back Door Request Switch

INFOID:0000000014910834

- Back door request switch (1) transmits back door request switch signal to BCM.

- Back door request switch (1) is integrated in outside handle (back door).



Door Lock and Unlock Switch (Driver Side)

INFOID:0000000014910835

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is Integrated in the main power window and door lock/unlock switch.

Door Lock and Unlock Switch (Passenger Side)

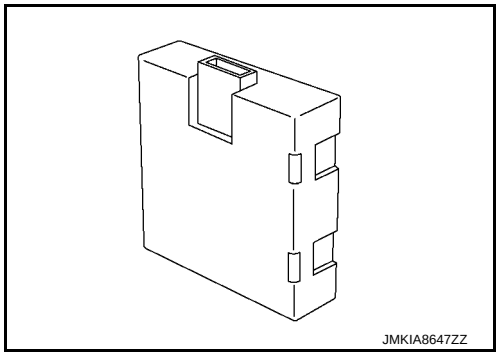
INFOID:0000000014910836

- Door lock and unlock switch transmits door lock/unlock signal operation to BCM.
- Door lock and unlock switch is Integrated in the power window and door lock/unlock switch RH.

Remote Keyless Entry Receiver

INFOID:0000000014910837

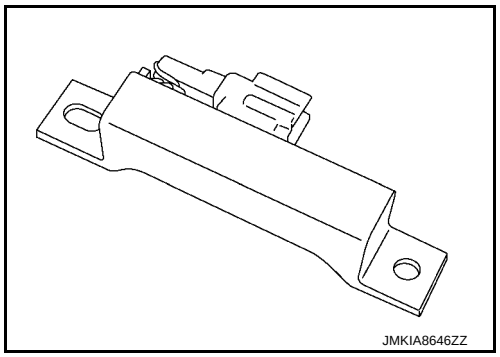
- Remote keyless entry receiver receives button operation signal and key ID signal of Intelligent Key and then transmits them to BCM.
- Remote keyless entry receiver is installed in the right side D pillar.



Inside Key Antenna (Instrument Center)

INFOID:0000000014910838

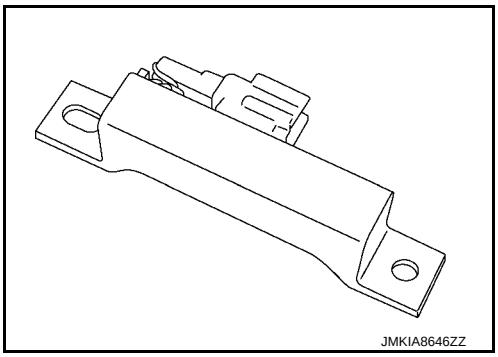
- Inside key antenna (instrument center) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.



Inside Key Antenna (Console)

INFOID:0000000014910839

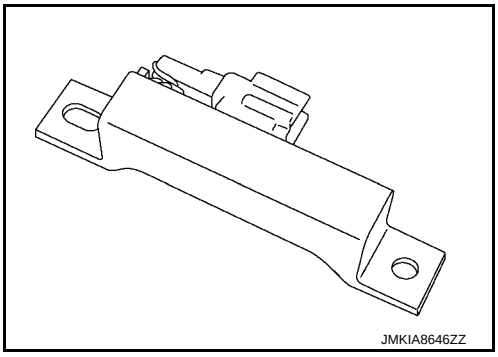
- Inside key antenna (console) detects that Intelligent Key is within the inside detection area, and then transmits detection status to BCM.



Outside Key Antenna (Rear Bumper)

INFOID:0000000014910840

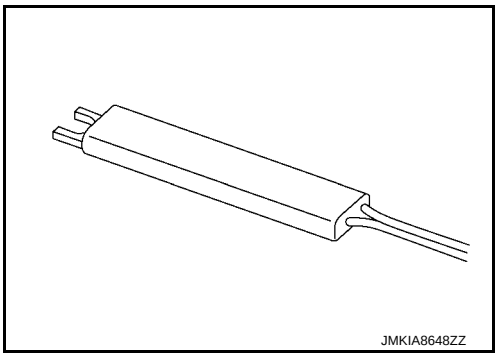
- Outside key antenna (rear bumper) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (rear bumper) is installed in the rear of rear bumper.



Outside Key Antenna (LH)

INFOID:0000000014910841

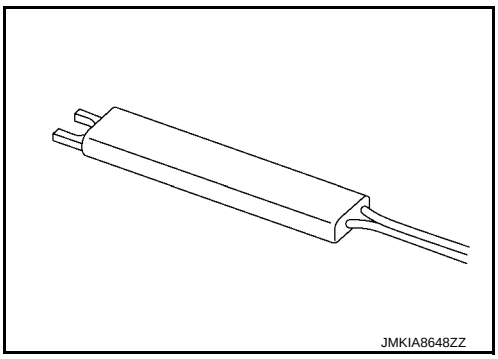
- Outside key antenna (LH) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (LH) is installed in driver side outside handle.



Outside Key Antenna (RH)

INFOID:0000000014910842

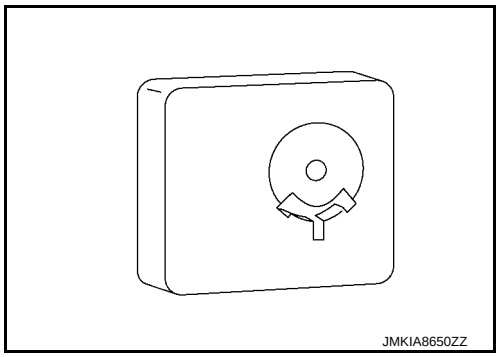
- Outside key antenna (RH) detects that Intelligent Key is within the outside detection area, and then transmits detection status to BCM. Request signal is transmitted simultaneously to Intelligent Key.
- Outside key antenna (RH) is installed in passenger side outside handle.



Intelligent Key Warning Buzzer

INFOID:0000000014910843

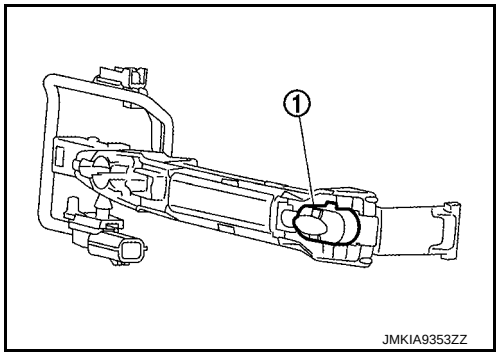
- Intelligent Key warning buzzer warns the user, who is outside vehicle, of operation confirmation according to Intelligent Key operation and door request switch operation, or of an inappropriate operation.
- Intelligent Key warning buzzer is installed in the rear of front bumper and behind RH headlight.


JMKIA8650ZZ

Front Door Request Switch (LH)

INFOID:0000000014910844

- Front door request switch (LH) transmits door request switch signal to BCM.
- Front door request switch (LH) (1) is integrated in driver side outside handle.

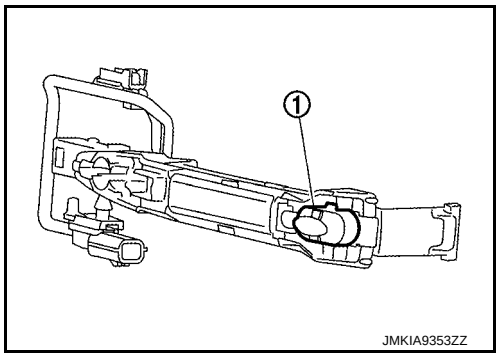


JMKIA9353ZZ

Front Door Request Switch (RH)

INFOID:0000000014910845

- Front door request switch (RH) transmits door request switch signal to BCM.
- Front door request switch (RH) (1) is integrated in passenger side outside handle.

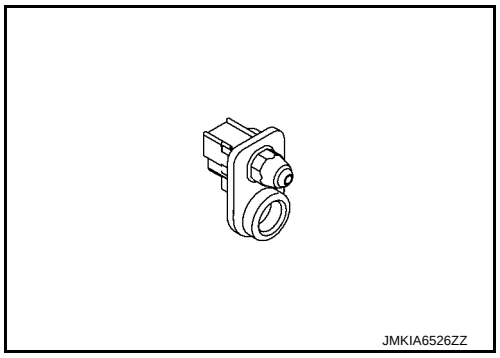


JMKIA9353ZZ

Front Door Switch

INFOID:0000000014910846

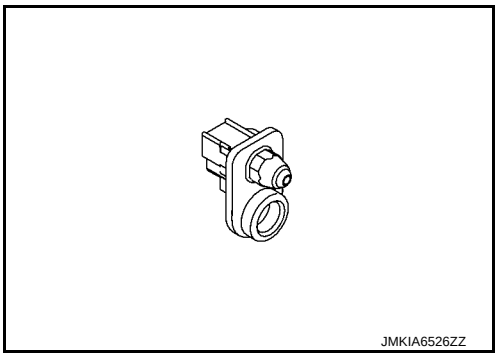
Door switch detects open/close status of door and transmits door switch signal to BCM.


JMKIA6526ZZ

Rear Door Switch

INFOID:0000000014910847

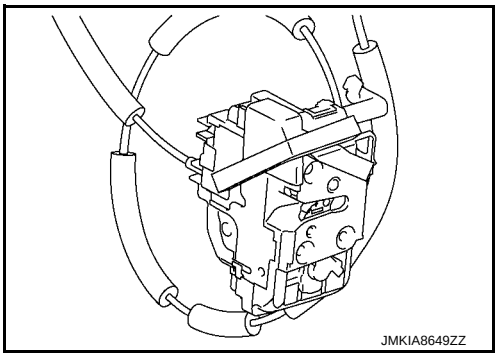
Door switch detects open/close status of door and transmits door switch signal to BCM.


JMKIA6526ZZ

Front Door Lock Assembly (LH)

INFOID:0000000014910848

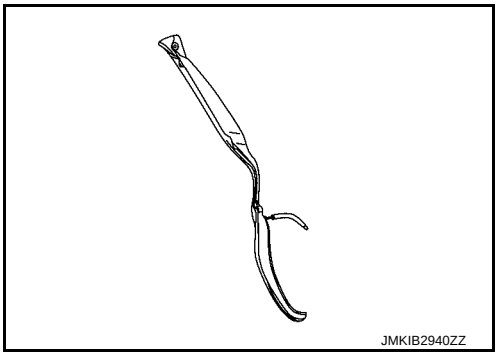
- Door lock actuator and unlock sensor are Integrated in driver door lock assembly.
- Door lock actuator receives lock/unlock signal from BCM, and then locks/unlocks driver door.
- Only front door lock assembly (driver side) integrates unlock sensor. Unlock sensor transmits lock/unlock status of driver door to BCM.


JMKIA8649ZZ

Touch Sensor

INFOID:0000000014910849

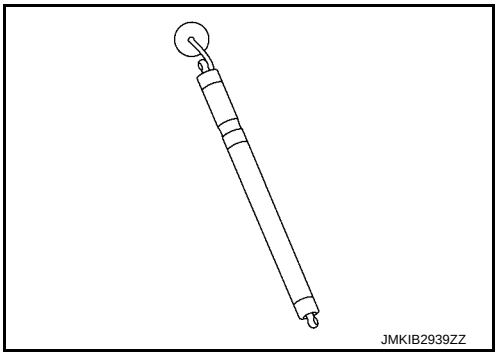
During back door close operation, the touch sensor detects any trapped foreign material.


JMKIB2940ZZ

Spindle Unit

INFOID:0000000014910850

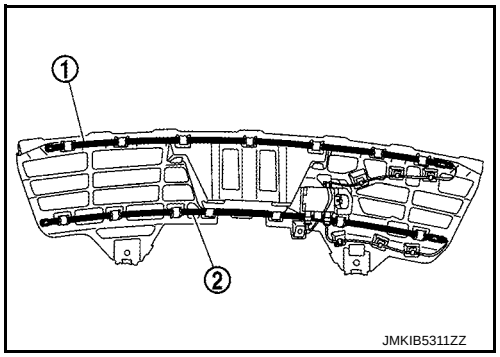
- Spindle unit integrates encoder
- Encoder: Automatic back door control unit receives the pulse signals from encoders A and B that occurred due to synchronization with the back door operation. The automatic back door control unit calculates the back door position, operation direction, and operation speed according to the received pulse signals.
- Spindle motor: Inputs open/close signal from automatic back door control unit and activates the automatic back door open/close operation.


JMKIB2939ZZ

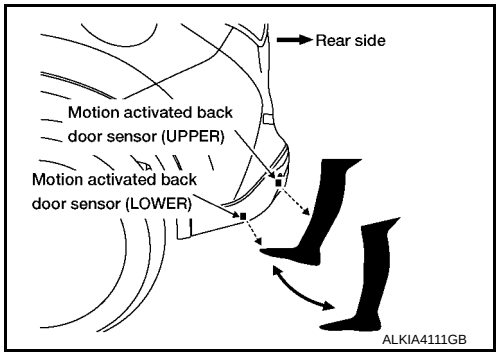
Motion Activated Back Door Sensors

INFOID:0000000014910851

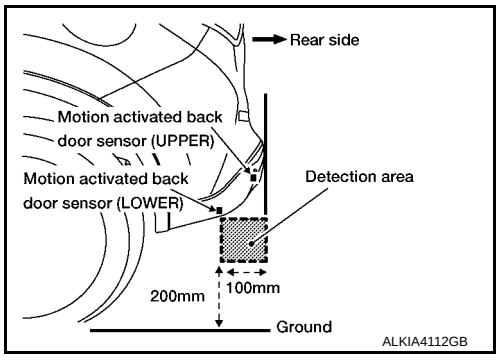
- Motion activated back door sensor (upper) (1) and motion activated back door sensor (lower) (2) are installed in the rear fascia.

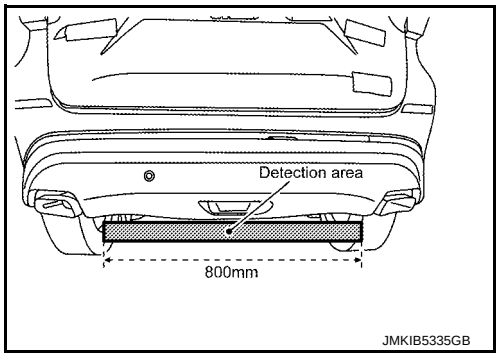


- When the user performs a kick motion toward rear bumper while carrying Intelligent Key as shown in the figure, motion activated back door sensor (upper) detects shin motion of leg and motion activated back door sensor (lower) detects instep motion of foot. This varies the voltage waveform of motion activated back door sensor. Motion activated back door sensor control unit judges user operation by detecting the voltage change of motion activated back door sensors.
  NOTE:
  Voltage generated in communication circuit between motion activated back door sensor and motion activated back door sensor control unit is extremely low and therefore cannot be measured.



- It is necessary to perform a kick motion within space as shown in the figure for activating the motion activated back door sensors completely. The detection area may differ depending on the conditions of the surroundings.



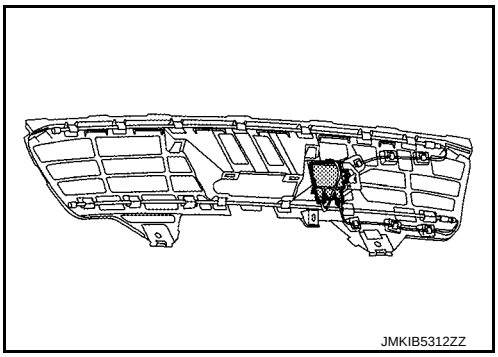


- Intelligent Key must be carried for starting the operation of the automatic back door open/close function by motion activated back door sensor operation (hands free function) with the back door stopped. Intelligent Key does not need to be carried when stopping the back door operation during automatic back door open/close operation (automatic open/close temporary stop function).

Motion Activated Back Door Control Unit

INFOID:0000000014910852

- Motion activated back door control unit is installed in the rear fascia.



- Motion activated back door control unit judges user operation by detecting the voltage waveform change of motion activated back door sensor (upper) and motion activated back door sensor (lower). The motion activated back door control unit then transmits the automatic back door operation request signal to automatic back door control unit via serial communication.

Integrated Homelink Transmitter

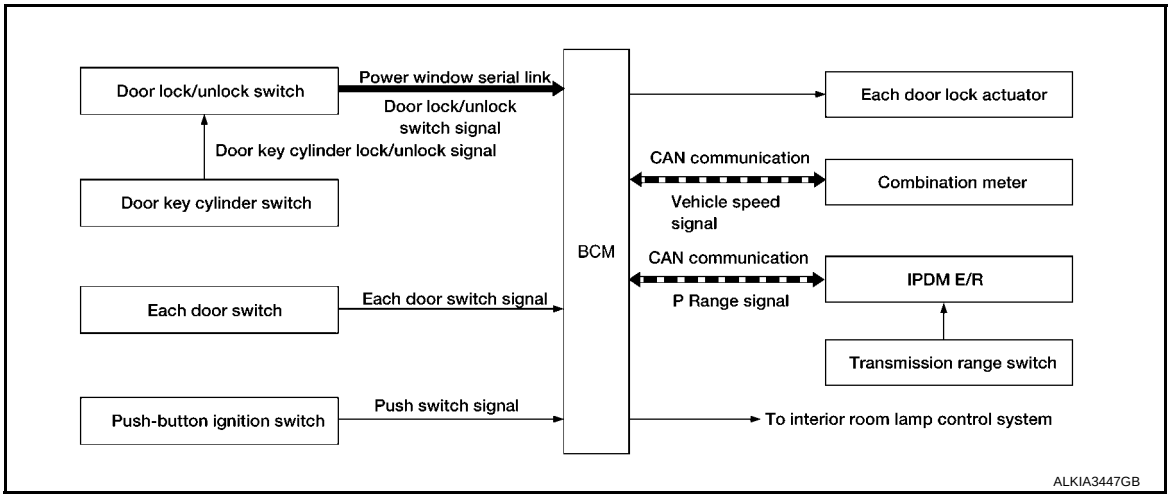
INFOID:0000000014910853

Within the Homelink® transmitter a maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

SYSTEM (POWER DOOR LOCK SYSTEM)

System Diagram

INFOID:0000000014910854



System Description

INFOID:0000000014910855

DOOR LOCK FUNCTION

Door Lock and Unlock Switch

- The door lock and unlock switch (driver side) is built into main power window and door lock/unlock switch.
- The door lock and unlock switch (passenger side) is built into power window and door lock/unlock switch RH.
- Interlocked with the locking operation of door lock and unlock switch, door lock actuators of all doors are locked.
- Interlocked with the unlocking operation of door lock and unlock switch, door lock actuators of all doors actuator are unlocked.

Door Key Cylinder Switch

- With the mechanical key inserted in the door key cylinder on driver side, turning it to lock position locks door lock actuator of all doors.
- With the mechanical key inserted in the door key cylinder on driver side, turning it to unlock position once unlocks the driver side door, turning it to unlock position again within 60 seconds after the first unlock operation unlocks all of the other doors. (SELECTIVE UNLOCK OPERATION)

Selective unlock operation mode can be changed using CONSULT.
Refer to BCS-16, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

IGNITION POSITION WARNING FUNCTION

When door lock and unlock switch are operated while driver side door is open and ignition position is ACC or ON, door locks once but immediately unlocks.

INTERIOR ROOM LAMP CONTROL FUNCTION

Interior room lamp is controlled according to door lock/unlock state, refer to INL-7, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Description".

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (LOCK OPERATION)

The interlock door lock function is the function that locks all doors linked with the vehicle speed or shift position. It has 2 types as per the following items.

Vehicle Speed Sensing Auto Door Lock

All doors are locked when the vehicle speed reaches 24 km/h (15 MPH) or more.
BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is turned ON, all doors are closed and the vehicle speed received from the combination meter via CAN communication becomes 24 km/h (15 MPH) or more.

P Range Interlock Door Lock

All doors are locked when shifting the selector lever from the P (Park) position to any position other than P (Park).

BCM outputs the lock signal to all door lock actuators when it detects that the ignition switch is in the ON position, all doors are closed and the shift signal received from the park position switch when shifted from the P (Park) position to any position other than P (Park).

Setting change of Automatic Door Lock/Unlock Function

The lock operation setting of the automatic door lock/unlock function can be changed.

With CONSULT

The ON/OFF switching of the automatic door lock function and the type selection of the automatic door lock/unlock function can be performed at the “Work support” setting.

Without CONSULT

The automatic door lock function ON/OFF can be switched by performing the following operation:

1. Close all doors (door switch OFF)
2. Ignition switch: OFF→ON
3. Press and hold the door lock and unlock switch for 5 seconds or more in the lock direction within 20 seconds after turning the ignition switch ON.
4. The switching complete when the hazard lamp blinks.

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

AUTOMATIC DOOR LOCK/UNLOCK FUNCTION (UNLOCK OPERATION)

The automatic door lock/unlock function is the function that unlocks all doors linked with the key position or shift position. It has 2 types as per the following items:

IGN OFF Interlock Door Unlock

All doors are unlocked when the power supply position is changed from ON to OFF.
BCM outputs the unlock signal to all door lock actuators when it detects that the power supply position is changed from ignition switch ON to OFF.

P Range Interlock Door Unlock

All doors are unlocked when shifting the selector lever from any position other than P to the P position.
BCM outputs the unlock signal to all door lock actuators when it detects that the ignition switch is in the ON position and the shift signal received from park position switch when shifted from any position other than P to the P position.

Setting change of Automatic Door Lock/Unlock Function

The unlock operation setting of the automatic door lock/unlock function can be changed.

With CONSULT

The ON/OFF switching of the automatic door lock/unlock function and the type selection of the automatic door lock/unlock function can be performed at the “Work support” setting.

Without CONSULT

The automatic door lock/unlock function ON/OFF can be switched by performing the following operation:

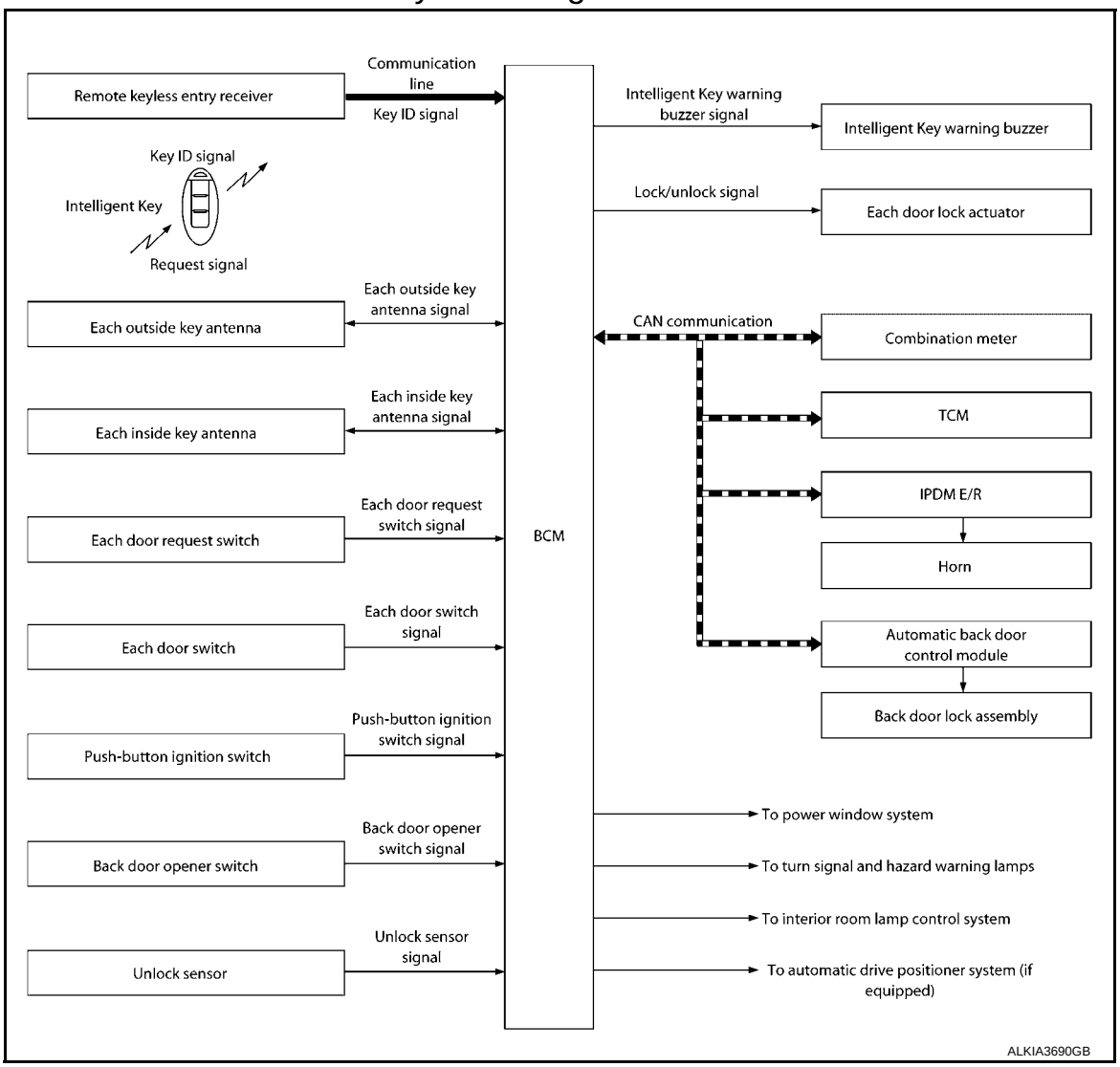
1. Close all doors (door switch OFF)
2. Ignition switch: OFF→ON
3. Press and hold the door lock and unlock switch for 5 seconds or more in the unlock direction within 20 seconds after turning the power supply position ON.
4. The switching is complete when the hazard lamp blinks.

OFF → ON	: 2 blinks
ON → OFF	: 1 blink

SYSTEM (INTELLIGENT KEY SYSTEM)
INTELLIGENT KEY SYSTEM

INTELLIGENT KEY SYSTEM : System Diagram

INFOID:0000000014910856



INTELLIGENT KEY SYSTEM : System Description

INFOID:0000000014910857

- The Intelligent Key system is a system that makes it possible to lock and unlock the door locks (door lock/unlock function) by carrying the Intelligent Key, which operates based on the results of electronic ID verification using two-way communication between the Intelligent Key and the vehicle (BCM).
  CAUTION:
  The driver should always carry the Intelligent Key.
- The settings for each function can be changed with CONSULT.
- If an Intelligent Key is lost, a new Intelligent Key can be registered. A maximum of 4 Intelligent Keys can be registered.
- It is possible to perform a diagnosis on the system and register an Intelligent Key with CONSULT.

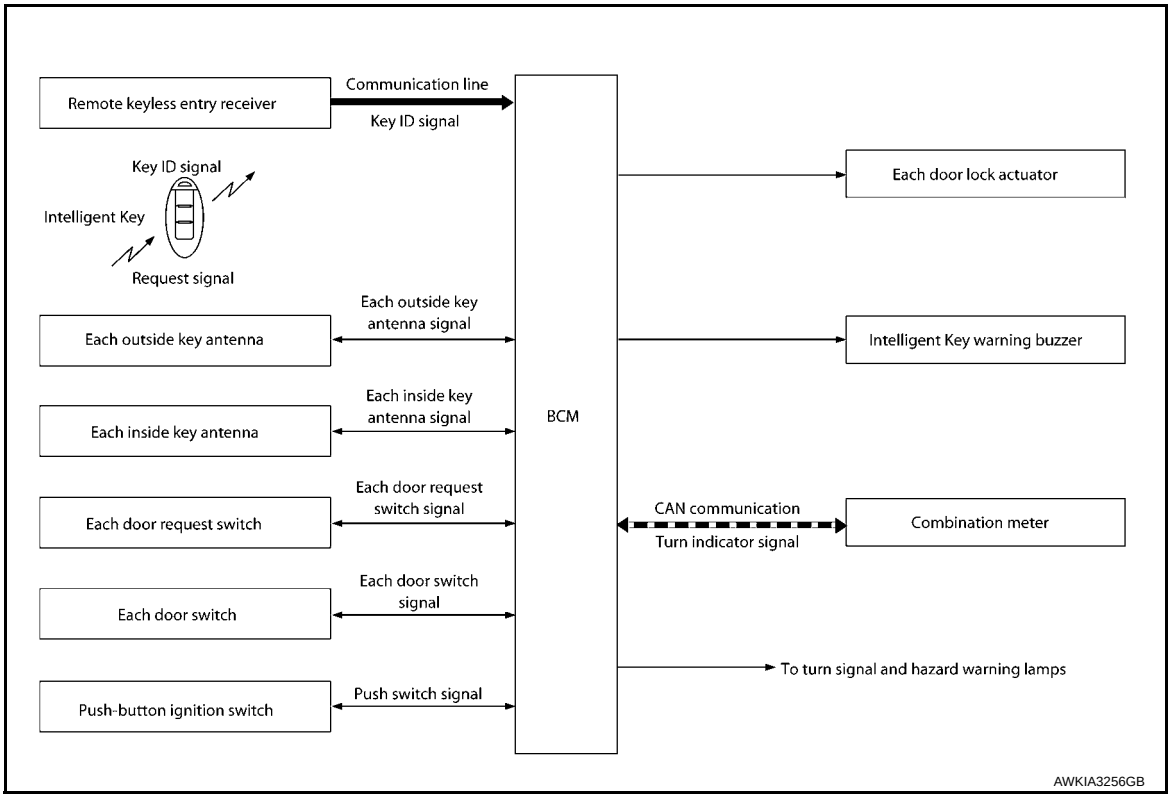
Function	Description	Refer
Door lock	Lock/unlock can be performed by pressing the request switch.	DLK-27
Back door opener	The back door can be opened by carrying the Intelligent Key and pressing the back door opener switch.	DLK-30
Remote keyless entry	Lock/unlock can be performed by pressing the remote controller button of the Intelligent Key.	DLK-28

Function	Description	Refer
Key reminder	The key reminder buzzer sounds a warning if the door is locked with the key left inside the vehicle.	DLK-34
Warning	If an action that does not meet the operating condition of the Intelligent Key system is taken, the buzzer sounds to inform the driver.	DLK-34
Interior room lamp control	Interior room lamp is controlled according to door lock/unlock state.	DLK-27
Panic alarm	When Intelligent Key panic alarm button is pressed, horn sounds.	DLK-34

DOOR LOCK FUNCTION

DOOR LOCK FUNCTION : System Diagram

INFOID:0000000014910858



DOOR LOCK FUNCTION : System Description

INFOID:0000000014910859

Only when pressing the door request switch it is possible to lock and unlock the door by carrying the Intelligent Key.

OPERATION DESCRIPTION

- When the BCM detects that each door request switch is pressed, it activates the outside key antenna and inside key antenna corresponding to the pressed door request switch and transmits the request signal to the Intelligent Key. Then check that the Intelligent Key is near the door.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM.
- BCM receives the key ID signal and compares it with the registered key ID.
- BCM locks/unlocks each doors (except back door).
- BCM sounds Intelligent Key warning buzzer (lock: 2 times, unlock: 1 time) and blinks hazard warning lamps (lock: 2 times, unlock: 1 time) at the same time as a reminder.

OPERATION CONDITION

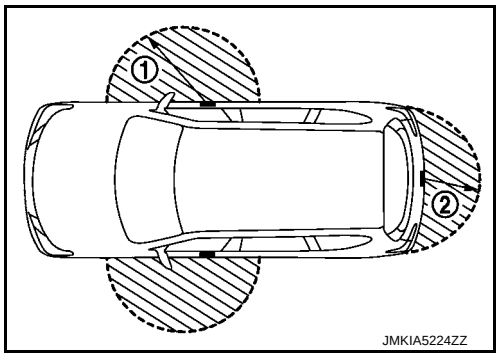
If the following conditions are satisfied, door lock/unlock operation is performed if the door request switch is operated.

Each door request switch operation	Operation condition
Lock	• All doors are closed. • Panic alarm is not activated. • P (Park) position warning is not activated. • Intelligent Key is outside the vehicle. • Intelligent Key is within outside key antenna detection area*.
Unlock	• Panic alarm is not activated. • Intelligent Key is outside the vehicle. • Intelligent Key is within outside key antenna detection area*.

*: Even with a registered Intelligent Key remaining inside the vehicle, door locks can be locked/unlocked from outside of the vehicle with a spare Intelligent Key as long as key IDs are different.

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of door lock/unlock function is in the range of approximately 80 cm (31.50 in) surrounding the driver, passenger door handles (1) and back door handle (2). However, this operating range depends on the ambient conditions.



SELECTIVE UNLOCK FUNCTION

Lock Operation

When a LOCK signal is sent from door request switch (driver side, passenger side, back door), all doors are locked.

Unlock Operation

- When an UNLOCK signal from driver side door request switch is transmitted, driver side door are unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors (except back door) are unlocked.
- When an UNLOCK signal from passenger side door request switch is transmitted, passenger side door is unlocked. When another UNLOCK signal is transmitted within 60 seconds, all other doors (except back door) are unlocked.
- When an UNLOCK signal from back door request switch is transmitted, back door open permission is set. When another UNLOCK signal is transmitted within 60 seconds, all doors (except back door) are unlocked.

How To Change Selective Unlock Operation Mode

Selective unlock operation mode can be changed using CONSULT.
Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND BUZZER REMINDER FUNCTION

During lock or unlock operation by each door request switch, the hazard warning lamps and Intelligent Key warning buzzer blinks or honks as a reminder.

Operating Function Of Hazard And buzzer Reminder

Operation	Hazard warning lamp blinks	Intelligent Key warning buzzer honks
Unlock	Once	Once
Lock	Twice	Twice

Hazard and buzzer reminder does not operate in the following conditions:

- Ignition switch position is ON.
- Door is open (only lock operation).

How To Change Hazard And Buzzer Reminder Mode

Hazard and buzzer reminder mode can be changed using CONSULT.
Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

AUTO DOOR LOCK FUNCTION

After door is unlocked by door request switch operation and if 60 seconds or more passes without performing the following operation, all doors are automatically locked. However, operation check function does not activate.

Operating condition	• Door switch is ON (door is open). • Door is locked. • Push switch is pressed.

How To Change Auto Door Lock Operation Mode

Auto door lock operation mode can be changed using CONSULT.
Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

LIST OF OPERATION RELATED PARTS

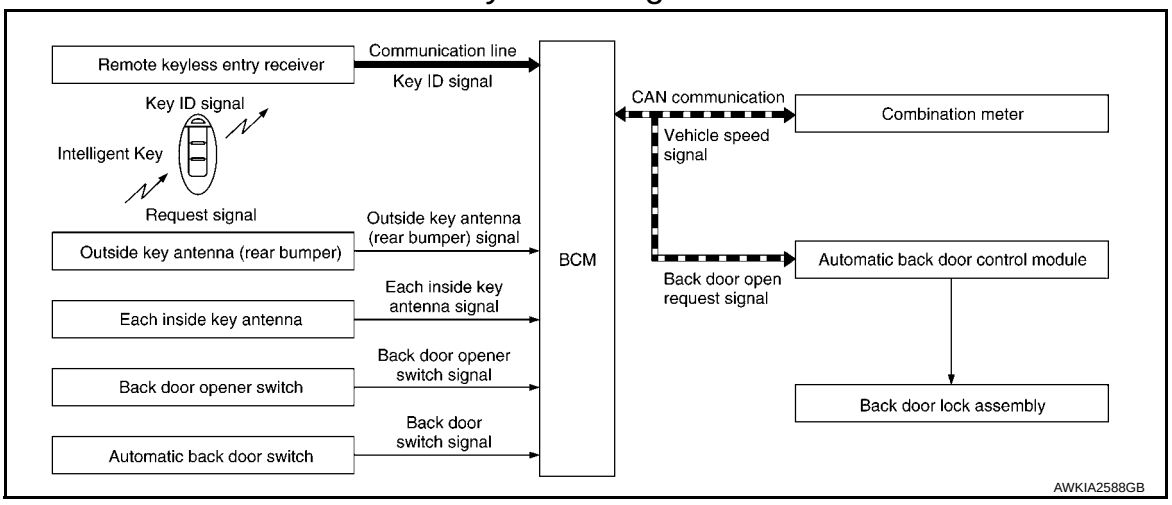
Parts marked with × are the parts related to operation.

Function	Intelligent Key	Door switch	Door request switch	Door lock actuator	Inside key antenna	Outside key antenna	CAN communication system	BCM	Hazard warning lamp	Intelligent Key warning buzzer	Push-button ignition switch
Door lock/unlock function	×	×	×	×	×	×		×			
Hazard reminder function							×	×	×	×	
Selective unlock function	×		×	×	×	×		×			
Auto door lock function	×			×				×			×

BACK DOOR OPEN FUNCTION

BACK DOOR OPEN FUNCTION : System Diagram

INFOID:0000000014910860



BACK DOOR OPEN FUNCTION : System Description

INFOID:0000000014910861

This section describes the operation of the back door opener switch.

- The back door open function can open the back door by pressing the back door opener switch while carrying the Intelligent Key and all doors (except back door) are locked.
- The back door open function enables the back door to be opened by pressing back door opener switch after BCM transmits UNLOCK signal to each door.

BACK DOOR OPEN

While back door open in the permitted state, back door opens when back door opener switch is pressed after back door request switch is operated. Back door open also can be operated according to the following procedure.

- When the BCM detects that back door opener switch is pressed, it activates the outside key antenna (rear bumper) and inside key antenna and transmits the request signal to the Intelligent Key and then, checks that the Intelligent Key is near the back door.
- If the Intelligent Key is within the outside key antenna detection area, it receives the request signal and transmits the key ID signal to the BCM.
- BCM receives the key ID signal and compares it with the registered key ID.
- If the verification result is OK, BCM transmits the back door open request signal to automatic back door control module via CAN communication.
- Automatic back door control module transmits back door open request signal to back door lock assembly and back door is open.
- When the back door is open, automatic back door system performs waiting operation for next back door close operation.
  The operation of then back door open is the same as the automatic back door system, refer to DLK-40, "System Diagram".

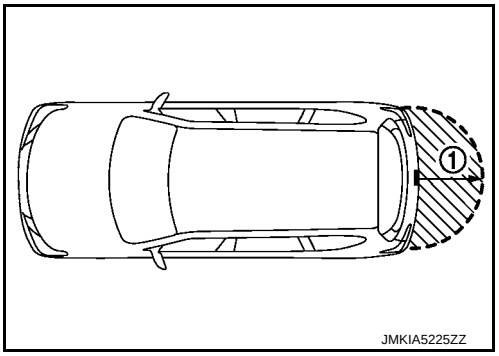
OPERATION CONDITION

If the following conditions are not satisfied, back door open operation is not performed even if the back door opener switch is operated.

Back door opener switch operation	Operation condition
Back door open	• Vehicle speed is less than 5 km/h (3 MPH). • Intelligent Key is within outside key antenna (rear bumper) detection area. • Back door is closed. • Panic alarm is not activated.

OUTSIDE KEY ANTENNA DETECTION AREA

The outside key antenna detection area of back door open function is in the range of approximately 80 cm (31.50 in) surrounding the outside key antenna (rear bumper) (1). However, this operating range depends on the ambient conditions.



LIST OF OPERATION RELATED PARTS

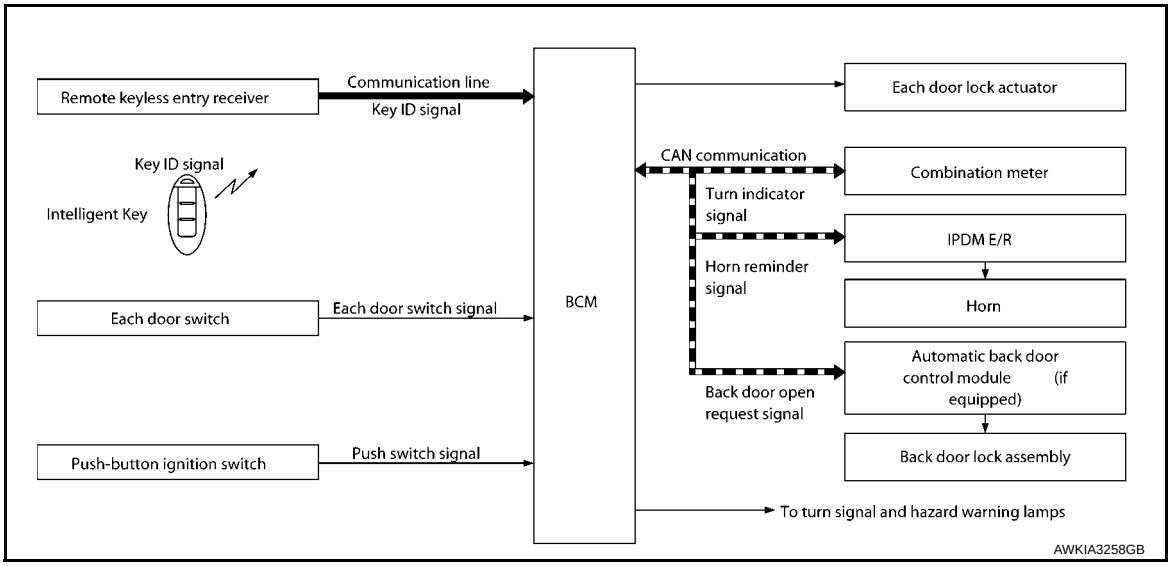
Parts marked with × are the parts related to operation.

Function	Intelligent Key	Back door opener switch	Back door lock assembly	Inside key antenna	Outside key antenna (rear bumper)	CAN communication system	BCM	Automatic back door control module
Back door open function	×	×	×	×	×	×	×	×

REMOTE KEYLESS ENTRY FUNCTION

REMOTE KEYLESS ENTRY FUNCTION : System Diagram

INFOID:0000000014910862



REMOTE KEYLESS ENTRY FUNCTION : System Description

INFOID:0000000014910863

The Intelligent Key has the same functions as the remote control entry system. Therefore, it can be used in the same manner as the remote controller by operating the door lock/unlock button.

OPERATION

Remote keyless entry system controls operation of the following items:

- Door lock/unlock function
- Selective unlock function
- Auto door lock function
- Hazard and horn reminder function
- Automatic back door open/close function
- Remote engine start

OPERATION AREA

The remote keyless entry operating range is approximately 60 m (197 ft) from the vehicle.

DOOR LOCK/UNLOCK FUNCTION

- When door lock/unlock button of the Intelligent Key is pressed, lock signal or unlock signal transmitted from Intelligent Key to BCM.
- When BCM receives the door lock/unlock signal, it operates all door lock actuators, blinks the hazard lamp (lock: 2 time, unlock: 1 times) and horn chirp signal to IPDM E/R at the same time as a reminder.
- IPDM E/R honks horn (lock: 1 time) as a reminder.

OPERATION CONDITION

If the following condition are satisfied, remote keyless entry operation is performed when the Intelligent Key is operated:

Remote controller operation	Operation condition
Lock	• Panic alarm is not activated. • P (Park) position warning is not activated.
Unlock	Panic alarm is not activated.

SELECTIVE UNLOCK FUNCTION

- When a LOCK signal is transmitted from Intelligent Key, all doors are locked.
- When an UNLOCK signal is transmitted from Intelligent Key once, driver side door are unlocked.
- Then, if an UNLOCK signal is transmitted from Intelligent Key again within 60 seconds, all other doors (except for back door) are unlocked.

How to change selective unlock operation mode.

Selective unlock operation mode can be changed using CONSULT.

Refer to BCS-16, "DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)".

AUTO DOOR LOCK FUNCTION

After door is unlocked by Intelligent Key button operation and if 60 seconds or more passes without performing the following operation, all doors are locked. However, operation check function does not activate.

Operating condition	• Door switch is ON. (door is open) • Door is locked. • Push switch is pressed.

How to change auto door lock operation mode.

Auto door lock mode can be changed using CONSULT.

Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

HAZARD AND HORN REMINDER FUNCTION

When doors are locked or unlocked by Intelligent Key, BCM blinks hazard warning lamps as a reminder. The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating Function of Hazard and Horn Reminder

	C mode		S mode	
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamp blinks	Twice	Once	Twice	—
Horn sound	Once	—	—	—

Hazard and horn reminder does not operate in the following conditions:

- Ignition switch position is ON.
- Door is open (only lock operation).

How to Change Hazard and Horn Reminder Mode

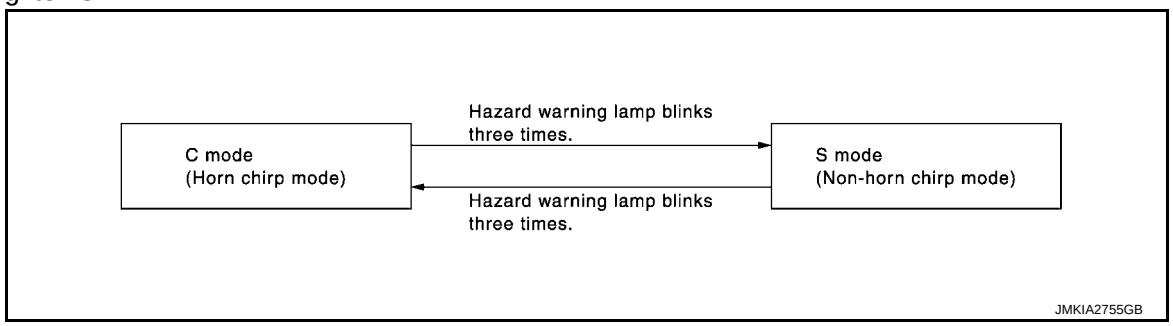
With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT.

Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

When LOCK and UNLOCK signals are sent from the Intelligent Key for more than 2 seconds at the same time, the hazard and horn reminder mode is changed and hazard warning lamp blinks and horn sounds as per the following items:



AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

When back door button of Intelligent Key is pressed for 0.4 second or more, back door open automatically for detailed description, refer to DLK-40, "System Description".

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Function	Intelligent Key	Door switch	Door lock actuator	Push-button ignition switch	CAN communication system	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Automatic back door control module	Back door lock assembly
Door lock/unlock function	×	×	×			×						
Selective unlock function	×	×	×			×						
Auto door lock function	×	×	×	×		×						
Hazard and horn reminder function					×	×	×	×	×	×		
Automatic back door open/close function	×				×	×					×	×

WARNING FUNCTION

WARNING FUNCTION : System Description

INFOID:0000000014910864

OPERATION DESCRIPTION

The warning function are as per the following items and are given to the user as warning information and warnings using combinations of Intelligent Key warning buzzer, combination meter buzzer, KEY warning lamp and information display in combination meter:

- Intelligent Key system malfunction
- OFF position warning
- P position warning
- Take away warning
- Door lock operation warning
- Engine start information
- Intelligent Key low battery warning
- Key ID warning
- Key ID verification information

OPERATION CONDITION

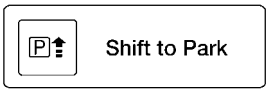
Once the following condition from below is established, alert or warning is executed:

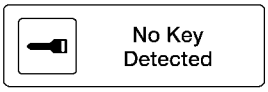
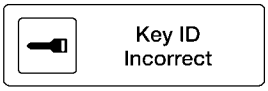
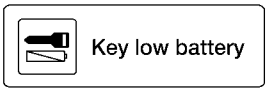
Warning/Information functions		Operation procedure
Intelligent Key system malfunction		When a malfunction is detected on BCM, “KEY” warning lamp illuminates.
OFF position warning	For internal	When condition A, B or condition C is satisfied • Condition A - Ignition switch: ACC position - Door switch (driver side): ON (Door is open) • Condition B - Turn ignition switch from ON to OFF while door is open • Condition C - Intelligent Key backside is contacted to ignition switch while brake pedal is depressed and ignition switch is LOCK or OFF (When the Intelligent Key battery is discharged) - Door switch (driver side): ON (Door is open)
	For external	OFF position warning (For internal) is in active mode, driver side door is closed. **NOTE:** OFF position (For external) active only when each of the sequence occurs as below: P position warning → ACC warning → OFF position warning (For internal) → OFF position warning (For internal)

Warning/Information functions		Operation procedure
P position warning	For internal	• Shift position: Except P (Park) position • Engine is running to stopped (ignition switch is ON to OFF)
	For external	Warning is activated when driver door is closed from the open position while the P (Park) position warning (for inside vehicle) is ON.
ACC warning		• When P (Park) position warning is in active mode, shift position changes P (Park) position • Ignition switch: ACC position
Take away warning	Door is open to close	• Ignition switch: Except Lock position • Door switch: ON to OFF (Door is open to close) • Intelligent Key cannot be detected inside the vehicle
	Door is open	• Ignition switch: Except Lock position • Door switch: ON (Door is open) • Key ID verification every 5 seconds when registered Intelligent Key cannot be detected inside the vehicle
	Push-button ignition switch operation	• Ignition switch: Except Lock position • Press push-button ignition switch • Intelligent Key cannot be detected inside the vehicle
Door lock operation warning		When door lock operation is requested while door lock operating condition of door request switch or Intelligent Key are not satisfied
Engine start information	Ignition switch is ON position	• Ignition switch: ON position • Shift position: P (Park) position* • Engine is stopped
	Ignition switch is except ON position	• Ignition switch: Except ON position • Shift position: P (Park) position* • Intelligent Key is inserted in key slot or Intelligent Key can be detected inside the vehicle
Intelligent Key low battery warning		When Intelligent Key is low battery, BCM is detected after ignition switch is turned ON
Key ID warning		When registered Intelligent Key cannot be detected inside the vehicle after ignition switch is turned ON
Key ID verification information		• When registered Intelligent Key cannot be detected inside the vehicle • Intelligent Key battery is discharged • When NATS antenna amp cannot be detected NATS ID

WARNING METHOD

The following table shows the alarm or warning methods with chime:

Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Intelligent Key system malfunction		Indicate	—	—	—
OFF position warning	For internal	—	—	Activate	—
	For external	—	—	—	Activate
P position warning	For internal	—	—	Activate	—
	For external	—	 ALKIA2515GB	—	Active

Warning/Information functions		"KEY" warning lamp	Information display (combination meter)	Warning chime	
				Combination meter buzzer	Intelligent Key warning buzzer
Take away warning	Door is open to close	—	 ALKIA2517GB	Activate	Activate
	Door is open			—	—
	Push-button ignition switch operation			Activate	—
Door lock operation warning	Request switch operation	—	—	—	Activate
	Intelligent Key	—	—	—	Activate
Key ID warning		—	 ALKIA2518GB	—	—
Intelligent Key low battery warning		—	 ALKIA2520GB	—	—
Key ID verification information		—	 ALKIA2521ZZ	—	—

LIST OF OPERATION RELATED PARTS

Parts marked with × are the parts related to operation.

Warning function		Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	"KEY" warning lamp
Intelligent Key system malfunction										×	×		×
OFF position warning	For internal			×					×	×	×		
	For external			×				×			×		
P (Park) position warning			×						×	×	×	×	×

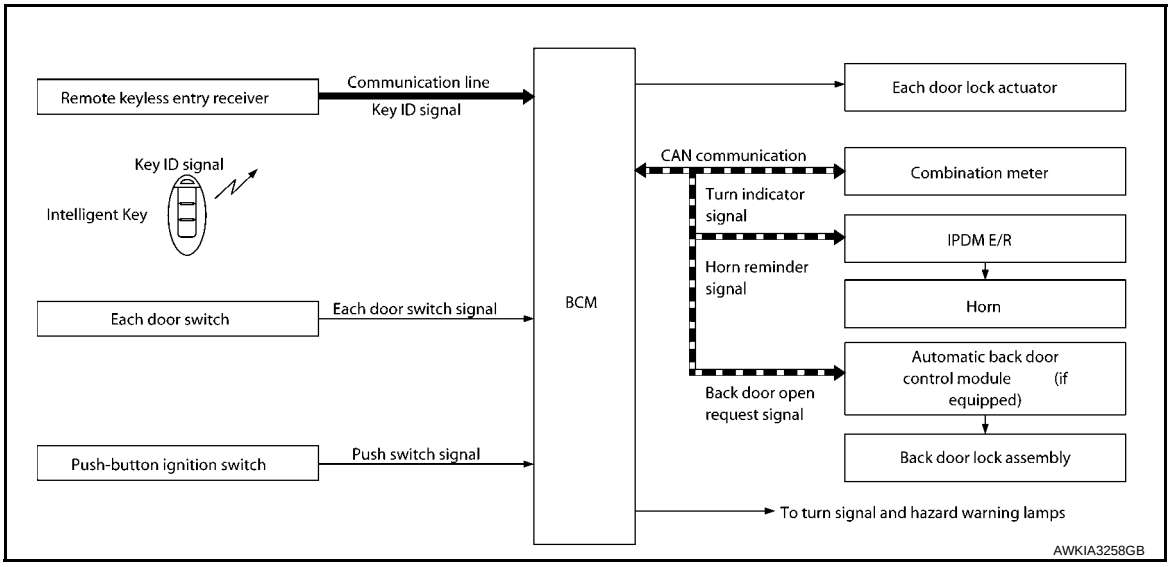
Warning function		Intelligent Key	Ignition switch	Door switch	Door request switch	Inside key antenna	Outside key antenna	Intelligent Key warning buzzer	Combination meter buzzer	CAN communication system	BCM	Information display	"KEY" warning lamp
Take away warning	Door is open or close	×		×		×		×	×	×	×	×	×
	Door is open	×		×		×				×	×	×	×
	Push-button ignition switch operation	×	×			×			×	×	×	×	×
Door lock operation warning		×		×	×	×	×	×			×		
Key ID warning			×			×				×	×	×	×
Engine start information	Ignition switch is ON position	×	×			×				×	×	×	
	Ignition switch is except ON position	×	×			×				×	×	×	
Intelligent Key low battery warning		×				×				×	×	×	×
Key ID verification information		×				×				×	×	×	

REMOTE ENGINE START FUNCTION

REMOTE ENGINE START FUNCTION : System Description

INFOID:0000000014910865

SYSTEM DIAGRAM



OPERATION

Remote keyless entry system controls operation of the following items:

- Door lock/unlock function
- Selective unlock function
- Auto door lock function
- Hazard and horn reminder function
- Automatic back door open/close function
- Remote engine start

OPERATION AREA

The remote engine start operating range is approximately 60 m (197 ft) from the vehicle but not inside the vehicle.

REMOTE ENGINE START FUNCTION

- The remote engine start function is activated when the lock button of the Intelligent Key is pressed and released, and then within 5 seconds, the remote engine start button is pressed and held for at least 2 seconds. At this time, a start signal is transmitted from the Intelligent Key to the BCM via the remote keyless entry receiver.
- When the BCM receives the lock signal, it locks all doors, flashes the hazard lamps and chirps the horn (the horn will chirp only if the answer back horn feature is activated).
- When the BCM receives a successful remote engine start signal, the turn signals will flash once and the parking/tail lamps will come on.
- To enter normal engine run mode from inside the vehicle, depress and hold the brake pedal then press the push-button ignition switch.
- To cancel the remote engine start mode away from the vehicle, press the remote engine start button on the Intelligent Key.
- Once the vehicle has been started using the remote engine start feature, it will remain running for 10 minutes. Extended run time can be added to the initial 10 minute running time by first pressing and releasing the lock button and then within 5 seconds, pressing and holding the remote engine start button for at least 2 seconds. The turn signals will flash once and an additional 10 minutes of running time will be added. The additional 10 minutes start when the extended run time is activated. Extended time can only be added once for a maximum run time of up to 20 minutes.

Additional remote engine start cancel operations	• Anti-theft alarm is activated - unauthorized entry. • Maximum time for engine to run by remote start has been exceeded. • Hazard lamps are turned on. • Push-button ignition switch is pressed without the Intelligent Key in the vehicle. • Push-button ignition switch is pressed without depressing the brake pedal first. • The hood is opened while the remote engine start is engaged. • The vehicle has been moved out of park before “brake and push” action is completed.
Limitations/Restrictions	• Remote engine start must be set to ON within Vehicle Settings in the combination meter. • Engine must be stopped (0 rpm) before engine can be remotely started. - Must wait for 6 seconds or more after IGN RUN → OFF. • Remote engine start can only be activated up to 2 times. - Remote engine start extended time counts as 1 remote engine start activation. - Cycling IGN via push-button ignition switch resets this counter. • User has 5 seconds to press and hold remote engine start button after lock button is pressed. • Remote engine start must be pressed and held for 2 seconds or more after lock button is pressed. • Maximum remote start time is 20 minutes (this includes remote engine start extended time). • Operation area is approximately 60 m (197 ft) from the vehicle but not inside the vehicle. • The push-button ignition switch must be in the LOCK or OFF power position. • The vehicle must be in Park. • Hazard flashers must not be on. • There must not be any registered Intelligent Keys inside the vehicle. • Brakes must not be pressed when attempting to activate remote engine start. - Improper remote engine start operation can occur when stop lamp switch is misadjusted or inoperative. • The doors must be closed. • The back door must be closed. • The hood must be closed. • No current DTCs in the BCM can be present.

HAZARD AND HORN REMINDER FUNCTION

When remote engine start is initiated by Intelligent Key, BCM blinks hazard warning lamps as a reminder. The hazard and horn reminder has a horn chirp mode (C mode) and a non-horn chirp mode (S mode).

Operating Function of Hazard and Horn Reminder

	C mode		S mode	
Intelligent Key operation	Lock	Unlock	Lock	Unlock
Hazard warning lamps blink	Twice	Once	Twice	—
Horn sounds	Once	—	—	—

Hazard and horn reminder does not operate in the following conditions:

- Ignition switch position is ON.
- Door is open (only lock operation).

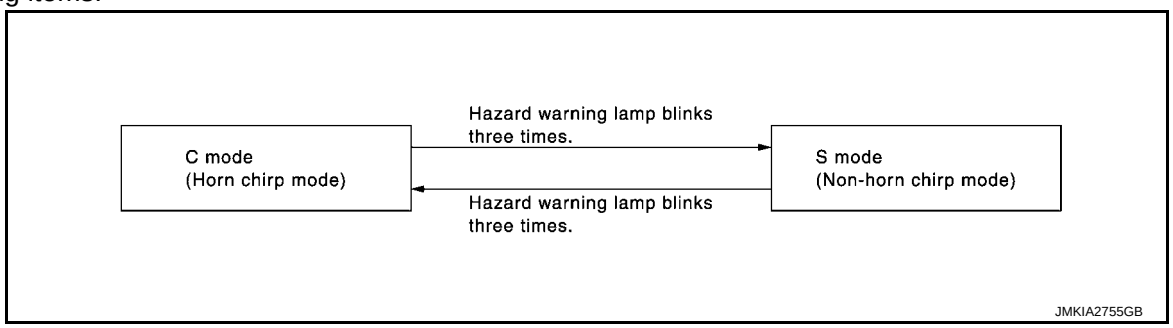
How to Change Hazard and Horn Reminder Mode

With CONSULT

Hazard and horn reminder operation mode can be changed using CONSULT.
Refer to BCS-21, "INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)".

Without CONSULT

When LOCK and UNLOCK signals are sent from the Intelligent Key for more than 2 seconds at the same time, the hazard and horn reminder mode is changed and hazard warning lamps blink and horn sounds as per the following items:



LIST OF OPERATION RELATED PARTS

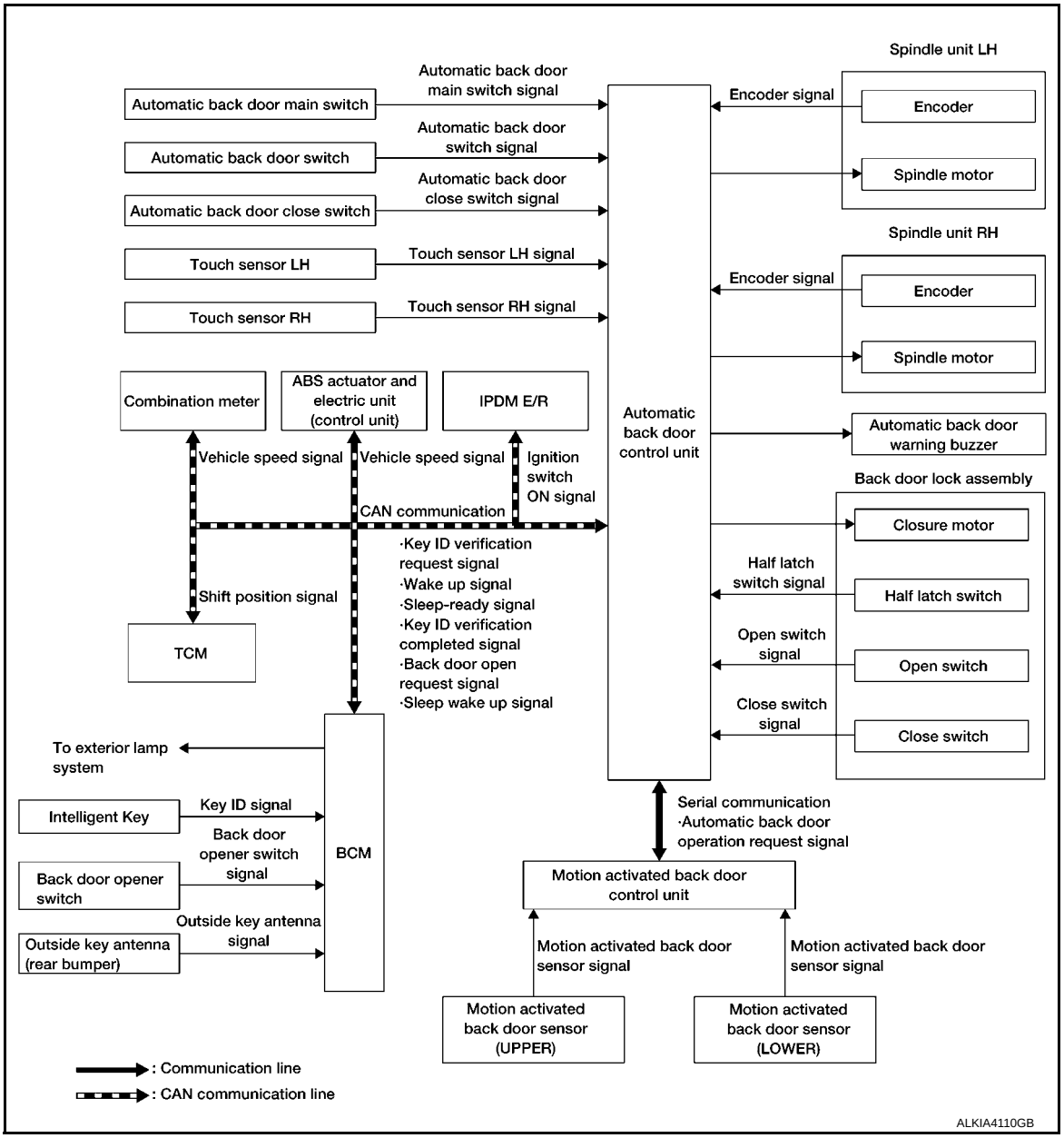
Parts marked with × are the parts related to operation.

Function	Intelligent Key	Door switch	Door lock actuator	Push-button ignition switch	CAN communication system	BCM	IPDM E/R	Horn	Combination meter	Hazard warning lamp	Automatic back door control module	Back door lock assembly
Door lock/unlock function	×	×	×			×						
Selective unlock function	×	×	×			×						
Auto door lock function	×	×	×	×		×						
Hazard and horn reminder function					×	×	×	×	×	×		
Automatic back door open/close function	×				×	×					×	×
Remote engine start function	×			×	×	×	×	×	×	×	×	×

SYSTEM (AUTOMATIC BACK DOOR SYSTEM)

System Diagram

INFOID:0000000014910866



System Description

INFOID:0000000014910867

The automatic back door system performs the automatic open/close operation of the back door by operating the automatic back door switch, automatic back door close switch, back door opener switch, motion activated back door sensor, and Intelligent Key.
Automatic back door system controls operation function of the following items:

- Hands free function (motion activated back door sensor operation)
- Automatic open/close temporary stop function
- Back door open position setting function
- Automatic back door open/close function
- Warning function
- Back door auto closure function
- Anti-pinch function

HANDS FREE FUNCTION (MOTION ACTIVATED BACK DOOR SENSOR OPERATION)

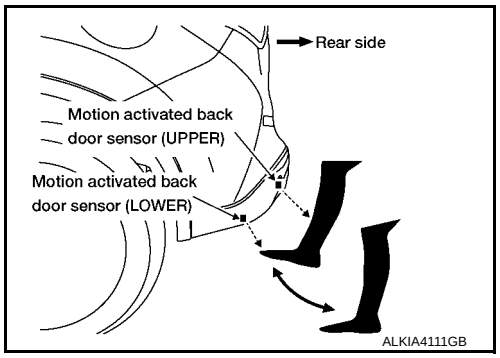
The hands free function is a function that automatically opens/closes the back door when the user moves a foot toward rear bumper and then pulls it back quickly (performs a kick motion).

Motion Activated Back Door Sensor Operation

When the user performs a kick motion toward rear bumper while carrying Intelligent Key as shown in the figure, motion activated back door sensor (upper) detects shin motion of leg and motion activated back door sensor (lower) detects instep motion of foot. This varies the voltage waveform of motion activated back door sensor. Motion activated back door control unit judges user operation by detecting the voltage change of motion activated back door sensor.

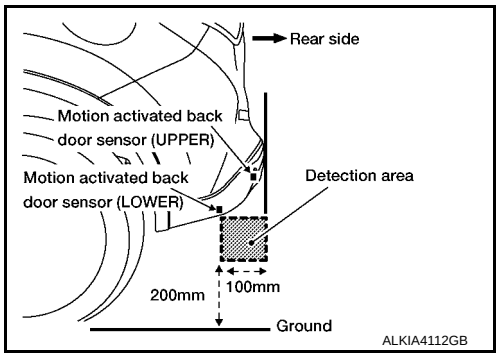
NOTE:

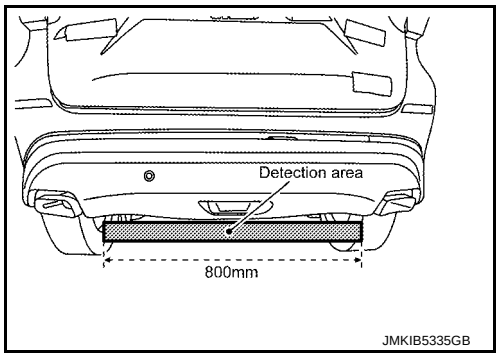
Voltage generated in the communication circuit between motion activated back door sensor and motion activated back door control unit is extremely low and therefore cannot be measured.



Motion Activated Back Door Sensor Detection Area

It is necessary to perform a kick motion within space as shown in the figure for activating the motion activated back door sensor completely. The detection area may differ depending on the conditions of the surroundings.





NOTE:

- For activating the hands free function, a kick motion must be detected by both motion activated back door sensor (upper) and motion activated back door sensor (lower).
- Motion activated back door sensor may not operate in a place near a radio-wave generation source such as a coin-operated parking lot or radio wave tower.
- Motion activated back door sensor may not operate if shoes that block static electricity (safety shoes, etc.) are worn when operating motion activated back door sensor.
- Motion activated back door sensor may not operate if there is any metal near rear bumper.
- Automatic open/close function may operate if motion activated back door sensor detects an animal, rain, an object, etc. when Intelligent Key is near the rear bumper.
- When automatic open function is activated by hands free function, BCM unlocks all doors and activates outside buzzer. (Depending on the settings of CONSULT, outside buzzer may not be activated. Refer to the settings section of “ANSWER BACK I-KEY LOCK UNLOCK” in Work support.)

Operation Condition

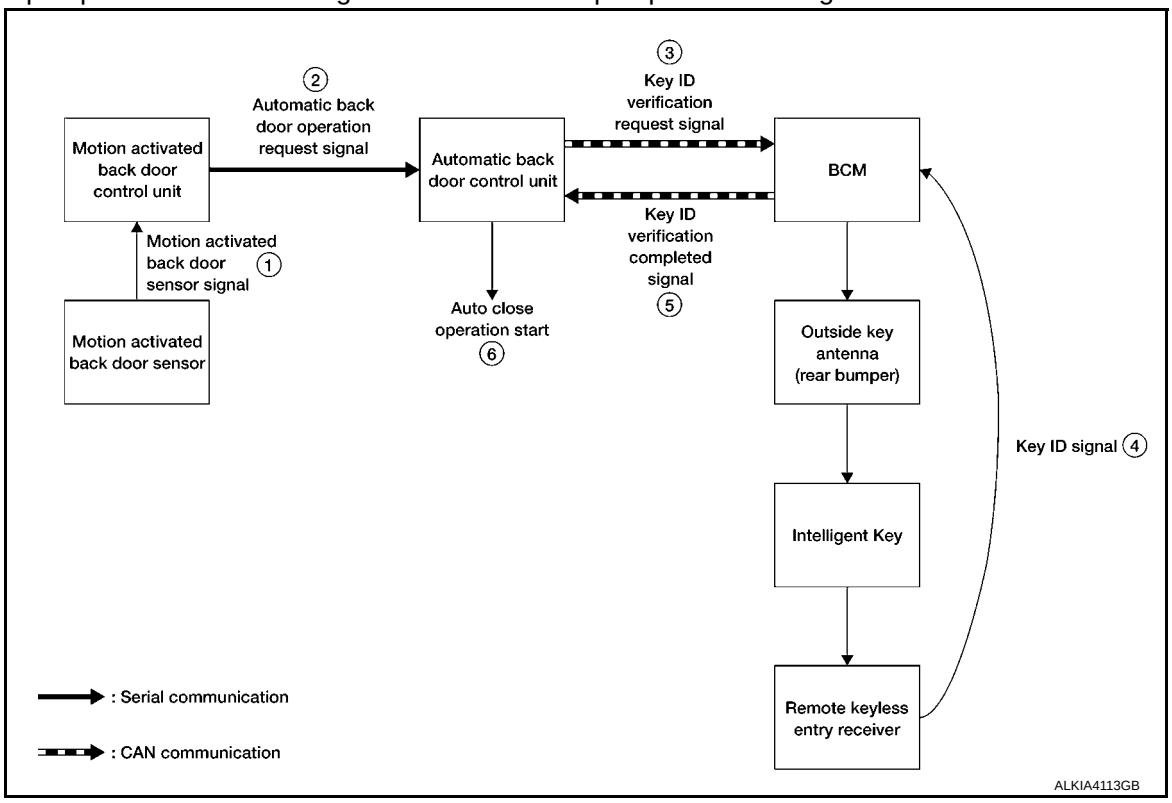
When all of the following conditions are satisfied:

- Vehicle speed: 0 km/h (0 mph)
- Shift position: P position
- Automatic back door main switch: ON position
- Intelligent Key: Within outside key antenna (rear bumper) detection area

Operation Description (Fully Closed to Fully Open of Back Door)

- When the user moves a foot toward rear bumper and pulls back quickly (performs a kick motion) while carrying Intelligent Key, voltage waveform change of motion activated back door sensor (upper) and motion activated back door sensor (lower) occurs.
- Motion activated back door control unit judges user operation by detecting the voltage waveform change of motion activated back door sensor (upper) and motion activated back door sensor (lower). The motion activated back door control unit then transmits automatic back door operation request signal to automatic back door control unit via serial communication.
- When automatic back door control unit receives an automatic back door operation request signal from motion activated back door control unit, the automatic back door control unit transmits a key ID verification request signal to BCM via CAN communication.
- When BCM receives a key ID verification request signal, BCM activates outside key antenna (rear bumper) and checks that Intelligent Key is near rear bumper.
- When Intelligent Key is within the outside key antenna (rear bumper) detection area, Intelligent Key receives the request signal and transmits the key ID signal to BCM via remote keyless entry receiver.
- BCM receives key ID signal and verifies the received key ID with the registered key ID.
- When key IDs verification match, BCM transmits a key ID verification completed signal to automatic back door control unit via CAN communication. When selective unlock function is OFF, BCM unlocks all doors simultaneously. For details of selective unlock function, refer to DLK-28, "DOOR LOCK FUNCTION : System Description".
- When automatic back door control unit receives a key ID verification completed signal from BCM, the automatic back door control unit operates back door auto closure function and opens back door.
- Automatic back door control unit operates the automatic open function after back door auto closure function stops, and opens back door to the full open position* automatically.

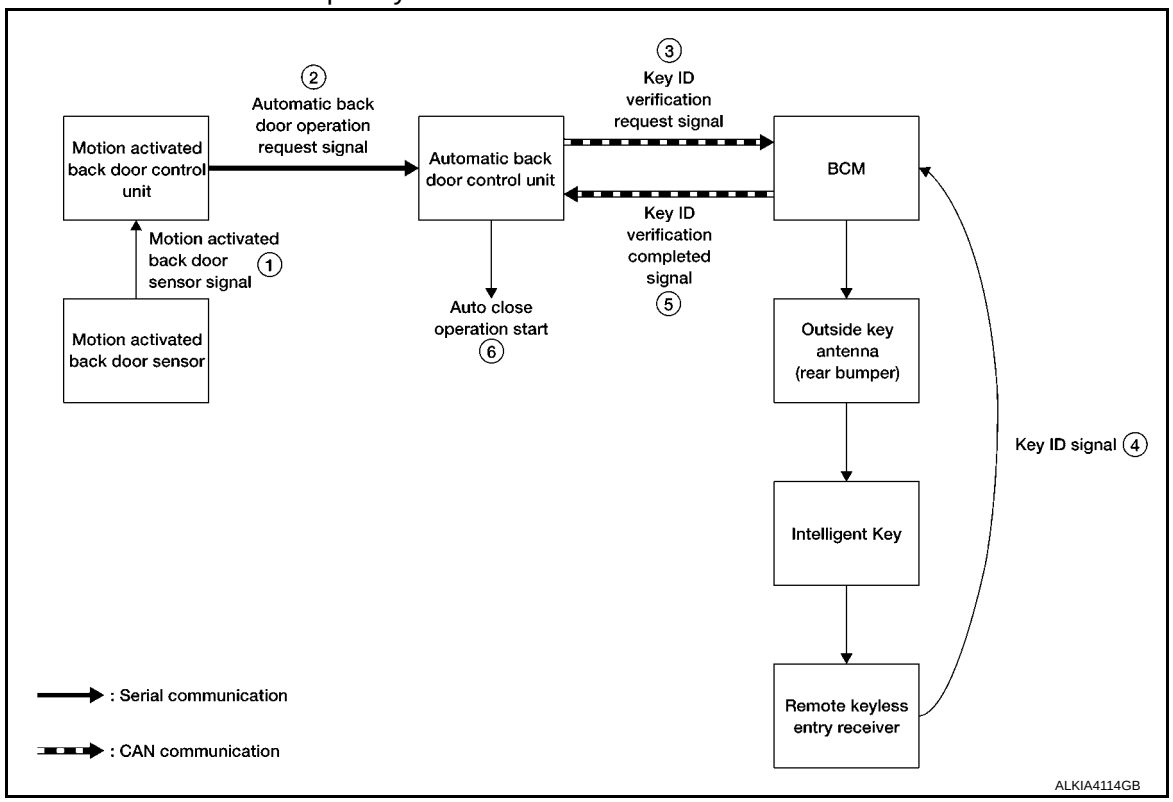
*: Full open position can be changed with back door open position setting function.



Operation Description (Fully Open to Fully Closed of Back Door)

- When the user moves a foot toward rear bumper and pulls back quickly (performs a kick motion) while carrying Intelligent Key, voltage waveform change of motion activated back door sensor (upper) and motion activated back door sensor (lower) occurs.
- Motion activated back door control unit judges user operation by detecting the voltage waveform of motion activated back door sensor (upper) and motion activated back door sensor (lower). The motion activated back door control unit then transmits an automatic back door operation request signal to automatic back door control unit via serial communication.

- When automatic back door control unit receives an automatic back door operation request signal from motion activated back door control unit, the automatic back door control unit transmits a key ID verification request signal to BCM via CAN communication.
- When BCM receives key ID verification request signal, BCM activates outside key antenna (rear bumper) and checks that Intelligent Key is near rear bumper.
- When Intelligent Key is within the outside key antenna (rear bumper) detection area, Intelligent Key receives the request signal and transmits the key ID signal to BCM via remote keyless entry receiver.
- BCM receives a key ID signal and verifies it with the registered key ID.
- When the key IDs match, BCM transmits the key ID verification completed signal to automatic back door control unit via CAN communication.
- When automatic back door control unit receives key ID verification completed signal from BCM, the automatic back door control unit operates automatic close function to close back door automatically until back door is in the ajar state (latch and striker are engaged).
- When automatic back door control unit detects back door ajar state, the unit operates back door auto closure function to close back door completely.



AUTOMATIC OPEN/CLOSE TEMPORARY STOP FUNCTION

Automatic open/close temporary stop function temporarily stops the open/close operation by operating back door opener switch, automatic back door close switch, automatic back door switch, Intelligent Key or motion activated back door sensor during automatic open/close operation or by turning automatic back door main switch OFF.

Each Switch, Intelligent Key or Motion Activated Back Door Sensor Operation

- Automatic open/close operation stops when back door opener switch, automatic back door close switch, automatic back door switch, Intelligent Key or motion activated back door sensor is operated during automatic open/close operation.
- If the back door opener switch, automatic back door close switch, automatic back door switch, Intelligent Key, or motion activated back door sensor is operated during the operation of automatic open/close temporary stop function (back door operation is stopped), the back door direction of operation changes automatically. As a result, the back door operates in the direction opposite to the direction of operation before operation stop.

NOTE:

Even when the Intelligent Key is not carried, it is possible to operate the automatic open/close temporary stop function by using the motion activated back door sensor.

Automatic Back Door Main Switch Operation

- When the automatic back door main switch is ON, and the automatic back door main switch is turned OFF during the automatic open/close function, the automatic open/close operation stops.
- If the automatic back door main switch is turned ON again when the automatic open/close temporary stop function is operating (back door operation is stopped), each switch becomes operable. The automatic operation restarts when any one of the switches, Intelligent Key, or motion activated back door sensor is operated.

BACK DOOR OPEN POSITION SETTING FUNCTION

Back door fully open position setting function is a function that enables users to set the full opening stop position of automatic open operation when back door may contact an obstacle if fully opened by the automatic open operation.

CAUTION:

- **It is not possible to set the position farther than the initial setting fully open position in the open direction.**
- **The position of back door cannot be set to approximately 30% or less than full open position. (Opening angle cannot be set to approximately 28° or less.)**
- **If a vehicle is parked on a steep slope after setting the fully open position of back door to half open or less, the door may open to near the half open position instead of stopping at the set position.**
- **When more than one user uses the vehicle, the back door fully open position setting function may be changed. Be careful when operating automatic open operation for the first time.**

Setting Procedure

By performing the following operations, stop position of the back door open position setting function can be set.

1. Set the shift position to P range.
2. Fully close the back door. (When back door is already fully closed, this operation is not necessary.)
3. After turning OFF the automatic back door main switch, release the latch by back door opener switch operation.
4. Manually move the back door to the desired stop position.
5. While maintaining the back door position, press and hold the automatic back door close switch for 3 seconds or more. When the setting is successfully completed, automatic back door buzzer sounds (pattern C).

Reset Procedure

By performing the following operation, the setting of the back door fully open position setting function can be canceled.

1. Set the shift position to P range.
2. Open the back door to the fully open position.
3. Manually move the back door to the upper limit position in the opening direction.
4. Press and hold the automatic back door close switch for 3 seconds or more. When the setting is successfully completed, automatic back door buzzer sounds (pattern C).

AUTOMATIC BACK DOOR OPEN/CLOSE FUNCTION

Automatic back door open/close function operates auto open/close of back door according to operation of automatic back door switch, automatic back door close switch, back door opener switch, motion activated back door sensor, and Intelligent Key.

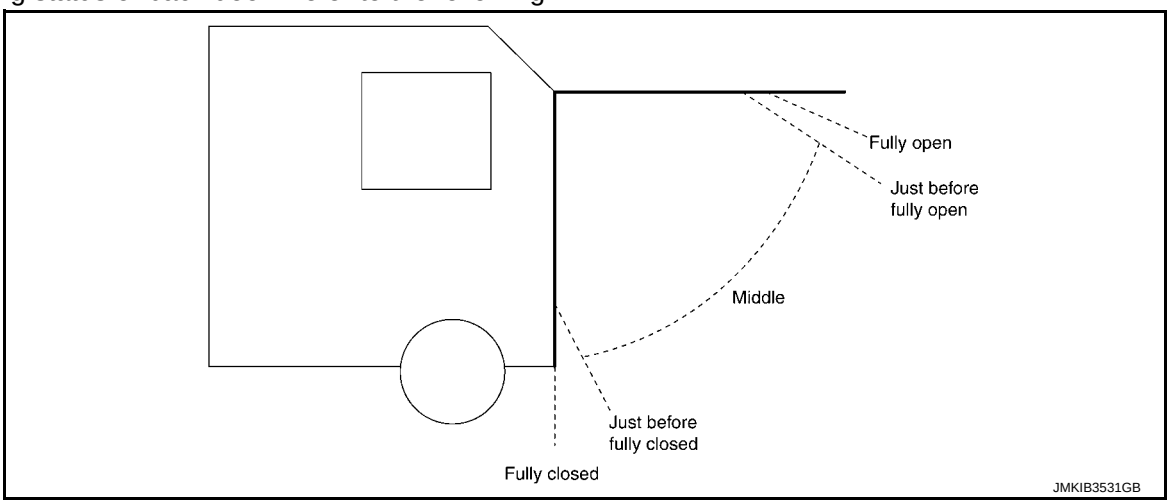
Operation Condition

When all of the following conditions are satisfied.

- Shift position: P position
- Vehicle speed: 0 km/h (0 mph)
- Power supply (automatic power back door control unit): Approx. 11 V or more

Automatic Open/close Operation When Each Switch is Operated

The automatic open/close operation when each switch is operated differs according to the stop position or operating status of back door. Refer to the following.



Automatic back door switch

Condition			Automatic back door switch	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Full open	Stop	ON	Long press (0.5 sec)	Non-operation
		OFF		Perform the automatic close function
Fully open to just before fully open	Stop	ON	Long press (0.5 sec)	Perform the automatic close function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
Middle	Stop	ON	Long press (0.5 sec)	• Automatic close operation (Operation before stop: when opening automatically) • Automatic open operation (Operation before stop: when closing automatically)
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			

Condition			Automatic back door switch	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Just before fully closed to fully closed	Stop	ON	Long press (0.5 sec)	Perform the automatic open function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			
Full closed	Stop	ON	Long press (0.5 sec)	Non-operation
		OFF		Perform the automatic open function

Intelligent Key

Condition				Intelligent Key	Back door operation
Back door position	Ignition switch	Back door condition	Automatic back door main switch		
Full open	OFF	Stop	ON	Long press (1 sec)	Perform the automatic close function
			OFF		
Fully open to just before fully open	OFF	Stop	ON	Long press (1 sec)	Perform the automatic close function
		Automatic open function operating			Stop of the auto operation
		Automatic close function operating			Stop of the auto operation
		Stop	OFF		Perform the automatic close function
		Automatic open function operating			Stop of the auto operation
		Automatic close function operating			Stop of the auto operation

Condition				Intelligent Key	Back door operation
Back door position	Ignition switch	Back door condition	Automatic back door main switch		
Middle	OFF	Stop	ON	Long press (1 sec)	• Automatic close operation (Operation before stop: when opening automatically) • Automatic open operation (Operation before stop: when closing automatically)
		Automatic open function operating			Stop of the auto operation
		Automatic close function operating			Stop of the auto operation
		Stop	OFF		Non-operation
		Automatic open function operating			Stop of the auto operation
		Automatic close function operating			Stop of the auto operation
Just before fully closed to fully closed	OFF	Stop	ON	Long press (1 sec)	Perform the automatic open function
		Automatic open function operating			Stop of the auto operation
		Automatic close function operating			Stop of the auto operation
		Stop	OFF		Non-operation
		Automatic open function operating			Stop of the auto operation
		Automatic close function operating			Stop of the auto operation
Full closed	OFF	Stop	ON	Long press (1 sec)	Perform the automatic open function
			OFF		

Automatic back door close switch

Condition			Automatic back door close switch	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Full open	Stop	ON	Press	Perform the automatic close function
		OFF		Non-operation

Condition			Automatic back door close switch	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Fully open to just before fully open	Stop	ON	Press	Perform the automatic close function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
Middle	Stop	ON	Press	• Automatic close operation (Operation before stop: when opening automatically) • Automatic open operation (Operation before stop: when closing automatically)
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
Just before fully closed to fully closed	Stop	ON	Press	Perform the automatic open function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation

Back door opener switch

Condition			Back door opener switch	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Full open	Stop	ON	Press	Non-operation
		OFF		

Condition			Back door opener switch	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Fully open to just before fully open	Stop	ON	Press	Perform the automatic close function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
Middle	Stop	ON	Press	• Automatic close operation (Operation before stop: when opening automatically) • Automatic open operation (Operation before stop: when closing automatically)
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
Just before fully closed to fully closed	Stop	ON	Press	Perform the automatic open function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
Full closed	Stop	ON	Press	Perform the automatic open function
		OFF		Perform the back door auto closure open operation

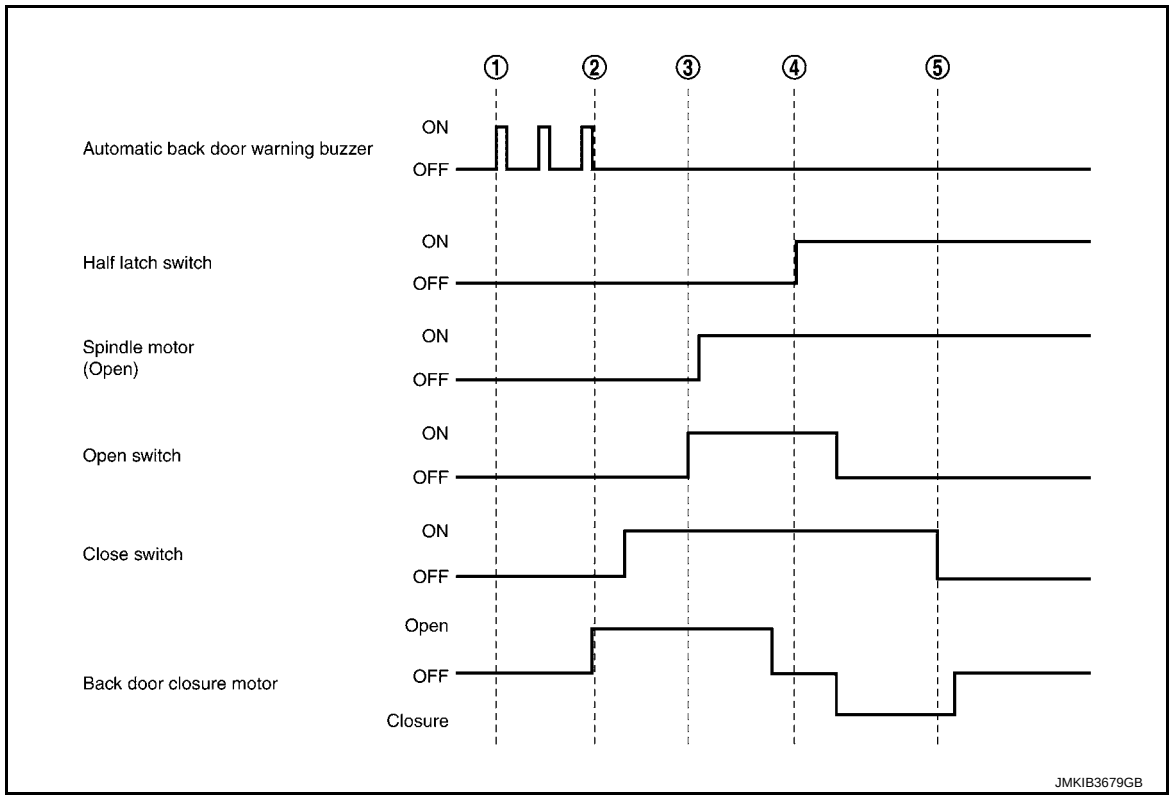
Hands free function (kick motion sensor operation)

Condition			Motion activated back door sensor	Back door operation
Back door position	Back door condition	Automatic back door main switch		
Full open	Stop	ON	ON	Perform the automatic close function
		OFF		Non-operation
Fully open to just before fully open	Stop	ON	ON	Perform the automatic close function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Automatic operation continues
	Automatic close function operating			Automatic operation continues
Middle	Stop	ON	ON	• Automatic close operation (Operation before stop: when opening automatically) • Automatic open operation (Operation before stop: when closing automatically)
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Automatic operation continues
	Automatic close function operating			Automatic operation continues
Just before fully closed to fully closed	Stop	ON	ON	Perform the automatic open function
	Automatic open function operating			Stop of the auto operation
	Automatic close function operating			Stop of the auto operation
	Stop	OFF		Non-operation
	Automatic open function operating			Automatic operation continues
	Automatic close function operating			Automatic operation continues
Full closed	Stop	ON	ON	Perform the automatic open function
		OFF		Non-operation

NOTE:
Intelligent Key must be carried for starting the automatic open/close function by motion activated back door sensor operation (hands free function) with the back door stopped. Intelligent Key does not need to be carried

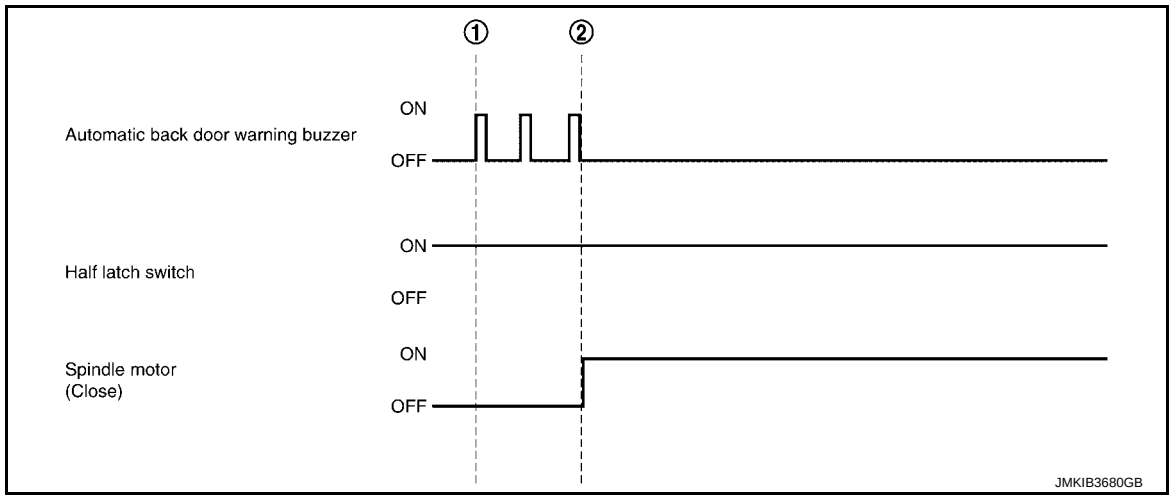
for stopping back door operation during automatic open/close function (automatic open/close temporary stop function).

Timing Chart (Full Closed to Fully Open Operation)



Timing	Operation
①	Buzzer operate after operation permission conditions are satisfied.
②	After buzzer operation (A pattern) ends, back door closure motor starts the open operation.
③	Open SW turns ON, and back door latch release operation completes.
④	Half latch SW turns ON, and then back door closure motor performs reverse operation and returns to the neutral position.
⑤	When close SW turns OFF, back door closure motor reverse operation stops, and then completes returning to the neutral position.

Timing Chart (Fully Open to Fully Closed Operation)



Timing	Operation
①	Buzzer operate after operation permission conditions are satisfied.
②	After buzzer operation (A pattern) ends, spindle motor starts the close operation.

CONTROL IF NOT WITHIN THE OPERATION CONDITIONS DURING THE OPERATION

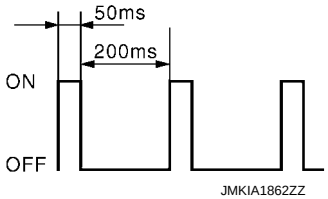
If the back door is not within the operation conditions during the operation, the automatic back door control unit performs the control as follows.

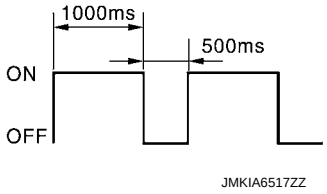
Item (Condition)		Back door operation status
Automatic back door main switch: ON→OFF		Operation stops
Operation condition release during the operation start announcement		Automatic back door function is not operating
Shift position: P position→other than P position		Operation continues (once back door fully closed state is detected, automatic operation does not become available again until the shift position is shifted to P range)
Vehicle speed (0 km/h (0 mph) → More than 1 km/h (0 MPH))	Automatic open function operating	Operation stop [Back door fully closed or buzzer sounds until the vehicle stops (pattern B)]
	Automatic close function operating	The operation is continued [buzzer sounds (pattern B) until back door fully closed]
Operation time (More than approx. 180 sec.)		Operation stops
Malfunction detected (Power supply circuit, half latch switch, and back door condition)		Operation stops
Touch sensor circuit (Normal → Open)	Open operation	Operation stops
	Close operation	Operation stops
	Closure (close) operation	Closure closing operation, or warning buzzer operates (B pattern)
	Closure [open (return the latch to the neutral position)]	Operation continues

WARNING FUNCTION

The warning function is as follows and gives the user warning information using automatic back door warning buzzer.

Automatic back door warning buzzer

Pattern		Description	Time
A		• Operation start announcement • Anti-pinch operation start announcement	0.75 sec

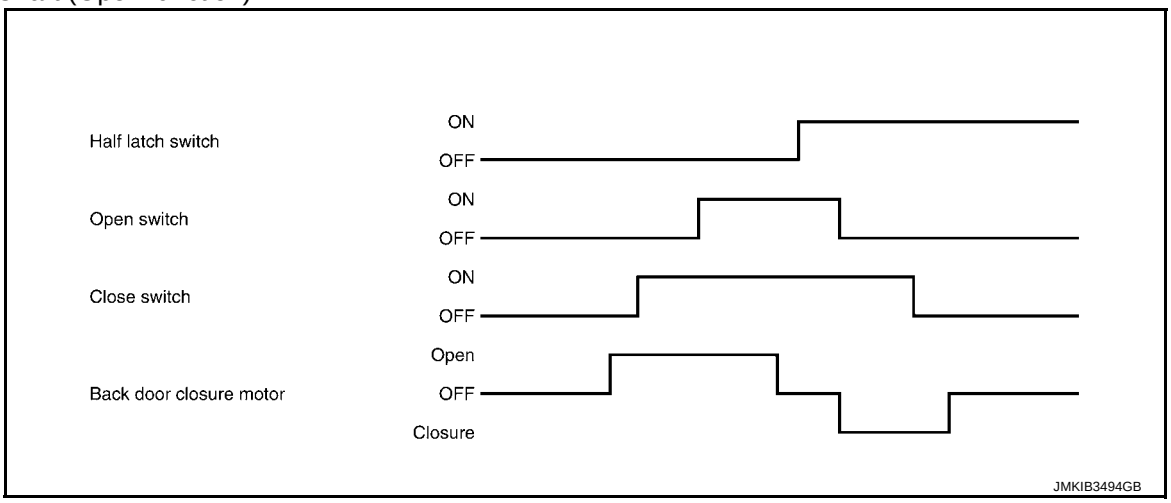
Pattern		Description	Time
B	Pi------••••••	The conditions are not satisfied in the fully open position or during the operation, and then the operation continues	Back door fully closed or vehicle is stopped
C	 JMKIA6517ZZ	• Calibration of automatic back door position information is complete • Back door open position setting procedure is complete	2.5 sec

BACK DOOR AUTO CLOSURE FUNCTION

Open Function

When back door opener switch is pressed and automatic back door main switch in the OFF position, BCM transmits the back door open request signal to automatic back door control unit via CAN communication, and automatic back door control unit opens back door lock assembly.

Timing Chart (Open function)

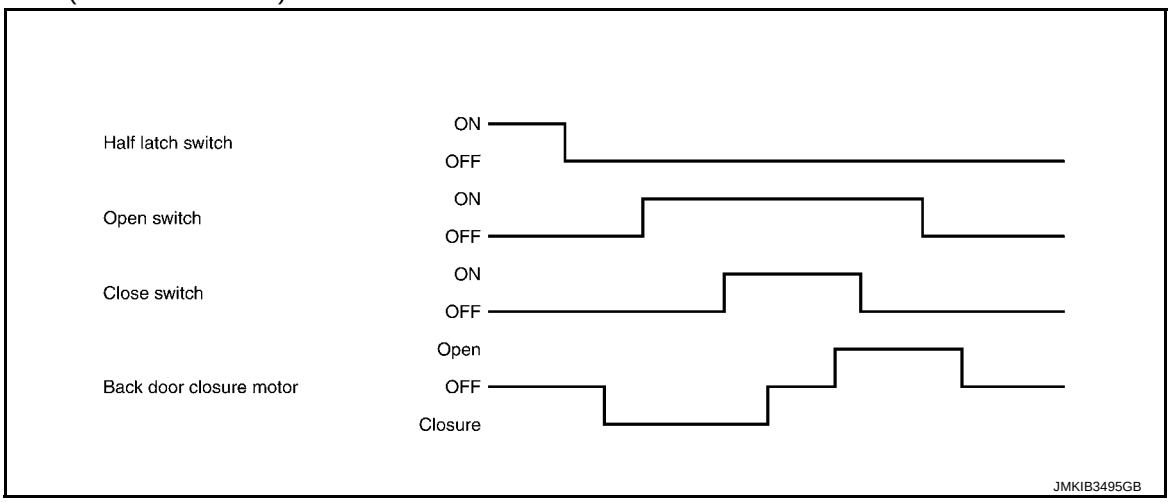


JMKIB3494GB

Closure Function

When the back door is closed to the half-latch position, the motor drives to rotate the latch lever and pulls it in from half latched to fully latched and automatically closes the door. Then, the closure motor reverses to the neutral position.

Timing Chart (Closure Function)



JMKIB3495GB

ANTI-PINCH FUNCTION

• When pinching of foreign material is detected during the operation of automatic open/close function, the back door is operated in the reverse direction.
• The detection methods are the following two types.

1. Overload detection (detection by encoder)
- When a drop in the operating speed is detected during the operation of the automatic open/close function, this is judged as pinching, and reverse operation operates.
- If an overload by pinching or contact with foreign material is detected, reverse operation operates again. At this time, when the second overload is detected, automatic operation stops.

2. Pinching detection (detection by back door touch sensor)
If the side part of the door pinches foreign material during the operation of automatic close function, the touch sensor detects this, and the door operates in the reverse direction. If a reverse operation is performed during driving, back door shifts to closing operation again. At this time, if the touch sensor detects foreign material in the closing direction for a second time, automatic operation stops.

• Automatic operation is stopped when one of the following conditions is detected after the first overload or pinching is detected.
- Automatic back door switch: ON
- Intelligent Key back door open button: ON
- Automatic back door close switch: ON
- Back door opener switch: ON
- Motion activated back door sensor: ON
- Overload detection or pinching detection: second time

Operation Condition

Detection method		Encoder pulse	Touch sensor
Operation when any trapped foreign material is detected	Stop the vehicle	Buzzer sounds (pattern A) and reverse operation	• Buzzer sounds (pattern A) and the back door stops in the fully-open position after reverse operation • During closure (close) operation (at main switch OFF): Closure [open (neutral position return)] operation
	Running the vehicle	No reverse operation (buzzer sounds, pattern B)	• The back door reverses a certain amount, and then it reverses automatically to perform the auto close operation • During closure (close) operation (at main switch ON): Closure (open) operation
Non-reverse area		• Just after starting the motor operation • Full range of closure operation • Driving	• Back door open operation • Closure [open (return the latch to the neutral position)]
Number of allowable reverse operations		Perform the automatic open/close temporary stop function after 2 reverse operations regardless of the operation direction	

SYSTEM (INTEGRATED HOMELINK TRANSMITTER)

System Description

INFOID:0000000014910868

Item	Function
Integrated Homelink® transmitter	A maximum of 3 radio signals can be stored and transmitted to operate the garage door, etc.

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000015206685

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Back door open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×	×			

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:0000000015206686

SELF DIAGNOSTIC RESULT

Refer to BCS-48, "DTC Index".

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Setting	Description
DOOR LOCK-UNLOCK SET	On*	Automatic door locks function ON.
	Off	Automatic door locks function OFF.
AUTO UNLOCK TYPE	MODE2	Driver door only unlocks automatically.
	MODE1*	All doors unlock automatically.
AUTO LOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors lock automatically when shifted out of P (park).
	MODE1*	Doors lock automatically when vehicle speed reaches 24 km/h (15 mph).
	Off	—
AUTO UNLOCK FUNCTION	MODE3	This mode is not used.
	MODE2	Doors unlock automatically when shifted into P (park).
	MODE1*	Doors unlock automatically when ignition is switched from ON to OFF.
	Off	—
SIGNATURE LIGHT SETTING	On*	Signature light mode function is ON.
	Off	Signature light mode function if OFF.

*: Initial setting

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:0000000015206687

SELF DIAGNOSTIC RESULT

Refer to BCS-48, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Main	Description
REQ SW -DR [On/Off]	×	Indicates condition of door request switch LH.
REQ SW -AS [On/Off]	×	Indicates condition of door request switch RH.
REQ SW -BD/TR [On/Off]	×	Indicates condition of back door request switch.
PUSH SW [On/Off]		Indicates condition of push-button ignition switch.
BRAKE SW 1 [On/Off]	×	Indicates condition of brake pedal position switch.
BRAKE SW 2 [On/Off]		Indicates condition of stop lamp switch.
DETE/CANCL SW [On/Off]	×	Indicates condition of park position switch.
PUSH SW -IPDM [On/Off]		Indicates condition of push-button ignition switch received from IPDM E/R on CAN communication line.
IGN RLY1 -F/B [On/Off]		Indicates condition of ignition relay 1 received from IPDM E/R on CAN communication line.
NEUTRAL SW -IPDM [On/Off]		Indicates condition of transmission range switch received from IPDM E/R on CAN communication line.
SFT PN -IPDM [On/Off]		Indicates condition of P (park) or N (neutral) position from TCM on CAN communication line.
STARTER RELAY -IPDM [On/Off]		Indicates condition of starter relay received from IPDM E/R on CAN communication line.
ENGINE STATE [STOP/START/CRANK/RUN]	×	Indicates condition of engine state from ECM on CAN communication line.
ST/INH RELAY - IPDM [On/Off]		Indicates condition of starter relay and starter control relay status signal from IPDM E/R.
REVERSE SIGNAL -IPDM [On/Off]		Indicates condition of transmission range switch received from IPDM E/R on CAN communication line.
CRANKING PERMIT -ECM [PERMIT]		Indicates condition of engine start possibility from ECM on CAN communication line.
STARTER CUT RELAY -ECM [On/Off]		Indicates condition of starter cut relay from ECM on CAN communication line.
VEH SPEED 1 [mph/km/h]	×	Indicates condition of vehicle speed signal received from ABS on CAN communication line.
VEH SPEED 2 [mph/km/h]	×	Indicates condition of vehicle speed signal received from combination meter on CAN communication line.
IGN REQ -IPDM [On/Off]		Indicates condition of ignition request from IPDM E/R on CAN communication line.
STARTER REQ -IPDM [On/Off]		Indicates condition of starter request received from IPDM E/R on CAN communication line.
DOOR STAT -DR [LOCK/READY/UNLK]	×	Indicates condition of driver side door status.
DOOR STAT -AS [LOCK/READY/UNLK]	×	Indicates condition of passenger side door status.
DOOR STAT -RR [LOCK/READY/UNLK]	×	Indicates condition of rear right side door status.
DOOR STAT -RL [LOCK/READY/UNLK]	×	Indicates condition of rear left side door status.
ID OK FLAG [Set/Reset]		Indicates condition of Intelligent Key ID.
PRMT ENG STRT [Set/Reset]		Indicates condition of engine start possibility.
I-KEY OK FLAG [Key ON/Key OFF]	×	Indicates condition of Intelligent Key OK flag.
PRBT ENG STRT [Set/Reset]		Indicates condition of engine start prohibit.
ID AUTHENT CANCEL TIMER [STOP]		Indicates condition of Intelligent Key ID authentication.
CRNK PRBT TMR [On/Off]		Indicates condition of crank prohibit timer.
AUT CRANK TMR [On/Off]		Indicates condition of automatic engine crank timer from Intelligent Key.
CRNK PRBT TME [sec]		Indicates condition of engine crank prohibit time.
AUT CRANK TMR [sec]		Indicates condition of automatic engine crank time from Intelligent Key.
CRANKING TME [sec]		Indicates condition of engine cranking time from Intelligent Key.

Monitor Item [Unit]	Main	Description
RKE OPE COUN1 [0-19]	×	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing.
RKE-LOCK [On/Off]		Indicates condition of lock signal from Intelligent Key.
RKE-UNLOCK [On/Off]		Indicates condition of unlock signal from Intelligent Key.
RKE-PANIC [On/Off]		Indicates condition of panic signal from Intelligent Key.
RKE-MODE CHG [On/Off]		Indicates condition of mode change signal from Intelligent Key.

ACTIVE TEST

Test Item	Description
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation [On/Off].
INSIDE BUZZER	This test is able to check combination meter warning chime operation [Buzzer 1/Buzzer 2/Buzzer 3/Off].
INDICATOR	This test is able to check combination meter warning lamp operation [KEY ON/KEY IND/Off].
ENGINE SW ILLUMI	This test is able to check push-button ignition switch START indicator operation [On/Off].
FLASHER	This test is able to check flasher operation [LH/RH/Off].
HORN	This test is able to check horn operation [On].
ENGINE START REQUEST	This test is able to check that BCM is sending starter request signal to IPDM E/R via CAN communication [MODE 1/MODE 2/MODE 3/Off].
STARTER CUT RELAY	This test is able to check starter control relay operation [On/Off].
AUTO ACC 2	This test is able to check that BCM is sending ACC power to audio unit or AV control unit [On/Off].
AUTO ACC 1	This test is able to check that BCM is controlling accessory relay-1 [Off/MODE 1/MODE 2/MODE 3].
TRUNK LUGGAGE LAMP TEST	This test is able to check luggage room lamp test operation [On/Off].

WORK SUPPORT

Support Item	Setting		Description
INSIDE ANT DIAGNOSIS	—		This function allows inside key antenna self-diagnosis.
LOCK/UNLOCK BY I-KEY	On*		Door lock/unlock by I-Key ON.
	Off		Door lock/unlock by I-Key OFF.
ENGINE START BY I-KEY	On*		Engine start with I-Key enabled.
	Off		Engine start with I-Key disabled.
AUTO LOCK SET	Mode 1	OFF	Auto door lock operation time can be changed in this mode.
	Mode 2	30 sec.	
	Mode 3*	1 min.	
	Mode 4	2 min.	
	Mode 5	3 min.	
	Mode 6	4 min.	
	Mode 7	5 min.	
IGN/ACC BATTERY SAVER	On*		Battery saver system ON.
	Off		Battery saver system OFF.
ANSWER BACK	On*		Buzzer or horn reminder for door request switch and I-Key ON.
	Off		Buzzer or horn reminder for door request switch and I-Key OFF.

Support Item	Setting	Description
ANSWER BACK I-KEY LOCK UNLOCK	BUZZER	I-Key buzzer reminder for door request switch.
	HORN	Horn sound for door request switch.
	Off	Reminder for door request switch OFF.
	INVALID	Not used.
ANSWER BACK KEYLESS LOCK UNLOCK	On*	Horn and hazard lamp reminder for I-Key ON.
	Off	Hazard lamp reminder for I-Key ON.

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000015206688

DATA MONITOR

Monitor Item [Unit]	Description
PUSH SW [On/Off]	Indicates condition of push-button ignition switch.
STARTER CUT RELAY [On/Off]	Indicates condition of starter cut relay.
DETECTION SENSOR (BK) [On/Off]	Indicates condition of hands free sensor.
VEH SPEED 1 [km/h]	Indicates vehicle speed signal received from ABS on CAN communication line.
BACK DOOR OPENER SW [On/Off]	Indicates condition of back door opener switch.

DIAGNOSIS SYSTEM (AUTOMATIC BACK DOOR CONTROL UNIT)

CONSULT Function

INFOID:0000000014910873

APPLICATION ITEMS

CONSULT performs the following functions via CAN communication with automatic back door control module:

Diagnosis mode	Function Description
Self diagnostic result	Displays the diagnosis results judged by automatic back door control module.
Data monitor	The automatic back door control module input/output signals are displayed.
Work support	Changes the setting for each setting function.
ECU identification	The automatic back door control module part number is displayed.

SELF DIAGNOSTIC RESULTS

Refer to DLK-68, "DTC Index".

DATA MONITOR

Monitor Item	Unit	Description
SPINDLE SENSOR LH	[Pulse]	Displays the condition of the LH encoder.
SPINDLE LH SPEED	[mm/s]	Displays the LH spindle operation speed.
SPINDLE MOTOR LH DUTY	[%]	Displays the condition of the spindle motor LH duty.
VHCL SPEED MTR	[km/h]	Displays the vehicle speed signal received from combination meter by numerical value.
VHCL SPEED ABS	[km/h]	Displays the vehicle speed signal received from ABS actuator and electrical unit by numerical value.
MAIN SW	[ON/OFF]	Indicates condition of automatic back door main switch.
AUTO BD SW	[ON/OFF]	Indicates condition of automatic back door switch.
BK DOOR CL SW	[ON/OFF]	Indicates condition of automatic back door close switch.
BACK DOOR LOCK STATUS	[ON/OFF]	Indicates condition of back door lock status.
PKB SW	[ON/OFF]	Indicates condition of park brake switch.
OPEN SW	[ON/OFF]	Indicates condition of open switch.
CLOSE SW	[ON/OFF]	Indicates condition of close switch.
HALF LATCH SW	[ON/OFF]	Indicates condition of half latch switch.
TOUCH SEN RH	[ON/OFF/OPEN]	Indicates condition of touch sensor RH.
TOUCH SEN LH	[ON/OFF/OPEN]	Indicates condition of touch sensor LH.
P RANGE IND	[ON/OFF]	Indicates condition of P range signal from combination meter.
RKE REQ	[OFF/MOVE/REV]	Indicates condition of remote keyless entry signal from BCM.
IGN SW	[ON/OFF]	Indicates condition of IGN power supply.
SPINDLE LH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A.
SPINDLE LH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B.
UNLOCK SEN BD	[LOCKUNLKI]	Indicates condition of back door unlock sensor.
DESTINATION	[JPN/NAM]	Indicates specification of destination of the automatic back door system.
AUTO BCK DR POS LEARN	[YET/DONE]	Indicates condition of calibration of automatic back door position information.
AUTO BCK DR POS INITIAL	[YET/DONE]	Indicates condition of additional service when removing battery negative cable.
SPINDLE SENSOR RH	[Pulse]	Displays the condition of the RH encoder.
SPINDLE RH SPEED	[mm/s]	Displays the RH spindle operation speed.

Monitor Item	Unit	Description
SPINDLE MOTOR RH DUTY	[%]	Displays the condition of the spindle motor RH duty.
SPINDLE RH ENCODER A	[LO/HI]	Indicates condition of encoder signal from encoder A.
SPINDLE RH ENCODER B	[LO/HI]	Indicates condition of encoder signal from encoder B.
TRANSMISSION TYPE	[AT/CVT]	Indicates type of transmission the vehicle is equipped with.
CLOSURE OPERATION	[ON/OFF]	Indicates condition of back door closure function.
IGN SW	[ON/OFF]	Indicates condition of IGN power supply.
KICK SENSOR COND	[ON/OFF]	Indicates condition of motion activated back door sensor circuit via serial communication.
HANDS FREE SENSOR PWR	-	This item is displayed, but con not be monitored.
KEY VERIFICATION REQ SIG	[ON/OFF]	Indicates condition of key ID verification request signal.
AUTO OPEN (BCM)	[ON/OFF]	Indicates condition of key ID verification completed signal, when back door is closed.
AUTO CLOSE (BCM)	[ON/OFF]	Indicates condition of key ID verification completed signal, when back door is open.
KICK SENSOR SIGNAL	[ON/OFF]	Indicates condition of motion activated back door sensor circuit via serial communication.

WORK SUPPORT

Work item	Description	Refer to
RESET AUTO BACK DOOR STATUS	This item is for calibration of automatic back door position information.	DLK-116, "Work Procedure"

ECU DIAGNOSIS INFORMATION

AUTOMATIC BACK DOOR CONTROL UNIT

Reference Value

INFOID:0000000014910874

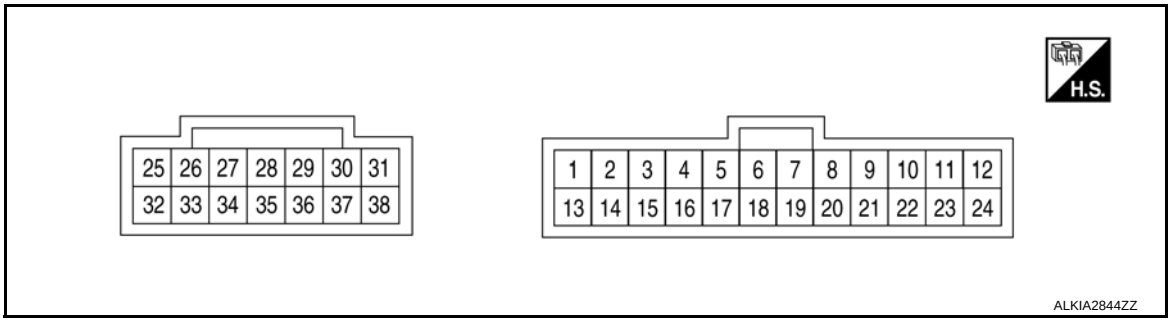
VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

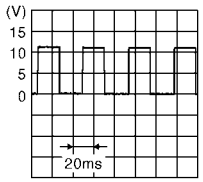
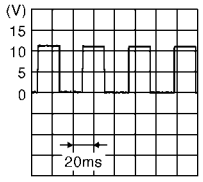
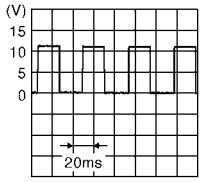
Monitor Item	Condition		Value/Status
SPINDLE SENSOR LH	Back door: Moving		0 – 65535
SPINDLE LH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR LH DUTY	Back door: Moving		0 – 255
VHCL SPEED MTR	While driving		Equivalent to speedometer reading
VHCL SPEED ABS	While driving		Equivalent to speedometer reading
MAIN SW	Automatic back door main switch	OFF	OFF
		ON	ON
AUTO BD SW	Automatic back door switch	Release	OFF
		Press	ON
BK DOOR CL SW	Automatic back door close switch	Release	OFF
		Press	ON
BACK DOOR LOCK STATUS	Back door lock	Lock	OFF
		Unlock	ON
PKB SW	Parking brake	Not applied	OFF
		Applied	ON
OPEN SW	Back door	Half latch/fully closed	OFF
		Applied	ON
CLOSE SW	Back door	Open/half latch	OFF
		Fully closed	ON
HALF LATCH SW	Back door	Half latch/fully closed	OFF
		Open	ON
TOUCH SEN RH	Touch sensor RH	Other than below	OFF
		Detect obstruction	ON
TOUCH SEN LH	Touch sensor LH	Other than below	OFF
		Detect obstruction	ON
P RANGE IND	Selector lever	Other than P position	OFF
		P position	ON
RKE REQ	Intelligent Key button (back door)	Release	OFF
		Press (more than 0.5 second)	MOVE
		Press (just after)	REV
IGN SW	Ignition switch	Other than ON position	OFF
		ON position	ON
SPINDLE LH ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
SPINDLE LH ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO

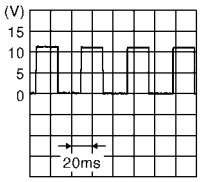
Monitor Item	Condition		Value/Status
UNLOCK SEN BD	Back door lock	Lock	LOCK
		Unlock	UNLK
DESTINATION	—		OTHER
AUTO BCK DR POS INITIAL	Calibration of automatic back door position information	Not complete	YET
		Complete	DONE
AUTO BCK DR POS LEARN	Additional service when removing battery negative terminal	Not complete	YET
		Complete	DONE
SPINDLE SENSOR RH	Back door: Moving		0 – 65535
SPINDLE RH SPEED	Back door: Moving		0 – 6553.5
SPINDLE MOTOR RH DUTY	Back door: Moving		0 – 255
SPINDLE RH ENCODER A	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
SPINDLE RH ENCODER B	Automatic back door	Not operate	No change HI or LO
		Operate	Change HI or LO
TRANSMISSION TYPE	—		AT/CVT
CLOSURE OPERATION	Back door closure	Other than below	OFF
		Open operation	ON
IGN SW	Ignition switch	Other than ON position	OFF
		On position	ON
KICK SENSOR COND	Motion activated back door sensor	Malfunction	NG
		Other than above	OK
HANDS FREE SENSOR PWR	The item is indicated, but can not be monitored		OFF
KEY VERIFICATION REQ	Motion activated back door sensor (UPPER) and (LOWER)	Other than below	OFF
		On	ON
AUTO OPEN (BCM)	Back door closed	Other than below	OFF
		Motion activated back door sensor: ON	ON
AUTO CLOSE (BCM)	Back door open	Other than below	OFF
		Motion activated back door sensor: ON	ON
KICK SENSOR SIGNAL	Motion activated back door sensor	Malfunction	NG
		Other than above	OK

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
1 (LG)	13 (GR)	Touch sensor RH signal	Input	Touch sensor RH	Detect obstruction	1.8 – 2.72 V
					Other than above	2.72 – 7.27 V
2 (G)	13 (GR)	Touch sensor LH signal	Input	Touch sensor LH	Detect obstruction	1.8 – 2.72 V
					Other than above	2.72 – 7.27 V
3 (SB)	Ground	Half latch switch signal	Input	Back door	Open	0 V
					Fully closed/half latch	Battery voltage
4 (B)	Ground	Ground	—	—		0 V
5 (BR)	Ground	Close switch signal	Input	Back door	Fully closed	0 V
					Open/half latch	Battery voltage
6 (W)	Ground	Encoder LH A signal	Input	Back door	Moving (auto or manual)	 JMKIA1864ZZ **NOTE:** Waveform width changes according to back door open/close speed
					When stopped	0 V or Battery voltage
7 (L)	Ground	Encoder LH B signal	Input	Back door	Moving (auto or manual)	 JMKIA1864ZZ **NOTE:** Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
8 (R)	Ground	Encoder RH A signal	Input	Back door	Moving (auto or manual)	 JMKIA1864ZZ **NOTE:** Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
9 (SB)	Ground	Encoder RH B signal	Input	Back door	Moving (auto or manual)	 JMKIA1864ZZ **NOTE:** Waveform width changes according to back door open/close speed
					When stopped	0 V or 12 V
10 (BG)	Ground	Automatic back door main switch	Input	Automatic back door main switch	ON	Battery voltage
					OFF	0 V
11 (V)	Ground	Open switch signal	Input	Back door	Open	0 V
					Half latch/fully closed	Battery voltage
12 (P)	Ground	CAN low	Input/ Output	—		—
13 (GR)	Ground	Touch sensor ground	Input	—		0.01 – 0 V
17 (G)	Ground	Digital output ON/OFF	—	—		—
19 (V)	Ground	Encoder LH power supply	Output	—		Battery voltage
20 (P)	Ground	Encoder RH power supply	Output	—		Battery voltage
21 (G)	Ground	Encoder ground	—	—		0 V
22 (LG)	Ground	Automatic back door switch	Input	Automatic back door switch	Pressed	Battery voltage
					Released	0 V
23 (W)	Ground	Automatic back door close switch	Input	Automatic back door close switch	Pressed	Battery voltage
					Released	0 V
24 (L)	Ground	CAN high	Input/ Output	—		—
25 (BR)	Ground	Power supply (BAT)	Input	—		Battery voltage
26 (L)	Ground	Motion activated back door sensor signal	Input	—		—
27 (BR)	Ground	Spindle motor LH (open)	Output	—		Battery voltage
29 (BR)	Ground	Spindle motor RH (open)	Output	Back door	Auto open operation	Battery voltage
30 (GR)	Ground	Motion activated back door sensor power supply	Output	Back door	Auto open operation	Battery voltage
31 (L)	Ground	Back door closure motor (open)	Output	Back door	Open operation	Battery voltage
					Other than above	0 V
32 (B)	Ground	Ground	—	—		0 V

Terminal No. (Wire color)		Description		Condition		Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output			
34 (G)	Ground	Spindle motor LH (close)	Output	Back door	Auto close operation	Battery voltage
35 (B)	Ground	Ground (noise shield spindle)	—	—		0.01 – 0 V
36 (G)	Ground	Spindle motor RH (close)	Output	Back door	Auto close operation	Battery voltage
37 (Y)	Ground	Back door warning chime	Output	Automatic back door warning chime	Sounding	0 V
					Not sounding	Battery voltage
38 (SB)	Ground	Back door closure motor (close)	Output	Back door	Close operation	Battery voltage
					Other than above	0 V

Fail Safe

INFOID:0000000014910875

Display contents of CONSULT	Fail-safe	Cancellation
U1000 CAN COMM	Inhibit automatic back door operation	Return to normal status.
U1010 CONTROL UNIT (CAN)	Inhibit automatic back door operation	Return to normal status.
U1320 REPROGRAMMING	Inhibit automatic back door operation	Return to normal status.
U1321 ABD: NOT CONFIGURED	Inhibit automatic back door operation	Return to normal status.
U1322 ABD: CONFIGURATION	Inhibit automatic back door operation	Return to normal status.
U1325 CALIBRATION	Inhibit automatic back door operation	Return to normal status.
B2401 IGN OPEN	Inhibit automatic back door operation	Automatic back door control module detects ignition switch ON signal via CAN communication.
B2409 HALF LATCH SW	Inhibit automatic back door operation	Automatic back door control module detects that half latch switch changes from ON to OFF when back door fully closes.
B2416 TOUCH SEN R OPEN	Inhibit automatic back door operation	Return to normal status.
B2417 TOUCH SEN L OPEN	Inhibit automatic back door operation	Return to normal status.
B2419 OPEN SW	Inhibit automatic back door operation	Reconnect battery.
B2420 CLOSE SW	Inhibit automatic back door operation	Reconnect battery.
B2422 BACK DOOR STATE	Inhibit automatic back door operation	Half latch switch is ON from OFF.
B2423 ABD MTR TIME OUT	Inhibit automatic back door operation	At least 180 seconds are passed after automatic back door operation is inhibited.
B2426 SPINDLE SENSOR LH	Inhibit automatic back door operation	Return to normal status.
B2427 SPINDLE SENSOR RH	Inhibit automatic back door operation	Return to normal status.
B2428 AUTO BACK DR CNT MODULE	Inhibit automatic back door operation	Return to normal status.
B242A CLSR CONDITION	Inhibit automatic back door operation	Reconnect battery.
B242C KICK SENSOR CONTROL UNIT	Inhibit hands free operation	Return to normal status.
B242D KICK SENSOR 1	Inhibit hands free operation	Return to normal status.
B242E KICK SENSOR 2	Inhibit hands free operation	Return to normal status.
B242F ABD BUZZER	Inhibit hands free operation	Return to normal status.

DTC Inspection Priority Chart

INFOID:0000000014910876

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	• B2428 AUTO BK DR CNT UNIT • U1000 CAN COMM • U1010 CONTROL UNIT (CAN) • U1320 REPROGRAMMING • U1321 ABD: NOT CONFIGURED • U1322 ABD: CONFIGURATION • U1325 CALIBRATION • B2401 IGN OPEN
2	• B2409 HALF LATCH SW • B2416 TOUCH SEN R OPEN • B2417 TOUCH SEN L OPEN • B2419 OPEN SW • B2420 CLOSE SW • B2422 BACK DOOR STATE • B2423 ABD MTR TIME OUT • B2426 SPINDLE SENSOR LH • B2427 SPINDLE SENSOR RH • B242A CLSR CONDITION • B242C KICK SENSOR CONTROL UNIT • B242D KICK SENSOR 1 • B242E KICK SENSOR 2 • B242F ABD BUZZER

DTC Index

INFOID:0000000014910877

NOTE:

Details of time display

- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

CONSULT display	Fail-safe	Reference page
U1000: CAN COMM	×	DLK-117, "DTC Description"
U1010: CONTROL UNIT(CAN)	×	DLK-118, "DTC Description"
U1320: REPROGRAMMING	×	DLK-198, "DTC Description"
U1321: NOT CONFIGURED	×	DLK-200, "DTC Description"
U1322: CONFIGURATION	×	DLK-201, "DTC Description"
U1325: CALIBRATION	×	DLK-203, "DTC Description"
B2401: IGN OPEN	×	DLK-119, "DTC Description"
B2409: HALF LATCH SW	×	DLK-121, "DTC Description"
B2416: TOUCH SEN R OPEN	×	DLK-125, "DTC Description"
B2417: TOUCH SEN L OPEN	×	DLK-129, "DTC Description"
B2419: OPEN SW	×	DLK-133, "DTC Description"
B2420: CLOSE SW	×	DLK-137, "DTC Description"
B2422: BACK DOOR STATE	×	DLK-141, "DTC Description"
B2423: ABD MTR TIME OUT	×	DLK-147, "DTC Description"
B2426: SPINDLE SENSOR LH	×	DLK-151, "DTC Description"
B2427: SPINDLE SENSOR RH	×	DLK-157, "DTC Description"
B2428: AUTO BACK DR CNT UNIT	×	DLK-163, "DTC Description"

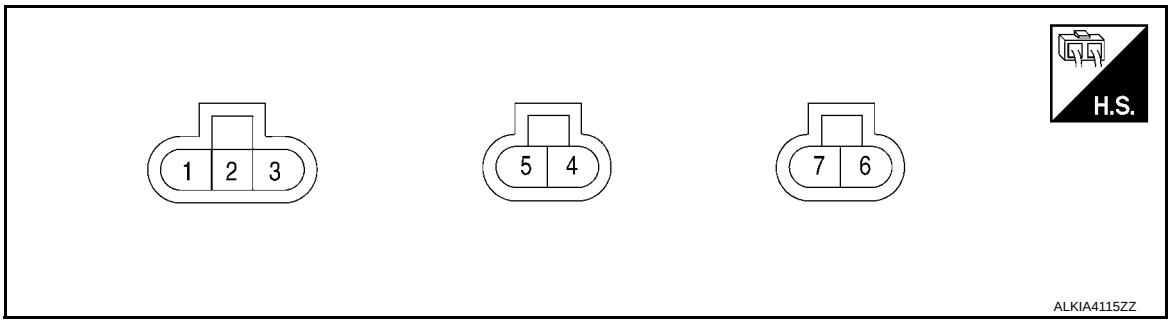
CONSULT display	Fail-safe	Reference page
B242A: CLSR CONDITION	×	DLK-164, "DTC Description"
B242C: KICK SENSOR CONTROL UNIT	×	DLK-171, "DTC Description"
B242D: KICK SENSOR 1	×	DLK-173, "DTC Description"
B242E: KICK SENSOR 2	×	DLK-175, "DTC Description"
B242F: ABD BUZZER	×	DLK-177, "DTC Description"

MOTION ACTIVATED BACK DOOR CONTROL UNIT

Reference Value

INFOID:0000000014910878

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition	Voltage (Approx.)
(+)	(–)	Signal name	Input/ Output		
1 (L)	Ground	Serial communication	Input/ Output	—	—
2 (GR)	Ground	Power supply (BAT)	Input	—	Battery voltage
3 (B)	Ground	Ground	—	—	0 V
4 (W)	Ground	Motion activated back door sensor (upper) input signal	Input	—	—
5 (W)	Ground	Motion activated back door sensor (upper) output signal	Input	—	—
6 (B)	Ground	Motion activated back door sensor (lower) input signal	Input	—	—
7 (B)	Ground	Motion activated back door sensor (lower) output signal	Input	—	—

NOTE:
Voltage generated in communication circuit between motion activated back door sensor and motion activated back door control unit is extremely low and therefore cannot be measured.

BCM

List of ECU Reference

INFOID:0000000014910879

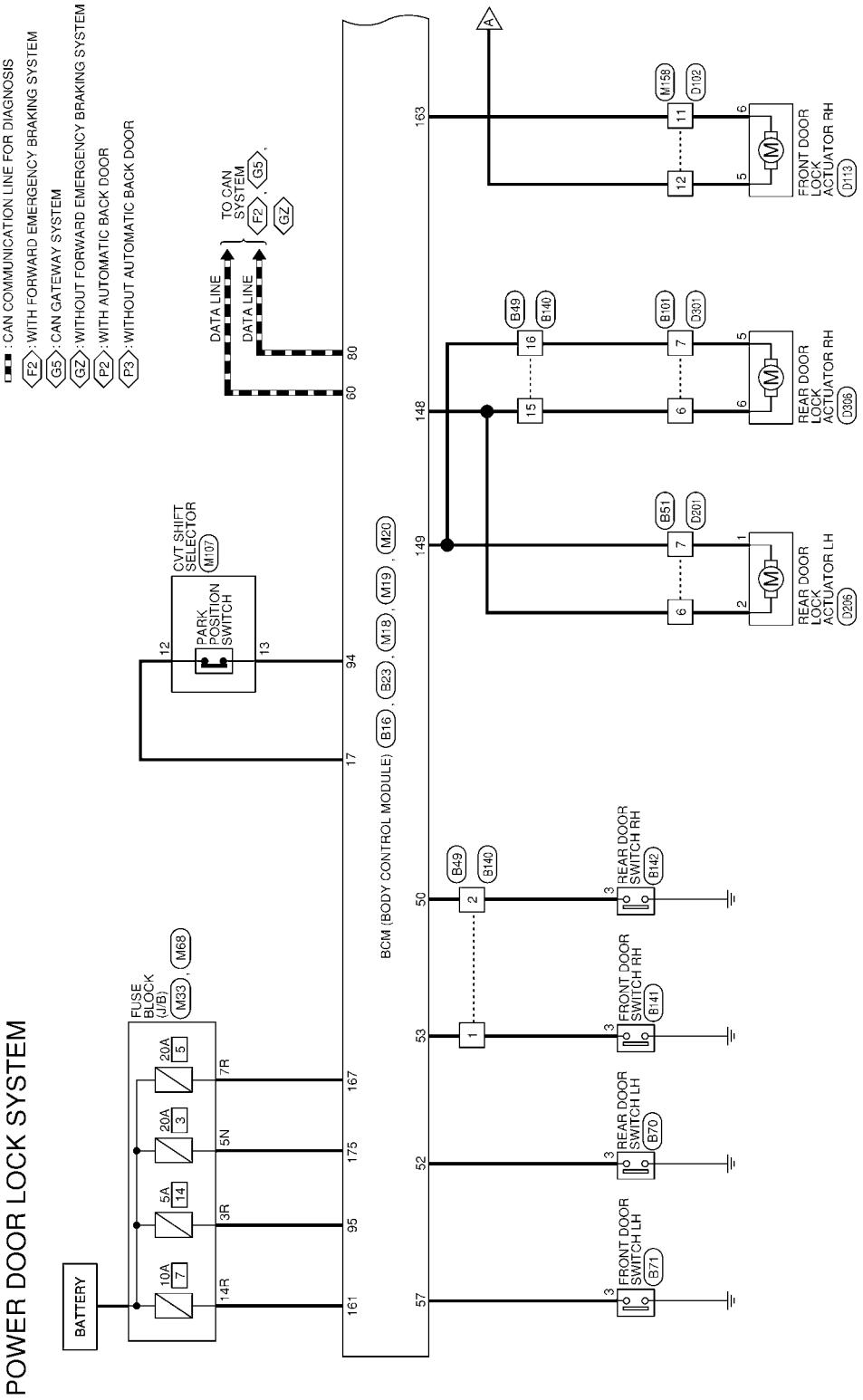
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

WIRING DIAGRAM

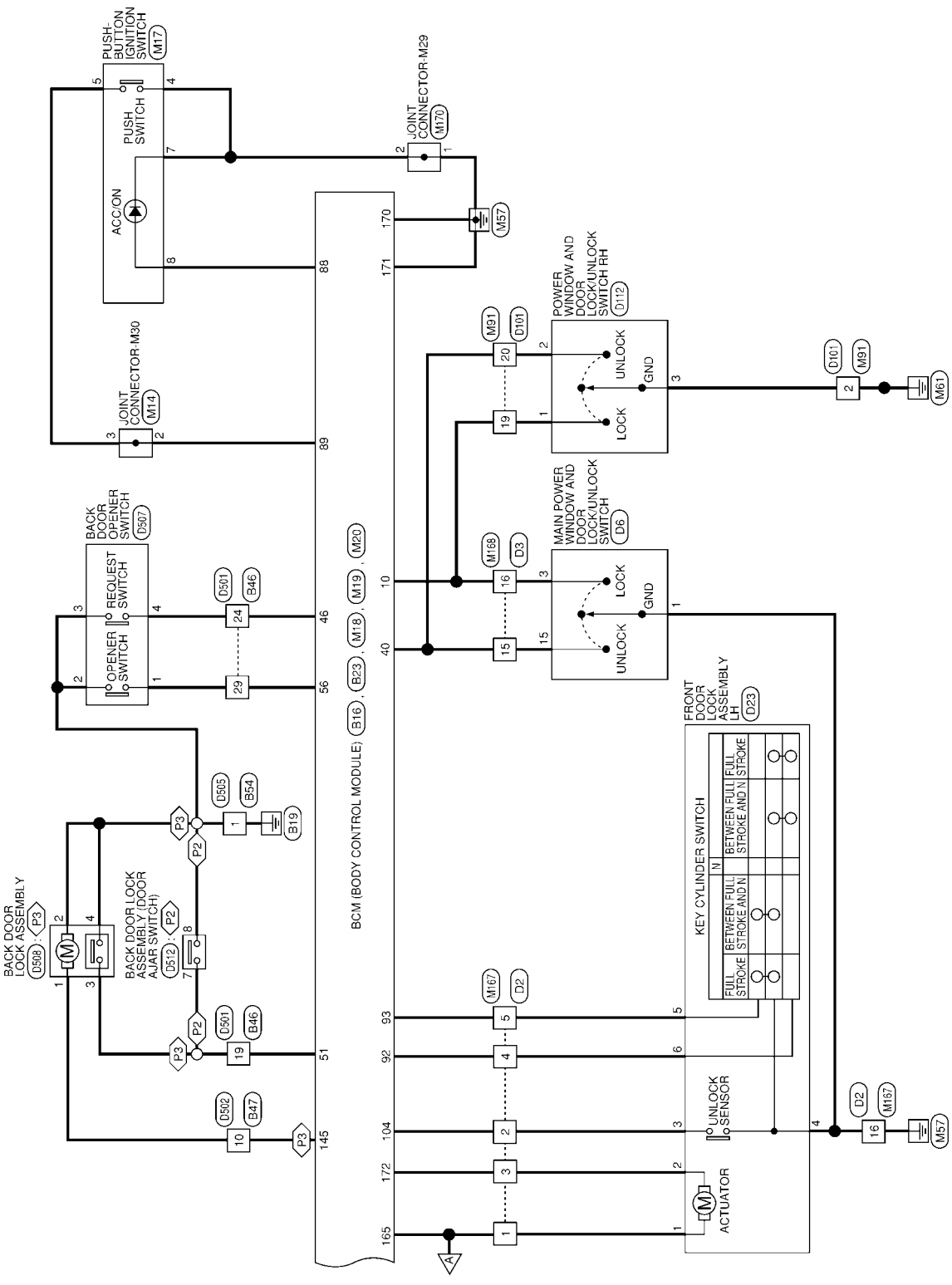
POWER DOOR LOCK SYSTEM

Wiring Diagram

INFOID:0000000014910880



AAKWA1625GB


PUSH-BUTTON IGNITION SWITCH M17
PUSH SWITCH
ACC/ON
JOINT CONNECTOR-M29
M170
M57
JOINT CONNECTOR-M30
M14
POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
D112
UNLOCK
LOCK
GND
M91
D101
M61
MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
D6
M168
D3
BACK DOOR OPENER SWITCH
D507
REQUEST SWITCH
OPENER SWITCH
D501
B46
B54
B19
D505
BACK DOOR LOCK ASSEMBLY
D508
BACK DOOR LOCK ASSEMBLY (DOOR AJAR SWITCH)
D512
D502
B47
BCM (BODY CONTROL MODULE)
B16, B23, M18, M19, M20
FRONT DOOR LOCK ASSEMBLY LH
D23
KEY CYLINDER SWITCH
FULL STROKE
BETWEEN FULL STROKE AND N
N
BETWEEN FULL STROKE AND N
FULL STROKE
M167
D2
UNLOCK SENSOR
ACTUATOR
M57
AAKWA1626GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH
Connector Color	GREEN

H.S.

58	59	56	57	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
41	–	–
42	–	–
43	–	–
44	–	–
45	–	–
46	R	SES BACKDOOR BUTTON SW
47	–	–
48	–	–
49	G	NO TOUCH TGATE SENSOR
50	W	RR DOOR SW
51	LG	TGATE SW
52	R	RL DOOR SW
53	SB	AS DOOR2 SW
54	–	–
55	LA/G	RR AUTOSTOP SW
56	Y	TGATE OPENER SW
57	SB	DR DOOR2 SW
58	–	–
59	–	–
60	L	CAN-H
61	V	SES EXT REAR ANTENNA B
62	Y	SES INT MIDDLE ANTENNA B
63	L	SES INT MIDDLE ANTENNA A
64	LG	SES EXT REAR ANTENNA A
65	–	–
66	–	–
67	–	–
68	–	–
69	–	–
70	–	–
71	–	–
72	–	–
73	–	–
74	–	–
75	–	–
76	–	–
77	V	SHIFT LOCK RLY

78	–	–
79	LA/W	STOP LAMP3
80	P	CAN-L

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FGY-CS
Connector Color	GRAY

H.S.

151	150	149	148		147	146	145
160	159	158	157	156	155	154	153	152

Terminal No.	Color of Wire	Signal Name
145	LA/V	TGATE OPENER
146	–	–
147	LA/R	RR WIPER
148	W	RR UNLOCK B
149	L	RR LOCK B
150	–	–
151	R	PWM ROOMLAMP 5
152	–	–
153	LA/W	STOP LAMP1
154	–	–
155	–	–
156	–	–
157	GR	DI RR LEFT B
158	LA/Y	STOP LAMP2 NISSAN EUR
159	–	–
160	P	DI RR RIGHT B

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS

3	–	TO BACK DOOR HARNESS
4	–	TO BACK DOOR HARNESS
5	R	TO BACK DOOR HARNESS
6	B	TO BACK DOOR HARNESS
7	W	TO BACK DOOR HARNESS
8	SHIELD	TO BACK DOOR HARNESS
9	–	TO BACK DOOR HARNESS
10	–	TO BACK DOOR HARNESS
11	–	TO BACK DOOR HARNESS
12	–	TO BACK DOOR HARNESS
13	W	TO BACK DOOR HARNESS
14	V	TO BACK DOOR HARNESS
15	BR	TO BACK DOOR HARNESS
16	SB	TO BACK DOOR HARNESS
17	LA/W	TO BACK DOOR HARNESS
18	LA/BR	TO BACK DOOR HARNESS
19	LG	TO BACK DOOR HARNESS
20	G	TO BACK DOOR HARNESS
21	G	TO BACK DOOR HARNESS
22	LA/R	TO BACK DOOR HARNESS
23	LA/R	TO BACK DOOR HARNESS
24	R	TO BACK DOOR HARNESS
25	–	TO BACK DOOR HARNESS
26	–	TO BACK DOOR HARNESS
27	–	TO BACK DOOR HARNESS
28	–	TO BACK DOOR HARNESS
29	Y	TO BACK DOOR HARNESS
30	G	TO BACK DOOR HARNESS
31	GR	TO BACK DOOR HARNESS
32	LG	TO BACK DOOR HARNESS

Connector No.	B47
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS
3	–	TO BACK DOOR HARNESS
4	V	TO BACK DOOR HARNESS
5	W	TO BACK DOOR HARNESS
6	–	TO BACK DOOR HARNESS
7	–	TO BACK DOOR HARNESS

8	LA/G	TO BACK DOOR HARNESS
9	LA/R	TO BACK DOOR HARNESS
10	LG/V	TO BACK DOOR HARNESS
11	B	TO BACK DOOR HARNESS
12	L	TO BACK DOOR HARNESS
13	SB	TO BACK DOOR HARNESS
14	–	TO BACK DOOR HARNESS
15	G	TO BACK DOOR HARNESS
16	W	TO BACK DOOR HARNESS

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	SB	TO BODY NO. 2 HARNESS
2	W	TO BODY NO. 2 HARNESS
3	LA/W	TO BODY NO. 2 HARNESS
4	V	TO BODY NO. 2 HARNESS
5	SB	TO BODY NO. 2 HARNESS
6	LA/BR	TO BODY NO. 2 HARNESS
7	P	TO BODY NO. 2 HARNESS
8	LA/W	TO BODY NO. 2 HARNESS
9	LA/BR	TO BODY NO. 2 HARNESS
10	R	TO BODY NO. 2 HARNESS
11	LA/G	TO BODY NO. 2 HARNESS
12	LA/P	TO BODY NO. 2 HARNESS
13	–	TO BODY NO. 2 HARNESS
14	–	TO BODY NO. 2 HARNESS
15	G	TO BODY NO. 2 HARNESS
16	V	TO BODY NO. 2 HARNESS

AAKIA4474GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/P	TO REAR DOOR LH HARNESS
2	LA/R	TO REAR DOOR LH HARNESS
3	LA/V	TO REAR DOOR LH HARNESS
4	–	TO REAR DOOR LH HARNESS
5	–	TO REAR DOOR LH HARNESS
6	W	TO REAR DOOR LH HARNESS
7	L	TO REAR DOOR LH HARNESS
8	LA/GR	TO REAR DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
8	LA/G	TO REAR DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
9	LA/Y	TO REAR DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
9	LA/P	TO REAR DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
10	–	TO REAR DOOR LH HARNESS
11	–	TO REAR DOOR LH HARNESS
12	–	TO REAR DOOR LH HARNESS

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	R	I RL DOOR SW
4	–	–

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	SB	I DR DOOR2 SW
4	–	–

Connector No.	B101
Connector Name	WIRE TO WIRE
Connector Type	NS12MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	TO REAR DOOR RH HARNESS
2	L	TO REAR DOOR RH HARNESS
3	LA/P	TO REAR DOOR RH HARNESS
4	LA/V	TO REAR DOOR RH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
4	LG	TO REAR DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)
5	LA/Y	TO REAR DOOR RH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
5	V	TO REAR DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)
6	LA/GR	TO REAR DOOR RH HARNESS
7	LA/LG	TO REAR DOOR RH HARNESS
8	–	TO REAR DOOR RH HARNESS
9	–	TO REAR DOOR RH HARNESS
10	–	TO REAR DOOR RH HARNESS
11	–	TO REAR DOOR RH HARNESS
12	–	TO REAR DOOR RH HARNESS

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	GR	TO BODY HARNESS
2	W	TO BODY HARNESS
3	LA/Y	TO BODY HARNESS
4	V	TO BODY HARNESS
5	SB	TO BODY HARNESS
6	LA/BR	TO BODY HARNESS
7	LA/V	TO BODY HARNESS
8	L	TO BODY HARNESS
9	Y	TO BODY HARNESS
10	R	TO BODY HARNESS
11	V	TO BODY HARNESS
12	LG	TO BODY HARNESS
13	L	TO BODY HARNESS
14	Y	TO BODY HARNESS
15	LA/GR	TO BODY HARNESS
16	LA/LG	TO BODY HARNESS

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	GR	I AS DOOR2 SW
4	–	–

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	W	I RR DOOR SW
4	–	–

AAKIA4475GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	TO MAIN HARNESS
2	R	TO MAIN HARNESS
3	G	TO MAIN HARNESS
4	BR	TO MAIN HARNESS
5	P	TO MAIN HARNESS
6	LA/L	TO MAIN HARNESS
7	LA/BR	TO MAIN HARNESS
8	SB	TO MAIN HARNESS
9	GR	TO MAIN HARNESS
10	L	TO MAIN HARNESS
11	P	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	V	TO MAIN HARNESS
15	R	TO MAIN HARNESS
16	B	TO MAIN HARNESS

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	TO MAIN HARNESS
2	GR	TO MAIN HARNESS
3	W	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
3	LA/SB	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
4	V	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
4	LA/BG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
5	SB	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	LA/Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	LA/V	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
7	W	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	SB	TO MAIN HARNESS
10	LG	TO MAIN HARNESS
11	GR	TO MAIN HARNESS
12	G	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	B	TO MAIN HARNESS
15	BG	TO MAIN HARNESS
16	L	TO MAIN HARNESS
17	LA/SB	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
17	LA/W	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/W	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	LA/LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	LA/BR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	LA/V	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
20	LA/GR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
21	BR	TO MAIN HARNESS
22	W	TO MAIN HARNESS
23	LA/R	TO MAIN HARNESS
24	GR	TO MAIN HARNESS
25	R	TO MAIN HARNESS
26	LA/G	TO MAIN HARNESS
27	LA/LG	TO MAIN HARNESS
28	LA/L	TO MAIN HARNESS
29	LA/Y	TO MAIN HARNESS
30	LA/V	TO MAIN HARNESS
31	LA/BR	TO MAIN HARNESS
32	P	TO MAIN HARNESS

Connector No.	D6
Connector Name	MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	GR	MOTOR DN AS UNLOCK SW
3	L	LOCK SW
4	R	ENCODER SIG-2
5	W	ENCODER SIG-1
6	P	MOTOR DN RR
7	LG	MOTOR UP RR
8	Y	MOTOR DN RL
9	V	MOTOR UP RL
10	SB	IGN
11	–	–
12	Y	ENCODER GND
13	–	–
14	G	ENCODER +
15	BG	UNLOCK SW
16	L	MOTOR UP AS

Connector No.	D23
Connector Name	FRONT DOOR LOCK ASSEMBLY LH
Connector Type	E06FGY-RS
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	V	O DR OR FR LOCK D
2	G	O FR OR DR UNLOCK D
3	R	I DR KNOB SW
4	B	GROUND

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	TO MAIN HARNESS
2	B	TO MAIN HARNESS
3	B	TO MAIN HARNESS
4	P	TO MAIN HARNESS
5	R	TO MAIN HARNESS
6	SB	TO MAIN HARNESS
7	L	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	Y	TO MAIN HARNESS
10	B	TO MAIN HARNESS
11	G	TO MAIN HARNESS
12	LA/V	TO MAIN HARNESS
13	LA/Y	TO MAIN HARNESS
14	LA/R	TO MAIN HARNESS
15	LA/V	TO MAIN HARNESS
16	LA/L	TO MAIN HARNESS
17	LA/BG	TO MAIN HARNESS
18	GR	TO MAIN HARNESS
19	LG	TO MAIN HARNESS
20	BR	TO MAIN HARNESS
21	LA/G	TO MAIN HARNESS
22	LA/SB	TO MAIN HARNESS
23	LA/BG	TO MAIN HARNESS
24	LA/Y	TO MAIN HARNESS

5	P	I KEY CYLINDER UNLOCK SW
6	BR	I KEY CYLINDER LOCK SW

AAKIA4476GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/B	TO MAIN HARNESS
2	B	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
2	LA/G	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
3	–	TO MAIN HARNESS
4	–	TO MAIN HARNESS
5	–	TO MAIN HARNESS
6	–	TO MAIN HARNESS
7	–	TO MAIN HARNESS
8	GR	TO MAIN HARNESS
9	Y	TO MAIN HARNESS
10	BR	TO MAIN HARNESS
11	L	TO MAIN HARNESS
12	V	TO MAIN HARNESS
13	LA/R	TO MAIN HARNESS
14	LA/G	TO MAIN HARNESS
15	–	TO MAIN HARNESS
16	–	TO MAIN HARNESS

Connector No.	D112
Connector Name	POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH RH
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	LOCK SW
2	BR	UNLOCK SW
3	B	GROUND
4	–	–
5	–	–
6	LA/L	ASST DN
7	LA/R	ASST UP
8	GR	IGNITION
9	–	–
10	–	–
11	Y	MAIN DN
12	BR	MAIN UP

Connector No.	D113
Connector Name	FRONT DOOR LOCK ACTUATOR RH
Connector Type	E06GY-RS
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	–	–
4	–	–
5	V	O DR DR FR LOCK D
6	L	O AS LOCK OR UNLOCK D

Connector No.	D201
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/Y	TO BODY HARNESS
2	LA/BR	TO BODY HARNESS
3	LA/GR	TO BODY HARNESS
4	–	TO BODY HARNESS
5	–	TO BODY HARNESS
6	LA/G	TO BODY HARNESS
7	LA/R	TO BODY HARNESS
8	LA/L	TO BODY HARNESS
9	–	TO BODY HARNESS
10	–	TO BODY HARNESS
11	–	TO BODY HARNESS
12	–	TO BODY HARNESS

Connector No.	D206
Connector Name	REAR DOOR LOCK ACTUATOR LH
Connector Type	E06FGY-RS
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	LA/G	O RR LOCK B
2	LA/V	O RR UNLOCK B
3	–	–
4	–	–
5	–	–
6	–	–

Connector No.	D301
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LA/Y	TO BODY NO. 2 HARNESS
2	LA/BR	TO BODY NO. 2 HARNESS
3	LA/GR	TO BODY NO. 2 HARNESS
4	LA/V	TO BODY NO. 2 HARNESS
5	LA/Y	TO BODY NO. 2 HARNESS
6	LA/W	TO BODY NO. 2 HARNESS
7	LA/L	TO BODY NO. 2 HARNESS
8	–	TO BODY NO. 2 HARNESS
9	–	TO BODY NO. 2 HARNESS
10	–	TO BODY NO. 2 HARNESS
11	–	TO BODY NO. 2 HARNESS
12	–	TO BODY NO. 2 HARNESS

Connector No.	D306
Connector Name	REAR DOOR LOCK ACTUATOR RH
Connector Type	E06FGY-RS
Connector Color	GRAY

H.S.

1	2	3	4	5	6

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	–	–
4	–	–
5	LA/L	O RR LOCK B
6	LA/W	O RR UNLOCK B

AAKIA4477GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS
2	–	TO BODY HARNESS
3	–	TO BODY HARNESS
4	–	TO BODY HARNESS
5	R	TO BODY HARNESS
6	B	TO BODY HARNESS
7	W	TO BODY HARNESS
8	V	TO BODY HARNESS
9	–	TO BODY HARNESS
10	–	TO BODY HARNESS
11	–	TO BODY HARNESS
12	–	TO BODY HARNESS
13	G	TO BODY HARNESS
14	LA/GR	TO BODY HARNESS
15	LA/W	TO BODY HARNESS
16	LA/LG	TO BODY HARNESS
17	Y	TO BODY HARNESS
18	LA/R	TO BODY HARNESS
19	W	TO BODY HARNESS
20	–	TO BODY HARNESS
21	G	TO BODY HARNESS
22	LA/Y	TO BODY HARNESS
23	P	TO BODY HARNESS
24	BR	TO BODY HARNESS
25	–	TO BODY HARNESS
26	–	TO BODY HARNESS
27	–	TO BODY HARNESS
28	–	TO BODY HARNESS
29	V	TO BODY HARNESS
30	G	TO BODY HARNESS
31	BG	TO BODY HARNESS
32	LG	TO BODY HARNESS

Connector No.	D502
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS
2	–	TO BODY HARNESS
3	–	TO BODY HARNESS
4	R	TO BODY HARNESS
5	W	TO BODY HARNESS
6	–	TO BODY HARNESS
7	–	TO BODY HARNESS
8	G	TO BODY HARNESS
9	GR	TO BODY HARNESS
10	LA/V	TO BODY HARNESS
11	B	TO BODY HARNESS
12	LA/L	TO BODY HARNESS
13	LA/G	TO BODY HARNESS
14	–	TO BODY HARNESS
15	–	TO BODY HARNESS
16	–	TO BODY HARNESS

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC
Connector Color	WHITE

H.S.

1
2

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

Connector No.	D507
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	V	I TGATE OPENER SW
2	GR	GROUND
3	GR	GROUND
4	BR	I SES BACKDOOR BUTTON SW

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR SYSTEM)
Connector Type	NS04FW-CS
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	LA/V	O TGATE OPENER
2	GR	GROUND
3	W	I TGATE SW
4	GR	GROUND

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Type	NS08FW-CS
Connector Color	WHITE

H.S.

1		2	3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
1	LA/L	LATCH MTR OPEN
2	LA/G	LATCH MTR CLOSE
3	–	–
4	LA/GR	OPEN SW
5	LA/W	CLOSE SW
6	LA/LG	HALF LATCH SW
7	W	I TGATE SW
8	B	GROUND

Connector No.	M14
Connector Name	JOINT CONNECTOR- M30
Connector Type	SAC04JW
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	Y	I IGN SW
2	Y	I START WO ESCL SW
3	Y	I START WO ESCL SW
4	Y	LI PUSH SW

AAKIA4478GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	M17
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	–	–
4	B	GROUND
5	Y	I START W/O ESCL SW
6	–	–
7	B	GROUND
8	W	O START SW BACKLIGHT LED

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	LIN 3 D
2	LA/G	DI FR LEFT D
3	LA/Y	DI FR RIGHT D
4	P	SPARE4 RL N
5	R	CAN-L
6	L	CAN-H
7	–	–
8	L	CAN-H
9	R	CAN-L
10	BG	DOORLOCK SW
11	Y	HAZARD SW D
12	W	PWR AUTOLIGHT SENSOR
13	–	–
14	–	–
15	–	–
16	–	–
17	L	PWR ATDVC
18	–	–
19	LG	AUTOLIGHT SENSOR
20	–	–
21	–	–
22	–	–
23	G	WL AUTHORIZATION RL
24	LA/R	DEFROSTER RL D
25	BR	BAT TEMP1 RL
26	–	–
27	Y	IGN1 RL
28	LA/W	IGN2 RL
29	–	–
30	V	GND AUTOLIGHT SENSOR
31	–	–
32	–	–
33	LG	CSW 5
34	Y	CSW 5
35	BG	SECURITY LED
36	G	CSW 3
37	GR	CSW 4
38	V	CSW 1
39	W	CSW 2
40	SB	DOORUNLOCK SW

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	SES FR HANDLE BUTTON SW
83	–	–
84	BR	CSW 2
85	SB	CSW 1
86	P	CSW 3
87	BG	CSW 4
88	W	START SW BACKLIGHT LED
89	Y	START W/O ESCL SW
90	–	–
91	–	–
92	BR	KEY CYLINDER LOCK SW
93	P	KEY CYLINDER UNLOCK SW
94	G	AT LOCKED IN PARK SW
95	V	SHORTING PIN
96	–	–
97	–	–
98	–	–
99	–	–
100	V	SES EXT DR ANTENNA A
101	–	–
102	–	–
103	–	–
104	R	DR KNOB SW
105	Y	SES DR HANDLE BUTTON SW
106	W	AUTO ACC2
107	–	–
108	–	–
109	–	–
110	BG	MR OUTPUT
111	–	–
112	–	–
113	–	–
114	Y	IMMOBILIZER KAZASHI B
115	W	IMMOBILIZER KAZASHI A
116	BG	SES INT FRONT ANTENNA B
117	GR	SES INT FRONT ANTENNA A
118	SB	SES EXT AS ANTENNA B
119	P	SES EXT AS ANTENNA A
120	BR	SES EXT DR ANTENNA B

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
161	W	PWR ECU
162	SB	PWM ROOMLAMP 1
163	L	AS LOCK OR UNLOCK D
164	–	–
165	V	DR OR FR LOCK D
166	–	–
167	LA/V	PWR DOORLOCK1
168	BG	PWR FLASHERS
169	GR	PWR STOP LAMP
170	B	GND1
171	B	GND2
172	G	FR OR DR UNLOCK D
173	–	–
174	–	–
175	R	PWR DOORLOCK2
176	LG	PWR WIPER

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1N	L	ACCESSORY RELAY 1 OUTPUT
2N	LG	BATTERY
3N	Y	FRONT BLOWER MOTOR RELAY OUTPUT
4N	LG	BATTERY
5N	R	BATTERY
6N	BG	BATTERY
7N	BR	ACCESSORY RELAY-1 CONTROL
8N	SB	FRONT BLOWER MOTOR RELAY OUTPUT

AAKIA4479GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1R	V	ILLUMINATION +
2R	G	IGNITION
3R	V	BATTERY
4R	–	–
5R	–	–
6R	LA/L	ACCESSORY
7R	LA/V	BATTERY
8R	–	–
9R	–	–
10R	GR	BATTERY
11R	–	–
12R	–	–
13R	–	–
14R	W	BATTERY
15R	W	BATTERY
16R	GR	ACCESSORY

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT DOOR RH HARNESS
2	GR	TO FRONT DOOR RH HARNESS
3	GR	TO FRONT DOOR RH HARNESS
4	W	TO FRONT DOOR RH HARNESS
5	P	TO FRONT DOOR RH HARNESS
6	SB	TO FRONT DOOR RH HARNESS
7	B	TO FRONT DOOR RH HARNESS
8	L	TO FRONT DOOR RH HARNESS
9	Y	TO FRONT DOOR RH HARNESS
10	SHIELD	TO FRONT DOOR RH HARNESS
11	G	TO FRONT DOOR RH HARNESS
12	V	TO FRONT DOOR RH HARNESS
13	Y	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
13	LA/SB	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
14	R	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
14	LA/GR	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
15	V	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
15	LA/V	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
16	LA/L	TO FRONT DOOR RH HARNESS
17	LA/BG	TO FRONT DOOR RH HARNESS
18	GR	TO FRONT DOOR RH HARNESS
19	LG	TO FRONT DOOR RH HARNESS
20	BR	TO FRONT DOOR RH HARNESS
21	LA/Y	TO FRONT DOOR RH HARNESS
22	SB	TO FRONT DOOR RH HARNESS
23	BG	TO FRONT DOOR RH HARNESS
24	Y	TO FRONT DOOR RH HARNESS

Connector No.	M107
Connector Name	CVT SHIFT SELECTOR
Connector Type	TH16FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	P	O/D OFF SW
2	B	GROUND
3	R	–
4	B	GROUND
5	G	ILL CONT OUT
6	B	GROUND
7	LG	M RANGE
8	BR	AT SHIFT DOWN
9	BG	AT SHIFT UP
10	B	GROUND
11	SB	NOT M RANGE
12	L	O PWR ATDVC
13	G	I AT LOCKED IN PARK SW
14	–	–
15	–	–
16	–	–

Connector No.	M158
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT DOOR RH HARNESS
2	GR	TO FRONT DOOR RH HARNESS
3	–	TO FRONT DOOR RH HARNESS
4	–	TO FRONT DOOR RH HARNESS
5	–	TO FRONT DOOR RH HARNESS
6	–	TO FRONT DOOR RH HARNESS
7	–	TO FRONT DOOR RH HARNESS
8	SB	TO FRONT DOOR RH HARNESS
9	LA/BR	TO FRONT DOOR RH HARNESS
10	LA/GR	TO FRONT DOOR RH HARNESS
11	L	TO FRONT DOOR RH HARNESS
12	Y	TO FRONT DOOR RH HARNESS
13	GR	TO FRONT DOOR RH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
13	R	TO FRONT DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)
14	W	TO FRONT DOOR RH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
14	SB	TO FRONT DOOR RH HARNESS - (WITH BOSE AUDIO SYSTEM)
15	–	TO FRONT DOOR RH HARNESS
16	–	TO FRONT DOOR RH HARNESS

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	TO FRONT DOOR LH HARNESS
2	R	TO FRONT DOOR LH HARNESS
3	G	TO FRONT DOOR LH HARNESS
4	BR	TO FRONT DOOR LH HARNESS
5	P	TO FRONT DOOR LH HARNESS
6	Y	TO FRONT DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
6	LA/L	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
7	R	TO FRONT DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
7	LA/BR	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
8	L	TO FRONT DOOR LH HARNESS
9	LA/BR	TO FRONT DOOR LH HARNESS
10	LA/GR	TO FRONT DOOR LH HARNESS
11	Y	TO FRONT DOOR LH HARNESS
12	BG	TO FRONT DOOR LH HARNESS
13	LA/G	TO FRONT DOOR LH HARNESS
14	LA/R	TO FRONT DOOR LH HARNESS
15	P	TO FRONT DOOR LH HARNESS
16	B	TO FRONT DOOR LH HARNESS

AAKIA4480GB

POWER DOOR LOCK SYSTEM CONNECTORS

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	TO FRONT DOOR LH HARNESS
2	GR	TO FRONT DOOR LH HARNESS
3	Y	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
3	SB	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
4	V	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
4	BG	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
5	BR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	Y	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	LG	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	V	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
7	Y	TO FRONT DOOR LH HARNESS
8	V	TO FRONT DOOR LH HARNESS
9	BR	TO FRONT DOOR LH HARNESS
10	LG	TO FRONT DOOR LH HARNESS
11	L	TO FRONT DOOR LH HARNESS
12	Y	TO FRONT DOOR LH HARNESS
13	G	TO FRONT DOOR LH HARNESS
14	SHIELD	TO FRONT DOOR LH HARNESS
15	SB	TO FRONT DOOR LH HARNESS
16	BG	TO FRONT DOOR LH HARNESS
17	SB	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
17	GR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/SB	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	LA/GR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	BR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	LA/V	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
20	GR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
21	BR	TO FRONT DOOR LH HARNESS
22	W	TO FRONT DOOR LH HARNESS
23	LA/R	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
23	R	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
24	GR	TO FRONT DOOR LH HARNESS
25	R	TO FRONT DOOR LH HARNESS LED INDICATOR L
26	LA/G	TO FRONT DOOR LH HARNESS
27	LG	TO FRONT DOOR LH HARNESS
28	L	TO FRONT DOOR LH HARNESS
29	Y	TO FRONT DOOR LH HARNESS
30	V	TO FRONT DOOR LH HARNESS
31	G	TO FRONT DOOR LH HARNESS
32	P	TO FRONT DOOR LH HARNESS

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

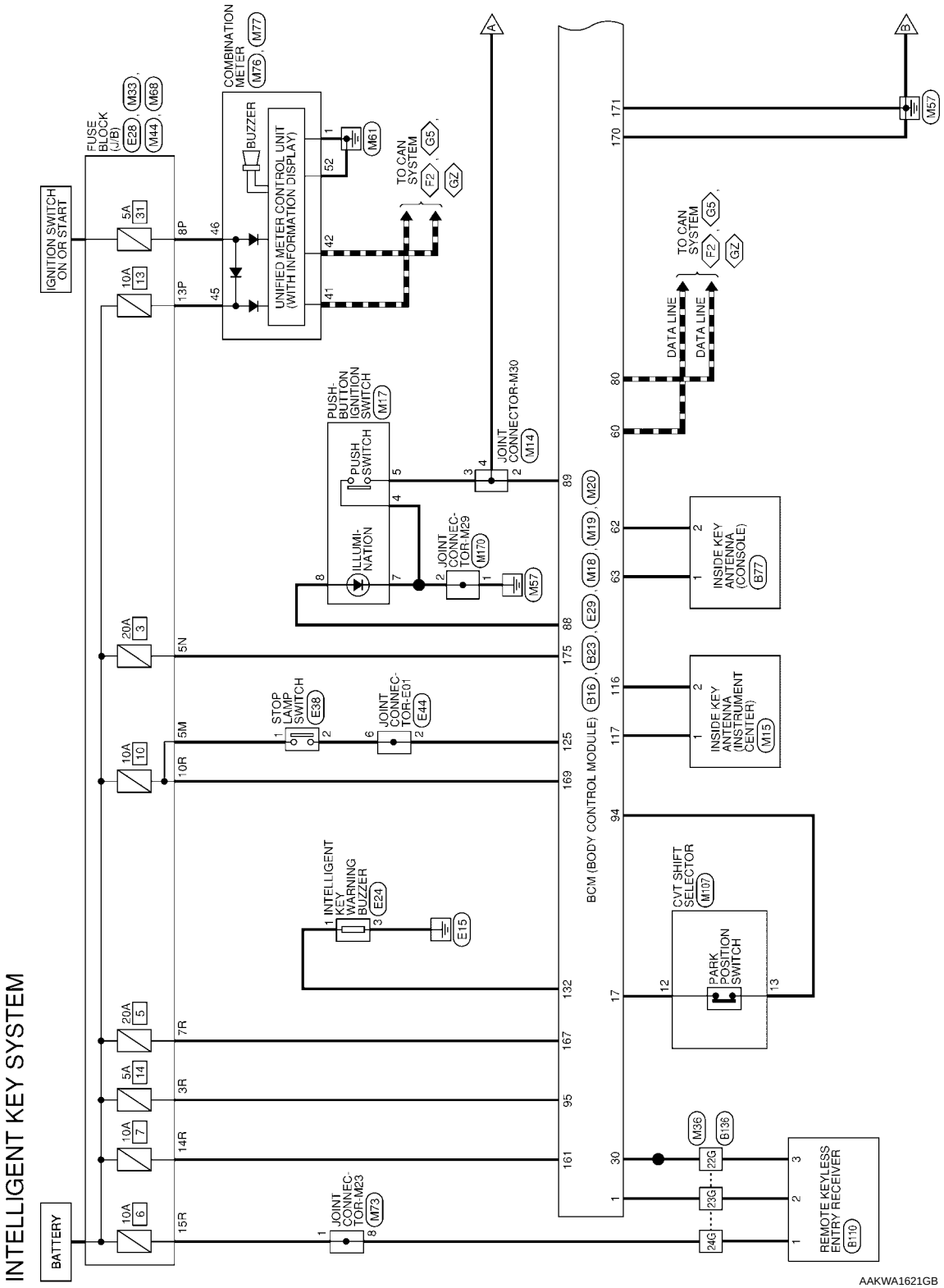
Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	B	GROUND
4	B	GROUND
5	B	GROUND
6	B	GROUND
7	B	GROUND
8	B	GROUND

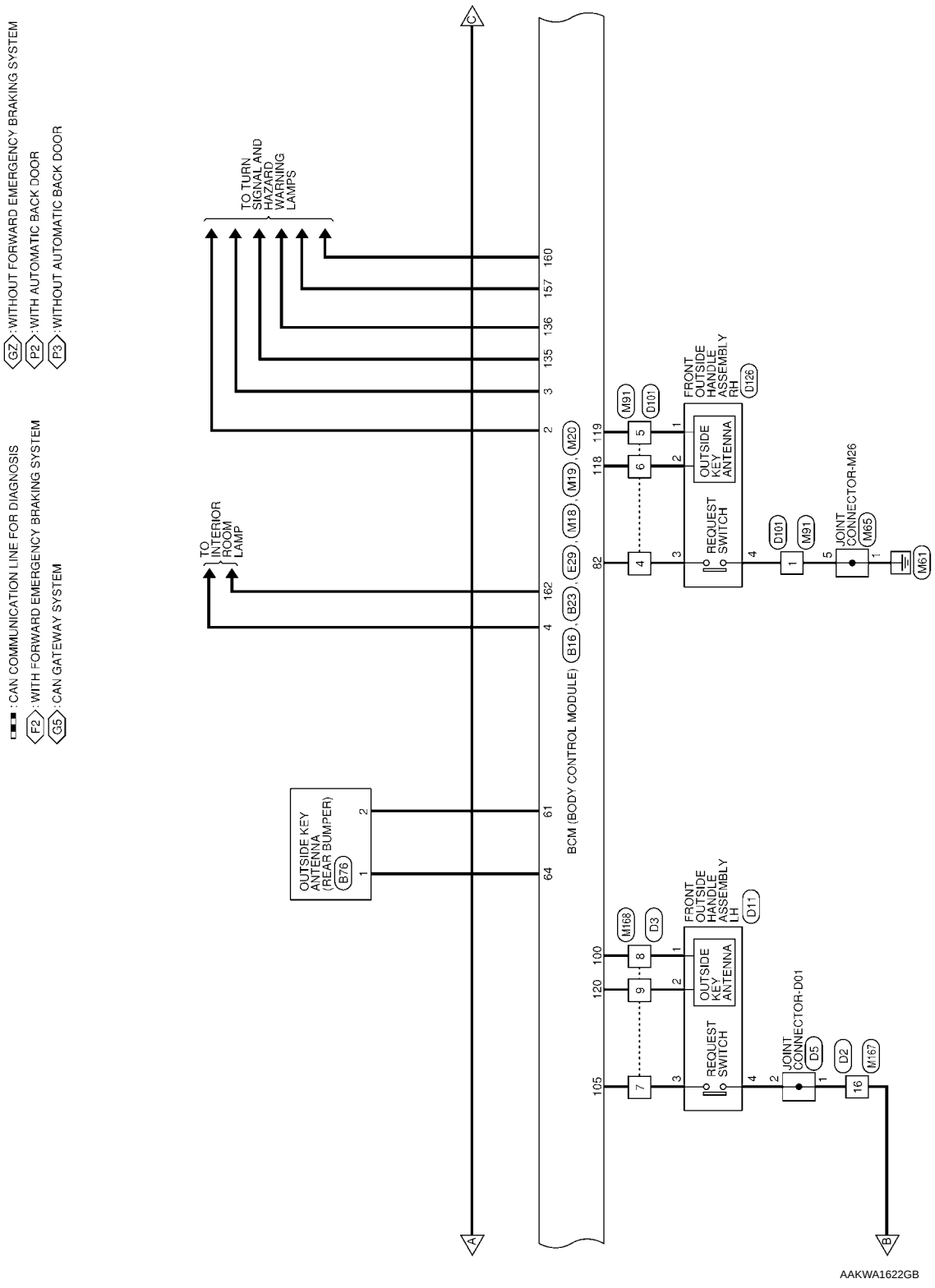
AAKIA4481GB

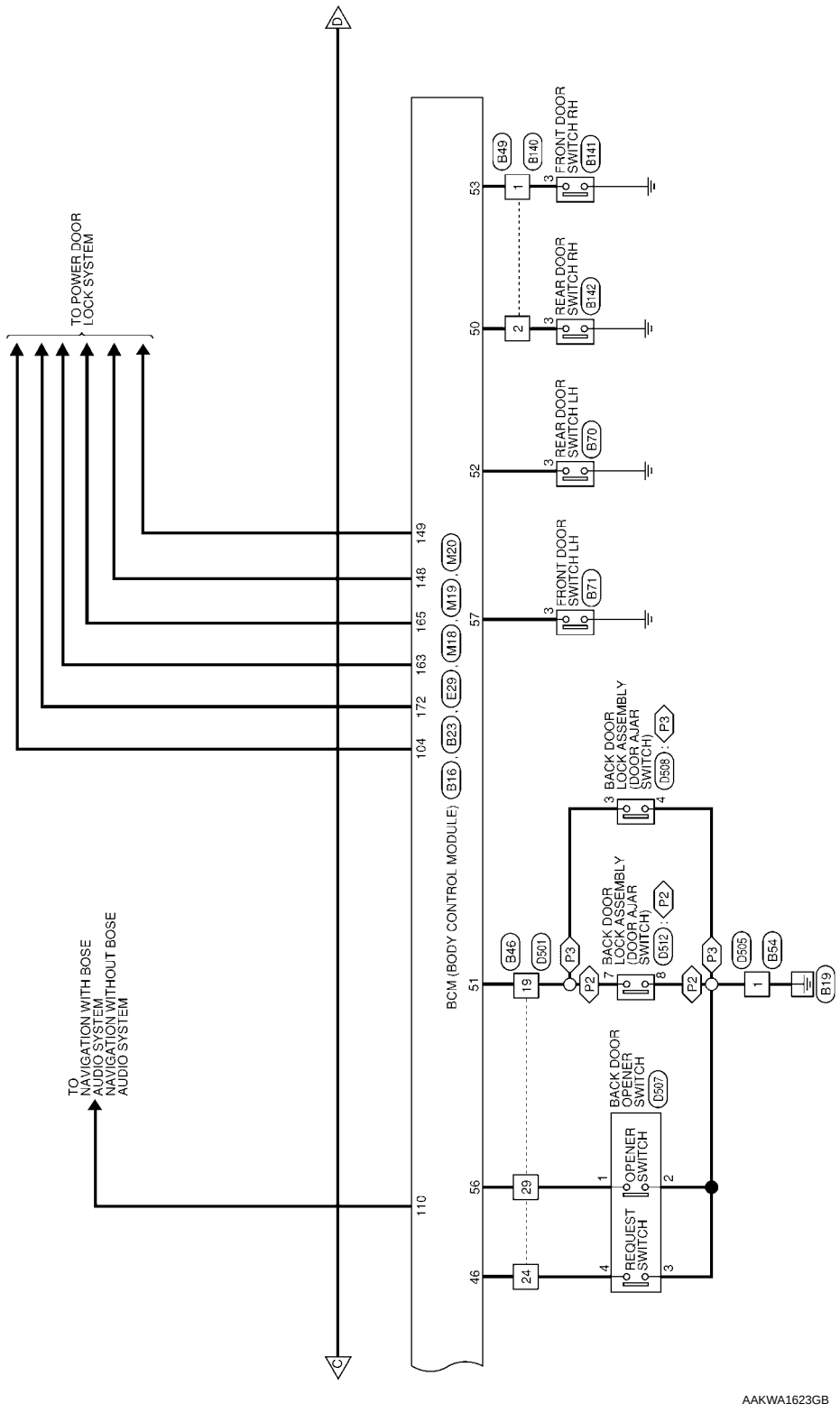
INTELLIGENT KEY SYSTEM

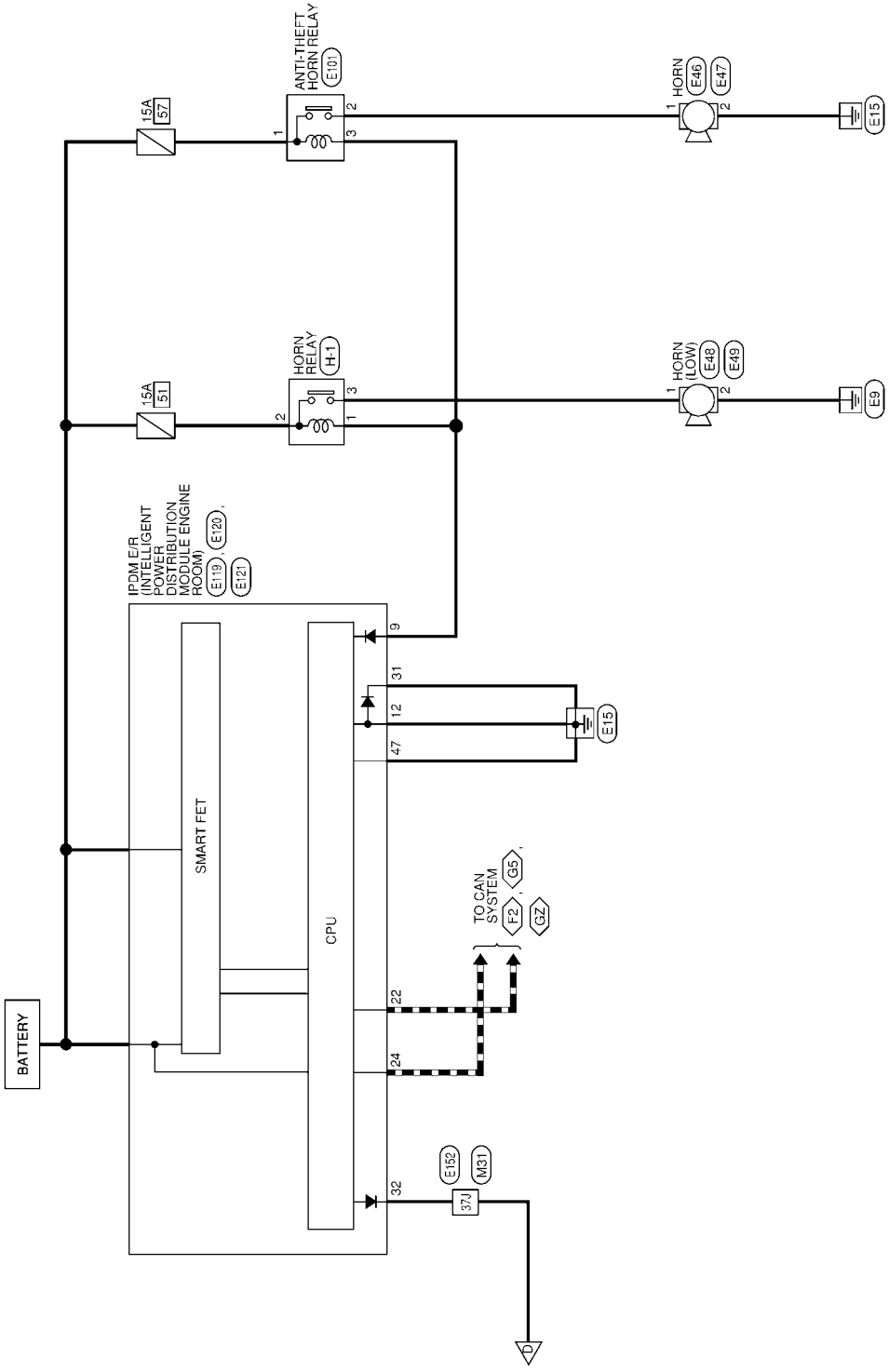
Wiring Diagram

INFOID:0000000014910881




: CAN COMMUNICATION LINE FOR DIAGNOSIS
F2 : WITH FORWARD EMERGENCY BRAKING SYSTEM
G5 : CAN GATEWAY SYSTEM
G7 : WITHOUT FORWARD EMERGENCY BRAKING SYSTEM
P2 : WITH AUTOMATIC BACK DOOR
P3 : WITHOUT AUTOMATIC BACK DOOR
TO TURN SIGNAL AND HAZARD WARNING LAMPS
TO INTERIOR ROOM LAMP
BCM (BODY CONTROL MODULE)
OUTSIDE KEY ANTENNA (REAR BUMPER)
FRONT OUTSIDE HANDLE ASSEMBLY RH
FRONT OUTSIDE HANDLE ASSEMBLY LH
OUTSIDE KEY ANTENNA
REQUEST SWITCH
JOINT CONNECTOR-M26
JOINT CONNECTOR-D01
AAKWA1622GB


TO POWER DOOR LOCK SYSTEM
TO NAVIGATION WITH BOSE AUDIO SYSTEM
NAVIGATION WITHOUT BOSE AUDIO SYSTEM
BCM (BODY CONTROL MODULE)
B16, B23, E29, M18, M19, M20
104 172 163 165 148 149
110
FRONT DOOR SWITCH RH
B49 B140 B141
REAR DOOR SWITCH RH
B142
REAR DOOR SWITCH LH
B70
FRONT DOOR SWITCH LH
B71
BACK DOOR LOCK ASSEMBLY (DOOR AJAR SWITCH)
D508 P3
BACK DOOR LOCK ASSEMBLY (DOOR AJAR SWITCH)
D512 P2
BACK DOOR OPENER SWITCH
D507
OPENER SWITCH
REQUEST SWITCH
B46 D501
D505 B54 B19
AAKWA1623GB

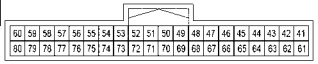


AAKWA1624GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH
Connector Color	GREEN

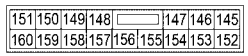
H.S.



Terminal No.	Color of Wire	Signal Name
41	–	–
42	–	–
43	–	–
44	–	–
45	–	–
46	R	SES BACKDOOR BUTTON SW
47	–	–
48	–	–
49	G	NO TOUCH TGATE SENSOR
50	W	RR DOOR SW
51	LG	TGATE SW
52	R	RL DOOR SW
53	SB	AS DOOR2 SW
54	–	–
55	LA/G	RR AUTOSTOP SW
56	Y	TGATE OPENER SW
57	SB	DR DOOR2 SW
58	–	–
59	–	–
60	L	CAN-H
61	V	SES EXT REAR ANTENNA B
62	Y	SES INT MIDDLE ANTENNA B
63	L	SES INT MIDDLE ANTENNA A
64	LG	SES EXT REAR ANTENNA A
65	–	–
66	–	–
67	–	–
68	–	–
69	–	–
70	–	–
71	–	–
72	–	–
73	–	–
74	–	–
75	–	–
76	–	–
77	V	SHIFT LOCK RLY
78	–	–
79	LA/W	STOP LAMP3
80	P	CAN-L

Connector No.	B23
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FGY-CS
Connector Color	GRAY

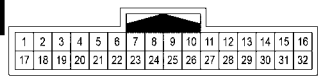
H.S.



Terminal No.	Color of Wire	Signal Name
145	LA/V	TGATE OPENER
146	–	–
147	LA/R	RR WIPER
148	W	RR UNLOCK B
149	L	RR LOCK B
150	–	–
151	R	PWM ROOMLAMP 5
152	–	–
153	LA/W	STOP LAMP1
154	–	–
155	–	–
156	–	–
157	GR	DI RR LEFT B
158	LA/Y	STOP LAMP2 NISSAN EUR
159	–	–
160	P	DI RR RIGHT B

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

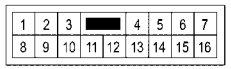
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS
3	–	TO BACK DOOR HARNESS
4	–	TO BACK DOOR HARNESS
5	R	TO BACK DOOR HARNESS
6	B	TO BACK DOOR HARNESS
7	W	TO BACK DOOR HARNESS
8	SHIELD	TO BACK DOOR HARNESS
9	–	TO BACK DOOR HARNESS
10	–	TO BACK DOOR HARNESS
11	–	TO BACK DOOR HARNESS
12	–	TO BACK DOOR HARNESS
13	W	TO BACK DOOR HARNESS
14	V	TO BACK DOOR HARNESS
15	BR	TO BACK DOOR HARNESS
16	SB	TO BACK DOOR HARNESS
17	LA/W	TO BACK DOOR HARNESS
18	LA/BR	TO BACK DOOR HARNESS
19	LG	TO BACK DOOR HARNESS
20	G	TO BACK DOOR HARNESS
21	G	TO BACK DOOR HARNESS
22	LA/R	TO BACK DOOR HARNESS
23	LA/R	TO BACK DOOR HARNESS
24	R	TO BACK DOOR HARNESS
25	–	TO BACK DOOR HARNESS
26	–	TO BACK DOOR HARNESS
27	–	TO BACK DOOR HARNESS
28	–	TO BACK DOOR HARNESS
29	Y	TO BACK DOOR HARNESS
30	G	TO BACK DOOR HARNESS
31	GR	TO BACK DOOR HARNESS
32	LG	TO BACK DOOR HARNESS

Connector No.	B49
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	SB	TO BODY NO. 2 HARNESS
2	W	TO BODY NO. 2 HARNESS
3	LA/W	TO BODY NO. 2 HARNESS
4	V	TO BODY NO. 2 HARNESS
5	SB	TO BODY NO. 2 HARNESS
6	LA/BR	TO BODY NO. 2 HARNESS
7	P	TO BODY NO. 2 HARNESS
8	LA/W	TO BODY NO. 2 HARNESS
9	LA/BR	TO BODY NO. 2 HARNESS
10	R	TO BODY NO. 2 HARNESS
11	LA/G	TO BODY NO. 2 HARNESS
12	LA/P	TO BODY NO. 2 HARNESS
13	–	TO BODY NO. 2 HARNESS
14	–	TO BODY NO. 2 HARNESS
15	G	TO BODY NO. 2 HARNESS
16	V	TO BODY NO. 2 HARNESS

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC
Connector Color	WHITE

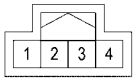
H.S.



Terminal No.	Color of Wire	Signal Name
1	B	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS

Connector No.	B70
Connector Name	REAR DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.



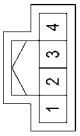
Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	R	I RL DOOR SW
4	–	–

AAKIA4462GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	B71
Connector Name	FRONT DOOR SWITCH LH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	SB	I DR DOOR2 SW
4	–	–

Connector No.	B76
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY
Connector Color	GRAY

H.S.



Terminal No.	Color of Wire	Signal Name
1	LG	SES EXT REAR ANTENNA A
2	V	SES EXT REAR ANTENNA B

Connector No.	B77
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY
Connector Color	GRAY

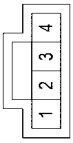
H.S.



Terminal No.	Color of Wire	Signal Name
1	L	SES INT MIDDLE ANTENNA A
2	Y	SES INT MIDDLE ANTENNA B

Connector No.	B110
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	AAC04FB
Connector Color	BLACK

H.S.



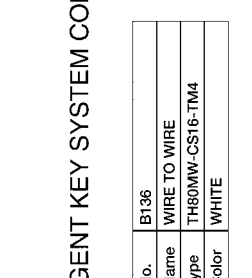
Terminal No.	Color of Wire	Signal Name
1	W	BATTERY
2	L	LIN 3D
3	P	O GND AUTOLIGHT SENSOR
4	–	–

AAKIA4463GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	B136
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.



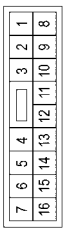
Terminal No.	Color of Wire	Signal Name
1G	LA/GR	TO MAIN HARNESS
2G	LA/P	TO MAIN HARNESS
3G	Y	TO MAIN HARNESS
4G	L	TO MAIN HARNESS
5G	G	TO MAIN HARNESS
6G	LA/BR	TO MAIN HARNESS
7G	BR	TO MAIN HARNESS
8G	LA/L	TO MAIN HARNESS
9G	LA/R	TO MAIN HARNESS
10G	R	TO MAIN HARNESS
11G	G	TO MAIN HARNESS
12G	Y	TO MAIN HARNESS
13G	BR	TO MAIN HARNESS
14G	–	TO MAIN HARNESS
15G	Y	TO MAIN HARNESS
16G	–	TO MAIN HARNESS
17G	–	TO MAIN HARNESS
18G	R	TO MAIN HARNESS
19G	R	TO MAIN HARNESS
20G	W	TO MAIN HARNESS
21G	P	TO MAIN HARNESS
22G	P	TO MAIN HARNESS
23G	L	TO MAIN HARNESS
24G	W	TO MAIN HARNESS
25G	L	TO MAIN HARNESS

26G	–	TO MAIN HARNESS
27G	–	TO MAIN HARNESS
28G	–	TO MAIN HARNESS
29G	SB	TO MAIN HARNESS
30G	–	TO MAIN HARNESS
31G	–	TO MAIN HARNESS
32G	–	TO MAIN HARNESS
33G	–	TO MAIN HARNESS
34G	V	TO MAIN HARNESS
35G	BR	TO MAIN HARNESS
36G	SHIELD	TO MAIN HARNESS
37G	LG	TO MAIN HARNESS
38G	V	TO MAIN HARNESS
39G	SHIELD	TO MAIN HARNESS
40G	G	TO MAIN HARNESS
41G	R	TO MAIN HARNESS
42G	–	TO MAIN HARNESS
43G	–	TO MAIN HARNESS
44G	BG	TO MAIN HARNESS
45G	SHIELD	TO MAIN HARNESS
46G	W	TO MAIN HARNESS
47G	R	TO MAIN HARNESS
48G	SHIELD	TO MAIN HARNESS
49G	L	TO MAIN HARNESS
50G	Y	TO MAIN HARNESS
51G	–	TO MAIN HARNESS
52G	–	TO MAIN HARNESS
53G	–	TO MAIN HARNESS
54G	–	TO MAIN HARNESS
55G	–	TO MAIN HARNESS
56G	–	TO MAIN HARNESS
57G	–	TO MAIN HARNESS
58G	–	TO MAIN HARNESS
59G	–	TO MAIN HARNESS
60G	GR	TO MAIN HARNESS
61G	V	TO MAIN HARNESS
62G	–	TO MAIN HARNESS
63G	–	TO MAIN HARNESS
64G	–	TO MAIN HARNESS
65G	–	TO MAIN HARNESS
66G	–	TO MAIN HARNESS
67G	–	TO MAIN HARNESS
68G	–	TO MAIN HARNESS
69G	–	TO MAIN HARNESS
70G	–	TO MAIN HARNESS
71G	–	TO MAIN HARNESS
72G	–	TO MAIN HARNESS
73G	–	TO MAIN HARNESS
74G	–	TO MAIN HARNESS
75G	–	TO MAIN HARNESS
76G	–	TO MAIN HARNESS
77G	–	TO MAIN HARNESS
78G	LA/R	TO MAIN HARNESS

79G	LA/V	TO MAIN HARNESS
80G	LA/B	TO MAIN HARNESS
81G	LA/L	TO MAIN HARNESS
82G	–	TO MAIN HARNESS
83G	–	TO MAIN HARNESS
84G	–	TO MAIN HARNESS
85G	–	TO MAIN HARNESS
86G	–	TO MAIN HARNESS
87G	–	TO MAIN HARNESS
88G	–	TO MAIN HARNESS
89G	–	TO MAIN HARNESS
90G	–	TO MAIN HARNESS
91G	R	TO MAIN HARNESS
92G	BR	TO MAIN HARNESS
93G	W	TO MAIN HARNESS
94G	LA/V	TO MAIN HARNESS
95G	V	TO MAIN HARNESS
96G	G	TO MAIN HARNESS
97G	P	TO MAIN HARNESS
98G	GR	TO MAIN HARNESS
99G	LA/Y	TO MAIN HARNESS
100G	Y	TO MAIN HARNESS

Connector No.	B140
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	GR	TO BODY HARNESS
2	W	TO BODY HARNESS
3	LA/Y	TO BODY HARNESS
4	V	TO BODY HARNESS
5	SB	TO BODY HARNESS
6	LA/BR	TO BODY HARNESS
7	LA/V	TO BODY HARNESS
8	L	TO BODY HARNESS
9	Y	TO BODY HARNESS
10	R	TO BODY HARNESS
11	V	TO BODY HARNESS
12	LG	TO BODY HARNESS
13	L	TO BODY HARNESS
14	Y	TO BODY HARNESS
15	LA/GR	TO BODY HARNESS

16	LA/LG	TO BODY HARNESS

Connector No.	B141
Connector Name	FRONT DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	GR	I AS DOOR2 SW
4	–	–

Connector No.	B142
Connector Name	REAR DOOR SWITCH RH
Connector Type	TH04FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	W	I RR DOOR SW
4	–	–

AAKIA4464GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	D2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	TO MAIN HARNESS
2	R	TO MAIN HARNESS
3	G	TO MAIN HARNESS
4	BR	TO MAIN HARNESS
5	P	TO MAIN HARNESS
6	L/A	TO MAIN HARNESS
7	LA/BR	TO MAIN HARNESS
8	SB	TO MAIN HARNESS
9	GR	TO MAIN HARNESS
10	L	TO MAIN HARNESS
11	P	TO MAIN HARNESS
12	LG	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	V	TO MAIN HARNESS
15	R	TO MAIN HARNESS
16	B	TO MAIN HARNESS

Connector No.	D3
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	Y	TO MAIN HARNESS
2	GR	TO MAIN HARNESS
3	W	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
3	LA/SB	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
4	V	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
4	LA/BG	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
5	SB	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	LA/Y	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	LA/V	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
7	W	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	SB	TO MAIN HARNESS
10	LG	TO MAIN HARNESS
11	GR	TO MAIN HARNESS
12	G	TO MAIN HARNESS
13	Y	TO MAIN HARNESS
14	B	TO MAIN HARNESS
15	BG	TO MAIN HARNESS
16	L	TO MAIN HARNESS
17	LA/SB	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
17	LA/W	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/Y	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
18	LA/W	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	LA/LG	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	LA/BR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	LA/V	TO MAIN HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
20	LA/GR	TO MAIN HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
21	BR	TO MAIN HARNESS
22	W	TO MAIN HARNESS
23	LA/R	TO MAIN HARNESS
24	GR	TO MAIN HARNESS
25	R	TO MAIN HARNESS
26	LA/G	TO MAIN HARNESS
27	LA/LG	TO MAIN HARNESS
28	LA/L	TO MAIN HARNESS
29	LA/Y	TO MAIN HARNESS
30	LA/V	TO MAIN HARNESS
31	LA/BR	TO MAIN HARNESS
32	P	TO MAIN HARNESS

Connector No.	D5
Connector Name	JOINT CONNECTOR-D01
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	B	GROUND
4	B	GROUND
5	LA/B	GROUND
6	B	GROUND (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	LA/B	GROUND (WITH AUTOMATIC DRIVE POSITIONER)
7	B	GROUND
8	LA/B	GROUND

Connector No.	D11
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY LH
Connector Type	RH04FB
Connector Color	BLACK

H.S.

1	2	3	4

Terminal No.	Color of Wire	Signal Name
1	V	SES EXT DR ANTENNA A
2	SB	SES EXT DR ANTENNA B
3	W	I SES DR HANDLE BUTTON SW
4	B	GROUND

Connector No.	D101
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH
Connector Color	WHITE

H.S.

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

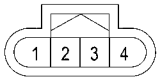
Terminal No.	Color of Wire	Signal Name
1	B	TO MAIN HARNESS
2	B	TO MAIN HARNESS
3	B	TO MAIN HARNESS
4	P	TO MAIN HARNESS
5	R	TO MAIN HARNESS
6	SB	TO MAIN HARNESS
7	L	TO MAIN HARNESS
8	V	TO MAIN HARNESS
9	Y	TO MAIN HARNESS
10	B	TO MAIN HARNESS
11	G	TO MAIN HARNESS
12	LA/V	TO MAIN HARNESS
13	LA/Y	TO MAIN HARNESS
14	LA/R	TO MAIN HARNESS
15	LA/V	TO MAIN HARNESS
16	LA/L	TO MAIN HARNESS
17	LA/BG	TO MAIN HARNESS
18	GR	TO MAIN HARNESS
19	LG	TO MAIN HARNESS
20	BR	TO MAIN HARNESS
21	LA/G	TO MAIN HARNESS
22	LA/SB	TO MAIN HARNESS
23	LA/BG	TO MAIN HARNESS
24	LA/Y	TO MAIN HARNESS

AAKIA4465GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	D126
Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY RH
Connector Type	RH04FB
Connector Color	BLACK

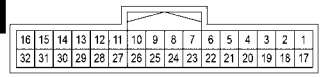
H.S.



Terminal No.	Color of Wire	Signal Name
1	R	SES EXT AS ANTENNA A
2	SB	SES EXT AS ANTENNA B
3	P	I SES FR HANDLE BUTTON SW
4	B	GROUND

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS
2	–	TO BODY HARNESS
3	–	TO BODY HARNESS
4	–	TO BODY HARNESS
5	R	TO BODY HARNESS
6	B	TO BODY HARNESS
7	W	TO BODY HARNESS
8	V	TO BODY HARNESS
9	–	TO BODY HARNESS
10	–	TO BODY HARNESS
11	–	TO BODY HARNESS
12	–	TO BODY HARNESS
13	G	TO BODY HARNESS
14	LA/GR	TO BODY HARNESS
15	LA/W	TO BODY HARNESS
16	LA/LG	TO BODY HARNESS
17	Y	TO BODY HARNESS
18	LA/R	TO BODY HARNESS
19	W	TO BODY HARNESS
20	–	TO BODY HARNESS
21	G	TO BODY HARNESS
22	LA/Y	TO BODY HARNESS
23	P	TO BODY HARNESS
24	BR	TO BODY HARNESS
25	–	TO BODY HARNESS
26	–	TO BODY HARNESS
27	–	TO BODY HARNESS
28	–	TO BODY HARNESS
29	V	TO BODY HARNESS
30	G	TO BODY HARNESS
31	BG	TO BODY HARNESS
32	LG	TO BODY HARNESS

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC
Connector Color	WHITE

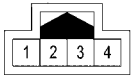
H.S.



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

Connector No.	D507
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	TH04MW-NH
Connector Color	WHITE

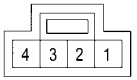
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	I TGATE OPENER SW
2	GR	GROUND
3	GR	GROUND
4	BR	I SES BACKDOOR BUTTON SW

Connector No.	D508
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR SYSTEM)
Connector Type	NS04FW-CS
Connector Color	WHITE

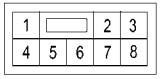
H.S.



Terminal No.	Color of Wire	Signal Name
1	LA/V	O TGATE OPENER
2	GR	GROUND
3	W	I TGATE SW
4	GR	GROUND

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Type	NS08FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	LA/L	LATCH MTR OPEN
2	LA/G	LATCH MTR CLOSE
3	–	–
4	LA/GR	OPEN SW
5	LA/W	CLOSE SW
6	LA/LG	HALF LATCH SW
7	W	I TGATE SW
8	B	GROUND

Connector No.	E24
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FBR
Connector Color	BROWN

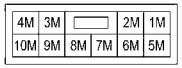
H.S.



Terminal No.	Color of Wire	Signal Name
1	G	O BUZZER
2	–	–
3	B	GROUND

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1M	–	–
2M	–	–
3M	–	–
4M	–	–
5M	V	BATTERY
6M	Y	O LIGHT POSITION REAR LH
7M	–	–
8M	–	–
9M	–	–
10M	–	–

AAKIA4466GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	E29
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH24FB-NH
Connector Color	BLACK

H.S.

132	131	130	129	128	127	126	125	124	123	122	121
144	143	142	141	140	139	138	137	136	135	134	133

Terminal No.	Color of Wire	Signal Name
121	–	–
122	–	–
123	–	–
124	–	–
125	LG	BRAKE SW2
126	W	BRAKE SW1
127	–	–
128	–	–
129	–	–
130	–	–
131	–	–
132	Y	BUZZER (WITH I-KEY)
133	–	–
134	–	–
135	BR	DI FR LEFT E
136	GR	DI FR RIGHT E
137	–	–
138	–	–
139	G	STCUT RL
140	–	–
141	–	–
142	–	–
143	–	–
144	–	–

Connector No.	E38
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC
Connector Color	WHITE

H.S.

3	4
1	2

Terminal No.	Color of Wire	Signal Name
1	V	BATTERY
2	LG	I BRAKE SW2
3	L	IGNITION
4	W	STOP LAMP SWITCH OUTPUT

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Type	NH24FG-J
Connector Color	GREEN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	V	SENSOR GROUND
2	LG	I BRAKE SW2
3	P	CAN-L
4	L	CAN-H
5	B	SENSOR GROUND
6	LG	I BRAKE SW2
7	P	CAN-L
8	L	CAN-H
9	W	SENSOR GROUND
10	Y	STOP LAMP SWITCH
11	P	CAN-L
12	L	CAN-H
13	–	–
14	R	STOP LAMP SWITCH
15	P	CAN-L
16	L	CAN-H

17	BR	EVAP CONTROL SYSTEM PRESSURE SENSOR
18	–	–
19	P	CAN-L
20	L	CAN-H
21	L	EVAP CONTROL SYSTEM PRESSURE SENSOR
22	–	–
23	–	–
24	–	–

Connector No.	E46
Connector Name	HORN
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

2

Terminal No.	Color of Wire	Signal Name
2	B	GROUND

Connector No.	E47
Connector Name	HORN
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	R	ANTI-THEFT HORN RELAY OUTPUT

Connector No.	E48
Connector Name	HORN (LOW)
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

2

Terminal No.	Color of Wire	Signal Name
2	B	GROUND

Connector No.	E49
Connector Name	HORN (LOW)
Connector Type	P01FB-A
Connector Color	BLACK

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	R	HORN RELAY OUTPUT

Connector No.	E101
Connector Name	ANTI-THEFT HORN RELAY
Connector Type	M03FW-R-LC
Connector Color	WHITE

H.S.

1	
2	3

Terminal No.	Color of Wire	Signal Name
1	L	BATTERY
2	R	RELAY OUTPUT
3	GR	RELAY CONTROL

AAKIA4467GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	NS16FGY-CS
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
3	P	IGN NOT COLUMN LOCK
4	Y	LIGHT POSITION REAR LH
5	–	–
6	–	–
7	–	–
8	BR	ACTUATOR4 CABIN (3FB4)
9	L	LO HORN RLY
10	–	–
11	V	IGN AIRBAG
12	B	SIGNAL GROUND
13	–	–
14	–	–
15	–	–
16	G	LIGHT REVERSE LAMP
17	W	LIGHT POSITION REAR RH
18	–	–

22	P	CAN-L
23	–	–
24	L	CAN-H
25	–	–
26	–	–
27	SB	CABIN MOTOR 5
28	R	CABIN MOTOR 6
29	LG	CABIN MOTOR 7
30	Y	CABIN MOTOR 8
31	B	2ND SIGNAL GROUND
32	GR	LI PUSH SW
33	BR	AUTO STOP WIPER
34	–	–
35	–	–
36	–	–
37	–	–
38	–	–
39	L	HEV CAN-H
40	G	HEV CAN-L
41	W	CABIN MOTOR 3
42	R	CABIN MOTOR 4

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	24340540BR
Connector Color	RED

H.S.

45	44	43
48	47	46

Terminal No.	Color of Wire	Signal Name
43	–	–
44	R	BAT ABS VALVE
45	V	FR WIPER HI
46	W	FUEL PUMP
47	B	POWER GROUND
48	Y	FR WIPER LO

Connector No.	E120
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH24FGY-NH
Connector Color	GRAY

H.S.

30	29	28	27	26	25	24	23	22	21	20	19
42	41	40	39	38	37	36	35	34	33	32	31

Terminal No.	Color of Wire	Signal Name
19	LG	IGN ECM
20	–	–
21	–	–

AAKIA4468GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	–	TO MAIN HARNESS
2J	Y	TO MAIN HARNESS
3J	–	TO MAIN HARNESS
4J	–	TO MAIN HARNESS
5J	–	TO MAIN HARNESS
6J	–	TO MAIN HARNESS
7J	–	TO MAIN HARNESS
8J	–	TO MAIN HARNESS
9J	BR	TO MAIN HARNESS
10J	–	TO MAIN HARNESS
11J	–	TO MAIN HARNESS
12J	–	TO MAIN HARNESS
13J	–	TO MAIN HARNESS
14J	–	TO MAIN HARNESS
15J	–	TO MAIN HARNESS
16J	–	TO MAIN HARNESS
17J	–	TO MAIN HARNESS
18J	–	TO MAIN HARNESS
19J	–	TO MAIN HARNESS
20J	–	TO MAIN HARNESS
21J	GR	TO MAIN HARNESS
22J	SHIELD	TO MAIN HARNESS
23J	LG	TO MAIN HARNESS
24J	V	TO MAIN HARNESS
25J	L	TO MAIN HARNESS
26J	BR	TO MAIN HARNESS
27J	G	TO MAIN HARNESS
28J	R	TO MAIN HARNESS
29J	L	TO MAIN HARNESS
30J	V	TO MAIN HARNESS
31J	–	TO MAIN HARNESS
32J	–	TO MAIN HARNESS
33J	R	TO MAIN HARNESS
34J	L	TO MAIN HARNESS
35J	BG	TO MAIN HARNESS
36J	LG	TO MAIN HARNESS
37J	GR	TO MAIN HARNESS
38J	BR	TO MAIN HARNESS
39J	–	TO MAIN HARNESS
40J	–	TO MAIN HARNESS
41J	G	TO MAIN HARNESS
42J	W	TO MAIN HARNESS
43J	L	TO MAIN HARNESS
44J	B	TO MAIN HARNESS
45J	SB	TO MAIN HARNESS
46J	BR	TO MAIN HARNESS
47J	W	TO MAIN HARNESS
48J	W	TO MAIN HARNESS
49J	L	TO MAIN HARNESS
50J	P	TO MAIN HARNESS
51J	W	TO MAIN HARNESS
52J	R	TO MAIN HARNESS
53J	SB	TO MAIN HARNESS
54J	LG	TO MAIN HARNESS
55J	W	TO MAIN HARNESS
56J	BG	TO MAIN HARNESS
57J	R	TO MAIN HARNESS
58J	V	TO MAIN HARNESS
59J	BR	TO MAIN HARNESS
60J	P	TO MAIN HARNESS
61J	L	TO MAIN HARNESS
62J	P	TO MAIN HARNESS
63J	L	TO MAIN HARNESS
64J	R	TO MAIN HARNESS
65J	L	TO MAIN HARNESS
66J	BG	TO MAIN HARNESS
67J	–	TO MAIN HARNESS
68J	–	TO MAIN HARNESS
69J	G	TO MAIN HARNESS
70J	L	TO MAIN HARNESS
71J	–	TO MAIN HARNESS
72J	–	TO MAIN HARNESS
73J	–	TO MAIN HARNESS
74J	–	TO MAIN HARNESS
75J	–	TO MAIN HARNESS
76J	–	TO MAIN HARNESS
77J	–	TO MAIN HARNESS
78J	–	TO MAIN HARNESS
79J	SHIELD	TO MAIN HARNESS
80J	B	TO MAIN HARNESS
81J	W	TO MAIN HARNESS
82J	–	TO MAIN HARNESS
83J	–	TO MAIN HARNESS
84J	–	TO MAIN HARNESS
85J	–	TO MAIN HARNESS
86J	–	TO MAIN HARNESS
87J	–	TO MAIN HARNESS
88J	–	TO MAIN HARNESS
89J	–	TO MAIN HARNESS
90J	–	TO MAIN HARNESS
91J	–	TO MAIN HARNESS
92J	LG	TO MAIN HARNESS
93J	L	TO MAIN HARNESS
94J	L	TO MAIN HARNESS
95J	BR	TO MAIN HARNESS
96J	–	TO MAIN HARNESS
97J	GR	TO MAIN HARNESS
98J	P	TO MAIN HARNESS
99J	W	TO MAIN HARNESS
100J	Y	TO MAIN HARNESS

Connector No.	M14
Connector Name	JOINT CONNECTOR- M30
Connector Type	SAC04JW
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	Y	I IGN SW
2	Y	I START WO ESCL SW
3	Y	I START WO ESCL SW
4	Y	LI PUSH SW

Connector No.	M15
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	GR	SES INT FRONT ANTENNA A
2	BG	SES INT FRONT ANTENNA B

Connector No.	M17
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TH08FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	–	–
4	B	GROUND
5	Y	I START WO ESCL SW
6	–	–
7	B	GROUND
8	W	O START SW BACKLIGHT LED

AAKIA4469GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH
Connector Color	GRAY

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	L	LIN 3 D
2	LA/G	DI FR LEFT D
3	LA/Y	DI FR RIGHT D
4	P	SPARE4 RL N
5	R	CAN-L
6	L	CAN-H
7	–	–
8	L	CAN-H
9	R	CAN-L
10	BG	DOORLOCK SW
11	Y	HAZARD SW D
12	W	PWR AUTOLIGHT SENSOR
13	–	–
14	–	–
15	–	–
16	–	–
17	L	PWR ATDVC
18	–	–
19	LG	AUTOLIGHT SENSOR
20	–	–
21	–	–
22	–	–
23	G	WL AUTHORIZATION RL
24	LA/R	DEFROSTER RL D
25	BR	BAT TEMP1 RL
26	–	–
27	Y	IGN1 RL
28	LA/W	IGN2 RL
29	–	–
30	V	GND AUTOLIGHT SENSOR
31	–	–
32	–	–
33	LG	CSW 5
34	Y	CSW 5
35	BG	SECURITY LED
36	G	CSW 3
37	GR	CSW 4

38	V	CSW 1
39	W	CSW 2
40	SB	DOORUNLOCK SW

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81
120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101

Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	SES FR HANDLE BUTTON SW
83	–	–
84	BR	CSW 2
85	SB	CSW 1
86	P	CSW 3
87	BG	CSW 4
88	W	START SW BACKLIGHT LED
89	Y	START WO ESCL SW
90	–	–
91	–	–
92	BR	KEY CYLINDER LOCK SW
93	P	KEY CYLINDER UNLOCK SW
94	G	AT LOCKED IN PARK SW
95	V	SHORTING PIN
96	–	–
97	–	–
98	–	–
99	–	–
100	V	SES EXT DR ANTENNA A
101	–	–
102	–	–
103	–	–
104	R	DR KNOB SW
105	Y	SES DR HANDLE BUTTON SW
106	W	AUTO ACC2
107	–	–
108	–	–
109	–	–
110	BG	MR OUTPUT
111	–	–
112	–	–
113	–	–

114	Y	IMMOBILIZER KAZASHI B
115	W	IMMOBILIZER KAZASHI A
116	BG	SES INT FRONT ANTENNA B
117	GR	SES INT FRONT ANTENNA A
118	SB	SES EXT AS ANTENNA B
119	P	SES EXT AS ANTENNA A
120	BR	SES EXT DR ANTENNA B

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

167	166	165	164		163	162	161
176	175	174	173	172	171	170	169	168

Terminal No.	Color of Wire	Signal Name
161	W	PWR ECU
162	SB	PWM ROOMLAMP 1
163	L	AS LOCK OR UNLOCK D
164	–	–
165	V	DR OR FR LOCK D
166	–	–
167	LA/V	PWR DOORLOCK1
168	BG	PWR FLASHERS
169	GR	PWR STOP LAMP
170	B	GND1
171	B	GND2
172	G	FR OR DR UNLOCK D
173	–	–
174	–	–
175	R	PWR DOORLOCK2
176	LG	PWR WIPER

AAKIA4470GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1J	–	TO ENGINE ROOM HARNESS
2J	R	TO ENGINE ROOM HARNESS
3J	–	TO ENGINE ROOM HARNESS
4J	–	TO ENGINE ROOM HARNESS
5J	–	TO ENGINE ROOM HARNESS
6J	–	TO ENGINE ROOM HARNESS
7J	–	TO ENGINE ROOM HARNESS
8J	–	TO ENGINE ROOM HARNESS
9J	W	TO ENGINE ROOM HARNESS
10J	–	TO ENGINE ROOM HARNESS
11J	–	TO ENGINE ROOM HARNESS
12J	–	TO ENGINE ROOM HARNESS
13J	–	TO ENGINE ROOM HARNESS
14J	–	TO ENGINE ROOM HARNESS
15J	–	TO ENGINE ROOM HARNESS
16J	–	TO ENGINE ROOM HARNESS
17J	–	TO ENGINE ROOM HARNESS
18J	–	TO ENGINE ROOM HARNESS
19J	–	TO ENGINE ROOM HARNESS
20J	–	TO ENGINE ROOM HARNESS
21J	LA/L	TO ENGINE ROOM HARNESS
22J	SHIELD	TO ENGINE ROOM HARNESS
23J	LG	TO ENGINE ROOM HARNESS
24J	V	TO ENGINE ROOM HARNESS
25J	L	TO ENGINE ROOM HARNESS
26J	BR	TO ENGINE ROOM HARNESS
27J	G	TO ENGINE ROOM HARNESS
28J	Y	TO ENGINE ROOM HARNESS
29J	L	TO ENGINE ROOM HARNESS
30J	V	TO ENGINE ROOM HARNESS
31J	–	TO ENGINE ROOM HARNESS
32J	–	TO ENGINE ROOM HARNESS
33J	R	TO ENGINE ROOM HARNESS
33J	Y	TO ENGINE ROOM HARNESS - (WITH DRIVER ASSISTNACE SYSTEM)
34J	L	TO ENGINE ROOM HARNESS
35J	BG	TO ENGINE ROOM HARNESS
36J	GR	TO ENGINE ROOM HARNESS
37J	Y	TO ENGINE ROOM HARNESS
38J	LA/BR	TO ENGINE ROOM HARNESS
39J	–	TO ENGINE ROOM HARNESS
40J	–	TO ENGINE ROOM HARNESS
41J	LA/R	TO ENGINE ROOM HARNESS
42J	W	TO ENGINE ROOM HARNESS
43J	L	TO ENGINE ROOM HARNESS
44J	B	TO ENGINE ROOM HARNESS
45J	SB	TO ENGINE ROOM HARNESS
46J	BR	TO ENGINE ROOM HARNESS
47J	W	TO ENGINE ROOM HARNESS
48J	R	TO ENGINE ROOM HARNESS
49J	SB	TO ENGINE ROOM HARNESS
50J	GR	TO ENGINE ROOM HARNESS
51J	W	TO ENGINE ROOM HARNESS
52J	R	TO ENGINE ROOM HARNESS
53J	BR	TO ENGINE ROOM HARNESS
54J	LG	TO ENGINE ROOM HARNESS
55J	LA/Y	TO ENGINE ROOM HARNESS
56J	LA/V	TO ENGINE ROOM HARNESS
57J	LA/R	TO ENGINE ROOM HARNESS
58J	W	TO ENGINE ROOM HARNESS
59J	BR	TO ENGINE ROOM HARNESS
60J	P	TO ENGINE ROOM HARNESS
61J	L	TO ENGINE ROOM HARNESS
62J	R	TO ENGINE ROOM HARNESS
63J	L	TO ENGINE ROOM HARNESS
64J	R	TO ENGINE ROOM HARNESS
65J	L	TO ENGINE ROOM HARNESS
66J	BG	TO ENGINE ROOM HARNESS
67J	–	TO ENGINE ROOM HARNESS
68J	–	TO ENGINE ROOM HARNESS
69J	G	TO ENGINE ROOM HARNESS
70J	L	TO ENGINE ROOM HARNESS
71J	–	TO ENGINE ROOM HARNESS
72J	–	TO ENGINE ROOM HARNESS
73J	–	TO ENGINE ROOM HARNESS
74J	–	TO ENGINE ROOM HARNESS
75J	–	TO ENGINE ROOM HARNESS
76J	–	TO ENGINE ROOM HARNESS
77J	–	TO ENGINE ROOM HARNESS
78J	–	TO ENGINE ROOM HARNESS
79J	SHIELD	TO ENGINE ROOM HARNESS
80J	B	TO ENGINE ROOM HARNESS
81J	W	TO ENGINE ROOM HARNESS
82J	–	TO ENGINE ROOM HARNESS
83J	–	TO ENGINE ROOM HARNESS
84J	–	TO ENGINE ROOM HARNESS
85J	–	TO ENGINE ROOM HARNESS
86J	–	TO ENGINE ROOM HARNESS
87J	–	TO ENGINE ROOM HARNESS
88J	–	TO ENGINE ROOM HARNESS
89J	–	TO ENGINE ROOM HARNESS
90J	–	TO ENGINE ROOM HARNESS
91J	–	TO ENGINE ROOM HARNESS
92J	Y	TO ENGINE ROOM HARNESS
93J	G	TO ENGINE ROOM HARNESS
94J	L	TO ENGINE ROOM HARNESS
95J	P	TO ENGINE ROOM HARNESS
96J	–	TO ENGINE ROOM HARNESS
97J	SB	TO ENGINE ROOM HARNESS
98J	P	TO ENGINE ROOM HARNESS
99J	LA/R	TO ENGINE ROOM HARNESS
100J	R	TO ENGINE ROOM HARNESS

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1N	L	ACCESSORY RELAY-1 OUTPUT
2N	LG	BATTERY
3N	Y	FRONT BLOWER MOTOR RELAY OUTPUT
4N	LG	BATTERY
5N	R	BATTERY
6N	BG	BATTERY
7N	BR	ACCESSORY RELAY-1 CONTROL
8N	SB	FRONT BLOWER MOTOR RELAY OUTPUT

AAKIA4471GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M36
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1G	LA/R	TO BODY NO. 2 HARNESS
2G	W	TO BODY NO. 2 HARNESS
3G	Y	TO BODY NO. 2 HARNESS
4G	BG	TO BODY NO. 2 HARNESS
5G	G	TO BODY NO. 2 HARNESS
6G	SB	TO BODY NO. 2 HARNESS
7G	P	TO BODY NO. 2 HARNESS
8G	LA/Y	TO BODY NO. 2 HARNESS
9G	LA/W	TO BODY NO. 2 HARNESS
10G	R	TO BODY NO. 2 HARNESS
11G	G	TO BODY NO. 2 HARNESS
12G	L	TO BODY NO. 2 HARNESS
13G	BR	TO BODY NO. 2 HARNESS
14G	–	TO BODY NO. 2 HARNESS
15G	Y	TO BODY NO. 2 HARNESS
16G	–	TO BODY NO. 2 HARNESS
17G	–	TO BODY NO. 2 HARNESS
18G	R	TO BODY NO. 2 HARNESS
19G	LA/R	TO BODY NO. 2 HARNESS
20G	W	TO BODY NO. 2 HARNESS
21G	BR	TO BODY NO. 2 HARNESS
22G	P	TO BODY NO. 2 HARNESS
23G	L	TO BODY NO. 2 HARNESS
24G	W	TO BODY NO. 2 HARNESS
25G	L	TO BODY NO. 2 HARNESS

26G	–	TO BODY NO. 2 HARNESS
27G	–	TO BODY NO. 2 HARNESS
28G	–	TO BODY NO. 2 HARNESS
29G	–	TO BODY NO. 2 HARNESS
30G	–	TO BODY NO. 2 HARNESS
31G	–	TO BODY NO. 2 HARNESS
32G	–	TO BODY NO. 2 HARNESS
33G	–	TO BODY NO. 2 HARNESS
34G	V	TO BODY NO. 2 HARNESS
35G	BR	TO BODY NO. 2 HARNESS
36G	SHIELD	TO BODY NO. 2 HARNESS
37G	LG	TO BODY NO. 2 HARNESS
38G	V	TO BODY NO. 2 HARNESS
39G	SHIELD	TO BODY NO. 2 HARNESS
40G	G	TO BODY NO. 2 HARNESS
41G	R	TO BODY NO. 2 HARNESS
42G	–	TO BODY NO. 2 HARNESS
43G	–	TO BODY NO. 2 HARNESS
44G	BG	TO BODY NO. 2 HARNESS
45G	SHIELD	TO BODY NO. 2 HARNESS
46G	L	TO BODY NO. 2 HARNESS
47G	Y	TO BODY NO. 2 HARNESS
48G	SHIELD	TO BODY NO. 2 HARNESS
49G	W	TO BODY NO. 2 HARNESS
50G	R	TO BODY NO. 2 HARNESS
51G	–	TO BODY NO. 2 HARNESS
52G	–	TO BODY NO. 2 HARNESS
53G	–	TO BODY NO. 2 HARNESS
54G	–	TO BODY NO. 2 HARNESS
55G	–	TO BODY NO. 2 HARNESS
56G	–	TO BODY NO. 2 HARNESS
57G	–	TO BODY NO. 2 HARNESS
58G	–	TO BODY NO. 2 HARNESS
59G	–	TO BODY NO. 2 HARNESS
60G	GR	TO BODY NO. 2 HARNESS
61G	BR	TO BODY NO. 2 HARNESS
62G	–	TO BODY NO. 2 HARNESS
63G	–	TO BODY NO. 2 HARNESS
64G	–	TO BODY NO. 2 HARNESS
65G	–	TO BODY NO. 2 HARNESS
66G	–	TO BODY NO. 2 HARNESS
67G	–	TO BODY NO. 2 HARNESS
68G	–	TO BODY NO. 2 HARNESS
69G	–	TO BODY NO. 2 HARNESS
70G	–	TO BODY NO. 2 HARNESS
71G	–	TO BODY NO. 2 HARNESS
72G	–	TO BODY NO. 2 HARNESS
73G	–	TO BODY NO. 2 HARNESS
74G	–	TO BODY NO. 2 HARNESS
76G	–	TO BODY NO. 2 HARNESS
77G	–	TO BODY NO. 2 HARNESS
78G	LA/Y	TO BODY NO. 2 HARNESS
79G	LA/V	TO BODY NO. 2 HARNESS

80G	LA/B	TO BODY NO. 2 HARNESS
81G	LA/L	TO BODY NO. 2 HARNESS
82G	–	TO BODY NO. 2 HARNESS
83G	–	TO BODY NO. 2 HARNESS
84G	–	TO BODY NO. 2 HARNESS
85G	–	TO BODY NO. 2 HARNESS
86G	–	TO BODY NO. 2 HARNESS
87G	–	TO BODY NO. 2 HARNESS
88G	–	TO BODY NO. 2 HARNESS
89G	–	TO BODY NO. 2 HARNESS
90G	–	TO BODY NO. 2 HARNESS
91G	R	TO BODY NO. 2 HARNESS
92G	LA/L	TO BODY NO. 2 HARNESS
93G	W	TO BODY NO. 2 HARNESS
94G	LG	TO BODY NO. 2 HARNESS
95G	GR	TO BODY NO. 2 HARNESS
96G	SB	TO BODY NO. 2 HARNESS
97G	LA/BR	TO BODY NO. 2 HARNESS
98G	GR	TO BODY NO. 2 HARNESS
99G	Y	TO BODY NO. 2 HARNESS
100G	V	TO BODY NO. 2 HARNESS

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1P	R	IGNITION
2P	G	IGNITION
3P	Y	IGNITION RELAY-2 CONTROL
4P	LG	REAR WINDOW DEFOGGER RELAY OUTPUT
5P	GR	REAR WINDOW DEFOGGER RELAY OUTPUT
6P	LA/R	REAR WINDOW DEFOGGER RELAY CONTROL
7P	Y	IGNITION
8P	V	IGNITION
9P	L	BATTERY
10P	LG	IGNITION
11P	–	–
12P	–	–
13P	G	BATTERY
14P	–	–

15P	L	BATTERY
16P	LA/W	FRONT BLOWER MOTOR RELAY CONTROL

Connector No.	M65
Connector Name	JOINT CONNECTOR-M26
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	B	GROUND
4	B	GROUND
5	B	GROUND
6	B	GROUND
7	B	GROUND
8	B	GROUND

AAKIA4472GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1R	V	ILLUMINATION +
2R	G	IGNITION
3R	V	BATTERY
4R	–	–
5R	–	–
6R	LA/L	ACCESSORY
7R	LA/V	BATTERY
8R	–	–
9R	–	–
10R	GR	BATTERY
11R	–	–
12R	–	–
13R	–	–
14R	W	BATTERY
15R	W	BATTERY
16R	GR	ACCESSORY

Connector No.	M73
Connector Name	JOINT CONNECTOR-M23
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	W	BATTERY
2	GR	BATTERY
3	W	BATTERY
4	W	BATTERY
5	W	BATTERY
6	W	BATTERY
7	W	BATTERY
8	W	BATTERY

Connector No.	M76
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	GND
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–
7	BG	SECURITY
8	–	–
9	GR	ECO MODE SW
10	–	–
11	–	–
12	–	–
13	–	–
14	–	–
15	L	OUTSIDE TEMP SENSOR
16	–	–
17	BG	SATELLITE SW GND
18	SB	TRIP RESET SW
19	–	–
20	Y	OUTSIDE TEMP GND
21	L	GND (STRG SW GND)
22	Y	STRG SW A
23	GR	STRG SW B
24	BR	WASHER SW
25	V	BRAKE OIL SW
26	G	PKB SW
27	–	–
28	Y	DR BELT SW
29	R	SPORT MODE SW
30	LG	M RANGE
31	SB	NOT M RANGE
32	BG	AT SHIFT UP
33	BR	AT SHIFT DOWN
34	–	–
35	–	–
36	GR	ILL UP SW
37	V	ILL DOWN SW
38	G	8P/R OUTPUT
39	W	2P/R OUTPUT
40	–	–

Connector No.	M77
Connector Name	COMBINATION METER
Connector Type	TH12FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
43	R	ILL CONT OUT
44	LA/B	FUEL SENSOR GND
45	G	BAT
46	V	IGN
47	SB	M-CAN H
48	LG	M-CAN L
49	–	–
50	–	–
51	LA/L	FUEL SENSOR
52	B	G1

Connector No.	M91
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

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

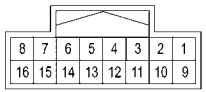
Terminal No.	Color of Wire	Signal Name
1	B	TO FRONT DOOR RH HARNESS
2	GR	TO FRONT DOOR RH HARNESS
3	GR	TO FRONT DOOR RH HARNESS
4	W	TO FRONT DOOR RH HARNESS
5	P	TO FRONT DOOR RH HARNESS
6	SB	TO FRONT DOOR RH HARNESS
7	B	TO FRONT DOOR RH HARNESS
8	L	TO FRONT DOOR RH HARNESS
9	Y	TO FRONT DOOR RH HARNESS
10	SHIELD	TO FRONT DOOR RH HARNESS
11	G	TO FRONT DOOR RH HARNESS
12	V	TO FRONT DOOR RH HARNESS
13	Y	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
13	LA/SB	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
14	R	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
14	LA/GR	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
15	V	TO FRONT DOOR RH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
15	LA/V	TO FRONT DOOR RH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
16	LA/L	TO FRONT DOOR RH HARNESS
17	LA/BG	TO FRONT DOOR RH HARNESS
18	GR	TO FRONT DOOR RH HARNESS
19	LG	TO FRONT DOOR RH HARNESS
20	BR	TO FRONT DOOR RH HARNESS
21	LA/Y	TO FRONT DOOR RH HARNESS
22	SB	TO FRONT DOOR RH HARNESS
23	BG	TO FRONT DOOR RH HARNESS
24	Y	TO FRONT DOOR RH HARNESS

AAKIA4473GB

INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M107
Connector Name	CVT SHIFT SELECTOR
Connector Type	TH16FW-NH
Connector Color	WHITE

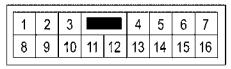
H.S.



Terminal No.	Color of Wire	Signal Name
1	P	O/D OFF SW
2	B	GROUND
3	R	–
4	B	GROUND
5	G	ILL CONT OUT
6	B	GROUND
7	LG	M RANGE
8	BR	AT SHIFT DOWN
9	BG	AT SHIFT UP
10	B	GROUND
11	SB	NOT M RANGE
12	L	O PWR ATDVC
13	G	I AT LOCKED IN PARK SW
14	–	–
15	–	–
16	–	–

Connector No.	M167
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

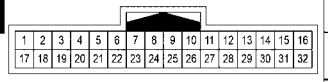
H.S.



Terminal No.	Color of Wire	Signal Name
1	V	TO FRONT DOOR LH HARNESS
2	R	TO FRONT DOOR LH HARNESS
3	G	TO FRONT DOOR LH HARNESS
4	BR	TO FRONT DOOR LH HARNESS
5	P	TO FRONT DOOR LH HARNESS
6	Y	TO FRONT DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
6	LA/L	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
7	R	TO FRONT DOOR LH HARNESS - (WITHOUT BOSE AUDIO SYSTEM)
7	LA/BR	TO FRONT DOOR LH HARNESS - (WITH BOSE AUDIO SYSTEM)
8	L	TO FRONT DOOR LH HARNESS
9	LA/BR	TO FRONT DOOR LH HARNESS
10	LA/GR	TO FRONT DOOR LH HARNESS
11	Y	TO FRONT DOOR LH HARNESS
12	BG	TO FRONT DOOR LH HARNESS
13	LA/G	TO FRONT DOOR LH HARNESS
14	LA/R	TO FRONT DOOR LH HARNESS
15	P	TO FRONT DOOR LH HARNESS
16	B	TO FRONT DOOR LH HARNESS

Connector No.	M168
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

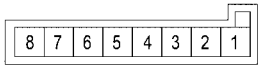
H.S.



Terminal No.	Color of Wire	Signal Name
1	Y	TO FRONT DOOR LH HARNESS
2	GR	TO FRONT DOOR LH HARNESS
3	SB	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
3	Y	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
4	BG	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
4	V	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
5	Y	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
5	BR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
6	V	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
6	LG	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
7	Y	TO FRONT DOOR LH HARNESS
8	V	TO FRONT DOOR LH HARNESS
9	BR	TO FRONT DOOR LH HARNESS
10	LG	TO FRONT DOOR LH HARNESS
11	L	TO FRONT DOOR LH HARNESS
12	Y	TO FRONT DOOR LH HARNESS
13	G	TO FRONT DOOR LH HARNESS
14	SHIELD	TO FRONT DOOR LH HARNESS
15	SB	TO FRONT DOOR LH HARNESS
16	BG	TO FRONT DOOR LH HARNESS
17	GR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
17	SB	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	W	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
18	LA/SB	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
19	BR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
19	LA/GR	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
20	GR	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
20	LA/V	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
21	BR	TO FRONT DOOR LH HARNESS
22	W	TO FRONT DOOR LH HARNESS
23	R	TO FRONT DOOR LH HARNESS - (WITH AUTOMATIC DRIVE POSITIONER)
23	LA/R	TO FRONT DOOR LH HARNESS - (WITHOUT AUTOMATIC DRIVE POSITIONER)
24	GR	TO FRONT DOOR LH HARNESS
25	R	TO FRONT DOOR LH HARNESS LED INDICATOR L
26	LA/G	TO FRONT DOOR LH HARNESS
27	LG	TO FRONT DOOR LH HARNESS
28	L	TO FRONT DOOR LH HARNESS
29	Y	TO FRONT DOOR LH HARNESS
30	V	TO FRONT DOOR LH HARNESS
31	G	TO FRONT DOOR LH HARNESS
32	P	TO FRONT DOOR LH HARNESS

Connector No.	M170
Connector Name	JOINT CONNECTOR-M29
Connector Type	SAC08JW
Connector Color	WHITE

H.S.



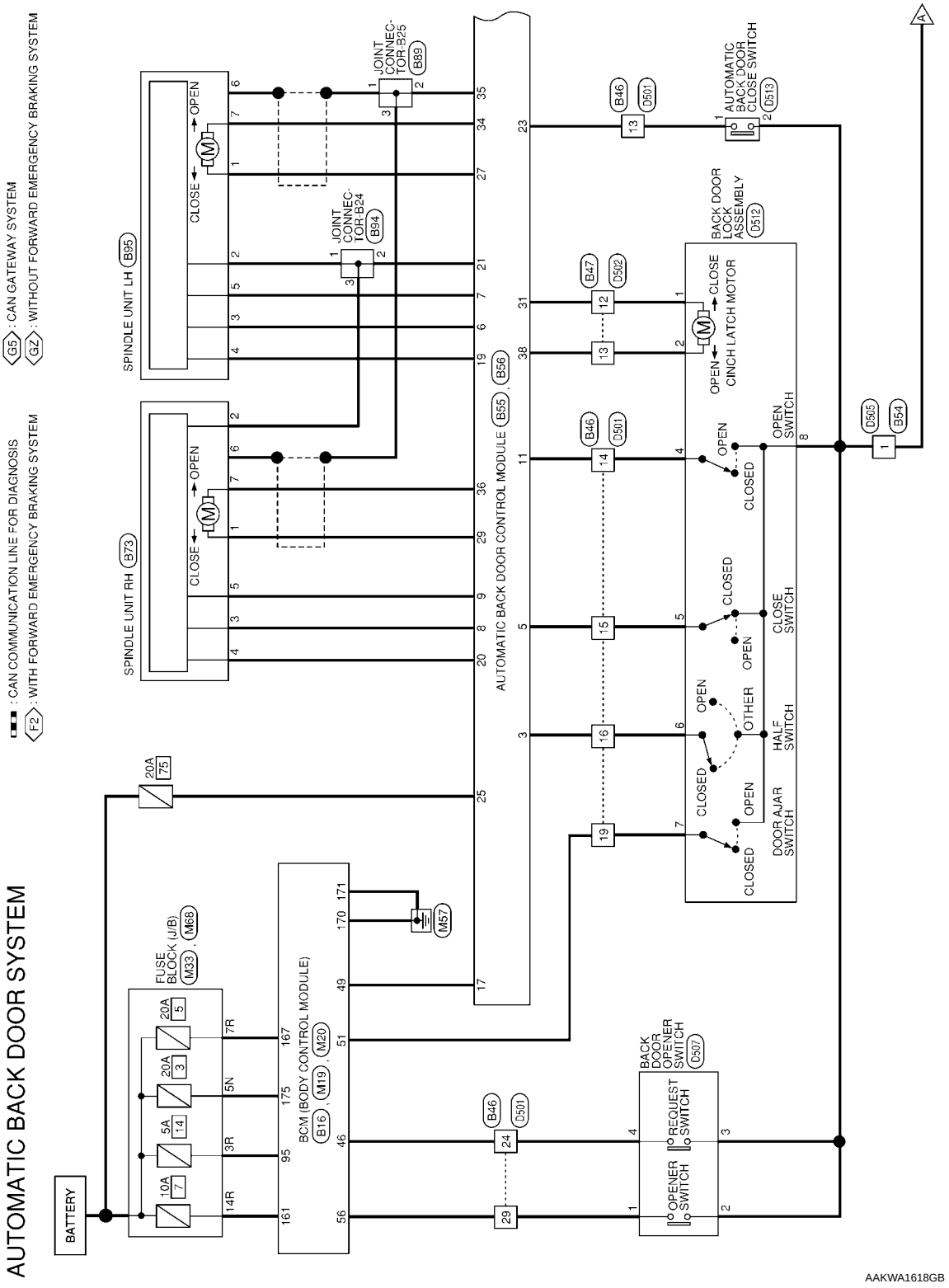
Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	B	GROUND
4	B	GROUND
5	B	GROUND
6	B	GROUND
7	B	GROUND
8	B	GROUND

AAKIA5032GB

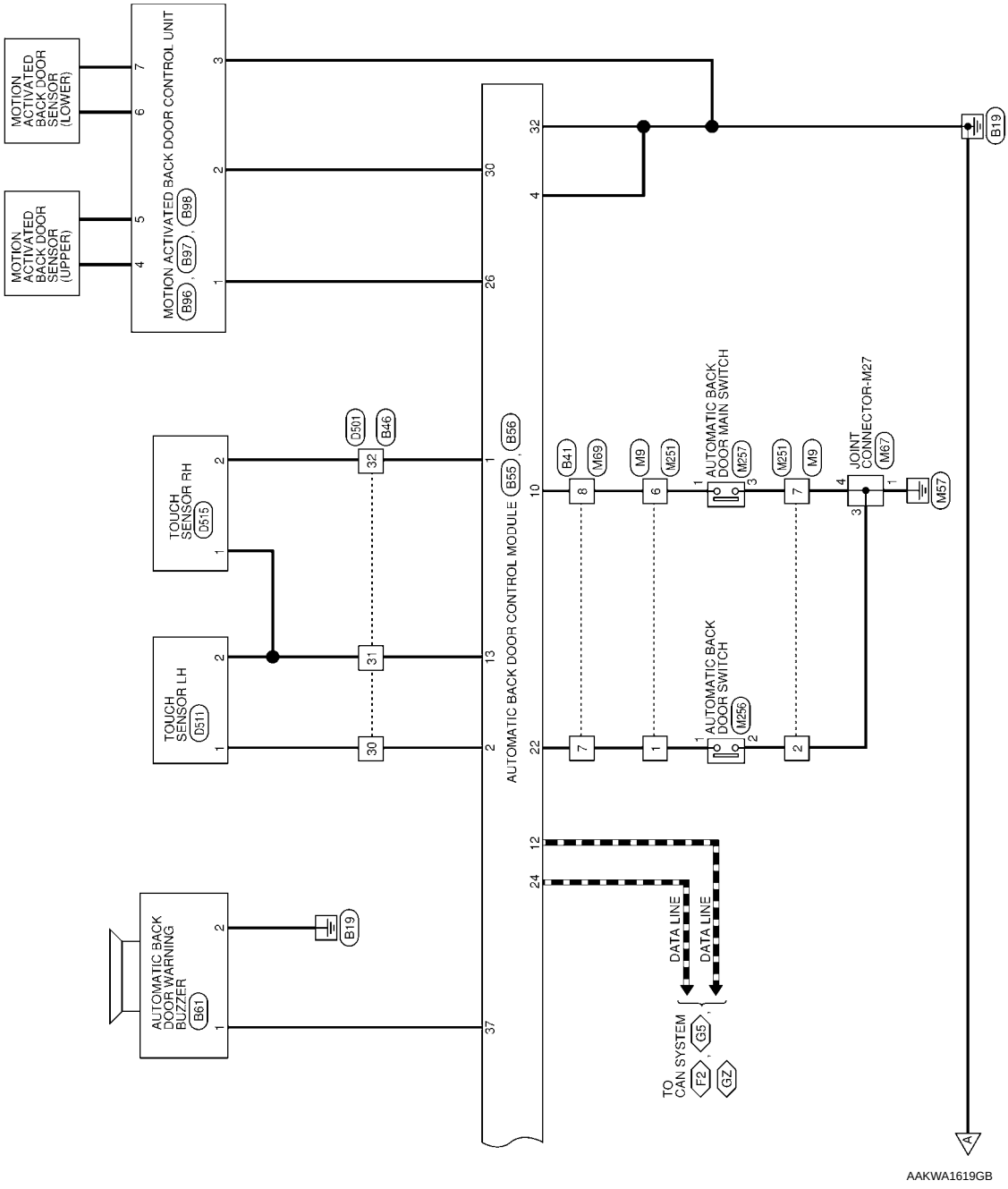
AUTOMATIC BACK DOOR SYSTEM

Wiring Diagram

INFOID:0000000014910882



AAKWA1618GB


MOTION ACTIVATED BACK DOOR SENSOR (LOWER)
MOTION ACTIVATED BACK DOOR SENSOR (UPPER)
MOTION ACTIVATED BACK DOOR CONTROL UNIT
B96, B97, B98
TOUCH SENSOR RH
D515
TOUCH SENSOR LH
D511
D501
B46
AUTOMATIC BACK DOOR WARNING BUZZER
B61
B19
AUTOMATIC BACK DOOR CONTROL MODULE
B55, B56
B41
M69
M9
M251
AUTOMATIC BACK DOOR MAIN SWITCH
M257
AUTOMATIC BACK DOOR SWITCH
M256
JOINT CONNECTOR-M27
M67
M57
DATA LINE
DATA LINE
TO CAN SYSTEM
F2, G5, GZ
A
AAKWA1619GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	B16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH
Connector Color	GREEN

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

Terminal No.	Color of Wire	Signal Name
41	–	–
42	–	–
43	–	–
44	–	–
45	–	–
46	R	SES BACKDOOR BUTTON SW
47	–	–
48	–	–
49	G	NO TOUCH TGATE SENSOR
50	W	RR DOOR SW
51	LG	TGATE SW
52	R	RL DOOR SW
53	SB	AS DOOR2 SW
54	–	–
55	LA/G	RR AUTOSTOP SW
56	Y	TGATE OPENER SW
57	SB	DR DOOR2 SW
58	–	–
59	–	–
60	L	CAN-H
61	V	SES EXT REAR ANTENNA B
62	Y	SES INT MIDDLE ANTENNA B
63	L	SES INT MIDDLE ANTENNA A
64	LG	SES EXT REAR ANTENNA A
65	–	–
66	–	–
67	–	–
68	–	–
69	–	–
70	–	–
71	–	–
72	–	–
73	–	–
74	–	–
75	–	–
76	–	–
77	V	SHIFT LOCK RLY

78	–	–
79	LA/W	STOP LAMP3
80	P	CAN-L

Connector No.	B41
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	SB	TO MAIN HARNESS
2	SB	TO MAIN HARNESS
3	L	TO MAIN HARNESS
4	L	TO MAIN HARNESS
5	W	TO MAIN HARNESS
6	Y	TO MAIN HARNESS
7	LG	TO MAIN HARNESS
8	BG	TO MAIN HARNESS
9	BR	TO MAIN HARNESS
10	Y	TO MAIN HARNESS
11	G	TO MAIN HARNESS
12	L	TO MAIN HARNESS
13	W	TO MAIN HARNESS
14	GR	TO MAIN HARNESS
15	Y	TO MAIN HARNESS
16	P	TO MAIN HARNESS
17	R	TO MAIN HARNESS
18	W	TO MAIN HARNESS
19	R	TO MAIN HARNESS
20	–	TO MAIN HARNESS
21	–	TO MAIN HARNESS
22	–	TO MAIN HARNESS
23	–	TO MAIN HARNESS
24	P	TO MAIN HARNESS
25	L	TO MAIN HARNESS
26	G	TO MAIN HARNESS
27	R	TO MAIN HARNESS
28	L	TO MAIN HARNESS
29	SHIELD	TO MAIN HARNESS
30	W	TO MAIN HARNESS
31	B	TO MAIN HARNESS
32	R	TO MAIN HARNESS

Connector No.	B46
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS
3	–	TO BACK DOOR HARNESS
4	–	TO BACK DOOR HARNESS
5	R	TO BACK DOOR HARNESS
6	B	TO BACK DOOR HARNESS
7	W	TO BACK DOOR HARNESS
8	SHIELD	TO BACK DOOR HARNESS
9	–	TO BACK DOOR HARNESS
10	–	TO BACK DOOR HARNESS
11	–	TO BACK DOOR HARNESS
12	–	TO BACK DOOR HARNESS
13	W	TO BACK DOOR HARNESS
14	V	TO BACK DOOR HARNESS
15	BR	TO BACK DOOR HARNESS
16	SB	TO BACK DOOR HARNESS
17	LA/W	TO BACK DOOR HARNESS
18	LA/BR	TO BACK DOOR HARNESS
19	LG	TO BACK DOOR HARNESS
20	G	TO BACK DOOR HARNESS
21	G	TO BACK DOOR HARNESS
22	LA/R	TO BACK DOOR HARNESS
23	LA/R	TO BACK DOOR HARNESS
24	R	TO BACK DOOR HARNESS
25	–	TO BACK DOOR HARNESS
26	–	TO BACK DOOR HARNESS
27	–	TO BACK DOOR HARNESS
28	–	TO BACK DOOR HARNESS
29	Y	TO BACK DOOR HARNESS
30	G	TO BACK DOOR HARNESS
31	GR	TO BACK DOOR HARNESS
32	LG	TO BACK DOOR HARNESS

Connector No.	B47
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	–	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS
3	–	TO BACK DOOR HARNESS
4	V	TO BACK DOOR HARNESS
5	W	TO BACK DOOR HARNESS
6	–	TO BACK DOOR HARNESS
7	–	TO BACK DOOR HARNESS
8	LA/G	TO BACK DOOR HARNESS
9	LA/R	TO BACK DOOR HARNESS
10	LG/V	TO BACK DOOR HARNESS
11	B	TO BACK DOOR HARNESS
12	L	TO BACK DOOR HARNESS
13	SB	TO BACK DOOR HARNESS
14	–	TO BACK DOOR HARNESS
15	G	TO BACK DOOR HARNESS
16	W	TO BACK DOOR HARNESS

Connector No.	B54
Connector Name	WIRE TO WIRE
Connector Type	M02MW-LC
Connector Color	WHITE

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B	TO BACK DOOR HARNESS
2	–	TO BACK DOOR HARNESS

AAKIA4455GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	B55
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Type	AAC24FB
Connector Color	BLACK

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	TOUCH SENSOR RH
2	G	TOUCH SENSOR LH
3	SB	HALF LATCH SW
4	B	AUT UNLK REQ
5	BR	CLOSE SW
6	W	A-SIGN LH
7	L	B-SIGN LH
8	R	A-SIGN RH
9	SB	B-SIGN RH
10	BG	MAIN SW
11	V	OPEN SW
12	P	CAN-L
13	GR	TOUCH SENSOR GND
14	–	–
15	–	–
16	–	–
17	G	IR SENSOR DUMMY SIG
18	–	–
19	V	POWER LH
20	P	POWER RH
21	G	GND
22	LG	DRIVER SW
23	W	INSIDE CLOSE SW
24	L	CAN-H

Connector No.	B56
Connector Name	AUTOMATIC BACK DOOR CONTROL MODULE
Connector Type	YEA10FGY-YHA4
Connector Color	GRAY

H.S.

25	26	27	28	29	30	31
32	33	34	35	36	37	38

Terminal No.	Color of Wire	Signal Name
25	BR	+B(1)
26	L	KICK SENSOR SIG(SERIAL SIG)
27	BR	P B/D LH MTR OPEN
28	–	–
29	BR	P B/D RH MTR OPEN
30	GR	KICK SENSOR PWR
31	L	LATCH MTR OPEN
32	B	GND (POWER 1)
33	–	–
34	G	P B/D LH MTR CLOSE
35	B	SPINDLE NOISE
36	G	P B/D RH MTR CLOSE
37	Y	BUZZER
38	SB	LATCH MTR CLOSE

Connector No.	B61
Connector Name	AUTOMATIC BACK DOOR WARNING BUZZER
Connector Type	RK02FBR-DGY
Connector Color	GRAY

H.S.

2
1

Terminal No.	Color of Wire	Signal Name
1	Y	BUZZER
2	B	GROUND

Connector No.	B73
Connector Name	SPINDLE UNIT RH
Connector Type	NS08MW-CS
Connector Color	WHITE

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
1	BR	P B/D RH MTR OPEN
2	G	GND
3	R	A-SIGN RH
4	P	POWER RH
5	SB	B-SIGN RH
6	SHIELD	SHIELD
7	G	P B/D RH MTR CLOSE
8	–	–

Connector No.	B89
Connector Name	JOINT CONNECTOR-B25
Connector Type	SAC04JW
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	SHIELD	SHIELD
2	B	SPINDLE NOISE
3	SHIELD	SHIELD
4	–	–

Connector No.	B94
Connector Name	JOINT CONNECTOR-B24
Connector Type	SAC04JW
Connector Color	WHITE

H.S.

4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	G	GND
2	G	GND
3	G	GND
4	–	–

Connector No.	B95
Connector Name	SPINDLE UNIT LH
Connector Type	NS08MW-CS
Connector Color	WHITE

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
1	BR	P B/D LH MTR OPEN
2	G	GND
3	W	A-SIGN LH
4	V	POWER LH
5	L	B-SIGN LH
6	SHIELD	SHIELD
7	G	P B/D LH MTR CLOSE
8	–	–

AAKIA4456GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	B96
Connector Name	MOTION ACTIVATED BACK DOOR CONTROL UNIT
Connector Type	ADY03FB
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	L	KICK SENSOR SIG (SERIAL SIG)
2	GR	KICK SENSOR PWR
3	B	GROUND

Connector No.	B97
Connector Name	MOTION ACTIVATED BACK DOOR CONTROL UNIT
Connector Type	ADY02FB
Connector Color	BLACK

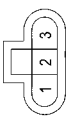
H.S.



Terminal No.	Color of Wire	Signal Name
4	W	SENSOR IN
5	W	SENSOR OUT

Connector No.	B98
Connector Name	MOTION ACTIVATED BACK DOOR CONTROL UNIT
Connector Type	ADY02FB
Connector Color	BLACK

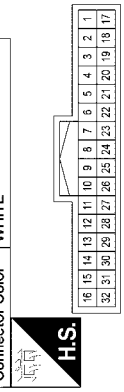
H.S.



Terminal No.	Color of Wire	Signal Name
6	B	SENSOR IN
7	B	SENSOR OUT

Connector No.	D501
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

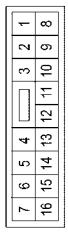
H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS
2	–	TO BODY HARNESS
3	–	TO BODY HARNESS
4	R	TO BODY HARNESS
5	W	TO BODY HARNESS
6	–	TO BODY HARNESS
7	–	TO BODY HARNESS
8	G	TO BODY HARNESS
9	GR	TO BODY HARNESS
10	LA/V	TO BODY HARNESS
11	B	TO BODY HARNESS
12	LA/L	TO BODY HARNESS
13	LA/G	TO BODY HARNESS
14	–	TO BODY HARNESS
15	–	TO BODY HARNESS
16	–	TO BODY HARNESS

Connector No.	D502
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	–	TO BODY HARNESS
2	–	TO BODY HARNESS
3	–	TO BODY HARNESS
4	R	TO BODY HARNESS
5	W	TO BODY HARNESS
6	–	TO BODY HARNESS
7	–	TO BODY HARNESS
8	G	TO BODY HARNESS
9	GR	TO BODY HARNESS
10	LA/V	TO BODY HARNESS
11	B	TO BODY HARNESS
12	LA/L	TO BODY HARNESS
13	LA/G	TO BODY HARNESS
14	–	TO BODY HARNESS
15	–	TO BODY HARNESS
16	–	TO BODY HARNESS

Connector No.	D505
Connector Name	WIRE TO WIRE
Connector Type	M02FW-LC
Connector Color	WHITE

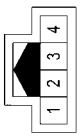
H.S.



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

Connector No.	D507
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	TH04MW-NH
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	V	I TGATE OPENER SW
2	GR	GROUND
3	GR	GROUND
4	BR	I SES BACKDOOR BUTTON SW

Connector No.	D511
Connector Name	TOUCH SENSOR LH
Connector Type	TK02MW
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	G	TOUCH SENSOR LH
2	BG	TOUCH SENSOR GND

AAKIA4457GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	D512
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR SYSTEM)
Connector Type	NS08FW-CS
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LA/L	LATCH MTR OPEN
2	LA/G	LATCH MTR CLOSE
3	–	–
4	LA/GR	OPEN SW
5	LA/W	CLOSE SW
6	LA/LG	HALF LATCH SW
7	W	I TGATE SW
8	B	GROUND

Connector No.	D513
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Type	TK06FGY
Connector Color	GRAY

H.S.

Terminal No.	Color of Wire	Signal Name
1	G	INSIDE CLOSE SW
2	B	GROUND
3	R	BATTERY
4	W	O PWM ROOM LAMP 5
5	–	–
6	–	–

Connector No.	D515
Connector Name	TOUCH SENSOR RH
Connector Type	TK02MW
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	TOUCH SENSOR GND
2	LG	TOUCH SENSOR RH

Connector No.	M9
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	LG	TO MAIN SUB HARNESS
2	B	TO MAIN SUB HARNESS
3	W	TO MAIN SUB HARNESS
4	B	TO MAIN SUB HARNESS
5	GR	TO MAIN SUB HARNESS
6	BG	TO MAIN SUB HARNESS
7	B	TO MAIN SUB HARNESS
8	B	TO MAIN SUB HARNESS
9	R	TO MAIN SUB HARNESS
10	B	TO MAIN SUB HARNESS
11	R	TO MAIN SUB HARNESS
12	SB	TO MAIN SUB HARNESS
13	BR	TO MAIN SUB HARNESS
14	B	TO MAIN SUB HARNESS
15	R	TO MAIN SUB HARNESS
16	B	TO MAIN SUB HARNESS

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
81	–	–
82	W	SES FR HANDLE BUTTON SW
83	–	–
84	BR	CSW 2
85	SB	CSW 1
86	P	CSW 3
87	BG	CSW 4
88	W	START SW BACKLIGHT LED
89	Y	START WO ESCL SW
90	–	–
91	–	–
92	BR	KEY CYLINDER LOCK SW
93	P	KEY CYLINDER UNLOCK SW
94	G	AT LOCKED IN PARK SW
95	V	SHORTING PIN
96	–	–
97	–	–
98	–	–
99	–	–
100	V	SES EXT DR ANTENNA A
101	–	–
102	–	–
103	–	–
104	R	DR KNOB SW
105	Y	SES DR HANDLE BUTTON SW
106	W	AUTO ACC2
107	–	–
108	–	–
109	–	–
110	BG	MR OUTPUT
111	–	–
112	–	–
113	–	–
114	Y	IMMOBILIZER KAZASHI B
115	W	IMMOBILIZER KAZASHI A
116	BG	SES INT FRONT ANTENNA B
117	GR	SES INT FRONT ANTENNA A
118	SB	SES EXT AS ANTENNA B
119	P	SES EXT AS ANTENNA A
120	BR	SES EXT DR ANTENNA B

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
161	W	PWR ECU
162	SB	PWM ROOMLAMP 1
163	L	AS LOCK OR UNLOCK D
164	–	–
165	V	DR OR FR LOCK D
166	–	–
167	LA/V	PWR DOORLOCK1
168	BG	PWR FLASHERS
169	GR	PWR STOP LAMP
170	B	GND1
171	B	GND2
172	G	FR OR DR UNLOCK D
173	–	–
174	–	–
175	R	PWR DOORLOCK2
176	LG	PWR WIPER

AAKIA4458GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	M33
Connector Name	FUSE BLOCK (J/B)
Connector Type	CS06FW-M2
Connector Color	WHITE

H.S.

3N		2N	1N
8N	7N	6N	5N	4N

Terminal No.	Color of Wire	Signal Name
1N	L	ACCESSORY RELAY 1 OUTPUT
2N	LG	BATTERY
3N	Y	FRONT BLOWER MOTOR RELAY OUTPUT
4N	LG	BATTERY
5N	R	BATTERY
6N	BG	BATTERY
7N	BR	ACCESSORY RELAY-1 CONTROL
8N	SB	FRONT BLOWER MOTOR RELAY OUTPUT

Connector No.	M67
Connector Name	JOINT CONNECTOR-M27
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	B	GROUND
2	B	GROUND
3	B	GROUND
4	B	GROUND
5	B	GROUND
6	B	GROUND
7	B	GROUND
8	B	GROUND

Connector No.	M66
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1R	V	ILLUMINATION +
2R	G	IGNITION
3R	V	BATTERY
4R	–	–
5R	–	–
6R	LA/L	ACCESSORY
7R	LA/V	BATTERY
8R	–	–
9R	–	–
10R	GR	BATTERY
11R	–	–
12R	–	–
13R	–	–
14R	W	BATTERY
15R	W	BATTERY
16R	GR	ACCESSORY

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	SB	TO BODY HARNESS
2	BR	TO BODY HARNESS
3	L	TO BODY HARNESS
4	L	TO BODY HARNESS
5	W	TO BODY HARNESS
6	Y	TO BODY HARNESS
7	LG	TO BODY HARNESS
8	BG	TO BODY HARNESS
9	BR	TO BODY HARNESS
10	Y	TO BODY HARNESS
11	G	TO BODY HARNESS
12	L	TO BODY HARNESS
13	W	TO BODY HARNESS
14	GR	TO BODY HARNESS
15	Y	TO BODY HARNESS
16	P	TO BODY HARNESS
17	R	TO BODY HARNESS
18	W	TO BODY HARNESS
19	R	TO BODY HARNESS
20	–	TO BODY HARNESS
21	–	TO BODY HARNESS
22	–	TO BODY HARNESS
23	–	TO BODY HARNESS
24	P	TO BODY HARNESS
25	L	TO BODY HARNESS
26	BR	TO BODY HARNESS
27	R	TO BODY HARNESS
28	L	TO BODY HARNESS
29	SHIELD	TO BODY HARNESS
30	W	TO BODY HARNESS
31	B	TO BODY HARNESS
32	R	TO BODY HARNESS

Connector No.	M251
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	LG	TO MAIN HARNESS
2	B	TO MAIN HARNESS
3	W	TO MAIN HARNESS
4	B	TO MAIN HARNESS
5	B	TO MAIN HARNESS
6	BG	TO MAIN HARNESS
7	B	TO MAIN HARNESS
8	B	TO MAIN HARNESS
9	R	TO MAIN HARNESS
10	B	TO MAIN HARNESS
11	G	TO MAIN HARNESS
12	BG	TO MAIN HARNESS
13	BR	TO MAIN HARNESS
14	B	TO MAIN HARNESS
15	R	TO MAIN HARNESS
16	B	TO MAIN HARNESS

Connector No.	M256
Connector Name	AUTOMATIC BACK DOOR SWITCH
Connector Type	TH08FG-NH
Connector Color	GREEN

H.S.

4		3
2		1

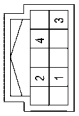
Terminal No.	Color of Wire	Signal Name
1	LG	DRIVER SW
2	B	GROUND
3	R	ILL CONT OUT
4	B	GROUND
5	–	–
6	–	–
7	–	–
8	–	–

AAKIA4459GB

AUTOMATIC BACK DOOR SYSTEM CONNECTORS

Connector No.	M257
Connector Name	AUTOMATIC BACK DOOR MAIN SWITCH
Connector Type	TH10FB-NH
Connector Color	BLACK

H.S.



Terminal No.	Color of Wire	Signal Name
1	BG	MAIN SW
2	B	GROUND
3	B	GROUND
4	R	ILL CONT OUT
5	–	–
6	–	–
7	–	–
8	–	–

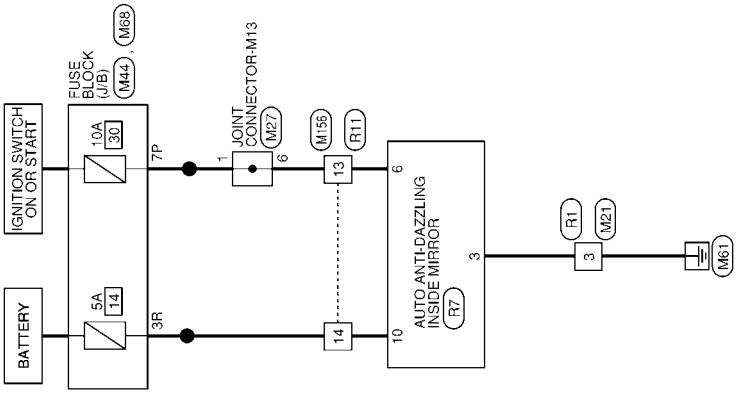
AAKIA5031GB

HOMELINK UNIVERSAL TRANSCEIVER

Wiring Diagram

INFOID:0000000014910883

HOMELINK® UNIVERSAL TRANSCEIVER



AAKWA1620GB

HOMELINK® UNIVERSAL TRANSCEIVER CONNECTORS

Connector No.	M21
Connector Name	WIRE TO WIRE
Connector Type	NS08FW-CS
Connector Color	WHITE

H.S.

3		2	1
8	7	6	5	4

Terminal No.	Color of Wire	Signal Name
1	–	TO ROOM LAMP HARNESS
2	V	TO ROOM LAMP HARNESS
3	B	TO ROOM LAMP HARNESS
4	B	TO ROOM LAMP HARNESS
5	–	TO ROOM LAMP HARNESS
6	W	TO ROOM LAMP HARNESS
7	R	TO ROOM LAMP HARNESS
8	Y	TO ROOM LAMP HARNESS

Connector No.	M27
Connector Name	JOINT CONNECTOR-M13
Connector Type	SAC08JW
Connector Color	WHITE

H.S.

8	7	6	5	4	3	2	1

Terminal No.	Color of Wire	Signal Name
1	SB	IGNITION
2	SB	IGNITION
3	SB	IGNITION
4	Y	IGNITION
5	SB	IGNITION
6	SB	IGNITION
7	SB	IGNITION
8	SB	IGNITION

Connector No.	M44
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1P	R	IGNITION
2P	G	IGNITION
3P	Y	IGNITION RELAY-2 CONTROL
4P	LG	REAR WINDOW DEFOGGER RELAY OUTPUT
5P	GR	REAR WINDOW DEFOGGER RELAY OUTPUT
6P	LA/R	REAR WINDOW DEFOGGER RELAY CONTROL
7P	Y	IGNITION
8P	V	IGNITION
9P	L	BATTERY
10P	LG	IGNITION
11P	–	–
12P	–	–
13P	G	BATTERY
14P	–	–
15P	L	BATTERY
16P	LA/W	FRONT BLOWER MOTOR RELAY CONTROL

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FBR-CS
Connector Color	BROWN

H.S.

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

Terminal No.	Color of Wire	Signal Name
1R	V	ILLUMINATION +
2R	G	IGNITION
3R	V	BATTERY
4R	–	–
5R	–	–
6R	LA/L	ACCESSORY
7R	LA/V	BATTERY
8R	–	–
9R	–	–
10R	GR	BATTERY
11R	–	–
12R	–	–
13R	–	–
14R	W	BATTERY
15R	W	BATTERY
16R	GR	ACCESSORY

Connector No.	M156
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-CS
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	TO ROOM LAMP HARNESS
2	W	TO ROOM LAMP HARNESS
3	SHIELD	TO ROOM LAMP HARNESS
4	R	TO ROOM LAMP HARNESS
5	–	TO ROOM LAMP HARNESS
6	Y	TO ROOM LAMP HARNESS
7	LG	TO ROOM LAMP HARNESS
8	L	TO ROOM LAMP HARNESS
9	R	TO ROOM LAMP HARNESS
10	–	TO ROOM LAMP HARNESS
11	–	TO ROOM LAMP HARNESS
12	–	TO ROOM LAMP HARNESS
13	SB	TO ROOM LAMP HARNESS
14	GR	TO ROOM LAMP HARNESS
15	SB	TO ROOM LAMP HARNESS
16	GR	TO ROOM LAMP HARNESS
17	V	TO ROOM LAMP HARNESS
18	G	TO ROOM LAMP HARNESS
19	SB	TO ROOM LAMP HARNESS
20	R	TO ROOM LAMP HARNESS
21	B	TO ROOM LAMP HARNESS
22	GR	TO ROOM LAMP HARNESS
23	–	TO ROOM LAMP HARNESS
24	–	TO ROOM LAMP HARNESS

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS
Connector Color	WHITE

H.S.

1	2		3
4	5	6	7	8

Terminal No.	Color of Wire	Signal Name
1	–	TO MAIN HARNESS
2	P	TO MAIN HARNESS
3	B	TO MAIN HARNESS
4	B	TO MAIN HARNESS
5	–	TO MAIN HARNESS
6	W	TO MAIN HARNESS
7	Y	TO MAIN HARNESS
8	R	TO MAIN HARNESS

Connector No.	R7
Connector Name	AUTO ANTI-DAZZLING INSIDE MIRROR
Connector Type	TH10FB-NH
Connector Color	BLACK

H.S.

5	4	3	2	1
10	9	8	7	6

Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	B	GROUND
4	–	–
5	–	–
6	SB	IGNITION
7	–	–
8	–	–
9	–	–
10	P	BATTERY

AAKIA4460GB

HOMELINK® UNIVERSAL TRANSCEIVER CONNECTORS

Connector No.	R11
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH
Connector Color	WHITE

H.S.

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

Terminal No.	Color of Wire	Signal Name
1	B	TO MAIN HARNESS
2	W	TO MAIN HARNESS
3	SHIELD	TO MAIN HARNESS
4	SB	TO MAIN HARNESS
5	–	TO MAIN HARNESS
6	LG	TO MAIN HARNESS
7	LG	TO MAIN HARNESS
8	–	TO MAIN HARNESS
9	–	TO MAIN HARNESS
10	–	TO MAIN HARNESS
11	–	TO MAIN HARNESS
12	–	TO MAIN HARNESS
13	SB	TO MAIN HARNESS
14	P	TO MAIN HARNESS
15	–	TO MAIN HARNESS
16	–	TO MAIN HARNESS
17	–	TO MAIN HARNESS
18	–	TO MAIN HARNESS
19	SB	TO MAIN HARNESS
20	R	TO MAIN HARNESS
21	B	TO MAIN HARNESS
22	L	TO MAIN HARNESS
23	–	TO MAIN HARNESS
24	–	TO MAIN HARNESS

AAKIA4461GB

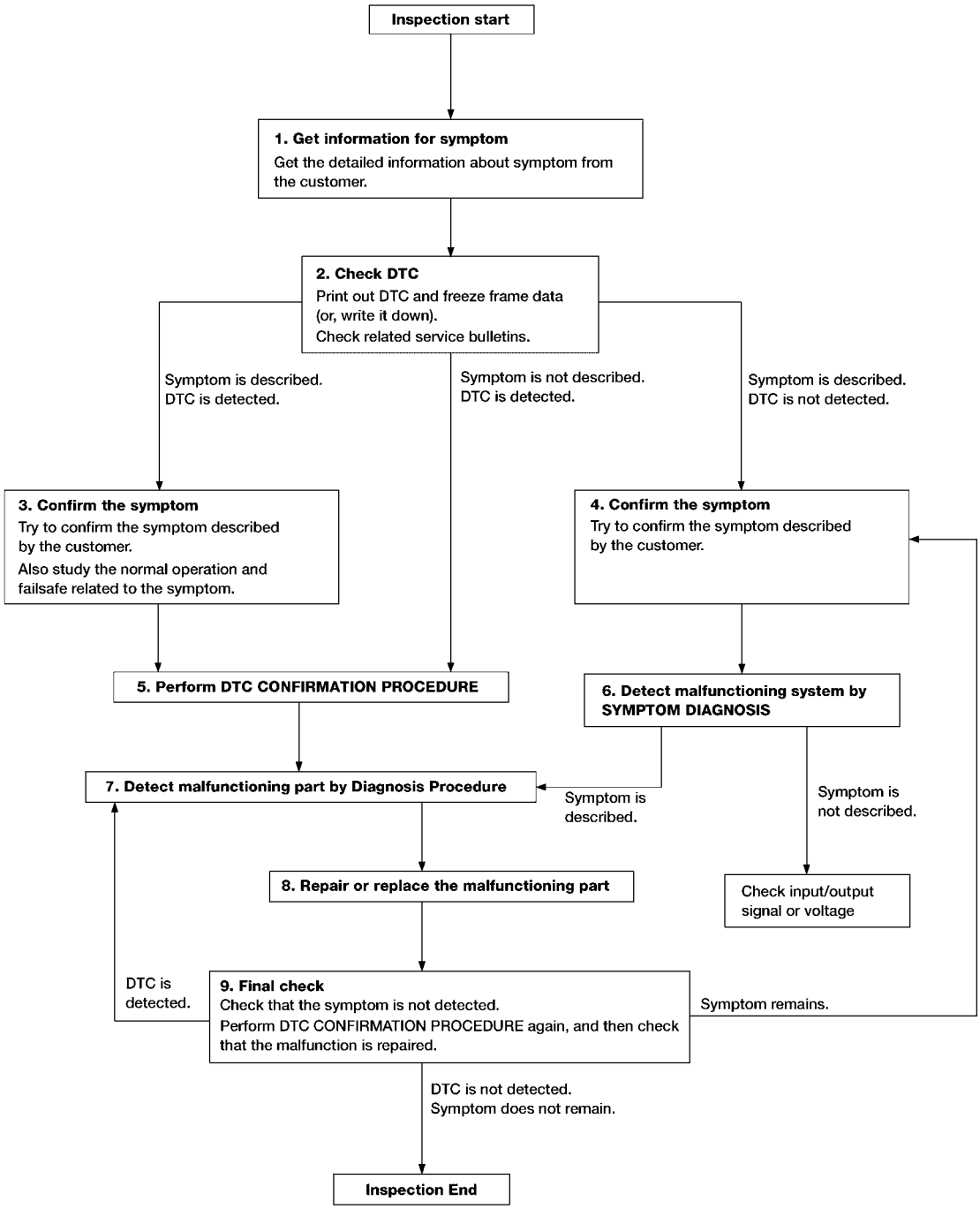
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000014910884

OVERALL SEQUENCE



ALAIA0158GB

DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

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

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

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

3.CONFIRM THE SYMPTOM

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

>> GO TO 5.

4.CONFIRM THE SYMPTOM

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

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle and check self diagnostic results in real time.
If two or more DTCs are detected, refer to BCS-47, "DTC Inspection Priority Chart" (BCM) and determine trouble diagnosis order.

NOTE:

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

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-54, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

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

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-54, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

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

Is DTC detected and does symptom remain?

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

Description

INFOID:0000000014910885

When the battery is disconnected from the negative terminal, it is necessary to perform initial setting to operate automatic back door control system normally.

NOTE:

The following specified operations are not performed under the non-initialized condition.

- Automatic back door open/close function
- Anti-pinch function

Work Procedure

INFOID:0000000014910886

1. INITIALIZATION

1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary).
2. Perform automatic back door open/close operation of back door.
3. Check for noise or malfunctioning during operation.
4. Check that hazard lamp blinks and that warning buzzer operates.

NOTE:

Never touch back door or allow foreign materials to be pinched in door when performing automatic back door open/close operation of back door until it is in the fully closed or fully open position.

>> Inspection End.

ADDITIONAL SERVICE WHEN REPLACING BCM

Description

INFOID:0000000014910887

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

Work Procedure

INFOID:0000000014910888

Refer to the CONSULT Immobilizer mode and follow the on-screen instructions.

ADDITIONAL SERVICE WHEN REPLACING AUTOMATIC BACK DOOR CONTROL UNIT

Description

INFOID:0000000014910889

When replacing control module or removing connector terminal, it is necessary to perform initial setting to operate automatic back door system normally.

NOTE:

The following specified operations are not performed under the non-initialized condition:

- Automatic back door open/close function
- Anti-pinch function

Work Procedure

INFOID:0000000014910890

1. INITIALIZATION

1. Fully close the back door manually. (When back door is already fully closed, this operation is not necessary.)
2. Perform automatic back door open/close operation of back door.
3. Check for noise or malfunctioning during operation.
4. Check that hazard lamp blinks and that warning buzzer operates.

NOTE:

Never touch back door or allow foreign materials to be pinched in door when performing automatic back door open/close operation of back door until it is in the fully closed or fully open position.

>> Inspection End.

CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

Description

INFOID:0000000014910891

When the following work is performed, it is necessary to perform initial setting of automatic back door position information to operate automatic back door system:
- After removing and installing or replacing back door assembly.
- After removing and installing or replacing spindle unit.
- After adjustment or position change of the back door hinges or striker.

Work Procedure

INFOID:0000000014910892

1.STEP 1

Fully close the back door manually.

>> GO TO 2.

2.STEP 2

1. Select “AUTO BACK DOOR” using CONSULT.
2. Select “RESET AUTO BACK DOOR STATUS” of “Work support”.
3. Touch “START” to erase automatic back door position information.

>> GO TO 3.

3.STEP 3

Operate back door opener switch and perform automatic open operation.
NOTE:
At this time, automatic operation of back door is performed at half speed.

>> GO TO 4.

4.STEP 4

1. The back door fully opens.
2. Check that hazard warning lamp blinks and automatic back door warning buzzer sounds normally.

Does hazard warning lamp blink and automatic back door warning buzzer sound normally?

YES >> GO TO 5.
NO >> GO TO 1.

5.STEP 5

Fully close the back door.

>> Inspection End.

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM CIRCUIT

DTC Description

INFOID:0000000014923107

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-42, "CAN COMMUNICATION SYSTEM : CAN System Specification Chart".

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
U1000–01	CAN COMM CIRCUIT (CAN communication circuit)	Diagnosis condition	All times
		Signal (terminal)	CAN communication
		Threshold	When automatic back door control unit cannot communicate CAN communication signal
		Diagnosis delay time	2 seconds

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn the ignition switch OFF.
2. Turn the ignition switch ON and wait for 2 seconds or more.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC “U1000-01” displayed?

YES >> Refer to DLK-117, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923108

1.PERFORM SELF DIAGNOSTIC

CONSULT
1. Turn the ignition switch OFF.
2. Turn the ignition switch ON and wait for 2 seconds or more.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC “U1000-01” displayed?

YES >> Refer to LAN-26, "Trouble Diagnosis Flow Chart".
NO >> Refer to GI-54, "Intermittent Incident".

U1010 CONTROL UNIT (CAN)

DTC Description

INFOID:0000000014923109

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
U1010–49	CONTROL UNIT (CAN) [Control unit (CAN)]	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Automatic back door control unit detected internal CAN communication circuit malfunction
		Diagnosis delay time	–

POSSIBLE CAUSE

Automatic back door control unit

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn the ignition switch OFF.
2. Turn the ignition switch ON and wait for 2 seconds or more.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC “U1010-49” displayed?

YES >> Refer to DLK-118, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923110

1.REPLACE AUTOMATIC BACK DOOR CONTROL UNIT

When DTC “U1010-49” is detected, replace automatic back door control unit.

>> Replace automatic back door control unit. Refer to DLK-343, "Removal and Installation".

B2401 IGNITION POWER SUPPLY CIRCUIT

DTC Description

INFOID:0000000014923111

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2401–86	IGN OPEN (Ignition open)	Diagnosis condition	All times
		Signal (terminal)	Ignition switch ON signal (CAN communication)
		Threshold	When all of the following conditions are satisfied • CAN communication is normal • Automatic back door control module receives wake up signal via CAN communication with BCM • Automatic back door control module cannot detect ignition switch ON signal via CAN communication with IPDM E/R
		Diagnosis delay time	–
B2401–87	IGN OPEN (Ignition open)	Diagnosis condition	All times
		Signal (terminal)	CAN communication
		Threshold	When automatic back door control module can not communicate CAN communication signal
		Diagnosis delay time	2 seconds

POSSIBLE CAUSE

- CAN communication system
- BCM
- IPDM E/R
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “B2401-86”: Refer to DLK-119, "Diagnosis Procedure (B2401-86)".
YES-2 >> DTC “B2401-87”: Refer to DLK-120, "Diagnosis Procedure (B2401-87)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (B2401-86)

INFOID:0000000014923112

1.CHECK DTC OF BCM AND IPDM E/R

CONSULT
1. Turn ignition switch ON.
2. Check DTC in “Self Diagnostic Result” mode of “BCM” and “IPDM E/R”.

Is DTC detected?

YES >> Refer to PCS-28, "DTC Index" (BCM) or PCS-28, "DTC Index" (IPDM E/R).
NO >> GO TO 2.

2.CHECK IGN SW DATA MONITOR ITEM

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “IGN SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
IGN SW	Ignition switch	ON	ON
		OFF	OFF

Is the inspection result normal?

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

3. ERASE DTC

CONSULT
1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-119, "DTC Description".

Is DTC “B2401-86” detected?

YES >> GO TO 4.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

CONSULT
1. Turn ignition switch OFF.
2. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
3. Turn ignition switch ON.
4. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC “B2401-86” detected?

YES >> Check CAN communication trouble. Refer to LAN-26, "Trouble Diagnosis Flow Chart".
NO >> Inspection End.

Diagnosis Procedure (B2401-87)

INFOID:0000000014923113

1. CHECK CAN COMMUNICATION TROUBLE DIAGNOSIS

Check CAN communication trouble diagnosis. Refer to LAN-26, "Trouble Diagnosis Flow Chart".

>> GO TO 2.

2. ERASE DTC

Consult
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
3. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-119, "DTC Description".

Is DTC “B2401–87” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2409 HALF LATCH SWITCH

DTC Description

INFOID:0000000014923114

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2409–71	HALF LATCH SW (Half latch switch)	Diagnosis condition	All times
		Signal (terminal)	Half latch switch signal (automatic back door control module connector terminal: 3)
		Threshold	When all of the following conditions are satisfied • Back door: half latch or open • Half latch switch: ON → OFF
		Diagnosis delay time	–

POSSIBLE CAUSE

- Entry of foreign materials to back door lock assembly
- Back door mechanism
- Half latch switch
- Harness or connectors (half latch switch circuit is open or shorted)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Open the back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-121, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923115

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

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

2.REMOVE FOREIGN MATERIALS AND ERASE DTC

CONSULT
1. Remove foreign materials.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-121, "DTC Description".

Is DTC “B2409-71” detected?

YES >> GO TO 3.
NO >> Inspection End.

3. CHECK BACK DOOR LOCK OPEN/CLOSE OPERATION

Manually check open and close operation of back door lock.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 4.

4. CHECK INSTALLATION OF BACK DOOR LOCK ASSEMBLY

Check that back door lock assembly is installed normally. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

Is the inspection result normal?

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

5. ADJUST OF BACK DOOR LOCK ASSEMBLY INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust of back door lock assembly installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-121, "DTC Description".

Is DTC “B2409-71” detected?

YES >> GO TO 6.
NO >> Inspection End.

6. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-121, "DTC Description".

Is DTC “B2409-71” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

7. CHECK HALF LATCH SWITCH MONITOR ITEM

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “HALF LATCH SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
HALF LATCH SW	Back door	Closed	OFF
		Open	ON

Is the inspection result normal?

YES >> GO TO 12.
NO >> GO TO 8.

8. CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.

3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D512	6	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 10.
NO >> GO TO 9.

9. CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D512	6	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	3		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

10. CHECK HALF LATCH SWITCH GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D512	8	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace harness.

11. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-121, "DTC Description".

Is DTC “B2409-71” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

12. ERASE DTC

CONSULT
1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-121, "DTC Description".

Is DTC “B2409-71” detected?

YES >> GO TO 13.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

13. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-121, "DTC Description".

Is DTC “B2409-71” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2416 TOUCH SENSOR RH

DTC Description

INFOID:0000000014923116

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2416–1B	TOUCH SEN R OPEN (Touch sensor right open)	Diagnosis condition	All times
		Signal (terminal)	Touch sensor RH signal (automatic back door control module connector terminal: 1)
		Threshold	When one of the following conditions is satisfied • Touch sensor RH circuit is open • Disconnect touch sensor RH connector
		Diagnosis delay time	–
B2416–1E	TOUCH SEN R OPEN (Touch sensor right open)	Diagnosis condition	All times
		Signal (terminal)	Touch sensor RH signal (automatic back door control module connector terminal: 1)
		Threshold	When one of the following conditions is satisfied • Touch sensor RH circuit is open • Disconnect touch sensor RH connector
		Diagnosis delay time	–

POSSIBLE CAUSE

- Improper installation of touch sensor
- Touch sensor RH
- Harness or connectors (touch sensor circuit is open)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-125, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923117

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK INSTALLATION OF TOUCH SENSOR RH CONNECTOR

Check that touch sensor RH connector is installed normally.

Is the inspection result normal?

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

2.ADJUST OF TOUCH SENSOR RH CONNECTOR INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust of touch sensor RH connector installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-125, "DTC Description".

Is DTC “B2416-1B” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.CHECK TOUCH SENSOR RH

Refer to DLK-128, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 6.

4.CHECK TOUCH SENSOR RH MONITOR ITEM

CONSULT
1. Turn ignition switch ON.
2. Select “AUTO BACK DOOR”.
3. Select “TOUCH SEN RH” in “Data Monitor” mode.
4. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN RH	Touch sensor RH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> GO TO 10.
NO-1 >> Status “ON/OFF” can not changed: GO TO 5.
NO-2 >> Status “OPEN” is displayed: GO TO 6.

5.CHECK TOUCH SENSOR RH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor RH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Touch sensor RH			
Connector	Terminal		
D515	2	Ground	5 – 7.27 V

Is the inspection result normal?

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

6.CHECK TOUCH SENSOR RH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and touch sensor RH connector.
3. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D515	2	Yes

4. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	1		No

Is the inspection result normal?

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

7. CHECK TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D515	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	1		No

Is the inspection result normal?

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

8. CHECK TOUCH SENSOR RH GROUND CIRCUIT

1. Disconnect automatic back door control module, touch sensor LH and RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D515	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

9. REPLACE TOUCH SENSOR RH AND ERASE DTC

CONSULT
1. Replace touch sensor RH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-125, "DTC Description".

Is DTC “B2416-1B” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

10. ERASE DTC

CONSULT
1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-125, "DTC Description".

Is DTC “B2416-1B” detected?

YES >> GO TO 11.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

11. REPLACE TOUCH SENSOR RH AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace touch sensor RH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-125, "DTC Description".

Is DTC “B2416-1B” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Component Inspection

INFOID:0000000014923118

1. CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check resistance between touch sensor RH terminals.

Touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor RH	Detect obstruction	400 Ω or less
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor RH.

B2417 TOUCH SENSOR LH

DTC Description

INFOID:0000000014923119

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2417–1B	TOUCH SEN L OPEN (Touch sensor left open)	Diagnosis condition	All times
		Signal (terminal)	Touch sensor LH signal (automatic back door control module connector terminal: 2)
		Threshold	When one of the following conditions is satisfied • Touch sensor LH circuit is open • Disconnect touch sensor LH connector
		Diagnosis delay time	–
B2417–1E	TOUCH SEN L OPEN (Touch sensor left open)	Diagnosis condition	All times
		Signal (terminal)	Touch sensor LH signal (automatic back door control module connector terminal: 2)
		Threshold	When one of the following conditions is satisfied • Touch sensor LH circuit is open • Disconnect touch sensor LH connector
		Diagnosis delay time	–

POSSIBLE CAUSE

- Improper installation of touch sensor
- Touch sensor LH
- Harness or connectors (touch sensor circuit is open)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-129, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923120

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK INSTALLATION OF TOUCH SENSOR LH CONNECTOR

Check that touch sensor LH connector is installed normally.

Is the inspection result normal?

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

2.ADJUST OF TOUCH SENSOR LH CONNECTOR INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust of touch sensor LH connector installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-129, "DTC Description".

Is DTC “B2417-1B” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.CHECK TOUCH SENSOR LH

Refer to DLK-132, "Component Inspection"

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 6.

4.CHECK TOUCH SENSOR LH MONITOR ITEM

CONSULT
1. Turn ignition switch ON.
2. Select “AUTO BACK DOOR”.
3. Select “TOUCH SEN LH” in “Data Monitor” mode.
4. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
TOUCH SEN LH	Touch sensor LH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> GO TO 10.
NO-1 >> Status “ON/OFF” can not changed: GO TO 5.
NO-2 >> Status “OPEN” is displayed: GO TO 6.

5.CHECK TOUCH SENSOR LH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Touch sensor LH			
Connector	Terminal		
D511	1	Ground	5 – 7.27 V

Is the inspection result normal?

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

6.CHECK TOUCH SENSOR LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and touch sensor LH connector.
3. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D511	1	Yes

4. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

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

7. CHECK TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D511	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

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

8. CHECK TOUCH SENSOR LH GROUND CIRCUIT

1. Disconnect automatic back door control module, touch sensor LH and RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D511	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair or replace harness.

9. REPLACE TOUCH SENSOR LH AND ERASE DTC

CONSULT
1. Replace touch sensor LH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-129, "DTC Description".

Is DTC “B2417-1B” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

10. ERASE DTC

CONSULT
1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-129, "DTC Description".
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC “B2417-1B” detected?

YES >> GO TO 11.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

11. REPLACE TOUCH SENSOR LH AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace touch sensor LH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-129, "DTC Description".

Is DTC “B2417-1B” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Component Inspection

INFOID:0000000014923121

1. CHECK TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.
3. Check resistance between touch sensor LH terminals.

Touch sensor LH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor LH	Detect obstruction	400 Ω or less
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor LH.

B2419 OPEN SWITCH

DTC Description

INFOID:0000000014923122

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2419–72	OPEN SW (Open switch)	Diagnosis condition	All times
		Signal (terminal)	Open switch signal (automatic back door control module connector terminal: 11)
		Threshold	When one of the following conditions is satisfied • Automatic back door control module does not detect the open switch signal change for more than 1 second, after the start of back door closure motor opening operation. • Automatic back door control module does not detect the open switch signal change for more than 0.5 second, after the start of back door closure motor closing operation. • Automatic back door control module detects open switch ON and close switch OFF, when the back door closure motor starts to operate.
		Diagnosis delay time	3 times

POSSIBLE CAUSE

- Entry of foreign materials to back door lock assembly
- Back door mechanism
- Open switch
- Harness or connectors (open switch circuit is open or shorted)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Open the back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-133, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923123

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

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

2.REMOVE FOREIGN MATERIALS AND ERASE DTC

CONSULT
1. Remove foreign materials.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-133, "DTC Description".

Is DTC “B2419-72” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.CHECK BACK DOOR LOCK OPEN/CLOSE OPERATION

Manually check open and close operation of back door lock.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 4.

4.CHECK INSTALLATION OF BACK DOOR LOCK ASSEMBLY

Check that back door lock assembly is installed normally. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

Is the inspection result normal?

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

5.ADJUST OF BACK DOOR LOCK ASSEMBLY INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust of back door lock assembly installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-133, "DTC Description".

Is DTC “B2419-72” detected?

YES >> GO TO 6.
NO >> Inspection End.

6.REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-133, "DTC Description".

Is DTC “B2419-72” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

7.CHECK OPEN SWITCH MONITOR ITEM

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “OPEN SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
OPEN SW	Back door	Other than below	OFF
		Closure operation	ON

Is the inspection result normal?

YES >> GO TO 12.
NO >> GO TO 8.

8.CHECK OPEN SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D512	4	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 10.
NO >> GO TO 9.

9.CHECK OPEN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	11	D512	4	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	11		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

10.CHECK OPEN SWITCH GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D512	8	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace harness.

11. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT

1. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-133, "DTC Description".

Is DTC “B2419-72” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

12. ERASE DTC

CONSULT

1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-133, "DTC Description".

Is DTC “B2419-72” detected?

YES >> GO TO 13.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

13. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC-3

CONSULT

1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-133, "DTC Description".

Is DTC “B2419-72” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2420 CLOSE SWITCH

DTC Description

INFOID:0000000014923124

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2420–73	CLOSE SW (Close switch)	Diagnosis condition	All times
		Signal (terminal)	Close switch signal (automatic back door control module connector terminal: 5)
		Threshold	Automatic back door control module does not detect the close switch signal change for more than 3 second, after the start of back door closure motor closing operation.
		Diagnosis delay time	3 seconds

POSSIBLE CAUSE

- Entry of foreign materials to back door lock assembly
- Back door mechanism
- Close switch
- Harness or connectors (close switch circuit is open or shorted)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Open the back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-137, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923125

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

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

2.REMOVE FOREIGN MATERIALS AND ERASE DTC

CONSULT
1. Remove foreign materials.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B2420-73” detected?

YES >> GO TO 3.
NO >> Inspection End.

3. CHECK BACK DOOR LOCK OPEN/CLOSE OPERATION

Manually check open and close operation of back door lock.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 4.

4. CHECK INSTALLATION OF BACK DOOR LOCK ASSEMBLY

Check that back door lock assembly is installed normally. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

Is the inspection result normal?

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

5. ADJUST OF BACK DOOR LOCK ASSEMBLY INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust of back door lock assembly installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B2420-73” detected?

YES >> GO TO 6.
NO >> Inspection End.

6. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B2420-73” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

7. CHECK CLOSE SWITCH MONITOR ITEM

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “CLOSE SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
CLOSE SW	Back door	Other than bellow	OFF
		Closure operation	ON

Is the inspection result normal?

YES >> GO TO 12.
NO >> GO TO 8.

8. CHECK CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D512	5	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 10.
NO >> GO TO 9.

9. CHECK CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	5	D512	5	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	5		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

10. CHECK CLOSE SWITCH GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D512	8	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace harness.

11. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B2420-73” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".

NO >> Inspection End.

12. ERASE DTC

CONSULT
1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B2420-73” detected?

YES >> GO TO 13.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

13. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC-3

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B2420-73” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2422 BACK DOOR STATE

DTC Description

INFOID:0000000014923126

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2422–78	BACK DOOR STATE (Back door state)	Diagnosis condition	All times
		Signal (terminal)	Encoder LH A signal, encoder LH B signal, encoder RH A signal, encoder RH B signal (automatic back door control module connector terminal: 9, 20, 19, 7)
		Threshold	When the automatic back door control module detect the encoder pulse signal LH does not according with the encoder pulse signal RH
		Diagnosis delay time	–
B2422–79	BACK DOOR STATE (Back door state)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When automatic back door position information is deleted from automatic back door control module memory
		Diagnosis delay time	–

POSSIBLE CAUSE

- Improper installation of back door assembly
- Calibration of automatic back door position information
- Back door mechanism
- Encoder
- Harness or connectors (encoder circuit is open or shorted)
- Automatic back door control module
- Battery terminal is disconnected and reconnected

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “B2422-78”: Refer to DLK-141, "Diagnosis Procedure (B2422-78)".
YES-2 >> DTC “B2422-79”: Refer to DLK-146, "Diagnosis Procedure (B2422-79)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (B2422-78)

INFOID:0000000014923127

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
   Refer to DLK-313, "BACK DOOR ASSEMBLY : Adjustment".

2. Check back door assembly mechanism deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

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

2.ADJUST BACK DOOR ASSEMBLY INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust the back door assembly installation. Refer to DLK-313, "BACK DOOR ASSEMBLY : Adjustment".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-141, "DTC Description".

Is DTC “B2422-78” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

1. Perform initialization setting of automatic back door position information. Refer to DLK-115, "Work Procedure".
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-141, "DTC Description".

Is DTC “B2422-78” detected?

YES >> GO TO 4.
NO >> Inspection End.

4.CHECK ENCODER MONITOR ITEM

CONSULT
1. Turn ignition switch ON.
2. Select “AUTO BACK DOOR”.
3. Select “SPINDLE LH ENCODER A”, “SPINDLE LH ENCODER B”, “SPINDLE RH ENCODER A” and “SPINDLE RH ENCODER B” in “Data Monitor” mode.
4. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
SPINDLE LH ENCODER A	Back door	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
SPINDLE LH ENCODER B		Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
SPINDLE RH ENCODER A	Back door	Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO
SPINDLE RH ENCODER B		Moving (auto or manual)	HI ⇔ LO
		When stopped	HI or LO

Is the inspection result normal?

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

5.CHECK ENCODER POWER SUPPLY

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

(+)			(–)	Voltage (Approx.)
Spindle unit				
Connector		Terminal		
LH	B95	3	Ground	Battery voltage
RH	B73			

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 6.

6. CHECK ENCODER POWER SUPPLY CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit			Continuity
Connector	Terminal	Connector		Terminal	
B55	6	LH	B95	3	Yes
	8	RH	B73		

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	8		No
	6		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

7. CHECK ENCODER CIRCUIT GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit			Continuity
Connector	Terminal	Connector		Terminal	
B55	21	LH	B95	2	Yes
		RH	B73		

3. Check continuity between automatic back door control module harness connector and ground.

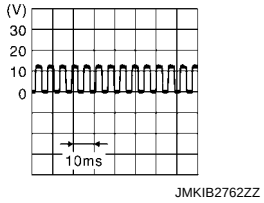
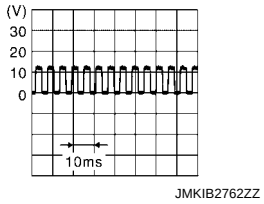
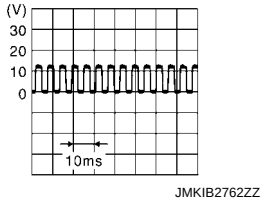
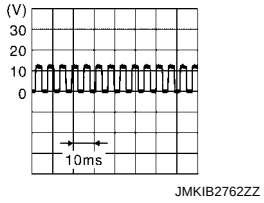
Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	21		No

Is the inspection result normal?

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

8. CHECK ENCODER OUTPUT SIGNAL

1. Connect spindle unit and automatic back door control module connector.
2. Check signal between spindle unit harness connector and ground using oscilloscope.

(+)			(–)	Condition		Voltage (Approx.)
Spindle unit						
Connector		Terminal				
LH	B95	5	Ground	Back door	Moving (auto)	 JMKIB2762ZZ
					When stopped	0 V or 12 V
		4			Moving (auto)	 JMKIB2762ZZ
					When stopped	0 V or 12 V
RH	B73	5			Moving (auto)	 JMKIB2762ZZ
					When stopped	0 V or 12 V
		4			Moving (auto)	 JMKIB2762ZZ
					When stopped	0 V or 12 V

Is the inspection result normal?

YES >> GO TO 10.
NO >> GO TO 9.

9. CHECK ENCODER OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module and spindle unit connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Spindle unit			Automatic back door control module		Continuity
Connector		Terminal	Connector	Terminal	
LH	B95	5	B55	7	Yes
		4		19	
RH	B73	5		9	
		4		20	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	9		No
	20		
	7		
	19		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

10. REPLACE SPINDLE UNIT AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-141, "DTC Description".

Is DTC “B2422-78” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

11. CHECK INSTALLATION OF SPINDLE UNIT

Check that spindle unit is installed normally. Refer to DLK-326, "SPINDLE UNIT : Removal and Installation".

Is the inspection result normal?

YES >> GO TO 13.
NO >> GO TO 12.

12. ADJUST SPINDLE UNIT INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust the spindle unit installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-141, "DTC Description".

Is DTC “B2422-78” detected?

YES >> GO TO 13.
NO >> Inspection End.

13. REPLACE SPINDLE UNIT AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-141, "DTC Description".

Is DTC “B2422-78” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2422-79)

INFOID:0000000014923128

1.ERASE DTC

CONSULT
1. Fully close then back door manually.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”. Refer to DLK-141, "DTC Description".

Is DTC “B2422-79” detected?

YES >> GO TO 2.
NO >> Inspection End.

2.CHECK AUTOMATIC BACK DOOR CONTROL UNIT EACH DTC

If DTC “B2422-79” is displayed with DTC “B2426-23, B2426-24, B2426-29, B2427-23, B2427-24, B2427-29”, first perform the trouble diagnosis for DTC “B2426-23, B2426-24, B2426-29, B2427-23, B2427-24, B2427-29”.

Is DTC “B2426-23, B2426-24, B2426-29, B2427-23, B2427-24, B2427-29” detected?

YES >> Refer to DLK-68, "DTC Index".
NO >> Replace automatic back door control unit. Refer to DLK-343, "Removal and Installation".

B2423 AUTOMATIC BACK DOOR MOTOR OPERATION TIME

DTC Description

INFOID:0000000014923129

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2423–11	ABD MTR TIME OUT (Automatic back door motor time out)	Diagnosis condition	All times
		Signal (terminal)	Spindle motor RH (open) signal, spindle motor RH (close) signal, spindle motor LH (open) signal, spindle motor LH (close) signal (automatic back door control module connector terminal: 29, 36, 27, 34)
		Threshold	One of the spindle motor open/close circuits is shorted to ground: current flowing through one of circuits is higher than a threshold (30 A or more for 30 ms).
		Diagnosis delay time	–
B2423–12	ABD MTR TIME OUT (Automatic back door motor time out)	Diagnosis condition	All times
		Signal (terminal)	Spindle motor RH (open) signal, spindle motor RH (close) signal, spindle motor LH (open) signal, spindle motor LH (close) signal (automatic back door control module connector terminal: 29, 36, 27, 34)
		Threshold	One of the spindle motor open/close circuit is shorted to battery voltage: the voltage of a motor terminal is above a threshold (voltage at output terminal is higher than 2.5 V, if motor is not activated).
		Diagnosis delay time	–
B2423–13	ABD MTR TIME OUT (Automatic back door motor time out)	Diagnosis condition	All times
		Signal (terminal)	Spindle motor RH (open) signal, spindle motor RH (close) signal, spindle motor LH (open) signal, spindle motor LH (close) signal (automatic back door control module connector terminal: 29, 36, 27, 34)
		Threshold	One of the spindle motor circuits is open: current flowing through one of circuits is lower than a threshold (1 A).
		Diagnosis delay time	–
B2423–63	ABD MTR TIME OUT (Automatic back door motor time out)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the automatic back door control module and spindle motor operate in the same direction for 180 seconds or more continuously
		Diagnosis delay time	–
B2423–4B	ABD MTR TIME OUT (Automatic back door motor time out)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the automatic back door control module and spindle motor operate continuously
		Diagnosis delay time	–

POSSIBLE CAUSE

- Spindle motor (continuous action)
- Harness or connectors (circuit is shorted)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “B2423-11”: Refer to DLK-148, "Diagnosis Procedure (B2423-11)".
YES-2 >> DTC “B2423-12”: Refer to DLK-149, "Diagnosis Procedure (B2423-12)".
YES-3 >> DTC “B2423-13”: Refer to DLK-149, "Diagnosis Procedure (B2423-13)".
YES-4 >> DTC “B2423-63” or DTC “B2423-4B”: Refer to DLK-150, "Diagnosis Procedure (B2423-63 or B2423-4B)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (B2423-11)

INFOID:0000000014923130

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK SPINDLE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit connector.
3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	29		No
	36		
	27		
	34		

Is the inspection result normal?

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

2.ERASE DTC

CONSULT

1. Connect automatic back door control module and spindle unit connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-11” detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

3.REPLACE SPINDLE UNIT LH

1. Turn ignition switch OFF.
2. Replace spindle unit LH.
3. Turn ignition switch ON.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-11” detected?

YES >> GO TO 4.
NO >> Inspection End.

4.REPLACE SPINDLE UNIT RH

1. Turn ignition switch OFF.
2. Replace spindle unit RH.
3. Turn ignition switch ON.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-11” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2423-12)

INFOID:0000000014923131

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK SPINDLE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B56	29	Ground	0 V
	36		
	27		
	34		

Is the inspection result normal?

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

2.ERASE DTC

CONSULT
1. Connect automatic back door control module and spindle unit connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-12” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

Diagnosis Procedure (B2423-13)

INFOID:0000000014923132

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK SPINDLE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit connector.

3. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit			Continuity
Connector	Terminal	Connector		Terminal	
B56	29	RH	B73	1	Yes
	36			7	
	27	LH	B95	1	
	34			7	

Is the inspection result normal?

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

2.ERASE DTC

CONSULT
1. Connect automatic back door control module and spindle unit connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-13” detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

3.REPLACE SPINDLE UNIT LH

1. Turn ignition switch OFF.
2. Replace spindle unit LH.
3. Turn ignition switch ON.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-13” detected?

YES >> GO TO 4.
NO >> Inspection End.

4.REPLACE SPINDLE UNIT RH

1. Turn ignition switch OFF.
2. Replace spindle unit RH.
3. Turn ignition switch ON.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-13” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2423-63 or B2423-4B)

INFOID:0000000014923133

1.ERASE DTC

CONSULT
1. At least 180 seconds are passed after automatic back door operation is inhibited.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-147, "DTC Description".

Is DTC “B2423-63” or DTC“B2423-4B” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2426 ENCODER

DTC Description

INFOID:0000000014923134

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2426–11	SPINDLE SENSOR LH (Spindle sensor left hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder LH power supply (automatic back door control module connector terminal: 6)
		Threshold	Short circuit is detected in encoder power supply output circuit inside automatic back door control module. B2427-11 is detected simultaneously because encoder sensor RH receives power supply from the same power supply circuit as LH (circuit inside automatic back door control module).
		Diagnosis delay time	–
B2426–23	SPINDLE SENSOR LH (Spindle sensor left hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder LH A signal, encoder LH B signal (automatic back door control module connector terminal: 19, 7)
		Threshold	Either pulse signal A value or pulse signal B value is stuck to OFF side during automatic open/close operation.
		Diagnosis delay time	–
B2426–24	SPINDLE SENSOR LH (Spindle sensor left hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder LH A signal, encoder LH B signal (automatic back door control module connector terminal: 19, 7)
		Threshold	Either pulse signal A value or pulse signal B value is stuck to ON side during automatic open/close operation.
		Diagnosis delay time	–
B2426–29	SPINDLE SENSOR LH (Spindle sensor left hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder LH A signal, encoder LH B signal (automatic back door control module connector terminal: 19, 7)
		Threshold	Automatic back door control module detects the abnormal pulse values of encoder LH.
		Diagnosis delay time	–
B2426–32	SPINDLE SENSOR LH (Spindle sensor left hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder LH A signal, encoder LH B signal (automatic back door control module connector terminal: 19, 7)
		Threshold	Automatic back door control module detects spindle unit failure.
		Diagnosis delay time	–

POSSIBLE CAUSE

- Improper installation of back door assembly
- Calibration of automatic back door position information
- Back door mechanism
- Encoder (spindle unit LH)
- Harness or connectors (encoder circuit is open or shorted)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “B2426-11”: Refer to DLK-152, "Diagnosis Procedure (B2426-11)".
YES-2 >> DTC “B2426-23”: Refer to DLK-153, "Diagnosis Procedure (B2426-23)".
YES-3 >> DTC “B2426-24”: Refer to DLK-154, "Diagnosis Procedure (B2426-24)".
YES-4 >> DTC “B2426-29” or DTC “B2426-32”: Refer to DLK-155, "Diagnosis Procedure (B2426-29 or B2426-32)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (B2426-11)

INFOID:0000000014923135

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.ERASE DTC

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
3. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-11” detected?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

2.CHECK SPINDLE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	7	Ground	0 V
	19		

Is the inspection result normal?

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

3.REPLACE SPINDLE UNIT LH

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit LH.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-11” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2426-23)

INFOID:0000000014923136

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK ENCODER POWER SUPPLY

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

(+)		(–)	Voltage (Approx.)
Spindle unit LH			
Connector	Terminal		
B95	3	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK ENCODER POWER SUPPLY CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	6	B95	3	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	6		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK ENCODER GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	21	B95	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	21		No

Is the inspection result normal?

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

4.CHECK ENCODER COMMUNICATION CIRCUIT

1. Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	7	B95	5	Yes
	19		4	

2. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	7		No
	19		

Is the inspection result normal?

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

5.ERASE DTC

CONSULT
1. Connect automatic back door control module and spindle unit LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-23” detected?

YES >> GO TO 6.
NO >> Inspection End.

6.REPLACE SPINDLE UNIT

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit LH.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-23” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2426-24)

INFOID:0000000014923137

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK ENCODER COMMUNICATION CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit LH connector.
3. Check continuity between automatic back door control module harness connector and ground.

(+)		(-)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	7	Ground	0 V
	19		

Is the inspection result normal?

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

2.ERASE DTC

CONSULT
1. Connect automatic back door control module and spindle unit LH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-24” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.REPLACE SPINDLE UNIT

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit LH.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-24” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2426-29 or B2426-32)

INFOID:0000000014923138

1.CHECK DTC CONDITION

CONSULT
1. Turn ignition switch ON.
2. Move then back door manually.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

What is the display history of DTC “B2426-29”or DTC “B2426-32”?

“CRNT”>> GO TO 3.
“PAST” >> GO TO 2.

2.ERASE DTC

Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-29” or DTC “B2426-32”detected?

YES >> GO TO 3.
NO >> Inspection End.

3.REPLACE SPINDLE UNIT AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit LH.
3. Perform initialization setting of automatic back door position information.
   Refer to DLK-115, "Work Procedure".

4. Turn ignition switch ON.
5. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
6. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-151, "DTC Description".

Is DTC “B2426-29” or DTC “B2426-32”detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2427 ENCODER

DTC Description

INFOID:0000000014923139

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2427–11	SPINDLE SENSOR RH (Spindle sensor right hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder RH power supply (automatic back door control module connector terminal: 8)
		Threshold	Short circuit is detected in encoder power supply output circuit inside automatic back door control module. B2426-11 is detected simultaneously because encoder sensor LH receives power supply from the same power supply circuit as RH (circuit inside automatic back door control module).
		Diagnosis delay time	–
B2427–23	SPINDLE SENSOR RH (Spindle sensor right hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder RH A signal, encoder RH B signal (automatic back door control module connector terminal: 9, 20)
		Threshold	Either pulse signal A value or pulse signal B value is stuck to OFF side during automatic open/close operation.
		Diagnosis delay time	–
B2427–24	SPINDLE SENSOR RH (Spindle sensor right hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder RH A signal, encoder RH B signal (automatic back door control module connector terminal: 9, 20)
		Threshold	Either pulse signal A value or pulse signal B value is stuck to ON side during automatic open/close operation.
		Diagnosis delay time	–
B2427–29	SPINDLE SENSOR RH (Spindle sensor right hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder RH A signal, encoder RH B signal (automatic back door control module connector terminal: 9, 20)
		Threshold	Automatic back door control module detects the abnormal pulse values of encoder RH.
		Diagnosis delay time	–
B2427–32	SPINDLE SENSOR RH (Spindle sensor right hand)	Diagnosis condition	All times
		Signal (terminal)	Encoder RH A signal, encoder RH B signal (automatic back door control module connector terminal: 9, 20)
		Threshold	Automatic back door control module detects spindle unit failure.
		Diagnosis delay time	–

POSSIBLE CAUSE

- Improper installation of back door assembly
- Calibration of automatic back door position information
- Back door mechanism
- Encoder (spindle unit RH)
- Harness or connectors (encoder circuit is open or shorted)
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “B2427-11”: Refer to DLK-158, "Diagnosis Procedure (B2427-11)".
YES-2 >> DTC “B2427-23”: Refer to DLK-159, "Diagnosis Procedure (B2427-23)".
YES-3 >> DTC “B2427-24”: Refer to DLK-160, "Diagnosis Procedure (B2427-24)".
YES-4 >> DTC “B2427-29” or “B2427-32”: Refer to DLK-161, "Diagnosis Procedure (B2427-29 or B2427-32)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (B2427-11)

INFOID:0000000014923140

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.ERASE DTC

CONSULT
1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
3. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-11” detected?

YES >> GO TO 2.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

2.CHECK SPINDLE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	9	Ground	0 V
	20		

Is the inspection result normal?

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

3.REPLACE SPINDLE UNIT RH

1. Turn ignition switch OFF.
2. Replace spindle unit RH.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-11” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2427-23)

INFOID:0000000014923141

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK ENCODER POWER SUPPLY

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

(+)		(–)	Voltage (Approx.)
Spindle unit RH			
Connector	Terminal		
B73	3	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK ENCODER POWER SUPPLY CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit RH harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	8	B73	3	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	8		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK ENCODER GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit RH harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	21	B73	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	21		No

Is the inspection result normal?

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

4.CHECK ENCODER COMMUNICATION CIRCUIT

1. Check continuity between automatic back door control module harness connector and spindle unit RH harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	9	B73	5	Yes
	20		4	

2. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	9		No
	20		

Is the inspection result normal?

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

5.ERASE DTC

CONSULT
1. Connect automatic back door control module and spindle unit RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-23” detected?

YES >> GO TO 6.
NO >> Inspection End.

6.REPLACE SPINDLE UNIT

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit RH.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-23” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2427-24)

INFOID:0000000014923142

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK ENCODER COMMUNICATION CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and spindle unit RH connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(-)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	9	Ground	0 V
	20		

Is the inspection result normal?

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

2.ERASE DTC

CONSULT
1. Connect automatic back door control module and spindle unit RH connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-24” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.REPLACE SPINDLE UNIT

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit RH.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-24” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B2427-29 or B2427-32)

INFOID:0000000014923143

1.CHECK DTC CONDITION

CONSULT
1. Turn ignition switch ON.
2. Move then back door manually.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

What is the display history of DTC “B2427-29” or DTC “B2427-32”?

“CRNT”>> GO TO 3.
“PAST” >> GO TO 2.

2.ERASE DTC

Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-29” or DTC “B2427-32” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.REPLACE SPINDLE UNIT AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace spindle unit RH.
3. Perform initialization setting of automatic back door position information. Refer to DLK-115, "Work Procedure".

4. Turn ignition switch ON.
5. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
6. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-157, "DTC Description".

Is DTC “B2427-29” or DTC “B2427-32” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B2428 AUTOMATIC BACK DOOR CONTROL UNIT

DTC Description

INFOID:0000000014923144

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2428–01	AUTO BACK DR CNT UNIT (Auto back door control module)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Automatic back door control module detected CPU malfunction
		Diagnosis delay time	–

POSSIBLE CAUSE

Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-163, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923145

1.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

When DTC “B2428-01” is detected, replace automatic back door control module.

>> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".

B242A CLOSURE CONDITION

DTC Description

INFOID:0000000014923146

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B242A–01	CLSR CONDITION (Closure condition)	Diagnosis condition	All times
		Signal (terminal)	Open switch signal, close switch signal (automatic back door control module connector terminal: 5, 11)
		Threshold	Automatic back door control module detects open switch and close switch ON, when the back door closure motor starts to operate.
		Diagnosis delay time	–
B242A–11	CLSR CONDITION (Closure condition)	Diagnosis condition	All times
		Signal (terminal)	Back door closure motor (open) signal, back door closure motor (close) signal (automatic back door control module connector terminal: 38, 31)
		Threshold	One of the closure motor open/close circuits is shorted to ground: current flowing through one of circuits is higher than a threshold (18 A for 30 ms).
		Diagnosis delay time	–
B242A–12	CLSR CONDITION (Closure condition)	Diagnosis condition	All times
		Signal (terminal)	Back door closure motor (open) signal, back door closure motor (close) signal (automatic back door control module connector terminal: 38, 31)
		Threshold	One of the closure motor open/close circuits is shorted to battery voltage: the voltage of a circuits is above a threshold (3 V or more) when that specific terminal is inactive.
		Diagnosis delay time	–
B242A–13	CLSR CONDITION (Closure condition)	Diagnosis condition	All times
		Signal (terminal)	Back door closure motor (open) signal, back door closure motor (close) signal (automatic back door control module connector terminal: 38, 31)
		Threshold	One of the closure motor open/close circuits is open: current flowing through one of circuits is lower than a threshold (2.4 A). This can only be detected when that specific terminal is activated (motor rotates in a specific direction)
		Diagnosis delay time	–
B242A–63	CLSR CONDITION (Closure condition)	Diagnosis condition	All times
		Signal (terminal)	Back door closure motor (open) signal, back door closure motor (close) signal (automatic back door control module connector terminal: 38, 31)
		Threshold	When the automatic back door control module and closure motor operate in the same direction for 35 times or more continuously
		Diagnosis delay time	–

POSSIBLE CAUSE

- Entry of foreign materials to back door lock assembly
- Back door mechanism
- Close switch
- Open switch

- Harness or connectors (open or shorted)
- Automatic back door control module
- Closure motor (continuous action)

FAIL-SAFE

Inhibit automatic back door system back door auto closure function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Operate back door auto closure operation.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “B242A-01”: Refer to DLK-165, "Diagnosis Procedure (B242A-01)".
YES-2 >> DTC “B242A-11”: Refer to DLK-168, "Diagnosis Procedure (B242A-11)".
YES-3 >> DTC “B242A-12”: Refer to DLK-169, "Diagnosis Procedure (B242A-12)".
YES-4 >> DTC “B242A-13”: Refer to DLK-169, "Diagnosis Procedure (B242A-13)".
YES-5 >> DTC “B242A-63”: Refer to DLK-170, "Diagnosis Procedure (B242A-63)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (B242A-01)

INFOID:0000000014923147

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK FOR FOREIGN MATERIALS IN BACK DOOR LOCK ASSEMBLY

Check for entry of foreign materials in back door lock assembly.

Is the inspection result normal?

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

2.REMOVE FOREIGN MATERIALS AND ERASE DTC

CONSULT
1. Remove foreign materials.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-01” detected?

YES >> GO TO 3.
NO >> Inspection End

3.CHECK BACK DOOR LOCK OPEN/CLOSE OPERATION

Manually check open and close operation of back door lock.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 4.

4.CHECK INSTALLATION OF BACK DOOR LOCK ASSEMBLY

Check that back door lock assembly is installed normally. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

Is the inspection result normal?

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

5. ADJUST OF BACK DOOR LOCK ASSEMBLY INSTALLATION AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Adjust of back door lock assembly installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-01” detected?

YES >> GO TO 6.
NO >> Inspection End.

6. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC-1

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-01” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

7. CHECK OPEN SWITCH AND CLOSE SWITCH MONITOR ITEM

CONSULT
1. Select “AUTO BACK DOOR” using.
2. Select “OPEN SW” and “CLOSE SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions.

Monitor item	Condition		Status
OPEN SW	Back door	Other than below	OFF
		Closure operation	ON
CLOSE SW	Back door	Other than below	OFF
		Closure operation	ON

Is the inspection result normal?

YES >> GO TO 12.
NO >> GO TO 8.

8. CHECK OPEN SWITCH OR CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D512	4	Ground	Battery voltage
	5		

Is the inspection result normal?

YES >> GO TO 10.
NO >> GO TO 9.

9. CHECK OPEN SWITCH OR CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	11	D512	4	Yes
	5		5	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	11		No
	5		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

10. CHECK HALF LATCH SWITCH GROUND CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D512	8	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

YES >> GO TO 11.
NO >> Repair or replace harness.

11. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-01” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

12. ERASE DTC

CONSULT
1. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
2. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-01” detected?

YES >> GO TO 13.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

13. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-01” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B242A-11)

INFOID:0000000014923148

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1. CHECK CLOSURE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and back door lock assembly connector.
3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	38		No
	31		

Is the inspection result normal?

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

2. ERASE DTC

CONSULT
1. Connect automatic back door control module and back door lock assembly connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-11” detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

3. REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-11” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B242A-12)

INFOID:0000000014923149

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK CLOSURE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and back door lock assembly connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B56	38	Ground	0 V
	31		

Is the inspection result normal?

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

2.ERASE DTC

CONSULT
1. Connect automatic back door control module and back door lock assembly connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-12” detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

3.REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-12” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B242A-13)

INFOID:0000000014923150

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK CLOSURE MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and back door lock assembly connector.
3. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B56	31	D512	1	Yes
	38		2	

Is the inspection result normal?

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

2.ERASE DTC

CONSULT
1. Connect automatic back door control module and back door lock assembly connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-13” detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

3.REPLACE BACK DOOR LOCK ASSEMBLY AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-13” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (B242A-63)

INFOID:0000000014923151

1.ERASE DTC

CONSULT
1. Turn ignition switch ON.
2. At least 12 minutes are passed after automatic back door operation is inhibited.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-164, "DTC Description".

Is DTC “B242A-63” detected?

YES >> Replace automatic back door control module. DLK-343, "Removal and Installation".
NO >> Inspection End.

B242C MOTION ACTIVATED BACK DOOR CONTROL MODULE

DTC Description

INFOID:0000000014910928

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B242C	KICK SENSOR CONTROL UNIT (Kick sensor control unit)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Automatic back door control unit detects CPU malfunction of motion activated back door control unit via serial communication
		Diagnosis delay time	–

POSSIBLE CAUSE

- Motion activated back door control unit
- Automatic back door control module
- Harness or connectors

FAIL-SAFE

Inhibit motion activated automatic back door system

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door motion activated back door sensor.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-171, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014910929

1.CHECK SELF DIAGNOSTIC RESULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

What is the display history of DTC “B242C”?

“CRNT”>> GO TO 2.
“PAST” >> GO TO 3.

2.CHECK INTERMITTENT INCIDENT

1. Check intermittent incident. Refer to GI-54, "Intermittent Incident".
2. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC “B242C” detected?

YES >> GO TO 4.
NO >> Inspection End.

3.ERASE DTC

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
3. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-171, "DTC Description".

Is DTC “B242C” detected?

YES >> GO TO 4.

NO >> Inspection End.

4. REPLACE MOTION ACTIVATED BACK DOOR CONTROL UNIT

1. Turn ignition switch OFF.
2. Replace motion activated back door control unit. Refer to DLK-340, "MOTION ACTIVATED BACK DOOR CONTROL UNIT : Removal and Installation".
3. Turn ignition switch ON.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-171, "DTC Description".

Is DTC “B242C” detected?

YES >> Replace automatic back door control unit. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B242D MOTION ACTIVATED BACK DOOR SENSOR

DTC Description

INFOID:0000000014910930

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B242D	KICK SENOR 1 (Kick sensor 1)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Automatic back door control unit detects the abnormal resistance value of motion activated back door sensor (lower) via serial communication
		Diagnosis delay time	–

POSSIBLE CAUSE

- Motion activated back door sensor (lower)
- Harness or connectors [motion activated back door sensor (lower) circuit is open or shorted]
- Automatic back door control module
- Motion activated back door control unit

FAIL-SAFE

Inhibit motion activated automatic back door system

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door system hands free function (motion activated back door sensor).
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-173, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014910931

1.CHECK INSTALLATION OF MOTION ACTIVATED BACK DOOR SENSOR

Check that motion activated back door sensor (lower) is installed normally.
Refer to DLK-341, "MOTION ACTIVATED BACK DOOR SENSOR : Removal and Installation".

Is the inspection result normal?

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

2.ADJUST OF MOTION ACTIVATED BACK DOOR SENSOR INSTALLATION AND ERASE DTC

1. Turn ignition switch OFF.
2. Adjust of motion activated back door sensor (lower) installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-173, "DTC Description".

Is DTC “B242D” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.REPLACE MOTION ACTIVATED BACK DOOR SENSOR AND ERASE DTC

1. Replace motion activated back door sensor (lower).

2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-173, "DTC Description".

Is DTC “B242D” detected?

YES >> GO TO 4.
NO >> Inspection End.

4. REPLACE MOTION ACTIVATED BACK DOOR CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace motion activated back door control unit. Refer to DLK-340, "MOTION ACTIVATED BACK DOOR CONTROL UNIT : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-173, "DTC Description".

Is DTC “B242D” detected?

YES >> Replace automatic back door control unit. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B242E MOTION ACTIVATED BACK DOOR SENSOR

DTC Description

INFOID:0000000014910932

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B242E	KICK SENOR 2 (Kick sensor 2)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Automatic back door control unit detects the abnormal resistance value of motion activated back door sensor (upper) via serial communication
		Diagnosis delay time	–

POSSIBLE CAUSE

- Motion activated back door sensor (upper)
- Harness or connectors [motion activated back door sensor (upper) circuit is open or shorted]
- Automatic back door control module
- Motion activated back door control unit

FAIL-SAFE

Inhibit motion activated automatic back door system

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Operate automatic back door system hands free function (motion activated back door sensor).
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.

Is DTC detected?

YES >> Refer to DLK-175, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014910933

1.CHECK INSTALLATION OF MOTION ACTIVATED BACK DOOR SENSOR

Check that motion activated back door sensor (upper) is installed normally.
Refer to DLK-341, "MOTION ACTIVATED BACK DOOR SENSOR : Removal and Installation".

Is the inspection result normal?

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

2.ADJUST OF MOTION ACTIVATED BACK DOOR SENSOR INSTALLATION AND ERASE DTC

1. Turn ignition switch OFF.
2. Adjust of motion activated back door sensor (upper) installation.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-175, "DTC Description".

Is DTC “B242E” detected?

YES >> GO TO 3.
NO >> Inspection End.

3.REPLACE MOTION ACTIVATED BACK DOOR SENSOR AND ERASE DTC

1. Replace motion activated back door sensor (upper).

2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-175, "DTC Description".

Is DTC “B242E” detected?

YES >> GO TO 4.
NO >> Inspection End.

4. REPLACE MOTION ACTIVATED BACK DOOR CONTROL UNIT AND ERASE DTC

1. Turn ignition switch OFF.
2. Replace motion activated back door control unit. Refer to DLK-340, "MOTION ACTIVATED BACK DOOR CONTROL UNIT : Removal and Installation".
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR” using CONSULT.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”.

Is DTC “B242E” detected?

YES >> Replace automatic back door control unit. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B242F ABD BUZZER

DTC Description

INFOID:0000000014923153

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B242F–12	ABD BUZZER (Automatic back door warning buzzer)	Diagnosis condition	All times
		Signal (terminal)	Automatic back door warning buzzer signal (automatic back door control module connector terminal: 37)
		Threshold	Automatic back door control module detects a malfunction of automatic back door warning buzzer circuit
		Diagnosis delay time	–

POSSIBLE CAUSE

- Harness or connectors (automatic back door warning buzzer circuit is open or shorted)
- Automatic back door control module

FAIL-SAFE

–

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

Ⓕ CONSULT

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-177, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923154

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR WARNING BUZZER OUTPUT SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module and automatic back door warning buzzer connector.
3. Check continuity between automatic back door control module harness connector and automatic back door warning buzzer harness connector.

Automatic back door control module		Automatic back door warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
B56	37	B61	1	Yes

4. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	37		No

Is the inspection result normal?

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

2. ERASE DTC

CONSULT
1. Connect automatic back door control module and automatic back door warning buzzer connector.
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-177, "DTC Description".

Is DTC “B242F-12” detected?

YES >> GO TO 3.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

3. REPLACE AUTOMATIC BACK DOOR WARNING BUZZER AND ERASE DTC

CONSULT
1. Turn ignition switch OFF.
2. Replace automatic back door warning buzzer.
3. Turn ignition switch ON.
4. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
5. Erase DTC, and then repeat “DTC CONFIRMATION PROCEDURE”. Refer to DLK-177, "DTC Description".

Is DTC “B242F-12” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

B261B REMOTE ENGINE START

DTC Description

INFOID:0000000014923155

DTC DETECTION LOGIC

NOTE:

- If DTC B261B is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to DLK-117, "DTC Description".
- If DTC B261B is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to DLK-118, "DTC Description".

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B261B	BCM	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	—
		Threshold	The BCM has requested ignition OFF but ECM keeps the engine running for more than 10 seconds after the OFF request was made
		Diagnosis delay time	—

POSSIBLE CAUSE

- ECM

FAIL-SAFE

—

Diagnosis Procedure

INFOID:0000000014923156

1. CHECK ECM IGNITION, POWER AND GROUND CIRCUITS

Check ECM ignition power and ground circuits. Refer to EC-184, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace ECM. Refer to EC-595, "Removal and Installation". GO TO 2.
NO >> Repair or replace harness or connectors.

2. INSPECTION

CONSULT

1. Turn ignition switch ON.
2. Select “Self Diagnostic Result” mode.
3. Touch “ERASE”.
4. Perform vehicle remote start operation.

Does DTC B261B return?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Inspection End.

B2621 INSIDE ANTENNA

DTC Description

INFOID:0000000014923157

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2621	INSIDE ANTENNA	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	BCM terminals 117,116
		Threshold	An excessive high or low voltage from inside antenna (instrument center) is sent to BCM
		Diagnosis delay time	—

POSSIBLE CAUSE

- Inside key antenna (instrument center)
- Harness or connector
  [Inside key antenna (instrument center) circuit is open or shorted]

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “INSIDE ANT DIAGNOSIS” in “Work support” mode.
3. Perform inside key antenna (“INSIDE ANT DIAGNOSIS”) in “Work support” mode of “INTELLIGENT KEY”.
4. Check BCM for DTC.

Is inside key antenna DTC detected?

YES >> Refer to DLK-180, "Diagnosis Procedure".
NO >> Inside key antenna (instrument center) is OK.

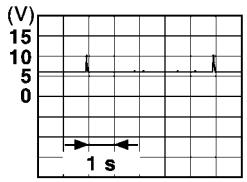
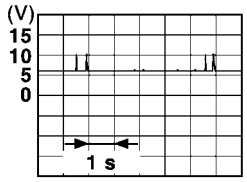
Diagnosis Procedure

INFOID:0000000014923158

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M19	117, 116	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> GO TO 2.

2. CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (instrument center) connector.
2. Check continuity between BCM harness connector and inside key antenna (instrument center) harness connector.

BCM Connector	BCM Terminal	Inside key antenna (instrument center) Connector	Inside key antenna (instrument center) Terminal	Continuity
M19	117	M15	1	Yes
	116		2	

3. Check continuity between BCM harness connector and ground.

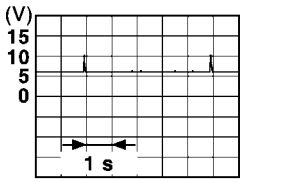
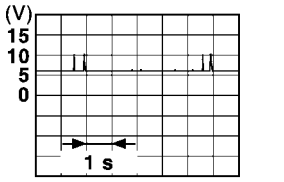
BCM Connector	BCM Terminal	Ground	Continuity
M19	117		No
	116		

Is the inspection result normal?

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

3. CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna (instrument center) (New antenna or other antenna).
2. Connect BCM connector and inside key antenna (instrument center) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M19	117, 116	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (instrument center).
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

B2622 INSIDE ANTENNA

DTC Description

INFOID:0000000014923159

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2622	INSIDE ANTENNA	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	BCM terminals 63, 62
		Threshold	An excessive high or low voltage from inside antenna (console) is sent to BCM
		Diagnosis delay time	—

POSSIBLE CAUSE

- Inside key antenna (console)
- Harness or connector
  [Inside key antenna (console) circuit is open or shorted]

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “INSIDE ANT DIAGNOSIS” in “Work support” mode.
3. Perform inside key antenna (“INSIDE ANT DIAGNOSIS”) in “Work support” mode of “INTELLIGENT KEY”.
4. Check BCM for DTC.

Is inside key antenna DTC detected?

YES >> Refer to DLK-183, "Diagnosis Procedure".
NO >> Inside key antenna (console) is OK.

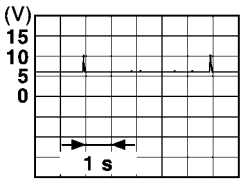
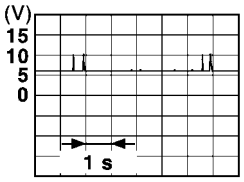
Diagnosis Procedure

INFOID:0000000014923160

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
B16	63, 62	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> GO TO 2.

2.CHECK INSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and inside key antenna (console) connector.
2. Check continuity between BCM harness connector and inside key antenna (console) harness connector.

BCM Connector	BCM Terminal	Inside key antenna (console) Connector	Inside key antenna (console) Terminal	Continuity
B16	63	B77	1	Yes
	62		2	

3. Check continuity between BCM harness connector and ground.

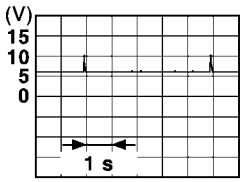
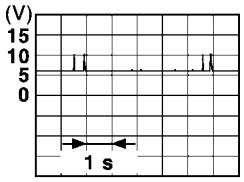
BCM Connector	BCM Terminal	Ground	Continuity
B16	163		No
	62		

Is the inspection result normal?

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

3.CHECK INSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace inside key antenna (console) (New antenna or other antenna).
2. Connect BCM connector and inside key antenna (console) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
B16	63, 62	Ground	When Intelligent Key is in the antenna detection area.	 JMKIA3839GB
			When Intelligent Key is not in the antenna detection area.	 JMKIA5951GB

Is the inspection result normal?

YES >> Replace inside key antenna (console). Refer to DLK-334, "CONSOLE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

B26FE HOOD SWITCH

DTC Description

INFOID:0000000014923165

DTC DETECTION LOGIC

NOTE:

- If DTC B26FE is displayed with DTC U1000, first perform the trouble diagnosis for DTC U1000. Refer to DLK-117, "DTC Description".
- If DTC B26FE is displayed with DTC U1010, first perform the trouble diagnosis for DTC U1010. Refer to DLK-118, "DTC Description".

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B26FE	HOOD SWITCH	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	IPDM E/R terminals 52,103
		Threshold	BCM detects that the hood switch input is malfunctioning
		Diagnosis delay time	3 seconds

POSSIBLE CAUSE

- Hood switch
- Harness or connector
  [hood switch circuit is open or shorted]

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM”.

Is DTC detected?

YES >> Refer to DLK-186, "Diagnosis Procedure".
NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:0000000014923166

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1. CHECK HOOD SWITCH SIGNAL CIRCUITS

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

(+)		(–)	Voltage (Approx.)
Hood switch			
Connector	Terminal		
E223	1	Ground	Battery voltage
	2		

Is the inspection result normal?

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

2.CHECK HOOD SWITCH SIGNAL CIRCUITS

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

IPDM E/R		Hood switch		Continuity
Connector	Terminal	Connector	Terminal	
F42	103	E223	1	Yes
E217	52		2	

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
F42	103		No
E217	52		

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-46, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch		Ground	Continuity
Connector	Terminal		
E223	3		Yes

Is the inspection result normal?

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

4.CHECK HOOD SWITCH

Refer to DLK-187, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace hood switch. Refer to DLK-316, "HOOD LOCK : Removal and Installation".

5.CHECK BCM CONFIGURATION

Refer to BCS-60, "CONFIGURATION (BCM) : Configuration List".

>> Inspection End.

Component Inspection

INFOID:0000000014923167

1.CHECK HOOD SWITCH

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

Hood switch		Condition		Continuity
Terminal				
1	3	Hood switch	Press	Yes
			Release	No
2			Press	No
			Release	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace hood switch. Refer to DLK-316, "HOOD LOCK : Removal and Installation".

B2626 OUTSIDE ANTENNA

DTC Description

INFOID:0000000014923168

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2626	OUTSIDE ANTENNA (Outside antenna)	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	—
		Threshold	An excessive high or low voltage from outside key antenna RH is sent to BCM
		Diagnosis delay time	—

POSSIBLE CAUSE

- BCM
- Outside key antenna RH
- Harness or connector (Outside key antenna RH circuit is open or shorted.)

FAIL-SAFE

–

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM”.

Is DTC detected?

YES >> Refer to DLK-189, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

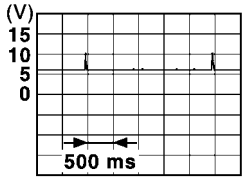
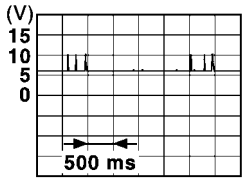
Diagnosis Procedure

INFOID:0000000014923169

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M19	118, 119	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (RH) connector.
2. Check continuity between BCM harness connector and outside key antenna (RH) harness connector.

BCM Connector	BCM Terminal	Outside key antenna (RH) Connector	Outside key antenna (RH) Terminal	Continuity
M19	119	D126	1	Yes
	118		2	

3. Check continuity between BCM harness connector and ground.

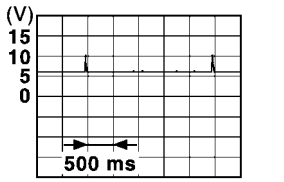
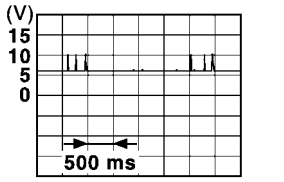
BCM Connector	BCM Terminal	Ground	Continuity
M19	119		No
	118		

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (RH). (New antenna or other antenna)
2. Connect BCM connector and outside key antenna (RH) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M19	118, 119	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (RH). Refer to DLK-335, "PASSENGER SIDE : Removal and Installation".

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

B2627 OUTSIDE ANTENNA

DTC Description

INFOID:0000000014923170

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2627	OUTSIDE ANTENNA	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	—
		Threshold	An excessive high or low voltage from outside key antenna LH is sent to BCM
		Diagnosis delay time	—

POSSIBLE CAUSE

- BCM
- Outside key antenna LH
- Harness or connector (Outside key antenna LH circuit is open or shorted.)

FAIL-SAFE

–

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM”.

Is DTC detected?

YES >> Refer to DLK-192, "DTC Description".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

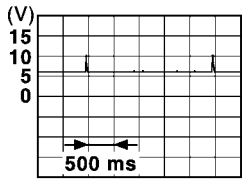
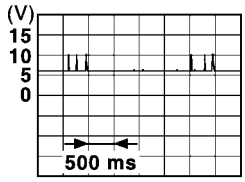
Diagnosis Procedure

INFOID:0000000014923171

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M19	120, 100	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (LH) connector.
2. Check continuity between BCM harness connector and outside key antenna (LH) harness connector.

BCM Connector	BCM Terminal	Outside key antenna (LH) Connector	Outside key antenna (LH) Terminal	Continuity
M19	100	D11	1	Yes
	120		2	

3. Check continuity between BCM harness connector and ground.

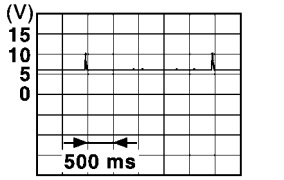
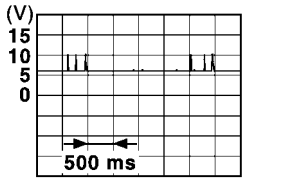
BCM Connector	BCM Terminal	Ground	Continuity
M19	100		No
	120		

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (LH). (New antenna or other antenna)
2. Connect BCM connector and outside key antenna (LH) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
M19	120, 100	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (LH). Refer to DLK-335, "DRIVER SIDE : Removal and Installation".
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

B2628 OUTSIDE ANTENNA

DTC Description

INFOID:0000000014923172

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition	
B2628	OUTSIDE ANTENNA	Diagnosis condition	When ignition switch is ON.
		Signal (terminal)	—
		Threshold	An excessive high or low voltage from outside key antenna rear bumper is sent to BCM
		Diagnosis delay time	—

POSSIBLE CAUSE

- BCM
- Outside key antenna rear bumper
- Harness or connector (Outside key antenna rear bumper circuit is open or shorted.)

FAIL-SAFE

–

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “BCM”.

Is DTC detected?

YES >> Refer to DLK-195, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

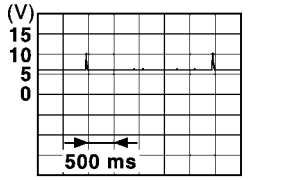
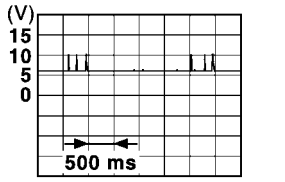
Diagnosis Procedure

INFOID:0000000014923173

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 1

1. Turn ignition switch OFF.
2. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
B16	64, 61	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA CIRCUIT

1. Disconnect BCM connector and outside key antenna (rear bumper) connector.
2. Check continuity between BCM harness connector and outside key antenna (rear bumper) harness connector.

BCM Connector	BCM Terminal	Outside key antenna (rear bumper) Connector	Outside key antenna (rear bumper) Terminal	Continuity
B16	64	B76	1	Yes
	61		2	

3. Check continuity between BCM harness connector and ground.

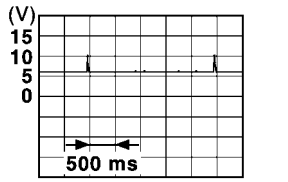
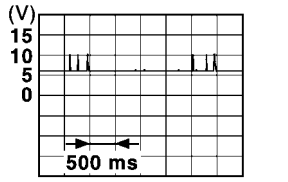
BCM Connector	BCM Terminal	Ground	Continuity
B16	64		No
	61		

Is the inspection result normal?

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

3.CHECK OUTSIDE KEY ANTENNA INPUT SIGNAL 2

1. Replace outside key antenna (rear bumper). (New antenna or other antenna)
2. Connect BCM and outside key antenna (rear bumper) connector.
3. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition		Signal (Reference value)
B16	64, 61	Ground	When the driver door request switch is operated with ignition switch OFF.	When Intelligent Key is in the antenna detection area. (The distance between Intelligent Key and antenna: 80 cm or less.)	 JMKIA5955GB
				When Intelligent Key is not in the antenna detection area. (The distance between Intelligent Key and antenna: Approx. 2 m.)	 JMKIA5954GB

Is the inspection result normal?

YES >> Replace outside key antenna (rear bumper). Refer to DLK-335, "REAR BUMPER : Removal and Installation".

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

U1320 REPROGRAMMING ERROR

DTC Description

INFOID:0000000014923174

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
U1320–06	REPROGRAMMING ERROR	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the automatic back door control module configuration is not successful
		Diagnosis delay time	–
U1320–42	REPROGRAMMING ERROR	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the automatic back door control module configuration is not successful
		Diagnosis delay time	–
U1320–51	REPROGRAMMING ERROR	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the automatic back door control module configuration is not successful
		Diagnosis delay time	–

POSSIBLE CAUSE

- Improper installation of back door assembly
- [CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION]: not complete
- Back door mechanism
- Automatic back door control module
- Harness or connectors

FAIL-SAFE

—

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-198, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000014923175

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1. CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

CONSULT

1. Perform initialization setting of automatic back door position information.
   Refer to DLK-115, "Work Procedure".

2. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”.

Is DTC detected?

YES >> GO TO 2.
NO >> Inspection End.

2.CHECK INSTALLATION OF BACK DOOR ASSEMBLY

1. Check that back door assembly is installed normally.
   Refer to DLK-313, "BACK DOOR ASSEMBLY : Adjustment".
2. Check back door assembly mechanism for deformation, looseness, rattle, interference with other parts, and pinched foreign materials.

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace the malfunctioning parts.

U1321 ABD CONFIGURATION

DTC Description

INFOID:0000000014923176

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
U1321–55	ABD: NOT CONFIGURED (Automatic back door: not configured)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the configuration work of automatic back door control module has not been started
		Diagnosis delay time	–

POSSIBLE CAUSE

- Configuration work of automatic back door control module
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-200, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923177

1.CONFIGURATION WORK OF AUTOMATIC BACK DOOR CONTROL MODULE

CONSULT

1. Perform configuration work of automatic back door control module. Refer to DLK-116, "Work Procedure".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”. Refer to DLK-200, "DTC Description".

Is DTC “U1321-55” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

U1322 ABD CONFIGURATION

DTC Description

INFOID:0000000014923178

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
U1322–01	ABD: CONFIGURATION (Automatic back door: configuration)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Other error while downloading the configuration data
		Diagnosis delay time	–
U1322–08	ABD: CONFIGURATION (Automatic back door: configuration)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the configuration work of automatic back door control module is not successful
		Diagnosis delay time	–
U1322–56	ABD: CONFIGURATION (Automatic back door: configuration)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	Configuration data is corrupted
		Diagnosis delay time	–

POSSIBLE CAUSE

- Configuration work of automatic back door control module
- Automatic back door control module

FAIL-SAFE

Inhibit automatic back door system all function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT

1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES-1 >> DTC “U1322-01” : Refer to DLK-201, "Diagnosis Procedure (U1322-01)".
YES-2 >> DTC “U1322-08” : Refer to DLK-202, "Diagnosis Procedure (U1322-08)".
YES-3 >> DTC “U1322-56” : Refer to DLK-202, "Diagnosis Procedure (U1322-56)".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure (U1322-01)

INFOID:0000000014923179

1.CONFIGURATION WORK OF AUTOMATIC BACK DOOR CONTROL MODULE

CONSULT

1. Perform configuration work of automatic back door control module.
   Refer to DLK-116, "Work Procedure".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”. Refer to DLK-201, "DTC Description".

Is DTC “U1322-01” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (U1322-08)

INFOID:0000000014923180

1. CONFIGURATION WORK OF AUTOMATIC BACK DOOR CONTROL MODULE

CONSULT
1. Perform configuration work of automatic back door control module. Refer to DLK-116, "Work Procedure".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”. Refer to DLK-201, "DTC Description".

Is DTC “U1322-08” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

Diagnosis Procedure (U1322-56)

INFOID:0000000014923181

1. CONFIGURATION WORK OF AUTOMATIC BACK DOOR CONTROL MODULE

CONSULT
1. Perform configuration work of automatic back door control module. Refer to DLK-116, "Work Procedure".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”. Refer to DLK-201, "DTC Description".

Is DTC “U1322-56” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

U1325 CALIBRATION

DTC Description

INFOID:0000000014923182

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
U1325–54	CALIBRATION (Calibration)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the calibration of automatic back door position information work is not successful
		Diagnosis delay time	–
U1325–55	CALIBRATION (Calibration)	Diagnosis condition	All times
		Signal (terminal)	–
		Threshold	When the calibration of automatic back door position information work is not successful
		Diagnosis delay time	–

POSSIBLE CAUSE

Calibration of automatic back door position information

FAIL-SAFE

Inhibit automatic back door system auto open/close function

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

CONSULT
1. Turn ignition switch ON.
2. Operate automatic back door.
3. Check “Self Diagnostic Result” mode of “AUTO BACK DOOR”.

Is DTC detected?

YES >> Refer to DLK-203, "Diagnosis Procedure".
NO-1 >> To check malfunction symptom before repair: Refer to GI-54, "Intermittent Incident".
NO-2 >> Confirmation after repair: Inspection End.

Diagnosis Procedure

INFOID:0000000014923183

1.CALIBRATION OF AUTOMATIC BACK DOOR POSITION INFORMATION

CONSULT
1. Perform initialization setting of automatic back door position information. Refer to DLK-115, "Work Procedure".
2. Turn ignition switch ON.
3. Select “Self Diagnostic Result” mode of “AUTO BACK DOOR”.
4. Erase DTC, and then repeat “PERFORM DTC CONFIRMATION PROCEDURE”. Refer to DLK-203, "DTC Description".

Is DTC “U1325-54” detected?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Inspection End.

POWER SUPPLY AND GROUND CIRCUIT
AUTOMATIC BACK DOOR CONTROL UNIT
AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure

INFOID:0000000014910955

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK FUSIBLE LINK

Check that the following fusible link is not open.

Fusible link No.	Signal name
K (30A)	Battery power supply

Is the fusible link open?

YES >> Replace the open fusible link after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic back door control module connector.
3. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B56	25	Ground	Battery voltage

Is the inspection result normal?

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

3.CHECK GROUND CIRCUIT

Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	32		Yes
B55	4		

Does continuity exist?

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

BCM
BCM : Diagnosis Procedure

INFOID:0000000015206684

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

1. CHECK FUSE

Check that the following fuses are not blown.

Terminal No.	Signal name	Fuse No.
161	BCM power supply	7 (10A)
167	Power door lock battery power supply	5 (20A)
168	Turn signal/hazard battery power supply	1 (15A)
169	Stop lamp battery power supply	10 (10A)
175	Power door lock2 battery power supply	3 (20A)
176	Rear wiper battery power supply	4 (15A)

Is the fuse blown?

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

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M20.
2. Check voltage between BCM connector M20 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M20	161	—	Battery voltage
	167		
	168		
	169		
	175		
	176		

Is the inspection result normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M20 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	170	—	Yes
	171		

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

DOOR SWITCH

Component Function Check

INFOID:0000000014910963

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR SW-DR”, “DOOR SW-AS”, “DOOR SW-RL”, “DOOR SW-RR”, in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
DOOR SW-DR	Front door LH	Open	On
		Closed	Off
DOOR SW-AS	Front door RH	Open	On
		Closed	Off
DOOR SW-RL	Rear door LH	Open	On
		Closed	Off
DOOR SW-RR	Rear door RH	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-206, "Diagnosis Procedure".

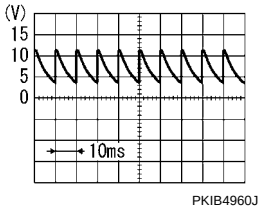
Diagnosis Procedure

INFOID:0000000014910964

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning door switch connector.
3. Check signal between malfunctioning door switch harness connector and ground using oscilloscope.

(+)			(–)	Signal (Reference value)
Door switch				
Connector		Terminal		
Front LH	B71	3	Ground	 PKIB4960J 7.0 - 8.0 V
Front RH	B141			
Rear LH	B70			
Rear RH	B142			

Is the inspection result normal?

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

2.CHECK DOOR SWITCH CIRCUIT

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

Door switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
Front LH	B71	3	B16	57	Yes
Front RH	B141			53	
Rear LH	B70			52	
Rear RH	B142			50	

3. Check continuity between door switch harness connector and ground.

Door switch			Ground	Continuity
Connector		Terminal		
Front LH	B71	3		No
Front RH	B141			
Rear LH	B70			
Rear RH	B142			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR SWITCH

Refer to DLK-207, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace malfunctioning door switch. Refer to DLK-332, "Removal and Installation".

4.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014910965

1.CHECK DOOR SWITCH

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

Door switch		Condition		Continuity
Terminal				
3	Ground contact is part of the switch.	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunctioning door switch. Refer to DLK-332, "Removal and Installation".

BACK DOOR SWITCH

Component Function Check

INFOID:0000000014910966

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR SW-BK” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
DOOR SW-BK	Back door	Open	On
		Closed	Off

Is the inspection result normal?

YES >> Door switch is OK.
NO >> Refer to DLK-208, "Diagnosis Procedure (With Automatic Back Door)".

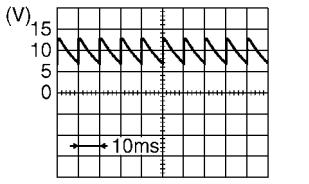
Diagnosis Procedure (With Automatic Back Door)

INFOID:0000000014910967

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check signal between back door lock assembly harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Back door lock assembly			
Connector	Terminal		
D512	7	Ground	 JPMIA0593GB 9.0 - 10.0 V

Is the inspection result normal?

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

2.CHECK BACK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between back door lock assembly harness connector and BCM harness connector.

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D512	7	B16	51	Yes

3. Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	7		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	8		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to DLK-210, "Component Inspection (With Automatic Back Door)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

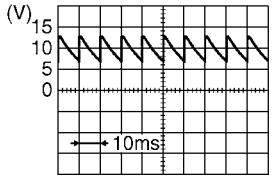
Diagnosis Procedure (Without Automatic Back Door)

INFOID:0000000014910968

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK BACK DOOR SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check signal between back door lock assembly harness connector and ground using oscilloscope.

(+)		(–)	Signal (Reference value)
Back door lock assembly			
Connector	Terminal		
D508	3	Ground	 JPMIA0593GB 9.0 - 10.0 V

Is the inspection result normal?

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

2.CHECK BACK DOOR SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between back door lock assembly harness connector and BCM harness connector.

Back door lock assembly		BCM		Continuity
Connector	Terminal	Connector	Terminal	
D508	3	B16	51	Yes

3. Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D508	3		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D508	4		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR SWITCH

Refer to DLK-211, "Component Inspection (Without Automatic Back Door)".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection (With Automatic Back Door)

INFOID:0000000014910969

1.CHECK BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
7	8	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

Component Inspection (Without Automatic Back Door)

INFOID:0000000014910970

1. CHECK BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
3	4	Door switch	Pressed	No
			Released	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

DOOR LOCK AND UNLOCK SWITCH
DRIVER SIDE

DRIVER SIDE : Description

INFOID:0000000014910971

Transmits door lock/unlock operation to BCM.

DRIVER SIDE : Component Function Check

INFOID:0000000014910972

1.CHECK FUNCTION

CONSULT
Check “CDL LOCK SW”, “CDL UNLOCK SW” in “Data Monitor” mode.

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-212, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000014910973

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the main power window and door lock/unlock switch connector when the switch (driver side) is turned to “LOCK” or “UNLOCK”.

Connector	Main power window and door lock/unlock switch state	Terminal		Voltage (Approx.)
D6	Neutral → Unlock	15	Ground	Battery voltage → 0
	Neutral → Lock	3		

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect main power window and door lock/unlock switch connector.
3. Check continuity between main power window and door lock/unlock switch connector and ground.

Main power window and door lock/unlock switch connector	Terminal		Continuity
D6	1	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SWITCH

Check continuity between main power window and door lock/unlock switch terminals.

Main power window and door lock/unlock switch state	Terminals	Continuity
Unlock	1 - 3	Yes
Lock	1 - 15	
Neutral/Unlock	1 - 15	No
Neutral/Lock	1 - 3	

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace main power window and door lock/unlock switch. Refer to PWC-60, "Removal and Installation".

4. CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.
2. Check continuity between BCM connector and main power window and door lock/unlock switch connector.

BCM connector	Terminal	Main power window and door lock/unlock switch connector	Terminal	Continuity
M18	40	D6	15	Yes
	10		3	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	40	Ground	No
	10		

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

PASSENGER SIDE

PASSENGER SIDE : Description

INFOID:0000000014910974

Transmits door lock/unlock operation to BCM.

PASSENGER SIDE : Component Function Check

INFOID:0000000014910975

1. CHECK FUNCTION

CONSULT
Check “CDL LOCK SW”, “CDL UNLOCK SW” in “Data Monitor” mode.

Monitor item	Condition	
CDL LOCK SW	LOCK	: ON
	UNLOCK	: OFF
CDL UNLOCK SW	LOCK	: OFF
	UNLOCK	: ON

Is the inspection result normal?

YES >> Door lock and unlock switch is OK.
NO >> Refer to DLK-214, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000014910976

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK POWER WINDOW SWITCH OUTPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage at the power window and door lock/unlock switch RH connector when the switch (passenger side) is changed to “LOCK” or “UNLOCK”.

Connector	Power window and door lock/unlock switch RH state	Terminal		Voltage (Approx.)
D112	Neutral → Lock	1	Ground	Battery voltage → 0
	Neutral → Unlock	2		

Is the inspection result normal?

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

2.CHECK POWER WINDOW SWITCH GROUND

1. Turn ignition switch OFF.
2. Disconnect power window and door lock/unlock switch RH connector.
3. Check continuity between power window and door lock/unlock switch RH connector and ground.

Power window and door lock/unlock switch RH connector	Terminal		Continuity
D112	3	Ground	Yes

Is the inspection result normal?

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

3.CHECK POWER WINDOW SWITCH

Check continuity between power window and door lock/unlock switch RH terminals.

Power window and door lock/unlock switch RH state	Terminals	Continuity
Lock	1 - 3	Yes
Unlock	2 - 3	
Neutral/Unlock	1 - 3	No
Neutral/Lock	2 - 3	

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace power window and door lock/unlock switch RH. Refer to PWC-61, "Removal and Installation".

4.CHECK POWER WINDOW SWITCH CIRCUITS

1. Disconnect BCM connector.
2. Check continuity between BCM connector and power window and door lock/unlock switch RH connector.

BCM connector	Terminal	Power window and door lock/unlock switch RH connector	Terminal	Continuity
M18	10	D112	1	Yes
	40		2	

3. Check continuity between BCM connector and ground.

BCM connector	Terminal		Continuity
M18	10	Ground	No
	40		

Is the inspection result normal?

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

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

DOOR LOCK ACTUATOR
DRIVER SIDE

DRIVER SIDE : Component Function Check

INFOID:0000000014910977

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR LOCK” in “Active Test”.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-216, "DRIVER SIDE : Diagnosis Procedure".

DRIVER SIDE : Diagnosis Procedure

INFOID:0000000014910978

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check voltage between front door lock assembly LH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Front door lock assembly LH					
Connector	Terminal				
D23	1	Ground	Door lock and unlock switch	Lock	Battery voltage
	2			Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuator connectors.
2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M20	165	D23	1	Yes
	172		2	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	165		No
	172		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
M20	165	Ground	Door lock and unlock switch	Lock	Battery voltage
	172			Unlock	

Is the inspection result normal?

YES >> Replace front door lock assembly LH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".

NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:0000000014910979

1.CHECK FUNCTION

CONSULT

1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR LOCK” in “Active Test”.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.

NO >> Refer to DLK-217, "PASSENGER SIDE : Diagnosis Procedure".

PASSENGER SIDE : Diagnosis Procedure

INFOID:0000000014910980

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock actuator RH connector.
3. Check voltage between front door lock actuator RH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Front door lock actuator RH					
Connector	Terminal				
D113	5	Ground	Door lock and unlock switch	Unlock	Battery voltage
	6			Lock	

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".

NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuator connectors.
2. Check continuity between BCM harness connector and front door lock actuator RH harness connector.

BCM		Front door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
M20	165	D113	5	Yes
	163		6	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	165		No
	163		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+) BCM		(–)	Condition		Voltage (Approx.)
Connector	Terminal				
M20	165	Ground	Door lock and unlock switch	Unlock	Battery voltage
	163			Lock	

Is the inspection result normal?

YES >> Replace front door lock actuator RH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

REAR LH

REAR LH : Component Function Check

INFOID:0000000014910981

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR LOCK” in “Active Test”.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-218, "REAR LH : Diagnosis Procedure".

REAR LH : Diagnosis Procedure

INFOID:0000000014910982

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator LH connector.
3. Check voltage between rear door lock actuator LH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock actuator LH					
Connector	Terminal				
D206	1	Ground	Door lock and unlock switch	Lock	Battery voltage
	2			Unlock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to DLK-323, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuator connectors.
2. Check continuity between BCM harness connector and rear door lock actuator LH harness connector.

BCM		Rear door lock actuator LH		Continuity
Connector	Terminal	Connector	Terminal	
B23	148	D206	2	Yes
	149		1	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B23	148		No
	149		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
B23	148	Ground	Door lock and unlock switch	Unlock	Battery voltage
	149			Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator LH. Refer to DLK-323, "DOOR LOCK : Removal and Installation".
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

REAR RH

REAR RH : Component Function Check

INFOID:0000000014910983

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “DOOR LOCK” in “Active Test”.
3. Touch “ALL LOCK” or “ALL UNLK” to check that it works normally.

Is the inspection result normal?

YES >> Door lock actuator is OK.
NO >> Refer to DLK-220, "REAR RH : Diagnosis Procedure".

REAR RH : Diagnosis Procedure

INFOID:0000000014910984

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR LOCK ACTUATOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect rear door lock actuator RH connector.
3. Check voltage between rear door lock actuator RH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Rear door lock actuator RH					
Connector	Terminal				
D306	5	Ground	Door lock and unlock switch	Unlock	Battery voltage
	6			Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to DLK-323, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK DOOR LOCK ACTUATOR CIRCUIT

1. Disconnect BCM, all door lock actuator connectors.
2. Check continuity between BCM harness connector and rear door lock actuator RH harness connector.

BCM		Rear door lock actuator RH		Continuity
Connector	Terminal	Connector	Terminal	
B23	148	D306	6	Yes
	149		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B23	148		No
	149		

Is the inspection result normal?

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

3.CHECK BCM OUTPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
BCM					
Connector	Terminal				
B23	148	Ground	Door lock and unlock switch	Unlock	Battery voltage
	149			Lock	

Is the inspection result normal?

YES >> Replace rear door lock actuator RH. Refer to DLK-323, "DOOR LOCK : Removal and Installation".
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

UNLOCK SENSOR

Component Function Check

INFOID:0000000014910985

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “UNLK SEN-DR” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
UNLK SEN -DR	Driver side door	Lock	OFF
		Unlock	ON

Is the inspection result normal?

YES >> Unlock sensor is OK.
NO >> Refer to DLK-221, "Diagnosis Procedure".

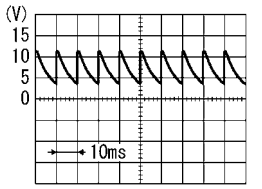
Diagnosis Procedure

INFOID:0000000014910986

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK UNLOCK SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check signal between front door lock assembly LH harness connector and ground with oscilloscope.

(+)		(–)	Signal (Reference value)
Front door lock assembly LH			
Connector	Terminal		
D23	3	Ground	

PKIB4960J

Is the inspection result normal?

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

2.CHECK UNLOCK SENSOR CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M19	104	D23	3	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	104		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK UNLOCK SENSOR GROUND CIRCUIT

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		
D23	4		Yes

Is the inspection result normal?

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

4.CHECK UNLOCK SENSOR

Refer to DLK-222, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly LH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014910987

1.CHECK UNLOCK SENSOR

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity
Terminal				
3	4	Driver side door	Unlock	Yes
			Lock	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace front door lock assembly LH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".

DOOR KEY CYLINDER SWITCH

Component Function Check

INFOID:0000000014910988

1.CHECK FUNCTION

CONSULT
1. Select “DOOR LOCK” of “BCM”.
2. Select “KEY CYL LK-SW”, “KEY CYL UN-SW” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
KEY CYL LK-SW	Driver side door key cylinder	Lock	ON
		Neutral / Unlock	OFF
KEY CYL UN-SW		Unlock	ON
		Neutral / Lock	OFF

Is the inspection result normal?

YES >> Door key cylinder switch is OK.
NO >> Refer to DLK-223, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014910989

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR KEY CYLINDER SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check voltage between front door lock assembly LH harness connector and ground.

(+)		(–)	Voltage (Approx.)
Front door lock assembly LH			
Connector	Terminal		
D23	5	Ground	5 V
	6		

Is the inspection result normal?

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

2.CHECK DOOR KEY CYLINDER SWITCH SIGNAL CIRCUIT

1. Disconnect the BCM connector.
2. Check continuity between BCM harness connector and front door lock assembly LH harness connector.

BCM		Front door lock assembly LH		Continuity
Connector	Terminal	Connector	Terminal	
M19	92	D23	6	Yes
	93		5	

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M19	92		No
	93		

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR KEY CYLINDER SWITCH GROUND CIRCUIT

Check continuity between front door lock assembly LH harness connector and ground.

Front door lock assembly LH		Ground	Continuity
Connector	Terminal		
D23	4		Yes

Is the inspection result normal?

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

4.CHECK DOOR KEY CYLINDER SWITCH

Refer to DLK-224, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace front door lock assembly LH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014910990

1.CHECK DOOR KEY CYLINDER SWITCH

1. Turn ignition switch OFF.
2. Disconnect front door lock assembly LH connector.
3. Check continuity between front door lock assembly LH terminals.

Front door lock assembly LH		Condition		Continuity
Terminal				
5	4	Driver side door key cylinder	Unlock	Yes
			Neutral / Lock	No
6			Lock	Yes
			Neutral / Unlock	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace front door lock assembly LH. Refer to DLK-319, "DOOR LOCK : Removal and Installation".

REMOTE KEYLESS ENTRY RECEIVER

Component Function Check

INFOID:0000000015268659

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “RKE OPE COUN1” in “DATA MONITOR” mode.
3. Check that the function operates normally according to the following conditions:

Monitor Item	Condition
RKE OPE COUN1	Checks whether value changes when operating Intelligent Key.

Is the inspection result normal?

YES >> Remote keyless entry receiver is OK.
NO >> Refer to DLK-225, "Diagnosis Procedure".

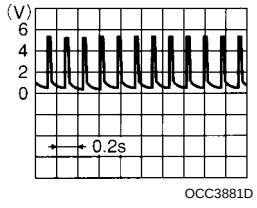
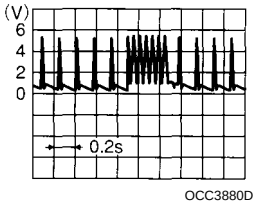
Diagnosis Procedure

INFOID:0000000015268660

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK REMOTE KEYLESS ENTRY RECEIVER OUTPUT SIGNAL

1. Turn ignition switch OFF.
2. Check signal between BCM harness connector and ground using oscilloscope.

(+) BCM Connector	(+) BCM Terminal	(–)	Condition	Signal (Reference value)
M18	1	Ground	Standby state	 OCC3881D
			Press the Intelligent Key lock or unlock button.	 OCC3880D

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> GO TO 2.

2.CHECK REMOTE KEYLESS ENTRY RECEIVER CIRCUIT 1

1. Disconnect BCM and remote keyless entry receiver connectors.
2. Check continuity between BCM harness connector and remote keyless entry receiver harness connector.

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M18	1	B110	2	Yes

3. Check continuity between BCM harness connector and ground.

(+)		(–)	Continuity
BCM			
Connector	Terminal		
M18	1	Ground	No

Is the inspection result normal?

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

3. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER SUPPLY

Check voltage between remote keyless entry receiver harness connector and ground.

(+)		(–)	Voltage (Approx.)
Remote keyless entry receiver			
Connector	Terminal		
B110	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.
NO-1 >> Check 10A fuse No. 6 [located in fuse block J/B].
NO-2 >> Repair or replace harness between remote keyless entry receiver and 10A fuse No. 6.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between remote keyless entry receiver harness connector and ground.

Remote keyless entry receiver		Ground	Continuity
Connector	Terminal		
B110	3		Yes

Is the inspection result normal?

YES >> Replace remote keyless entry receiver. Refer to DLK-338, "Removal and Installation".
NO >> Repair or replace harness.

DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000014910991

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “REQ SW-DR”, “REQ SW-AS” in “Data Monitor” mode.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
REQ SW -DR	LH door request switch	Pressed	ON
		Released	OFF
REQ SW -AS	RH door request switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Front door request switch is OK.
NO >> Refer to DLK-227, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014910992

Regarding Wiring Diagram information, refer to DLK-72, "Wiring Diagram".

1.CHECK DOOR REQUEST SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door request switch connector.
3. Check voltage between malfunctioning front door request switch harness connector and ground.

(+)			(–)	Voltage (Approx.)
Front door request switch				
Connector		Terminal		
LH	D11	3	Ground	Battery voltage
RH	D126			

Is the inspection result normal?

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

2.CHECK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between malfunctioning front door request switch harness connector and BCM harness connector.

Front door request switch			BCM		Continuity
Connector		Terminal	Connector	Terminal	
LH	D11	3	M19	105	Yes
RH	D126			82	

3. Check continuity between malfunctioning front door request switch harness connector and ground.

Front door request switch			Ground	Continuity
Connector		Terminal		
LH	D11	3		No
RH	D126			

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between malfunctioning front door request switch harness connector and ground.

Front door request switch			Ground	Continuity
Connector		Terminal		
LH	D11	4		Yes
RH	D126			

Is the inspection result normal?

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

4.CHECK DOOR REQUEST SWITCH

Refer to DLK-228, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace malfunctioning front outside handle assembly. Refer to DLK-333, "DRIVER SIDE : Removal and Installation" or DLK-333, "PASSENGER SIDE : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014910993

1.CHECK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect malfunctioning front door request switch connector.
3. Check continuity between malfunctioning front door request switch terminals.

Front door request switch		Condition		Continuity
Terminal				
3	4	Door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace malfunctioning front door request switch. Refer to DLK-333, "DRIVER SIDE : Removal and Installation" or DLK-333, "PASSENGER SIDE : Removal and Installation".

BACK DOOR REQUEST SWITCH

Component Function Check

INFOID:0000000014910994

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “REQ SW-BD/TR” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
REQ SW-BD/TR	Back door request switch	Pressed	On
		Released	Off

Is the inspection result normal?

YES >> Back door request switch is OK.
NO >> Refer to DLK-229, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014910995

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK BACK DOOR REQUEST SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Back door opener switch			
Connector	Terminal		
D509	4	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR REQUEST SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
B16	46	D509	4	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B16	46		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR REQUEST SWITCH GROUND CIRCUIT

Check continuity between back door opener switch harness connector and ground.

Back door opener switch		Ground	Continuity
Connector	Terminal		
D509	3		Yes

Is the inspection result normal?

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

4. CHECK BACK DOOR REQUEST SWITCH

Refer to DLK-230, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door opener switch. Refer to DLK-345, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014910996

1. CHECK BACK DOOR REQUEST SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door opener switch assembly connector.
3. Check continuity between back door opener switch assembly terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
3	4	Back door request switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door opener switch assembly. Refer to DLK-345, "Removal and Installation".

BACK DOOR OPENER SWITCH

Component Function Check

INFOID:0000000014910997

1.CHECK FUNCTION

CONSULT
1. Select “TRUNK” of “BCM”.
2. Select “TR/BD OPEN SW” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
TR/BD OPEN SW	Back door opener switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Back door opener switch is OK.
NO >> Refer to DLK-231, "Diagnosis Procedure".

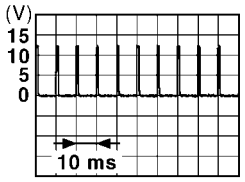
Diagnosis Procedure

INFOID:0000000014910998

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK BACK DOOR OPEN INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check signal between back door opener switch harness connector and ground.

(+)		(–)	Signal (Reference value)
Back door opener switch			
Connector	Terminal		
D507	1	Ground	

JPMIA0012GB

Is the inspection result normal?

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

2.CHECK BACK DOOR OPENER SWITCH CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and back door opener switch harness connector.

BCM		Back door opener switch		Continuity
Connector	Terminal	Connector	Terminal	
B16	56	D507	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
B16	56		No

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR OPENER SWITCH GROUND CIRCUIT

Check continuity between back door opener switch harness connector and ground.

Back door opener switch		Ground	Continuity
Connector	Terminal		
D507	2		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR OPENER SWITCH

Refer to DLK-232, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door opener switch. Refer to DLK-345, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014910999

1.CHECK BACK DOOR OPENER SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door opener switch connector.
3. Check continuity between back door opener switch terminals.

Back door opener switch assembly		Condition		Continuity
Terminal				
1	2	Back door opener switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door opener switch. Refer to DLK-345, "Removal and Installation".

INTELLIGENT KEY WARNING BUZZER

Component Function Check

INFOID:0000000014911000

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “OUTSIDE BUZZER” in “Active Test”.
3. Touch “On” or “Off” to check that it works normally.

Is the inspection result normal?

YES >> Intelligent Key warning buzzer is OK.
NO >> Refer to DLK-233, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911001

Regarding Wiring Diagram information, refer to DLK-82, "Wiring Diagram".

1.CHECK INTELLIGENT KEY WARNING BUZZER CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and Intelligent Key warning buzzer harness connector.

BCM		Intelligent Key warning buzzer		Continuity
Connector	Terminal	Connector	Terminal	
E29	132	E24	1	Yes

3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
E29	132		No

Is the inspection result normal?

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

2.CHECK INTELLIGENT KEY WARNING BUZZER

Refer to DLK-233, "Component Inspection".

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-336, "Removal and Installation".

Component Inspection

INFOID:0000000014911002

1.CHECK INTELLIGENT KEY WARNING BUZZER

1. Turn ignition switch OFF.
2. Disconnect Intelligent Key warning buzzer connector.
3. Connect battery power supply directly to Intelligent Key warning buzzer terminals and check the operation.

Intelligent Key warning buzzer		Operation
Terminal		
(+)	(–)	
1	3	Buzzer sounds

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace Intelligent Key warning buzzer. Refer to DLK-336, "Removal and Installation".

INTELLIGENT KEY

Component Function Check

INFOID:0000000014911003

NOTE:
The Signal Tech II Tool [– (J-50190)] can be used to perform the following functions: Refer to the Signal Tech II User Guide for additional information.
- Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “RKE OPE COUN1” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition
RKE OPE COUN1	Check that the numerical value is changing while operating on the Intelligent Key.

Is the inspection result normal?

YES >> Intelligent Key is OK.
NO >> Refer to DLK-235, "Diagnosis Procedure".

Diagnosis Procedure

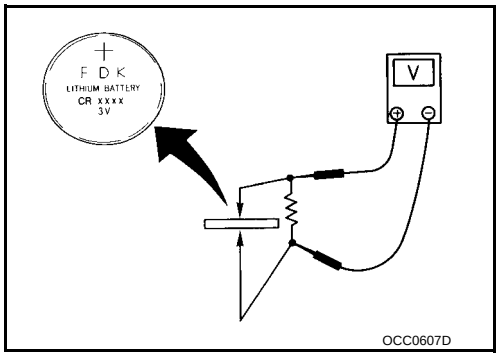
INFOID:0000000014911004

NOTE:
The Signal Tech II Tool [– (J-50190)] can be used to perform the following functions: Refer to the Signal Tech II User Guide for additional information.
- Check Intelligent Key relative signal strength.
- Confirm vehicle Intelligent Key antenna signal strength.

1.CHECK INTELLIGENT KEY BATTERY

Check by connecting a resistance (approximately 300Ω) so that the current value becomes about 10 mA. Refer to DLK-339, "Removal and Installation".

Standard : Approx. 2.5 - 3.0V



Is the measurement value within the specification?

YES >> Replace Intelligent Key.
NO >> Replace Intelligent Key battery.

METER BUZZER CIRCUIT

Description

INFOID:0000000014911005

- The buzzer for the warning chime system is installed in the combination meter.
- The combination meter sounds the buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:0000000014911006

1. CHECK OPERATION OF METER BUZZER

CONSULT
1. Select “BUZZER” of “BCM”.
2. Perform “LIGHT WARN ALM” or “SEAT BELT WARN TEST” of “Active Test” mode.

Does meter buzzer activate?

YES >> Inspection End.
NO >> Refer to DLK-236, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911007

1. CHECK COMBINATION METER INPUT SIGNAL

CONSULT
Select the “Data Monitor” mode of “METER/M&A” and check the “BUZZER” monitor value.

BUZZER	
Under the condition of buzzer input	: On
Except above	: Off

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-81, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-73, "Removal and Installation".

KEY WARNING LAMP

Component Function Check

INFOID:0000000014911008

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “INDICATOR” in “Active Test” mode.
3. Touch “KEY IND” or “KEY ON” to check that it works normally.

Is the inspection result normal?

YES >> Key warning lamp is OK.
NO >> Refer to DLK-237, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911009

1.CHECK KEY WARNING LAMP

Refer to MWI-21, "CONSULT Function (METER/M&A)".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

HAZARD FUNCTION

Component Function Check

INFOID:0000000014911010

1.CHECK FUNCTION

CONSULT
1. Select “INTELLIGENT KEY” of “BCM”.
2. Select “FLASHER” in “Active Test” mode.
3. Touch “LH” or “RH” to check that it works normally.

Is the inspection result normal?

YES >> Hazard warning lamp circuit is OK.
NO >> Refer to DLK-238, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911011

1.CHECK HAZARD SWITCH CIRCUIT

Refer to DLK-238, "Component Function Check".

Is the inspection result normal?

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

2.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

AUTOMATIC BACK DOOR CLOSE SWITCH

Component Function Check

INFOID:0000000014911012

1.CHECK FUNCTION

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “BK DOOR CL SW” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
BK DOOR CL SW	Automatic back door close switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Automatic back door close switch is OK.
NO >> Refer to DLK-239, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911013

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check voltage between automatic back door close switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door close switch			
Connector	Terminal		
D513	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR CLOSE SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door close switch harness connector.

Automatic back door control module		Automatic back door close switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	23	D513	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	23		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH GROUND CIRCUIT

Check continuity between automatic back door close switch harness connector and ground.

Automatic back door close switch		Ground	Continuity
Connector	Terminal		
D513	2		Yes

Is the inspection result normal?

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

4. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Refer to DLK-240, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door close switch. Refer to DLK-346, "Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014911014

1. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door close switch connector.
3. Check continuity between automatic back door close switch terminals.

Automatic back door close switch		Condition		Continuity
Terminal				
1	2	Automatic back door close switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace automatic back door close switch. Refer to DLK-346, "Removal and Installation".

AUTOMATIC BACK DOOR MAIN SWITCH

Component Function Check

INFOID:0000000014911015

1.CHECK FUNCTION

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “MAIN SW” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
MAIN SW	Automatic back door main switch	ON	ON
		OFF	OFF

Is the inspection result normal?

YES >> Automatic back door main switch is OK.
NO >> Refer to DLK-241, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911016

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect automatic back door main switch connector.
3. Check voltage between automatic back door main switch harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door main switch			
Connector	Terminal		
M178	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door main switch harness connector.

Automatic back door control module		Automatic back door main switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	10	M178	1	Yes

3. Check continuity between automatic back door control module connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	10		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH GROUND CIRCUIT

Check continuity between automatic back door main switch connector and ground.

Automatic back door main switch		Ground	Continuity
Connector	Terminal		
M178	3		Yes

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Refer to DLK-242, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door main switch. Refer to DLK-344, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014911017

1.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door main switch terminals.

Automatic back door main switch		Condition		Continuity
Terminal				
1	3	Automatic back door main switch	ON	Yes
			OFF	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace automatic back door main switch. Refer to DLK-344, "Removal and Installation".

AUTOMATIC BACK DOOR SWITCH

Component Function Check

INFOID:0000000014911018

1.CHECK FUNCTION

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “AUTO BD SW” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
AUTO BD SW	Automatic back door switch	Pressed	ON
		Released	OFF

Is the inspection result normal?

YES >> Automatic back door switch is OK.
NO >> Refer to DLK-243, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911019

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK AUTOMATIC BACK DOOR SWITCH INPUT SIGNAL

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

(+)		(–)	Voltage (Approx.)
Automatic back door switch			
Connector	Terminal		
M24	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK AUTOMATIC BACK DOOR SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and automatic back door switch harness connector.

Automatic back door control module		Automatic back door switch		Continuity
Connector	Terminal	Connector	Terminal	
B55	22	M24	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	22		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK AUTOMATIC BACK DOOR SWITCH GROUND CIRCUIT

Check continuity between automatic back door switch harness connector and ground.

Automatic back door switch		Ground	Continuity
Connector	Terminal		
M24	2		Yes

Is the inspection result normal?

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

4.CHECK AUTOMATIC BACK DOOR SWITCH

Refer to DLK-244, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace automatic back door switch. Refer to DLK-345, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014911020

1.CHECK AUTOMATIC BACK DOOR SWITCH

1. Turn ignition switch OFF.
2. Disconnect automatic back door switch connector.
3. Check continuity between automatic back door switch terminals.

Automatic back door switch		Condition		Continuity
Terminal				
1	2	Automatic back door switch	Pressed	Yes
			Released	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace automatic back door switch. Refer to DLK-345, "Removal and Installation".

HALF LATCH SWITCH

Component Function Check

INFOID:0000000014911021

1.CHECK FUNCTION

CONSULT
1. Select “AUTO BACK DOOR”.
2. Select “HALF LATCH SW” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
HALF LATCH SW	Back door	Fully closed/Half latch	OFF
		Open	ON

Is the inspection result normal?

YES >> Half latch switch is OK.
NO >> Refer to DLK-245, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000014911022

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK HALF LATCH SWITCH INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(–)		(–)	Voltage (Approx.)
Back door lock assembly			
Connector	Terminal		
D512	6	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK HALF LATCH SWITCH CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B55	3	D512	6	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	3		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK HALF LATCH SWITCH GROUND CIRCUIT

Check continuity between back door lock assembly harness connector and ground.

Back door lock assembly		Ground	Continuity
Connector	Terminal		
D512	3		Yes

Is the inspection result normal?

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

4.CHECK HALF LATCH SWITCH

Refer to DLK-246, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014911023

COMPONENT INSPECTION

1.CHECK HALF LATCH SWITCH

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check continuity between back door lock assembly terminals.

Back door lock assembly		Condition		Continuity
Terminal				
6	8	Back door	Open	Yes
			Fully closed/Half latch	No

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".

TOUCH SENSOR

RH

RH : Component Function Check

INFOID:0000000014911024

1.CHECK FUNCTION

CONSULT
1. Select “AUTOMATIC BACK DOOR”.
2. Select “TOUCH SEN RH” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
TOUCH SEN RH	Touch sensor RH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Touch sensor RH is OK.
NO >> Refer to DLK-247, "RH : Diagnosis Procedure".

RH : Diagnosis Procedure

INFOID:0000000014911025

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor RH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage (Approx.)
Touch sensor RH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D515	1	B55	13	Touch sensor RH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

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

2.CHECK TOUCH SENSOR RH CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	1	D515	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR RH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor RH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor RH harness connector.

Automatic back door control module		Touch sensor RH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D515	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

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

4.CHECK TOUCH SENSOR RH GROND CIRCUIT 2

1. Connect automatic back door control module and touch sensor RH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

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

5.CHECK TOUCH SENSOR RH

Refer to DLK-248, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace touch sensor RH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

RH : Component Inspection

INFOID:0000000014911026

1.CHECK TOUCH SENSOR RH

1. Turn ignition switch OFF.
2. Disconnect touch sensor RH connector.
3. Check resistance between touch sensor RH terminals.

Touch sensor RH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor RH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor RH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".

LH

LH : Component Function Check

INFOID:0000000014911027

1.CHECK FUNCTION

CONSULT
1. Select “AUTOMATIC BACK DOOR”.
2. Select “TOUCH SEN LH” in “Data Monitor”.
3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
TOUCH SEN LH	Touch sensor LH	Other than below	OFF
		Detect obstruction	ON

Is the inspection result normal?

YES >> Touch sensor LH is OK.
NO >> Refer to DLK-249, "LH : Diagnosis Procedure".

LH : Diagnosis Procedure

INFOID:0000000014911028

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK TOUCH SENSOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Check voltage between touch sensor LH harness connector and automatic back door control module harness connector.

(+)		(–)		Condition		Voltage (Approx.)
Touch sensor LH		Automatic back door control module				
Connector	Terminal	Connector	Terminal			
D511	2	B55	13	Touch sensor LH	Detect obstruction	1.8 – 5 V
					Other than above	2.72 – 7.27 V

Is the inspection result normal?

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

2.CHECK TOUCH SENSOR LH CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	D511	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	2		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK TOUCH SENSOR LH GROND CIRCUIT

1. Disconnect automatic back door control module and touch sensor LH connector.
2. Check continuity between automatic back door control module harness connector and touch sensor LH harness connector.

Automatic back door control module		Touch sensor LH		Continuity
Connector	Terminal	Connector	Terminal	
B55	13	D511	2	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B55	13		No

Is the inspection result normal?

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

4.CHECK TOUCH SENSOR LH GROND CIRCUIT 2

1. Connect automatic back door control module and touch sensor LH connector.
2. Check voltage between automatic back door control module harness connector and ground.

(+)		(–)	Voltage (Approx.)
Automatic back door control module			
Connector	Terminal		
B55	13	Ground	0.01 – 0 V

Is the inspection result normal?

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

5.CHECK TOUCH SENSOR LH

Refer to DLK-251, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace touch sensor LH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

LH : Component Inspection

INFOID:0000000014911029

1. CHECK TOUCH SENSOR LH

1. Turn ignition switch OFF.
2. Disconnect touch sensor LH connector.
3. Check resistance between touch sensor LH terminals.

Touch sensor LH		Condition		Resistance (Approx.)
Terminal				
1	2	Touch sensor LH	Detect obstruction	380 – 420 kΩ
			Other than above	0.95 – 1.05 kΩ

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace touch sensor LH. Refer to DLK-327, "TOUCH SENSOR : Removal and Installation".

SPINDLE MOTOR

RH

RH : Diagnosis Procedure

INFOID:0000000014911030

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK SPINDLE MOTOR INPUT SIGNAL

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

(+)		(–)	Condition		Voltage (Approx.)
Spindle unit RH					
Connector	Terminal				
B73	1	Ground	Back door	Auto open operation	Battery voltage
	7			Auto close operation	

Is the inspection result normal?

YES >> Replace spindle unit RH. Refer to DLK-326, "SPINDLE UNIT : Removal and Installation".
NO >> GO TO 2.

2.CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit harness connector.

Automatic back door control module		Spindle unit RH		Continuity
Connector	Terminal	Connector	Terminal	
B56	29	B73	1	Yes
	36		7	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	29		No
	36		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

LH

LH : Diagnosis Procedure

INFOID:0000000014911031

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK SPINDLE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

2. Disconnect spindle unit LH connector.
3. Check voltage between spindle unit LH harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Spindle unit LH					
Connector	Terminal				
B95	1	Ground	Back door	Auto open operation	Battery voltage
	7			Auto close operation	

Is the inspection result normal?

YES >> Replace spindle unit LH. Refer to DLK-326, "SPINDLE UNIT : Removal and Installation".
NO >> GO TO 2.

2.CHECK SPINDLE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and spindle unit LH harness connector.

Automatic back door control module		Spindle unit LH		Continuity
Connector	Terminal	Connector	Terminal	
B56	27	B95	1	Yes
	34		7	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	27		No
	34		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

BACK DOOR CLOSURE MOTOR

Diagnosis Procedure

INFOID:0000000014911032

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK BACK DOOR CLOSURE MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect back door lock assembly connector.
3. Check voltage between back door lock assembly harness connector and ground.

(+)		(–)	Condition		Voltage (Approx.)
Back door lock assembly					
Connector	Terminal				
D512	1	Ground	Back door opener switch	Pressed	Battery voltage
	2			Released	0 V

Is the inspection result normal?

YES >> Replace back door lock assembly. Refer to DLK-326, "DOOR LOCK : Removal and Installation".
NO >> GO TO 2.

2.CHECK BACK DOOR CLOSURE MOTOR CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door lock assembly harness connector.

Automatic back door control module		Back door lock assembly		Continuity
Connector	Terminal	Connector	Terminal	
B56	31	D512	1	Yes
	38		2	

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	31		No
	38		

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

AUTOMATIC BACK DOOR WARNING BUZZER

Diagnosis Procedure

INFOID:0000000014911033

Regarding Wiring Diagram information, refer to DLK-99, "Wiring Diagram".

1.CHECK BACK DOOR WARNING CHIME POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check voltage between back door warning chime harness connector and ground.

(+)		(–)	Voltage (Approx.)
Back door warning chime			
Connector	Terminal		
B61	1	Ground	Battery voltage

Is the inspection result normal?

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

2.CHECK BACK DOOR WARNING CHIME OUTPUT SIGNAL CIRCUIT

1. Disconnect automatic back door control module connector.
2. Check continuity between automatic back door control module harness connector and back door warning chime harness connector.

Automatic back door control module		Back door warning chime		Continuity
Connector	Terminal	Connector	Terminal	
B56	37	B61	1	Yes

3. Check continuity between automatic back door control module harness connector and ground.

Automatic back door control module		Ground	Continuity
Connector	Terminal		
B56	37		No

Is the inspection result normal?

YES >> Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
NO >> Repair or replace harness.

3.CHECK BACK DOOR WARNING CHIME GROUND CIRCUIT

Check continuity between back door warning chime harness connector and ground.

Back door warning chime		Ground	Continuity
Connector	Terminal		
B61	2		Yes

Is the inspection result normal?

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

4.CHECK BACK DOOR WARNING CHIME

Refer to DLK-256, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Replace back door warning chime. Refer to DLK-337, "Removal and Installation".

5.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

Component Inspection

INFOID:0000000014911034

1.CHECK BACK DOOR WARNING CHIME

1. Turn ignition switch OFF.
2. Disconnect back door warning chime connector.
3. Check battery power supply directly to back door warning chime terminals and check the operation.

back door warning chime		Operation
Terminal		
(+)	(-)	
1	2	Chime sounds

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace back door warning chime. Refer to DLK-337, "Removal and Installation".

INTEGRATED HOMELINK TRANSMITTER

Component Function Check

INFOID:0000000014911035

1.CHECK FUNCTION

Check that system receiver (garage door opener, etc.) operates with original hand-held transmitter.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Receiver or hand-held transmitter is malfunctioning.

2.CHECK ILLUMINATE

1. Turn ignition switch OFF.
2. Does red light of transmitter illuminate when any transmitter button is pressed?

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-257, "Diagnosis Procedure".

3.CHECK TRANSMITTER

Check transmitter with Tool*.
*:For details, refer to Technical Service Bulletin.

Is the inspection result normal?

YES >> Receiver or hand-held transmitter malfunction, not vehicle related.
NO >> Replace auto anti-dazzling inside mirror (Homelink® universal transceiver). Refer to MIR-21, "Removal and Installation".

Diagnosis Procedure

INFOID:0000000014911036

Regarding Wiring Diagram information, refer to DLK-107, "Wiring Diagram".

1.CHECK POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect auto anti-dazzling inside mirror (Homelink® universal transceiver) connector.
3. Check voltage between auto anti-dazzling inside mirror (Homelink® universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal		Condition	Voltage (V) (Approx.)
R7	10	Ground	Ignition switch position: OFF	Battery voltage
	6		Ignition switch position: ON	

Is the inspection result normal?

YES >> GO TO 2.
NO >> Check the following items:
- 5A fuse 14 located in the fuse block (J/B).
- 10A fuse 30 located in the fuse block (J/B).
- Harness for open or short between fuse and auto anti-dazzling inside mirror (Homelink® universal transceiver).

2.CHECK GROUND CIRCUIT

Check continuity between auto anti-dazzling inside mirror (Homelink® universal transceiver) harness connector and ground.

Auto anti-dazzling inside mirror (Homelink® universal transceiver) connector	Terminal	Ground	Continuity
R7	8		Yes

Is the inspection result normal?

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

3.CHECK INTERMITTENT INCIDENT

Refer to GI-54, "Intermittent Incident".

>> Inspection End.

SYMPTOM DIAGNOSIS

INTELLIGENT KEY SYSTEM SYMPTOMS

Diagnosis Procedure

INFOID:0000000015268631

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

SYMPTOM TABLE 1 (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

No.	Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)	Symptom
1	OK	OK	No start	No start	SEC-103
2	OK	NG	OK	OK	DLK-260
3	OK	NG	No crank, No start	OK	DLK-262
4	NG	NG	No crank, No start	OK	DLK-264
5	NG	NG	No start	No start	DLK-265
6	OK	OK	No crank, No start	OK	SEC-104
7	NG	OK	OK	OK	DLK-267
8	NG	NG	OK	OK	DLK-268
9	Poor range	OK	OK	OK	DLK-269

SYMPTOM TABLE 2 (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NORMALLY)

No.	Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)	Symptom
1	NG	OK	OK	OK	DLK-271
2	NG	NG	No crank, No start	OK	DLK-272
3	NG	NG	No crank, No start	No crank, No start	DLK-274
4	OK	OK	No crank, No start	No crank, No start	SEC-106
5	OK	NG	No crank, No start	OK	SEC-107
6	Poor range	OK	OK	OK	DLK-276

ALL DOORS DO NOT LOCK/UNLOCK OR TRUNK/BACK DOOR DO NOT OPEN WITH REQUEST SWITCH

Description

INFOID:0000000015268632

All doors do not lock/unlock using front door request switch.

NOTE:

Before starting diagnosis check that vehicle condition is as shown in “Conditions of vehicle”, and check each symptom.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
OK	NG	OK	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

- “LOCK/UNLOCK BY I-KEY” setting in “Work support” mode of “INTELLIGENT KEY” of “BCM” is ON.
- Registered Intelligent Key is within the detection area of outside key antenna.

DIAGNOSIS PROCEDURE

Refer to DLK-260, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268633

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.PERFORM SELF-DIAGNOSIS RESULT

Select “Self Diagnostic Result” mode of “BCM”, and check if DTC is detected.

Is DTC detected?

YES >> Perform the trouble diagnosis for detected DTC.
NO >> GO TO 3.

3.CHECK OUTSIDE KEY ANTENNA

Use SIGNAL TECH II to check each outside key antenna. For the inspection method and how to use SIGNAL TECH II, refer to “NISSAN/INFINITI SIGNAL TECH II USER GUIDE”.

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 5.

4.CHECK INTELLIGENT KEY OUTPUT SIGNAL

Use SIGNAL TECH II to check Intelligent Key outside signal. For the inspection method and how to use SIGNAL TECH II, refer to “NISSAN/INFINITI SIGNAL TECH II USER GUIDE”.

Is the inspection result normal?

YES >> GO TO 6.
NO >> Replace the malfunctioning outside key antenna. Refer to DLK-335, "DRIVER SIDE : Removal and Installation" or DLK-335, "PASSENGER SIDE : Removal and Installation".

5.CHECK DOOR REQUEST SWTICH

Check each door request switch.

- Front door: Refer to DLK-206, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts. Refer to DLK-333, "DRIVER SIDE : Removal and Installation" or DLK-333, "PASSENGER SIDE : Removal and Installation".

6. REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (REQ SW/PUSH SW) (ALL KEYS)

Description

INFOID:0000000015268634

All doors do not lock/unlock using door request switch, and engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

NOTE:

Before starting diagnosis check that vehicle condition is as shown in “Conditions of vehicle”, and check each symptom.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
OK	NG	No crank, No start	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

- “LOCK/UNLOCK BY I-KEY” setting in “Work support” mode of “INTELLIGENT KEY” of “BCM” is ON.
- “ENGINE START BY I-KEY” setting in “Work support” mode of “INTELLIGENT KEY” of “BCM” is ON.

DIAGNOSIS PROCEDURE

Refer to DLK-262, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268635

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK OUTSIDE KEY ANTENNA AND INSIDE KEY ANTENNA

Use SIGNAL TECH II to check each outside key antenna and inside key antenna. For the inspection method and how to use SIGNAL TECH II, refer to “NISSAN/INFINITI SIGNAL TECH II USER GUIDE”.

Is the inspection result normal?

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

3.REGISTER INTELLIGENT KEY

1. Register the Intelligent Key again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 4.

4.REPLACE INTELLIGENT KEY

1. Replace the Intelligent Key and perform registration again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 5.

5.REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".

2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ALL I-KEY/REQ SW/PUSH SW)

Description

INFOID:0000000015268636

All doors do not lock/unlock using door request switch, Intelligent Key, and engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	NG	No crank, No start	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

“ENGINE START BY I-KEY” setting in “Work support” mode of “INTELLIGENT KEY” of “BCM” is ON.

DIAGNOSIS PROCEDURE

Refer to DLK-264, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268637

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.
Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.PERFORM SELF-DIAGNOSIS RESULT

Select “Self Diagnostic Result” mode of “BCM”, and check if DTC “B26FF” is detected.

Is DTC “B26FF” detected?

YES >> Perform the trouble diagnosis for detected DTC.
NO >> GO TO 3.

3.CHECK INTELLIGENT KEY BATTERY

Check Intelligent Key battery.
Refer to DLK-235, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts. Refer to DLK-339, "Removal and Installation".

4.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-225, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts. Refer to DLK-338, "Removal and Installation".

5.REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ALL KEYS)

Description

INFOID:0000000015268638

Intelligent Key system all functions cannot operate (door lock and engine start).

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	NG	No start	No start

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

“ENGINE START BY I-KEY” setting in “Work support” mode of “INTELLIGENT KEY” of “BCM” is ON.

DIAGNOSIS PROCEDURE

Refer to DLK-265, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268639

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.
Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY-1

For both Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked.

- Check if the Intelligent Key that is checked is the Intelligent Key for a different NISSAN/INFINITI vehicle that the user owns.
- Check that the Intelligent Key buttons match the vehicle specifications.

Does the Intelligent Key belong to the vehicle to be checked?

YES >> GO TO 3.
NO >> Check Intelligent Key button operation using a registered Intelligent Key that belongs to the vehicle.

3.CHECK INTELLIGENT KEY-2

Check the inside of the both Intelligent Keys for rust or corrosion by water. Simultaneously check the internal circuits for damage.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key.

4.REGISTER INTELLIGENT KEY

1. Register the Intelligent Key again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 5.

5.REPLACE INTELLIGENT KEY

1. Replace the Intelligent Key and perform registration again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 6.

6. REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check the operation after replacement.

Is the inspection result normal?

YES >> Inspection End
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY

Description

INFOID:0000000015268640

All doors do not lock/unlock using Intelligent Key button.

NOTE:

Before starting diagnosis check that vehicle condition is as shown in “Conditions of vehicle”, and check each symptom.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	OK	OK	OK

CONDITIONS OF VEHICLE (OPERATING CONDITIONS)

Registered Intelligent Key is within the detection area of remote keyless entry receiver.

DIAGNOSIS PROCEDURE

Refer to DLK-267, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268641

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY OUTPUT SIGNAL

Use SIGNAL TECH II to check Intelligent Key output signal. For the inspection method and how to use SIGNAL TECH II, refer to “NISSAN/INFINITI SIGNAL TECH II USER GUIDE”.

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-73, "Removal and Installation".

NO >> Replace Intelligent Key.

DOOR DOES NOT LOCK/UNLOCK WITH DOOR REQUEST SWITCH AND INTELLIGENT KEY

Description

INFOID:0000000015268642

All doors do not lock/unlock using door request switch or Intelligent Key button.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	NG	OK	OK

DIAGNOSIS PROCEDURE

Refer to DLK-268, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268643

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK POWER DOOR LOCK OPERATION

Check door lock/unlock using door lock and unlock switch.

Does door lock/unlock using door lock and unlock switch?

YES >> GO TO 3.

NO >> Refer to [DOOR DOES NOT LOCK/UNLOCK WITH DOOR LOCK AND UNLOCK SWITCH].

3.REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ALL KEYS)

Description

INFOID:0000000015268644

Intelligent Key button operation has poor range.

SYMPTOM TABLE (BOTH INTELLIGENT KEYS HAVE THE SAME SYMPTOMS)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (registered Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
Poor range	OK	OK	OK

DIAGNOSIS PROCEDURE

Refer to DLK-269, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268645

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.
Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning operates.

Is the Intelligent Key low battery warning operated?

YES >> GO TO 3.
NO >> Replace Intelligent Key battery. Refer to DLK-339, "Removal and Installation".

3.CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.
Refer to DLK-235, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key battery. Refer to DLK-339, "Removal and Installation".

4.PERFORM SELF-DIAGNOSIS RESULT-1

Select “Self Diagnostic Result” mode of “BCM”, and check if DTC “B26FF” is detected.

Is DTC “B26FF” detected?

YES >> Perform the trouble diagnosis for detected DTC.
NO >> GO TO 5.

5.REMOTE AFTERMARKET DEVICE

1. If the vehicle is equipped with any interference-generating aftermarket device such as a vehicle security system, charger and remote engine starter etc., remove them.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 6.

6.CHECK REMOTE KEYLESS ENTRY RECEIVER

Check remote keyless entry receiver.
Refer to DLK-225, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace the malfunctioning parts.

7. REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK WITH INTELLIGENT KEY (ONE KEY)

Description

INFOID:0000000015268646

All doors do not lock/unlock using Intelligent Key button. (One Intelligent Key has the symptom, other keys operate normally.)

NOTE:

Before starting diagnosis check that vehicle condition is as shown in “Conditions of vehicle”, and check each symptom.

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NORMALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	OK	OK	OK

DIAGNOSIS PROCEDURE

Refer to DLK-271, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268647

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.

Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY OUTPUT SIGNAL

Use SIGNAL TECH II to check Intelligent Key output signal. For the inspection method and how to use SIGNAL TECH II, refer to “NISSAN/INFINITI SIGNAL TECH II USER GUIDE”.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace Intelligent Key.

3.REGISTER INTELLIGENT KEY

1. Register the Intelligent Key again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 4.

4.REPLACE INTELLIGENT KEY

1. Replace the Intelligent Key and perform registration again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> GO TO 5.

5.REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

DOOR DOES NOT LOCK/UNLOCK AND ENGINE DOES NOT START (ONE I-KEY/REQ SW/PUSH SW)

Description

INFOID:0000000015268648

All doors do not lock/unlock using door request switch or Intelligent Key, and engine does not start when push-button ignition switch is pressed while carrying Intelligent Key. (One Intelligent Key has the symptom, other keys operate normally.)

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NORMALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	NG	No crank, No start	OK

DIAGNOSIS PROCEDURE

Refer to DLK-272, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268649

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.
Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY

Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage. Squeeze, twist or bend the Intelligent Key and check the functionality again. Is the Intelligent Key operating normally?

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace Intelligent Key.

3.CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key battery. Refer to DLK-339, "Removal and Installation".

4.REGISTER INTELLIGENT KEY

1. Register the Intelligent Key again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 5.

5.REPLACE INTELLIGENT KEY

1. Replace the Intelligent Key and perform registration again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 6.

6. REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Confirm the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

INTELLIGENT KEY SYSTEM ALL FUNCTIONS CANNOT OPERATE (ONE KEY)

Description

INFOID:0000000015268650

Intelligent Key system all functions cannot operate (door lock and engine start). (One Intelligent Key has the symptom, other keys operate normally.)

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NORMALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
NG	NG	No crank, No start	No crank, No start

DIAGNOSIS PROCEDURE

Refer to DLK-274, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268651

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.
Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY-1

For Intelligent Key that cannot be used for door lock and unlock, check that the Intelligent Key belongs to the vehicle to be checked.

Does the Intelligent Key belong to the vehicle to be checked?

YES >> GO TO 3.
NO >> Check Intelligent Key button operation using a registered Intelligent Key that belongs to the vehicle.

3.CHECK INTELLIGENT KEY-2

Check the inside of the Intelligent Key for rust or corrosion by water. Simultaneously check the internal circuits for damage.

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace Intelligent Key.

4.REGISTER INTELLIGENT KEY

1. Register the Intelligent Key again.
2. Check the operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 5.

5.REPLACE INTELLIGENT KEY

1. Replace the Intelligent Key and perform registration again.
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> GO TO 6.

6. REPLACE BCM

1. Replace BCM. Refer to BCS-73, "Removal and Installation".
2. Check operation after replacement.

Is the inspection result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

INTELLIGENT KEY BUTTON OPERATION HAS POOR RANGE (ONE KEY)

Description

INFOID:0000000015268652

Intelligent Key button operation has poor range. (One Intelligent Key has the symptom, other keys operate normally.)

SYMPTOM TABLE (ONE INTELLIGENT KEY HAS THE SYMPTOM, OTHER KEYS OPERATE NORMALLY)

Door lock operation (remote keyless entry)	Door lock operation (request switch)	Engine started with push-button ignition switch operation (Intelligent Key is within the detection area of inside key antenna)	Engine started with push-button ignition switch operation (registered Intelligent Key placed next to push-button ignition switch)
Poor range	OK	OK	OK

DIAGNOSIS PROCEDURE
Refer to DLK-276, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000015268653

1.CHECK INTELLIGENT KEY SYSTEM SYMPTOM TABLE

Check Intelligent Key system symptom table.
Refer to DLK-259, "Diagnosis Procedure".

>> GO TO 2.

2.CHECK INTELLIGENT KEY LOW BATTERY WARNING

Check that the Intelligent Key low battery warning operates.

Is the Intelligent Key low battery warning operated?

YES >> Replace Intelligent Key battery. Refer to DLK-339, "Removal and Installation".
NO >> GO TO 3.

3.CHECK INTELLIGENT KEY BATTERY

Check the Intelligent Key battery.

Is the inspection result normal?

YES >> Replace Intelligent Key and register new Intelligent Key.
NO >> Replace Intelligent Key battery. Refer to DLK-339, "Removal and Installation".

AUTOMATIC BACK DOOR OPERATION DOES NOT OPERATE
ALL SWITCHES

ALL SWITCHES : Description

INFOID:0000000014911067

Automatic back door open/close function does not operate using all switches.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-40, "System Description".

ALL SWITCHES : Diagnosis Procedure

INFOID:0000000014911068

1. CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2. CHECK BACK DOOR AUTO CLOSURE FUNCTION

Check back door auto closure function.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Refer to DLK-280, "OPEN/CLOSURE FUNCTION : Diagnosis Procedure".

3. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-204, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4. CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-204, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5. CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-251, "LH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6. CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-248, "RH : Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.
NO >> Repair or replace the malfunctioning parts.

7. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

AUTOMATIC BACK DOOR SWITCH

AUTOMATIC BACK DOOR SWITCH : Description

INFOID:0000000014911069

Automatic back door open/close function does not operate using automatic back door switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-40, "System Description".

AUTOMATIC BACK DOOR SWITCH : Diagnosis Procedure

INFOID:0000000014911070

1. CHECK AUTOMATIC BACK DOOR SWITCH

Check automatic back door switch.

Refer to DLK-243, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.

NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

AUTOMATIC BACK DOOR CLOSE SWITCH

AUTOMATIC BACK DOOR CLOSE SWITCH : Description

INFOID:0000000014911071

Automatic back door open/close function does not operate using automatic back door close switch.

NOTE:

Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-40, "System Description".

AUTOMATIC BACK DOOR CLOSE SWITCH : Diagnosis Procedure

INFOID:0000000014911072

1. CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2. CHECK AUTOMATIC BACK DOOR CLOSE SWITCH

Check automatic back door close switch.

Refer to DLK-239, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.

Refer to DLK-241, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

INTELLIGENT KEY

INTELLIGENT KEY : Description

INFOID:0000000014911073

Automatic back door open/close function does not operate using Intelligent Key.

NOTE:
Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-27, "INTELLIGENT KEY SYSTEM : System Description".

INTELLIGENT KEY : Diagnosis Procedure

INFOID:0000000014911074

1.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK REMOTE KEYLESS ENTRY FUNCTION

Check remote keyless entry function.

Does door lock/unlock with Intelligent Key button?

YES >> GO TO 4.
NO >> Refer to DLK-267, "Diagnosis Procedure".

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

BACK DOOR OPENER SWITCH

BACK DOOR OPENER SWITCH : Description

INFOID:0000000014911075

Automatic back door open/close function does not operate using back door opener switch.

NOTE:
Automatic back door open/close operation condition is extremely complicated. During operating confirmations, reconfirm the list above twice in order to ensure proper operation. Refer to DLK-40, "System Description".

BACK DOOR OPENER SWITCH : Diagnosis Procedure

INFOID:0000000014911076

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.

NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-241, "Component Function Check".

Is the inspection result normal?

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

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-231, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

OPEN/CLOSURE FUNCTION

OPEN/CLOSURE FUNCTION : Description

INFOID:0000000014911077

Back door auto closure function does not operate when back door opening and closing operations are performed.

OPEN/CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000014911078

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK DTC WITH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-241, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-231, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning parts.

5.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.
Refer to DLK-254, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair or replace the malfunctioning parts.

6.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

OPEN FUNCTION

OPEN FUNCTION : Description

INFOID:0000000014911079

Back door auto closure function does not operate when back door opening operations are performed.

OPEN FUNCTION : Diagnosis Procedure

INFOID:0000000014911080

1.CONFIRM THE OPERATION

1. Turn ON automatic back door main switch.
2. Confirm the operation.

Is the result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-241, "Component Function Check".

Is the inspection result normal?

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

3.CHECK BACK DOOR OPENER SWITCH

Check back door opener switch.
Refer to DLK-231, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

CLOSURE FUNCTION

CLOSURE FUNCTION : Description

INFOID:0000000014911081

Back door auto closure function does not operate when back door closing operations are performed.

CLOSURE FUNCTION : Diagnosis Procedure

INFOID:0000000014911082

1.CHECK HALF LATCH SWITCH

Check half latch switch.
Refer to DLK-245, "Component Function Check".

Is the inspection result normal?

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

2.CHECK BACK DOOR CLOSURE MOTOR

Check back door closure motor.
Refer to DLK-254, "Diagnosis Procedure".

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

AUTOMATIC BACK DOOR WARNING DOES NOT OPERATE

BUZZER

BUZZER : Description

INFOID:0000000014911083

Automatic back door warning chime does not operate when automatic back door warning function are performed.

BUZZER : Diagnosis Procedure

INFOID:0000000014911084

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK BACK DOOR WARNING CHIME

Check back door warning chime.
Refer to DLK-255, "Diagnosis Procedure".

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

HAZARD WARNING LAMP

HAZARD WARNING LAMP : Description

INFOID:0000000014911085

Hazard warning lamp does not operate when automatic back door warning function are performed.

HAZARD WARNING LAMP : Diagnosis Procedure

INFOID:0000000014911086

1.CHECK DTC WITCH AUTOMATIC BACK DOOR CONTROL MODULE

Check that DTC is not detected with automatic back door control module.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Perform trouble diagnosis relevant to DTC indicated.

2.CHECK DTC WITCH BCM

Check that DTC is not detected with BCM.

Is the inspection result normal?

YES >> GO TO 3.
NO >> Perform trouble diagnosis relevant to DTC indicated.

3.CHECK GROUND CIRCUIT

Check automatic back door control module ground circuit.
Refer to DLK-204, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4.CHECK HAZARD AND HORN REMINDER FUNCTION

Check hazard and horn reminder function.

Is the inspection result normal?

YES >> GO TO 5.
NO >> Refer to DLK-238, "Diagnosis Procedure".

5. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

AUTOMATIC BACK DOOR FUNCTIONS DO NOT CANCEL

Diagnosis Procedure

INFOID:0000000014911087

1.CHECK THE OPERATION

Check automatic back door main switch function.

NOTE:

When the main switch is OFF, the automatic back door operation is not available by back door opener switch and automatic back door close switch.

Is the inspection result normal?

YES >> Automatic back door system is normal.
NO >> GO TO 2.

2.CHECK AUTOMATIC BACK DOOR MAIN SWITCH

Check automatic back door main switch.
Refer to DLK-241, "Component Function Check".

Is the inspection result normal?

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

3.REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

AUTOMATIC BACK DOOR ANTI-PINCH FUNCTION DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014911088

1. CHECK POWER SUPPLY AND GROUND CIRCUIT

Check automatic back door control module power supply and ground circuit.
Refer to DLK-204, "AUTOMATIC BACK DOOR CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

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

2. CHECK TOUCH SENSOR LH

Check touch sensor LH.
Refer to DLK-249, "LH : Component Function Check".

Is the inspection result normal?

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

3. CHECK TOUCH SENSOR RH

Check touch sensor RH.
Refer to DLK-247, "RH : Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace the malfunctioning parts.

4. REPLACE AUTOMATIC BACK DOOR CONTROL MODULE

1. Replace automatic back door control module. Refer to DLK-343, "Removal and Installation".
2. Confirm the operation after replacement.

Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

INTEGRATED HOMELINK TRANSMITTER DOES NOT OPERATE

Diagnosis Procedure

INFOID:0000000014911089

1. CHECK INTEGRATED HOMELINK® TRANSMITTER

Check integrated Homelink® transmitter.
Refer to DLK-257, "Component Function Check".

Is the inspection result normal?

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

2. REPLACE AUTO ANTI-DAZZLING INSIDE MIRROR

Replace auto anti-dazzling inside mirror.
Refer to MIR-21, "Removal and Installation".

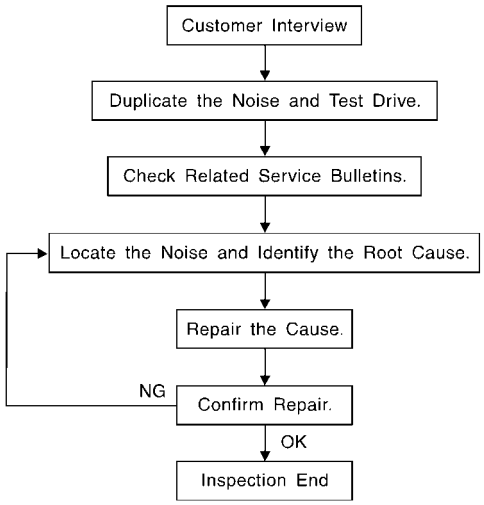
Is the result normal?

YES >> Inspection End.
NO >> Check intermittent incident. Refer to GI-54, "Intermittent Incident".

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow

INFOID:0000000014911090



SBT842

CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to DLK-292, "Diagnostic Worksheet". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
  Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor)
  Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
  Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door)
  Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand)
  Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)
  Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumble bee)
  Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on CVT and A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
   - removing the components in the area that you suspect the noise is coming from.
     Do not use too much force when removing clips and fasteners, otherwise clips and fasteners can be broken or lost during the repair, resulting in the creation of new noise.
   - tapping or pushing/pulling the component that you suspect is causing the noise.
     Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
   - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
   - placing a piece of paper between components that you suspect are causing the noise.
   - looking for loose components and contact marks.
     Refer to DLK-289, "Generic Squeak and Rattle Troubleshooting".

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- separate components by repositioning or loosening and retightening the component, if possible.
- insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A NISSAN Squeak and Rattle Kit (J-50397) is available through your authorized NISSAN Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
NOTE:

- Always check with the Parts Department for the latest parts information.
- The materials contained in the NISSAN Squeak and Rattle Kit (J-50397) are listed on the inside cover of the kit; and can each be ordered separately as needed.
- The following materials not found in the kit can also be used to repair squeaks and rattles.
- SILICONE GREASE: Use instead of UHMW tape that will be visible or does not fit. The silicone grease will only last a few months.
- SILICONE SPRAY: Use when grease cannot be applied.
- DUCT TAPE: Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Generic Squeak and Rattle Troubleshooting

INFOID:0000000014911091

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. Cluster lid A and the instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar finisher
4. Instrument panel to windshield
5. Instrument panel pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

1. Shift selector assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

1. Finisher and inner panel making a slapping noise
2. Inside handle escutcheon to door finisher
3. Wiring harnesses tapping
4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-50397) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner.
In addition look for:

1. Trunk lid bumpers out of adjustment
2. Trunk lid striker out of adjustment
3. The trunk lid torsion bars knocking together
4. A loose license plate or bracket

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
2. Sun visor shaft shaking in the holder
3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

OVERHEAD CONSOLE (FRONT AND REAR)

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage.
In addition look for:

1. Loose harness or harness connectors.
2. Front console map/reading lamp lens loose.

3. Loose screws at console attachment points.

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

1. Headrest rods and holder
2. A squeak between the seat pad cushion and frame
3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noise include:

1. Any component installed to the engine wall
2. Components that pass through the engine wall
3. Engine wall mounts and connectors
4. Loose radiator installation pins
5. Hood bumpers out of adjustment
6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine rpm or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

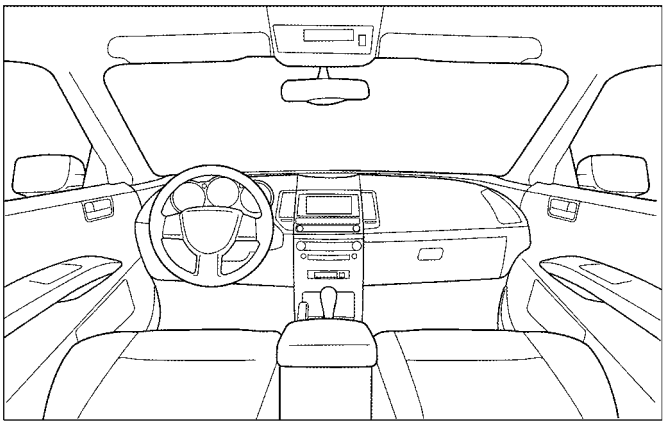
Diagnostic Worksheet

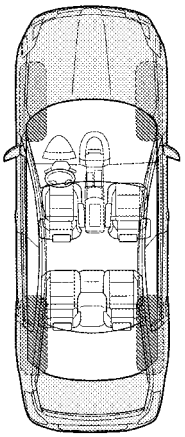
INFOID:0000000014911092

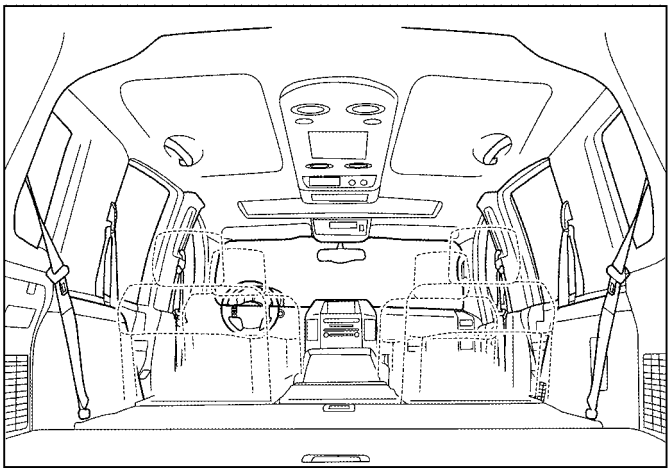
Dear Customer:
We are concerned about your satisfaction with your vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your vehicle right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service advisor or technician to ensure we confirm the noise you are hearing.

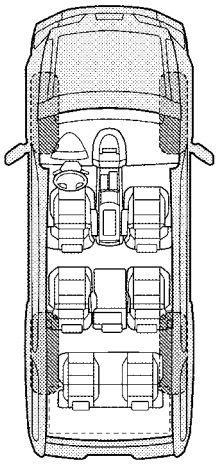
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.









Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

LAIA0072E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (please check the boxes that apply)

- ☐ Anytime
- ☐ 1st time in the morning
- ☐ Only when it is cold outside
- ☐ Only when it is hot outside
- ☐ After sitting out in the rain
- ☐ When it is raining or wet
- ☐ Dry or dusty conditions
- ☐ Other:

III. WHEN DRIVING:

- ☐ Through driveways
- ☐ Over rough roads
- ☐ Over speed bumps
- ☐ Only about ____ mph
- ☐ On acceleration
- ☐ Coming to a stop
- ☐ On turns: left, right or either (circle)
- ☐ With passengers or cargo
- ☐ Other: _____
- ☐ After driving _____ miles or _____ minutes

IV. WHAT TYPE OF NOISE

- ☐ Squeak (like tennis shoes on a clean floor)
- ☐ Creak (like walking on an old wooden floor)
- ☐ Rattle (like shaking a baby rattle)
- ☐ Knock (like a knock at the door)
- ☐ Tick (like a clock second hand)
- ☐ Thump (heavy muffled knock noise)
- ☐ Buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name _____

W.O.# _____ Date: _____

This form must be attached to Work Order

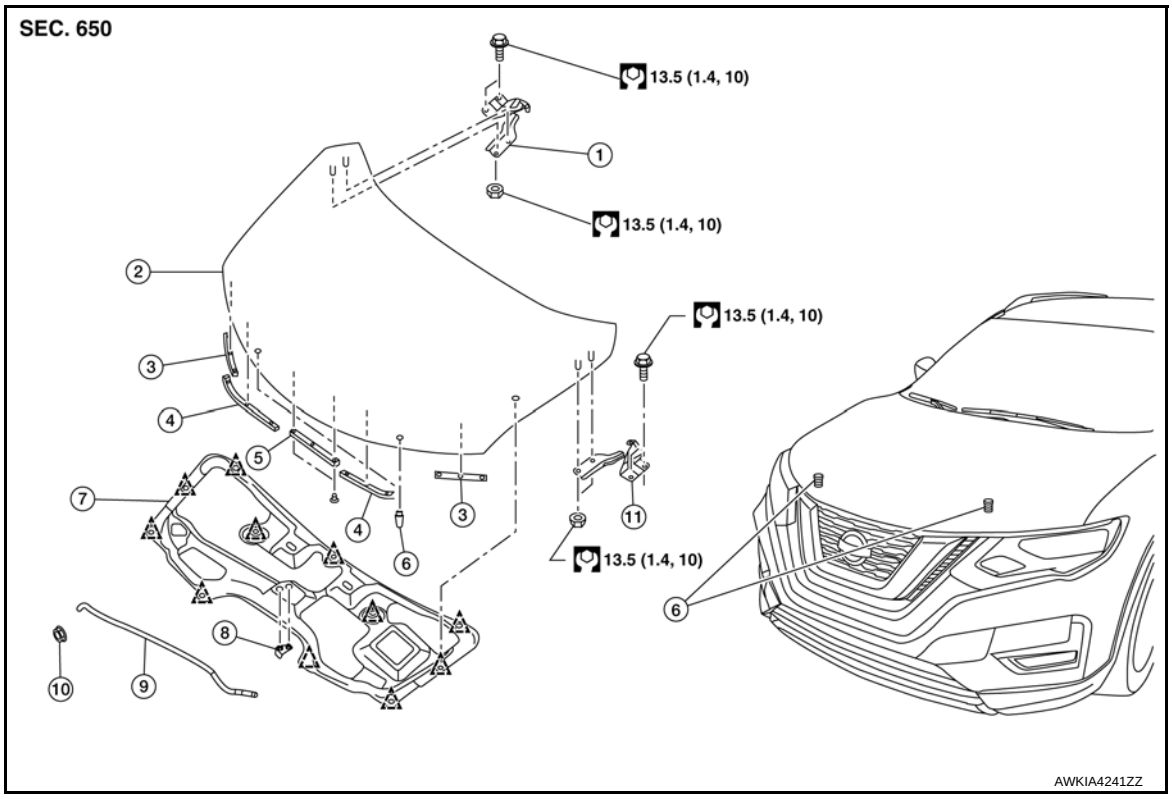
LAIA0071E

REMOVAL AND INSTALLATION

HOOD

Exploded View

INFOID:0000000014625213



1. Hood hinge (RH)
2. Hood
3. Hood side seal
4. Hood front seal
5. Hood center seal
6. Bumper rubber
7. Hood insulator
8. Hood rod clamp
9. Hood support rod
10. Hood rod grommet
11. Hood hinge (LH)
- Clip

HOOD ASSEMBLY

HOOD ASSEMBLY : Removal and Installation

INFOID:0000000014625214

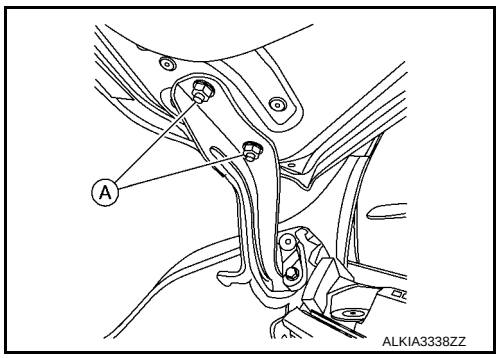
CAUTION:
- **Use two people when removing or installing hood assembly due to its heavy weight.**
- **Use protective tape or shop cloths to protect surrounding components from damage during removal and installation of hood assembly.**

REMOVAL

1. Support the hood assembly using a suitable tool.

   WARNING:
   Bodily injury may occur if hood assembly is not supported properly when removing hood assembly.

2. Remove hood hinge to hood nuts (A) and hood assembly.
NOTE:
RH side shown; LH similar.



INSTALLATION

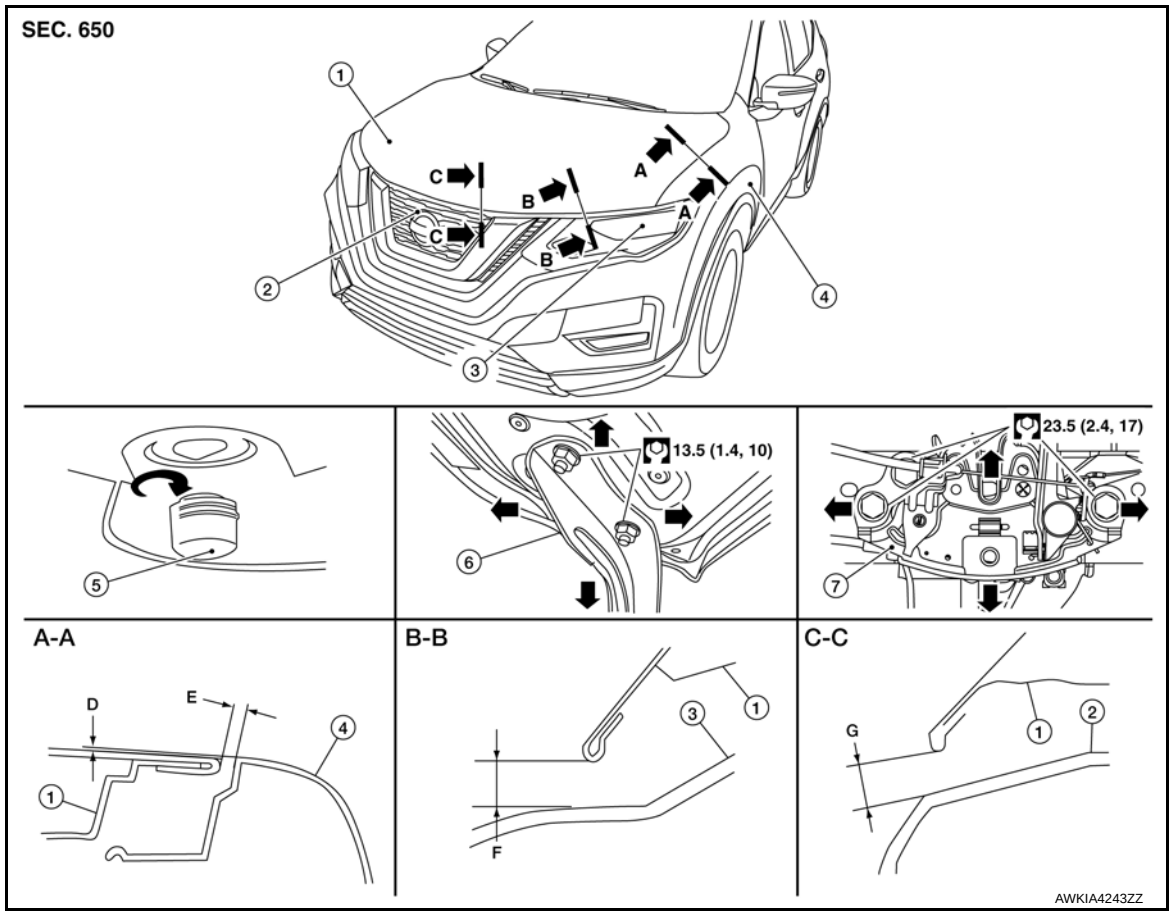
Installation is in the reverse order of removal.

CAUTION:

- **Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.**
- **After installation, perform the hood assembly adjustment procedure. Refer to DLK-295, "HOOD ASSEMBLY : Adjustment".**

HOOD ASSEMBLY : Adjustment

INFOID:0000000014625215



1. Hood assembly
2. Front grille
3. Front combination lamp
4. Fender
5. Bumper rubber
6. Hood hinge
7. Hood lock

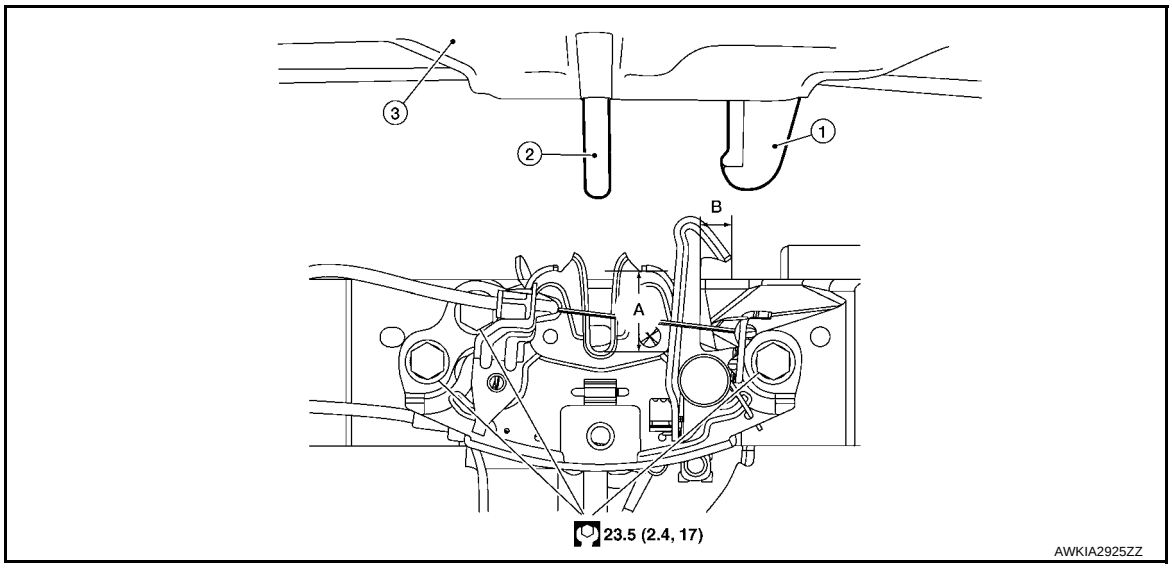
Check the clearance and the surface height between hood and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Parallelism
Hood - Fender	A - A	D	Surface height	0.0 ± 1.0 (0.0 ± 0.04)	1.4 (0.06)
		E	Clearance	3.5 ± 1.0 (0.14 ± 0.04)	1.4 (0.06)
Hood - Front combination lamp	B - B	F	Clearance	9.0 ± 2.0 (0.35 ± 0.08)	2.0 (0.08)
Hood - Front grille	C - C	G	Clearance	9.0 ± 2.0 (0.35 ± 0.08)	2.3 (0.09)

HEIGHT ADJUSTMENT

1. Loosen the hood lock assembly bolts.
2. Adjust the surface height of hood assembly to front grille and front fender according to the specified values by rotating hood bumper rubber.
3. Temporarily tighten hood lock assembly bolts.
4. Adjust (A) and (B) as shown to the following value with hood's own weight by dropping it from approximately 200 mm (7.87 in) height or by pressing hood lightly [approximately 29 N (3.0 kg, 6.5 lb)].



1. Secondary striker
2. Primary striker
3. Hood assembly

A. 20 mm (0.79 in)
B. 6.8 mm (0.27 in)

5. After adjustment, tighten hood hinge nuts and bolts to the specified torque.
   CAUTION:
   - **Check hood hinge rotating part for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
   - **After adjusting, apply touch-up paint (body color) to the head of hood hinge bolts and nuts.**

CLEARANCE ADJUSTMENT

1. Loosen hood hinge nuts and bolts.
2. Loosen the hood lock assembly bolts.
3. Adjust the hood assembly so the clearance measurements are within specifications.
4. Tighten the hood hinge nuts and bolts to specified torque.
5. Tighten the hood lock assembly bolts to specified torque.

HOOD HINGE

HOOD HINGE : Removal and Installation

INFOID:0000000014625216

REMOVAL

1. Remove hood assembly. Refer to DLK-294, "HOOD ASSEMBLY : Removal and Installation".

2. Remove front fender. Refer to DLK-299, "Removal and Installation".
3. Remove hood hinge bolts, and then remove hood hinge.

INSTALLATION

Installation is in the reverse order of removal.

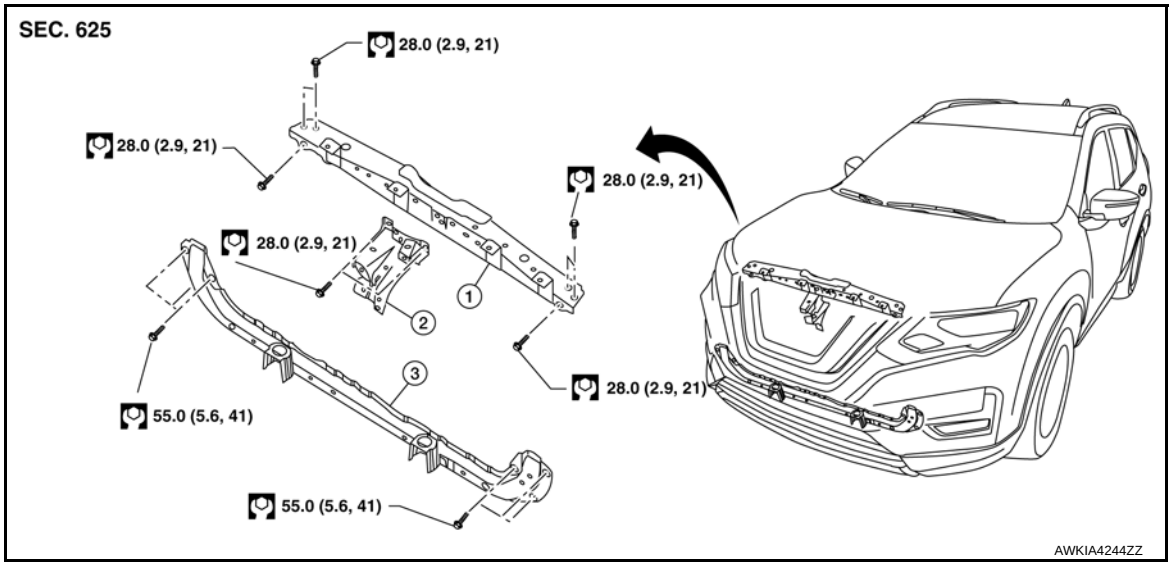
CAUTION:

- **Before installing the hood hinge, apply anticorrosive agent onto the surface of the vehicle.**
- **After installation, perform hood assembly adjustment procedure. Refer to DLK-295, "HOOD ASSEMBLY : Adjustment".**

RADIATOR CORE SUPPORT

Exploded View

INFOID:0000000014625217



1. Radiator core upper support
2. Secondary latch bracket
3. Radiator core lower support

Removal and Installation

INFOID:0000000014625218

CAUTION:
When removing radiator core support upper, be careful not to damage the painted surface.

REMOVAL

Radiator Core Upper Support

1. Remove front combination lamp (LH). Refer to EXL-116, "Removal and Installation" (HALOGEN HEADLAMP) or (LED HEADLAMP) EXL-247, "Removal and Installation"
2. Remove front air duct. Refer to EM-29, "Exploded View".
3. Remove hood lock. Refer to DLK-316, "HOOD LOCK : Removal and Installation".
4. Remove secondary latch. Refer to DLK-317, "SECONDARY LATCH : Removal and Installation".
5. Remove crash zone sensor. Refer to SR-23, "Removal and Installation".
6. Remove bolts and radiator core upper support.

Radiator Core Lower Support

1. Remove front bumper fascia. Refer to EXT-26, "Removal and Installation".
2. Support the radiator using a suitable tool.
3. Remove bolts and radiator core lower support.

INSTALLATION

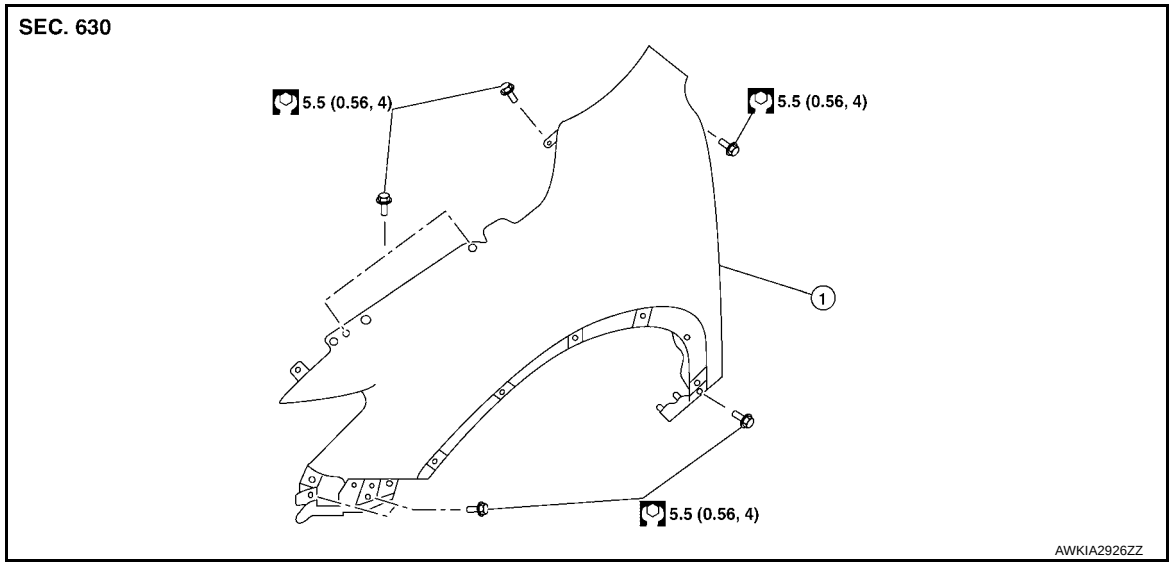
Installation is in the reverse order of removal.

CAUTION:
Tighten bolts to specified torque. Refer to DLK-298, "Exploded View".

FRONT FENDER

Exploded View

INFOID:0000000014625219



1. Front fender

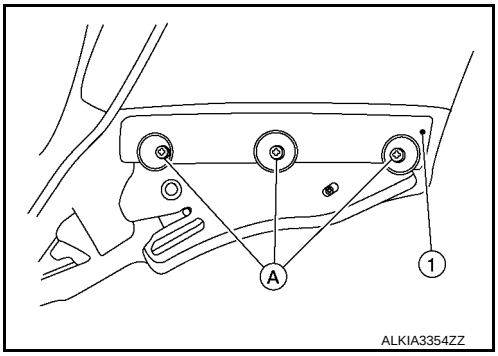
Removal and Installation

INFOID:0000000014625220

CAUTION:
Use a shop cloths to protect the body from being damaged during removal and installation.

REMOVAL

1. Remove front bumper fascia. Refer to EXT-26, "Removal and Installation".
2. Remove front combination lamp. Refer to EXL-116, "Removal and Installation" (HALOGEN HEADLAMP) or EXL-247, "Removal and Installation". (LED HEADLAMP).
3. Remove center mudguard. Refer to EXT-47, "Removal and Installation - Center Mudguard".
4. Remove screws (A) and front fender bracket (1).



5. Remove bolts and front fender.
   CAUTION:
   Use care when removing the front fender. The front fender baffle foam adheres the front fender to the body side outer. Carefully release the baffle foam or damage to the front fender may occur.

INSTALLATION

Installation is in the reverse order of removal.

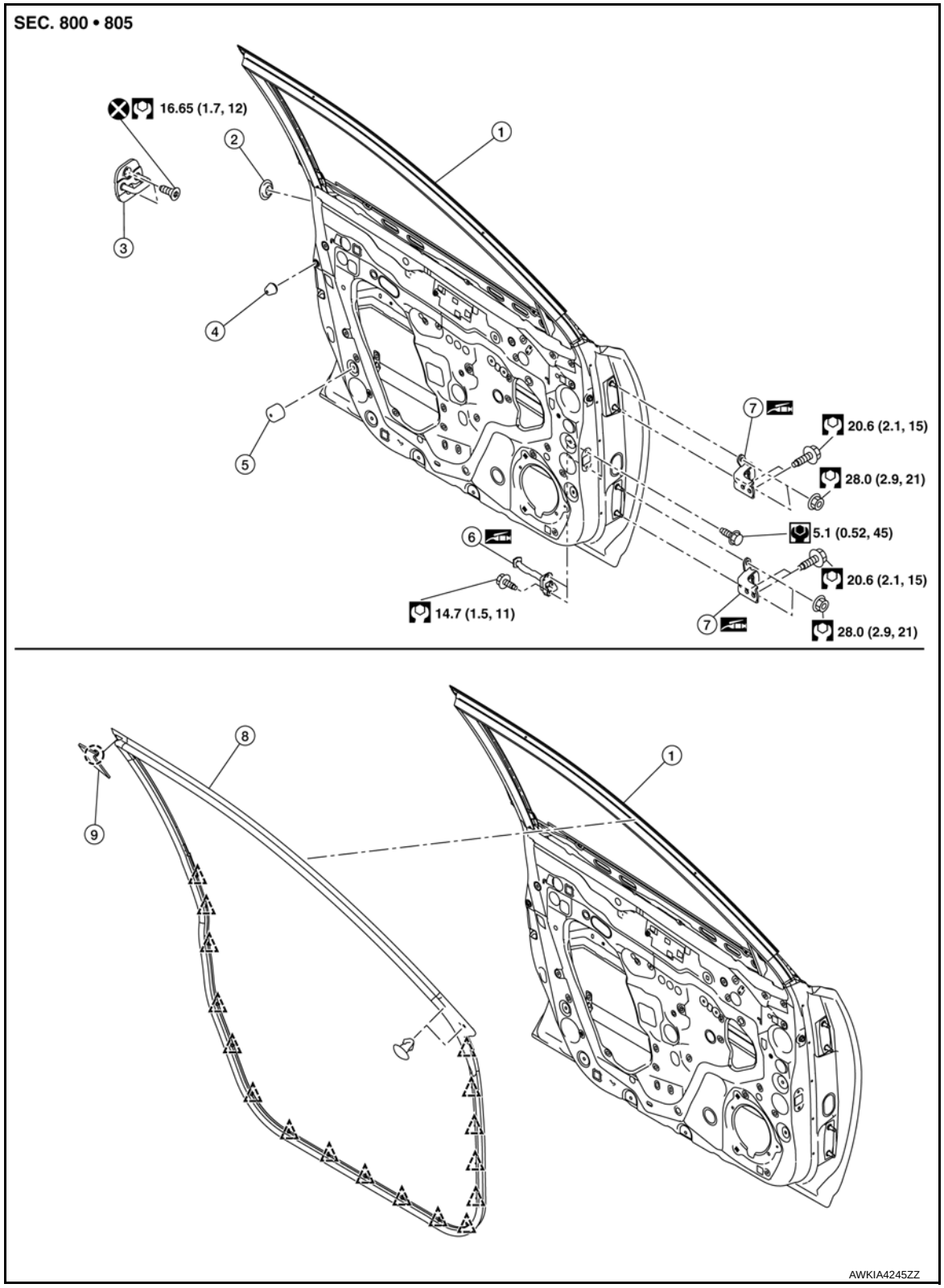
CAUTION:
- **After installation apply touch up paint (body color) to the head of front fender bolts.**
- **After installation, adjust the following components as necessary:**
- **Hood assembly: Refer to DLK-295, "HOOD ASSEMBLY : Adjustment".**
- **Front door: Refer to DLK-302, "DOOR ASSEMBLY : Adjustment".**

- **Tighten bolts to specification. Refer to DLK-299, "Exploded View".**

FRONT DOOR

Exploded View

INFOID:0000000014625221



1. Front door panel
2. Grommet
3. Door striker
4. Bumper rubber
5. Bumper rubber
6. Door check link

7. Front door hinge
8. Weather-strip
9. Weather-strip clip

Pawl
Clip

DOOR ASSEMBLY

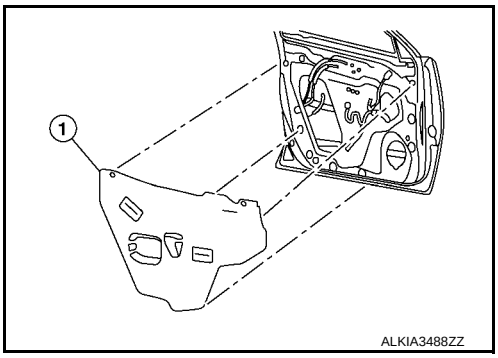
DOOR ASSEMBLY : Removal and Installation

INFOID:0000000014625222

CAUTION:
- **Use two people when removing or installing the front door due to its heavy weight.**
- **When removing and installing front door assembly, support front door with a suitable tool.**

REMOVAL

1. Disconnect the battery negative and positive terminals and wait at least three minutes with the side air bag (satellite) sensor.
2. Remove front door finisher. Refer to INT-15, "Removal and Installation".
3. Remove front door vapor barrier (1).
   NOTE:
   LH side shown; RH similar.



4. Disconnect the harness connectors from the front door.
5. Remove front door harness grommet, then harness from the front door.
6. Remove front door check link bolt (body side).
7. Remove front door hinge nuts (door side) and front door assembly.

INSTALLATION

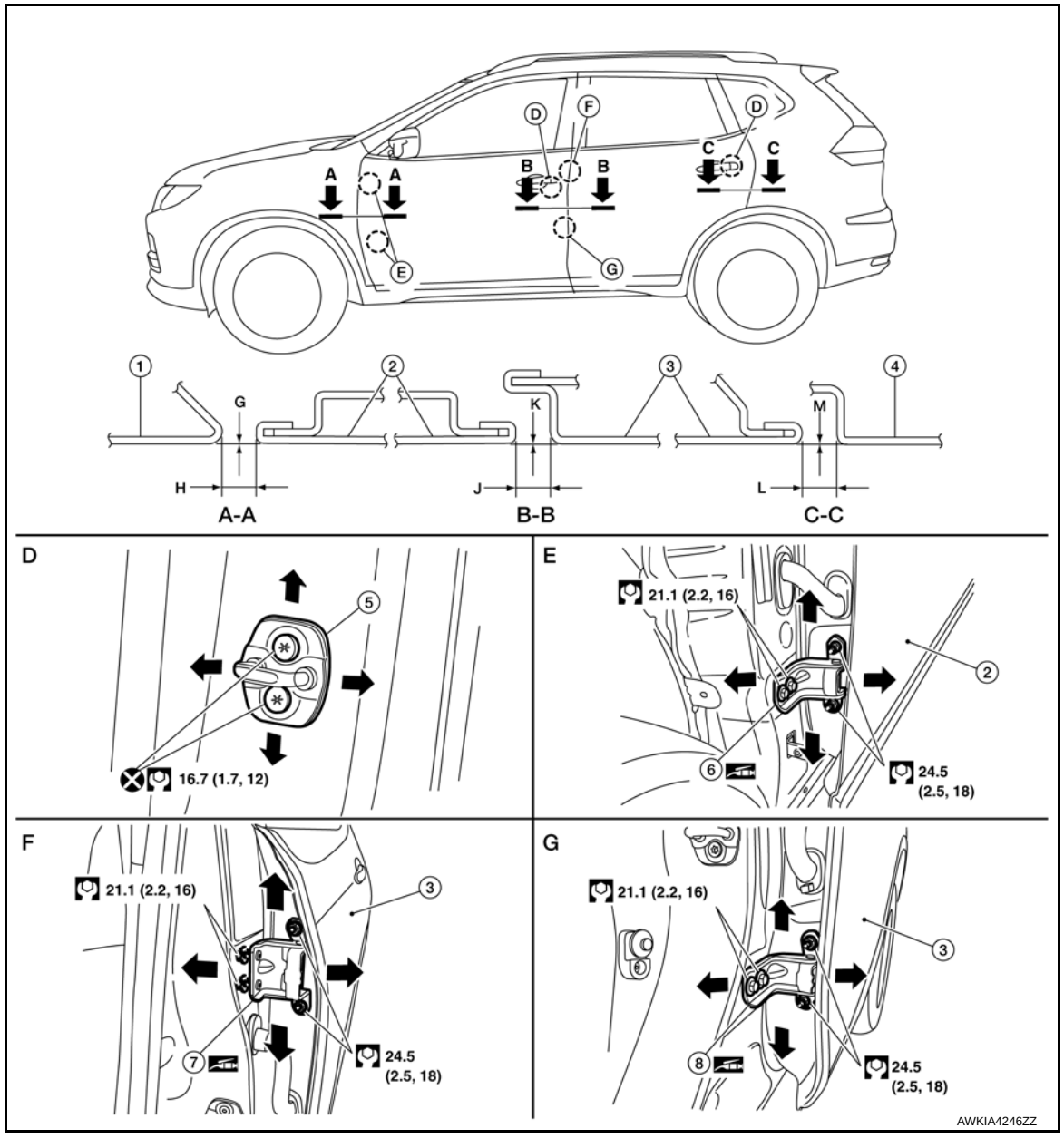
Installation is in the reverse order of removal.

CAUTION:
- **Tighten nuts/bolts to specified torque. Refer to DLK-301, "Exploded View".**
- **Apply anticorrosive agent where necessary.**
- **After installation, check front door open/close and lock/unlock operation.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-302, "DOOR ASSEMBLY : Adjustment".**
- **Perform camera image calibration (with around view monitor). PWC-26, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description" (AROUND VIEWMONITOR SYSTEM).**

DOOR ASSEMBLY : Adjustment

INFOID:0000000014625223

ADJUSTMENT



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Door striker
6. Front door hinge
7. Rear door upper hinge
8. Rear door lower hinge

Check the clearance and surface height between front door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Portion	Section		Standard
Front fender - Front door	A – A	H	4.2 ± 1.0 (0.17 ± 0.04)
		G	± 1.0 (± 0.04)
Front door - Rear door	B – B	J	4.5 ± 1.0 (0.18 ± 0.04)
		K	± 1.0 (± 0.04)
Rear door - Body side outer	C – C	L	4.0 ± 1.0 (0.16 ± 0.04)
		M	± 1.0 (± 0.04)

1. Remove front fender. Refer to DLK-299, "Removal and Installation".
2. Loosen front door hinge nuts (door side).
3. Adjust the surface height of front door according to the specifications provided.
4. Temporarily tighten front door hinge nuts (door side).
5. Loosen front door hinge bolts (body side).
6. Raise front door at rear end to adjust clearance of the front door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
   - **After adjusting, apply touch-up paint (body color) to the head of front door hinge bolts and nuts.**
8. Install front fender. Refer to refer to DLK-299, "Removal and Installation".

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000014625224

REMOVAL

Remove bolts and front door striker.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

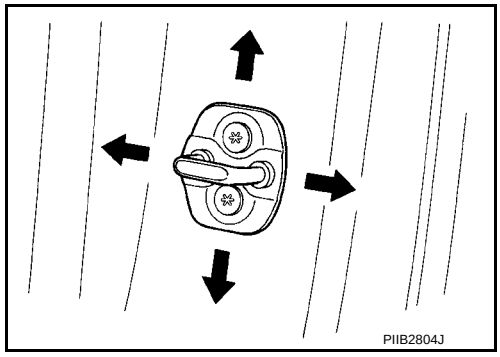
- **Do not reuse front door striker bolts.**
- **After installation, check front door open/close operation. If necessary, adjust the front door striker. Refer to DLK-304, "DOOR STRIKER : Adjustment".**
- **Tighten bolts to specified torque. Refer to DLK-301, "Exploded View".**

DOOR STRIKER : Adjustment

INFOID:0000000014625225

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to DLK-301, "Exploded View".

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000014625226

REMOVAL

1. Remove front fender. Refer to DLK-299, "Removal and Installation".
2. Remove front door assembly. Refer to DLK-302, "DOOR ASSEMBLY : Removal and Installation".
3. Remove front door hinge bolts (body side) and front door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten nuts/bolts to specified torque. Refer to DLK-301, "Exploded View".**

- **Apply anticorrosive agent to the hinge mating surface.**
- **After installation, check front door open/close and lock/unlock operation.**
- **Check door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
- **After installation, perform the front door adjustment procedure. Refer to DLK-302, "DOOR ASSEMBLY : Adjustment".**

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000014625227

REMOVAL

1. Fully close the front door window.
2. Remove front door speaker. Refer to AV-68, "Removal and Installation" (DISPLAY AUDIO WITHOUT BOSE), or AV-149, "Removal and Installation" (DISPLAY AUDIO WITH BOSE), or AV-244, "Removal and Installation" (NAVIGATION WITHOUT BOSE) or AV-358, "Removal and Installation" (NAVIGATION WITH BOSE).
3. Remove door check link bolt (body side).
4. Remove door check link bolts (door side).
5. Remove door check link through the hole in door assembly.

INSTALLATION

Installation is in the reverse order of removal.

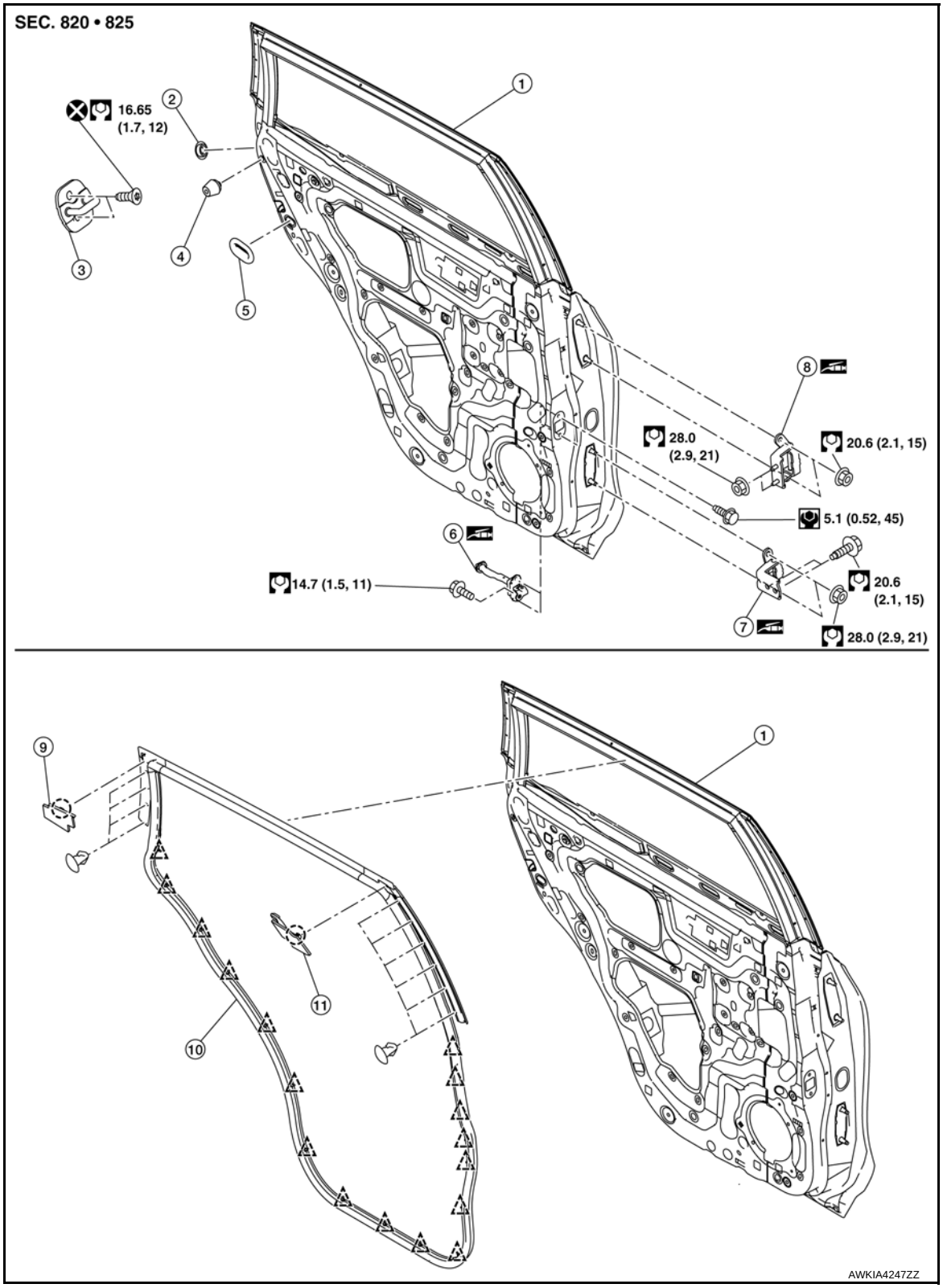
CAUTION:

- **Tighten nuts/bolts to specified torque. Refer to DLK-301, "Exploded View".**
- **After installation, check front door open/close and lock/unlock operation.**
- **Check door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**

REAR DOOR

Exploded View

INFOID:0000000014625228



1. Rear door panel
2. Grommet
3. Door striker
4. Bumper rubber
5. Grommet
6. Door check link

7. Rear door lower hinge
8. Rear door upper hinge
9. Weather-strip clip
10. Weather-strip
Pawl
Clip

DOOR ASSEMBLY

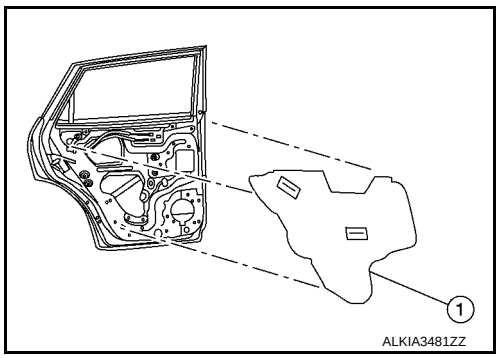
DOOR ASSEMBLY : Removal and Installation

INFOID:0000000014625229

CAUTION:
- **Use two people when removing or installing the rear door due to its heavy weight.**
- **When removing and installing rear door assembly, support rear door using a suitable tool.**

REMOVAL

1. Remove rear door finisher. Refer to INT-18, "Removal and Installation".
2. Remove rear door vapor barrier (1).
   NOTE:
   LH side shown; RH similar.



3. Disconnect the harness connectors from rear door.
4. Remove harness grommet from rear door, then pull out rear door harness from the rear door.
5. Remove rear door check link bolt (body side).
6. Remove rear door hinge nuts (door side) and rear door assembly.

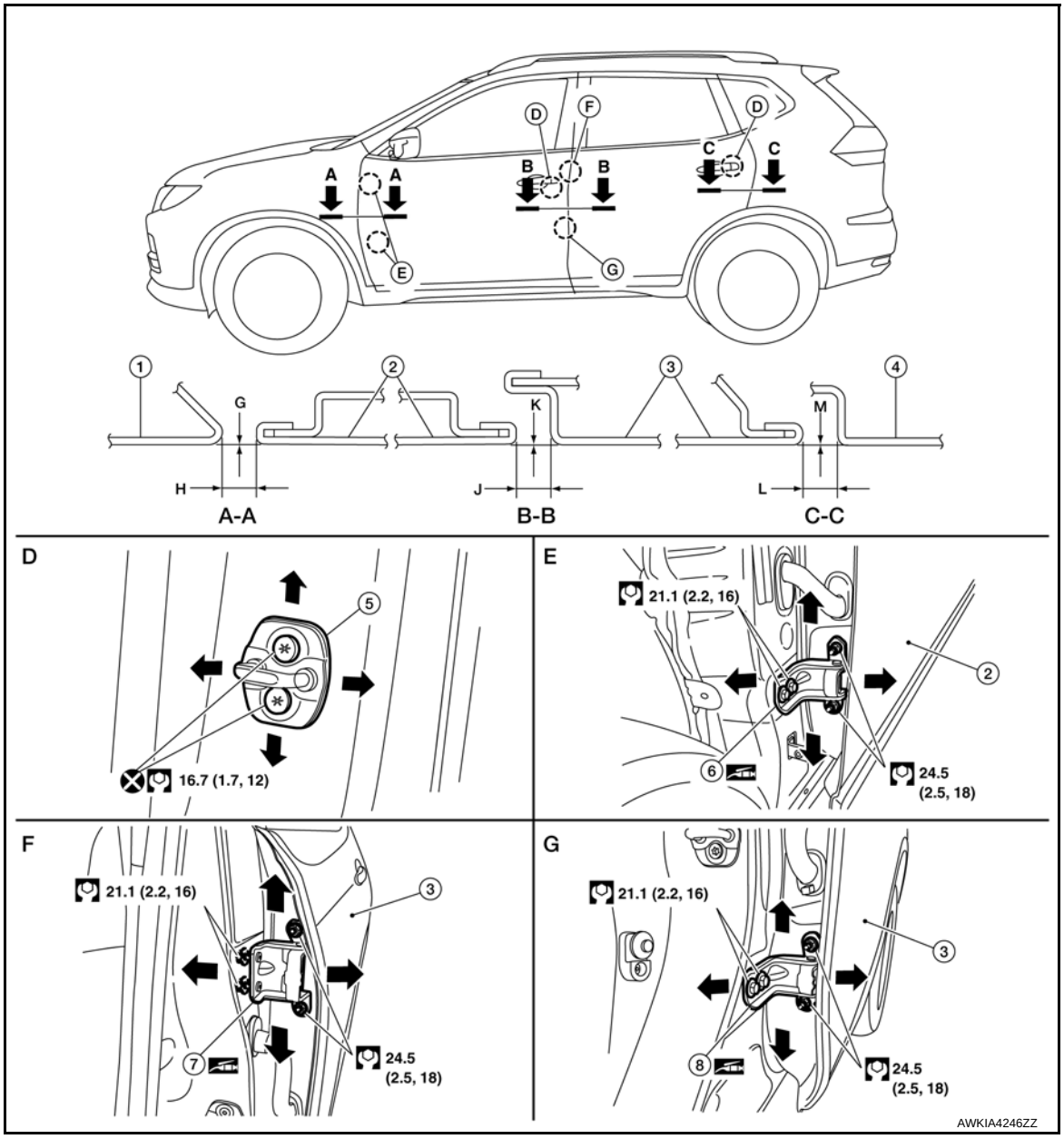
INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
- **Tighten nuts/bolts to specification. Refer to DLK-306, "Exploded View".**
- **Apply anticorrosive agent where necessary.**
- **After installation, check rear door open/close and lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-308, "DOOR ASSEMBLY : Adjustment".**

DOOR ASSEMBLY : Adjustment

INFOID:0000000014625230



1. Front fender
2. Front door
3. Rear door
4. Body side outer
5. Door striker
6. Front door hinge
7. Rear door upper hinge
8. Rear door lower hinge

Check the clearance and surface height between rear door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedures.

Unit: mm (in)

Portion	Section		Standard
Front fender - Front door	A – A	H	4.2 ± 1.0 (0.17 ± 0.04)
		G	± 1.0 (± 0.04)
Front door - Rear door	B – B	J	4.3 ± 1.0 (0.17 ± 0.04)
		K	± 1.0 (± 0.04)

Portion	Section		Standard
Rear door - Body side outer	C – C	L	4.0 ± 1.0 (0.16 ± 0.04)
		M	± 1.0 (± 0.04)

1. Remove center pillar lower finisher. Refer to INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation".
2. Loosen rear door hinge nuts (door side).
3. Adjust the surface height of rear door according to specifications provided.
4. Temporarily tighten rear door hinge nuts (door side).
5. Loosen rear door hinge nuts and bolts (body side).
6. Raise rear door at rear end to adjust clearance of rear door according to the specifications provided.
7. After adjustment tighten bolts and nuts to the specified torque.
   CAUTION:
   - **Check rear door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
   - **After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.**
8. Install center pillar lower finisher. Refer to INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation".

DOOR STRIKER

DOOR STRIKER : Removal and Installation

INFOID:0000000014625231

REMOVAL

Remove bolts and rear door striker.

INSTALLATION

Installation is in the reverse order of removal.

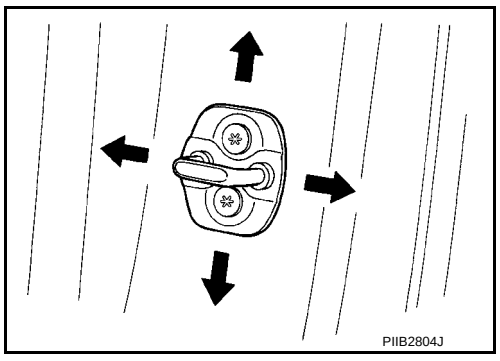
CAUTION:
- **Do not reuse rear door striker bolts.**
- **Tighten bolts to specification. Refer to DLK-306, "Exploded View".**
- **After installation, check rear door open/close operation. If necessary, adjust the door striker. Refer to DLK-309, "DOOR STRIKER : Adjustment".**

DOOR STRIKER : Adjustment

INFOID:0000000014625232

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to DLK-306, "Exploded View".

DOOR HINGE

DOOR HINGE : Removal and Installation

INFOID:0000000014625233

REMOVAL

1. Remove rear door assembly. Refer to DLK-307, "DOOR ASSEMBLY : Removal and Installation".
2. Remove center pillar lower finisher (rear door lower hinge only). Refer to INT-22, "CENTER PILLAR LOWER FINISHER : Removal and Installation".
3. Remove rear door hinge bolts and nuts and rear door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten nuts/bolts to specification. Refer to DLK-306, "Exploded View".**
- **Apply anticorrosive agent onto the hinge mating surface.**
- **After installation, check rear door open/close and lock/unlock operation.**
- **After installation, perform the rear door adjustment procedure. Refer to DLK-308, "DOOR ASSEMBLY : Adjustment".**

DOOR CHECK LINK

DOOR CHECK LINK : Removal and Installation

INFOID:0000000014625234

REMOVAL

1. Fully close the rear door window.
2. Remove rear door speaker. Refer to AV-69, "Removal and Installation" (DISPLAY AUDIO WITHOUT-BOSE), AV-151, "Removal and Installation" (DISPLAY AUDIO WITH BOSE) or AV-245, "Removal and Installation" (NAVIGATION WITHOUT BOSE) or AV-360, "Removal and Installation" (NAVIGATION WITH BOSE) OR.
3. Remove rear door check link bolt (body side).
4. Remove rear door check link bolts (door side).
5. Remove rear door check link through the hole in rear door panel.

INSTALLATION

Installation is in the reverse order of removal.

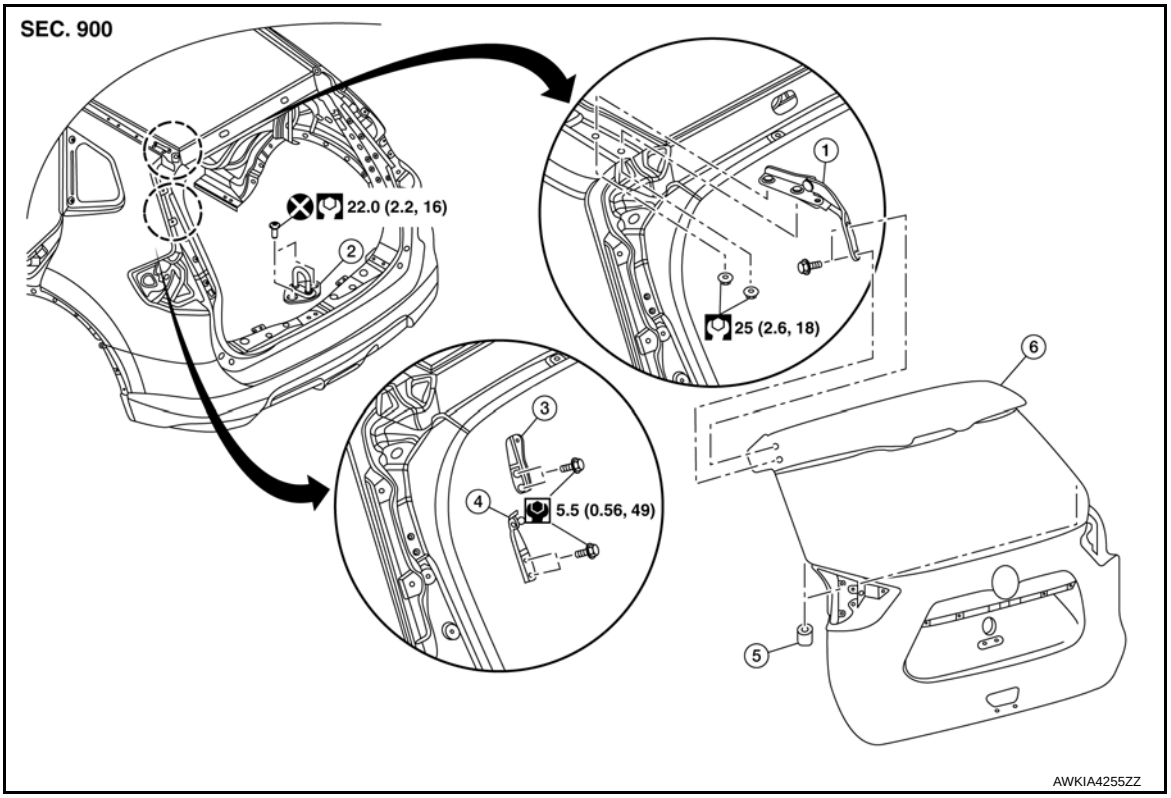
CAUTION:

- **Tighten bolts to specification. Refer to DLK-306, "Exploded View".**
- **After installation, check rear door open/close and lock/unlock operation.**
- **Check rear door check link rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**

BACK DOOR

Exploded View

INFOID:0000000014625235



1. Back door hinge
2. Back door striker
3. Spindle unit hinge (with automatic back door)
4. Back door stay hinge
5. Bumper rubber
6. Back door

BACK DOOR ASSEMBLY

BACK DOOR ASSEMBLY : Removal and Installation

INFOID:0000000014625236

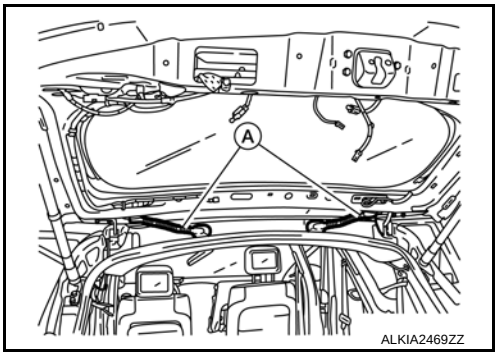
CAUTION:
- **Use two people when removing or installing the back door due to its heavy weight.**
- **Use shop cloths to protect surrounding components from damage during removal and installation of back door.**
- **Perform calibration of automatic back door position information. Refer to DLK-116, "Description".**

REMOVAL

1. Support the back door assembly using a suitable tool.

   WARNING:
   Bodily injury may occur if back door assembly is not supported properly when removing the back door spindle unit.
2. Remove spindle units (LH/RH) or back door stays (LH/RH). Refer to DLK-326, "SPINDLE UNIT : Removal and Installation" (WITH AUTOMATIC BACK DOOR) or DLK-327, "BACK DOOR STAY : Removal and Installation" (WITHOUT AUTOMATIC BACK DOOR).

3. Disconnect harness connectors (A) from back door.



4. Remove back door harness grommet, then pull harness from the back door.
5. Disconnect washer tube.
6. Remove washer tube grommet and washer tube from the back door.
7. Remove back door hinge bolts (door side) and back door assembly.

INSTALLATION

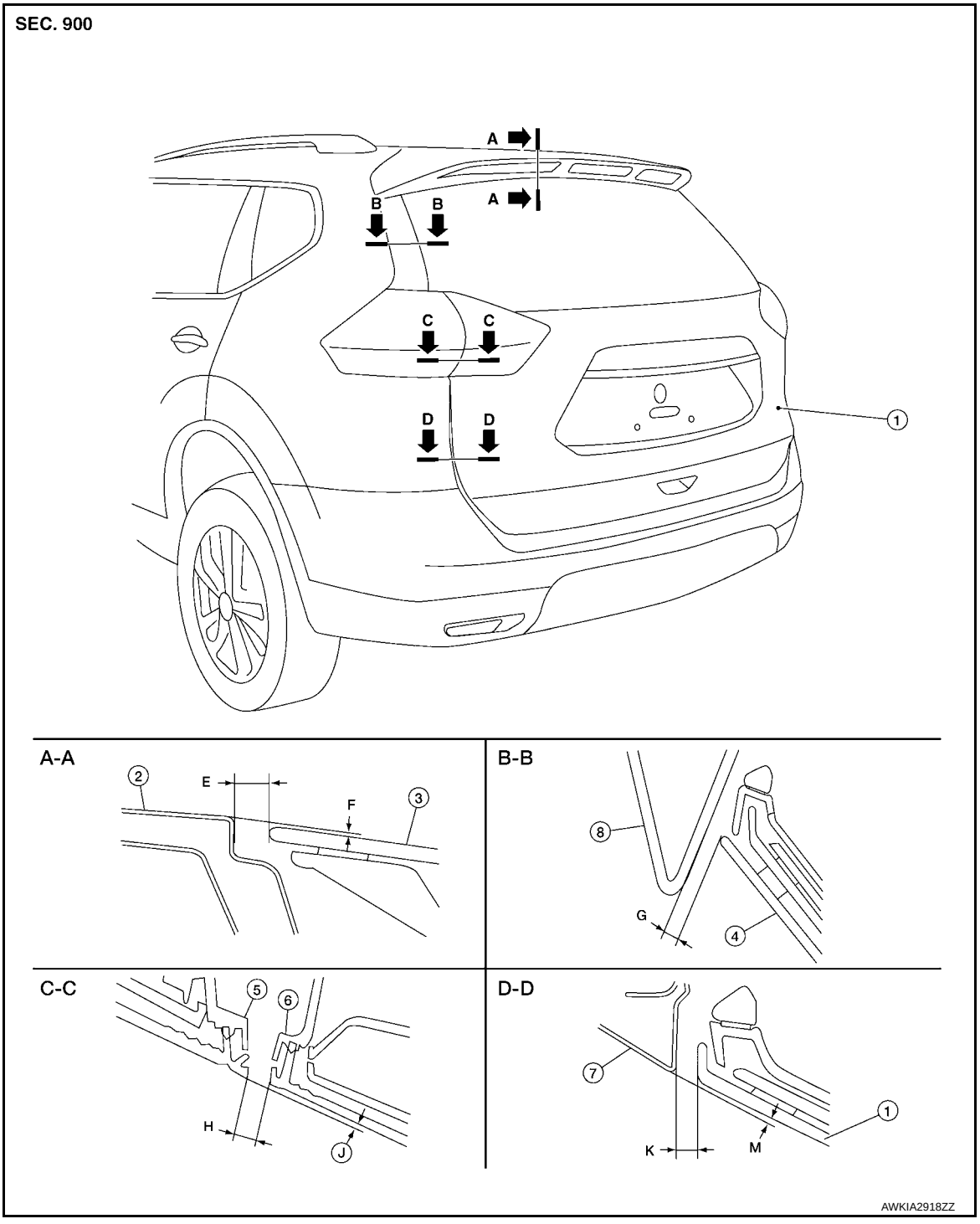
Installation is in the reverse order of removal.

CAUTION:

- **Tighten bolts to specification. Refer to DLK-311, "Exploded View".**
- **Apply anticorrosive agent onto the surface between hinge and door side.**
- **When reusing stud ball, always apply locking sealant before installing stud ball to back door.**
- **After installation, perform the back door assembly adjustment procedure. Refer to DLK-313, "BACK DOOR ASSEMBLY : Adjustment".**
- **Perform calibration of automatic back door position information. Refer to DLK-116, "Description".**
- **Perform camera image calibration (with around view monitor). Refer to AV-190, "CONFIGURATION (AV CONTROL UNIT) : Description" (NAVITGATION WITHOUT BOSE) or AV-290, "CONFIGURATION (AV CONTROL UNIT) : Description" (NAVIGATION WITH BOSE).**

BACK DOOR ASSEMBLY : Adjustment

INFOID:0000000014625237



1. Back door assembly
2. Roof panel
3. Rear spoiler
4. Back door glass
5. Rear combination lamp
6. Back-up lamp
7. Rear fender
8. Side spoiler

Check the clearance and the surface height between back door and each part by visual inspection and tactile feel. If the clearance and the surface height are out of specification, adjust them according to the adjustment procedure.

Unit: mm (in)

Portion	Section	Item	Measurement	Standard	Paraelleism
Roof panel – Rear spoiler	A – A	E	Clearance	7.0 ± 2.0 (0.28 ± 0.08)	2.0 (0.08)
		F	Surface height	1.7 ± 2.0 (0.07 ± 0.08)	2.0 (0.08)
Side spoiler – Back door glass	B – B	G	Clearance	5.5 ± 2.0 (0.22 ± 0.08)	2.0 (0.08)
		H	Surface height	—	—
Rear combination lamp – Back-up lamp	C – C	J	Clearance	4.5 ± 2.0 (0.18 ± 0.08)	2.0 (0.08)
		K	Surface height	2.2 ± 2.0 (0.09 ± 0.08)	2.0 (0.08)
Rear fender – Back door	D – D	M	Clearance	4.7 ± 2.0 (0.19 ± 0.08)	2.0 (0.08)
		N	Surface height	2.5 ± 2.0 (0.10 ± 0.08)	2.0 (0.08)

1. Loosen back door hinge nuts (door side).
2. Lift up back door approximately 100 – 150 mm (3.94 – 5.91 in) height then close it lightly and check that it is engaged firmly with back door closed.
3. Check the clearance and surface height according to the specifications provided.
4. Tighten back door hinge nuts to specified torque.

CAUTION:
- **After installation, check back door open/close, lock/unlock operation.**
- **Check back door hinge rotating point for poor lubrication. If necessary, apply a suitable multi-purpose grease.**
- **After adjusting, apply touch-up paint (body color) to the head of rear door hinge bolts and nuts.**
- **Perform calibration of automatic back door position information. Refer to DLK-116, "Description".**

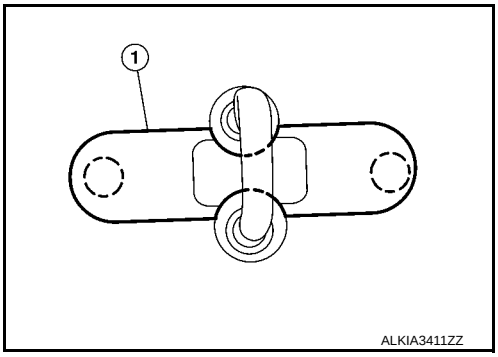
BACK DOOR STRIKER

BACK DOOR STRIKER : Removal and Installation

INFOID:0000000014625238

REMOVAL

1. Release back door striker cover (1) pawls using a suitable tool and remove.
   ◌: Pawl



2. Remove back door welt. Refer to DLK-315, "BACK DOOR WEATHER-STRIP : Removal and Installation".
3. Remove bolts and back door striker.

CAUTION:
- **Do not reuse back door striker bolts.**

INSTALLATION

Installation is in the reverse order of removal.

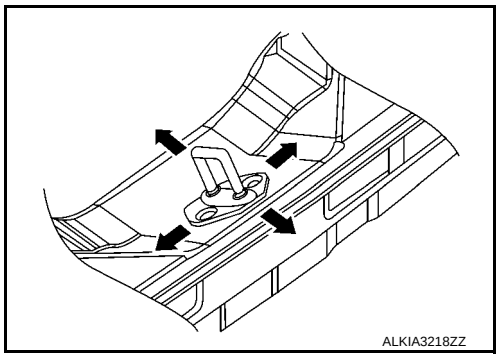
CAUTION:
- **Do not reuse back door striker bolts.**
- **Tighten bolts to specification. Refer to DLK-311, "Exploded View".**
- **After installation, check back door open/close operation. If necessary, adjust the door striker. Refer to DLK-315, "BACK DOOR STRIKER : Adjustment".**

BACK DOOR STRIKER : Adjustment

INFOID:0000000014625239

DOOR STRIKER ADJUSTMENT

1. Loosen door striker bolts
2. Adjust door striker so that it becomes parallel with front door lock insertion direction.



3. Tighten door striker bolts to specification. Refer to DLK-311, "Exploded View".

BACK DOOR HINGE

BACK DOOR HINGE : Removal and Installation

INFOID:0000000014625240

REMOVAL

1. Remove back door assembly. Refer to DLK-311, "BACK DOOR ASSEMBLY : Removal and Installation".
2. Partially remove the rear of the headlining. Refer to INT-29, "Removal and Installation".
3. Remove nuts and back door hinge.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten nuts to specification. Refer to DLK-311, "Exploded View".**
- **Apply anticorrosive agent onto the surface between hinge and body side.**
- **After installation, perform the back door assembly adjustment procedure. Refer to DLK-313, "BACK DOOR ASSEMBLY : Adjustment".**

BACK DOOR WEATHER-STRIP

BACK DOOR WEATHER-STRIP : Removal and Installation

INFOID:0000000014625241

REMOVAL

Carefully remove back door weather-strip from opening door joint.

INSTALLATION

1. Beginning with upper section, align weather-strip mark with vehicle center position mark and install weather strip to the vehicle.
2. For the lower section, align weather-strip seam with center of back door striker.

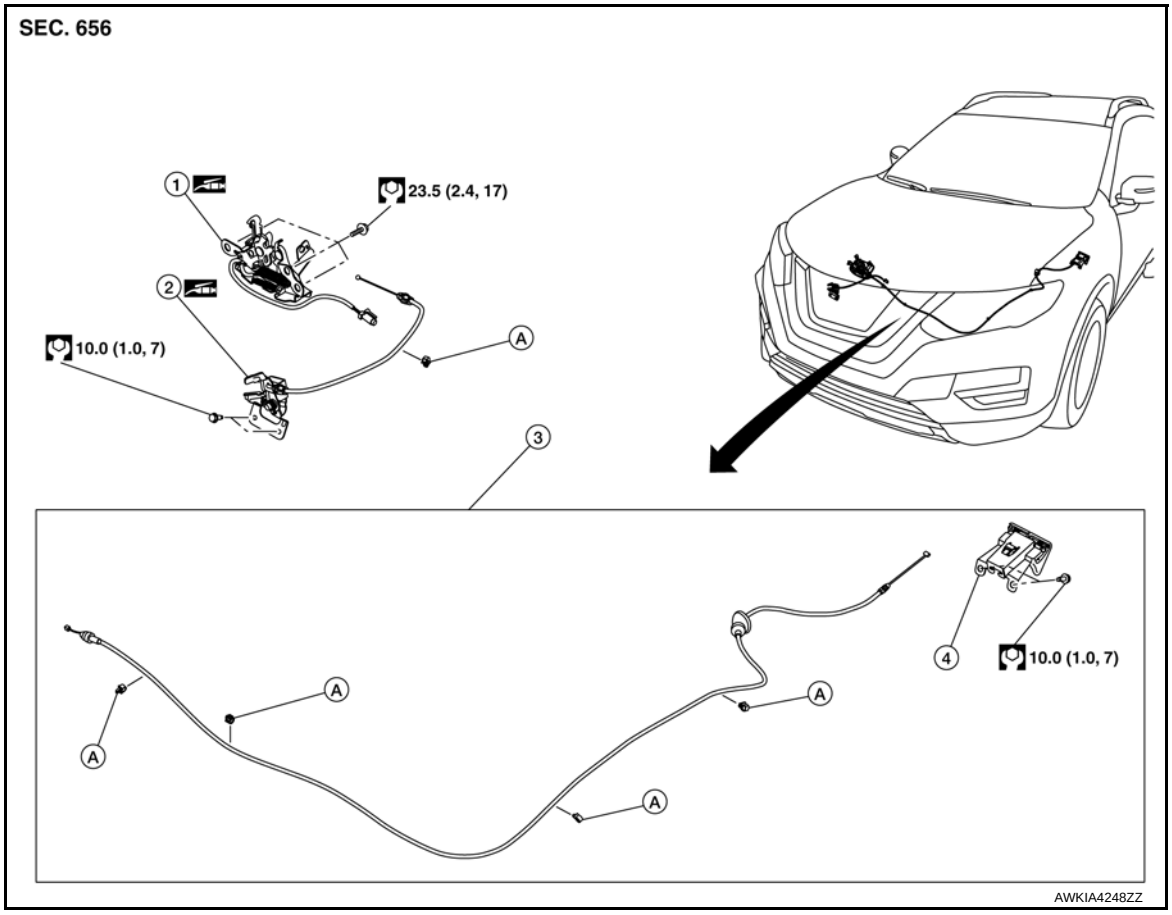
NOTE:

Pull weather-strip gently to ensure that there are no loose sections.

HOOD LOCK

Exploded View

INFOID:0000000014625242



1. Hood lock
2. Secondary latch
3. Hood lock release cable
4. Hood lock release handle
A. Clip

HOOD LOCK

HOOD LOCK : Removal and Installation

INFOID:0000000014625243

REMOVAL

1. Disconnect hood lock release cable and secondary latch cable from hood lock.
2. Disconnect the harness connector from the hood lock.
3. Remove bolts and hood lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten bolts to specified torque. Refer to DLK-316, "Exploded View".**
- **Check that hood lock release cable and secondary latch cable are properly engaged with hood lock.**
- **After installation, perform hood assembly adjustment procedure. Refer to DLK-295, "HOOD ASSEMBLY : Adjustment".**
- **After adjusting, perform hood lock inspection. Refer to DLK-316, "HOOD LOCK : Inspection".**

HOOD LOCK : Inspection

INFOID:0000000014625244

NOTE:

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

1. Check that secondary latch is properly engaged with secondary striker with hoods own weight.
2. While operating hood lock release handle, carefully check that the front end of hood assembly is raised by approximately 20.0 mm (0.79 in). Also check that hood lock release handle returns to the original position.
3. Check that hood lock release handle operates at 49 N (5.0 kg-m, 11.0 ft-lb) or below.
4. Install so that static closing force of hood is 315-490 N (32.1-50.0 kg–m, 70.8-110.2 ft–lb).
   NOTE:
   - Do not exert vertical force on right side and left side of hood lock.
   - Do not press simultaneously on both sides.
5. Check the hood lock lubrication condition. If necessary, apply a suitable multi-purpose grease to hood lock assembly.

SECONDARY LATCH

SECONDARY LATCH : Removal and Installation

INFOID:0000000014625245

REMOVAL

1. Remove front grille. Refer to EXT-33, "Removal and Installation".
2. Disconnect secondary latch cable from hood lock assembly.
3. Remove bolts and secondary latch.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten bolts to specified torque. Refer to DLK-316, "Exploded View".**
- **Check that secondary latch cable is properly engaged with hood lock.**

HOOD LOCK RELEASE CABLE

HOOD LOCK RELEASE CABLE : Removal and Installation

INFOID:0000000014625246

REMOVAL

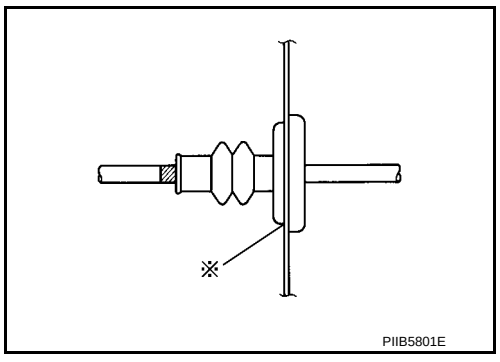
1. Remove fender protector (LH). Refer to EXT-40, "FENDER PROTECTOR : Removal and Installation".
2. Remove front grille. Refer to EXT-33, "Removal and Installation".
3. Disconnect hood lock release cable from hood lock release handle and hood lock.
4. Release hood lock release cable clips using a suitable tool.
5. Remove grommet on the lower dash and carefully pull the hood lock release cable into the passenger compartment.
   CAUTION:
   While pulling, be careful not to damage (peel) the outside of hood lock release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Be careful not to bend cable too much, keep the radius 100 mm (3.94 in) or more.**
- **Check that cable is not offset from the positioning grommet, and apply the sealant to the grommet (at * mark) properly.**



- **Check that hood lock release cable is properly engaged with hood lock assembly.**

- **After installation, perform hood assembly adjustment procedure. Refer to DLK-295, "HOOD ASSEMBLY : Adjustment".**
- **After adjusting, perform hood lock inspection. Refer to DLK-316, "HOOD LOCK : Inspection".**

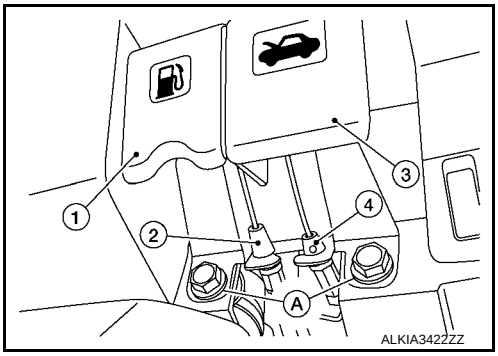
HOOD LOCK RELEASE HANDLE

HOOD LOCK RELEASE HANDLE : Removal and Installation

INFOID:0000000014625247

REMOVAL

1. Remove fuel filler lid/hood lock release handle bolts (A).
2. Disconnect fuel filler lid release cable (2) from fuel filler lid release handle (1).
3. Disconnect hood lock release cable (4) from hood lock release handle (3).



4. Remove hood lock release handle.

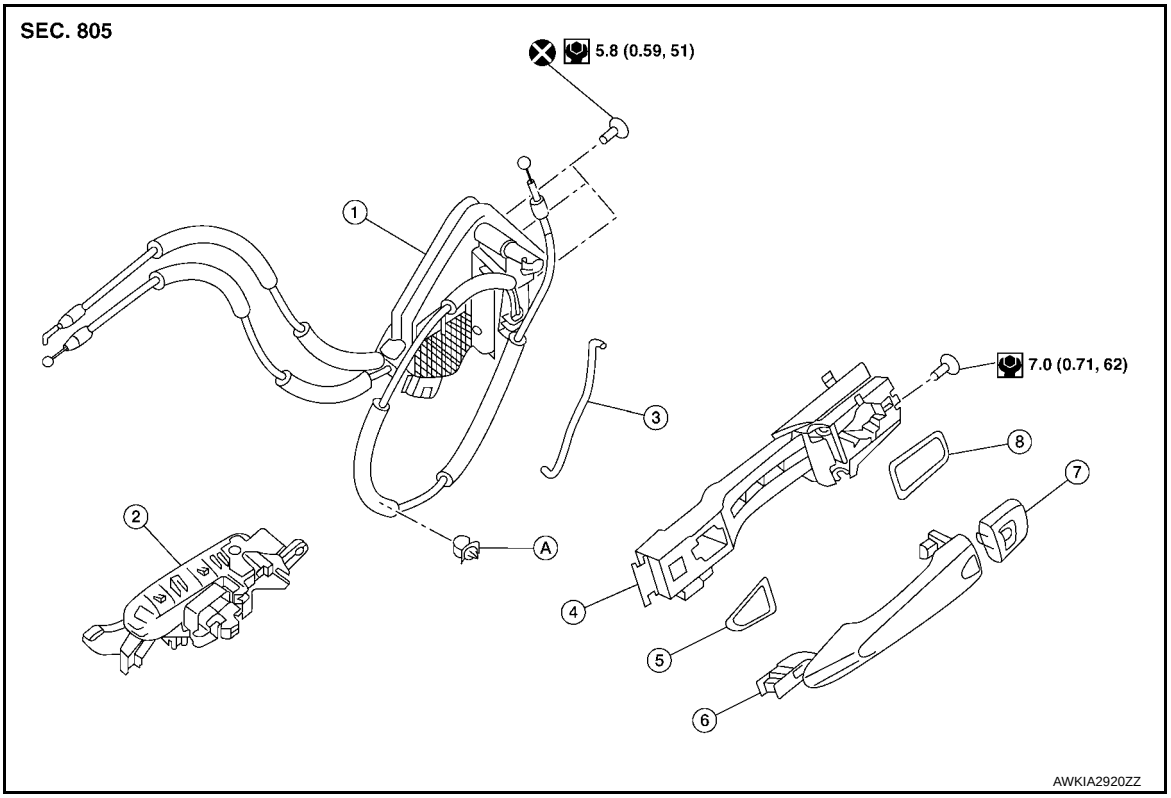
INSTALLATION

Installation is in the reverse order of removal.

FRONT DOOR LOCK

Exploded View

INFOID:0000000014625248



1. Front door lock
2. Inside handle
3. Door key cylinder rod (LH only)
4. Outside handle bracket
5. Front gasket
6. Outside handle
7. Outside handle escutcheon / door key cylinder (LH only)
8. Rear gasket
A. Clip

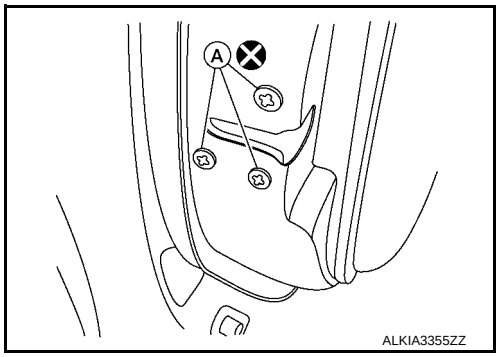
DOOR LOCK

DOOR LOCK : Removal and Installation

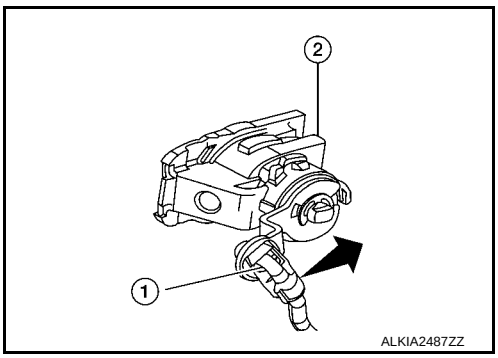
INFOID:0000000014625249

REMOVAL

1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
2. Remove vapor barrier.
3. Remove front door lock bolts (A).



4. Disconnect door key cylinder rod (LH only) (1) from front door lock (2) (LH only).



5. Disconnect door lock cables from inside handle and outside handle..
6. Disconnect the harness connector from the front door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Do not reuse front door lock bolts.**
- **Tighten bolts to specification. Refer to DLK-319, "Exploded View".**
- **After installation, check door lock cables are properly engaged to inside handle and outside handle bracket.**
- **When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.**
- **After installation, check door open/close and lock/unlock operation.**
- **Check door lock assembly for poor lubrication. If necessary apply a suitable multi-purpose grease.**

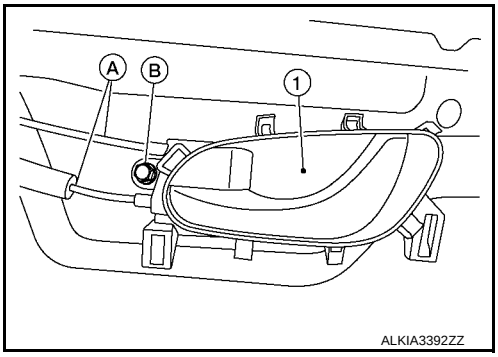
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000014625250

REMOVAL

1. Remove front door finisher. Refer to INT-15, "Removal and Installation".
2. Remove inside handle bolt (B).
3. Disconnect the door lock cables (A) and remove inside handle (1).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **After installation, check door lock cables are properly engaged to inside handle.**
- **After installation, check door open/close and lock/unlock operation.**

OUTSIDE HANDLE

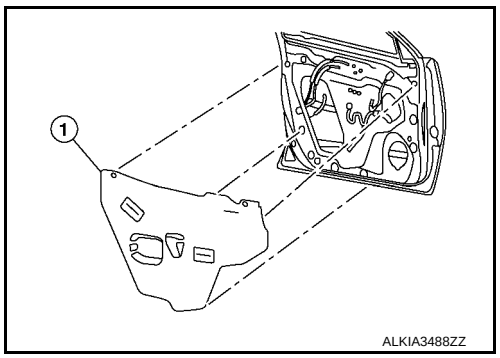
OUTSIDE HANDLE : Removal and Installation

INFOID:0000000014625251

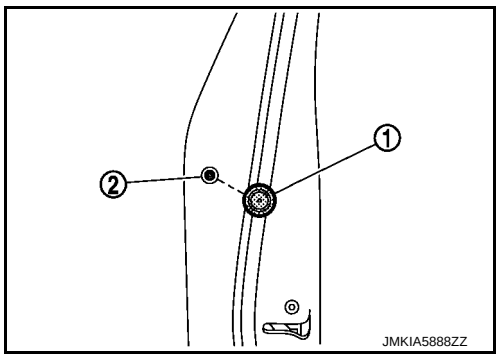
REMOVAL

1. Fully close front door glass.
2. Remove front door finisher. Refer to INT-15, "Removal and Installation".

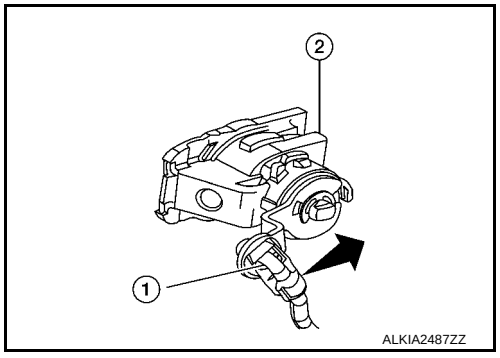
3. Remove front door vapor barrier (1).
NOTE:
LH side shown; RH similar.



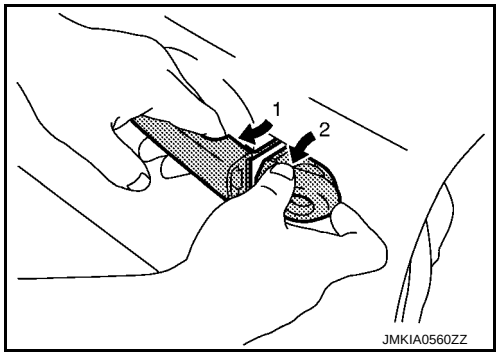
4. Remove door side grommet (1), and remove bolt from grommet hole (2).



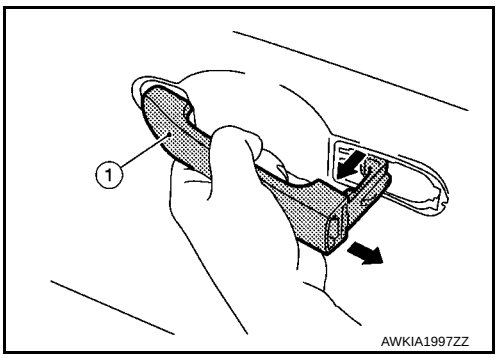
5. Separate door key cylinder rod (LH only) (1) from door key cylinder assembly (LH only) (2).



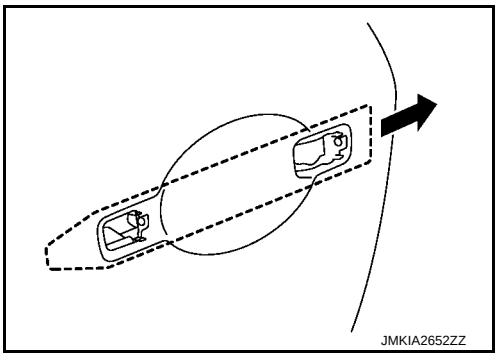
6. While pulling (1) outside handle, remove (2) door key cylinder assembly (LH side) or outside handle escutcheon (RH side).



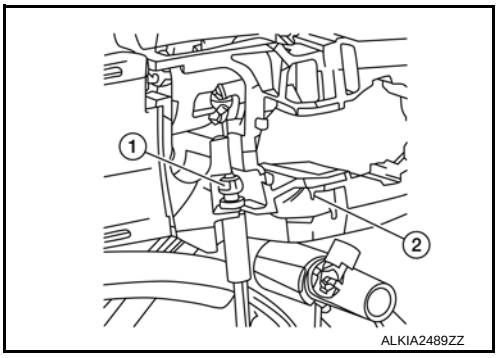
7. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



8. Remove front gasket and rear gasket.
9. Slide outside handle bracket toward rear of vehicle to remove.



10. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation is in the reverse order of removal.

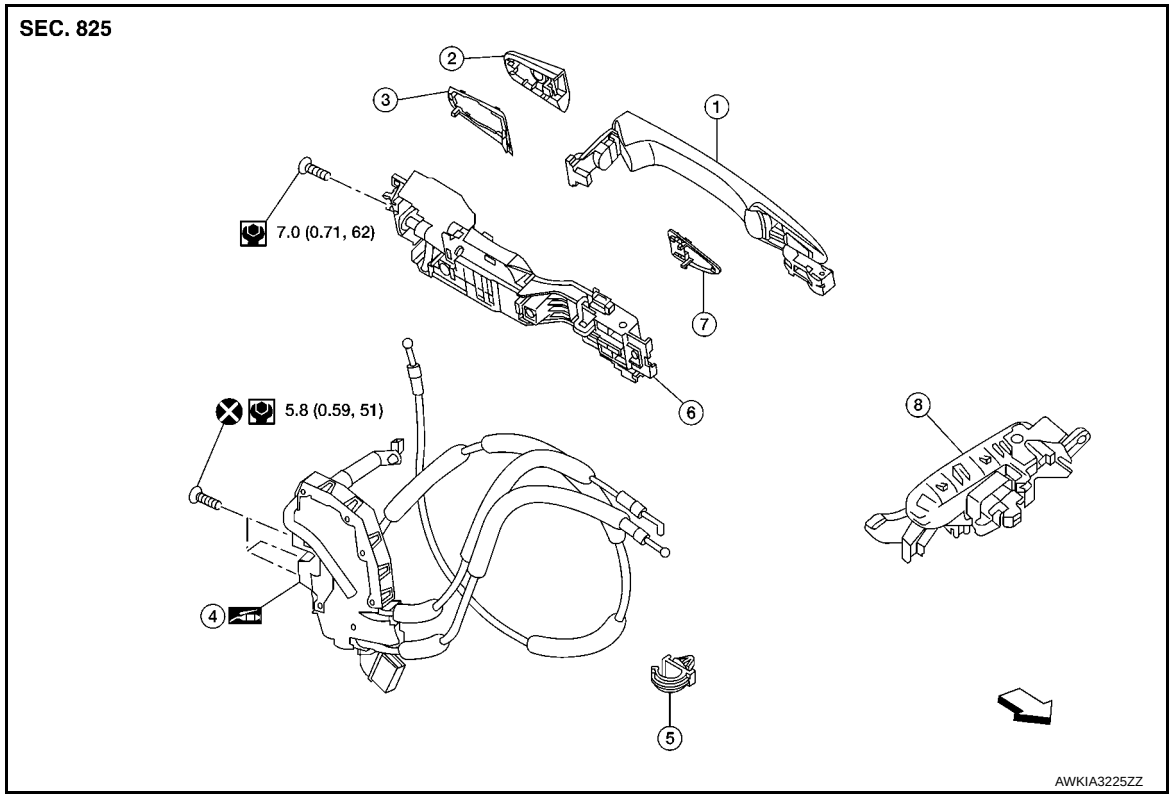
CAUTION:

- **When installing door key cylinder rod (LH only), be sure to rotate door key cylinder rod holder until a click is felt.**
- **After installation, check door lock cable is properly engaged to outside handle bracket.**
- **After installation, check door open/close and lock/unlock operation.**

REAR DOOR LOCK

Exploded View

INFOID:0000000014625252



1. Outside handle
2. Outside handle escutcheon
3. Rear gasket
4. Rear door lock
5. Cable clip
6. Outside handle bracket
7. Front gasket
8. Inside handle
⇦ Front

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000014625253

REMOVAL

1. Remove rear door finisher. Refer to INT-18, "Removal and Installation".
2. Remove vapor barrier.
3. Remove rear door lock bolts.
4. Disconnect the door lock cables.
5. Disconnect the harness connector from the rear door lock and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Do not reuse rear door lock bolts.**
- **Tighten bolts to specification. Refer to DLK-323, "Exploded View".**
- **After installation, check door lock cables are properly engaged to inside handle and outside handle.**
- **After installation, check door open/close and lock/unlock operation.**

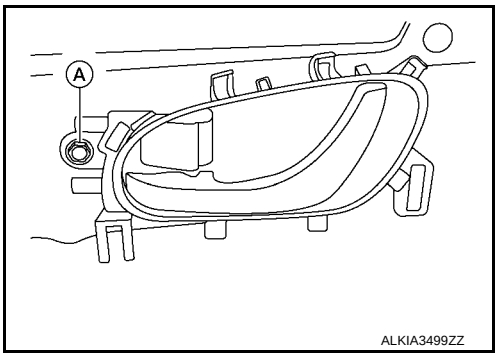
INSIDE HANDLE

INSIDE HANDLE : Removal and Installation

INFOID:0000000014625254

REMOVAL

1. Remove rear door finisher. Refer to INT-18, "Removal and Installation".
2. Remove inside handle bolt (A).



3. Disconnect door lock cables from inside handle and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **After installation, check door lock cables are properly engaged to inside handle.**
- **After installation, check door open/close and lock/unlock operation.**

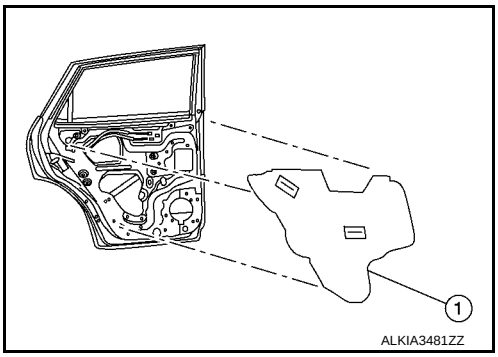
OUTSIDE HANDLE

OUTSIDE HANDLE : Removal and Installation

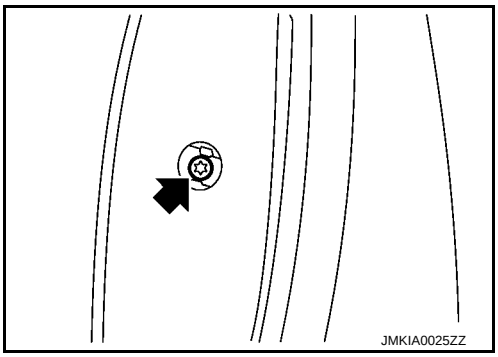
INFOID:0000000014625255

REMOVAL

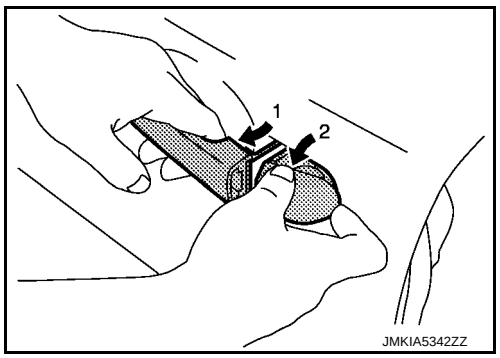
1. Fully close rear door glass.
2. Remove rear door finisher. Refer to INT-18, "Removal and Installation".
3. Remove rear door vapor barrier (1).
   NOTE:
   LH side shown; RH similar.



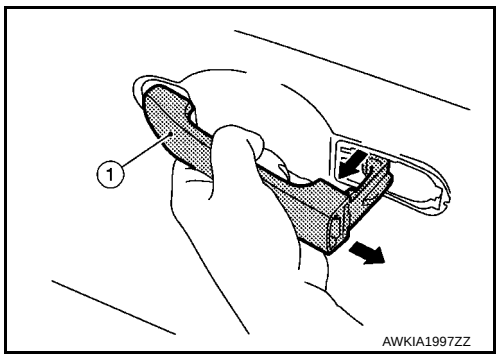
4. Remove door side grommet and bolt from grommet hole.



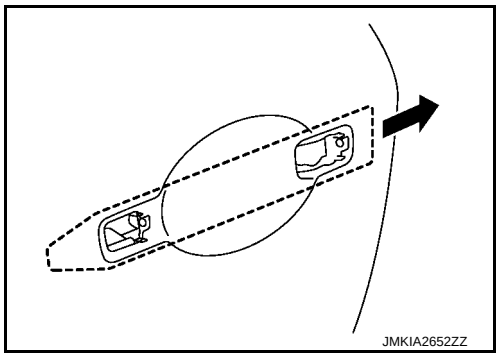
5. While pulling (1) outside handle, remove (2) outside handle escutcheon.



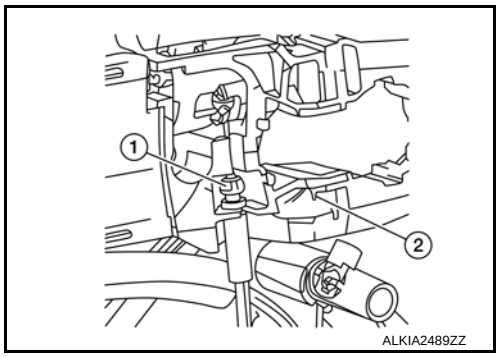
6. While pulling outside handle (1), slide toward rear of vehicle to remove outside handle.



7. Remove front gasket and rear gasket.
8. Slide outside handle bracket toward rear of vehicle to remove.



9. Disconnect outside handle cable (1) from outside handle bracket (2) as shown.



INSTALLATION

Installation in the reverse order of removal.

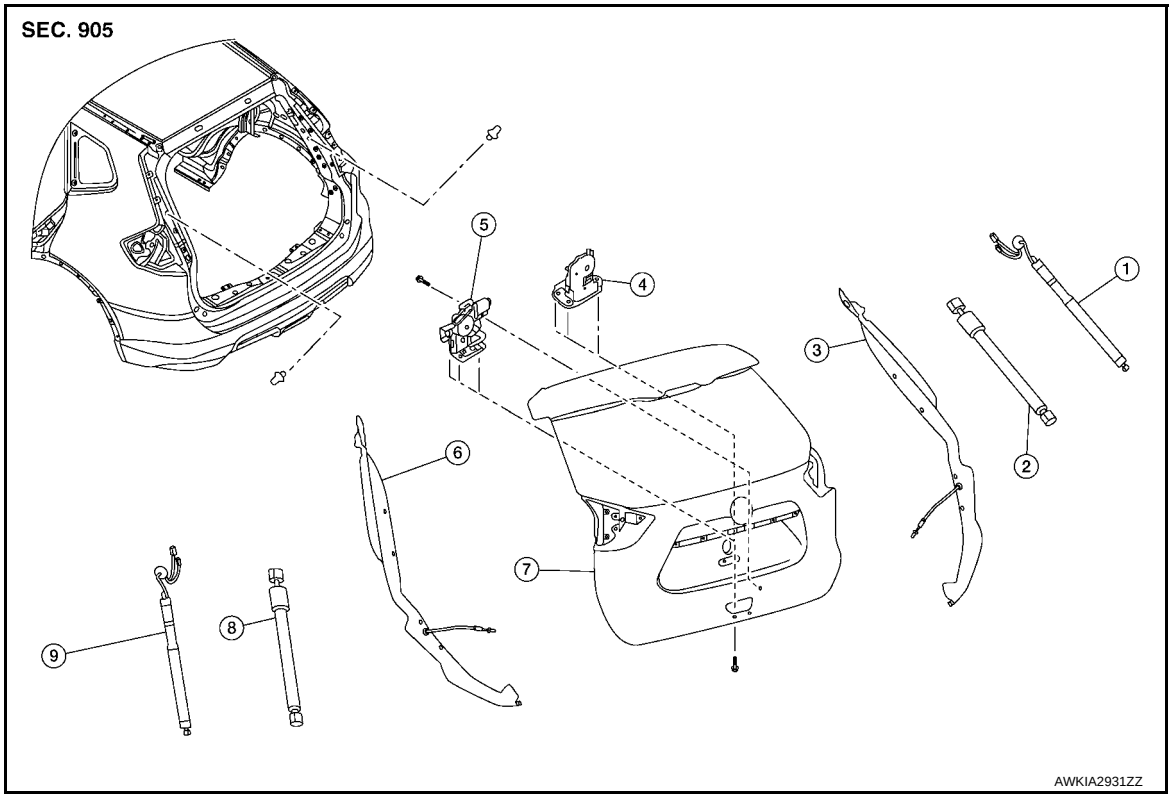
CAUTION:

- **After installation, check door lock cable is properly engaged to outside handle bracket.**
- **After installation, check door open/close and lock/unlock operation.**

BACK DOOR LOCK

Exploded View

INFOID:0000000014625256



1. Spindle unit (RH) (with automatic back door)
2. Back door stay (RH)
3. Back door touch sensor (RH) (with automatic back door)
4. Back door lock
5. Back door lock (with automatic back door)
6. Back door touch sensor (LH) (with automatic back door)
7. Back door
8. Back door stay (LH)
9. Spindle unit (LH) (with automatic back door)

DOOR LOCK

DOOR LOCK : Removal and Installation

INFOID:0000000014625257

REMOVAL

1. Remove back door finisher. Refer to INT-35, "Removal and Installation".
2. Disconnect the harness connector from the back door lock.
3. Remove bolts and back door lock.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

- **Tighten bolts to specification. Refer to DLK-326, "Exploded View".**
- **After installation, check back door open/close and lock/unlock operation.**

SPINDLE UNIT

SPINDLE UNIT : Removal and Installation

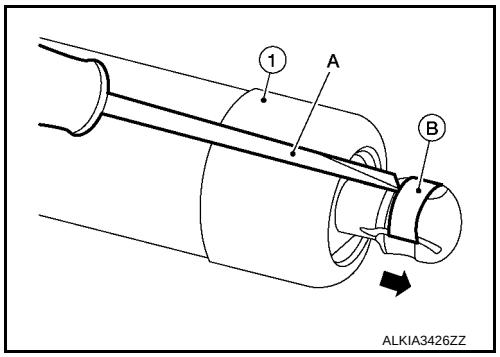
INFOID:0000000014625258

REMOVAL

1. Support back door using a suitable tool.

WARNING:
Bodily injury may occur if the back door is not supported properly when removing the back door spindle unit.

2. Partially remove headlining (rear edge). Refer to INT-28, "Exploded View".
3. Remove ball socket spring (B) from spindle unit (1) using a suitable tool (A).



4. Disconnect the harness connector from the spindle unit and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
- **When reusing stud ball, always apply locking sealant before installing stud ball to back door.**
- **After installation, check back door open/close, lock/unlock operation.**
- **Perform calibration of automatic back door position information. Refer to DLK-116, "Description".**

BACK DOOR STAY

BACK DOOR STAY : Removal and Installation

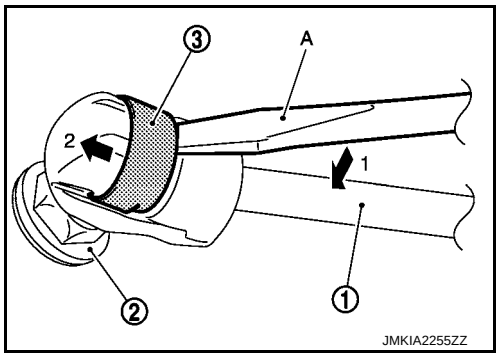
INFOID:0000000014625259

REMOVAL

1. Support the back door using a suitable tool.

WARNING:
Body injury may occur if no supporting rod is holding the back door open when removing the back door stay.

2. Release the metal clip (3) located on the connection between the back door stay (1) and the stud ball (2) (back door side) using a suitable tool (A).
3. Remove the back door stay (back door side).



4. Repeat procedure for removing back door stay from body side.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
After installation, check the back door open/close operation.

TOUCH SENSOR

TOUCH SENSOR : Removal and Installation

INFOID:0000000014625260

CAUTION:
Use care not to bend touch sensor.

REMOVAL

1. Release the spindle unit from the stud ball (with power back door).
2. Release the back door stay from the stud ball (without power back door).
3. Release touch sensor clips using a suitable tool.
4. Disconnect the harness connector from the touch sensor and remove.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check back door open/close and lock/unlock operation.

EMERGENCY LEVER

EMERGENCY LEVER : Unlock procedures

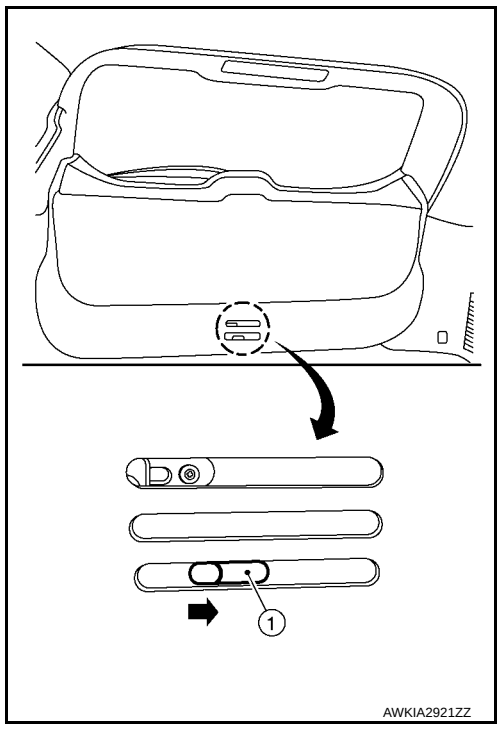
INFOID:0000000014625261

UNLOCK PROCEDURES

NOTE:

If back door lock cannot be unlocked due to a malfunction or battery discharge, perform the following procedures to unlock back door assembly.

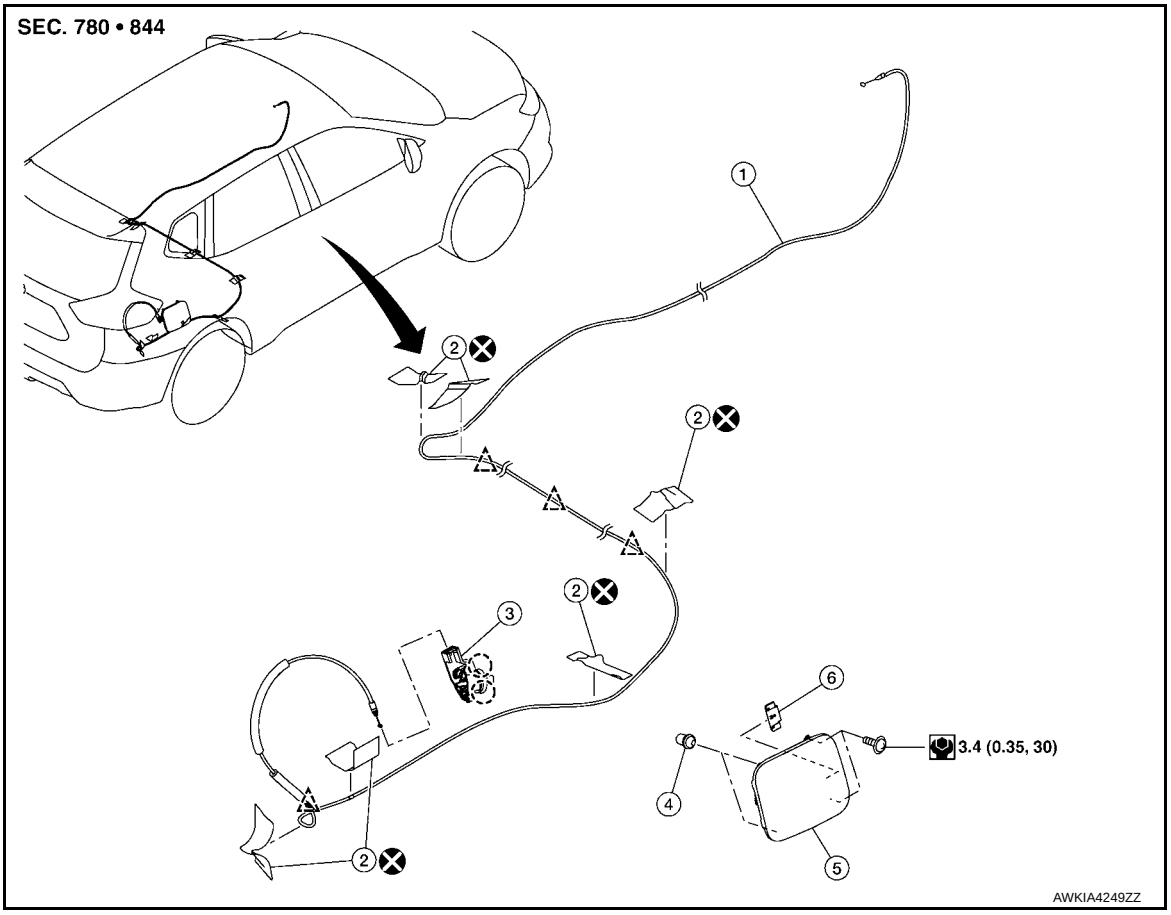
1. From inside the vehicle, rotate emergency lever (1) in the direction shown to unlock.



FUEL FILLER LID OPENER

Exploded View

INFOID:0000000014625262



1. Fuel filler lid release cable
2. Cable protector
3. Fuel filler lid lock
4. Bumper rubber
5. Fuel filler lid
6. Spring

Pawls

Clip

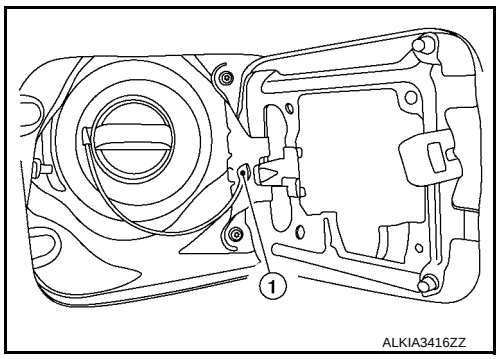
FUEL FILLER LID

FUEL FILLER LID : Removal and Installation

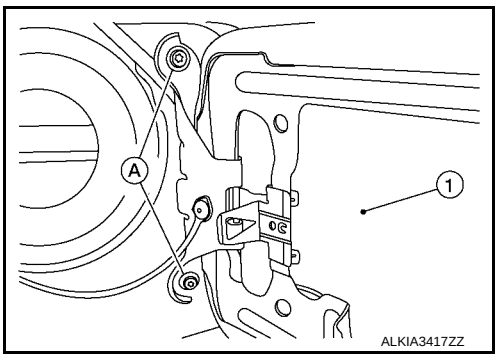
INFOID:0000000014625263

REMOVAL

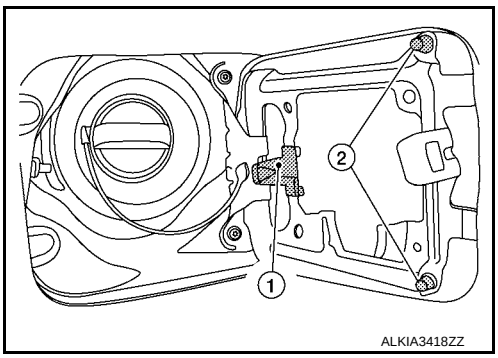
1. Remove fuel cap pin (1).



2. Remove screws (A) and fuel filler lid (1).



3. Remove fuel filler lid spring (1) and bumper rubber (2) from fuel filler lid (if necessary).



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check fuel filler lid open/close, lock/unlock operation.

FUEL FILLER LID LOCK

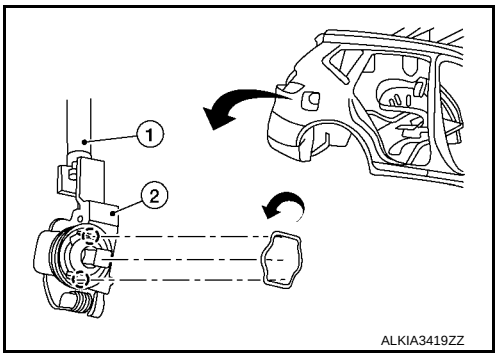
FUEL FILLER LID LOCK : Removal and Installation

INFOID:0000000014625264

REMOVAL

1. Remove luggage side lower finisher (RH). Refer to INT-32, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Disconnect the fuel filler lid release cable (1) from the fuel filler lid lock (2).
3. Rotate fuel filler lid lock to release pawls and remove.

   ◌: Pawl



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check fuel filler lid open/close, lock/unlock operation.

FUEL FILLER LID RELEASE CABLE

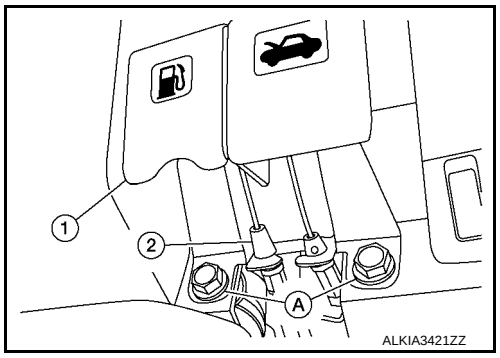
FUEL FILLER LID RELEASE CABLE : Removal and Installation

INFOID:0000000014625265

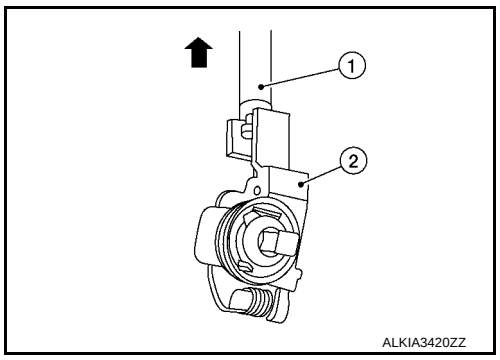
REMOVAL

1. Partially remove front floor trim. Refer to INT-26, "Removal and Installation".

2. Remove rear floor trim. Refer to INT-26, "Removal and Installation".
3. Remove the fuel filler lid/hood lock release handle bolts (A)
4. Disconnect the fuel filler lid release cable (2) from fuel filler lid release handle (1).



5. Disconnect the fuel filler lid release cable (1) from fuel filler lid lock (2).



6. Release the clips and remove fuel filler lid release cable.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

After installation, check fuel filler lid open/close, lock/unlock operation.

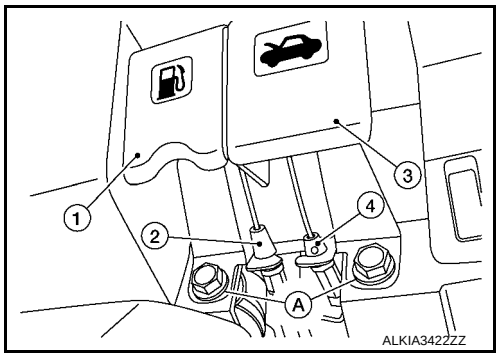
FUEL FILLER LID RELEASE HANDLE

FUEL FILLER LID RELEASE HANDLE : Removal and Installation

INFOID:0000000014625266

REMOVAL

1. Remove fuel filler lid/hood lock release handle bolts (A).
2. Disconnect fuel filler lid release cable (2) from fuel filler lid release handle (1).
3. Disconnect hood lock release cable (4) from hood lock release handle (3).



4. Remove fuel filler lid release handle.

INSTALLATION

Installation is in the reverse order of removal.

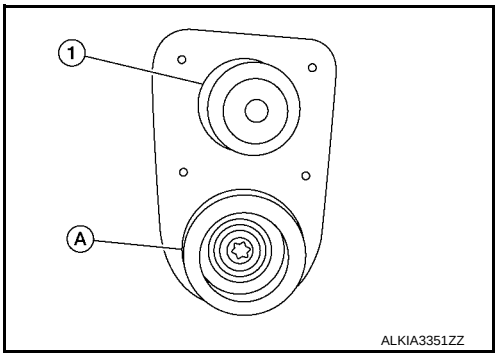
DOOR SWITCH

Removal and Installation

INFOID:0000000014625267

REMOVAL

1. Remove the door switch bolt (A).
2. Disconnect the harness connector from the door switch (1) and remove.



INSTALLATION

Installation is in the reverse order of removal.

DOOR REQUEST SWITCH

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000014625268

The driver side door request switch and driver side outside handle are serviced as an assembly. Refer to DLK-320, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000014625269

The passenger side door request switch and passenger side outside handle are serviced as an assembly. Refer to DLK-320, "OUTSIDE HANDLE : Removal and Installation".

BACK DOOR

BACK DOOR : Removal and Installation

INFOID:0000000014625270

REMOVAL

1. Remove back door finisher. Refer to INT-35, "Removal and Installation".
2. Disconnect the harness connector from the back door request switch.
3. Release pawls and remove back door request switch.

INSTALLATION

Installation is in the reverse order of removal.

INSIDE KEY ANTENNA

INSTRUMENT CENTER

INSTRUMENT CENTER : Removal and Installation

INFOID:0000000014625271

REMOVAL

1. Remove front air control or A/C switch assembly. Refer to HAC-119, "Removal and Installation" (AUTOMATIC AIR CONDITONING).
2. Disconnect the harness connector from the inside key antenna (instrument center).
3. Release pawls and remove inside key antenna (instrument center).

INSTALLATION

Installation is in the reverse order of removal.

CONSOLE

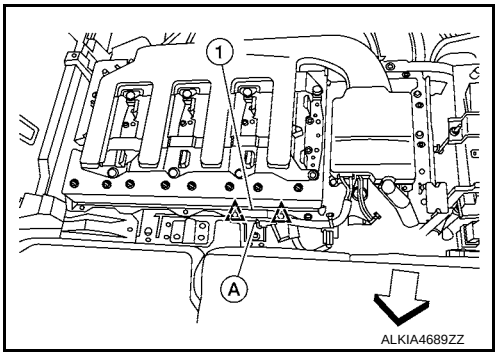
CONSOLE : Removal and Installation

INFOID:0000000014625272

REMOVAL

1. Remove front luggage floor finisher. Refer to INT-32, "Exploded View".
2. Disconnect the harness connector (A) from the inside key antenna (console) (1).
3. Remove clips and remove inside key antenna (console).

: Clip



INSTALLATION

Installation is in the reverse order of removal.

OUTSIDE KEY ANTENNA

DRIVER SIDE

DRIVER SIDE : Removal and Installation

INFOID:0000000014625273

The driver side outside key antenna and driver side outside handle are serviced as an assembly. Refer to DLK-320, "OUTSIDE HANDLE : Removal and Installation".

PASSENGER SIDE

PASSENGER SIDE : Removal and Installation

INFOID:0000000014625274

The passenger side outside key antenna and passenger side outside handle are serviced as an assembly. Refer to DLK-320, "OUTSIDE HANDLE : Removal and Installation".

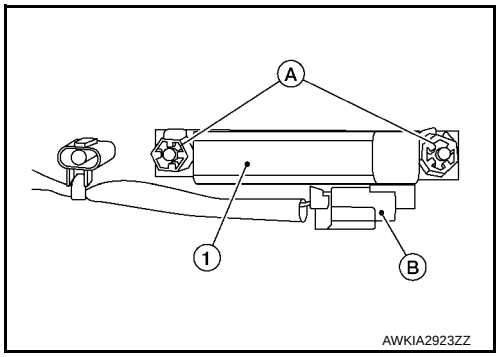
REAR BUMPER

REAR BUMPER : Removal and Installation

INFOID:0000000014625275

REMOVAL

1. Remove rear bumper fascia. Refer to EXT-29, "Removal and Installation".
2. Disconnect the harness connector (B) from the outside key antenna [rear bumper(1)].
3. Release clips (A) and remove outside key antenna (rear bumper).



INSTALLATION

Installation is in the reverse order of removal.

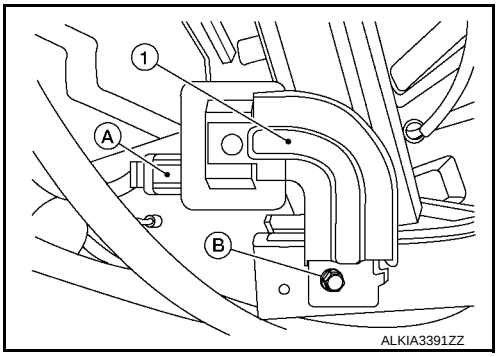
INTELLIGENT KEY WARNING BUZZER

Removal and Installation

INFOID:0000000014625276

REMOVAL

1. Remove front bumper fascia. Refer to EXT-26, "Removal and Installation".
2. Disconnect the harness connector (A) from the Intelligent Key warning buzzer (1).
3. Remove bolt (B) and Intelligent Key warning buzzer.



INSTALLATION

Installation is in the reverse order of removal.

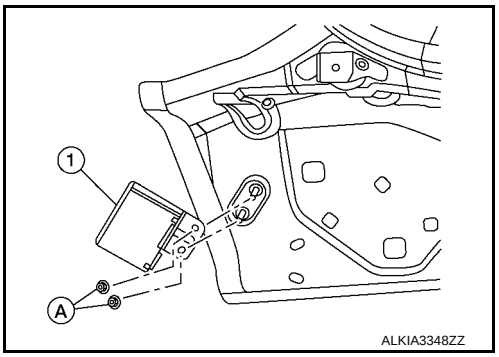
BACK DOOR WARNING CHIME

Removal and Installation

INFOID:0000000014625277

REMOVAL

1. Remove the rear bumper fascia. Refer to EXT-29, "Removal and Installation".
2. Disconnect the harness connector from the back door warning chime.
3. Remove nuts (A) and back door warning chime (1).



INSTALLATION

Installation is in the reverse order of removal.

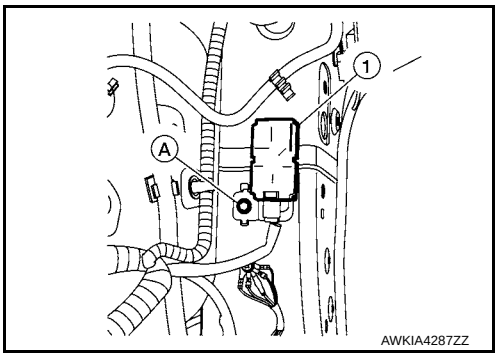
REMOTE KEYLESS ENTRY RECEIVER

Removal and Installation

INFOID:0000000014906765

REMOVAL

1. Remove luggage side lower finisher. Refer to INT-33, "LUGGAGE SIDE UPPER FINISHER : Removal and Installation".
2. Disconnect the harness connector from the remote keyless entry receiver (1).
3. Remove bolt (A) and remote keyless entry receiver.



4. Remove remote keyless entry receiver from bracket.

INSTALLATION

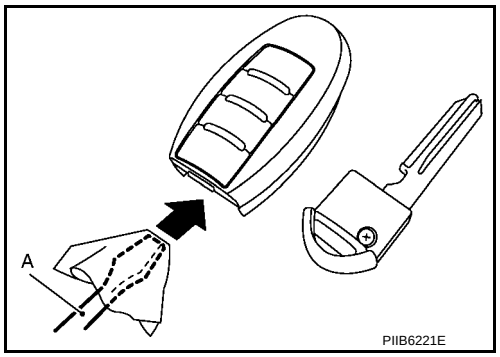
Installation is in the reverse order of removal.

INTELLIGENT KEY BATTERY

Removal and Installation

INFOID:0000000014625278

1. Release the lock knob on the back of the Intelligent Key and remove the key.
2. Insert a suitable tool (A) wrapped with a cloth into the slit of the corner and twist it to separate the upper part from the lower part.

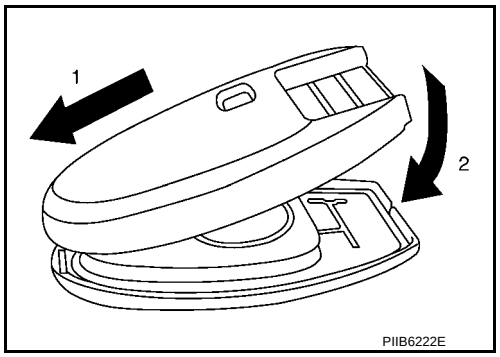


CAUTION:
- **Do not insert a tool into the notches of the Intelligent Key to pry it open, as this may damage the circuit board.**
- **Do not use excessive force when opening the intelligent key, as this may result in damage to the internal components.**
- **Do not touch the circuit board or battery terminal.**
- **The key fob is water-resistant. However, if it does get wet, immediately wipe it dry.**

3. Replace the battery with a new one.

Battery replacement	**:Coin-type lithium battery (CR2025)**

4. Align the tips of the upper and lower parts, and then push them together until unit is securely closed.

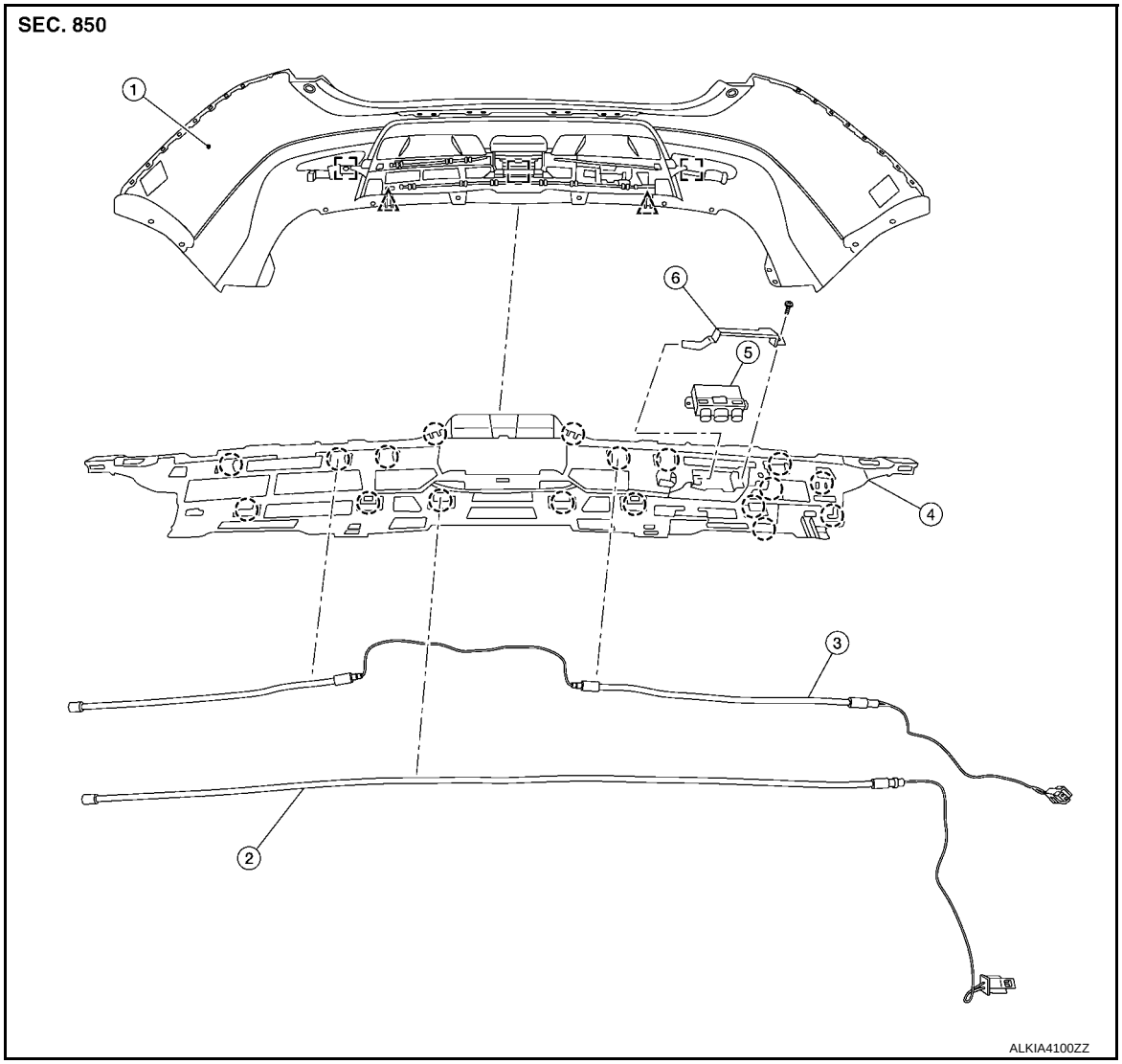


CAUTION:
- **When replacing battery, keep dirt, grease, and other foreign materials off the electrode contact area.**
- **After replacing the battery, check that all Intelligent Key functions work normally.**

MOTION ACTIVATED BACK DOOR SYSTEM

Exploded View

INFOID:0000000014625285



1. Rear bumper fascia	2. Motion activated back door sensor (lower)	3. Motion activated back door sensor (upper)
4. Motion activated back door bracket	5. Motion activated back door control unit	6. Motion activated back door control unit bracket
Metal clip	Clip	Pawl

MOTION ACTIVATED BACK DOOR CONTROL UNIT

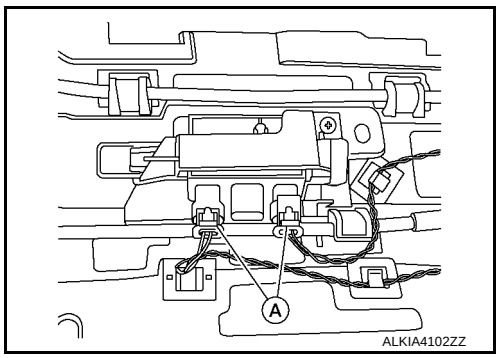
MOTION ACTIVATED BACK DOOR CONTROL UNIT : Removal and Installation

INFOID:0000000014625286

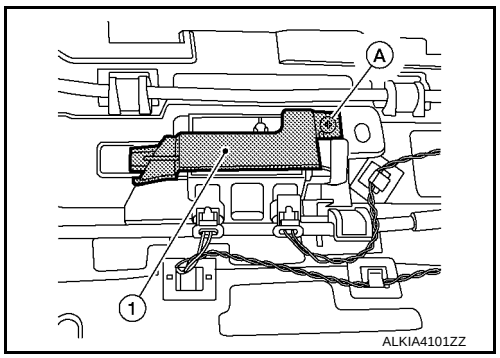
REMOVAL

1. Remove rear bumper fascia. Refer to EXT-29, "Removal and Installation".

2. Disconnect harness connectors (A) from motion activated back door control unit.

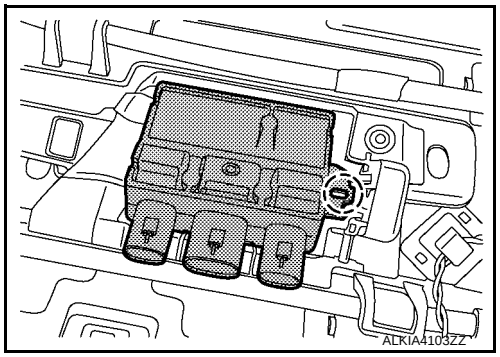


3. Remove screw (A) and motion activated back door control unit bracket (1).



4. Release pawl and remove motion activated back door control unit.

◌ :Pawl



INSTALLATION

Installation is in the reverse order of removal.

MOTION ACTIVATED BACK DOOR SENSOR

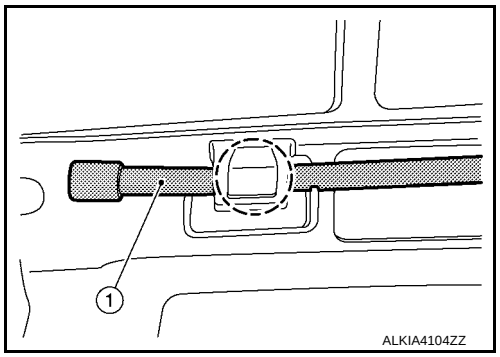
MOTION ACTIVATED BACK DOOR SENSOR : Removal and Installation

INFOID:0000000014625287

REMOVAL

1. Remove rear bumper fascia. Refer to EXT-29, "Removal and Installation".
2. Disconnect harness connector from motion activated back door control unit.
3. Release pawls and remove motion activated back door sensor (1).

◌ :Pawl



INSTALLATION

Installation is in the reverse order of removal.

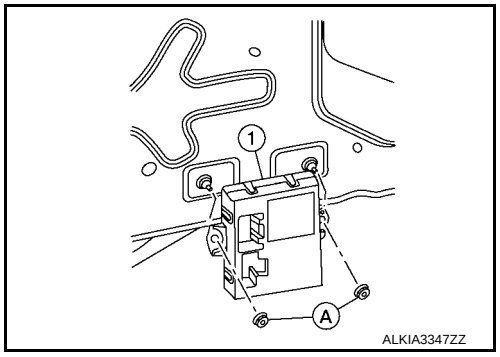
AUTOMATIC BACK DOOR CONTROL MODULE

Removal and Installation

INFOID:0000000014625279

REMOVAL

1. Remove the luggage side lower finisher (LH). Refer to INT-32, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation".
2. Disconnect the harness connectors from the automatic back door control module.
3. Remove nuts (A) and automatic back door control module (1).



INSTALLATION

Installation is in the reverse order of removal.

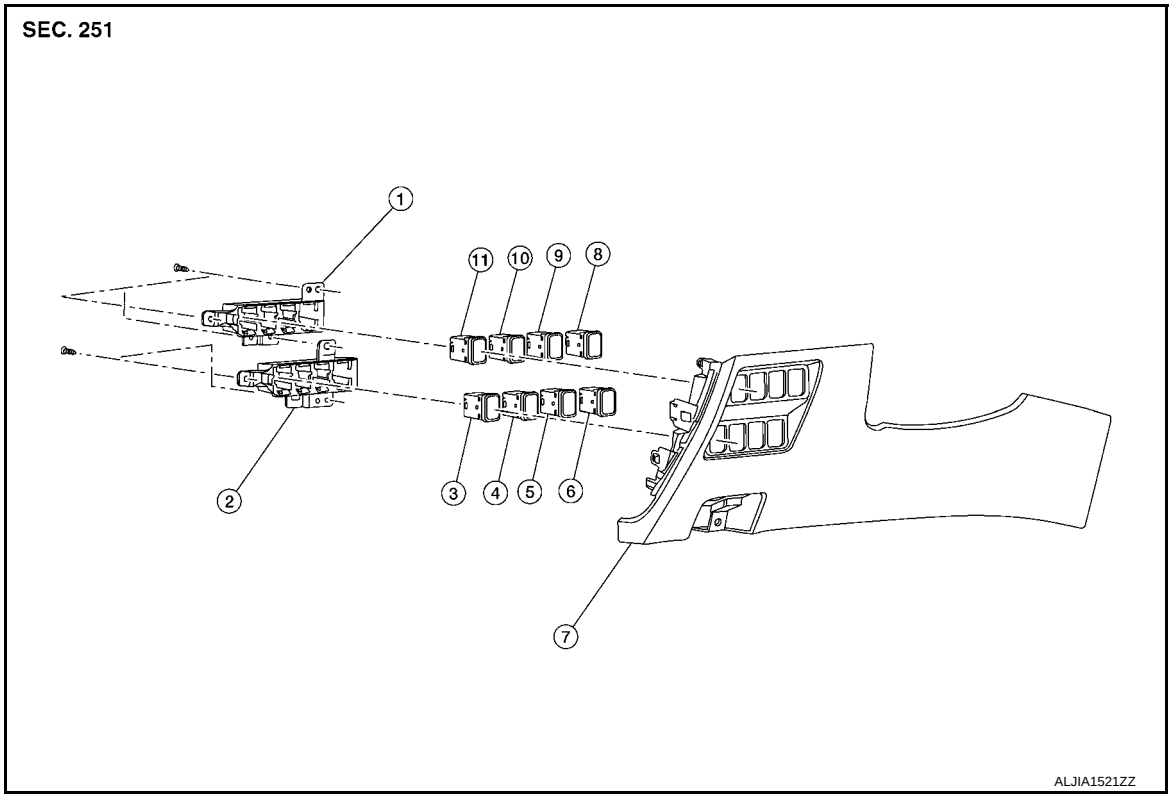
CAUTION:

- **Perform calibration of automatic back door position information. Refer to DLK-116, "Description".**

AUTOMATIC BACK DOOR MAIN SWITCH

Exploded View

INFOID:0000000014625280



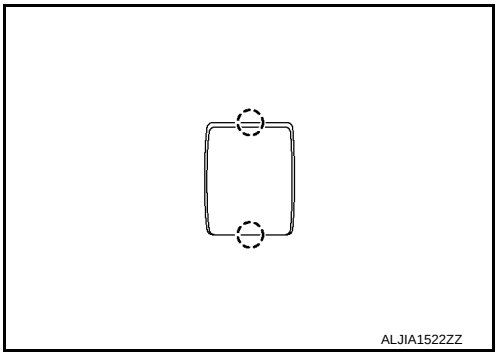
1.	Upper switch carrier	2.	Lower switch carrier	3.	Heated steering wheel switch (If equipped)
4.	AWD lock switch (If equipped)	5.	Sport mode switch	6.	ECO mode switch
7.	Instrument lower panel LH	8.	Automatic back door main switch	9.	Automatic back door switch
10.	Driving assist	11.	VDC OFF switch		

Removal and Installation

INFOID:0000000014625281

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-22, "Removal and Installation".
2. Remove the screws and upper switch carrier from the instrument lower panel LH.
3. Release pawls using suitable tool and remove the automatic back door main switch from the upper switch carrier.
   ◌: Pawl



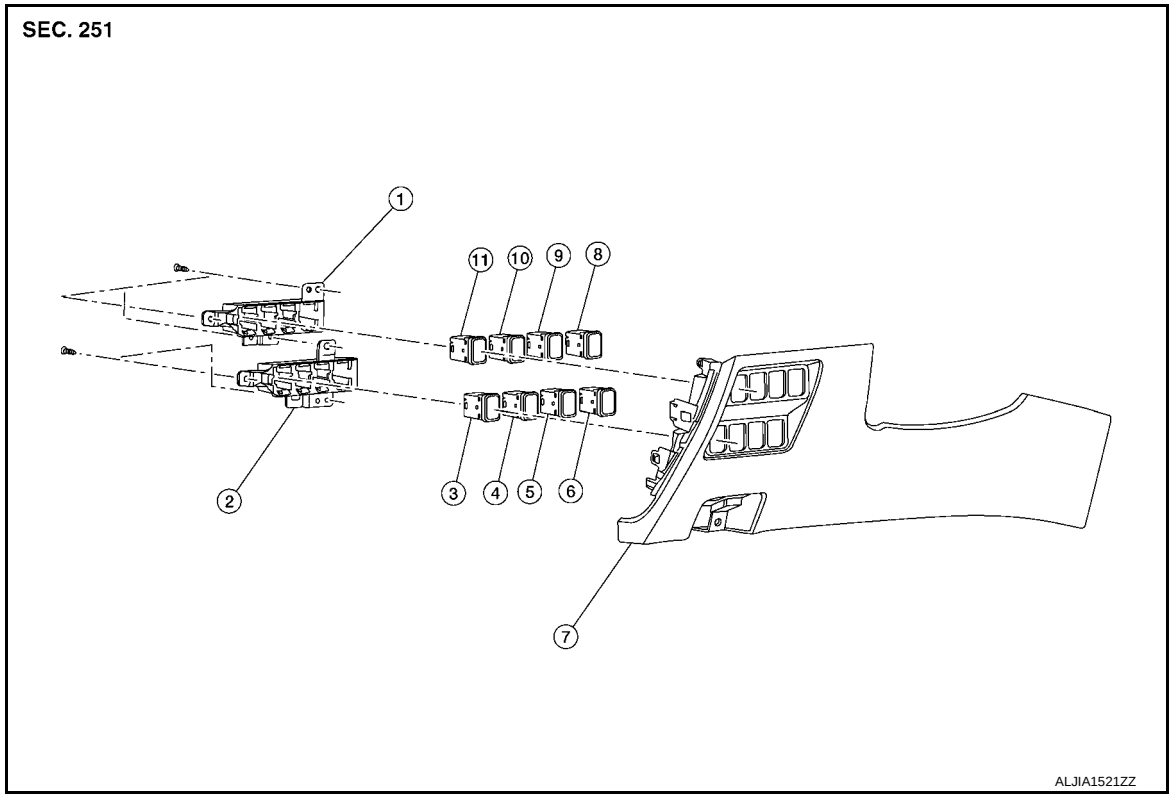
INSTALLATION

Installation is in the reverse order of removal.

AUTOMATIC BACK DOOR SWITCH

Exploded View

INFOID:0000000014625282



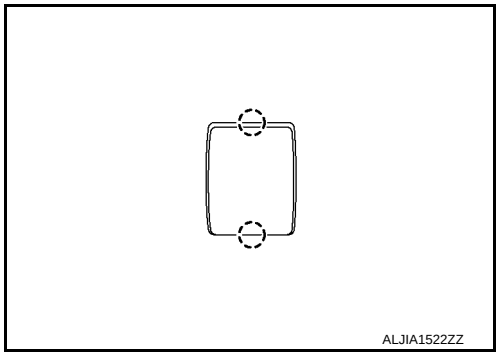
1. Upper switch carrier
2. Lower switch carrier
3. Heated steering wheel switch (If equipped)
4. AWD lock switch (If equipped)
5. Sport mode switch
6. ECO mode switch
7. Instrument lower panel LH
8. Automatic back door main switch
9. Automatic back door switch
10. Driving assist
11. VDC OFF switch

Removal and Installation

INFOID:0000000014625283

REMOVAL

1. Remove the instrument lower panel LH. Refer to IP-22, "Removal and Installation".
2. Remove the screws and upper switch carrier from the instrument lower panel LH.
3. Release pawls using suitable tool and remove the automatic back door switch switch from the upper switch carrier.
   ◌: Pawl



INSTALLATION

Installation is in the reverse order of removal.

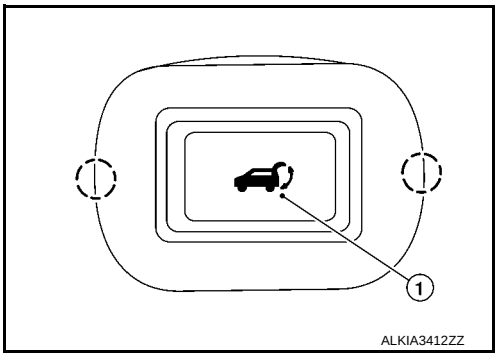
AUTOMATIC BACK DOOR CLOSE SWITCH

Removal and Installation

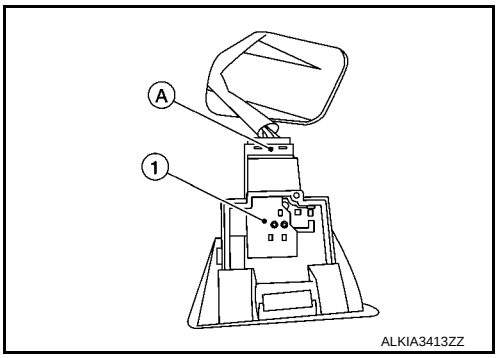
INFOID:0000000014625284

REMOVAL

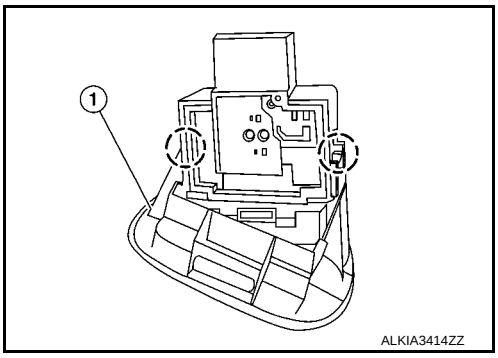
1. Release the automatic back door close switch (1) pawls using a suitable tool.
   ◌: Pawl



2. Disconnect the harness connector (A) from the automatic back door close switch (1) and remove.



3. Release pawls and remove automatic back door request switch finisher (1).
   ◌: Pawl



INSTALLATION

Installation is in the reverse order of removal.