SECURITY CONTROL SYSTEM

D

Е

CONTENTS

PRECAUTION4
PRECAUTIONS
SYSTEM DESCRIPTION6
COMPONENT PARTS 6 Component Parts Location 6 NATS Antenna Amp. 9 Hood Switch 9
SYSTEM10
INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS18 INFINITI VEHICLE IMMOBILIZER SYSTEM- NATS: System Description
VEHICLE SECURITY SYSTEM
INFORMATION DISPLAY (COMBINATION METER)
WARNING/INDICATOR/CHIME LIST35 WARNING/INDICATOR/CHIME LIST : Warning Lamp/Indicator Lamp35

DIAGNOSIS SYSTEM (BCM)36	F
COMMON ITEM	G
INTELLIGENT KEY	Н
THEFT ALM41 THEFT ALM : CONSULT Function (BCM - THEFT)41	I
IMMU42 IMMU : CONSULT Function (BCM - IMMU)42	J
DIAGNOSIS SYSTEM (IPDM E/R)44 CONSULT Function (IPDM E/R)44	SE
ECU DIAGNOSIS INFORMATION46	
ECM, IPDM E/R, BCM46 List of ECU Reference46	L
WIRING DIAGRAM47	M
SECURITY CONTROL SYSTEM47 Wiring Diagram47	N
BASIC INSPECTION92	IN
DIAGNOSIS AND REPAIR WORK FLOW92 Work Flow92	0
ADDITIONAL SERVICE WHEN REPLACING ECM95	Р
Description95 Work Procedure95	
DTC/CIRCUIT DIAGNOSIS96	
P1610 LOCK MODE 96 DTC Description96	

Revision: November 2016 SEC-1 2016 Q50

Diagnosis Procedure	96	B2605 SHIFT POSITION	128
D4644 ID DISCORD IMMU ECM	00	DTC Description	
P1611 ID DISCORD, IMMU-ECM		Diagnosis Procedure	128
DTC Description		B2608 STARTER RELAY	404
Diagnosis Procedure	90		
P1612 CHAIN OF ECM-IMMU	99	DTC Description	
DTC Description		Diagnosis Procedure	131
Diagnosis Procedure		B260F ENGINE STATUS	133
		Description	
B2192 ID DISCORD, IMMU-ECM		DTC Description	
DTC Description		Diagnosis Procedure	
Diagnosis Procedure	101		
B2193 CHAIN OF ECM-IMMU	402	B26F3 STARTER CONTROL RELAY	
		DTC Description	
DTC Description		Diagnosis Procedure	135
Diagnosis Procedure	102	DOCEA CTARTER CONTROL RELAY	407
B2195 ANTI-SCANNING	104	B26F4 STARTER CONTROL RELAY	
DTC Description		DTC Description	
Diagnosis Procedure		Diagnosis Procedure	137
•		B26F7 BCM	130
B2196 DONGLE UNIT	105	DTC Description	
DTC Description	105	Diagnosis Procedure	
Diagnosis Procedure	105	Diagnosis i Tocedure	133
		B26F8 BCM	140
B2198 NATS ANTENNA AMP		DTC Description	140
DTC Description		Diagnosis Procedure	
Diagnosis Procedure	107	-	
B2555 STOP LAMP	400	B26FC KEY REGISTRATION	
		DTC Description	141
DTC Description		Diagnosis Procedure	141
Diagnosis Procedure		DOLOD OTABLED CONTROL DELAY	
Component Inspection	110	B210B STARTER CONTROL RELAY	
B2556 PUSH-BUTTON IGNITION SWIT	CH 112	DTC Description	
DTC Description		Diagnosis Procedure	142
Diagnosis Procedure		B210C STARTER CONTROL RELAY	1/13
Component Inspection		DTC Description	
		Diagnosis Procedure	
B2557 VEHICLE SPEED	114	Diagnosis i rocedure	143
DTC Description	114	B210D STARTER RELAY	145
Diagnosis Procedure	114	DTC Description	145
		Diagnosis Procedure	
B2601 SHIFT POSITION		-	
DTC Description		B210E STARTER RELAY	
Diagnosis Procedure	116	DTC Description	
B2602 SHIFT POSITION	440	Diagnosis Procedure	147
		DAME CHIEF DOCITION/CLUTCH INTER	
DTC Description		B210F SHIFT POSITION/CLUTCH INTER-	
Diagnosis Procedure		LOCK SWITCH	
Component Inspection	120	DTC Description	
B2603 SHIFT POSITION	121	Diagnosis Procedure	149
DTC Description		B2110 SHIFT POSITION/CLUTCH INTER-	
Diagnosis Procedure		LOCK SWITCH	454
Component Inspection			
Component inoposition		DTC Description	
B2604 SHIFT POSITION	125	Diagnosis Procedure	151
DTC Description	125	B219B SECURITY CODE	153
Diagnosis Procedure		DTC Description	
-		Diagnosis Procedure	
		,	

VEHICLE SECURITY SYSTEM CANNOT BE SET170

Α

Р

B261B REMOTE ENGINE START155DTC Description155Diagnosis Procedure155
B26FE HOOD SWITCH156DTC Description156Diagnosis Procedure156Component Inspection157
SECURITY INDICATOR LAMP159 Component Function Check159 Diagnosis Procedure159
HOOD SWITCH161Component Function Check161Diagnosis Procedure161Component Inspection162
HEADLAMP FUNCTION163Component Function Check163Diagnosis Procedure163
HORN FUNCTION164Component Function Check164Diagnosis Procedure164Component Inspection166
SYMPTOM DIAGNOSIS168
ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE168 Description
SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

Revision: November 2016

PRECAUTION

PRECAUTIONS

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, 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 "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the
 ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with
 a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing
 serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery or batteries, and wait at least 3 minutes before performing any service.

Precautions for Removing Battery Terminal

INFOID:0000000013492783

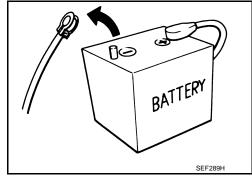
When disconnecting the battery terminal, pay attention to the following.

Always use a 12V battery as power source.

: 4 minutes

- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

BR08DE : 4 minutes V9X engine : 4 minutes : 20 minutes YD25DDTi D4D engine : 2 minutes YS23DDT HR09DET : 12 minutes : 4 minutes HRA2DDT : 12 minutes YS23DDTT : 4 minutes K9K engine : 4 minutes ZD30DDTi : 60 seconds M9R engine : 4 minutes ZD30DDTT : 60 seconds



NOTE:

R9M engine

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

 After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.
 NOTE:

PRECAUTIONS

< PRECAUTION >

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
- Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
- Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

 After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC. NOTE:

The removal of 12V battery may cause a DTC detection error.

SEC

L

M

Р

SEC-5 Revision: November 2016 2016 Q50

В

Α

C

Е

D

F

Н

J

Ν

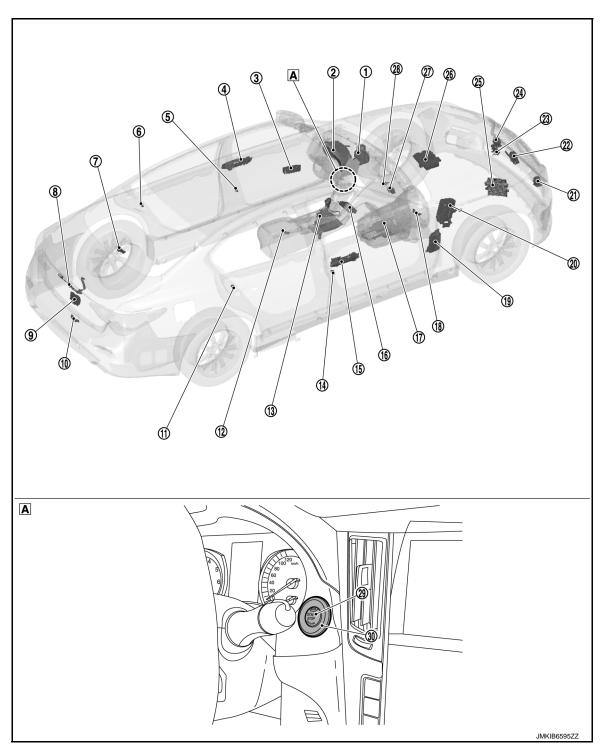
0

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000012792677



A View with cluster lid A

COMPONENT PARTS

< SYSTEM DESCRIPTION >

No.	Component	Function		
1	ABS actuator and electric unit (control unit)	ABS actuator and electric unit (control unit) transmits the vehicle speed signal to BCM via CAN-communication. BCM also receives the vehicle speed signal from combination meter via CAN communication. BCM compares both signals to detect the vehicle speed. Refer to BRC-10, "Component Parts Location" for detailed installation location.		
2	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 INFINITI VEHICLE IMMOBILIZER SYSTEM (NATS) is on board.		
3	Power window main switch (door lock and unlock switch)	Door lock and unlock switch transmits door lock/unlock signal operation to BCM.		
4	One touch unlock sensor assembly (driver side)	One touch unlock sensor detects user hold outside handle operation and transmits one touch unlock sensor signal to BCM. Refer to <u>DLK-9</u> . " <u>DOOR LOCK SYSTEM</u> : <u>Component Parts Location</u> " for detailed installation location.		
(5)	Front door switch (driver side)	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.		
6	Rear door switch LH	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.		
7	Inside key antenna (trunk room)	Inside key antenna (trunk room) detects whether Intelligent Key is inside the vehicle, and transmits the signal to BCM. Refer to DLK-9, "DOOR LOCK SYSTEM: Component Parts Location" for detailed installation location.		
8	Trunk lid opener request switch	Trunk lid opener request switch detects open operation of trunk lid and transmits trunk lid open- or request signal to BCM.		
9	Trunk lid lock assembly (trunk room lamp switch)	Trunk room lamp switch is integrated into trunk lid lock assembly. Trunk room lamp switch detects trunk lid open/close condition and then transmits ON/OFF signal to BCM.		
10	Outside key antenna (rear bumper)	Outside key antenna detects whether Intelligent Key is within the detection area or not, and then transmits signal to BCM. Refer to DLK-9 . "DOOR LOCK SYSTEM: Component Parts Location" for detailed installation location.		
11)	Rear door switch RH	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.		
12	Inside key antenna (console)	Inside key antenna (console) detects whether Intelligent Key is inside the vehicle, and transmits the signal to BCM. Refer to DLK-9, "DOOR LOCK SYSTEM: Component Parts Location" for detailed installation location.		
13	A/T shift selector (detention switch)	Detention switch is integrated into A/T shift sector, and detects that selector lever is locked in the P position, then transmits ON/OFF signal to BCM and IPDM E/R.		
14)	Front door switch (passenger side)	Door switch detects door open/close condition and then transmits ON/OFF signal to BCM.		
15	One touch unlock sensor assembly (passenger side)	One touch unlock sensor detects user hold outside handle operation and transmits one touch unlock sensor signal to BCM. Refer to DLK-9, "DOOR LOCK SYSTEM: Component Parts Location" for detailed installation location.		
16	TCU	TCU transmits engine start signal to BCM when engine start request signal is received from Infiniti Connection™ data center. Refer to AV-699, "Component Parts Location" for detailed installation location.		

SEC-7 2016 Q50 Revision: November 2016

COMPONENT PARTS

< SYSTEM DESCRIPTION >

No.	Component	Function	
17	A/T assembly (TCM)*1	TCM detects the selector lever position, and then transmits the P/N position signal to BCM an IPDM E/R. BCM confirms the A/T shift selector position with the following 4 signals. • P position signal from A/T shift selector (detention switch) • P/N position signal from TCM • Interlock/PNP switch signal from IPDM E/R (CAN) • P/N position signal from TCM (CAN) IPDM E/R confirms the A/T shift selector position with the following 3 signals. • P position signal from A/T shift selector (detention switch) • P/N position signal from TCM • P/N position signal from BCM (CAN) Refer to TM-13. "A/T CONTROL SYSTEM: Component Parts Location" for detailed installation location.	
18	Inside key antenna (instrument lower)	Inside key antenna (instrument lower) detects whether Intelligent Key is within the detection area or not, and then transmits signal to BCM. Refer to DLK-9. "DOOR LOCK SYSTEM: Component Parts Location" for detailed installation location.	
19	всм	BCM controls INTELLIGENT KEY SYSTEM (ENGINE START FUNCTION), INFINITI VEHI-CLEIMMOBILIZER SYSTEM (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-99, "Removal and Installation" for detailed installation location.	
@	IPDM E/R	Starter control relay and starter relay are integrated in IPDM E/R, and used for the engine start ing function. Starter relay is controlled by BCM, and starter control relay is controlled by IPDM E/R while communicating with BCM. IPDM E/R sends the starter control relay and starter relay status signal to BCM. Refer to PCS-5, "Component Parts Location" for detailed installation location.	
21)	Vehicle security horn	Vehicle security horn operate for warning vehicle surroundings when VEHICLE SECURITY SYSTEM operates.	
22	Horn high	Horn high operate for warning vehicle surroundings when VEHICLE SECURITYSYSTEM operates.	
23	Hood switch	Refer to SEC-9, "Hood Switch".	
24)	Horn low	Horn low operate for warning vehicle surroundings when VEHICLE SECURITYSYSTEM operates.	
25	ECM*1	ECM controls the engine.	
26	ECM*2	When ignition switch is turned ON, BCM starts communication with ECM and performs the ID verification between BCM and ECM. If the verification result is OK, the engine can start. If the verification result is NG, the engine can not start. Refer to EC6-33 , "ENGINE CONTROL SYSTEM: Component Parts Location" (VR30DDTT engine models for USA and Canada), EC6-1024 , "ENGINE CONTROL SYSTEM: Component Parts Location" (VR30DDTT engine models for Mexico) or EC4-25 , "ENGINE CONTROL SYSTEM: Component Parts Location" (2.0L Turbo gasoline engine models) for detailed installation location.	
27	Remote keyless entry receiver	Remote keyless entry receiver receives each button operation signal and electronic key ID signal from Intelligent Key, and then transmits the signal to BCM. Refer to DLK-9 , "DOOR LOCK SYSTEM: Component Parts Location" for detailed installation location.	
28	Stop lamp switch	Stop lamp switch detects that brake pedal is depressed, and then transmits ON/OFF signal to BCM. Refer to BRC-10, "Component Parts Location" for detailed installation location.	

COMPONENT PARTS

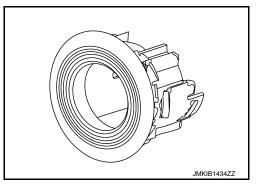
< SYSTEM DESCRIPTION >

No.	Component	Function
29	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 change 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.
30	NATS antenna amp.	Refer to SEC-9, "NATS Antenna Amp.".

^{*1:} For VR30DDTT engine models

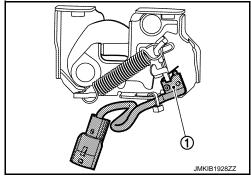
NATS Antenna Amp.

The ID verification is performed between BCM and transponder integrated into Intelligent Key via NATS antenna amp. when Intelligent Key backside is contacted to push-button ignition switch in case that Intelligent Key battery is discharged. If the ID verification result is OK, the operation of ignition switch is available.



Hood Switch

Hood switch ① detects that hood is open, and then transmits ON/ OFF signal to IPDM E/R. IPDM E/R transmits hood switch signal to BCM via CAN communication. Hood switch is integrated into hood lock assembly.



SEC

Α

В

D

Е

INFOID:0000000012792678

Ν

0

^{*2:} For 2.0L Turbo gasoline engine models

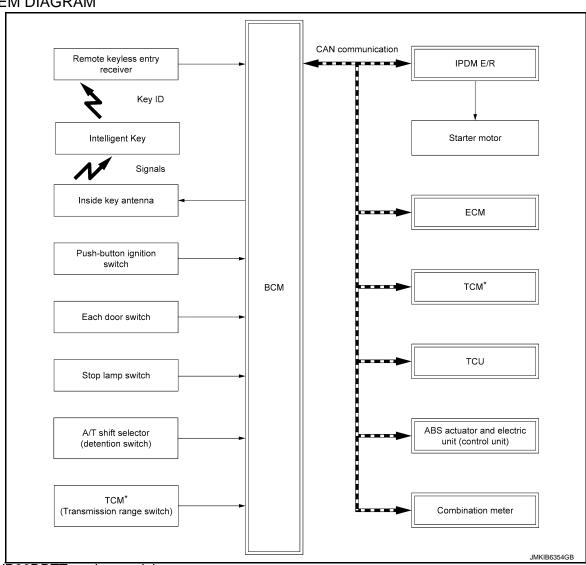
SYSTEM

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION: System Description

VFOID:0000000012792680

SYSTEM DIAGRAM



*: For VR30DDTT engine models

BCM INPUT/OUTPUT SIGNAL CHART

Input Signal Item

Transmit unit	Signal name		
ECM		ID verification signal Engine status signal	
IPDM E/R	CAN communication	 Push-button ignition switch status signal Starter relay status signal Starter control relay signal Detention switch signal Interlock/PNP switch signal 	
Combination meter		Vehicle speed signal	
ABS actuator and electric unit (control unit)		Vehicle speed signal	
TCM*		Shift position signal	
TCU		Engine start request signal	
Remote keyless entry receiver	Key ID signal		
Push-button ignition switch	Push switch signal	Push switch signal	
Each door switch	Door switch signal		
Stop lamp switch	Stop lamp switch signal		
A/T shift selector (detention switch)	P position signal		
TCM*	P/N position signal		

^{*:} For VR30DDTT engine models

Output Signal Item

Reception unit	Signal name		
Combination meter	CAN communication	Key warning lamp signal	
ECM	CAN communication	ID verification signal	
Inside key antenna	Inside key antenna signal		

SYSTEM DESCRIPTION

The engine start function of Intelligent Key system makes it possible to start and stop the engine without using the key, based on the electronic ID verification. The electronic ID verification is performed between BCM and Intelligent Key when the push-button ignition switch is pressed while the Intelligent Key is within the detection area of inside key antenna.

NOTE:

The driver should carry the Intelligent Key at all times.

 Intelligent Key has 2 IDs (Intelligent Key ID and NATS ID). It can perform the door lock/unlock operation and the push-button ignition switch operation when the registered Intelligent Key is carried.

NOTE:

Refer to DLK-19, "INTELLIGENT KEY SYSTEM: System Description" for any functions other than engine start function of Intelligent Key system.

- If the ID is successfully verified, when push-button ignition switch is pressed, the engine can be started.
- Up to 4 Intelligent Keys can be registered (Including the standard Intelligent Key) upon request from the cus-
- For registration of Intelligent Keys, perform procedure according to the instructions displayed on the CON-SULT monitor.

PRECAUTIONS FOR INTELLIGENT KEY SYSTEM

The transponder (the chip for NATS ID verification) is integrated into the Intelligent Key. (For the conventional models, it is integrated into the mechanical key.) Therefore, ID verification cannot be performed by mechanical key only.

In that case, NATS ID verification can be performed when Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed. If verification result is OK, engine can be started.

OPERATION WHEN INTELLIGENT KEY IS CARRIED (FOR VR30DDTT ENGINE MODELS)

SEC

Α

В

D

Е

M

Ν

SEC-11 Revision: November 2016 2016 Q50

< SYSTEM DESCRIPTION >

- 1. When the push-button ignition switch is pressed, the BCM activates the inside key antenna and transmits the request signal to the Intelligent Key.
- 2. The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the BCM.
- BCM receives the Intelligent Key ID signal via remote keyless entry receiver and verifies it with the registered ID.
- BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
- IPDM E/R turns the ignition relay ON and starts the ignition power supply.
- IPDM E/R turns the starter control relay ON for engine starting in advance.
- 7. BCM detects the selector lever position and brake pedal operation condition.
- 8. BCM transmits the starter request signal to IPDM E/R and turns the starter relay in IPDM E/R ON if BCM judges that the engine start condition* is satisfied.
- Power supply is supplied through the starter relay and the starter control relay to operate the starter motor.
 CAUTION:

If a malfunction is detected in the Intelligent Key system, the "Intelligent Key system malfunction display" display on information display in combination meter. At that time, the engine cannot be started.

10. When BCM receives feedback signal from ECM indicating that the engine is started, the BCM transmits a stop signal to IPDM E/R and stops cranking by turning OFF the starter motor relay. (If engine start is unsuccessful, cranking stops automatically within 5 seconds.)

CAUTION

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

*: For the engine start condition, refer to "IGNITION SWITCH POSITION CHANGE TABLE BY PUSH-BUT-TON IGNITION SWITCH OPERATION".

OPERATION WHEN INTELLIGENT KEY IS CARRIED (FOR 2.0L TURBO GASOLINE ENGINE MODELS)

- 1. When the push-button ignition switch is pressed, the BCM activates the inside key antenna and transmits the request signal to the Intelligent Key.
- The Intelligent Key receives the request signal and transmits the Intelligent Key ID signal to the BCM.
- BCM receives the Intelligent Key ID signal via remote keyless entry receiver and verifies it with the registered ID.
- 4. BCM transmits the unlock signal to steering lock unit and IPDM E/R if the verification results are OK.
- 5. IPDM E/R turns the steering lock relay ON and supplies power supply to the steering lock unit.
- The steering lock releases.
- BCM transmits the power supply stop signal to IPDM E/R when detecting that the steering lock is in the unlock condition.
- 8. IPDM E/R turns the steering lock relay OFF and stops power supply to the steering lock unit.
- 9. BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
- 10. IPDM E/R turns ignition relay ON and starts the ignition power supply.
- 11. BCM receives an engine status signal from ECM via CAN communication, and recognizes that the engine is not started.
- 12. When BCM performs ID verification with ECM and detects that the verified result is OK, the engine start conditions are satisfied. BCM transmits an engine start request signal to ECM via CAN communication.
- 13. When ECM receives an engine start request signal from BCM via CAN communication, ECM activates the starter motor and starts the engine.
- 14. When ECM recognizes that the engine is started, ECM transmits an engine status signal (RUN) to BCM via CAN communication.
- 15. When BCM receives an engine status signal from ECM via CAN communication, BCM recognizes that the engine is started.
- *: For the engine start condition, refer to "IGNITION SWITCH POSITION CHANGE TABLE BY PUSH-BUT-TON IGNITION SWITCH OPERATION".

CAUTION:

< SYSTEM DESCRIPTION >

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

OPERATION RANGE

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

ENGINE START OPERATION WHEN INTELLIGENT KEY IS CONTACTED TO PUSH-BUTTON IG-NITION SWITCH

When Intelligent Key battery is discharged, NATS ID verification between transponder in Intelligent Key and BCM is performed when Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed. If the verification result is OK, engine can be started.

IGNITION SWITCH POSITION CHANGE TABLE BY PUSH-BUTTON IGNITION SWITCH OPERA-TION

The ignition switch position can be changed by the following operations.

NOTE:

- When an Intelligent Key is within the detection area of inside key antenna or when Intelligent Key backside is contacted to push-button ignition switch, it is equivalent to the operations below.
- When starting the engine, the BCM monitors under the engine start conditions,
- Brake pedal operation condition
- Selector lever position
- Vehicle speed

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

	Con	- Push-button ignition switch opera- tion frequency	
Power supply position	r supply position Selector lever Brake pedal operation condition		
$OFF \to ACC$	_	Not depressed	1
$OFF \to ACC \to ON$	_	Not depressed	2
$OFF \to ACC \to ON \to OFF$	_	Not depressed	3
$\begin{array}{c} OFF \to START \\ ACC \to START \\ ON \to START \end{array}$	P or N position	Depressed	1
Engine is running → OFF	_	_	1

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

	Con	Push-button ignition switch opera-	
Power supply position	Selector lever	Brake pedal operation condition	tion frequency
Engine is running → ACC	_	_	Emergency stop operation
Engine stall return operation while driving	N position	Not depressed	1

Emergency stop operation

Emergency engine stop is activated when any of the following operation is performed.

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

REMOTE ENGINE START FUNCTION (FOR VR30DDTT ENGINE MODELS)

Remote engine start function enables engine to be started from vehicle outside by operating REMOTE ENGINE START button of Intelligent Key or mobile phone.

In the same way as the Intelligent Key, the engine can be started by operating a cellular phone using the Telematics system function. For details, refer to AV-703, "TELEMATICS SYSTEM: System Description".

Engine Start Procedures

The following operation enables the engine to be started.

SEC-13 Revision: November 2016 2016 Q50

SEC

Α

D

Е

F

Н

N

SYSTEM

< SYSTEM DESCRIPTION >

- Press LOCK button of Intelligent Key, and then within 5 seconds, press and hold REMOTE ENGINE START button of Intelligent Key for 2 seconds or more.
- Perform engine start operation using a cellular phone.

Engine does not start while the vehicle is in the following status.

- All doors are UNLOCK or any door is open.
- Hood is open.
- A registered Intelligent Key is in passenger room.
- Shift position is other than P.
- Vehicle security alarm is in operation
- Hazard lamp is in operation.

Engine Stop Procedures

The following operation enables the engine to be stoped.

- Press REMOTE ENGINE START button of Intelligent Key.
- Perform engine stop operation using a cellular phone.
- Push-button ignition switch is operated.

Engine stops when the vehicle status changes to the following status

- 10 minutes are passed since engine start.
- Hood is open.
- Shift position is shifted to a position other than P.
- Vehicle security alarm starts to operate.

NOTE:

While engine is in operation by Intelligent Key, engine operation time can be extended for 10 minutes. To extend engine operation time, press LOCK button of Intelligent Key, and then within 5 seconds, press and hold REMOTE ENGINE START button of Intelligent Key for 2 seconds or more.

Operation Area

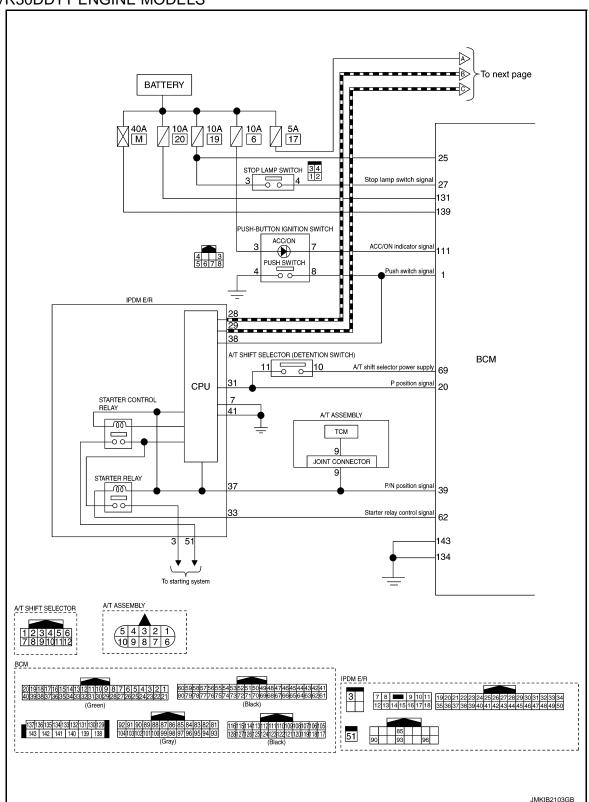
The engine can be started when the vehicle is under the following conditions.

- The remote engine start operating range is approximately 60 m (197 ft.) from the vehicle.
- The vehicle is within the communication range of the Infiniti Connection™ data center.

INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION : Circuit Diagram

INFOID:0000000012792681

FOR VR30DDTT ENGINE MODELS



В

С

D

Е

F

G

Н

.

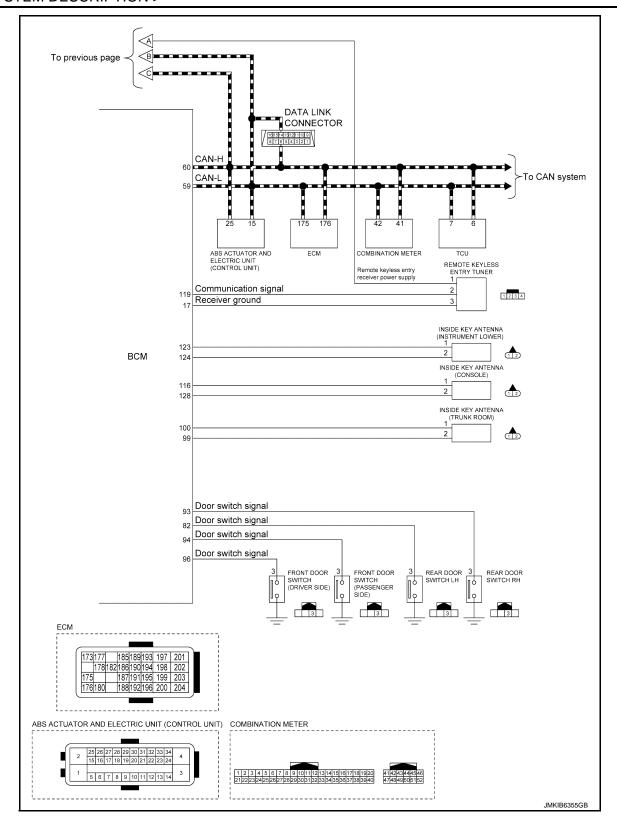
SEC

ı

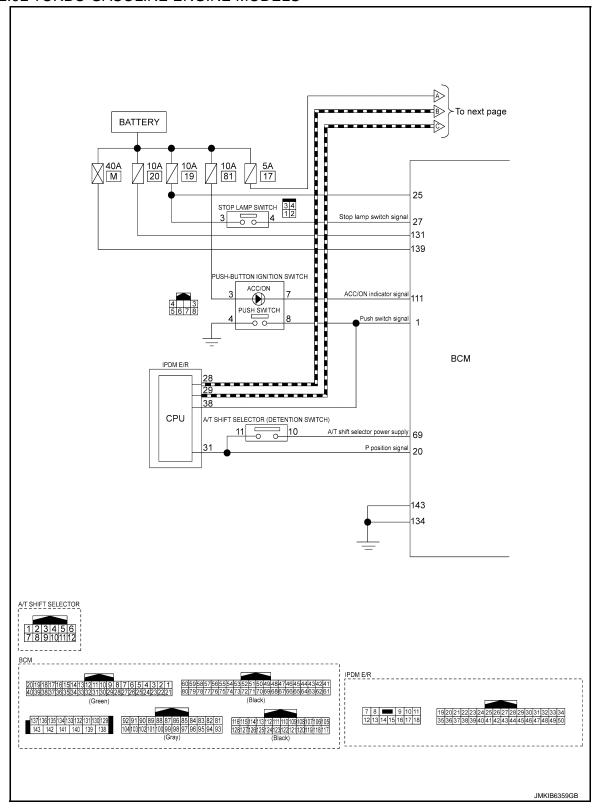
M

Ν

0



FOR 2.0L TURBO GASOLINE ENGINE MODELS



Α

В

С

D

Е

F

G

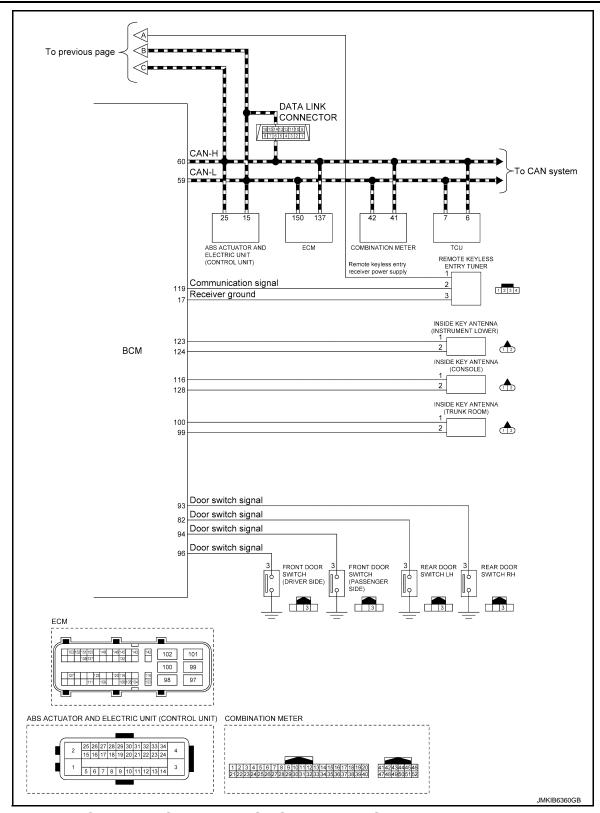
Н

SEC

M

Ν

 \bigcirc

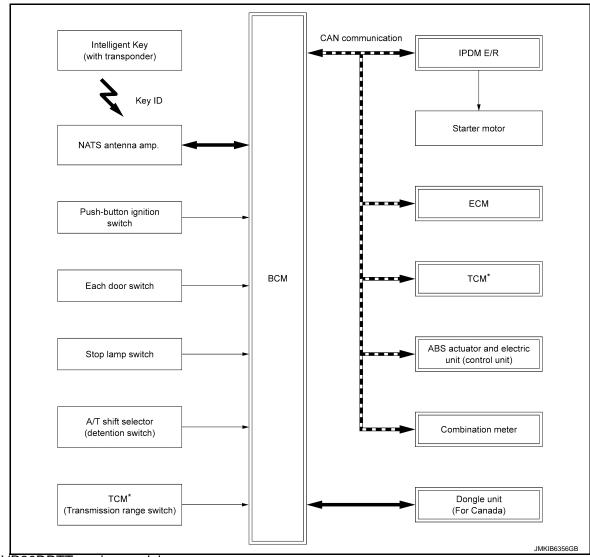


INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS : System Description

INFOID:0000000012792682

SYSTEM DIAGRAM



*: For VR30DDTT engine models

BCM INPUT/OUTPUT SIGNAL CHART

Input Signal Item

Transmit unit	Signal name	
ECM		ID verification signal Engine status signal
IPDM E/R	CAN communication	 Push-button ignition switch status signal Starter relay status signal Starter control relay signal Detention switch signal Interlock/PNP switch signal
TCM*		Shift position signal
Combination meter		Vehicle speed signal
ABS actuator and electric unit (control unit)		Vehicle speed signal
NATS antenna amp.	Key ID signal	
Push-button ignition switch	Push switch signal	
Each door switch	Door switch signal	

Revision: November 2016 SEC-19 2016 Q50

В

Α

С

D

Е

F

Н

. I

SEC

M

Ν

0

< SYSTEM DESCRIPTION >

Transmit unit	Signal name
Stop lamp switch	Stop lamp switch signal
A/T shift selector (detention switch)	P position signal
TCM*	P/N position signal

*: For VR30DDTT engine models

Output Signal Item

Reception unit	Signal name	
ECM	CAN communication	ID verification signal
Combination meter (security indicator lamp)	Security indicator lamp signal	
Inside key antenna	Inside key antenna signal	

SYSTEM DESCRIPTION

- INFINITI VEHICLE IMMOBILIZER SYSTEM (NATS) prevents the engine from being started by Intelligent Key whose ID is not registered to the vehicle (BCM). It has higher protection against auto theft involving the duplication of mechanical keys.
- The ignition key integrated in the Intelligent Key cannot start the engine. When the Intelligent Key battery is discharged, the NATS ID verification is performed between the transponder integrated with Intelligent Key and BCM via NATS antenna amp. when the Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed. If the verification result is OK, the engine start operation can be performed by the push-button ignition switch operation.
- Security indicator lamp is located on combination meter and blinks when the ignition switch is in any position except ON to warn that the vehicle is equipped with INFINITI VEHICLE IMMOBILIZER SYSTEM (NATS).
- Up to 4 Intelligent Keys can be registered (including the standard ignition key) upon request from the owner.
- When replacing ECM, BCM or Intelligent Key, the specified procedure (Initialization of BCM and registration of Intelligent Keys) using CONSULT is required.
- Possible symptom of NATS malfunction is "Engine can not start". This symptom also occurs because of other than NATS malfunction, so start the trouble diagnosis according to SEC-92, "Work Flow".
- If ECM other than genuine part is installed, the engine cannot be started.

PRECAUTIONS FOR KEY REGISTRATION

- The ID registration is a procedure that erases the current NATS ID once, and then registers a new ID. Therefore before starting the registration operation, collect all registered Intelligent Keys from the customer.
- When registering the Intelligent Key, perform only one procedure to simultaneously register both IDs (NATS ID and Intelligent Key ID).
- For registration of Intelligent Keys, perform procedure according to the instructions displayed on the CON-SULT monitor.

SECURITY INDICATOR LAMP

- Security indicator lamp warns that the vehicle is equipped with INFINITI VEHICLE IMMOBILIZER SYSTEM (NATS).
- Security indicator lamp always blinks when the ignition switch is in any position other than ON.
 NOTE:

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

ENGINE START OPERATION WHEN INTELLIGENT KEY IS CONTACTED TO PUSH-BUTTON IGNITION SWITCH (FOR VR30DDTT ENGINE MODELS)

- 1. When brake pedal is depressed while selector lever is in the P position, BCM activates NATS antenna amp. that is located behind push-button ignition switch.
- 2. When Intelligent Key (transponder built-in) backside is contacted to push-button ignition switch, BCM starts NATS ID verification between BCM and Intelligent Key (built-in transponder) via NATS antenna amp.
- 3. When NATS ID verification result is OK, buzzer in combination meter sounds and BCM transmits the result to ECM.
- When push-button ignition switch is pressed, BCM turns ACC relay ON and transmits ignition power supply ON signal to IPDM E/R.
- IPDM E/R turns the ignition relay ON and starts the ignition power supply.

SYSTEM

< SYSTEM DESCRIPTION >

- 6. IPDM E/R turns the starter control relay ON for engine starting in advance.
- 7. BCM detects that the selector lever position and brake pedal operation condition.
- 8. BCM transmits starter request signal to IPDM E/R and turns the starter relay in IPDM E/R ON if BCM judges that the engine start condition* is satisfied.
- 9. Power supply is supplied through the starter relay and the starter control relay to operate the starter motor.
- 10. When BCM receives feedback signal from ECM indicating that the engine is started, BCM transmits a stop signal to IPDM E/R and stops cranking by turning off the starter motor relay. (If engine start is unsuccessful, cranking stops automatically within 5 seconds.)
- *: For the engine start condition, refer to "IGNITION SWITCH POSITION CHANGE TABLE BY PUSH-BUT-TON IGNITION SWITCH OPERATION" below.

ENGINE START OPERATION WHEN INTELLIGENT KEY IS CONTACTED TO PUSH-BUTTON IGNITION SWITCH (FOR 2.0L TURBO GASOLINE ENGINE MODELS)

- 1. When brake pedal is depressed while selector lever is in the P position, BCM activates NATS antenna amp. that is located behind push-button ignition switch.
- 2. When Intelligent Key (transponder built-in) backside is contacted to push-button ignition switch, BCM starts NATS ID verification between BCM and Intelligent Key (built-in transponder) via NATS antenna amp.
- 3. When NATS ID verification result is OK, buzzer in combination meter sounds and BCM transmits the result to ECM.
- 4. When push-button ignition switch is pressed, BCM transmits steering unlock signal to steering lock unit and IPDM E/R.
- 5. IPDM E/R turns steering lock relay ON and supplies power supply to the steering lock unit.
- 6. The steering lock is released.
- 7. BCM transmits the power supply stop signal to IPDM E/R when detecting that the steering lock is in the unlock position.
- 8. IPDM E/R turns steering lock relay OFF and stops power supply to the steering lock unit.
- 9. BCM turns ACC relay ON and transmits the ignition power supply ON signal to IPDM E/R.
- 10. IPDM E/R turns ignition relay ON and starts the ignition power supply.
- 11. BCM receives an engine status signal from ECM via CAN communication, and recognizes that the engine is not started.
- 12. When BCM performs ID verification with ECM and detects that the verified result is OK, the engine start conditions are satisfied. BCM transmits an engine start request signal to ECM via CAN communication.
- 13. When ECM receives an engine start request signal from BCM via CAN communication, ECM activates the starter motor and starts the engine.
- 14. When ECM recognizes that the engine is started, ECM transmits an engine status signal (RUN) to BCM via CAN communication.
- 15. When BCM receives an engine status signal from ECM via CAN communication, BCM recognizes that the engine is started.
- *: For the engine start condition, refer to "IGNITION SWITCH POSITION CHANGE TABLE BY PUSH-BUT-TON IGNITION SWITCH OPERATION" below.

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

The ignition switch position can be changed by the following operations.

NOTE:

- When an Intelligent Key is within the detection area of inside key antenna or when Intelligent Key backside is contacted to push-button ignition switch, it is equivalent to the operations below.
- When starting the engine, the BCM monitors under the engine start conditions,
- Brake pedal operation condition
- Selector lever position
- Vehicle speed

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

SEC

Н

Α

D

N /I

Ν

0

Р

Revision: November 2016 SEC-21 2016 Q50

Power supply position	Con	Push-button ignition switch opera-	
	Selector lever	Brake pedal operation condition	tion frequency
$OFF \to ACC$	_	Not depressed	1
$OFF \to ACC \to ON$	_	Not depressed	2
$OFF \to ACC \to ON \to OFF$	_	Not depressed	3
OFF → START ACC → START ON → START	P or N position	Depressed	1
Engine is running → OFF	_	_	1

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

	Condition		- Push-button ignition switch opera-	
Power supply position	Selector lever	Brake pedal operation condition	tion frequency	
Engine is running → ACC	_	_	Emergency stop operation	
Engine stall return operation while driving N position		Not depressed	1	

Emergency stop operation

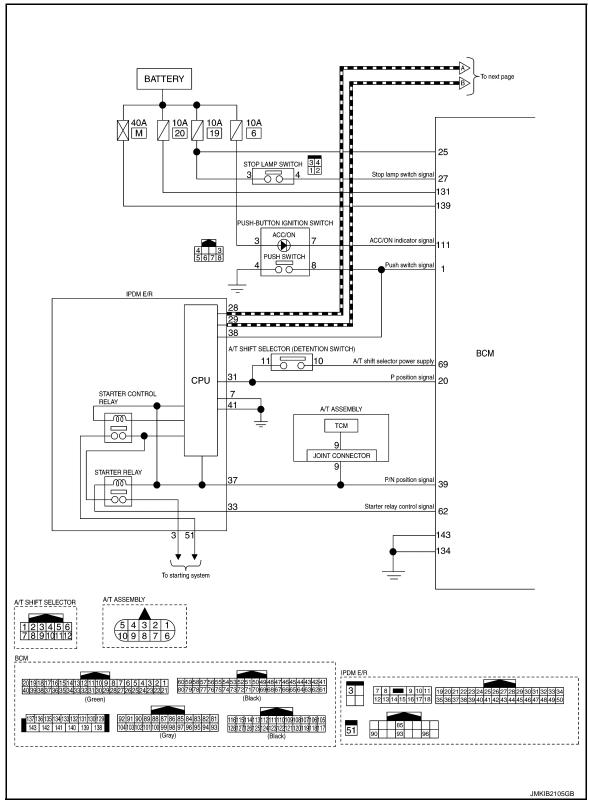
Emergency engine stop is activated when any of the following operation is performed.

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

INFINITI VEHICLE IMMOBILIZER SYSTEM-NATS: Circuit Diagram

INFOID:0000000012792683

FOR VR30DDTT ENGINE MODELS



В

Α

С

D

Е

F

G

Н

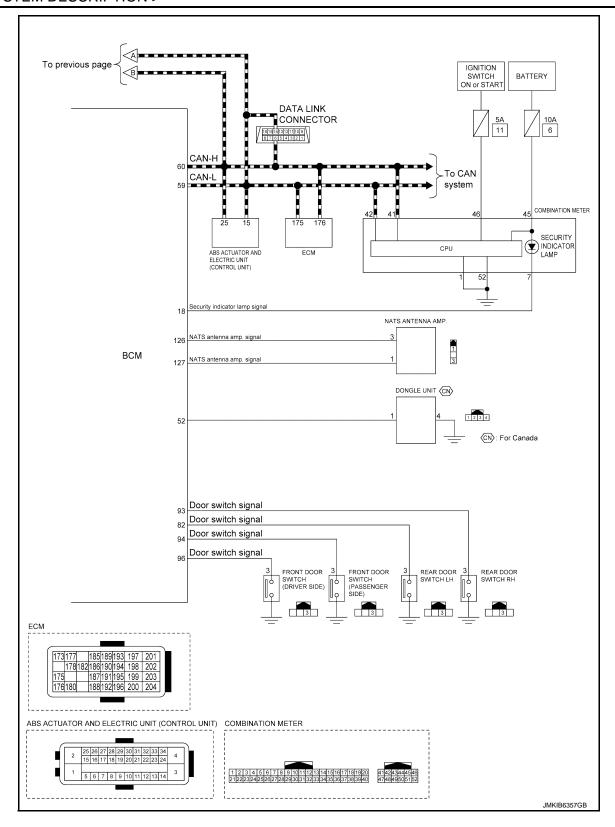
SEC

.

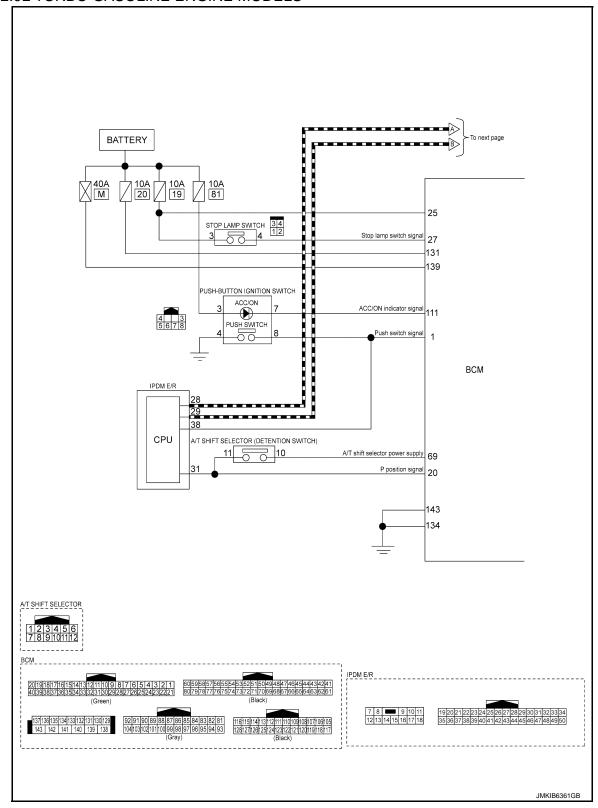
M

Ν

0



FOR 2.0L TURBO GASOLINE ENGINE MODELS



Α

В

D

Е

F

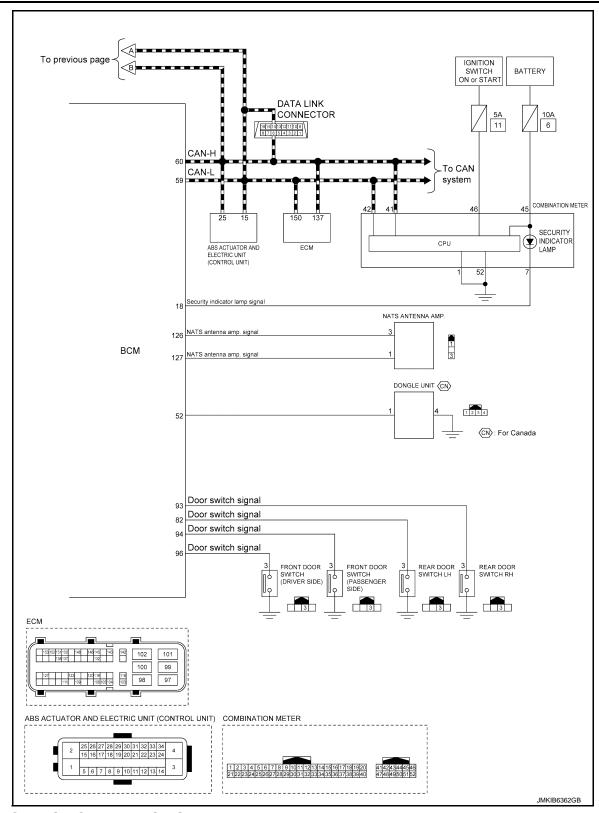
Н

SEC

M

Ν

0



VEHICLE SECURITY SYSTEM

VEHICLE SECURITY SYSTEM : System Description

INFOID:0000000012792684

Α

В

D

Е

F

Н

SEC

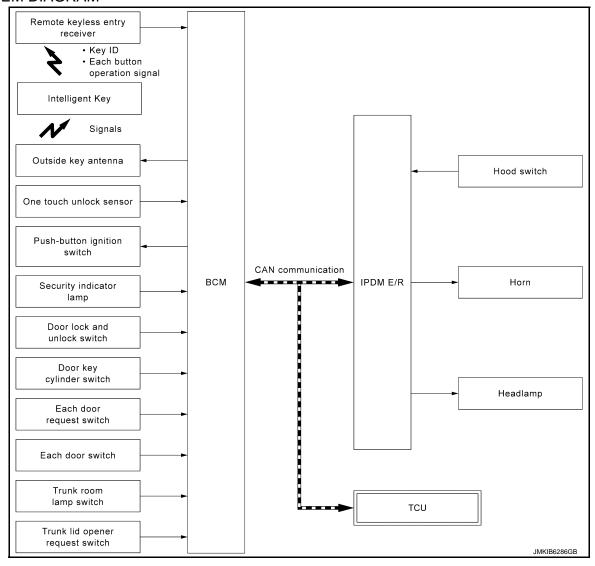
M

Ν

0

Р

SYSTEM DIAGRAM



BCM INPUT/OUTPUT SIGNAL CHART

Input Signal Item

Transmit unit		Signal name		
IPDM E/R	CAN communication	Hood switch signal		
TCU	CAN communication	Panic alarm request signal		
Remote keyless entry receiver	Key ID signal Each button operatio			
Push-button ignition switch	Push switch signal	Push switch signal		
Each door switch	Door switch signal	Door switch signal		
Each door request switch	Door request switch sig	Door request switch signal		
Trunk room lamp switch	Trunk room lamp switch	Trunk room lamp switch signal		
Trunk lid opener request switch	Trunk opener request s	Trunk opener request switch signal		
Door key cylinder switch	Door key cylinder switc	Door key cylinder switch signal		
One touch unlock sensor	One touch unlock sens	One touch unlock sensor signal		

Output Signal Item

Reception unit	Signal name	
IPDM E/R	CAN communication	Theft warning horn request signal High beam request signal
Combination meter (security indicator lamp)	Security indicator lamp signal	
Outside key antenna Signal Outside key antenna Signal		nal

SYSTEM DESCRIPTION

- The vehicle security system has two alarm functions (theft warning alarm and panic alarm), and reduces the possibility of a theft or mischief by activating horns and headlamps intermittently.
- The panic alarm does not start when the theft warning alarm is activating, and the panic alarm stops when the theft warning alarm is activated.

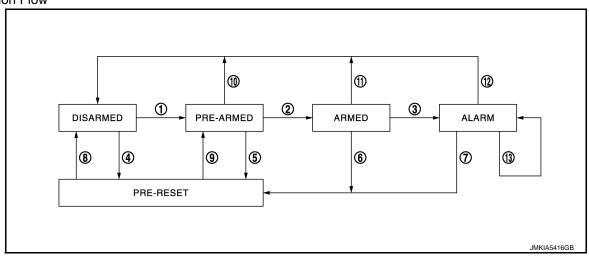
The priority of the functions are as per the following.

Priority	Function	
1	Theft warning alarm	
2	Panic alarm	

THEFT WARNING ALARM

- The theft warning alarm function activates horns and headlamps intermittently when BCM detects that any door, hood or trunk lid is opened by unauthorized means, while the system is in the ARMED state.
- Security indicator lamp on combination meter always blinks when ignition switch is any position other than ON. Security indicator lamp blinking warns that the vehicle is equipped with a vehicle security system.

Operation Flow



No.	System state	Switching condition			
1	DISARMED to PRE-ARMED	When all conditions of A and one condition of B is satisfied.	Ignition switch: OFF All doors: Closed Hood: Closed Trunk lid: Closed	B All doors are locked by: Door key cylinder LOCK switch LOCK button of Intelligent Key Door request switch	
@	PRE-ARMED to ARMED	When none of the following conditions are satisfied for 30 seconds.	Ignition switch: ACC/ON Door key cylinder UNLOCK switch: ON UNLOCK button of Intelligent Key: ON Door request switch: ON UNLOCK switch of door lock and unlock switch: ON Any door: Open Hood: Open Trunk lid: Open		
3	ARMED to ALARM	When one condition of A and one condition of B are satisfied.	Any door: OpenHood: OpenTrunk lid: Open		

SYSTEM

< SYSTEM DESCRIPTION >

No.	System state	Switching condition			
4	DISARMED to PRE-RESET	When all conditions of A and one condition of B is satisfied.	Ignition switch: OFF All doors: Closed Hood and/or Trunk lid: Open	B All doors are locked by: Door key cylinder LOCK switch LOCK button of Intelligent Key Door request switch	
(5)	PRE-ARMED to PRE-RESET	When one of the following conditions is satisfied.	Hood: Open Trunk lid: Open		
6	ARMED to PRE-RESET	When one of the following	Trunk lid opener request switch: ON		
7	ALARM to PRE-RESET	conditions is satisfied.	TRUNK OPEN button of Intelligent	Key: ON	
8	PRE-RESET to DISARMED	When one of the following conditions is satisfied.	 Ignition switch: ACC/ON Door key cylinder UNLOCK switch: ON UNLOCK button of Intelligent Key: ON Door request switch: ON UNLOCK switch of door lock and unlock switch: ON Hold the outside handle grip (one touch unlock sensor: ON) Any door: Open 		
9	PRE-RESET to PRE-ARMED	When all conditions of A are satisfied, and all conditions of B are satisfied.	A Ignition switch: OFF All doors: Closed	Hood: Closed Trunk lid: Closed	
(1)	PRE-ARMED to DISARMED	When one of the following condition is satisfied.	Ignition switch: ACC/ON Door key cylinder UNLOCK switch: ON UNLOCK button of Intelligent Key: ON Door request switch: ON UNLOCK switch of door lock and unlock switch: ON Hold the outside handle grip (one touch unlock sensor: ON) Any door: Open		
11)	ARMED to DISARMED	Ignition switch: ACC/ON Door key cylinder UNLOCK switch: ON INUCCIONAL SWITCH: ON			
12	ALARM to DISARMED	 UNLOCK button of Intelligent Key: ON Hold the outside handle grip (one touch unlock sensor: ON) Door request switch: ON 			
13	RE-ALARM	When one of the following condition is satisfied after the ALARM operation is finished.	Any door: Open Hood: Open Trunk lid: Open		

NOTE:

- BCM ignores the door key cylinder UNLOCK switch signal input for 1 second after the door key cylinder LOCK switch signal input.
- · To lock/unlock all doors or trunk lid by operating remote controller button of Intelligent Key or door/trunk lid opener request switch, Intelligent Key must be within the detection area of outside key antenna. For details, refer to DLK-19. "INTELLIGENT KEY SYSTEM: System Description".

DISARMED Phase

The vehicle security system is not set in the DISARMED phase. The vehicle security system stays in this phase while any door is open, because it is assumed that the owner is inside or nearby the vehicle. Security indicator lamp blinks every 2.4 seconds.

When the vehicle security system is reset, each phase switches to the DISARMED phase directly.

PRE-ARMED Phase

The PRE-ARMED phase is the transient state between the DISARMED phase and the ARMED phase. This phase is maintained for 30 seconds, so that the owner can reset the setting due to a mis-operation. This phase switches to the ARMED phase when vehicle conditions are not changed for 30 seconds. Security indicator lamp illuminates while being in this phase.

To reset the PRE-ARMED phase, refer to the switching condition of No. 10 in the table above.

ARMED Phase

The vehicle security system is set, and BCM monitors all necessary inputs. If any door, hood, or trunk lid is opened without using Intelligent Key or mechanical key, vehicle security system switches to the ALARM phase. Security indicator lamp blinks every 2.4 seconds.

SEC-29 Revision: November 2016 2016 Q50

SEC

Α

В

D

Е

Н

M

Ν

SYSTEM

< SYSTEM DESCRIPTION >

To reset the ARMED phase, refer to the switching condition of No. 11 in the table above.

ALARM Phase

BCM transmits "Theft Warning Horn Request" signal and "High Beam Request" signal intermittently to IPDM E/R via CAN communication. In this phase, horns and headlamps are activated intermittently for approximately 50 seconds to warn that the vehicle is accessed by unauthorized means. ON/OFF timings of horns and headlamps are synchronized. After 50 seconds, the vehicle security system returns to the ARMED phase. At this time, if BCM still detects unauthorized access to the vehicle, the system is switched to the ALARM phase again. This RE-ALARM operation is carried out a maximum of 2 times.

To cancel the ALARM operation, refer to the switching condition of No. 12 in the table above.

NOTE:

If a battery terminal is disconnected during the ALARM/ARMED phase, theft warning alarm stops. But when the battery terminal is reconnected, theft warning alarm is activated again.

PRE-RESET Phase

The PRE-RESET phase is the transient state between each phase and DISARMED phase. If only the condition of hood or trunk lid is not satisfied, the system switches to the PRE-RESET phase. Then, when any condition is changed, the system switches to the DISARMED phase or PRE-ARMED phase.

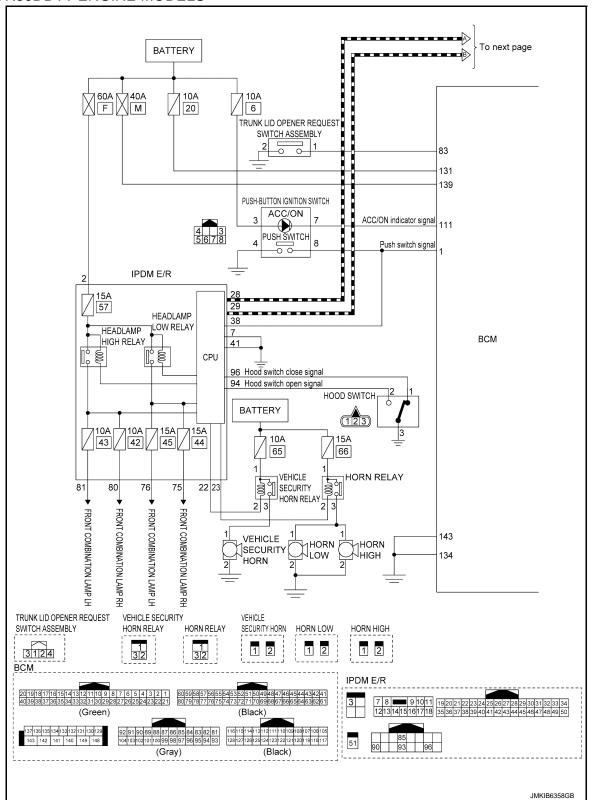
PANIC ALARM

- The panic alarm function activates horns and headlamps intermittently when the owner presses the PANIC ALARM button of Intelligent Key outside the vehicle while the ignition switch is OFF.
- In the same way as the Intelligent Key, the panic alarm can be activated and stopped by operating a cellular phone using the Telematics system function. For details, refer to <u>AV-703</u>, "<u>TELEMATICS SYSTEM</u>: <u>System Description</u>".
- When BCM receives panic alarm signal from Intelligent Key or TCU, BCM transmits "Theft Warning Horn Request" signal and "High Beam Request" signal intermittently to IPDM E/R via CAN communication. To prevent the activation due to mis-operation of Intelligent Key by owner, the panic alarm function is activated when BCM receives the signal for 0.4 - 0.6 seconds.
- Panic alarm operation is maintained for 25 seconds.
- Panic alarm operation is cancelled when BCM receives one of the following signals.
- LOCK button of Intelligent Key: ON
- UNLOCK button of Intelligent Key: ON
- TRUNK OPEN button of Intelligent Key: ON
- PANIC ALARM button of Intelligent Key: Long pressed
- Any door request switch: ON
- Hold the outside handle grip (one touch unlock sensor: ON)
- When BCM receive panic alarm signal from TCU via CAN communication.

VEHICLE SECURITY SYSTEM: Circuit Diagram

INFOID:0000000012792685

FOR VR30DDTT ENGINE MODELS



В

Α

С

D

Е

F

G

Н

J

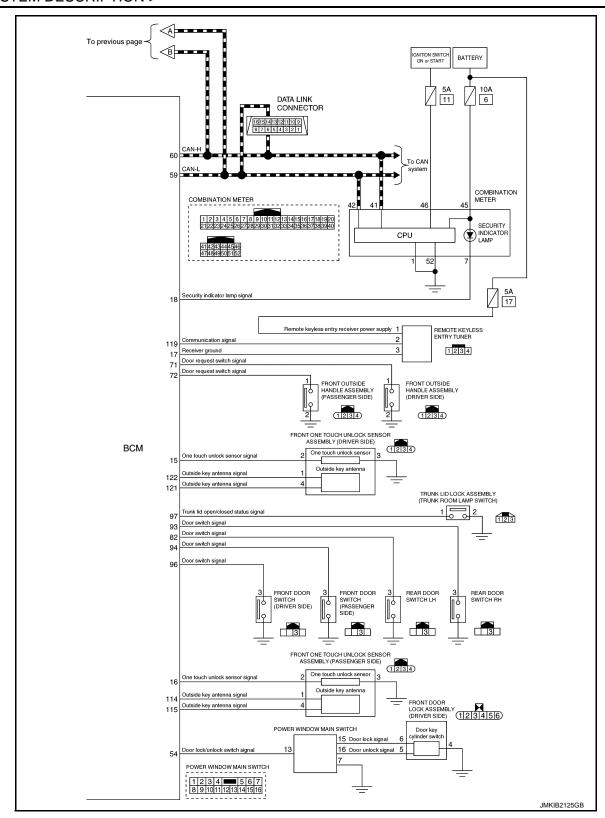
SEC

M

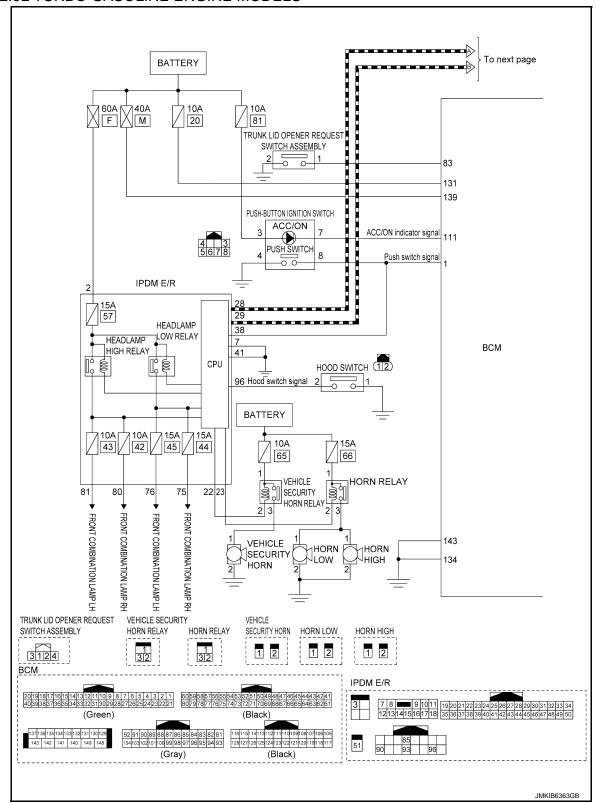
Ν

O

Ρ



FOR 2.0L TURBO GASOLINE ENGINE MODELS



Α

В

С

D

Е

F

G

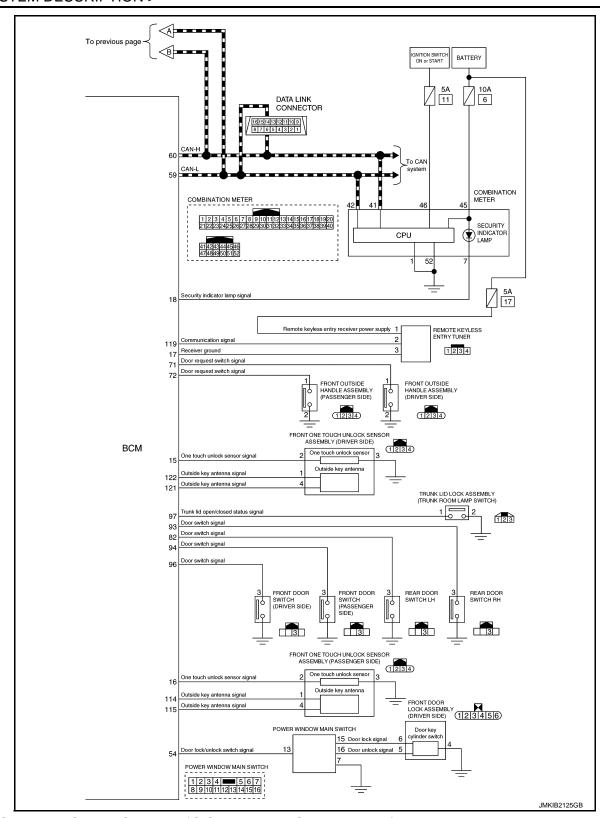
Н

SEC

M

Ν

0

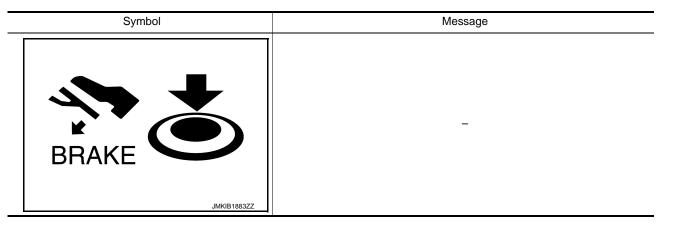


INFORMATION DISPLAY (COMBINATION METER)

INFORMATION DISPLAY (COMBINATION METER): Remote Engine Start Information

DESIGN/PURPOSE

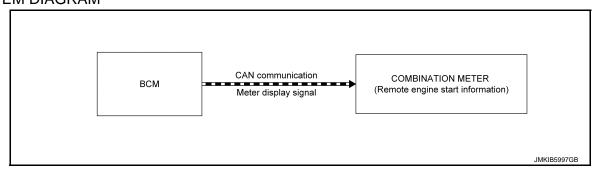
Information display informs the driver that the engine can be started.



SYNCHRONIZATION WITH MASTER WARNING LAMP

No applicable

SYSTEM DIAGRAM



SIGNAL PATH

- BCM transmits meter display signal to combination meter via CAN communication when remote engine run
 mode.
- When combination meter recieves meter display signal, combination meter display remote engine start information.

WARNING/INDICATOR OPERATIONG CONDITION

During remote engine run mode.

For details, refer to SEC-27, "VEHICLE SECURITY SYSTEM: System Description".

WARNING/INDICATOR CANCEL CONDITION

Mode switch to normal engine run mode from remote engine run mode.

For details, refer to <u>SEC-27</u>, "VEHICLE SECURITY SYSTEM: System Description".

WARNING/INDICATOR/CHIME LIST

WARNING/INDICATOR/CHIME LIST: Warning Lamp/Indicator Lamp

INFOID:0000000012792686

Item	Design	Reference
		For layout, refer to MWI-9, "METER SYSTEM: Design".
Security indicator lamp		For function, refer to MWI-44, "WARNING LAMPS/INDICATOR LAMPS: Security Indicator Lamp (Turn ON)" or MWI-45, "WARNING LAMPS/INDICATOR LAMPS: Security Indicator Lamp (Blinks)".

Р

Ν

Α

В

D

Е

F

Н

SEC

Revision: November 2016 SEC-35 2016 Q50

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000013496107

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

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

^{*:} This item is not used.

FREEZE FRAME DATA (FFD)

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

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit		Description	Α
Vehicle Speed	km/h	Vehicle speed of the mo	ment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odomete	r value) of the moment a particular DTC is detected	_
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)	В
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	С
	LOCK>ACC		While turning power supply position from "LOCK" *to "ACC"	
	ACC>ON		While turning power supply position from "ACC" to "IGN"	D
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)	
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	Е
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	F
V I : I O I''	OFF>LOCK	Power position status of the moment a particular DTC is detected*	While turning power supply position from "OFF" to "LOCK"*	
Vehicle Condition	OFF>ACC		While turning power supply position from "OFF" to "ACC"	C
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	H
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode	
	LOCK		Power supply position is "LOCK" (Ignition switch OFF)*	
	OFF		Power supply position is "OFF" (Ignition switch OFF)	
	ACC		Power supply position is "ACC" (Ignition switch ACC)	J
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)	Ü
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)	SE
	CRANKING		Power supply position is "CRANKING" (At engine cranking)	
IGN Counter	0 - 39	 The number is 0 wher The number increases whenever ignition swit 	at ignition switch is turned ON after DTC is detected a malfunction is detected now. If the interpolar is like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition to the OFF \rightarrow ON. If 39 until the self-diagnosis results are erased if it is over 39 .	L

NOTE

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

Ν

0

Р

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

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

INTELLIGENT KEY

INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:000000013496106

WORK SUPPORT

< SYSTEM DESCRIPTION >

Monitor item	Description
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
LOCK/UNLOCK BY I-KEY	Door lock function (door request switch) mode can be changed to operation in this mode On: Operate Off: Non-operation
ENGINE START BY I-KEY	Engine start function mode can be changed to operation with this mode On: Operate Off: Non-operation
TRUNK/GLASS HATCH OPEN	Reminder function (trunk lid opener request switch) mode can be changed to operation with this mode On: Operate Off: Non-operation
AUTO LOCK SET	Auto door lock operation time can be changed in this mode • MODE 1: OFF • MODE 2: 30 sec. • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes
SHORT CRANKING OUTPUT	Starter motor can operate during the times below
CONFIRM KEY FOB ID	It can be checked whether Intelligent Key ID code is registered or not in this mode
RETRACTABLE MIRROR SET	NOTE: This item is displayed, but cannot be used
TOUCH SENSOR UNLOCK FUNCTION SETTING	One touch unlock function can be changed to operation with this mode On: Operate Off: Non-operation
IGN/ACC BATTERY SAVER	Ignition battery saver system mode can be changed to operation with this mode On: Operate Off: Non-operation
REMOTE ENGINE STARTE	NOTE: This item is displayed, but cannot be used
INTELLIGENT KEY LINK SET	NOTE: This item is displayed, but cannot be used
ANSWER BACK	Reminder function (door request switch and Intelligent Key) mode can be selected from the following with this mode On: S mode (buzzer or horn reminder non-operation) Off: C mode (buzzer or horn operate)
ANSWER BACK I-KEY LOCK UN- LOCK	Reminder function (door request switch) mode can be selected from the following with this mode • BUZZER: Sound Intelligent Key warning buzzer • HORN: Sound horn • Off: Only hazard warning lamp operate • INVALID: This item is displayed, but cannot be used
ANSWERBACK KEYLESS LOCK UNLOCK	Reminder function (Intelligent Key) mode can be selected from the following with this mode On: Horn and hazard warning lamp operate Off: Only hazard warning lamp operate
WELCOME LIGHT OP SET	NOTE: This item is displayed, but cannot be used

SELF-DIAG RESULT Refer to BCS-63, "DTC Index".

DATA MONITOR **NOTE**:

< SYSTEM DESCRIPTION >

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

Monitor Item	Condition
REQ SW -DR	Indicates [On/Off] condition of front door request switch (driver side)
REQ SW -AS	Indicates [On/Off] condition of front door request switch (passenger side)
REQ SW -BD/TR	Indicates [On/Off] condition of trunk lid opener request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
SHFTLCK SLNID PWR SPLY	Indicates [On/Off] condition of the power supply from BCM to shift lock solenoid
CLUCH SW	NOTE: This item is displayed, but cannot be monitored
BRAKE SW 1	Indicates [On/Off]* condition of stop lamp switch power supply
BRAKE SW 2	Indicates [On/Off] condition of stop lamp switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status
PUSH SW -IPDM	Indicates [On/Off] condition of push-button ignition switch
IGN RLY1 -F/B	Indicates [On/Off] condition of ignition relay 1
DETE SW -IPDM	Indicates [On/Off] condition of P position
SFT PN -IPDM	Indicates [On/Off] condition of P or N position
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [STOP/STALL/CRANK/RUN] condition of engine states
VEH SPEED 1	Display the vehicle speed signal received from combination meter by numerical value [km/h]
VEH SPEED 2	Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [km/h]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger door status
DOOR STAT-RR	Indicates [LOCK/READY/UNLK] condition of rear door RH status
DOOR STAT-RL	Indicates [LOCK/READY/UNLK] condition of rear door LH status
BK DOOR STATE	NOTE: This item is displayed, but cannot be monitored
ID OK FLAG	Indicates [Set/Reset] condition of Intelligent Key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored
I-KEY OK FLAG	Indicates [KEY On/NOT On] condition of Intelligent Key ID and Intelligent Key is detected inside vehicle
PRBT ENG STRT	Indicates whether or not the engine is in start prohibited status
ID AUTHENT CANCEL TIMER	Indicates whether or not it is in engine start possible status when Intelligent Key verification is unnecessary
ACC BATTERY SAVER	Indicates [On/Off] whether or not ignition battery saver is in operation
CRNK PRBT TMR	Indicates [On/Off] whether or not in cranking prohibited status due to starter motor protection function operation
AUT CRANK TMR	Indicates [On/Off] whether or not in AUTO CRANKING MODE status
CRNK PRBT TME	Indicates the time for changing from cranking prohibited status to cranking possible status
AUT CRANK TMR	Indicates the time that AUTO CRANKING MODE operates
CRANKING TME	Indicates the cranking operation time

Revision: November 2016 SEC-39 2016 Q50

D

С

Α

В

Е

F

G

Н

J

SEC

L

M

Ν

0

Р

< SYSTEM DESCRIPTION >

Monitor Item	Condition
SHORT CRANK	NOTE: This item is displayed, but not used
DETE SW PWR	Indicates [On/Off] condition of the power supply from BCM to the A/T shift selector (detention switch)
IGN RLY3-REQ	Indicates [On/Off] condition of blower relay control signal
ACC RLY-REQ	Indicates [On/Off] condition of accessory relay control signal
RKE OPE COUN1	When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk room lamp switch
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-TR/BD	Indicates [On/Off] condition of trunk open signal from Intelligent Key
RKE-PANIC	Indicates [On/Off] condition of panic alarm signal from Intelligent Key
RKE-MODE CHG	NOTE: This item is displayed, but cannot be monitored
RKE PBD	NOTE: This item is displayed, but cannot be monitored

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

ACTIVE TEST

Test item	Description
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation On: Operates Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation Take Out: Take away warning chime sounds when CONSULT screen is touched Key: Key warning chime sounds when CONSULT screen is touched Knob: OFF position warning chime sounds when CONSULT screen is touched Off: Non-operation
INDICATOR	This test is able to check information display (combination meter) operation KEY ON: [Intelligent Key system malfunction] displays when CONSULT screen is touched KEY IND: [Steering lock unit ID registration complete] displays when CONSULT screen is touched Off: Non-operation
INT LAMP	This test is able to check interior room lamp operation On: Operates Off: Non-operation
FLASHER	This test is able to check hazard warning lamp operation The hazard warning lamps are activated after "LH/RH/Off" on CONSULT screen is touched
HORN	This test is able to check horn operation • On: Operates
IGN CONT2	This test is able to operate the blower relay in fuse block (J/B) On: Operates Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when "On" on CONSULT screen is touched
PUSH SWITCH INDICATOR	This test is able to check push-ignition switch indicator operation when "On" on CONSULT screen is touched
ACC CONT	This test is able to operate the accessory relay in fuse block (J/B) On: Operates Off: Non-operation

< SYSTEM DESCRIPTION >

Test item	Description
IGN CONT1	This test is able to operate the ignition relay in IPDM E/R On: Operates Off: Non-operation
IGNITION RELAY	This test is able to operate the ignition relay in fuse block (J/B) On: Operates Off: Non-operation
ST CONT LOW	This test is able to operate the starter relay in IPDM E/R On: Non-operation Off: Operates
BATTERY SAVER	This test is able to check interior room lamp battery saver operation On: Outputs interior room lamp power supply to turn interior room lamps ON. Off: Cuts interior room lamp power supply to turn interior room lamps OFF.
TRUNK/BACK DOOR	This test is able to check trunk lid open operation. This actuator opens when "Open" on CONSULT screen is touched.
RETRACTABLE MIRROR	NOTE: This item is displayed, but cannot be used
INTELLIGENT KEY LINK(CAN)	NOTE: This item is displayed, but cannot be used
REVERSE LAMP TEST	NOTE: This item is displayed, but cannot be used
DOOR HANDLE LAMP TEST	This test is able to check outside handle lamp operation On: Operates Off: Non-operation
DR SEAT LAMP TEST	NOTE: This item is displayed, but cannot be used
AS SEAT LAMP TEST	NOTE: This item is displayed, but cannot be used
SHIFT SPOT LAMP TEST	NOTE: This item is displayed, but cannot be used
TRUNK/LUGGAGE LAMP TEST	This test is able to check trunk room lamp operation On: Operates Off: Non-operation
KEYFOB P/W TEST	This test is able to check keyless power window up/down operation • Up: Non-operation • Down*: Power window and sunroof open • Off: Non-operation
SHIFTLOCK SORENOID TEST	NOTE: This item is displayed, but cannot be used

^{*:} When ignition switch is OFF, driver door opened, power window and sunroof is closed.

THEFT ALM

THEFT ALM: CONSULT Function (BCM - THEFT)

INFOID:0000000012792689

Ν

0

Р

Α

В

D

Е

DATA MONITOR

NOTE:

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

Monitored Item	Description
REQ SW -DR	Indicates [On/Off] condition of door request switch (driver side).
REQ SW -AS	Indicates [On/Off] condition of door request switch (passenger side).
REQ SW -RR	NOTE: This item is indicated, but not monitored.

< SYSTEM DESCRIPTION >

Monitored Item	Description
REQ SW -RL	NOTE: This item is indicated, but not monitored.
REQ SW -BD/TR	Indicates [On/Off] condition of trunk lid opener request switch.
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR	Indicates [On/Off] condition of driver door UNLOCK status.
DOOR SW-DR	Indicates [On/Off] condition of front door switch (driver side).
DOOR SW-AS	Indicates [On/Off] condition of front door switch (passenger side).
DOOR SW-RR	Indicates [On/Off] condition of rear door switch RH.
DOOR SW-RL	Indicates [On/Off] condition of rear door switch LH.
DOOR SW-BK	NOTE: This item is indicated, but not monitored.
CDL LOCK SW	Indicates [On/Off] condition of lock signal from door lock/unlock switch.
CDL UNLOCK SW	Indicates [On/Off] condition of unlock signal from door lock/unlock switch.
KEY CYL LK-SW	Indicates [On/Off] condition of lock signal from door key cylinder switch.
KEY CYL UN-SW	Indicates [On/Off] condition of unlock signal from door key cylinder switch.
KEY CYL SW-TR	NOTE: This item is indicated, but not monitored.
TR/BD OPEN SW	Indicates [On/Off] condition of trunk lid opener switch.
TRNK/HAT MNTR	Indicates [On/Off] condition of trunk room lamp switch.
SEN CANCEL SW	NOTE: This item is indicated, but not monitored.
RKE-LOCK	Indicates [On/Off] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key.
RKE-TR/BD	Indicates [On/Off] condition of TRUNK OPEN signal from Intelligent Key.

WORK SUPPORT

Service Item	Description
SECURITY ALARM SET	This mode is able to confirm and change security alarm "On" - "Off" setting.

ACTIVE TEST

Test Item	Description
FLASHER	This test is able to check turn signal lamp operation. Turn signal lamp is activated after "LH" or "RH" on CONSULT screen is touched.
THEFT IND	This test is able to check security indicator lamp operation. Security indicator lamp is turned on when "On" on CONSULT screen is touched.
VEHICLE SECURITY HORN	This test is able to check horn operation. Horn is activated for 0.5 seconds after "On" on CONSULT screen is touched.
HEADLAMP(HI)	This test is able to check headlamps operation. Headlamps are turned on when "On" on CONSULT screen is touched.

IMMU

IMMU: CONSULT Function (BCM - IMMU)

INFOID:0000000012792690

DATA MONITOR

NOTE:

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

< SYSTEM DESCRIPTION >

Monitor item	Content
CONFRM ID ALL	Indicates [Yet] at all time. Switches to [Done] when a registered Intelligent Key backside is contacted to push-button ignition switch.
CONFIRM ID4	
CONFIRM ID3	
CONFIRM ID2	
CONFIRM ID1	
NOT REGISTERED	Indicates [ID OK] when key ID that is registered is received or is not yet received. Indicates [ID NG] when key ID that is not registered is received.
TP 4	Indicates the number of IDs that are registered.
TP 3	
TP 2	
TP 1	
PUSH SW	Indicates [On/Off] condition of push-button ignition switch.

ACTIVE TEST

Test item	Description
THEFT IND	This test is able to check security indicator lamp operation. Security indicator lamp is turned on when "On" on CONSULT screen touched.

SEC

Α

В

С

D

Е

F

G

Н

M

Ν

0

F

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (IPDM E/R)

CONSULT Function (IPDM E/R)

INFOID:0000000013496112

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with IPDM E/R.

Diagnosis mode	Description
ECU Identification	Allows confirmation of IPDM E/R part number.
Self Diagnostic Result	Displays the diagnosis results judged by IPDM E/R.
Data Monitor	Displays the real-time input/output data from IPDM E/R input/output data.
Active Test	IPDM E/R can provide a drive signal to electronic components to check their operations.
CAN Diag Support Monitor	The results of transmit/receive diagnosis of CAN communication can be read.

SELF DIAGNOSTIC RESULT

Refer to PCS-26, "DTC Index".

DATA MONITOR

NOTE:

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

Monitor Item [Unit]	MAIN SIGNALS	Description
RAD FAN REQ [%]	×	Displays the value of the cooling fan speed request signal received from ECM via CAN communication.
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper stop position signal judged by IPDM E/R.
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	MAIN SIGNALS	Description
ST/INHI RLY [Off/ ST ON/INHI ON/UNK- WN]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.
DETENT SW [Off/On]		Displays the status of the A/T shift selector (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		NOTE: The item is indicated, but not monitored.
S/L STATE [LOCK/UNLK/UNKWN]		NOTE: The item is indicated, but not monitored.
DTRL REQ [Off/On]		Displays the status of the daytime running light request signal received from BCM via CAN communication.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		Displays the status of the hood switch judged by IPDM E/R.
HL WASHER REQ [Off/On]		NOTE: The item is indicated, but not monitored.
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.
HOOD SW 2 [Off/On]		Displays the status of the hood switch judged by IPDM E/R.

ACTIVE TEST

Test item	Operation	Description
HORN	On	Operates horn relay for 20 ms.
	Off	OFF
FRONT WIPER	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper HI/LO relay.
	1	OFF
MOTOR FAN	2	- OFF
MOTOR FAN	3	Operates the cooling fan relay (MID operation).
	4	Operates the cooling fan relay (HI operation).
HEAD LAMP WASHER	On	NOTE: The item is indicated, but cannot be tested.
	Off	OFF
	TAIL	Operates the tail lamp relay.
EXTERNAL LAMPS	Lo	Operates the headlamp low relay.
	Hi	Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals.
	Fog	Operates the front fog lamp relay.

Revision: November 2016 SEC-45 2016 Q50

В

Α

С

D

Е

F

G

Н

SEC

 \mathbb{N}

Ν

0

Ρ

ECU DIAGNOSIS INFORMATION

ECM, IPDM E/R, BCM

List of ECU Reference

INFOID:0000000012792692

ECU		Reference
	Reference Value	EC4-124, "Reference Value"
ECM 2.0L Turbo gasoline engine models	Fail-safe	EC4-144, "Fail-safe (ECM)"
2.02 Turbo gasomie crigine modelo	DTC Index	EC4-146, "DTC Index"
	Reference Value	EC6-131, "TURBO HIGH PRESSURE MODEL : Reference Value"
VR30DDTT engine models for USA and Canada (Turbo high pressure)	Fail-safe	EC6-157, "TURBO HIGH PRESSURE MODEL : Fail safe (Turbo High Pressure Model)"
a caaaa (. a.sog p. cooa)	DTC Index	EC6-164, "TURBO HIGH PRESSURE MODEL : DTC Index"
	Reference Value	EC6-172, "TURBO LOW PRESSURE MODEL : Reference Value"
VR30DDTT engine models for USA and Canada (Turbo low pressure)	Fail-safe	EC6-198, "TURBO LOW PRESSURE MODEL : Fail safe (Turbo Low Pressure Model)"
and canada (raiso low procedure)	DTC Index	EC6-205, "TURBO LOW PRESSURE MODEL : DTC Index"
	Reference Value	EC6-1107, "Reference Value"
ECM VR30DDTT engine models for Mexico	Fail-safe	EC6-1132, "Fail safe"
The state of the s	DTC Index	EC6-1139, "DTC Index"
	Reference Value	BCS-36, "Reference Value"
BCM	Fail-safe	BCS-61, "Fail-safe"
BCIVI	DTC Inspection Priority Chart	BCS-62, "DTC Inspection Priority Chart"
	DTC Index	BCS-63, "DTC Index"
	Reference Value	PCS-16, "Reference Value"
IPDM E/R	Fail-safe	PCS-24, "Fail-safe"
	DTC Index	PCS-26, "DTC Index"

WIRING DIAGRAM

SECURITY CONTROL SYSTEM

Wiring Diagram

Α

C

D

Е

F

Н

J

SEC

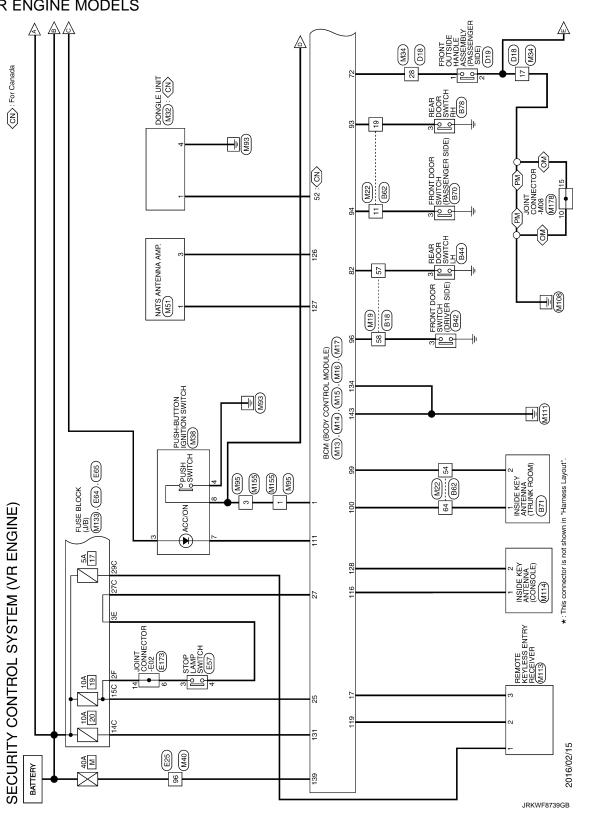
M

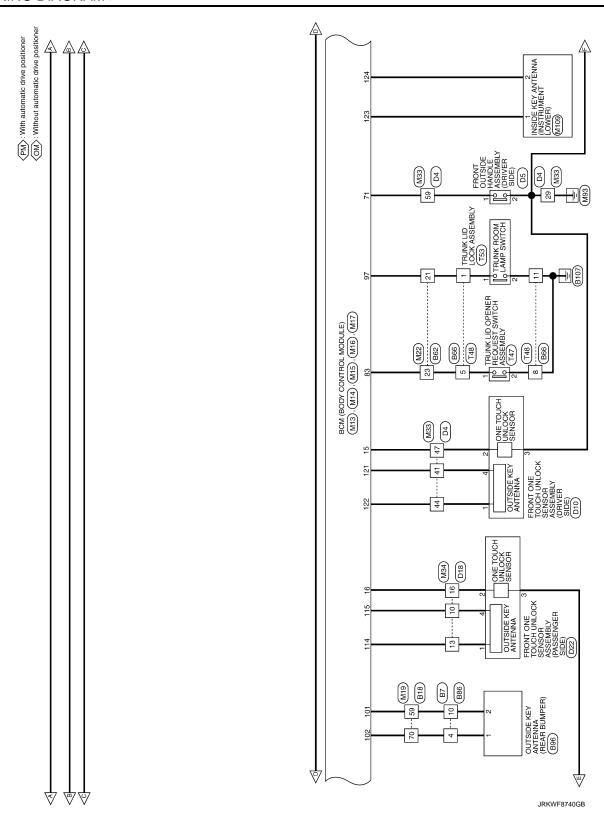
Ν

0

Ρ

FOR VR ENGINE MODELS





Α

В

C

D

Е

F

G

Н

J

SEC

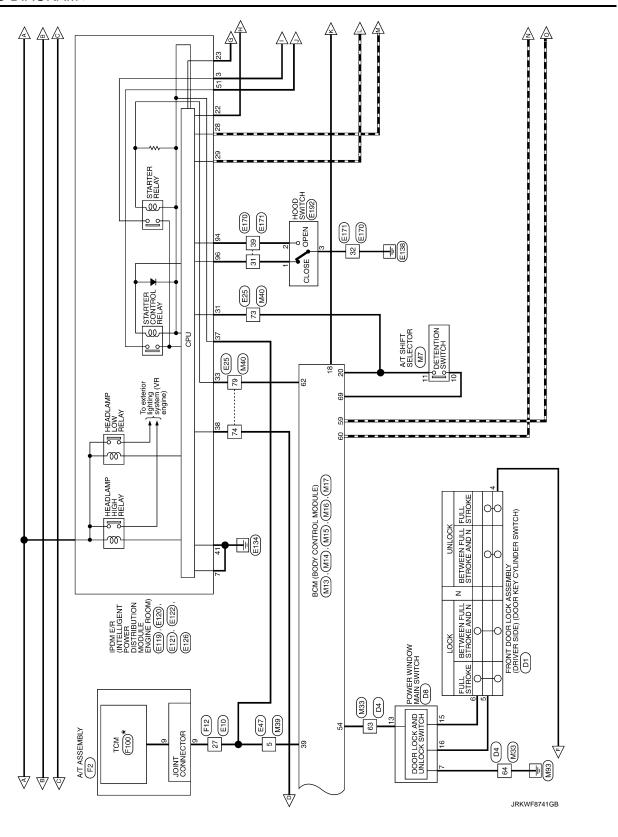
L

M

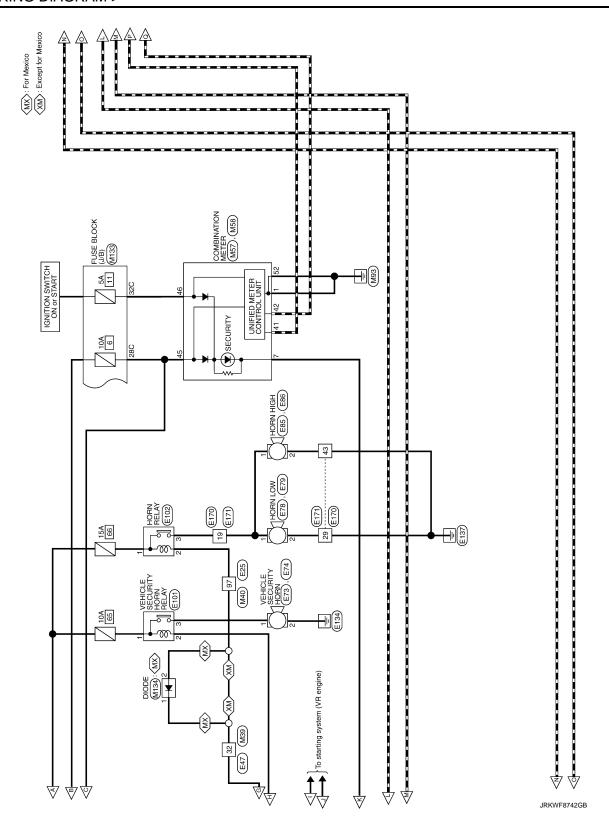
Ν

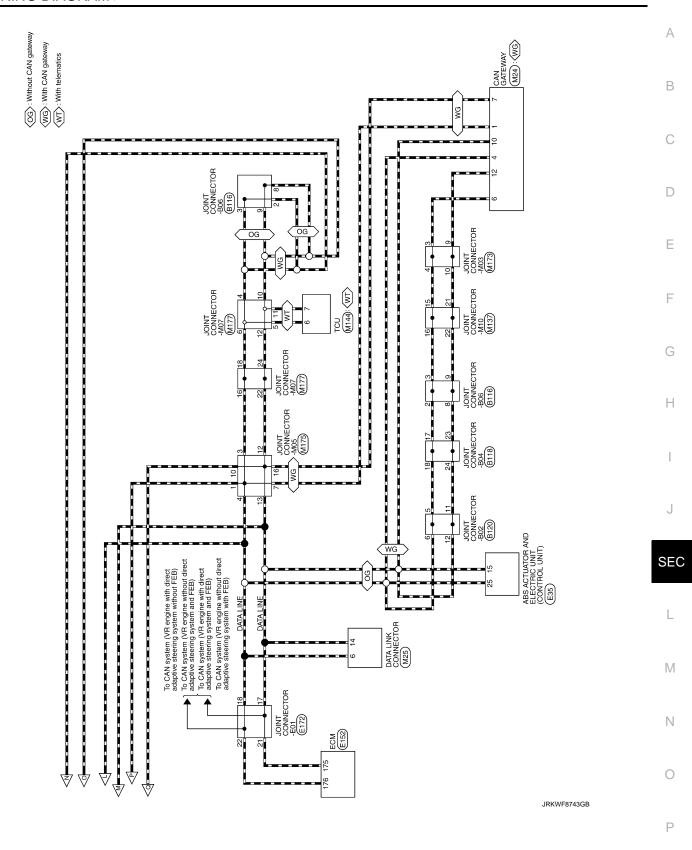
0

Р



Revision: November 2016 SEC-49 2016 Q50





Revision: November 2016 SEC-51 2016 Q50

SECURITY CONTROL SYSTEM

	-	-	RG		07	~		Connector No.	844
	П	12	9		71	*			П
Connector Name	WIRE TO WIRE	13	æ		72	m		Connector Name	ne REAR DOOR SWITCH LH
Connector Type	TH12MW-NH	14	œ		73	×		Connector Type	e TH04FW-NH
 		15	_		74	_			
E		16	>		75	œ	- [Without paddle shift]	E	
		18	>	٠	75	>	- [With paddle shift]		
2	7 0 0	13	88		76	æ		2. 2.	
) t	20	×		77	В			m
	7 8 9 10 11 12	2	۵		× Z	ű			
		73	>		62	>	- [With VR30 engine]		
		2.4	_	- [With 2 III turbo gasoline engine]	79	3	[With 2 Of turbo gasoline engine]		
Terminal Color Of		24	: >	- [With VR30 engine]	. 2		[2118]	Terminal	Color Of
_	Signal Name [Specification]	35		- NWith 2 Of turbo pacoling population and without page and	63	٥			Mire Signal Name [Specification]
t		3 2	. >	[Mith 2 Of third or collect collection of the state of th	8	: 8		t	2 4
\dagger		C L	. ;	DATE VOSO control	8 8	3 -		┨	
ł		2 2	: 0	[augus oculanis]	5 8	، ا	(#jelo olbbon trodfilm)		
ł		2 2			8 8	= >	- DMith coddlochiti	Connector No	Cod
+		à			8 8	۰	Tring around in tall		Т
+		07	ء ء	Contract Occurs Attorno	00 00			Connector Name	he WIRE TO WIRE
+		TC	١	Final resolution -	8	9 :			T
+		3	W.	- [With 2.0L turbo gasoline engine]	68	>	- [With 2.0L turbo gasoline engine]	Connector 1ype	TH80FW-CS16-TM4
+		32	8		88	≥	- [With VR30 engine]	ą	
+		33	<u>m</u>		91	8		彦	
12 B		34	91		94	g		Ę	
		35	۵		96	^		5	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		36	۸		26	>			
Connector No.	B18	37	SB	•	86	BR	- [With VR30 engine and with BOSE system]		
	Г	38	97		86	>	- [Except with VR30 engine and with BOSE system]		
connector Name	WIRE IO WIRE	40	۵						
Connector Type	TH80FW-CS16-TM4	41	SB					Terminal Col	Color Of
	1	42	æ		Connector No.	r No.	B42	No.	Wire Signal Name [Specification]
Œ		43	BG		·			1	BR - [With 2.0L turbo gasoline engine and without BOSE System
		44	9g		Connector Name	n Name	FROM I DOOR SWITCH (DRIVER SIDE)	1	LG - [With VR30 engine]
Ċ		46	œ		Connector Type	r Type	TH04FW-NH	1	W - [With 2.0L turbo gasoline engine and with BOSE system
		20	>			 _		2	L - [With VR30 engine]
	9 9 9	51	SB		Œ			2 SF	SHIELD - [With 2.0L turbo gasoline engine]
		25	>					e	BR - [With 2.0L turbo gasoline engine]
		23	9		N N			6	R - [With VR30 engine and with BOSE system]
Terminal Color Of		24	~				က	en	W - [With VR30 engine and without BOSE system
No. Wire	e Signal Name [Specification]	22	~					4 SF	SHIELD - [With VR30 engine]
1 Y		57	*					4	Y - [With 2.0L turbo gasoline engine]
2 6		88	>					2	G - [With VR30 engine]
3 Γ		29	S.		Terminal	Color Of	Control State of Land 1	2	V - [With 2.0L turbo gasoline engine]
4 LG		09	g		No.	Wire	olgnar ivame (opecification)	9	BG - [With VR30 engine]
2		61	o		m	>		9	BR - [With 2.0L turbo gasoline engine]
6 R		62	BG					7	B - [With 2.0L turbo gasoline engine and with BOSE system
L		63	æ					7	BR - [With VR30 engine and without BOSE system
91 8		64	,						Ì
			<u>-</u>					7	W - [With VR30 engine and with BOSE system

JRKWF8744GB

- (With 2 0) turbo assoline engine 9 R .		l T	- [With 2.0L turbo gasoline engine] 13 SHIELD - [With rear view monitor]	13 W	14 B	- IWith 2.01 turbo easoline engine 14 G - IWith around view monitor	15 R	М	16 B	ingine] 16 R	- [With VR30 engine]		- [With 2.0L turbo gasoline engine] Connector No. B70	Connector Name FRONT DOOR SWITCH (PASSENGER SIDE)	engine]	- (With VR30 engine) Connector Type TH04FW-NH	ingine]	- [With VR30 engine]	- [With VR30 engine]	=	[With 2.0L turbo gasoline engine and without BOSE system]		- [With VR30 engine and with BOSE system]		3OSE system] Terminal C	No. Wire	- [With 2.0L turbo gasoline engine] 3 GR -		Connector No. B71		T	NS16MW-CS Connector Type RK02FGY	Q			7 0 0	[8] 9[10]11[12[13[14]15[16]				E .	No. Wire	. ANT+				,		
84 SHIFID	t	85 G		╀	91 (8	87 SHIELD	t	H	۸ 06	92 L	92 W	93 R	93 SHIELD	94 R	J 56	95 Y	\dashv	M 96	٦	A.	W	PT PT	BR	۵	· >-	+	100 W		Connector No. B66	I	0)	Connector Type NS16		臣	S I	2		•		H	la l	No. Wire	1 R	2 BG	4 SHIELD	5 W	6 GR	8 8	
	DAGIsh 2 Of Acades assessing the constraint	- [with Z.OL turbo gasonine engine] - [With VR30 engine]							- [With 2.0L turbo gasoline engine]	- [With VR30 engine]									- [With VR30 engine]	- [With 2.0L turbo gasoline engine]						- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2 Of turbo assoline angine]	T	Ι	- [With 2.0L turbo gasoline engine]		ingine]		- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		•		engine]		- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	
٩		ی ه	SHIELD	o	98	o	>	GR	3	>	ď	GR	1	>	В	P1	۵	7	۵	>	٦	>	91	_	۱ -	æ,	~ (9 >	~	SHIELD	BG	٦	GR	>	æ	>	_	7	œ	8	≥	В	ď	9	SHIELD	В	*	BR	
VE)		45	46	47	48	49	20	51	25	25	53	54	22	26	22	28	29	61	62	62	63	64	99	89	69	7	17 1	7 2	2 2	73	74	74	75	75	76	92	72	28	79	8	8	81	81	82	82	83	83	84	
SECURITY CONTROL SYSTEM (VR ENGINE	t	Y - [With VR30 engine and without BOSE system]	- [With 2.0L turbo gasoline engine	0		- dR	<u></u>		BG .	BG - [With 2.0L turbo gasoline engine]	GR - [With VR30 engine]	۰ .	٠.		R .	GR -	· ·	^	_	BG - [With 2.0L turbo gasoline engine]	V - [With VR30 engine]	L - [With 2.0L turbo gasoline engine]	-	4	W - [With 2.0L turbo gasoline engine]	× !	LG Mark 200 to the market 200	LG - [With Z.Ot. turibo gasoline engine]	- Care Care Care Care Care Care Care Care		B - [With VR30 engine]	LG - [With 2.0L turbo gasoline engine]	0	4	- [With		- [With 2.0L turbo gasoline engine	- [With 2.0L turk	- [With VR30 engine]	 With 2.0L turbo gasoline engine and with BOSE system] 		P - [With VR30 engine and without BOSE system]	R - [With 2.0L turbo gasoline engine]	w] -	. 9			SHIELD -	

SEC

Α

В

С

D

Е

F

G

Н

L

M

Ν

0

JRKWF8745GB

Ρ

SECURITY CONTROL SYSTEM (VR ENGINE)	E)								
Connector No. 878	Connec	Connector No.	968	15	В	- [With 2.0L turbo gasoline engine]	6	æ	- [With VR30 engine and without paddle shift]
Connector Name REAR DOOR SWITCH RH	Connec	Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)	15	SHIELD	- [With VR30 engine]	6	>	- [With VR30 engine and with paddle shift]
Т	Sand	tor Tuno	VOTCOMO	16	7 7	- [With VR30 engine]	+	91	- [With 2.0L turbo gasoline engine]
7	3	adki ionamion	KKUZFGY	qT :	SHIELD	- [with 2:0L turbo gasoline engine]	†	SHIELD	- [with vk30 engine]
1	Œ	•		17	CHIEID	- [With 2 OI turbo assoline angine]	11	SHIFID	- [With 2.0L turbo gasoline engine]
	手		<	18	_	- [With VR30 engine]	t	57	- fWith 2.0L turbo gasoline engine
	1	<i>,</i> ,		18	SHIELD	- [With 2.0L turbo gasoline engine]	t	SHIELD	- [With VR30 engine]
3			(1 5)	19	٦	- [With 2.0L turbo gasoline engine]	13	٦	- [With VR30 engine]
				19	SHIELD	- [With VR30 engine]	13	Ь	- [With 2.0L turbo gasoline engine and without gateway]
				20	7	- [With 2.0L turbo gasoline engine]	13	œ	- [With 2.0L turbo gasoline engine and with gateway]
				20	SHIELD	- [With VR30 engine]	14	٦	- [With VR30 engine]
a	Terminal	nal Color Of	Signal Name (Specification)	21	٦	•	14	Ь	- [With 2.0L turbo gasoline engine and without gateway]
No. Wire	O	Wire	orginal ivaline [operation]	22	Ь		14	ж	- [With 2.0L turbo gasoline engine and with gateway]
3 R -	П	~	ANT+	23	Ь		15	7	- [With VR30 engine]
	2	æ	ANT-	24	۵	- [With VR30 engine]	15	œ	- [With 2.0L turbo gasoline engine]
				24	>	- [With 2.0L turbo gasoline engine]	16	_	
Connector No. B86							17	-	
Connector Name WIRE TO WIRE	Connec	Connector No.	8116				18	_	
	Journal	Connector Name	IOINT CONNECTOR-ROS	Connector No.		B118	19	_	 [With 2.0L turbo gasoline engine]
Connector Type TH12FW-NH				Connector Name		JOINT CONNECTOR-804	19	SHIELD	- [With VR30 engine]
, d	Connec	Connector Type	24342_4GA2A				20	٦,	- [With 2.0L turbo gasoline engine]
	(Connector Type		24342_4GA2A	20	SHIELD	- [With VR30 engine]
<u></u>		_					21	-	- [With 2.0L turbo gasoline engine]
0 7	•	_	6 5 4 3 2 1	E			21	SHIELD	- [With VR30 engine]
0 0 4 3 2	7	v.	11 10 9 8 7	1		6 5 4 3 2 1	t	~	
12 11 10 9 8 7		ı	18 17 16 15 14 13	H.S.		12 11 10 9 8 7	23	~	
			24 23 22 21 20 19			18 17 16 15 14 13	24	œ	
						24 23 22 21 20 19			
Terminal Color Of Signal Name (Specification)									
	Terminal	כ	Signal Name [Specification]				Connector No.		8120
2 BG -	No.	Wire		Terminal	Color Of	Signal Name (Specification)	Connector Name		DOINT CONNECTOR-802
3 B -	П	_		No.	Wire				
4 R -	2	_	-	1	97	- [With VR30 engine]	Connector Type		24342_4GA2A
-	m	_		1	SHIELD	 [With 2.0L turbo gasoline engine] 	þ		
+	4	-		2	97	- [With VR30 engine]	序		
\dashv	S	-		2	SHIELD	 [With 2.0L turbo gasoline engine]) I		5 4 3
-	9	٦		3	SHIELD		Š		11 10 9 8 7
10 GR -	7	В		4	FIG	- [With VR30 engine]			17 15 14
11 BR -	00	œ	- [With Gateway]	4	SHIELD	- [With 2.0L turbo gasoline engine]			24 23 22 21 20 19
12 B -	œ	>	- [Without Gateway]	2	Pl	- [With VR30 engine]			
	6	~	- [With Gateway]	2	SHIELD	- [With 2.0L turbo gasoline engine]			
	6	^	- [Without Gateway]	9	PT PT	- [With VR30 engine]	Terminal	Color Of	Signal Name (Specification)
	10	В	- [With VR30 engine]	9	SHIELD	- [With 2.0L turbo gasoline engine]	No.	Wire	organic (observed organic
	10	>	- [With 2.0L turbo gasoline engine]	7	œ	- [Color of wire differs depending on production]	1	æ	
	11	>		7	>	- [Color of wire differs depending on production]	2	æ	
	12	۵	- [With Gateway]	80	91	- [With 2.0L turbo gasoline engine]	3	_	- [With VR30 engine]
	12	~	- [Without Gateway]	00	œ	 [With VR30 engine and without paddle shift] 	9	œ	- [With 2.0L turbo gasoline engine]
	13	SHIELD		80	>	- [With VR30 engine and with paddle shift]	4	_	- [With VR30 engine]
	14	SHIELD		6	91	- [With 2.0L turbo gasoline engine]	7	œ	- [With 2.0L turbo gasoline engine]

JRKWF8746GB

SECURITY CONTROL SYSTEM

Name	В
Connector Connector Connector Connector Connector Connector Connector Connector A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	D E
- (Color of wire differs depending on production) - (Signal Name (Specification) - (Signal Name (Specification)	F
41	G H
WIRE TO WINE NH60PW-1512 Signal Name [Specification] Signal Name [Specification]	J
Connector No. Connector Name Connector Name Connector Type Connector Name Connector Name SB Connector Name Connector Name Connector Name SB Connector Name Connect	SEC
SECURITY CONTROL SYSTEM (VR ENGINE) S	L M
SECURITY CON 5	N O
JRKWF8	3747GB

SEC-55 2016 Q50 Revision: November 2016

Α

SECURITY CONTROL SYSTEM

38	50 SHELD		A Color Of Sign	12
E10 WRE TO WIRE SAA36MB-RS8-SH28 1	Signal Name (Specification)			
Connector Name Connector Type H.S.	Color O No. Wire 1			29 [G 30 G 31 Y 32 R 33 B 34 V 35 LG 36 W
64	Connector Type RHG4FB	ar of R R R		Control Signal Name [Specification] No Wire Wire Signal Name [Specification] No Wire Signal Name [Specification]
ITROL SYSTEM (VR ENGINE) TO WHE TO WHE THE	Signal Name (Specification)	. Termir No	Oom Common	Normal No
SECURITY CON Connector No. Connector Name Connector Type MHS.	Terminal Color of No. Wire No. Wire		<u> </u>	49 I.G 55 I. V 56 Y 58 S8 59 R 59 R

JRKWF8748GB

I cotor or wire arries septemble or production.	COLLIECTOL NO.		Connector Name	C4/
		-	L'annactor Na	
	Connector Name ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	UNIT)	כמוווברנסי יאים	ne WIRE TO WIRE
	Connector Type SAZ30FB-SJZ4-U		Connector Type	e TH32MW-NH
				1
			Œ	
- IWith 2 Of turbo gasoline engine			卖	
[Mith VB20 coring]	2 22 200	4	ν? 	1
faugus cous unas				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
- [With 2.UL turbo gasoline engine]	2 0 0	8		23 24 25 26
- [With VR30 engine]	JJ			
- [With VR30 engine]		1		
- DWith 2 Of turbo gasoline engine				
- [Mith VR30 angine]	Terminal Color Of		Terminal	Color Of
- [with was engine]	0 000	ation]		Signal Name [Specification]
- [With 2.UL turbo gasoline engine]	wire		+	+
With 2.0L turbo gasoline engine and without gateway]			1	 Golor of wire differs depending on production.
With 2.0L turbo gasoline engine and with gateway]			1	 Y - [Color of wire differs depending on production]
engi	_	30 engine	2	,
1	٥	ancolino ondinol	c	
	. ;	gasonine engine)	, ,	
	-		‡	
[With 2.0L turbo gasoline engine and with ADAS]	91	Vith ADAS]	4	R - [With Gateway]
- [With VR30 engine]		Vith ASCD]	2	
With 2 Oil turbo assoline engine and without ADASI	-	SIGNAL	u	85
With 2.00 to Do gasonile engine and mithout Appeal	5	SIGNAL	0 1	+
	ŋ	VER SUPPLY	,	BR - [Color of wire differs depending on production]
		SIGNAL	7	 [Color of wire differs depending on production]
	a's	VER SUIPPLY	œ	. ·
	5 6		,	1000
	×	GNAL	5	BG - [Without BOSE system]
- [With 2.0L turbo gasoline engine]	۵	swav]	б	v - [With BOSE system]
hwith wead section	a	l local	ç	
- [with VK30 engine]	¥	ay]	OT	
	17 Y RR RH WHEEL SENSOR	SIGNAL	11	- · · · · · · · · · · · · · · · · · · ·
		fundamental for continued	1	
	2	familia anno 88 como	77	
	>	[With VR30 engine]	13	
	a	SIGIAME	Ç	uc.
- [With VR30 engine]	88	VER SUPPLY	16	- a
- Mith 2 OI turbo assoline engine	_		H	CHIELD
fatter eror to produce cubine.	, ,		t	
	9	R SUPPLY	18	
	~	AL	19	
10 to	0.0110	0.410	2	
- [With VR30 engine]	SHIELD	ONNO	50	. ·
- Mith 2 Ol turbo assoline anginel	ď		21	
(with the telepoperate crighted)	,		1	
- [With VR30 engine]			22	
With 2 Of turbo easoling apping and without eatoway!			22	
The same of the sa			67	
With 2.0L turbo gasoline engine and with gateway]			24	· ·
			ļ	
			57	
			56	BG -
			/7	
- Mith 2 Ol turbo assoline anginel			28	a
- [with 2.0t turbo gasonne engine]			07	- uc
- [With VR30 engine]			53	
			ş	
			30	
			31	
			31	
1 (8)21 1 (2) (2) (3) 1 1 1 1 1 1 1 1 1	- [With 2 Ot Lurbo gasoline engine and with 2 Ot Lurbo gasoline engine and with 2 Ot Lurbo gasoline engine and with ADAS] - [With 2 Ot Lurbo gasoline engine and with ADAS] - [With 7 Ot Lurbo gasoline engine and with ADAS] - [With 2 Ot Lurbo gasoline engine and without ADAS] - [With 2 Ot Lurbo gasoline engine and without ADAS] - [With 2 Ot Lurbo gasoline engine]	No Wire	No. Wire Signal Mar 1	1

Α

В

С

D

Е

F

G

Н

SEC

L

M

Ν

0

Р

SECURITY CONTROL SYSTEM (VR ENGINE)	M (VR ENGINI	E)						
Connector No. E57		Connector No.	E65	Connector No.	E74) lei	[aciteoficed] AmeN leasts	
Connector Name STOP LAMP SWITCH		Connector Name	FUSE BLOCK (J/B)	Connector Name	VEHICLE SECURITY HORN	No. Wire	inoneanneach ann an	
Connector Type M04FW-LC		Connector Type	TH12FW-NH	Connector Type	P01FB-A	-		_
		@		1		Connector No.	E85	
H.S.		H.S.		H.S.		Connector Name	HORN HIGH	
† Q			187 115 105 9F 8F 7F		2	Connector Type	PO1FB-BR-A	_
Terminal Color Of Signal Name [Specification]	ecification]	Terminal Color Of No. Wire	F Signal Name [Specification]	Terminal Color Of No. Wire	Signal Name [Specification]	H.S.	<u> </u>	
1 G - [With ASCD]	(CD)	10F W	fralso ofiso differe demanding as accedention	2 B	- [With VR30 engine]]	
	(D)	\sqcup	- [Color of wire differs depending on production]	+	- [WILL Z.OL UI DO BASOILLE EUGITE]			
2 LG - [With ADAS]	AS]	12F W	- [With VR30 engine]	Connector No.	828	Terminal Color Of No. Wire	Signal Name [Specification]	
H		Н		ءِ ا	HOBNIOW	H		
		2F BR		- 1	POTER RR.A			
Connector No. E64		╁				Connector No.	983	
Connector Name FUSE BLOCK (J/B)		6F L		F		Connector Name	HORN HIGH	
Connector Type NS08FW-CS		\mathbb{H}		S H S	<u> </u>	Connector Type	P01FB-A	
		9F L			3	Œ		
S:	2E 1E	Connector No.	F73			H.S.		
7E 6E	4E	Connector Name	VEHICLE SECURITY HORN	Terminal Color Of	Signal Name [Specification]		2	
		Connector Type	PO1FB-BR-A	Н				
Terminal Color Of Signal Name [Specification]	ecification]	Œ		Connector No	673	Terminal Color Of	Signal Name [Specification]	
H		HS.	<u> </u>	یو ا	HORN LOW	Н		
2E P .	Ī		3		P01FB-A			
4E GR -				4				
BG		Terminal Color Of No. Wire	Signal Name [Specification]	H.S.				
		Н			N			

JRKWF8750GB

SECURITY CONTROL SYSTEM

	Α
NOTE-LC MOTE-LC MOTE-LC Signal Name [Specification] Signal Name [Specification] Signal Name [Specification] - [With VR30 engine] - [With VR30 engine] - [With VR30 engine]	В
Name E122	С
Connector Name Connector Name Connector Type No. Wire S.1 W Connector Name Connector Name Connector Name Connector Name Connector Name Connector Name S.2 W H.S. H.S. H.S. H.S. H.S. H.S. B. U B. D B. D	D
31 32 33 34 34 34 34 34 34	Е
1937-WANH	F
	G
Connector No. Connector Name 19	Н
Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	Ι
Signal N Signal N Signal N Signal N Signal N Signal N	J
This is a second of the second	EC
CR ENGIN	L
Signal Nai	M
Connector No. Connector No	Ν
SECURITY Connector Name Connector Name Connector Name Connector Type 3 9 V VI Connector Name Con	0
JRKWF8751GB	

Revision: November 2016 SEC-59 2016 Q50

Ρ

		_	_		_	_	_	_			_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	E172	JOINT CONNECTOR-E01	SGA28FLBR-J		Signal Name [Specification]			,	-					,	,						-				- [Color of wire differs depending on production]	- [Color of wire differs depending on production]	- [Color of wire differs depending on production]	- [Color of wire differs depending on production]				
	Connector No.	Connector Name	Connector Type	vi.	tal Color Of Wire	GR	٨	M	T.	GR	> 3	۸ -	_ e	╀	M	_	Μ	BG	Ь		W	BG	Ь	٦	SB	W	BG	97	Ь	_	>	-
	Connec	Connec	Connec	图 H.S.	Terminal No.	1	7	٣	4	S	9 1	` .	» σ	10	11	12	15	16	17	18	19	20	21	22	23	23	24	24	25	56	27	78
	E171	WIRE TO WIRE	SAA36FB-RS10-SJZ2		Signal Name (Specification)				-		-			,																		
	Connector No.	Connector Name	Connector Type	S.	Ferminal Color Of No. Wire	>	1 GR	>	SB C	4	a .		Ů	8	8	م ا	8 8	۸ ۸	9	R	9 g	2 BG	91 8	÷ €	а с	1	7 M	9 8	7	>	98 Z	┞
	Conne	Conne	Conne	€	Termin No.	10	11	19	20	22	24	2 2	7 80	53	30	31	32	33	34	35	36	37	38	39	40	41	45	43	44	45	47	Å.
	E170	WIRE TO WIRE	SAA36MB-RS10-SJZ2		of Signal Name [Specification]																											
			П		Color Of Wire	· ^ C	1 GR .	· · · · · ·	SB	\dashv	8		3	9 8	8	1 P	2 B .	3 V 8	GR			7 R .	8 V .	·		1 1	2 w .	3 B	- · · · · · · · · · · · · · · · · · · ·	- · · · · · · · · · · · · · · · · · · ·		H
NE)	Connector No. E170	Connector Name WIRE TO WIRE	Connector Type SAA36MB-RS10-5JZ2	H.S. I TO SECULD THE SECULD SECURD SECULD SECULD SECULD SECULD SECULD SECULD SECULD SECULD SECULD SECURD SECULD SECULD SECURD SECULD SECURD S		10 V	11 GR .	Н		\dashv	+	+	28 SHEID	\vdash	8	31 P .	32 8 .	33 V			36 B ·		38 V	зэ ү	40 P	41 L	42 W -	H	44 L	45 Y -	47 8G .	┞
CONTROL SYSTEM (VR ENGINE)			П	<u>~</u>	Signal Name [Specification] Terminal Color Of No. Wire	FUEL TANK PRESSURE SENSOR 10 V -	H	19	RESSURE SENSOR] 20 SB	4L 22	+	(FICINI) CHECK	77	RING SWITCH] 29	30 B	L	LINE-H 32	H	GR	depending on production) 35	epending on production] 36		IN SENSOR 2 38	SITION SENSOR 2]		PPLY	42	D 43	ECM GROUND 44 L .	N SENSOR 1	D 47	848
'Y CONTROL SYSTEM	Connector No.	Connector Name	Connector Type	第一個 日本	Terminal Color Of No. Wire	ENSOR	CAN-L 11	L CAN-H 19	G SENSOR POWER SUPPLY [FUEL TANK PRESSURE SENSOR] 20 SB	V TACHO METER SIGNAL 22	SENSOR 24	VV FOEL FOWER CONTROL MODDEE (FFCM) CHECK 20	ASCD STEERING SWITCH 28	BG SENSOR GROUND [ASCD STEERING SWITCH] 29	Y FUEL PUMP CONTROL MODULE (FPCM) 30 B	Y ENGINE COMMUNICATION LINE-L 31	L ENGINE COMMUNICATION LINE-H 32	33	BG BRAKE PEDAL POSITION SWITCH 34 GR	GR EUR CANSTER VEHT CONTRIC VALVE [Color of wire differs depending on production] 35	№ 1.6 № 1.0 В САМБТЕВ VERT COMMICA. VALVE (Color of wire differs depending on production) № 36	W SENSOR POWER SUPPLY 37	BR ACCELERATOR PEDAL POSITION SENSOR 2 38	R SENSOR GROUND (ACCELERATOR PEDAL POSITION SENSOR 2)	R ECM POWER SUPPLY 40	L SENSOR POWER SUPPLY	42	V SENSOR GROUND 43	B ECM GROUND	Y ACCELERATOR PEDAL POSITION SENSOR 1	47	B ECM GROUND 48

JRKWF8752GB

	SECURITY (SECURITY CONTROL SYSTEM (VR ENGINE)	E)				
	Connector No.	E173	Connector No. F2	10	BG		Connector No. F100
	Connector Name	JOINT CONNECTOR-E02	Connector Name A/T ASSEMBLY	= =	œ 9	,	Connector Name TCM
	Connector Type	SGA28FDGY-I		13	9]]		Connector Type SP10FG
				14	>		
	Œ	162	<	15	91		
	ě			16	¥		
	113		<u></u>	17	1		<u></u>
			6	18	۵.		6
				19	æ		1
				20	BG		
				17	¥5 ::	,	
	lerminal Color Of	T Signal Name [Specification]	<u></u>	77	× (ē.
	NO. WITE		†	5	9 ;		NO.
	9 T	- [Color of Wire differs depending on production]	L GR IGNITION POWER SUPPLY [With Z.UL turbo gasonine engine]	77	Se :		I - IGNITION POWER SUPPLY
	+	- [Color of wire differs depending on production]	†	5	>		- BALLERY POWERS
			P BALLERY POWERS	97	M		,
	+		3 L CAN-H	27	>		4 - K-LINE
			-	28	W		5 - GROUND
	6 BR		GROUN	59	Υ		6 - IGNITION POWER SUPPLY
	7 B			30	R		7 - BACK-UP LAMP RELAY
	8			31	Ь		
			7 BG BACK-UP LAMP RELAY	32	×.		9 - STARTER RELAY
	L			33	a		
	12 B		V STA	34	98		
	ŀ		6	35	9		
	$\frac{1}{1}$			35	9		Connector No. M7
	+			2 2	or >		Τ
	+		A Management of the state of th	6	> 6		Connector Name A/T SHIFT SELECTOR
	+		ı	28	ž		Т
	25 R		Connector Name WIRE TO WIRE	£	as B		Connector Type TH12FW-NH
	7e r		Т	40	SHIELD		á
			Connector Type SAA36FB-RS8-SHZ8	41	8		国
			ģ	45	٣		7
	Connector No.	E192	-	43	>-		-
	Connector Name	HOUD SWITCH	16 15 14 13	45	٨		1000
				46	Ь	-	
	Connector Type	кнозгв	<u> সম্ভোজনাতা সম্প্রামে</u> 6 5	47	1		
	4		(2015) (2015)	48	91	-	
	E			49	98		Terminal Color Of
				20	SHIELD		
		/	Terminal Color Of	51	*		1 58
		الالالا	No Wire Signal Name (Specification)	3	: @		
			t	7	,		
			= 5				$^{+}$
			E.				+
			3 BG .				
	la Ta	Signal Name [Specification]	œ				œ
	No. Wire						
	1 P		. 1 2				8 V - [With 2.0L turbo gasoline engine]
	γ γ						8 6
	3 B						10 GR
	$\frac{1}{1}$		$\left\{ \right.$				┨
JF							
Rŀ							
۲W							
VF							
87							
753							
3G							
В							

Revision: November 2016 SEC-61 2016 Q50

В

Α

С

D

Е

F

G

Н

J

SEC

L

M

Ν

0

Р

SECL	JRITY (SECURITY CONTROL SYSTEM (VR ENGINE)								İ		
11	œ		Connector No.		M14	Connector No.		M15	116	BR	INSIDE KEY ANT (CONSOLE) +	
			Connect	Connector Name	BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)	117	M/B	TURN SIG LH OUTPUT (FRONT)	
			,	Ţ			T		119]	KYLS EN I RECEIV COMM	
Connector No.	or No.	M13	Connector Type	or lype	TH40FB-NH	Connector Type	٦	TH24FGY-NH	121	SB	DRIVER DOOR ANT -	
Connect	Connector Name	BCM (BODY CONTROL MODULE)	1			Q.	_		122	g ,	DRIVER DOOR ANT +	
Connector Type	ar Type	TW COLOR	事			车			123	× (INSIDE REY ANI (INSTRUMENT LOWER) +	
	246. 12		ES.		<u> </u>	X HS	_] [126	, «	NATS ANT AMP	
個 個					80 58 55 55 52 10 10 10 10 10 10 10 10 10 10 10 10 10			92.91 10101010100 97.98 94.93	127	>	NATS ANT AMP.	
É							-	100 100 100 100	128	GR	INSIDE KEY ANT (CONSOLE) -	
2	_	20 18 17 16 15 14 13 12 11 10 10 10 10 10 10 10 10 10 10 10 10										
			Terminal	Il Color Of	(- i - i - i - i - i - i - i - i - i -	Terminal	Color Of	() () () () () () () () () ()	Connector No.		M17	
			No.	Wire	ognal Name [opecification]	No.	Wire	olgnal Name (opecification)	Connector Name		BCM (BODY CONTROL MODILIE)	
			48	œ	PUSH-BTN IGN SW ILL PWR	82	Α	REAR LH DOOR SW			(22222222222222222222222222222222222222	
Terminal	0	Signal Name [Specification]	25	9	DONGLE LINK	83	_	TR LID OPEN REQ SW	Connector Type		FEA09FW-FHA6-SA	
No.	Wire		24	>	COMM LINE	82	۵	TR ROOM LAMP CONT	ģ			
1	œ	PUSH SW	22	œ	RAIN SENSOR	91	æ	TRUNK LID OPEN	居			
æ	>	SENS PWR SPLY	29	۵	CAN-L	95	>	TURN SIG RH OUTPUT (SIDE, REAR)	E E		and and the bot one and the bot the	
4	BG	OPTICAL SENSOR	9	٦	CAN-H	93	g	REAR RH DOOR SW	11.0		130 130 139 130 132 131 130	
S	91		61	g	REAR WINDOW DEF RLY CONT	94	S.	PASSENGER DOOR SW			143 142 141 140 139 138	
10	Μ	COMBI SW OUTPUT 5	62	w.	STARTER RLY CONT	96	>	DRIVER DOOR SW				
11	SB	COMBI SW OUTPUT 4	64	۸	I-KEY WARN BUZZER	26	Я	TR ROOM LAMP SW				
12	٦	COMBI SW OUTPUT 3	9	8	OUTS HD LAMP CONT	66	GR	INSIDE KEY ANT (TRUNK) -				
13	9	COMBI SW OUTPUT 2	99	В	BLOWER FAN RLY CONT [With VR30 engine]	100	Μ	INSIDE KEY ANT (TRUNK) +	Terminal	Color Of	Simal Name (Specification)	
14	Ь	COMBI SW OUTPUT 1	99	^	BLOWER FAN RLY CONT [With 2.0L turbo gasoline engine]	101	98	REAR BMPR ANT -	No.	Wire	Signal Name (Specification)	
15	9	ONE TOUCH UNLK SENS (DR)	49	W/B	IGN RLYAY (F/B) CONT	102	91	REAR BMPR ANT +	129	91	INT ROOM LAMP PWR SPLY	
16	9	ONE TOUCH UNLK SENS (PASS)	89	В	DIMMER	103	٨	TURN SIG LH OUTPUT (SIDE, REAR)	130	Ь	PASS DOOR UNLK OUTPUT	
17	۵	RECEIVER/SENSOR GND	69	GR	A/T SHIFT SELECT PWR SPLY				131	٨	BAT (FUSE)	
18	7	SECURITY IND LAMP CONT	70	8	IGN RLYAY (IPDM E/R) CONT				132	^	RR, RL DOOR LK OUTPUT	
20	Я	DETENT SW	7.1	9	DR DOOR REQ SW	Connector No.		M16	133	BR	RR, RL DOOR UNLK OUTPUT	
21	SB	STEP LAMP CONT	72	SB	PASS DOOR REQ SW	Connector Name		(SILIGON LOGENOS AGOS) MOS	134	В	GND	
25	R	STOP LAMP SW2	75	BR	COMBI SW INPUT 5	COLLIECTO		BOWN (BOD) CONTINOUNDOLL)	135	^	FRONT DOOR, FL LID LK OUTPUT	
56	æ	EXTENDED STORAGE FUSE SW	9/	96	COMBI SW INPUT 4	Connector Type		TH24FB-NH	136	^	INT ROOM LAMP CONT	
27	Ь	STOP LAMP SW	77	>	COMBI SW INPUT 3	9			137	10	FRONT DOOR, FL LID UNLK OUTPUT	
30	Μ	DR DOOR UNLK SENS	78	٨	COMBI SW INPUT 2				138	Ь	REAR DOORS ACT PWR SPLY [With VR30 engine]	
33	>	TR LID OP CANCEL SW	79	97	COMBI SW INPUT 1	ĺ	_	7	138	В	REAR DOORS ACT PWR SPLY [With 2.0L turbo gasoline engine]	
36	9	HAZARD SW	80	٦	TR LID OPNR SW	2		1114114114113 1111	139	W	BAT (F/L)	
39	BR	P/N POSITION						T11 D11 191 191 191 191 191	140	BR	IGN ON	
							-	h	141	В	PWR SPLY (BAT)	
									142	В	FRONT DOORS, FL LID ACT PWR SPLY	
									143	В	GND	
						Terminal	0	Signal Name [Specification]				
						o O	wire					
						105	>	TURN SIG RH OUTPUT (FRONT)				
						107	۵	PUSH-BTN IGN SW ILL GND				
						111	>	ACC/ON IND				
						113	SB S	ACC RELAY CONT				
						114	9] :	PASSENGER DOOR ANT +				
						115	>	PASSENGER DOOR ANT -				

JRKWF8754GB

Α

Ρ

	П			1	T								T,		lmotor	99315111	stem				T	T,		Τ	Ι	ystem]	system]				_		T		Τ	I	T			Ţ	П		7											
++ VB30 opening	- [With VR30 engine]	turbo gasoline engine		- [With VR30 engine]	With 2.0L turbo gasoline engine		- [With VR30 engine]	turbo gasoline engine	- [With VR30 engine]	turbo gasoline engine	th VR30 engine]	- [With 2.0L turbo gasoline engine]	(With VR30 engine)	- [With 2.0L turbo gasoline engine]	2000 thought bac on	turbo gasoline engine	- [With VR30 engine and with BOSE system]						- [With 2:0L turbo gasoline engine]	ui vico enginej		engine and with BOSE s	With VR30 engine and with BOSE sy				[With 2.0L turbo gasoline engine]	- [With VR30 engine]		,	,					With 2.0L turbo gasoline engine	- [With VR30 engine]	,												
SWG	- [w]	- [With 2:0L		[W]			- [Wi	- [With 2:0L	- [Wi	- [With 2.0L	- [Wi	- [With 2.0L	. [Wi	- [With 2:0L	ringo OCOV, 4+1MO	- Iwith VK30 engil	- [With VR30 eng				٥	0.000	- [with 2.0L			- Except with VR30	- [With VR30 eng				- [With 2.0L	- [Wi								- fwith 2.0L	- [Wi													
2	26 G	25 W	Н	+	31 SHELD	H	+	33 LG	+	H	+	+	+	+	+	+	36	40 G		┪	43 SHELD	+	45 B	46 SHIFID	t	╀	48 BR	L	20 v	51 V	52 L	+	+	54 GR	25 L	+	S/ R	+	+	62 P	62 V	1 E9	4											
					8 2 9	3 8 3 7				lication		ngine]	oline engine]	oline engine]	nginej	oline enginel	nginel	oline engine]	ngine]	oline engine]	ngine)	oline engine]	oline enginej	oline enginel	nginel						oline engine]	ngine]	[5]	CM]							oline engine]	ngine]	Ome engine											
	WIRE TO WIRE	TH80MW-CS16-TM4							3	olgnal Name (opecification)	•	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2.0L turbo gasoline engine]	- [with VR30 engine]	- IWith 2 OI turbo gas	- [With VR30 e	- [With 2.0L turbo gasoline engine]	- [With VR30 e	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2:0L turbo gasoline engine]	- fWith 2.01 turbo gas	- [With VR30 engine]						- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With DCM	- [Without DCM							- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- Iwaini 2.0c mino Bas											
Connector No	ne	Ť	4	唐	H.S.				Terminal Color Of	No. Wire	1 16	2 L	5	3 BB	Ť	4 4 ×		>		+	7 LG	+	5 a	. 5	SHELD 6	10 v	11 GR	H	Н	14 LG	15 BR	+	+	16 V	۱۲ ۲	+	5 G	+	+	+	24 BG	24 V	7 67											
Γ			, <u> </u>	<u>-</u>	_ _ T	Π	П	Т	Ē	П	ш П	<u> </u>		<u>т</u>	<u> </u>	T	T	 		 		<u>т</u>	т Т	T	T	T	Г	 		П	П	 	<u> </u>	 	<u>т</u>		<u> </u>			1	ш		J											
					. .																			[With VR30 engine]	turbo									[With VR30 engine]					- [With VK3U engine and with BOSE system]	and an Britania and with 100 and 100 a														
																								ľ	- fwith 2.01								- [With					Section Section	- [WITH VR3U	Investor mon														
9	88	8 8 8	98	>	> >	91	œ	∝ ≥	: >	BG	9	9	98 :	H ;	- 0	2 2	*	8	*	_	> 8	BR e	n 8	e a	. >	- 60	~	98	1	Μ	9	9	>	*	g	¥ :	» ;	$^{+}$	Ť	1														
	45	44	46	20	52	53	24	55	28	59	09	61	62	63	÷ 0	8 2	7.1	72	73	74	75	19	//	67	62	81	82	83	84	82	98	88	8	68	91	94	9 5	6	80 8	8														
(VR ENGINE)					26 26	8 8	© (se			catton																			ne engine]	[eu,	ne engine]	ine]																						
SECURITY CONTROL SYSTEM (VR	WIRE TO WIRE	TH80MW-CS16-TM4							3	olgnal Name (opecification)						. .													- [With 2.0L turbo gasoline engi	- [With VR30 engine]	- [With 2.0L turbo gasoline engin	- [With VR30 eng																						
RITY CON	Name	Т							Color Of	Wire	*	9	SB	ag :	- 0	4 3	>	BG	BR	97	GR.	œ .	1	> 3	: 6	*	SB	œ	R	Y	Ь	*	9	æ	œ	¥ °	20 0	n ;	> 0	. 3	SB :	91												
SECUR	Connector Name	Connector Type	Q	季	H.S.				Terminal	No.	1	2	e .	4 1	n	2		10	11	12	13	14	15	18	19	20	22	23	24	24	25	25	56	27	58	31	75	33	35	36	37	38	ş											
																																															JRI	ĸw	F875	550	SB.			
																																															UIN		. 510		٠			

SEC-63 2016 Q50 Revision: November 2016

_	1	Т		_		_	1	_	_	_	_	_		П	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	г				_	_	_	_	_	_	_		_	-,	
		,					,	, ,	- [With DRPO]	- [Without DRPO]		- [Without DRPO]	- [With DRPO]			- [Without DRPO]	- [With DRPO]	,				,		,					,		[33] anodajini poz odpodo (JCG/) Hajini accongji	- [Cocept with VR30 engine and without ISS]					,	•		,						,	
*	SHIELD	۵	SB	PΠ	Υ	>	4	W/B	91	> 3	> 0	BG	9	٦	٨	BG.	٦,	- 5	ž :	> 0	20 1	>	8	SB	_	BR :	2 3	≥ (9 6	ء ا	SE W	>	BG	BR	9	۸	В	BR	В	BG	LG	۸	В	9	-	g	
10	11	12	13	14	15	16	1/	18	19	19	07	22	22	23	24	25	25	7.0	/7	87	67	30	31	32	33	34	60	36	3/	40	41	43	44	46	47	49	20	52	53	55	26	57	58	59	09	61	63
CAN-H	KLINE [With 2.0L turbo gasoline engine]	KLINE [With VR30 engine]	IGN_SW	M_CAN_H	CAN-L	CAN-H	CAN-L	POWER			Mi32	DONGLE UNIT	TH04FW-NH			<u>[</u>	[- -	1				Signal Name [Specification]		DATA&+5V_SUPPLY	GND			M33	WIRE TO WIRE	NUICONAMI TOTO	NH60IWW-1512			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 6 9 12 5 13 14 17 17 17 17 17 17 17 18 18 18 17 17 17 17 17 17 17 17 17 17 17 17 17				Signal Name (Specification)								_
Ŀ	>	>	Α	SB	R	-	4	≥		SI S	. NO.	r Name	r Type										Wire	و	8			No.	r Name	True	adá.								0	Wire	Μ	9	9	œ	œ	GR	
9	7	_	∞	11	12	13	14	16		N software No	COILIECT	Connector Name	Connector Type	4	B) is						Termina	è		4			Connector No.	Connector Name	Control Tropo	ากลแเดา	Œ	Ì	2					Terminal	No.	2	4	5	9	7	œ	
- [With 2.0L turbo gasoline engine]	- [With VR30 engine and without BOSE system]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]			M24	CAN GATEWAY		TH12FW-NH			7 4 7	- 1	7 101 6 7			Signal Name [Specification]	19 All Cold of Character in Appared Tax Cold In 1880	CAN-H (CAN COMIMUNICATION CIRCUIT 1)	BAITERY POWER SUPPLY	CAN-H (CAN COMMUNICATION CIRCUIT 2)	GROUND	CAN-H (CAN COMMUNICATION CIRCUIT 2)	CAN-L (CAN COMMUNICATION CIRCUIT 1)	IGNITION POWER SUPPLY [With VR30 engine and without ISS]	IGNITION POWER SUPPLY (Except with VR30 engine and without ISS)	CAIN-L (CAIN COININIONICATION CIRCOTT 2)	GROUND	CAN-L (CAN COMMUNICATION CIRCUIT 2)		M25	NICO	DATA LINK CONNECTOR	BD16FW			ı	11121314 16	3 4 5 6 7 8				Signal Name (Specification)	- Paramanana - Paramanananananananananananananananananan	M_CAN_L	EARTH	
۵	>	BR	W			-		П	lype								lerminal Color Of	wire	-	Α.	-	8	٦	۵	œ	≥ 4	ء ا	a .	¥			ı	. Name	Type .									Color Of	Wire	PI	8	
.	66	100	100			Connector No.	Connector Name		Connector Type	₫.	事	H.S.					lerminal	ġ,	-	· .	4	2	9	7	6	6	or ;	= =	17		Connector No		Connector Name	Connector Type	Ġ	B	Ě	2					Terminal	No.	6	4	
6 R			- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		_	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	Carine and an about the Carine	- [With Z.OL Lundo gasoline engine] - [With VR30 engine]				- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With	- [With VK30 engine	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine	- [With	- [With VR30 engine]	- [with 2.0t turbo gasonine engine]	- [With 2.0L turbo gasoline engine]	- [With VK30 engine]	TOWN.		- [With 2:01 turbo pasoline engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	,	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		Committee of the commit
-	_	۵	GR	ж	9	>	57	SHIELD	_	9 6	5 د	oc >	>	٦	9	GR.	Α .	ه م	× (9	SHELD	~	≥	BR	SHIELD	BR c	,	≃ ;	> 5	2 2	SHIELLD	5 9	SB	>	٦	W	œ	SHIELD	œ	_	٨	æ	Μ	٦	œ	BR	-
3 s	89	69	71	71	72	72	/3	13	74	74	0 4	92	77	78	79	80	200	Z 5	. I	78	3	83	83	84	84	28	8	98	98	3 6	χ o	68	90	96	92	95	93	93	94	95	95	96	96	97	97	86	0

JRKWF8756GB

SECURITY CONTROL SYSTEM

	Connector No. M40	Connector Name WIRE TO WIRE	T	Connector Type TH80MW-CS16-TM4	ď			S	2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18 17				Transition Color Of			1 BG -		. ^ _		[200] Carrier of the control of the	YS :	ຄຸ ເ	+	*	>	y - [With 2.0L to		12 BR - [With 2.0L turbo gasoline engine]		13 SHIELD - [With 2.0L turbo gasoline engine]	14 B -	15 BG - [With 2.0L turbo gasoline engine]	15 SB - [With VR30 engine]	8	RR - (With		ł	0 1	1	+	M	G - [with 2:0L tu	>	33 L - [With VR30 engine]	33 Y - (With 2.0L turbo gasoline engine)	34 P	H	┝	L	_	38 - [With VR30 angina]	38 P - (With 2.0) turbo easoline engine and without safeway)	. α	-
	Connector No. M39	Connector Name WIRE TO WIRE	Т	Connector Type TH32FW-NH				/	16 15 14 13 12 11 10 9 8 7 6 5 4 3	8 25 24 23 22 21 20 19				Color Of	0		1 W/B	2 SB		4 P - [Without Gateway]	Commence of the commence of th	× ¦	+	b 38	+	*	P - [Witho	9 V - [With BOSE system]		11 SB -	12 G -	13 6 -	15 R -	16 SB	17 SHEID	t	× 61		+	+	+	23 BK	+	25 L	26 Y -	27 LG -	28 BR -	Ĺ	30 ×	31 w	╀	, <u>e</u>			
		BR - [With DRPO]	ec :		BG - [Without DRPO]	W/B - [With DRPO]				^		- SB			2	T.G.				88				· ·	SB			Ì	r No. M38	Name PLISH-RITHON IGNITION SWITCH		r Type TH08FW-NH			K		$\frac{1}{2}$	5 6 7 8					a .	M			- d		BR						
VE)		56	27	28	59	29	30	Q.	÷ :	25	55	26	22	'n	000	29	9	63	99	59	3	gg Ş	69	2	71	72			Connector No.	Connector Name		Connector Type	_			S.						lerminal	NO.	e	4	2	9	7	00						
SECURITY CONTROL SYSTEM (VR ENGINE)		64 B	65 R	4		_		21 16	+	72 V -			Connector No. M34	T	Connector Name WIRE TO WIRE	Т	Connector Type NH60MW-TS12				200000000000000000000000000000000000000		3 6 9 12 15 18 12 15 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 18 18 18 18 18 18 18 18 18 18 18 18				E E	No. Wire	1 v	2 R -	4 G - [With DRPO]	4 SB - [Without DRPO]	. 1 5				9 GR	ł	+	+	27	+	Tp of	+	18 W -	19 B -	20 SB - [With DRPO]	>	21 SHIELD	T	BG	23 P - [With DRPO]		+	1
V)	Ц							_	1	_			ŭ	1	٥	_1	۳	Ľ	2	_	_	•				Ĺ		_1	_1	_				_		1_	1	_	1			_1_		_1				<u> </u>	1	1	1	1	1_	1	J

Revision: November 2016 SEC-65 2016 Q50

Α

В

С

D

Е

F

G

Н

SEC

L

M

Ν

0

Р

						7	144646	3	20 10			Snecification		H-N	N-L	CONTROL SIGNAL	NSOR GROUND	WER SUPPLY	VR30 engine and without ISS]	130 engine and without ISS]	(TION SIGNAL (H)	ATION SIGNAL (L)	UND									5 6 7 8	13 14 15 16			Snecification	- Communication				-Gateway]	ateway]		. Gateway]
27 56 Connector Connec	MASS	OCIVI	COMBINATION METER	TH12FW-NH			10/10/11	2	4/ 48					CAN-H	CA	ILLUMINATION C	FUEL LEVEL SEN	BATTERY POWER SUPPLY	IGNITION SIGNAL [Except with VR30 engine and without ISS]	IGNITION SIGNAL [With VR30 engine and without ISS]	AV COMMUNICATION SIGNAL (H)	AV COMMUNICA	GROUND			M95	WIRE TO WIRE	TH16MW-NH				3 4	9 10 11 12				Tallian Inches				- [Without	- [With Gateway]		- [Without Gateway
17 5.8 Connector Name Connector Name CONSINATION METER 18 Connector Name Consistent 18 Connector Name Connector Name Consistent 18 Connector Name Connector Name Consistent 18 Connector Name Connector Name Connector Name Connector Name 19 Connector Name Conne	nnector No.	III CCCO IAC.	nnector Name	nnector Type			Ŧ.S.						_	41 L	\dashv		44 Y	H	H		\dashv	+		-		nnector No.	nnector Name	nnector Type		Œ	SH	2					┪	1 R	H	L	H	$\frac{1}{1}$	_	7 p
1							0 1 2	22 24 25 25 27 28 30 31 32 33 34 35 37 38						GROUND	DP/START OFF SWITCH INDICATOR SIGNAL	SECURITY SIGNAL		ALTERNATOR SIGNAL	LED HEADLAMP (RH) WARNING SIGNAL	LED HEADLAMP (LH) WARNING SIGNAL	ACC POWER SUPPLY	AIR BAG SIGNAL	TRIP/RESET SIGNAL	STEERING SWITCH SIGNAL GROUND			Ť	T	ASSENGER SEAT BELT WARNING SIGNAL	T BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	UAL MODE SIGNAL [With 2.0L turbo gasoline engine]	ANUAL MODE SIGNAL [With VR30 engine]	N-INIANUAL MODE SIGNAL [With VK30 engine] -MANUAL MODE SIGNAL [With 2.0t turbo easoline engine]	MANUAL MODE SHIFT UP SIGNAL	IUAL MODE SHIFT DOWN SIGNAL [With VR30 engine]	_	 	ADDLE SHIFTER DOWN SWITCH SIGNAL	UMINATION CONTROL SWITCH SIGNAL (+)	UMINATION CONTROL SWITCH SIGNAL (+)	VEHICLE SPEED SIGNAL (8-PULSE)		<u> </u>	
73 5.6				Γ		_	vi.	212						H	GR	9		H	9	BR	\perp	+	+	├	Н	+	+	+	U	×	5	SB	ے و	, ₈₈	S.	Ь	BG	g	>	GR	œ			
77 78 78 78 78 78 78 78 78 78 78 78 78 7		т Т	Ť	T		_			_		_		_	_	_						_			_			<u>+</u>	_	_		_	_		_			_			_	_	, _	Т	1
		Londone Ocean dailed	- [With 2.0L turbo gasoline engine]	faulding and a second a second and a second			- [With 2.0L turbo gasoline engine]	- [With VR30 engine]				•	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]				- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	With 2.0L turbo gasoline engine and without gateway	[With 2.0L turbo gasoline engine and with gateway			- [With VR30 engine]	- [With 2.0L turbo gasoline engine]			51	ATS ANTENNA AMP.		403FW	Ē		-		က]		Constitution Constitution	olgnai wame [opecification]			
NET CON I KOLL SYS I EMI (VK ENG) Y	я,		\downarrow		. 9		<u> </u>			^	. 9				. ·	. 9			L - [With 2.0L turbo gasoline engine]		Ħ	+	M Te	· ·		97	┨				Т				<u>-</u>		8]		Color Of		, M		
X X X X X X X X X X		ge C	و و	2 00	Н	+	88 E	В	L		\vdash	^	9	^	\dashv	Н	BR	GR	1	BR	۵.	× ;	+	λ 86	BR	97	┨				Т				H.S.		8]		Color Of	Wire	+	\vdash	
		angme) // Sb	2 8/2	79 R	08	engine] 81	83 BR 12	ngine] 83 R	ngine] 84	98	87	v 68	ngine] 90 G	ngine] 90 V	91	Н	BR	GR	engine] 94 L	95 BR	engine] 95 P	95 R	engine] 97		99 BR	97	┨			production] Connector Name	production]						യ	- [With VR30 engine]	- [With VR30 engine]	engine] Terminal Color Of	No. Wire	П	m	

JRKWF8758GB

SECURITY CONTROL SYSTEM

	А
Signal Name (Specification)	В
M137 JOINT CONNECTOR-M10 JOINT CONNECTOR-M10 Signal Name [S M144 Tru Tru Tru Tru Tru Tru Tru T	С
Connector No. M Connector No. M Connector Name D Connector N	D
[ou]	Е
	F
M134 M134 M135 M135 M135 M135 M135 M135 M135 M135	G
28C W 22C R 30C R 31C W 33C R	Н
Signal Name [Specification] Signal Name [Specification] ANT- ANT- ANT- ANT- ANT- ANT- ANT- ANT- - [Without DRPO]	I
INSIDE EEY ANTENNA (CONSOLE) RROZEGY RROZEGY ANT- ANT- ANT- ANT- ANT- ANT- ANT- ANT-	J
Mine ton Name onnector Name onnector Name onnector Type (ALS) 1	SEC
N	L
1 SHELD	M
SHED	N
SECURITY C 10 R 11 SHEID 13 L 14 L 14 L 15 L 16 L 16 L 16 L 17 Connector Name Connecto	0
JRKWF8759GB	

SEC-67 2016 Q50 Revision: November 2016

Ρ

	SECURITY	SECURITY CONTROL SYSTEM (VR ENGINE)	VE)						
Mary Part Mary Part Mary Part	Terminal Color No. Wire		11 11	SHIELD		23	S S	- [With 2.0L turbo gasoline engine] - [With VR30 engine and without ISS]	П
Match 2014 Mat	1	Ц	14	_		23	>	- [With VR30 engine and with ISS]	
Convector Name Conv	+	1	12	_	-	24	~ 5	- [With 2.0L turbo gasoline engine]	╗
SCONTINGENORMA CONTINUE NATIONAL CONTINUE NA	+	+				24	95	- [With VK3U engine and without ISS]	₫.
Contector Plane Contector	+		Donney	or No	M173	74	>	- [with vks0 engine and with lss]	R R 4
Connector Name DAYL CONNECTOR ADD CONNECTOR NAME DAYL CONNECTOR NAME CONNECTOR NAME DAYL CONNECTOR NAME CONNECT	+				C/TIM				1 0 0 0 1
Fig. 10 Fig.	+		Connect	or Name	JOINT CONNECTOR-M03	Connecto		M175	18 17 16 15 14 13
CONTINUEND NAME CHAPTON STORMAN FINAL CHAPTON STOR	┞		Connect	or Type	24342_4GA2A			TOTAL COMPANY OF THE CO.	23 22 21 20 19
MICHOPHORE SOUND STATE MICHOPHORE SOUND ST	H		_(Connecto	21	JOINT CONNECTOR-MOS	
MICCOP-IOUT STANKIA Н	MICROPHONE SIGNAL GP	B			Connecto		NH20FL-DC		
MICCOPM 1/1 Feminal Color Of Signal Name [specification] Miccopmone voc. Micropmone voc. Miccopmone voc. Miccopmone voc. Miccopmone voc. Micropmone voc. Miccopmone voc. Micropmone voc. Mic	7	MICROPHONE OUTPUT SIG	Ę		6 4 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ą			Color Of
Micropartons (SGMAL)	†		1	-	11 10 9 8 7	季			Wire
Triconviolet Conviolet C	+				23 22 21 20 14	S			
A COMM (H)	+				20 22 21 20 10			8 7 6 5 4 3 2 1	2
No. Wire Signal Name (Specification) No. Wire Signal Name (Specificati	+							19 17161514131211	3 1
Signal Name Specification	\dashv								4 L
SCHELD No. Wire			Termina		Signal Name [Specification]				5 L
D SQUIND SIGNAL (+) 2 1 1 1 1 1 1 1 1 1			No.	Wire	ognation (openingation)				- I 9
SOUND SIGNAL (+) 2 1			1	1	•	Terminal	Color Of	Circul Namo [Coorification]	7 р
MISS	Н		7	٦	•	No.	Wire	ogna ivanie [opecinication]	
MISS			e	1		1	٦		
MISS			4	7		2	T		
MISS MISE MISS MISE MISS MISE MISS MISE MISS MISE MISS MISE MISS			2	٦	•	я	_		\dashv
MIRETOWNEE 2			9	1		4	٦		
Wing TO Wing Wing TO Wing	Connector No.	M155	7	œ	-	2	_		13 L
THIGFWAMH 10 R	Connector Name		00	œ		9	_		14 L
11		Т	6	œ	-	7	_		15 L
1	Connector Type	1	음	œ			_		16 L -
State Signal Name (Specification) 13	ą		11	œ		10	۵		17 L
13 56 14 15 14 15 15 14 15 15	昼		12	~		=	۵		+
	Ĕ		13	SB		12	Д		1
To To To To To To To To	liè.	7 6 5 4 3 2	14	SB		13	۵		+
Color Of Signal Name Specification 16 16 17 18 19 18 19 19 19 19 19		15 1/ 13 19 11 10	15	SB		14	۵		-
Color Of Signal Name [Specification]		7	16	_	 [With 2.0L turbo gasoline engine] 	12	۵		4
Color Of Signal Name Specification 17 1			16	SB	- [With VR30 engine]	16	Ь	- [With VR30 engine]	+
One Off Value Signal Name (Specification) 17 SB 17 PP R - (With Value) 18 1 1 - (With Value) 19 R R - (With Out ADAS and with boat Gateway) 19 6 - (With Value) 6 - (With Value) 19 W Y - (With Loud ADAS and with boat Gateway) 20 16 - (With Value) 6 R - (With Value) 20 W Y - (Without Gateway) 21 16 - (With Value) 6 W V P - (Without Gateway) 21 16 - (With Value) 6 W V P - (Without Gateway) 21 16 - (With X30 engine) 20 W R - (With Cateway) 22 - (With X30 engine) 20 W R - (With W30 engine) R - (With W30 engine and with V31 - (With W30 engine and with V31 - (With W			17	٦	 [With 2.0L turbo gasoline engine] 	16	œ	- [With 2.0L turbo gasoline engine]	_
Wire	Terminal Color		17	SB	- [With VR30 engine]	17	۵	- [With VR30 engine]	
R R R R R R R R R R	_		18	_	 [With 2.0L turbo gasoline engine] 	17	œ	- [With 2.0L turbo gasoline engine]	
R -[Without ADMS and without Gateway 19 8R -[With Vide engine 19 W R -[Without ADMS and without Gateway 10 16 -[With Vide engine 20 W Y -[With ADMS 200 without ADMS and without Gateway 20 BR -[With Vide engine 20 W Y -[With ADMS 200 without ADMS 20 BR -[With Vide engine 20 W P -[With Cateway 21 LG -[With X10 engine engine 21 LG -[With X10 engine engine 22 R -[With X10 engine engine 22 R -[With X10 engine and without S3 R -[With Vide engine and without S3 -[With Vide engine and without S3 -[With Vide engine and without S4 -[With Vide engine and without S5 -[With Vide engine and without S5 -[With Vide engine and without S4 -[With Vide engine and without S4 -[With Vide engine and without S4 -[With Vide engine and without S5 -[With Vide engine and	1 R		18	SB	- [With VR30 engine]	19	ч	- [With VR30 engine and with ISS]	
P - (Without ADAS and without Gateway) 19 LG - (With Data gazoline engine) 20 R Y - (With Land LADAS and with Gateway) 20 LG - (With 20 turbo gazoline engine) 20 W Y - (With LADAS) 21 LG - (With 20 turbo gazoline engine) R P - (With LADAS) 21 LG - (With 20 turbo gazoline engine) R - (With Cateway) 22 R - (With Y30 engine) A/W - (With V30 engine and without SS) - (With V30 engine and with USS)	3 R		19	BR	- [With VR30 engine]	19	Μ	- [Except with VR30 engine and with ISS]	
R - (With ADAS) 20 BR - (With VIS3 engine) 20 W Y - (With ADAS) 20 1.G - (With 20L turbo gasoline engine) R R R R - (With 20L turbo gasoline engine) R R R R - (With VIS4 engine) R	H		19	97	- [With 2.0L turbo gasoline engine]	20	æ	- [With VR30 engine and with ISS]	
Y (With ADAS) 20 LG Y (With ADAS) 21 BR P (Without Gareway) 21 LG R (With Gateway) 22 R R R V V			20	BR	- [With VR30 engine]	20	Μ	- [Except with VR30 engine and with ISS]	
Y 21 BR P - [Withhout Gateway] 21 LG R - [With Gateway] 22 R R/W 22 N 22 R R 22 V	2	- [With ADAS]	20	97	- [With 2.0L turbo gasoline engine]				
P (Without Gateway) 21 LG R - (With Gateway) 22 R R/W 22 R R R 22 V R			21	BR	- [With VR30 engine]				
R UVITh Gateway) 22 R RAV 22 58 RA 22 58	7 P		21	97	- [With 2.0L turbo gasoline engine]				
R/W - 22 5B R - - 22 V	7 R		22	ч	- [With 2.0L turbo gasoline engine]				
	Н		22	SB	- [With VR30 engine and without ISS]				
	Н		22	>	- [With VR30 engine and with ISS]				

JRKWF8760GB

	Connector No. T53	Connector Name TRUNK LID LOCK ASSEMBLY	Connector Type TROSEW-IC	1	•	Hs.	123			Terminal Color Of Signal Name [Specification] No. Wire	Н	\dashv	3 6																								
	Signal Name [Specification]				•		148	WIRE TO WIRE	NS16FW-CS			N	16 15 14 13 12 11 10 9 8				Signal Name [Specification]				•		-					- [With around view monitor]	- [With rear view monitor]	- [With rear view monitor]	- [With around view monitor]	- [With around view monitor]	- [With rear view monitor]	- [With rear view monitor]	- [With around view monitor]		
	Terminal Color Of	Wire			œ		П		Γ								_	MIE	>	BG	٦	Ь	9	8	œ	d	7	9	1	В	æ	8	Μ	œ	М		
	Terminal	V	,	m	4		Connector No.	Connector Name	Connector Type	1	-	Ż					Terminal	NO.		2	4	2	9	8	6	10	11	13	13	14	14	15	15	16	16		
SECURITY CONTROL SYSTEM (VR ENGINE)	M178	JOINT CONNECTOR-M08	NH30EW-DC			987	20 1817 151413121110			Signal Name [Specification]						- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [with vks0 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]		- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	1					T47	VIBNATIO OPENED DEGLISCATION ASSEMBLY	INCINK LID OF BIVEN RECOEST STATEON ASSEMBLE	TH04MW-NH	S C C C C C C C C C	
SECURITY	Connector No.	Connector Name	Connector Type		Œ	H.S.				Terminal Color Of No. Wire	Н	2 R	+	+	4	+	10 W	+	+	12 B	12 W	13 B	13 W	14 B	15 B	15 W	17 BR	18 BR	20 BR			Connector No.	Connector Name	COLLINGING INGLIS	Connector Type	E.S.	

A

В

С

D

Е

F

G

Н

J

SEC

L

N

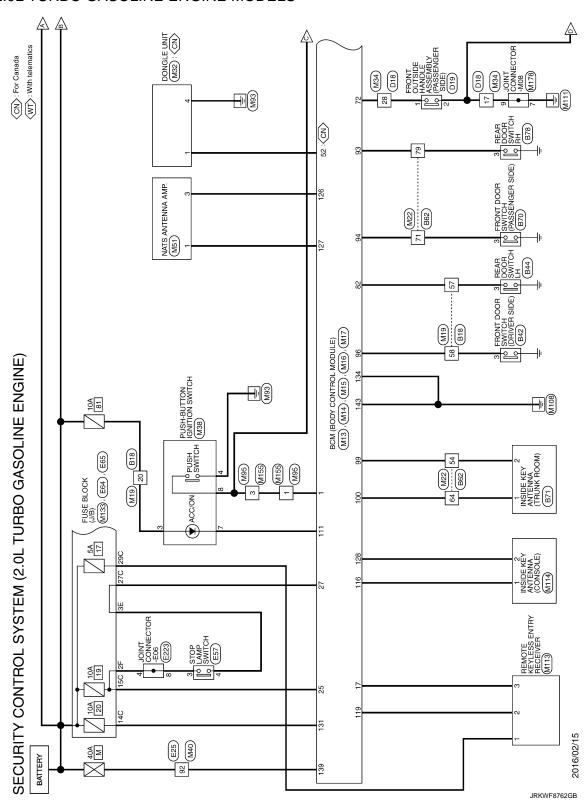
Ν

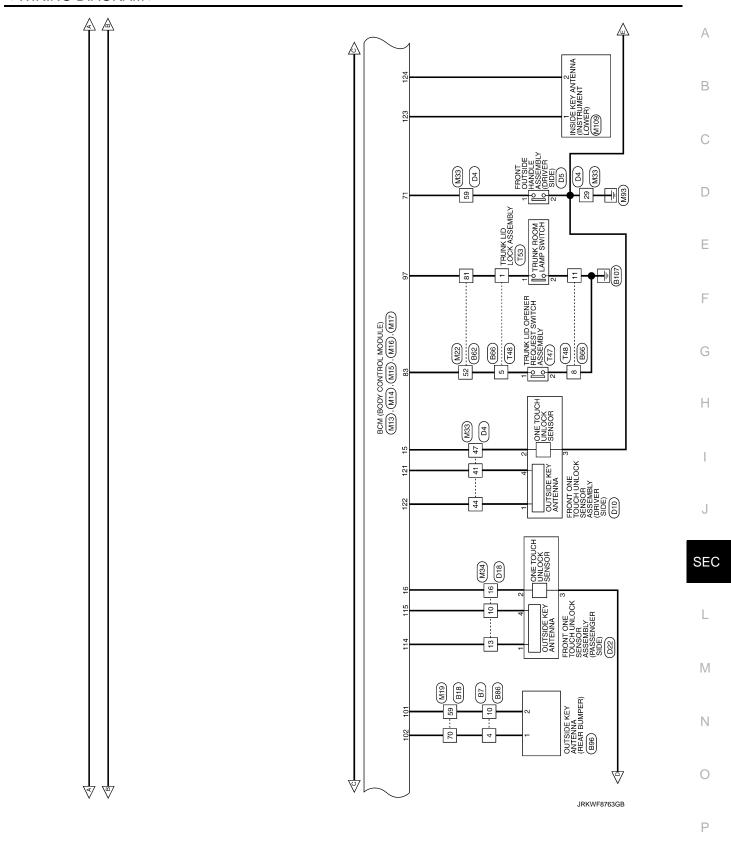
0

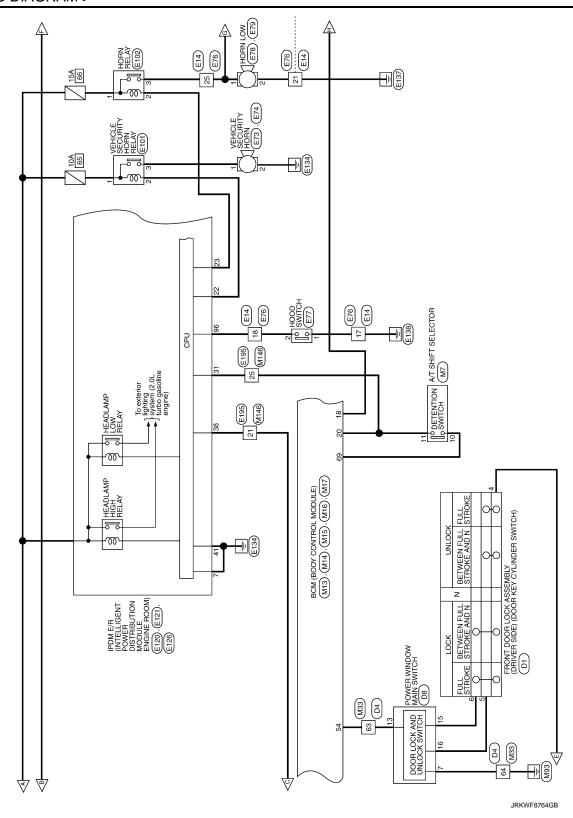
JRKWF8761GB

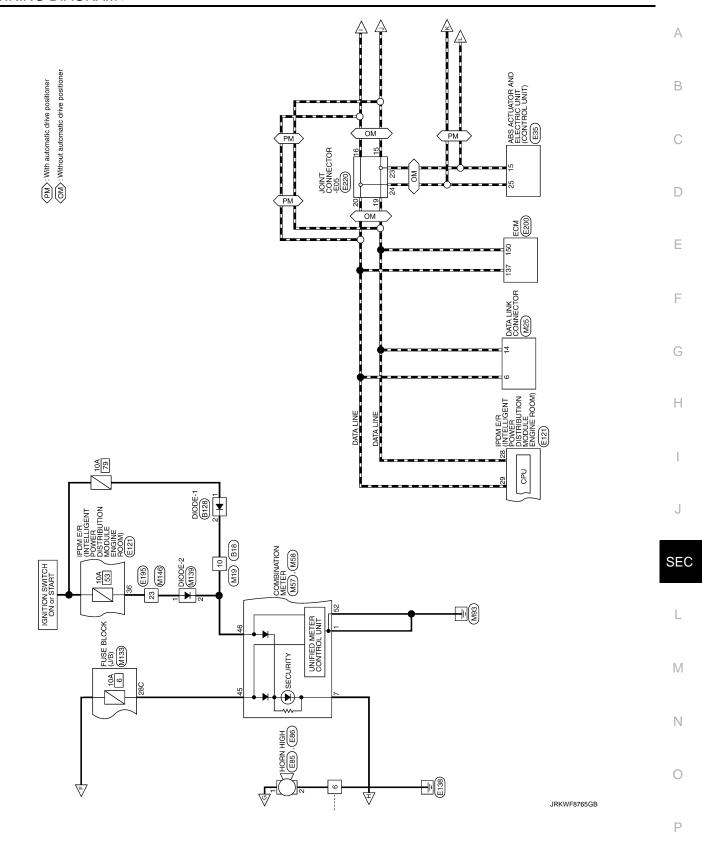
Ρ

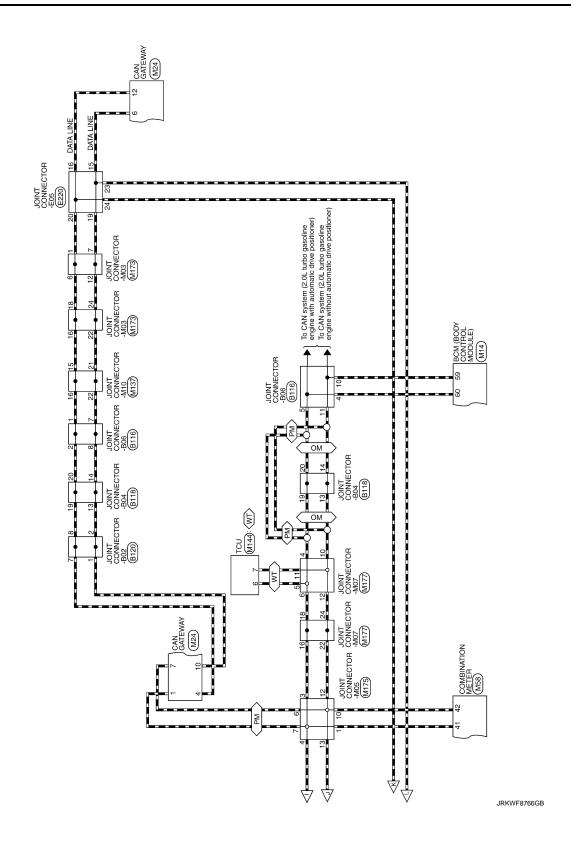
FOR 2.0L TURBO GASOLINE ENGINE MODELS











Α

В

С

D

Е

F

G

Н

J

SEC

L

M

Ν

0

Ρ

Connector Name WIRE TO WIRE Connector Type TH12AWW-NH H.S. 1 2 3 4 5 6 7 8 9 10 11 12 7 8 9 10 11 12 12 9 10 11 12 10 10	\dashv					CONTINUED INC. D44
Тн12мw-лн 1 2 3 4 5 6 7 8 9 10 11 12			71	W		Connector Name REAR DOOR SWITCH LH
7 8 9 10 11 12 3 4 5 6 12 13 14 15 6 15 15 15 15 15 15 15 15 15 15 15 15 15	13 GR		7.3	9 %		Connector Type THOMEW-NH
7 8 9 10 11 12	+		27	: -		1
7 8 9101112	╀		75		- [Without paddle shift]	
7 8 9 10 11 12	18 W		75	^	- [With paddle shift]	
910111111111111111111111111111111111111			9/	BR		
7111016	20 W		77	8	•	3
	22 R		78	SB		
	23 V		79	۸ .	- [With VR30 engine]	
	24 R	- [Wit	79		- [With 2.0L turbo gasoline engine]	
nal Color Of Signal Name (Specification)	24 Y	- [With VR30 engine]	81	В		e e
Tions and Tions and Tions	25 P	- [With 2.0L turbo gasoline engine and without gateway]	82	æ		е
. BG .	25 V	- [With 2.0L turbo gasoline engine and with gateway]	83	86		3 W
	25 W	Н	84	7	•	
4 R	26 6	Н	82	R	- [Without paddle shift]	
	27 R		85	^	- [With paddle shift]	Connector No. B62
8 9	28 R		98	8		Γ
9	ł	- [With VR30 engine]	88	œ		Connector Name WIRE TO WIRE
	21	Suppose ordered to C 449/MI	8 8	1	DMish 3 Of sushpanged in a partial	Connector Tune Tueschar CC16 TM44
	+	\downarrow	6	+	Z.U. turbo gasoline enginej	1
- GK	+		68		- [With VR30 engine]	Q
	+		91	ag.	•	
12 B .	\dashv		94	GR		
	35 P		96	*		26 3
	36 W		26	>		2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Connector No. B18	37 SB		86	BR - [With VR30	- [With VR30 engine and with BOSE system]	
TOWN OT JOHN	98 10		86	γ - [Except with \	- [Except with VR30 engine and with BOSE system]	
WINE TO WINE	40 P					
Connector Type TH80FW-CS16-TM4	\vdash					_
	\vdash		Connector No.	No. B42		No. Wire Signal Name [Specification]
	43 BG				נקמים מקיאמת/ ויסדייאים מססק דואסמי	1 BR - [With 2.0L turbo gasoline engine and without BOSE System
	\vdash		Connector Name		SWITCH (DRIVER SIDE)	H
	H		Connector Type	TH04FW-NH		W - [With 2.0L turl
	╀			1		t
	ł		Œ			2 SHIFLD - (With 2 OI turbo gasoline
			金寸			2 BD - [With 2 Of turbo resoling anging]
	+		\ \		<u>K</u>	6 4
	+					٤ :
Tall Color UT Signal Name [Specification]	+				3	w - [with VK30
	+					4 SHIELD - [With VR30 engine]
1 Y	57 W					4 Y - [With 2.0L turbo gasoline engine]
	28					5 G - [With VR30 engine]
	92		Tarminal	Color Of		N N
	+				Signal Name (Specification)	> 8
. 91	+		o O	0		BG
- × 2	61 6		m	>		6 BR - [With 2.0L turbo gasoline engine]
~	H]	_		- fwith
	3 3					2 300 thought when agines account the Milk West and To
	+					Т
						×
	64 Y					7 Y [With 2.0L turbo gasoline engine and without BOSE System]
	64 Y					

Revision: November 2016 SEC-75 2016 Q50

SECL	RITYC	SECURITY CONTROL SYSTEM (2.0L TURE	30 GA!	SOLIN	OL TURBO GASOLINE ENGINE)						
80	8	- [With VR30 engine and with BOSE system]	44	Ь		84	SHIELD	- [With 2.0L turbo gasoline engine]	9 R		_
∞	9	- [With 2.0L turbo gasoline engine]	45	8	- [With 2.0L turbo gasoline engine]	85	98	- [With VR30 engine]	10 P		_
∞	>	- [With VR30 engine and without BOSE system]	45	9	- [With VR30 engine]	88	9	- [With 2.0L turbo gasoline engine]	11 8		_
6	91	- [With 2.0L turbo gasoline engine]	46	SHIELD		98	œ	- [With 2.0L turbo gasoline engine]	13 SHIELD	LD - [With rear view monitor]	_
6	SHIELD		47	g		98	^	- [With VR30 engine]	13 W	- [With around view monitor]	_
10	>		48	BG		87	91	- [With VR30 engine]	14 B	- [With rear view monitor]	_
11	GR		49	g		87	SHIELD	- [With 2.0L turbo gasoline engine]	14 G	- [With around view monitor]	_
12	>		20	>		88	91		15 R	- [With around view monitor]	
13	œ		51	GR		06	Ь	- [With 2.0L turbo gasoline engine]	15 W	- [With rear view monitor]	_
14	BG		25	3	- [With 2.0L turbo gasoline engine]	6	>	- [With VR30 engine]	16 B	- [With around view monitor]	_
15	BG	- [With 2.0L turbo gasoline engine]	25	>	- [With VR30 engine]	92	7	- [With 2.0L turbo gasoline engine]	16 R		
15	GR	- [With VR30 engine]	23	~		92	>	- [With VR30 engine]			1
16	^		24	GR	-	93	Н				(
17	Ь		25	1		93	SHIELD	- [With 2.0L turbo gasoline engine]	Connector No.	870	
18	٦		99	>		94	ď		Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)	_
19	В		22	œ		95	٦	- [With 2.0L turbo gasoline engine]	COILIECTOI IVAIII		
20	g.		28	9		95	>	- [With VR30 engine]	Connector Type	TH04FW-NH	_
21	œ		29	۵		96	æ	- [With 2.0L turbo gasoline engine]		1	1
22	>		61	-		96	*	- [With VR30 engine]	Œ		
23	Α		62	۵	- [With VR30 engine]	97	_	- [With VR30 engine]			
24	BG	- [With 2.0L turbo gasoline engine]	62	>	- [With 2.0L turbo gasoline engine]	97	ď	- [With 2.0L turbo gasoline engine and with BOSE system]	1.3	<u>-</u>	
24	>	- [With VR30 engine]	63	_		97	>	- [With 2.0L turbo gasoline engine and without BOSE system]		8	
25	Ĺ	- [With 2.0L turbo gasoline engine]	64	>		86	91				
25	æ	- [With VR30 engine]	99	9		66	┞	- [With VR30 engine and with BOSE system]			
56	9	- [With VR30 engine]	89	-		66		- [With 2.0L turbo gasoline engine]			
56	>	- [With 2.0L turbo gasoline engine]	69	۵		66	>	- [With VR30 engine and without BOSE system]	Terminal Color Of	L	_
27	œ		71	S.	- [With 2.0L turbo gasoline engine]	100	BR	- [With VR30 engine]	No. Wire	e Signal Name [Specification]	
59	91		71	~	- [With VR30 engine]	100	L	- [With 2.0L turbo gasoline engine]	3		_
30	91	- [With 2.0]. turbo gasoline engine]	72		- [With VR30 engine]			0	1		7
30	۵	- [With VR30 engine]	72	>	- [With 2.0L turbo gasoline engine]						
31	SHIELD		73	~	- [With 2.0L turbo gasoline engine]	Conne	Connector No.	998	Connector No.	B71	_
32	_		73	SHIELD	L	,				П	_
33	8	- [With VR30 engine]	74	98	- [With 2.0L turbo gasoline engine]	Conne	connector Name	WIRE IO WIRE	Connector Name	INSIDE KEY ANTENNA (TRONK ROOM)	
33	91	- [With 2.0L turbo gasoline engine]	74	٦	- [With VR30 engine]	Conne	Connector Type	NS16MW-CS	Connector Type	RK02FGY	_
34	SHIELD		75	GR	- [With 2.0L turbo gasoline engine]				[
32	91	- [With VR30 engine]	75	۸	- [With VR30 engine]	B			B		
35	W	- [With 2.0L turbo gasoline engine]	9/	GR	- [With VR30 engine]	7	ě		Ě	≪	
36	æ	- [With VR30 engine]	26	>	- [With 2.0L turbo gasoline engine]	₹	5	22	5	{	
36	W	- [With 2.0L turbo gasoline engine]	77	۵				8 9 10 11 12 13 14 15 16		((1 2))	
37	Ь	- [With 2.0L turbo gasoline engine and without BOSE system]	78	٦)	
37	œ	- [With VR30 engine]	79	œ							
37	×	- [With 2.0L turbo gasoline engine and with BOSE system]	80	8	- [With 2.0L turbo gasoline engine]						
38	W		80	۸	- [With VR30 engine]	Terminal	nal Color Of	Circuit Name (Constitution)	Terminal Color Of	10 Jona Stanistica	_
39	Ь	- [With VR30 engine and without BOSE system]	81	8	- [With VR30 engine]	No.	Wire	orginal realite [openitication]	No. Wire		
39	Я		81	ж	- [With 2.0L turbo gasoline engine]	1	В		1 W		
39	W	- [With VR30 engine and with BOSE system]	82	9	- [With 2.0L turbo gasoline engine]	2	BG		2 GR	ANT-	_
40	9		82	SHIELD		4	SHIELD				
41	٦		83	œ	- [With 2.0L turbo gasoline engine]	2	Μ	,			
42	Я		83	Μ	- [With VR30 engine]	9	GR				
43	SHIELD		84	BR	- [With VR30 engine]	∞	Н				

JRKWF8768GB

Α

В

С

D

Е

F

G

Н

J

SEC

L

M

Ν

0

Ρ

9 R - (With VR30 engine and without pouldle shift] 10 SHELD - (With 20 tumb gosoline engine] 111 SHELD - (With 20 tumb gosoline engine] 112 SHELD - (With 20 tumb gosoline engine] 123 SHELD - (With 20 tumb gosoline engine] 124 SHELD - (With 20 tumb gosoline engine] 125 SHELD - (With 20 tumb gosoline engine] 126 C - (With 20 tumb gosoline engine] 127 SHELD - (With WR30 engine] 128 L - (With 20 tumb gosoline engine] 129 L - (With 20 tumb gosoline engine] 120 SHELD - (With 20 tumb gosoline engine] 121 SHELD - (With 20 tumb gosoline engine] 122 SHELD - (With 20 tumb gosoline engine] 123 L - (With 20 tumb gosoline engine] 124 R - (With 20 tumb gosoline engine] 125 L - (With 20 tumb gosoline engine] 126 L - (With 20 tumb gosoline engine] 127 SHELD - (With 20 tumb gosoline engine] 128 L - (With 20 tumb gosoline engine] 129 L - (With 20 tumb gosoline engine] 130 L - (With 20 tumb gosoline engine] 131 SHELD - (With 20 tumb gosoline engine] 132 SHELD - (With 20 tumb gosoline engine] 133 R - (With 20 tumb gosoline engine] 134 R - (With 20 tumb gosoline engine] 135 L - (With 20 tumb gosoline engine] 136 L - (With 20 tumb gosoline engine] 137 SHELD - (With 20 tumb gosoline engine] 138 L - (With 20 tumb gosoline engine] 139 R - (With 20 tumb gosoline engine] 140 R - (With 20 tumb gosoline engine] 150 SHELD - (With 20 tumb gosoline engine] 151 R - (With 20 tumb gosoline engine] 152 R - (With 20 tumb gosoline engine] 153 R - (With 20 tumb gosoline engine] 154 R - (With 20 tumb gosoline engine] 155 R - (With 20 tumb gosoline engine] 156 R - (With 20 tumb gosoline engine] 157 R - (With 20 tumb gosoline engine] 158 R - (With 20 tumb gosoline engine] 159 R - (With 20 tumb gosoline engine] 150 R - (With 20 tumb gosoline engine] 150 R - (With 20 tumb gosoline engine] 151 R - (With 20 tumb gosoline engine] 152 R - (With 20 tumb gosoline engine] 153 R - (With 20 tumb gosoline engine] 159 R - (With 20 tumb gosoline engine] 150 R - (With 20 tumb gosoline engine] 150 R - (With 20 tumb gosoline engine] 151 R - (With 20 tumb gosoline engine	Terminal Color Of
SHIELD S	S SHIELO - (With Z 0.1 Lufto gazoline engine)
Connector No. 1996 Connector Type 1902 FCY ANTENNA, (82.48 BANFER)	9
SECURITY CONTROL SYSTEM (2.0L TUF Connector Name REAR DOOR SWITCH RH Connector Type THO45PW-NH No. Wire Signal Name Specification Signal Name Specification No. Wire TH12FW-NH Connector Type TH12FW-NH	JRKWF8769GB

Revision: November 2016 SEC-77 2016 Q50

SECUR	SECURITY CONTROL SYSTEM (2		RBO GASOLI	OLIN	OL TURBO GASOLINE ENGINE)	L	1		Connector No	2
, ,	-				7.7	_	Ŧ			Т
+	-		Connector Name	or Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)		+		Connector Name	FRONT OUTSIDE HANDLE ASSEMBLY (DRIVER SIDE)
H	-		Connector Type	or Type	E06FGY-RS	_			Connector Type	RH04FB
Н	L - [With 2.0L turbo gasoline engine]	line engine]	4	_		Ш	21 LG		4	
\dashv	R - [With VR30 engine]	gine]	彦				22 W		彦	
10	L - [With 2.0L turbo gasoline engine]	line engine]	٦		[23 L		J.	[
10	R - [With VR30 engine]	gine]	21	_					Ċ	
11					(12341516)		25 BR			(1234)
12							26 R			
13	w						27 BR			
14	w					Ш.	28 V			
_	w		Terminal	_	Of Signal Name (Specification)	_	4		lal	Of Signal Name [Specification]
17 S	SHIELD -		No.	Wire			30 W		No. Wire	
18	. ·		1	Ь			31 P	-	1 ^	-
Н	- [With	line engine]	2	91			32 Y		2 B	
19	GR - [With VR30 engine]	gine]	3	Μ			33 BR		3 BR	
H	GR - [With VR30 engine]	gine]	4	8			34 L		4 GR	
Н	SHIELD - [With 2.0L turbo gasoline engine]	line engine]	2	>		_	35 R			
H	B - [With 2.0L turbo gasoli	line engine]	9	>			36 GR			
H	GR - [With VR30 engine]	gine]				_	37 G		Connector No.	8G
H	. ·					L	40 LG	- [Color of wire differs depending on production]	Constant Manne	ECTIVES INIMAA MOGINIM GOMOO
Н	. ·		Connector No.	or No.	D4		40 P	- [Color of wire differs depending on production]	COIIIIECTOI MAIIIE	
H			Connects	Connector Name	BOW OT BOW		41 L		Connector Type	NS16FW-CS
				all Indille			43 BG		ú	
			Connector Type	r Type	NH60FW-TS12	_	44 Y		B	
Connector No.	o. B128		ą	_			46 W		٦١	
or N	Connector Name DIODE-1		夏		ш и,		47 R		i.S	0 10 11 12 12 15 16
Connector Type	WC-COTT 900		H.S.				+			0 1 1 1 1 0 1
ŀ	ı				200 200 200 200 200 200 200 200 200 200		╀			
_						_	53 GR			
						L	┝	- [Color of wire differs depending on production]	Terminal Color Of	JC Stone Manual Consideration
	121						55 SB	- [Color of wire differs depending on production]	No. Wire	
	Ţ <u>-</u>		Terminal	I Color Of		_	L	H	>	ENCODER POWER SUPPLY
]		No.	Wire	olgnal Name [Specification]		57 R		4 Y	IGNITION POWER SUPPLY
			2	SB		L	7 85		2	FRONT POWER WINDOW MOTOR (DRIVER SIDE) DOWN SIGNAL
			4	BG		_	۸ ۸		9	FRONT POWER WINDOW MOTOR (DRIVER SIDE) UP SIGNAL
le O	Terminal Color Of		S	œ		L	9 09		7 B	GROUND
	Wire Signal Name [Specification]	Ication	9	>		L	61 BG		9 BR	BATTERY POWER SUPPLY
⊢	8		7	97			H		10 B	ENCODER GROUND
⊢	BG -		00	o		L	63 SB		L	ENCODER SIGNAL 1
l			6	GR		_	64 B		12 BR	ENCODER SIGNAL 2
			10	٨			y 59		13 SB	POWER WINDOW SERIAL LINK
			11	SHIELD			66 BR		15 V	DOOR KEY CYLINDER SWITCH LOCK SIGNAL
			12	BG			γ ۸		16 Y	DOOR KEY CYLINDER SWITCH UNLOCK SIGNAL
			13	٦			ا 69	•		
			14	В			70 W			
			15	٨		_	71 16			
			16	g		L	┢			
							İ			

JRKWF8770GB

SECURITY CONTROL SYSTEM

Connector Name Parameter attails Connector Name	D10	H	or No. D22	23 P	
1 1 1 1 1 1 1 1 1 1	E TOUCH UNLOCK SENSOR ASSEMBLY (DRIVER SIDE)	SHIELD .		24 L	
12 2 2 2 2 2 2 2 2 2	.GY		П	H	
12 3 4 4 4 4 4 4 4 4 4		B			
1 2 4 2 2 4 4 4 4 4 4		, A			
12 3 4 2 2 4 4 4 4 4 4 4		. 9		Connector No.	E25
Name Specification 25	(1 2 3 4)	> :	(1234)	Connector Name	
Specification Specificatio		× «		Connector Type	Т
Signate Pace Contractor Signate Name Specification Signate Signa		91			
10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Specification 10 Wire Digital Name Digital Nam	Circus Nows (Cossification)	- d	Color Of	E	
1				۳	
SS SR S S Connector No. E14 Connector No. E15 Co	-	*	χ.	Ž	
Signal Name Specification Connector Name Specification Connector Name Specification Connector Name Specification Connector Name Specification Connector Name Connector Na		œ			
See R		- · · · · · · · · · · · · · · · · · · ·			
Connector No. Connector No					
Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. Wife Cornector No. E14 No. E14					
Connector No. Connector No		و		-	
Connector Name Specification Connector Name Specification					
Connector No. Connector No					
Connector Name Specification		88	Γ	1 RG	,
Connector No. Connector No. Connector Connecto	O WIRE			ł	
1 1 1 1 1 1 1 1 1 1			1	+	
71 8 6 1 1 1 1 1 1 1 1 1	W-T512		٦	7 L	
Till BG Connector No. D19 Connector				-	
Connector No. Connector No. Connector No. Connector No. Connector No. Connector Name More Notice and Name Connector Name More Notice and Name Connector Name More Name Connector Name More Name Connector Name More Name Connector Name Connector Name More Name Connector Name					
Connector No. Dispendication Connector No. Dispendication Connector No. Dispendication Connector No. Dispendication Connector No. Dispendication Connector No. Order Or		· .		L	
Connector No. D19 Connector No. D19 Connector No. D19 Connector Name More voluments of the part of	S S S S S S		20 21 22 22 23	ł	t
Connector No. Disperiment of the Property			19 26 27 28 30 30	\dagger	$^{+}$
Connector No. D19	342/242/18/3/28		00 82 82 82	\dashv	+
Connector Name Mont correct water Mont of the connector Name Mont correct water Mont correct water Mont of the connector Name Mont of the connector					~
Connector Name Finducing Connector Name Finducing Connector Name Finducing Connector Name Finducing Color Of		Г			
Terminal Color Of Signal Name (Specification) Terminal Color Of Signal Nam				$\frac{1}{1}$	
Terminal Color Of Signal Name [Specification] 12 14 15 15 15 15 15 15 15			0-10	+	+
Month Mont	Signal Name [Specification]	IXIIO4FB	0 000	†	
	,			1	
Terminal Color Of Signal Name (Specification) 15 16 17 18 18 19 19 19 19 19 19			· ·	ŀ	
15 15 15 15 15 15 15 15				+	
Terminal Color Of Signal Name (Specification) 15 16 17 18 18 18 19 19 18 19 19	,	<u>R</u>		+	1
Terminal Color Of Signal Name (Specification) 15 28 15 15 15 15 15 15 15 1		_ 			
Terminal Color Of No. Wire Signal Name (Specification) 11		((1934))	BG	H	
Terminal Color Of Signal Name (Specification) 13				+	+
Terminal Color Of Signal Name [Specification] 11 GR		α .	27	+	+
Terminal Color Of Signal Name (Specification) 12	-	6	R .	16 Y	- [With VR30 engine]
Terminal Color Of Signal Name [Specification] 12 R		111			
No. Wirel Signal Name (Specification) 13 6 1 1 1 1 1 1 1 1 1		Color Of	ď	H	
1		Signal Name [Specification]	: 4	Ŧ	
1 V . 14 G . 18 P 2 B . 16 V . 31 W 3 BR . 16 V . 31 W 4 GR . 17 B . 32 G 21 8 8 . 32 GR 21 8 8 . 32 GR 22 8 . . 8 GR		Alla	n	+	1
B C C C C C C C C C					
BR 15 V 31 W				γ γ	
GR 17 8 - 31 Y 18 58 - 32 G 21 8 - 32 GR 22 8 - 32 GR		a	N.	F	
17 B SB				ł	
SB	,		· ·	+	
B . 32 GR		18	SB -	_	
- cr		21			
		cc	Culling	ŀ	

SEC

Α

В

С

D

Е

F

G

Н

L

M

Ν

0

JRKWF8771GB

Ρ

Connector No. E57	Connector Name STOP LAMP SWITCH	П	Connector Type M04FW-LC	QI.	The state of the s	LS.	7 0 1	3		- 1	Terminal Color Of Signal Name [Specification]	t		2 GR - [With ASCD]	2 LG - [With ADAS]	3 BR .	4 V		Ī	Connector No. E64	Connector Name FUSE BLOCK (J/B)	Connector Type NSD8FW-CS				36 26 16	7E 6E 4E			Terminal Color Of	No. Wire Signal Name [Specification]	\dashv	2E P	4E GR	\perp	7E BG .							
Connector No. [35	Connector Name A88 ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	П	Connector Type SAZ30FB-SJZ4-U	[AHA	2 25 20 30 32 4		4 () 18 1 10 18 2 1 1 1 1 1 1 1 1 1		- 1	Terminal Color Of Signal Name [Specification]	$^{+}$		3 G VALVE BATTERY [With VR30 engine]	3 P VALVE BATTERY (With 2.0L turbo gasoline engine)	4 Y MOTOR BATTERY	5 LG STOP LAMP SW SIGNAL [With ADAS]	TS	S.	D RR	9 BR FRRH WHEEL SENSOR SIGNAL	5 ~	: a	æ	17 Y RR RH WHEEL SENSOR SIGNAL	91	V RR RH W	19 SB FR LH WHEEL SENSOR SIGNAL	+	G VACUUM SEN	æ	SHIELD VACUUM SI	34 G IGN										
OL TURBO GASOLINE ENGINE)	- [With	BR	_	۰	/5 K - [With 2.0L turbo gasoline engine and with gateway] 75 V - [With VR30 engine]		╁	78 LG - [With 2.0L turbo gasoline engine and with ADAS]	۵			200 200	+	83 BR - [With 2.0L turbo gasoline engine]	83 R - [With VR30 engine]	84 IG .	86 BG -	+	91	9	90 GR - [With 2.0L turbo gasoline engine]	93 86	+	L - [With	95 BG - [With VR30 engine]	Ь	95 R - [With 2.0L turbo gasoline engine and with gateway]	+	. 91 /6	99 LG - [With 2.0L turbo gasoline engine]	۵	100 SHIELD .											
SECURITY CONTROL SYSTEM (2.0L TURBO C				- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	. DMith 2 Of turbo escoline engine and without esteway	- [With 2.0L turbo gasoline engine and with gateway]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]			- [With 2 01 turbo pasoline engine]	- [With VR30 engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]				- [With VR30 engine]	- [With 2.0L turbo gasoline engine]			- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]	- [With 2 Of Furbo assoline engine]	- [Color of wire differs depending on production]	- [Color of wire differs depending on production]			- [Color of wire differs depending on production]						Control of the contro	- [with 2.0L turbo gasolifie engine] - [With VR30 engine]	- [With 2.0L turbo gasoline engine]	- [With VR30 engine]
SECURITY C	34 P	+	36 R	+	3/ /	38 23	+		39 ү	_	41 LG	44	45 W	46 B	46 Y	47 G	48 SHIELD	-	+	50 GR	51	25 V	54 P	54 W	55 B	Н	26 BG	56 SB	57 BG	-		H	61 R	. BR	+	┝	97 29	68 BG	\dashv	+	71 16	╀	72 V

JRKWF8772GB

SECURITY CONTROL SYSTEM

	А
Signal Name (Specification) Signal Name (Specification)	В
E85 E85 E86 E86 E86 E86 E86 E86 E86 E86 E86 E86	С
Connector No. Connector No. Terminal Color Of No. No. No. Wire Towner No. Connector No. Connector No. Connector No. La. La. La. La. La. La. La. L	D
:ification	Е
E77 HODO SWITCH RH02FB RH02FB Signal Name (Specification) Signal Name (Specification) Signal Name (Specification)	F
S S S S S S S S S S S S S S S S S S S	G
	Н
Signal Name (Specification) - With 2.01 turbo gasoline engine) - With 2.01 turbo gasoline engine) - With 2.01 turbo gasoline engine) - Signal Name (Specification) - Signal Name (Specification) - Signal Name (Specification)	I
FENGINE) E74 VEHICLE SECURITY HORN POIFBA - WINTE TO WIRE SAAAI8FENSIZZ Signal Name IS Signal Name IS - Signal Name IS - Signal Name IS - Signal Name IS	J
Connector None Conn	SEC
2.0L TURB In production 1 product	L
SECURITY CONTROL SYSTEM (2.01 TUNBO GASOLINE ENGINE)	M
Connector Name Cuse BLOCK (I/B)	N
Connector Name Conn	0
	JRKWF8773GB

SEC-81 2016 Q50 Revision: November 2016

Ρ

JRKWF8774GB

Α

В

С

D

Е

F

G

Н

J

SEC

L

M

Ν

0

Ρ

	SECURITY Connector No.	SECURITY CONTROL SYSTEM (2.0L TURBO GASOLINE ENGINE) Connector No. [220] [220	SO GASOLINE	ENGINE)	H	Connector No.	M13	
	Connector Name	ECM	e	JOINT CONNECTOR-E05	11 G	Connector Name	BCM (BODY CONTROL MODULE)	
	Connector Type	ADA52FB-AHZ6	ector Type	NH24FB-J	18 V	Connector Type	TH40FG-NH	
	唇 H.S.	1 1 1 1 1 1 1 1 1 1	₽ H.S.		BG GR	图 HS.	(2) 18 17 16 15 14 13 17 10 12 11 10 10 11 12 11 10 11 10 11 12 11 10 11 10 11 11 11 10 11 11 11 11 11	
		97 98 12 Na 10 Na			24 BR		71	
	Terminal Color Of No. Wire	f Signal Name [Specification]	Terminal Color Of No. Wire	Signal Name [Specification]	-	Terminal Color Of No. Wire	Signal Name [Specification]	
	Ħ	POWER SUPPLY (MAIN)	H		П	H	PUSH SW	
	+	POWER SUPPLY (MAIN)	+		a	+	OPTICAL SENSOR	
	100 B	ECM GROUND POWER SUPPLY (MAIN)	8 T	1	Connector Type TH12FW-NH	5 LG	COMBLSW OUTPUT 5	
	Н	1 1	Н		Œ	Н	COMBI SW OUTPUT 4	
	103 V	COOLING FAN CONTROL SIGNAL (PWM) SENSOR POWER SUPPLY	15 P	- [Without Gateway] - [With Gateway]	SI	12 L	COMBISW OUTPUT 3	
	Н	SENSOR POWER SUPPLY	16 L		7 8 9 10 11	Н	COMBI SW OUTPUT 1	
	106 W	SENSOR GROUND ENGINE SPEED SIGNAL	19 P	- [Without Gateway]	2	15 6	ONE TOUCH UNLK SENS (DR)	
	Н	POWER SUPPLY	20 L			H	RECEIVER/SENSOR GND	
	4	STARTER RELAY-L	23 P	- [Without Gateway]	Terminal Color Of Signal Name [Specification]	18 L	SECURITY IND LAMP CONT	
	119 BR	SENSOR GROUND SENSOR GROUND	23 R	- [With Gateway]	Wire	20 R	STEP LAMP CONT	
	H	MAIN RELAY CONTROL SIGNAL			2 GR -		STOP LAMP SW2	
	\dashv	FUEL PUMP ON SIGNAL			3 BG .	26 R	EXTENDED STORAGE FUSE SW	
	132 G	ACCELERATOR PEDAL POSITION SENSOR 1 CAN-H	Т	E223	88 G	30 W	STOP LAMP SW	
	+	DRIVETRAIN CAN-H	e	JOINT CONNECTOR-E06	ο «	H	TR LID OP CANCEL SW	
	142 GR	BACK-UP LAMP SWITCH	Connector Type	SGA28FB-J	8 P - [With VR30 engine]	36 G	HAZARD SW	
	+	REFRIGERANT PRESSURE SENSOR	Œ		> 0	┥	P/N POSITION	
	145 L	ACCELERATOR PEDAL POSITION SENSOR 2 FUEL TANK PRESSURE SENSOR		N N N N N N N N N N	10 GR			
	148 L	STARTER RELAY-H	1	2 - 1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	Н			
	+	CAN-L DRIVETBAIN CAN-I		24 23 22 28 24 28 27 28 27 28				
	152 B	EVAP CANISTER VENT CONTROL VALVE		n				
	4	EVAP PURGE CONTROL VALVE						
			<u>e</u>	Signal Name [Specification]				
			3 G 4 BR					
			6 BG					
			9					
J۱								
JRK¹								
WF8								
7750								
ЗB								

Revision: November 2016 SEC-83 2016 Q50

SECURI	Σ	SECURITY CONTROL SYSTEM (2.0L TURBO GASOLINE ENGINE)	O GASOL	INE E	NGINE)						
Connector No.	П	M14	Connector No.	Θ.	15	Н	BR	INSIDE KEY ANT (CONSOLE) +	Connector No.		M19
Connector Name		BCM (BODY CONTROL MODULE)	Connector Name		BCM (BODY CONTROL MODULE)	119	W/B	TURN SIG LH OUTPUT (FRONT) KYI S ENT RECEIV COMM	Connector Name		WIRE TO WIRE
Connector Type	П	ТН40FB-NH	Connector Type	П	TH24FGY-NH	Н	SB	DRIVER DOOR ANT -	Connector Type	П	TH80MW-CS16-TM4
E			E			+	R 8G	DRIVER DOOR ANT + INSIDE KEY ANT (INSTRUMENT LOWER) +	Œ		
H.S.	_		H.S.	تقا	28	124	_ 	INSIDE KEY ANT (INSTRUMENT LOWER) - NATS ANT AMP.	#S		8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
		80 79 78 77 77 77 77 78 88 66 66 66 66 66 66 66 66 66 66 66 66			103 102 101 100 99 97 96 94 93	127	≫ R	NATS ANT AMP. INSIDE KEY ANT (CONSOLE) -			
Terminal Co	Color Of Wire	Signal Name [Specification]	Terminal Co	Color Of Wire	Signal Name [Specification]	Connector No.	Τ	7	Terminal	Color Of Wire	Signal Name [Specification]
H	œ	PUSH-BTN IGN SW ILL PWR	Н	*	REAR LH DOOR SW	Connector Name		BCM (BODY CONTROL MODULE)	1	>	-
52	ŋ	DONGLE LINK	83	_	TR LID OPEN REQ SW	Connector Type		FEA09FW-FHA6-SA	2	ŋ	
54	>	COMM LINE	92	۵.	TR ROOM LAMP CONT	1			en ·	SB	,
22	œ (RAIN SENSOR	91	¥ :	TRUNK LID OPEN	生			4	W :	
£ 6	-	CAN-L	92	<u>></u> ∪	I DRN SIG RH UDI PUT (SIDE, REAR)	H.S.	_	- 137 138 138 134 133 132 131 130 129	۰ 4	- a	1 1
61	9	REAR WINDOW DEF RLY CONT	94	S.	PASSENGER DOOR SW			143 142 141 140 139 138	7	*	
62	œ	STARTER RLY CONT	96	>	DRIVER DOOR SW		_		œ	>	
64	>	I-KEY WARN BUZZER	97	æ	TR ROOM LAMP SW				10	BG	
9	8		66	æ	INSIDE KEY ANT (TRUNK) -				11	BR	
99	a >	BLOWER FAN RLY CONT [With VR30 engine]	100	> 2	INSIDE KEY ANT (TRUNK) +	ler	Color Of	Signal Name [Specification]	12	9 6	
99	, W/W	BLOWER PAN RLY CONT [With 2.0L turbo gasoline engine]	101	2 0	REAK BIMPK AN I -	130 v	a Nice	VIGS GWIG GAAL MACOG THE	1.4	¥ °	
t	2 ~	DIMMER	103	2 >	TURN SIG LH OUTPUT (SIDE,REAR)	╀	2 a	PASS DOOR UNLK OUTPUT	15	-	
H	GR	A/T SHIFT SELECT PWR SPLY				131	>	BAT (FUSE)	16	>	
70	В	IGN RLYAY (IPDM E/R) CONT				132	۸	RR, RL DOOR LK OUTPUT	18	W	
7.1	9	DR DOOR REQ SW	Connector No.		M16	133	BR	RR, RL DOOR UNLK OUTPUT	19	BR	
72	SB	PASS DOOR REQ SW	Connector Name		BCM (BODY CONTROL MODULE)	134	В	GND	20	%	
75	BR	COMBI SW INPUT 5		. T	(11000)	135	>	FRONT DOOR, FL LID LK OUTPUT	22	SB	
76	BG	COMBI SW INPUT 4	Connector Type		TH24FB-NH	136	>	INT ROOM LAMP CONT	23	æ	
77	> :	COMBI SW INPUT 3	4			137	97 1	FRONT DOOR, FL LID UNLK OUTPUT	24	æ :	- [With 2.0L turbo gasoline engine]
8/ 0/	2 ح	COMBLSW INPUT 2	至			138	†	REAR DOORS ACT PWR SPLY [With VR30 engine]	7,5		- [With 2 OI furbo gasoline engine]
80	_	TR LID OPNR SW	H.S.		1107 107 1108	139	t	BAT (F/L)	25	×	- [With VR30 engine]
					100 100 100 100 100 100 110	140	BR	IGN ON	26	9	,
						141	×	PWR SPLY (BAT)	27	Я	
						142	æ	FRONT DOORS, FL LID ACT PWR SPLY	28	æ	
			- 1	ŀ		143	В	GND	31	BR	
			Te.	Color Of	Signal Name (Specification)				32	B	
			\dashv	Wire					33	9	
			105	>	TURN SIG RH OUTPUT (FRONT)				34	>	1
			107	۵	PUSH-BTN IGN SW ILL GND				32	۵	
			111	> 8	ACC/ON IND				36	× 8	,
			113	SB 5	PASSENGER DOOR ANT +				38	SB	
			115	2 >	PASSENGER DOOR ANT -				40	3 a	

JRKWF8776GB

	_	Г	M22	96	9 0	- [With VR30 engine]	98	۷ -	, ,
	Connector Name		WIRE TO WIRE	56	+	- [With 2.0L turbo gasoline engine]	8 69	ه د	
	Connector Type	Γ	TH80MW-CS16-TM4	27	H		7.1	GR	- [With 2.0L turbo gasoline engine]
				59	97		71	æ	- [With VR30 engine]
	ß			30	SB	- [With VR30 engine]	72	9	- [With VR30 engine]
	Ě			30	\dashv	- [With 2.0L turbo gasoline engine]	72	>	- [With 2.0L turbo gasoline engine]
	2	_	2	31	SHIELD		73	97	- [With 2.0L turbo gasoline engine]
				7 2	+	a come many	2 7	SHELD	- [With VR3U engine]
				S 5	+	- [with vksu engine]	4	٠,	- [with vk30 engine]
]	'n l	†	1	4	2 6	- [with 2.0L turbo gasoline engine]
	Torminal	Color Of		34	SHELD	Forest Vest (Mith Vest organs)	27	d as	[oning onilogen orbits]
	ON.		Signal Name [Specification]	5 2	+	- [with 2.0] turko estaline ponino]	0/ 2/2	200	- [With 2:00 tubb Baschine engine]
		2		3 8	+	[with 2.0c to 50 gasonic engine]	2 5	,	[augus ocua usual -
	, ,	3 -	- [With VR30 engine]	36	+	- [With 2 0] turbo gasoline engine]	78	-	
	,	HEID	- (With 2 Oil turbo gasoline engine)	-	╀	- [With VR30 angine]	5 2	e	,
	1 0	a	- (Mith 2 Of turbo escoline engine)	37	+	- [Mith 2 OI turbo escalpae	08	, 8	foring anipage orbit 10 C 41Wit-
	ď	-	- IWith VR30 engine	8	. 3	[0	8	A	- [With WB30 engine]
		CHIFID	- [With VR30 engine]	2	ł	- [With VR30 engine and without BOSE system]	2		- [Mith WR30 engine]
	4	>	- [With 2.0L turbo gasoline engine]	8	ł	- [With 2.0L turbo gasoline engine]	81	000	- [With 2.0L turbo gasoline engine]
	2	o	- [With VR30 engine]	39	>	- [With VR30 engine and with BOSE system]	82	9	- [With 2.0L turbo gasoline engine]
	S	>	- [With 2.0L turbo gasoline engine]	40	9		82	SHIELD	- [With VR30 engine]
	9	BG	- [With VR30 engine]	41	٦		83	~	- [With 2.0L turbo gasoline engine]
	9	BR	- [With 2.0L turbo gasoline engine]	42	œ		83	W	- [With VR30 engine]
	7	97	- [With VR30 engine]	45	SHIELD		84	BR	- [With VR30 engine]
	7	۵	- [With 2.0L turbo gasoline engine]	44	Ь	•	84	SHIELD	- [With 2.0L turbo gasoline engine]
	89	9	- [With 2.0L turbo gasoline engine]	45	8	- [With 2.0L turbo gasoline engine]	82	BR	- [With VR30 engine]
	8	Ь	- [With VR30 engine]	45	9	- [With VR30 engine]	82	9	- [With 2.0L turbo gasoline engine]
- [With VR30 engine]	6	Γe	- [With 2.0L turbo gasoline engine]	46	SHIELD		98	æ	- [With 2.0L turbo gasoline engine]
[With 2.0L turbo gasoline engine]	6	SHIELD	- [With VR30 engine]	47	g	-	86	>	- [With VR30 engine]
	10	>		48	\dashv	 [Except with VR30 engine and with BOSE system] 	87	PI	- [With VR30 engine]
	11	S.		48	\dashv	- [With VR30 engine and with BOSE system]	87	SHIELD	- [With 2.0L turbo gasoline engine]
	12	>	•	49	9		88	BR	- [With VR30 engine]
	13	9		20	>		88	97	- [With 2.0L turbo gasoline engine]
	14	97		51	>		90	SB	- [With 2.0L turbo gasoline engine]
	15	BR	- [With 2.0L turbo gasoline engine]	52	_	- [With 2.0L turbo gasoline engine]	06	>	- [With VR30 engine]
	15	۵	- [With VR30 engine]	52	>	- [With VR30 engine]	92	٦	- [With 2.0L turbo gasoline engine]
 [With 2.0L turbo gasoline engine] 	16	SB	- [With DCM]	53	R		92	W	- [With VR30 engine]
- [With VR30 engine]	16	^	- [Without DCM]	54	GR	•	93	В	- [With VR30 engine]
	17	>	-	55	٦		93	SHIELD	- [With 2.0L turbo gasoline engine]
	18	7		99	Ь		94	ď	
	19	9	•	57	æ		95	T	- [With 2.0L turbo gasoline engine]
	20	GR		28	91		95	٨	- [With VR30 engine]
- [With VR30 engine and with BOSE system]	21	В		59	SB		96	В	- [With 2.0L turbo gasoline engine]
and with BOSE system]	22	>		19	_		96	M	- [With VR30 engine]
	23	_		62	Ь	- [With 2.0L turbo gasoline engine]	46	7	- [With VR30 engine]
	24	BG	- [With 2.0L turbo gasoline engine]	9	>	- [With VR30 engine]	46	В	- [With 2.0L turbo gasoline engine]
	24	>	- [With VR30 engine]	63	_		86	BR	
	ť	[-	- [With 2.0L turbo gasoline engine]	7	*		Ġ	BR	- [With VR30 engine and with BOSE system]
	57	,		-					

SEC

Α

В

С

D

Е

F

G

Н

L

M

Ν

0

JRKWF8777GB

Ρ

SEC-85 2016 Q50 Revision: November 2016

SECURITY CONTROL SYSTEM

SECURIT	CONTROL SYSTEM (2	BO GAS	OLINE	OL TURBO GASOLINE ENGINE)					-	
+	P - [With 2.0L turbo gasoline engine]	ا و	- :	CAN-H	10	× .		63	> 4	
+	- [With VK30		>	KLINE [With 2.0L turbo gasoline engine]	=	SHIELD		94	20	
+	1	_	>	KLINE [With VR30 engine]	12	١.		69	×	
100	W - [With 2.0L turbo gasoline engine]	∞ ;	> ;	IGN_SW	13	SB :		99	BR	,
		11	SB.	M_CAN_H	14	9		89	Ь	
	ı	12	œ	CAN-L	15	>		69	>	
Connector No.	M24	13	_	CAN-H	16	>		70	Μ	-
Connector	CANICATEMAN	14	Ь	CAN-L	17	Ь		7.1	91	
Connector Nar		16	^	POWER	18	W/B		72	^	
Connector Type	e TH12FW-NH				19	97	- [With DRPO]			
	1				19	>	- [Without DRPO]			
Œ		Connector No.	l	M32	20	>		Connector No.	No. M34	
	7				21	В				
ė.	ļ	Connecti	Connector Name	DONGLE UNII	22	BG	- [Without DRPO]	Connector Name	Name WIRE TO WIRE	WIKE
	1	Connector Type	vr Type	TH04FW-NH	22	G	- [With DBPO]	Connector Type	Type NH60MW-TS12	W-TS12
	7 9 10 11 12				23	-			1	
		1			24	> ا		1		
		華			25	. BG	- [Without DRPO]	Ŧ		ľ
Torminal Color Of		Σ.		K	2	-	(With Dano)	S.		81 82 83 84 85 88 33 14 37 84 84 84 53 53 53 53 53 53 53 53 53 53 53 53 53
No on	Mire Signal Name [Specification]			-	25	۷ >	- [with Daro]		2 4 2 2 2 4 4 7 9	2 5 8 TH LATE 20 20 20 20 20 20 20 20 20 20 20 20 20
+	CAN IL CAN CONTACTION CIPCLIT 13			-	200	- 8			3692	
\dagger	CAN-FI (CAN COMIMONICATION				/7	5 :				
+	W BALLERY POWER SUPPLY				87	>	,			
4	L CAN-H (CAN COMMUNICATION CIRCUIT 2)				59	æ				
2	B GROUND	Terminal	0	Signal Name [Specification]	30	>		Terminal	Color Of	Signal Name [Specification]
9		No.	Wire		31	8		No.	Wire	
7	P CAN-L (CAN COMMUNICATION CIRCUIT 1)	1	9	DATA&+5V_SUPPLY	32	SB	,	1	>	
6	R IGNITION POWER SUPPLY [With VR30 engine and without ISS]	4	В	GND	33	٦		2	В	-
6	W IGNITION POWER SUPPLY (Except with VR30 engine and without ISS)				34	BR		4	9	- [With DRPO]
10	R CAN-L (CAN COMMUNICATION CIRCUIT 2)				35	97		4	SB	- [Without DRPO]
11	B GROUND	Connector No.	or No.	M33	36	^		2	1	
12	R CAN-L (CAN COMMUNICATION CIRCUIT 2)	Connect	Connector Name	BOW OT BOW	37	В		9	R	
			a line	WILL IS WILL	40	Ь		7	R	
		Connector Type	r Type	NH60MW-TS12	41	SB		80	W	
Connector No.	M25	ú			43	Μ	- [Except with VR30 engine and without ISS]	6	GR	
Connector Mamo	DATA LINK CONNECTOR	B		0	43	٨	- [With VR30 engine and without ISS]	10	^	
COLLIECTO NA		ť		** **	44	98	•	11	Y	
Connector Type	e BD16FW	Ć.	_		46	BR		13	91	
[2 5 8 11 M 7 38 23 82 83 3 6 9 12 15 18 28 28 28 28 83 87 77 72 A	47	9		14	W	
					49	^		16	9	
Š	۱Г				20	8	•	17	8	
ė	11 12 13 14 16				52	BR		18	W	
	3 4 5 6 7 8	Terminal	Color Of	Cincol Name Consideration	23	9		19	8	
	П	No.	Wire	oighal Naille [opecification]	22	98		20	SB	- [With DRPO]
		2	Μ		95	91		20	Υ	- [Without DRPO]
		4	g		57	>		2.1	SHIELD	
Terminal Color Of	or Of Since Management	S	9		58	æ		22	8	
No. W	Wire Signal Ivanie (Specification)	φ	~		29	o		23	BG	- [Without DRPO]
3	LG M_CAN_L	7	æ		09	_		23	Ь	- [With DRPO]
4	B EARTH	00	æ		61	o		24	9	
		6	æ		62	œ		25	91	
$\left\{ \right.$,	,					,	-	

JRKWF8778GB

26 BR 27 R 28 SB 29 BG 29 W/B	- [With DRPO]										
++++		Connector Name	- Name	WIRE TO WIRE	39	>	- [With VR30 engine]	_	78	9	- [With VR30 engine]
+H			1	WILE 10 WILE	40	GR			78	10	- [With 2.0L turbo gasoline engine]
H	-	Connector Type	r Type	TH80MW-CS16-TM4	41	٦	-		79	œ	
Н	- [Without DRPO]	(44	BR			80	9	
	- [With DRPO]	B			45	7	- [With 2.0L turbo gasoline engine]		81	В	
30 L		Š			45	Μ	- [With VR30 engine]		82	FIG	
49 P	•	2			46	9	- [With VR30 engine]		83	BR	- [With 2.0L turbo gasoline engine]
۸ ۲				200	46	٨	- [With 2.0L turbo gasoline engine]		83	Я	- [With VR30 engine]
8				22	47	9g	- [With 2.0L turbo gasoline engine]	 	84	>	
H					47	œ	- [With VR30 engine]		98	>	
╀					48	SHIFLD			87	_G	
		Terminal	Color Of		90	t	- [With VR30 appinal	l	08	>	
+		ON.		Signal Name [Specification]	9	$^{+}$	DAMes 2 Of Author concline constant	<u> </u>	3 8	. (Dalleh VD30 control
+		į,	a la		LJ	+	- וואורוו ביסר נתוחס מפסחוויה בוומוויה	† 	00	,	[alligned violation] -
60 R		-	PG.		20	+	- [With 2.0L turbo gasoline engine]	1	96	>	- [With 2.0L turbo gasoline engine]
+		٥	W/B		2	ž	- [With VK30 engine]	_ 	1.6	>	•
4		7	>		51	4			92	9	
BR BR	•	00	BG	- [With VR30 engine]	52	>			93	æ	
٠		80	BR	- [With 2.0L turbo gasoline engine]	53	9			94	GR	- [With VR30 engine]
88 69	•	6	97	- [With VR30 engine]	54	SB	- [With 2.0L turbo gasoline engine]		94	7	- [With 2.0L turbo gasoline engine]
٧ ٧		6	Ь	- [With 2.0L turbo gasoline engine]	54	>	- [With VR30 engine]		95	BR	- [With VR30 engine]
H	,	10	Μ		25	В	- [With 2.0L turbo gasoline engine]		95	- d	(With 2.0L turbo gasoline engine and without gateway
W 27		11	*	- [With VR30 engine]	r,	۵	- [With VR30 engine]	 	95	~	With 2.0L turbo gasoline engine and with gateway
┨		11	>	- Mith 2 Of turbo gasoline angine	5	2	- [With VB30 angle]	Τ	90	t	
		12	- α	- [With VR30 engine]	3 2	+	- IMith 2 Of turbo assoline angine	T	67		
Connector No	9674	5	, 8	(Mith 2 Of turbo modine	3 5	+	(Mith VB20 opera)	T	; 8	3 >	
Ī	Niso	12	ua c	DAGGE VOCO CARGING	à L	+	DAVISH 2 OF STREET	T	00 00	- 8	Continue Octavi delinio
Connector Name	PUSH-BUTTON IGNITION SWITCH	12	5	- With Voc Highe	n S	+	- [with 2.0c turbo gasonile engine]	<u> </u>	6 8	<u>د</u>	[with vest engine] -
Т		13	SHIELD	- [With 2.0L turbo gasoline engine]	ž į	+		 	+	2 1	- [With 2.0L turbo gasoline engine]
٦	I HUSF W-NH	14	2		59	+		_ _	200	SHIELD	
•		15	BG	- [With 2.0L turbo gasoline engine]	61	W/B		1			
_		15	SB	- [With VR30 engine]	64	>	,			Ī	
e	<u>_</u>	16	В	- [With VR30 engine]	65	Я	-	0	Connector No.		M51
ė	c	16	BR	- [With 2.0L turbo gasoline engine]	99	Ь	- [Color of wire differs depending on production	_	Connection Mount		Check Alministrate 2Told
	ľ	17	97		99	>	- [Color of wire differs depending on production]		OIIIIECTOI IV		ALS AN IENIVA AMIT.
	2 9 7 8	18	8	- [With VR30 engine]	49	97			Connector Type	Г	NH03FW
		18	W/B	- [With 2.0L turbo gasoline engine]	89	BG					
		19	>		69	-		Ī	The state of the s		Œ
Terminal Color Of		31	M		70	~					
No Wire	Signal Name [Specification]	32	٠	- Mith 2 Of turbo gasoline engine	17	ŀ	- [With VR30 engine]	T	Š		1
t		33	>	- [Mith WR30 engine]	-	. 3	Mith 2 Of this associate	' T			Ι
+		20		[augus acus intern	1	: -	DATE SOLVED BOSONIC CIBILIS	Ι			T
+		33	_	- [With VK30 engine]	7	4	- [With 2.0L turbo gasoline engine]	Τ			8
+		33	>	 [With 2.0L turbo gasoline engine] 	72	91	- [With VR30 engine]]
е ь		34	۵		73	œ	- [With VR30 engine]				
۷ /		35	BG		73	Μ	- [With 2.0L turbo gasoline engine]		Terminal C	Color Of	[molecus Green of a second leaves 2]
88		36	o		74	BR	- [With VR30 engine]		No.	Wire	olgnal Name (opecification)
1		37		- [With VR30 engine]	74	-	- [With 2.0] turbo gasoline engine]	T	t	>	
		37	, -	- [With 2 OI turbo assoline engine]	77	, "	- [With VR30 paging]	<u> </u>	1 ~	: "	
		60	,	- [with 2.0t talbo gasonile eligine]	2	+	- [with was engine]	J T	,		
		38	_	- [With VK30 engine]	٩	4	- [With 2.0L turbo gasoline engine and without gateway,	eway			
		38	Ь	- [With 2.0L turbo gasoline engine and without gateway]	75	ď	- [With 2:0L turbo gasoline engine and with gateway	way]			
		38	В	- [With 2.0L turbo gasoline engine and with gateway]	9/	W/B					

SEC

Α

В

С

D

Е

F

G

Н

L

M

Ν

0

JRKWF8779GB

Р

SECUR	IT	SECURITY CONTROL SYSTEM (2.0L TURB	30 GA:	SOLINE	TURBO GASOLINE ENGINE)			
Connector No.	10.	M57	Connec	Connector No.	M58	10 R -	Connector No.	M114
Connector Name		COMBINATION METER	Connec	Connector Name	COMBINATION METER	11 SHELD - 13 L - 1	Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	П	TH40FW-NH	Connec	Connector Type	TH12FW-NH	14 L -	Connector Type	RK02FGY
(F			Œ			15 L ·	E	«
ė.		1 20 20 20 20 20 20 20 20 20 20 20 20 20 2		5	41 42 43 44 45 46 47 48 51 52	Connector No. M109 Connector Name Inisipi kry Antervia (Inistrument Iowen) Connector Type RK02FGY	E S	
Terminal C No.	Color Of Wire	Signal Name [Specification]	Terminal No.	nal Color Of Wire	f Signal Name [Specification]	€ E	Terminal Color Of No. Wire	Signal Name [Specification]
1	œ 6	GROUND GR	41	_ 0	CAN-H	H.S.	1 BR	ANT+
۸ ر	5 0		43	+	ILLUMINATION CONTROL SIGNAL		ND Z	NK
00	8		44	>	FUEL LEVEL SENSOR GROUND			
11	≥ 0	ALTERNATOR SIGNAL	45	× 8	BATTERY POWER SUPPLY	Terminal Color Of	Connector No.	M133
13	- H	LED HEADLAMP (LH) WARNING SIGNAL	46	+	IGNITION SIGNAL [With VR30 engine and without ISS]		Connector Name	FUSE BLOCK (J/B)
14	>	ACC POWER SUPPLY	47	Н	AV COMMUNICATION SIGNAL (H)		Connector Type	TH40FW-NH
16	> %	AIR BAG SIGNAL METER CONTROL SWITCH GROLIND	48	9 8	AV COMMUNICATION SIGNAL (L)	2 G ANT-	1	
18	SB	TRIP/RESET SIGNAL	52	H	GROUND			
21	9	STEERING SWITCH SIGNAL GROUND				Connector No. M113	ŽĮ.	(2) (2) (2) (2) (3)
22	۵	STEERING SWITCH SIGNAL A				Connector Name REMOTE KEYLESS ENTRY RECEIVER		CHENNET CHEN CHEN CHEN CHEN CHEN CHEN CHEN CHEN
23	M/B	STEERING SWITCH SIGNAL B	Connec	Connector No.	M95	П		
25	. 91	BRAKE FLUID LEVEL SWITCH SIGNAL	Connec	Connector Name	WIRE TO WIRE	7		
36	>	PARKING BRAKE SWITCH SIGNAL	Connec	Connector Type	TH16MW-NH	•	Terminal Color Of	Sirval Namo [Specification]
27	9	PASSENGER SEAT BELT WARNING SIGNAL	q				No. Wire	Signal INAILIE (Specification)
87	T	SEAT BELL BUCKLE SWITCH SIGNAL (DRIVER SIDE)	生			103	707	
9 8	o 9	MANUAL MODE SIGNAL [With 2:0L turbo gasoline engine]	HS	vi			137	
31	9	NON-MANUAL MODE SIGNAL [With VR30 engine]		ı	2 3 4 5 6		14C Y	
31	_	NON-MANUAL MODE SIGNAL (With 2.0L turbo gasoline engine)			9 110 11 12 13 14 15 16		15C R	
32	BG	MANUAL MODE SHIFT UP SIGNAL				Terminal Color Of Signal Name (Specification)	16C R	
33	GR	MANUAL MODE SHIFT DOWN SIGNAL [With VR30 engine]				No. Wire	17C L	
33	۵	MANUAL MODE SHIFT DOWN SIGNAL [With 2.0L turbo gasoline orgine]	Terminal		Signal Name (Specification)	1 W +12V	18C BG	- [Without DRPO]
34	BG	PADDLE SHIFTER UP SWITCH SIGNAL	Š	Wire		2 L SIGNAL	4	- [With DRPO]
35	9	PADDLE SHIFTER DOWN SWITCH SIGNAL	1	œ		3 P GND	+	
36	>	ILLUMINATION CONTROL SWITCH SIGNAL (+)	~	# I			+	
3/	S.	ILLUMINATION CONTROL SWITCH SIGNAL (-)	m 1	¥ .			20C W	
38	~	VEHICLE SPEED SIGNAL (8-PULSE)	5	-	- [Without Gateway]		21C L	
			S	≃ ;	- [With Gateway]		22C L	
			1 0	× c	Consider O en estado (MA)		+	
				. ~	- [With Gateway]		29C CB	
			6	<u>.</u>	-		H	,

JRKWF8780GB

SECURITY CONTROL SYSTEM

Α

Ρ

	A
10 WIRE 1 10 10 10 10 10 10 10	В
M W R R W W R R R W W R R R W W R R R W W R R R W W R R R W W R R R W W R R R W W R R W W R R W W R R W W R R W W R R W W R R W W R W R W R W W R	С
32 SB 33 BG 34 W 35 BG 3	D
Signal Si	Е
MICROPHONE OUT MICROPHONE MICROPHONE MICROPHONE MICROPHONE SOUND SIGN SOUND SIGN SOUND SIGN WAYSID WA	F
SHELD No. No	G
Terminal Mo. 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Н
Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Signal Name (Specification) Net Court (Specificati	I
M139 DIODE-2 ET02.2W DIODE-2 ET02.2W	J
15 16 17 17 17 17 17 17 17	SEC
A TO TO TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TO THE TOTAL TOTA	L
SECURITY CONTROL SYSTEM (2.01 TUNB O GASOLINE ENGINE) 15	M
	N
SECURITY C 28C W 29C W 29C W 31C R 3	0
	JRKWF8781GB

SEC-89 2016 Q50 Revision: November 2016

SECUF	RITY CO	SECURITY CONTROL SYSTEM (2.0L TURBO GASOLINE ENGINE)	BO G	ASOL	INE E	ENGINE)						
Connector No.	No.	M173	Š	Connector No.		M175	Connector No.		M177	Connec	Connector No.	M178
Connector Name		JOINT CONNECTOR-M03	ē	Connector Name		JOINT CONNECTOR-M05	Connector Name		JOINT CONNECTOR-M07	Connec	Connector Name	JOINT CONNECTOR-M08
Connector Type	П	24342_4GA2A	Š	Connector Type	П	NH20FL-DC	Connector Type	П	24342_4GA2A	Connec	Connector Type	NH20FW-DC
修		-	Œ		٠		Œ			Œ		
#S.		6 5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		H.S.		20 19 17 16 15 14 13 12 11 10	H.S.		6 5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E.	16	20 1817 151413121110
Terminal Color Of No. Wire	Color Of Wire	Signal Name [Specification]	Ter	Ferminal Co No.	Color Of Wire	Signal Name [Specification]	Terminal No.	Color Of Wire	Signal Name (Specification)	Terminal No.	al Color Of Wire	Signal Name [Specification]
1	7		Ш	1	7		1	7		1	æ	-
2	7	•		2	7		2	٦.	•	2	Я	•
3	_			3	_		3	_		7	В	
4	_	1		4	_		4	_		∞	В	
2	_		[2	_		2	_		6	В	
9	_	•	_1	9	_	i.	9	-	•	10	80	- [With VR30 engine]
7	œ		_	_	_		7	۵		10	8	 [With 2.0L turbo gasoline engine]
∞	œ	•			_		œ	Ь		11	В	- [With VR30 engine]
б	œ			10	۵		6	а		11	8	- [With 2.0L turbo gasoline engine]
10	œ			11	۵		10	Ь		12	В	- [With VR30 engine]
11	œ			12	۵		11	۵		12	>	- [With 2.0L turbo gasoline engine]
12	œ	,		13	Ь		12	Ь		13	В	- [With VR30 engine]
13	SB	•		14	۵		13	_		13	×	- [With 2:0L turbo gasoline engine]
14	SB			15	Ь		14	1		14	В	
15	SB			16	۵	- [With VR30 engine]	15			15	В	- [With VR30 engine]
16	_	- [With 2.0L turbo gasoline engine]		16	æ	- [With 2.0L turbo gasoline engine]	16	_		15	×	- [With 2.0L turbo gasoline engine]
16	SB	- [With VR30 engine]		17	۵	- [With VR30 engine]	17	_	-	17	BR	•
17	_	- [With 2.0L turbo gasoline engine]	_	17	œ	- [With 2.0L turbo gasoline engine]	18	_		18	BR	
17	SB	- [With VR30 engine]		19	~	- [With VR30 engine and with ISS]	19	>		20	BR	
18	_	- [With 2.0L turbo gasoline engine]		19	>	- [Except with VR30 engine and with ISS]	20	>	•			
18	SB	- [With VR30 engine]		20	~	 [With VR30 engine and with ISS] 	21	>				
19	æ	- [With VR30 engine]	Ц	20	>	- [Except with VR30 engine and with ISS]	22	۵		Connec	Connector No.	T47
19	9]	- [With 2.0L turbo gasoline engine]					23	۵		Connec	Connector Name	TRUNK LID OPENER REQUEST SWITCH ASSEMBLY
07	¥ 5	- [With VK30 engine]					74	_	1	Jonne	Connector Tune	TIO ON WAS NOT
71	2 8	- [with 2.0L turbo gasoline engine]									7	HO4IMW-INH
27	£ 5	Carrier and Area engine)								1		
77	2 ,	- [With 2.0L turbo gasoline engine]								事		
77	×	- [with 2.0L turbo gasoline engine]								SH/	~	Ē
22	8	 [With VR30 engine and without ISS] 									9	
22	>	- [With VR30 engine and with ISS]										3 1 0 1
23	œ	- [With 2.0L turbo gasoline engine]										12110
23	SB	- [With VR30 engine and without ISS]										
23	>	- [With VR30 engine and with ISS]										
24	œ ;	- [With 2.0L turbo gasoline engine]										
24	SB.	- [With VR30 engine and without ISS]										
24	>	- [With VR30 engine and with ISS]										

JRKWF8782GB

ENGINE)	T53	A IDVESSE ASO I GIT AINTIGE	INGIAN EID LOCK ASSEMBLI	TB03FW-LC			(1 2 3			[moistochioson] Compile	olgilal Nallie [openiication]			•	
OLINE	. No.	, Marina	DI DI	. Type								Terminal Color Of	Wire	>	1	9	
GASC	Connector No.	omely softened	COLLECTO	Connector Type			¥.	2				Terminal	No.	1	2	3	
SECURITY CONTROL SYSTEM (2.0L TURBO GASOLINE ENGINE)	Terminal Color Of Signal Mamo (Sporification)	No. Wire Signal Manie [Specification]	1 р	2 B -	3 B	4 R			Connector No. T48	Connector Name WIRE TO WIRE	Connector Type NS16FW-CS	(പ	16 15 14 13 12 11 10 9 8	

	5 200	Constitution of the second
No.	Wire	olgnal Name [opecification]
1	٨	
2	BG	1
4	7	
2	Ь	
9	9	
8	В	
6	æ	
10	Ь	
11	7	
13	9	- [With around view monitor]
13	1	- [With rear view monitor]
14	В	- [With rear view monitor]
14	R	- [With around view monitor]
15	8	- [With around view monitor]
15	W	- [With rear view monitor]
16	В	- [With rear view monitor]
16	W	- [With around view monitor]

В

Α

С

D

Е

F

G

Н

J

SEC

I\

Ν

JRKWF8783GB

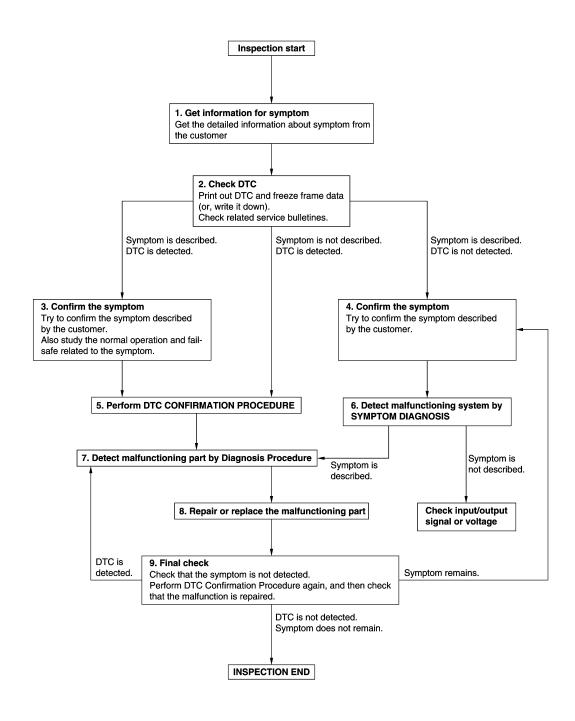
Ρ

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

OVERALL SEQUENCE



JMKIA8652GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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.
- 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-62, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.

If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIR-MATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to GI-45, "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 CON-SULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

SEC

Α

В

D

Е

Н

M

N

0

Р

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to GI-45, "Intermittent Incident".

8.repair or replace the malfunctioning part

- 1. Repair or replace the malfunctioning part.
- 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 REPLACING ECM

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING ECM

Description INFOID:0000000012792695

Performing the following procedure can automatically activate recommunication of ECM, but only when the ECM is replaced with a new one*. For details, refer to SEC-95, "Work Procedure".

*: New one means a virgin ECM that has never been energized on-board. (In this step, initialization procedure using CONSULT is not necessary)

NOTE:

- When the replaced ECM is not a brand new, the specified procedure using CONSULT is necessary.
- If multiple keys are attached to the key holder, separate them before beginning work.
- Distinguish keys with unregistered key IDs from those with registered IDs.

Work Procedure INFOID:0000000012792696

1.PERFORM ECM RECOMMUNICATING FUNCTION

- Install ECM.
- 2. Contact backside of the registered Intelligent Key* to push-button ignition switch while brake pedal is depressed, then turn ignition switch ON.
 - *: To perform this step, use the key that is used before performing ECM replacement.
- 3. Maintain ignition switch in the ON position for at least 5 seconds.
- Turn ignition switch OFF.
- 5. Check that the engine starts.

>> GO TO 2. 2.perform additional service when replacing ecm

Refer to EC4-207, "Description"

>> END

SEC

Α

В

D

Е

Н

Ν

Р

SEC-95 Revision: November 2016 2016 Q50

DTC/CIRCUIT DIAGNOSIS

P1610 LOCK MODE

DTC Description

INFOID:0000000012792697

ECM forcibly switches to the mode that inhibits engine start, when engine start operation is performed 5 times or more while communication between ECM and BCM is not normal.

DTC DETECTION LOGIC

NOTE:

If DTC P1610 is displayed with other DTC (for BCM or ENGINE), first perform the trouble diagnosis for other

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
P1610	LOCK MODE (Lock mode)	When ECM detects a communication malfunction between ECM and BCM 5 times or more.

POSSIBLE CAUSE

Engine start operation is performed five times or more under the following conditions,

- Infiniti Vehicle Immobilizer System malfunction
- · Operation by unregistered key

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC P1610 is displayed with other DTC (for BCM or ENGINE), first perform the trouble diagnosis for other DTC.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. BCM: Refer to BCS-63, "DTC Index". ECM: Refer to EC6-164, "TURBO HIGH PRESSURE MODEL: DTC Index" [VR30DDTT engine models for USA and Canada (Turbo high pressure)], EC6-205, "TURBO LOW PRESSURE MODEL: DTC Index" [VR30DDTT engine models for USA and Canada (Turbo low pressure)] or EC6-1139, "DTC Index" (VR30DDTT engine models for Mexico).

NO >> GO TO 2.

2.perform dtc confirmation procedure

- Turn ignition switch ON.
- Check DTC in "Self Diagnostic Result" mode of "ENGINE" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-96, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792698

CHECK DTC PRIORITY

If DTC P1610 is displayed with other DTC (for BCM or ENGINE), first perform the trouble diagnosis for other DTC.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. BCM: Refer to BCS-63, "DTC Index". ECM: Refer to EC6-164, "TURBO HIGH PRESSURE MODEL: DTC Index" [VR30DDTT engine models for USA and Canada (Turbo high pressure)], EC6-205, "TURBO LOW PRESSURE MODEL : DTC Index" [VR30DDTT engine models for USA and Canada (Turbo low pressure)] or EC6-1139, "DTC Index" (VR30DDTT engine models for Mexico).

>> GO TO 2.

NO

P1610 LOCK MODE

< DTC/CIRCUIT DIAGNOSIS >

$\overline{2}$.CHECK ENGINE START FUNCTION

- 1. Check that DTC except for DTC P1610 is not detected. If detected, erase the DTC after fixing.
- 2. Turn ignition switch OFF.
- Depress brake pedal and contact the registered Intelligent Key backside to push-button ignition switch, then wait 5 seconds.
- Turn ignition switch ON.
- Turn ignition switch OFF and wait 5 seconds.
- Repeat steps 3 and 5 twice (a total of 3 times).
- 7. Check that engine can start.

>> INSPECTION END

M

Ν

0

SEC-97 Revision: November 2016 2016 Q50

В

C

D

Е

F

Н

J

SEC

L

Р

P1611 ID DISCORD, IMMU-ECM

< DTC/CIRCUIT DIAGNOSIS >

P1611 ID DISCORD, IMMU-ECM

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
P1611	ID DISCORD, IMMU-ECM (Identification discord immobilizer unit - engine control module)	The ID verification results between BCM and ECM are NG.

POSSIBLE CAUSE

- BCM
- ECM

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check DTC in "Self Diagnostic Result" mode of "ENGINE" using CONSULT.

Is DTC detected?

- YES >> Refer to <u>SEC-98</u>, "<u>Diagnosis Procedure</u>".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792700

1. INTELLIGENT KEY REGISTRATION

Using CONSULT, register all Intelligent Keys again.

Can engine be started with the registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK SELF DIAGNOSTIC RESULT

- Select "Self Diagnostic Result" mode of "ENGINE" using CONSULT.
- Erase DTC.
- Perform DTC CONFIRMATION PROCEDURE for DTC P1611. Refer to SEC-98, "DTC Description".

Is DTC detected?

YES >> GO TO 3.

NO >> INSPECTION END

3. REPLACE BCM

- 1. Replace BCM. Refer to BCS-99, "Removal and Installation".
- 2. Perform DTC CONFIRMATION PROCEDURE for DTC P1611. Refer to SEC-98, "DTC Description".

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

4.REPLACE ECM

Replace ECM. Refer to <u>EC6-1014</u>, "Removal and Installation" (VR30DDTT engine models for USA and Canada) or <u>EC6-1759</u>, "Removal and Installation" (VR30DDTT engine models for Mexico).

>> INSPECTION END

P1612 CHAIN OF ECM-IMMU

< DTC/CIRCUIT DIAGNOSIS >

P1612 CHAIN OF ECM-IMMU

DTC Description

INFOID:0000000012792701

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
P1612	CHAIN OF ECM-IMMU (Chain of engine control module - immobilizer unit)	Inactive communication between ECM and BCM

D

Е

Α

В

POSSIBLE CAUSE

- Harness or connectors
 - (The CAN communication line is open or shorted.)
- BCM
- ECM

FAIL-SAFE

Inhibit engine cranking

F

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

Н

If DTC P1612 is displayed with DTC U1000 (for BCM) or U1010 (for BCM), first perform the trouble diagnosis for DTC U1000 (for BCM) or U1010(for BCM).

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000 (for BCM): Refer to BCS-86, "DTC Description". U1010 YES (for BCM): Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

Turn ignition switch ON.

Check DTC in "Self Diagnostic Result" mode of "ENGINE" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-99</u>, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

INFOID:0000000012792702

Diagnosis Procedure

CHECK DTC PRIORITY

If DTC P1612 is displayed with DTC U1000 (for BCM) or U1010 (for BCM), first perform the trouble diagnosis for DTC U1000 (for BCM) or U1010(for BCM).

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000 (for BCM): Refer to BCS-86, "DTC Description". U1010 YES (for BCM): Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 3.

3.replace ecm

Replace ECM. Refer to EC6-1014, "Removal and Installation" (VR30DDTT engine models for USA and Canada) or EC6-1759, "Removal and Installation" (VR30DDTT engine models for Mexico).

SEC

M

Ν

Р

P1612 CHAIN OF ECM-IMMU

>> INSPECTION END

B2192 ID DISCORD, IMMU-ECM

< DTC/CIRCUIT DIAGNOSIS >

B2192 ID DISCORD, IMMU-ECM

DTC Description INFOID:0000000012792703

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2192	ID DISCORD BCM-ECM (Identification discord body control module - engine control module)	The ID verification results between BCM and ECM are NG.

POSSIBLE CAUSE

- BCM
- ECM

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

>> Refer to SEC-101, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

${f 1}$. INTELLIGENT KEY REGISTRATION

Using CONSULT, register all Intelligent Keys again.

Can engine be started with the registered Intelligent Key?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK SELF-DIAGNOSIS RESULT

- Select "Self Diagnostic Result" mode of "BCM" using CONSULT.
- Erase DTC.
- Perform DTC CONFIRMATION PROCEDURE for DTC B2192. Refer to SEC-101, "DTC Description".

Is DTC detected?

YES >> GO TO 3.

NO >> INSPECTION END

3. REPLACE BCM

- Replace BCM. Refer to BCS-99, "Removal and Installation".
- Perform DTC CONFIRMATION PROCEDURE for DTC B2192. Refer to <u>SEC-101</u>, "DTC Description".

Is DTC detected?

YES >> GO TO 4.

Revision: November 2016

NO >> INSPECTION END

4.REPLACE ECM

Replace ECM. Refer to EC4-967, "Removal and Installation" (2.0L turbo gasoline engine models), EC6-1014, "Removal and Installation" (VR30DDTT engine models for USA and Canada) or EC6-1759, "Removal and Installation" (VR30DDTT engine models for Mexico).

>> INSPECTION END

SEC

Α

В

D

F

Н

INFOID:0000000012792704

Ν

Р

B2193 CHAIN OF ECM-IMMU

< DTC/CIRCUIT DIAGNOSIS >

B2193 CHAIN OF ECM-IMMU

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2193	CHAIN OF BCM-ECM (Chain of body control module - engine control module)	Inactive communication between BCM and ECM

POSSIBLE CAUSE

· Harness or connectors

(The CAN communication line is open or shorted.)

- ECM
- BCM

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2193 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-102</u>, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792706

1. CHECK DTC PRIORITY

If DTC B2193 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 3.

3.REPLACE ECM

Replace ECM. Refer to <u>EC4-967</u>, "Removal and Installation" (2.0L turbo gasoline engine models), <u>EC6-1014</u>, "Removal and Installation" (VR30DDTT engine models for USA and Canada) or <u>EC6-1759</u>, "Removal and Installation" (VR30DDTT engine models for Mexico).

B2193 CHAIN OF ECM-IMMU

>> INSPECTION END

Α

В

С

D

Е

F

3

Н

J

SEC

L

 \mathbb{N}

Ν

0

Ρ

B2195 ANTI-SCANNING

< DTC/CIRCUIT DIAGNOSIS >

B2195 ANTI-SCANNING

DTC Description INFOID:0000000012792707

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2195	ANTI-SCANNING (Anti-scanning)	ID verification between BCM and ECM that is out of the specified specification is detected.

POSSIBLE CAUSE

ID verification request out of the specified specification

FAIL-SAFE

Inhibits engine cranking

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-104</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792708

1. CHECK SELF DIAGNOSTIC RESULT 1

- Select "Self Diagnostic Result" mode of "BCM" using CONSULT.
- Erase DTC.
- Perform DTC CONFIRMATION PROCEDURE for DTC B2195. Refer to SEC-104, "DTC Description".

Is DTC detected?

YES >> GO TO 2.

NO >> INSPECTION END

2.CHECK EQUIPMENT OF THE VEHICLE

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

Is unspecified accessory part related to engine start installed?

YES >> GO TO 3.

>> GO TO 4. NO

3.CHECK SELF DIAGNOSTIC RESULT 2

- Obtain the customers approval to remove unspecified accessory part related to engine start, and then remove it.
- Select "Self Diagnostic Result" mode of "BCM" using CONSULT.
- 3. Erase DTC.
- 4. Perform DTC CONFIRMATION PROCEDURE for DTC B2195. Refer to SEC-104, "DTC Description".

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

4.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

B2196 DONGLE UNIT

< DTC/CIRCUIT DIAGNOSIS >

B2196 DONGLE UNIT

DTC Description INFOID:0000000012792709

BCM performs ID verification between BCM and dongle unit. When verification result is OK, BCM permits cranking.

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2196	DONGLE NG (Dongle unit not good)	The ID verification results between BCM and dongle unit is NG.

POSSIBLE CAUSE

 Harness or connectors (Dongle unit circuit is open or shorted.)

Dongle unit

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2196 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2 .PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Turn ignition switch OFF.
- Turn ignition switch ON.
- Check "Self-diagnosis result" using CONSULT.

Is the DTC detected?

>> Refer to SEC-105, "Diagnosis Procedure". YES

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

CHECK DTC PRIORITY

If DTC B2196 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

>> GO TO 2. NO

2. PERFORM INITIALIZATION

- Perform initialization of BCM and reregistration of all Intelligent Keys using CONSULT.
- 2. Start the engine.

Does the engine start?

YES >> INSPECTION END

NO >> GO TO 3. SEC

Α

В

D

Е

F

Н

Ρ

Ν

INFOID:0000000012792710

B2196 DONGLE UNIT

< DTC/CIRCUIT DIAGNOSIS >

$\overline{\mathbf{3}}$.CHECK DONGLE UNIT CIRCUIT

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

ВСМ		Dong	Continuity	
Connector	Terminal	Connector Terminal		Continuity
M14	52	M32	1	Existed

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector Terminal		Ground	Continuity
M14	52		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK DONGLE UNIT GROUND CIRCUIT

Check continuity between dongle unit harness connector and ground.

Dong	le unit		Continuity
Connector Terminal		Ground	Continuity
M32	4		Existed

Is the inspection result normal?

YES >> Replace dongle unit.

NO >> Repair or replace harness.

B2198 NATS ANTENNA AMP.

DTC Description

INFOID:0000000012792711

Α

В

D

Е

F

Н

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2198	NATS ANTENNA AMP (Nissan Anti-Theft System antenna amplifier)	Inactive communication between NATS antenna amp. and BCM is detected when BCM enters in the low power consumption mode (BCM sleep condition)

POSSIBLE CAUSE

- Harness or connectors (NATS antenna amp. circuit is open or shorted.)
- NATS antenna amp.
- BCM

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Make the conditions that BCM enters in the low power consumption mode (BCM sleep condition). Refer to BCS-13, "POWER CONSUMPTION CONTROL SYSTEM: System Description".
- 2. Turn ignition switch ON.
- 3. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

- YES >> Refer to <u>SEC-107</u>, "<u>Diagnosis Procedure</u>".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792712

$1.\mathsf{check}$ nats antenna communication signal

Check voltage signal between NATS antenna amp. harness connector and ground using an oscilloscope.

(+) NATS antenna amp.		(–) Condition		ition	Voltage	
Connector	Terminal					
M51	3	Ground	Intelligent Key: Intelligent Key battery is removed	Brake pedal: De- pressed	(V) 30 20 10 0 10 200 ms JSMIA1415GB	

Is the inspection result normal?

Revision: November 2016 SEC-107 2016 Q50

SEC

L

N

0

Р

B2198 NATS ANTENNA AMP.

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace NATS antenna amp. Refer to <u>SEC-176, "Removal and Installation"</u>.

NO >> GO TO 2.

$2.\mathsf{CHECK}$ NATS ANTENNA AMP. OUTPUT SIGNAL CIRCUIT

- 1. Disconnect NATS antenna amp. connector and BCM connector.
- 2. Check continuity between NATS antenna amp. harness connector and BCM connector.

NATS antenna amp.		BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M51	1	M16	127	Existed
I GIVI	3	IVITO	126	LXISIEU

3. Check continuity between NATS antenna amp. harness connector and ground.

NATS an	tenna amp.		Continuity	
Connector	Terminal	Ground	Continuity	
M51	1	Not exis	Not existed	
I CIVI	3		INOL EXISTED	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> Repair or replace harness.

B2555 STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

B2555 STOP LAMP

DTC Description

INFOID:0000000012792713

Α

В

D

Е

F

Н

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2555	STOP LAMP (Stop lamp)	BCM makes a comparison between the upper voltage and lower voltage of stop lamp switch. It judges from their values to detect the malfunctioning circuit.

POSSIBLE CAUSE

Harness or connectors

(Stop lamp switch circuit is open or shorted.)

- Stop lamp switch
- Fuse
- BCM

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

Depress brake pedal and wait 1 second or more.

Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-109</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792714

1.CHECK FUSE

Check that the following fuse in the fuse block (J/B) is not blown (open).

Signal name	Fuse No.
Battery power supply	19 (10 A)

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after replacing the cause of blowing.

NO >> GO TO 2.

2.CHECK STOP LAMP SWITCH 2 SIGNAL

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

	(+)		Voltage
E	BCM	(–)	
Connector	Terminal		
M13	25	Ground	9 – 16 V

Is the inspection normal?

>> GO TO 3. YES

NO >> Check harness for open or short between BCM and fuse.

3.CHECK STOP LAMP SWITCH POWER SUPPLY CIRCUIT

Disconnect stop lamp switch connector.

SEC

M

Ν

Р

SEC-109 Revision: November 2016

B2555 STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

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

(+)			
Stop lamp sw	vitch	(–)	Voltage
Connector	Terminal		
E57	3	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 4.

NO >> Check harness for open or short between stop lamp switch and fuse.

4.CHECK STOP LAMP SWITCH 1 SIGNAL

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

(+) BCM		(–)	Condition		Voltage
Connector	Terminal				
M13	27	Ground	Brake pedal	Depressed	9 – 16 V
IVITO	21	Giodila Biake pedai		Not depressed	0 V

Is the inspecting result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> GO TO 5.

5.CHECK STOP LAMP SWITCH 1 SIGNAL CIRCUIT

- Disconnect stop lamp switch connector.
- 2. Check continuity between stop lamp switch harness connector and BCM harness connector.

Stop lamp switch		BCM		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
E57	4	M13	27	Existed	

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

Stop lamp sv	vitch		Continuity
Connector	Terminal	Ground	Continuity
E57	4		Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK STOP LAMP SWITCH

Refer to SEC-110, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 7.

NO >> Replace stop lamp switch. Refer to BR-24, "Removal and Installation".

7. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792715

1. CHECK STOP LAMP SWITCH

B2555 STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

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

Stop lamp switch Terminal		Condition		Continuity
3	4	brake pedar	Depressed	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace stop lamp switch. Refer to <u>BR-24</u>, "Removal and Installation".

Е

Α

В

C

D

F

G

Н

J

SEC

L

M

Ν

0

B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2556 PUSH-BUTTON IGNITION SWITCH

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2556	PUSH-BTN IGN SW (Push-button ignition switch)	BCM detects the push-button ignition switch stuck at ON for 100 seconds or more.

POSSIBLE CAUSE

· Harness or connectors

(Push-button ignition switch circuit is shorted.)

- Push-button ignition switch
- BCM

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Press push-button ignition switch under the following condition.
- Brake pedal: Not depressed
- 2. Release push-button ignition switch and wait 100 seconds or more.
- 3. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-112</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792717

1. CHECK PUSH-BUTTON IGNITION SWITCH INPUT SIGNAL

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

(+)		
Push-button ignition switch		(–)	Voltage
Connector	Terminal		
M38	8	Ground	9 – 16 V
			l.

Is the inspection result normal?

YES >> GO TO 4. NO >> GO TO 2.

2.check push-button ignition switch circuit

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

Push-button ignition switch		В	Continuity	
Connector	Terminal	Connector Terminal		Continuity
M38	8	M13	1	Existed

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

B2556 PUSH-BUTTON IGNITION SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Push-button	ignition switch		Continuity
Connector Terminal		Ground	Continuity
M38	8		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

f 4.CHECK PUSH-BUTTON IGNITION SWITCH GROUND CIRCUIT

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

Push-button ignition switch			Continuity
Connector Terminal		Ground	Continuity
M38	4		Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

$\mathbf{5}.$ CHECK PUSH-BUTTON IGNITION SWITCH

Refer to SEC-113, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace push-button ignition switch. Refer to PCS-106, "Removal and Installation".

6.CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1. CHECK PUSH-BUTTON IGNITION SWITCH

Turn ignition switch OFF.

- Disconnect push-button ignition switch connector.
- Check continuity between push-button ignition switch terminals.

Push-button ignition switch		Condition		Continuity
Terminal				Continuity
4 8	Q	Push-button ignition	Pressed	Existed
	switch	Not pressed	Not existed	

Is the inspection result normal?

YES >> INSPECTION END

>> Replace push-button ignition switch. Refer to PCS-106, "Removal and Installation". NO

SEC

Α

В

D

Е

F

Н

INFOID:0000000012792718

M

Ν

B2557 VEHICLE SPEED

DTC Description

DTC DETECTION LOGIC

INFOID:0000000012792719

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2557	VEHICLE SPEED (Vehicle speed)	 BCM detects one of the following conditions for 10 seconds continuously. Vehicle speed signal from "combination meter" is 10 km/h (6.2 MPH) or more and vehicle speed signal from "ABS actuator and electric unit (control unit)" is 4 km/h (2.5 MPH) or less Vehicle speed signal from "combination meter" is 4 km/h (2.5 MPH) or less and vehicle speed signal from "ABS actuator and electric unit (control unit)" is 10 km/h (6.2 MPH) or more

POSSIBLE CAUSE

- Harness or connectors
 - (The CAN communication line is open or shorted.)
- Combination meter
- ABS actuator and electric unit (control unit)

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2557 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Start engine and wait 10 seconds or more.
- 2. Drive the vehicle at a vehicle speed of 10 km/h (6.2 MPH) or more for 10 seconds or more.
- 3. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-114, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792720

1. CHECK DTC PRIORITY

If DTC B2557 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.CHECK DTC OF "ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)"

Check DTC in "Self Diagnostic Result" mode of "ABS" using CONSULT.

Is DTC detected?

YES >> Perform the trouble diagnosis related to the detected DTC. Refer to BRC-72, "DTC Index".

NO >> GO TO 3.

B2557 VEHICLE SPEED

< DTC/CIRCUIT DIAGNOSIS >

3.CHECK DTC OF "COMBINATION METER" Check DTC in "Self Diagnostic Result" mode of "METER/M&A" using CONSULT.

___ A

Is DTC detected?

YES \rightarrow Perform the trouble diagnosis related to the detected DTC. Refer to MWI-87, "DTC Index". NO \rightarrow GO TO 4.

В

4. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

D

Е

F

G

Н

J

SEC

M

Ν

0

< DTC/CIRCUIT DIAGNOSIS >

B2601 SHIFT POSITION

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2601	SHIFT POSITION (Shift position)	When there is a difference between P position signal from A/T shift selector (detention switch) and P position signal from IPDM E/R (CAN).

POSSIBLE CAUSE

· Harness or connectors

(CAN communication line is open or shorted.)

Harness or connectors

[A/T shift selector (detention switch) circuit is open or shorted.]

- BCM
- IPDM E/R
- A/T shift selector (detention switch)

FAIL-SAFE

_

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2601 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Shift the selector lever to the P position.
- 2. Turn ignition switch ON and wait 2 seconds or more.
- 3. Shift the selector lever to any position other than P and wait 2 seconds or more.
- 4. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-116, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792722

1. CHECK DTC PRIORITY

If DTC B2601 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

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

- 1. Turn ignition switch OFF.
- Disconnect A/T shift selector (detention switch) connector, BCM connector, and IPDM E/R connector.
- Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

< DTC/CIRCUIT DIAGNOSIS >

A/T shift selector (detention switch)		В	CM	Continuity
Connector	Terminal	Connector Terminal		Continuity
M7	11	M13	20	Existed

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

A/T shift selector (detention switch)			Continuity
Connector Terminal		Ground	Continuity
M7	11		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

A/T shift selector (detention switch)		IPDM E/R		Continuity
Connector	Terminal	Connector Terminal		Continuity
M7	11	E121	31	Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.REPLACE BCM

- Replace BCM. Refer to BCS-99, "Removal and Installation".
- 2. Perform DTC CONFIRMATION PROCEDURE for DTC B2601. Refer to SEC-116, "DTC Description".

Is DTC B2601 detected again?

YES >> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

NO >> INSPECTION END

SEC

Р

SEC-117 Revision: November 2016 2016 Q50

Α

В

D

Е

F

Н

J

Ν

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition	
B2602	SHIFT POSITION (Shift position)	BCM detects the following status for 10 seconds. Selector lever is in the P position Vehicle speed is 4 km/h (2.5 MPH) or more Ignition switch is in the ON position	

POSSIBLE CAUSE

· Harness or connectors

(The CAN communication line is open or shorted.)

Harness or connectors

[A/T shift selector (detention switch) circuit is open or shorted.]

- BCM
- A/T shift selector (detention switch)
- ABS actuator and electric unit (control unit)
- Combination meter

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2602 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- Start engine.
- Drive vehicle at a speed of 4 km/h (2.5 MPH) or more for 10 seconds or more.
- 3. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-118</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792724

1. CHECK DTC PRIORITY

If DTC B2602 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.CHECK DTC OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

Check DTC in "Self Diagnostic Result" mode of "ABS" using CONSULT.

Is DTC detected?

YES >> Perform the trouble diagnosis related to the detected DTC. Refer to BRC-72, "DTC Index".

Revision: November 2016 SEC-118 2016 Q50

< DTC/CIRCUIT DIAGNOSIS >

NO >> GO TO 3.

3.CHECK DTC OF COMBINATION METER

Check DTC in "Self Diagnostic Result" mode of "METER/M&A" using CONSULT.

Is DTC detected?

YES >> Perform the trouble diagnosis related to the detected DTC. Refer to MWI-87, "DTC Index".

NO >> GO TO 4.

4. CHECK A/T SHIFT SELECTOR POWER SUPPLY

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

(+)				
A/T shift selector (detention switch)		(–)	Voltage	
Connector	Terminal			
M7	10	Ground	9 – 16 V	

Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 5.

CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

Disconnect BCM connector.

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

A/T shift selector	A/T shift selector (detention switch)		ВСМ	
Connector	Terminal	Connector Terminal		Continuity
M7	10	M14	69	Existed

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

A/T shift selector (detention switch)			Continuity
Connector Terminal		Ground	Continuity
M7	10		Not existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

7.CHECK A/T SHIFT SELECTOR CIRCUIT

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

A/T shift selector (detention switch)		BCM		Continuity
Connector	Terminal	Connector Terminal		Continuity
M7	11	M13	20	Existed

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

SEC

Α

В

D

Е

_

_

M

Ν

< DTC/CIRCUIT DIAGNOSIS >

A/T shift selector (detention switch)			Continuity
Connector	Connector Terminal		Continuity
M7	M7 11		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness.

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

Refer to SEC-120, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 9.

NO >> Replace A/T shift selector. Refer to TM-289, "Removal and Installation".

9. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792725

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

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

A/T shift selector (detention switch)		Condition		Continuity
Terminal				
		Selector lever: P position	Selector button: Released	Not existed
10 11	Selector lever. F position	Selector button: Pressed	Existed	
		Selector lever: Other than P	position	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector. Refer to TM-289. "Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

B2603 SHIFT POSITION

DTC Description INFOID:0000000012792726

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2603	SHIFT POSI STATUS (Shift position status)	 BCM detects the following status when ignition switch is in the ON position. P/N position signal: approx. 0 V (Other than P/N position) A/T shift selector (detention switch) signal: approx. 0 V (P position)

POSSIBLE CAUSE

- Harness or connectors
 - (The CAN communication line is open or shorted.)
- Harness or connectors
 - (P/N position signal circuit is open or shorted.)
- A/T shift selector (detention switch)
- BCM
- TCM

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2603 is displayed with DTC B2601, first perform the trouble diagnosis for DTC B2601.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. Refer to <u>SEC-116</u>, "DTC <u>Description"</u>.

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 1

- Shift the selector lever to the P position.
- Turn ignition switch ON and wait 1 second or more.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-121, "Diagnosis Procedure".

>> GO TO 3. NO

3.PERFORM DTC CONFIRMATION PROCEDURE 2

- Shift the selector lever to the position other than P and N, and wait 1 second or more.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

- >> Refer to <u>SEC-121</u>, "<u>Diagnosis Procedure</u>".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK DTC PRIORITY

If DTC B2603 is displayed with DTC B2601, first perform the trouble diagnosis for DTC B2601.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. Refer to SEC-116, "DTC Description".

NO >> GO TO 2.

$\mathbf{2}.$ INSPECTION START

Perform inspection in accordance with procedure that confirms DTC.

SEC

Α

В

D

Е

Н

SEC-121 Revision: November 2016 2016 Q50

N

INFOID:0000000012792727

< DTC/CIRCUIT DIAGNOSIS >

Which procedure confirms DTC?

DTC confirmation procedure 1>>GO TO 3.

DTC confirmation procedure 2>>GO TO 7.

3. CHECK P/N POSITION SIGNAL

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

В	+) CM	(–)	Condition		Voltage
Connector	Terminal				
M13	39	Ground	Selector lever P or N position		(V) 15 10 5 0 JSMIA1472GB
				Other than above	0 V

Is the inspection result normal?

YES >> GO TO 12.

NO >> GO TO 4.

4. CHECK P/N POSITION SIGNAL CIRCUIT 1

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

IPDI	Л E/R	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
E121	37	M13	39	Existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK P/N POSITION SIGNAL CIRCUIT 2

- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector and IPDM E/R harness connector.

A/T as	A/T assembly		ВСМ	
Connector	Terminal	Connector	Terminal	Continuity
F2	9	M13	39	Existed

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK JOINT CONNECTOR

- 1. Remove joint connector.
- 2. Check continuity between joint connector terminals.

A/T assembly harness connector side	TCM harness connector side	Continuity	
Terminal	Terminal		
9	9	Existed	

Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace TCM. Refer to TM-296, "Removal and Installation".

NO >> Replace joint connector. Refer to TM-296, "Removal and Installation".

7.CHECK A/T SHIFT SELECTOR POWER SUPPLY

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

(+)		
A/T shift selector	A/T shift selector (detention switch)		Voltage
Connector	Connector Terminal		
M7	10	Ground	9 – 16 V

Is the inspection result normal?

YES >> GO TO 9.

NO >> GO TO 8.

8.CHECK A/T SHIFT SELECTOR POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector.
- 3. Check continuity between A/T shift selector (detention switch) harness connector and BCM harness connector.

A/T shift selector (detention switch)		BCM		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
M7	10	M14	69	Existed	

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

A/T shift selector	(detention switch)		Continuity
Connector Terminal		Ground	Continuity
M7 10			Not existed

Is the inspection result normal?

YES >> GO TO 11.

NO >> Repair or replace harness.

9. CHECK A/T SHIFT SELECTOR CIRCUIT

- 1. Turn ignition switch OFF
- Disconnect BCM connector.
- Check continuity between A/T shift selector (detention switch) harness countermand BCM harness connector

A/T shift selector	A/T shift selector (detention switch)		BCM	
Connector	Terminal	Connector Terminal		Continuity
M7	11	M13	20	Existed

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

A/T shift selector	(detention switch)		Continuity
Connector Terminal		Ground	Continuity
M7 11			Not existed

Is the inspection result normal?

YES >> GO TO 10.

NO >> Repair or replace harness.

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

SEC

Α

В

D

Е

F

Н

Revision: November 2016 SEC-123 2016 Q50

,_0

N

0

< DTC/CIRCUIT DIAGNOSIS >

Refer to SEC-124, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 12.

NO >> Replace A/T shift selector. Refer to TM-289, "Removal and Installation".

11. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

12.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

Component Inspection

INFOID:0000000012792728

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

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

A/T shift selector (detention switch)		Condition		Continuity	
Terminal				Continuity	
		Selector lever: P position	Selector button: Released	Not existed	
10	11	Selector lever. F position	Selector button: Pressed	Existed	
		Selector lever: Other than P position		Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace A/T shift selector. Refer to TM-289, "Removal and Installation".

< DTC/CIRCUIT DIAGNOSIS >

B2604 SHIFT POSITION

DTC Description INFOID:0000000012792729

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2604	PNP/CLUTCH SW (Park neutral position/ clutch switch)	 The following states are detected for 5 seconds while ignition switch is ON. P/N position signal is sent from TCM but shift position signal input (CAN) from TCM is other than P and N P/N position signal is not sent from TCM but shift position signal input (CAN) from TCM is P or N

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

Harness or connectors

(P/N position signal circuit is open or shorted.)

- BCM
- TCM
- IPDM E/R

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2604 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- Shift the selector lever to the P position.
- Turn ignition switch ON and wait 5 seconds or more.
- Shift the selector lever to the N position and wait 5 seconds or more.
- Shift the selector lever to any position other than P and N, and wait 5 seconds or more.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

>> Refer to SEC-125, "Diagnosis Procedure".

>> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK DTC PRIORITY

If DTC B2604 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.CHECK DTC OF TCM

Check DTC in "Self Diagnostic Result" mode of "TCM" using CONSULT.

SEC

Α

В

D

Е

Н

N

INFOID:0000000012792730

Р

2016 Q50

< DTC/CIRCUIT DIAGNOSIS >

Is DTC detected?

YES >> Perform the trouble diagnosis related to the detected DTC. Refer to <u>TM-102, "2.0L TURBO GAS-OLINE ENGINE: DTC Index"</u>.

NO >> GO TO 3.

3.CHECK P/N POSITION SIGNAL

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

(+) BCM		(–)	Condition		Voltage
Connector	Terminal				
M13	39	Ground	Selector lever	P or N position	(V) 15 10 5 0 10 ms JSMIA1472GB
				Other than above	0 V

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> GO TO 4.

4. CHECK P/N POSITION SIGNAL CIRCUIT 1

- Turn ignition switch OFF.
- 2. Disconnect IPDM E/R connector, BCM connector and A/T assembly connector.
- 3. Check continuity between A/T assembly harness connector and BCM harness connector.

A/T as	sembly	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
F2	9	M13	39	Existed

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

A/T as	ssembly		Continuity
Connector	Terminal	Ground	Continuity
F2	9		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK P/N POSITION SIGNAL CIRCUIT 2

1. Check continuity between A/T assembly harness connector and IPDM E/R harness connector.

A/T assembly		IPDM	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
F2	9	E121	37	Existed

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

A/T as	sembly		Continuity
Connector	Terminal	Ground	Continuity
F2	9		Not existed

Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 6.

NO >> Repair or replace harness.

6. CHECK JOINT CONNECTOR

- 1. Remove joint connector.
- 2. Check continuity between joint connector terminals.

A/T assembly harness connector side	TCM harness connector side	Continuity
Terminal	Terminal	Continuity
9	9	Existed

Is the inspection result normal?

YES

>> Replace TCM. Refer to <u>TM-296, "Removal and Installation"</u>. >> Replace joint connector. Refer to <u>TM-296, "Removal and Installation"</u>. NO

SEC

J

Α

В

C

D

Е

F

G

Н

M

Ν

0

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2605	PNP/CLUTCH SW (Park neutral position/clutch switch)	When ignition switch is ON, P/N position signal input from TCM and P/N position signal (CAN) input from IPDM E/R do not match.

POSSIBLE CAUSE

· Harness or connectors

(The CAN communication line is open or shorted.)

· Harness or connectors

(P/N position signal circuit is open or shorted.)

- BCM
- IPDM E/R
- TCM

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2605 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Shift the selector lever to the P position.
- Turn ignition switch ON and wait 1 second or more.
- 3. Shift the selector lever to the N position and wait 1 second or more.
- 4. Shift the selector lever to any position other than P and N, and wait 1 second or more.
- 5. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-128, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792732

1. CHECK DTC PRIORITY

If DTC B2605 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>. U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.CHECK DTC OF TCM

Check DTC in "Self Diagnostic Result" mode of "TCM" using CONSULT.

Is DTC detected?

< DTC/CIRCUIT DIAGNOSIS >

YES >> Perform the trouble diagnosis related to the detected DTC. Refer to <u>TM-102, "2.0L TURBO GAS-OLINE ENGINE: DTC Index"</u>.

NO >> GO TO 3.

3.CHECK P/N POSITION SIGNAL

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

(+) BCM		(-)	Condition		Voltage	
Connector	Terminal					
M13	39	Ground	Selector lever	P or N position	(V) 15 10 5 0 JSMIA1472GB	
				Other than above	0 V	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> GO TO 4.

4. CHECK P/N POSITION SIGNAL CIRCUIT 1

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

IPDM E/R		BCM		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
E121	37	M13	39	Existed	

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

IPDN	/I E/R		Continuity
Connector	Terminal	Ground	Continuity
E121	37		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK P/N POSITION SIGNAL CIRCUIT 2

- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector and IPDM E/R harness connector.

A/T as	A/T assembly		IPDM E/R	
Connector	Terminal	Connector	Terminal	Continuity
F2	9	E121	37	Existed

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

A/T as	sembly		Continuity
Connector	Terminal	Ground	Continuity
F2	9		Not existed

Is the inspection result normal?

SEC

Α

В

D

Е

Н

1\ /1

1 V I

Ν

N

F

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

NO >> Repair or replace harness.

B2608 STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

B2608 STARTER RELAY

DTC Description INFOID:0000000012792733

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2608	STARTER RELAY (Starter relay)	BCM outputs starter relay OFF signal but BCM receives starter relay ON signal from IPDM E/R (CAN).

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

Harness or connectors

(Starter motor relay circuit is open or shorted.)

IPDM E/R

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2608 is displayed with DTC U1000, U1010, or B210D first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description". B210D: Refer to BCS-87, "DTC Description"

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- Press push-button ignition switch under the following conditions to start engine, and wait 1 second or more.
- Selector lever: In the P position
- Brake pedal: Depressed
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-131</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK DTC PRIORITY

If DTC B2608 is displayed with DTC U1000, U1010, or B210D first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description". B210D: Refer to BCS-87, "DTC Description"

NO >> GO TO 2.

2.CHECK DTC OF IPDM E/R

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Perform the trouble diagnosis related to the detected DTC. Refer to PCS-26, "DTC Index".

NO >> GO TO 3.

3.CHECK P/N POSITION SIGNAL 1 $\,$

SEC-131 Revision: November 2016 2016 Q50

SEC

Α

D

Е

F

Н

M INFOID:0000000012792734

Ν

B2608 STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

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

(+) BCM		(–)	Condition Voltage		Voltage
Connector	Terminal				
M13	39	Ground	Selector lever	P or N position	(V) 15 10 5 0 JSMIA1472GB
				Other than above	0 V

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK P/N POSITION SIGNAL 2

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

((+)				
IPDM E/R		(–)		Condition	Voltage
Connector	Terminal				
E121	37	Ground	Selector lever	P or N position	9 – 16 V
LIZI	31	Glound	Selector level	Other than above	0 – 1.5 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. REPLACE IPDM E/R

- Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

 Perform DTC CONFIRMATION PROCEDURE for B2608. Refer to SEC-131, "DTC Description".

Is DTC B2608 detected again?

>> Replace BCM. Refer to BCS-99, "Removal and Installation". YES

>> INSPECTION END NO

B260F ENGINE STATUS

< DTC/CIRCUIT DIAGNOSIS >

B260F ENGINE STATUS

Description INFOID:0000000012792735

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

DTC Description INFOID:0000000012792736

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B260F	ENG STATE SIG LOST (Engine state signal lost)	BCM has not yet received the engine status signal from ECM when ignition switch is in the ON position.

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

ECM

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B260F is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to YES BCS-87, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON and wait 2 seconds or more.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

>> Refer to <u>SEC-133</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK DTC PRIORITY

If DTC B260F is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.INSPECTION START

- Turn ignition switch ON.
- Select "Self Diagnostic Result" mode of "BCM" using CONSULT.
- Touch "ERASE".
- Perform DTC CONFIRMATION PROCEDURE for DTC B260F. Refer to SEC-133, "DTC Description".

Is DTC detected?

YES >> GO TO 3.

Revision: November 2016

NO >> INSPECTION END SEC

Α

В

D

INFOID:0000000012792737

Ν

2016 Q50

B260F ENGINE STATUS

< DTC/CIRCUIT DIAGNOSIS >

3.REPLACE ECM

Replace ECM. Refer to <u>EC4-967</u>, "Removal and Installation" (2.0L turbo gasoline engine models), <u>EC6-1014</u>, "Removal and Installation" (VR30DDTT engine models for USA and Canada) or <u>EC6-1759</u>, "Removal and Installation" (VR30DDTT engine models for Mexico).

>> INSPECTION END

B26F3 STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

B26F3 STARTER CONTROL RELAY

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B26F3	START CONT RLY ON (Starter control relay on)	BCM requests IPDM E/R to turn starter control relay OFF, but BCM cannot receive starter control relay OFF state signal from IPDM E/R (CAN).

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

- IPDM E/R
- BCM

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B26F3 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- Press push-button ignition switch under the following conditions to start engine.
- Selector lever: In the P position
- Brake pedal: Not depressed
- Wait 2 seconds after engine started.
- 3. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-135, "Diagnosis Procedure".

>> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK DTC PRIORITY

If DTC B26F3 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.CHECK DTC OF IPDM E/R

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Perform the diagnosis procedure related to the detected DTC. Refer to PCS-26, "DTC Index".

NO >> GO TO 3.

3.REPLACE BCM

SEC

Α

В

D

Е

F

Н

INFOID:0000000012792738

INFOID:0000000012792739

Р

2016 Q50

B26F3 STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

B26F4 STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

B26F4 STARTER CONTROL RELAY

DTC Description INFOID:0000000012792740

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B26F4	START CONT RLY OFF (Starter control relay off)	BCM requests IPDM E/R to turn starter control relay ON, but BCM cannot receive starter control relay ON state signal from IPDM E/R (CAN).

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

- BCM
- IPDM E/R

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B26F4 is displayed with DTC U1000, or U1010 first perform the trouble diagnosis for DTC U1000, or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- Press push-button ignition switch under the following conditions to start engine, and wait 1 second or
- Selector lever: In the P position
- Brake pedal: Not depressed
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to SEC-137, "Diagnosis Procedure".

>> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK DTC PRIORITY

If DTC B26F4 is displayed with DTC U1000, or U1010 first perform the trouble diagnosis for DTC U1000, or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description".

NO >> GO TO 2.

2.CHECK DTC OF IPDM E/R

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Perform the diagnosis procedure related to the detected DTC. Refer to PCS-26, "DTC Index".

NO >> GO TO 3.

3.REPLACE BCM

SEC

Α

В

D

Е

F

Н

INFOID:0000000012792741

Р

2016 Q50

SEC-137 Revision: November 2016

B26F4 STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

B26F7 BCM < DTC/CIRCUIT DIAGNOSIS > B26F7 BCM Α **DTC** Description INFOID:0000000012792742 DTC DETECTION LOGIC В CONSULT screen items DTC No. DTC detecting condition (Trouble diagnosis content) B26F7 Inside key antenna output circuit in BCM is malfunctioning. (Body control module) D POSSIBLE CAUSE **BCM FAIL-SAFE** Е Inhibit engine cranking by Intelligent Key system DTC CONFIRMATION PROCEDURE 1. PERFORM DTC CONFIRMATION PROCEDURE F Press door request switch. Turn ignition switch ON. Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT. Is DTC detected? YES >> Refer to SEC-139, "Diagnosis Procedure". Н >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident". NO-2 >> Confirmation after repair: INSPECTION END Diagnosis Procedure INFOID:0000000012792743 1. INSPECTION START Turn ignition switch ON. Select "Self Diagnostic Result" mode of "BCM" using CONSULT. 2. Touch "ERASE". Perform DTC CONFIRMATION PROCEDURE for DTC B26F7. Refer to SEC-139, "DTC Description". SEC Is DTC B26F7 detected again? YES >> GO TO 2. NO >> INSPECTION END 2.REPLACE BCM Replace BCM. Refer to BCS-99, "Removal and Installation". M >> INSPECTION END Ν

SEC-139 Revision: November 2016 2016 Q50

B26F8 BCM

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B26F8	BCM (Body control module)	Starter control relay control signal and feedback circuit signal (inside BCM) does not match.

POSSIBLE CAUSE

BCM

FAIL-SAFE

_

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON and wait 1 second.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-140, "Diagnosis Procedure"</u>.

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792745

1.INSPECTION START

- 1. Turn ignition switch ON.
- 2. Select "Self Diagnostic Result" mode of "BCM" using CONSULT.
- 3. Touch "ERASE".
- 4. Perform DTC CONFIRMATION PROCEDURE for DTC B26F8. Refer to <u>SEC-140</u>, "DTC Description".

Is DTC detected?

YES >> GO TO 2.

NO >> INSPECTION END

2.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

B26FC KEY REGISTRATION

< DTC/CIRCUIT DIAGNOSIS >

B26FC KEY REGISTRATION

DTC Description INFOID:0000000012792746

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B26FC	KEY REGISTRATION (Key registration)	Intelligent Key that does not match the vehicle is registered.

POSSIBLE CAUSE

- Improper registration operation
- Intelligent Key
- BCM

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1 . PERFORM DTC CONFIRMATION PROCEDURE

- Perform initialization of BCM and registration of all Intelligent Keys using CONSULT.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

>> Refer to SEC-141, "Diagnosis Procedure"

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. REPLACE INTELLIGENT KEY

- 1. Prepare Intelligent Key that matches the vehicle.
- Registration of all Intelligent Keys using CONSULT.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> GO TO 2.

NO >> INSPECTION END

2.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

SEC

Α

В

D

Е

F

Н

INFOID:0000000012792747

M

Ν

B210B STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

B210B STARTER CONTROL RELAY

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B210B	STR CONT RLY ON CIRC (Starter control relay on circuit)	When comparing the following items, IPDM E/R detects that starter control relay is stuck in the ON position for 1 second or more. • Starter control relay signal (CAN) from BCM • Starter relay status signal (CAN) from BCM • Starter control relay and starter relay status signal (IPDM E/R input) • Starter control relay control signal (IPDM E/R output)

POSSIBLE CAUSE

IPDM E/R

FAIL-SAFE

_

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B210B is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to PCS-36, "DTC <a href="Description". U1010: Refer to PCS-38, "DTC <a href="Description".

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Turn ignition switch OFF and wait for 1 second or more.
- 3. Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-142</u>, "Diagnosis Procedure".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000012792749

1. CHECK SELF DIAGNOSTIC RESULT

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

What is the display history of DTC "B210B"?

"CRNT">>> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

"PAST" >> GO TO 2.

2.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

B210C STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

B210C STARTER CONTROL RELAY

INFOID:0000000012792750

Α

В

C

D

Е

F

Н

DTC DETECTION LOGIC

DTC Description

When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210C may be detected.

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B210C	STR CONT RLY OFF CIRC (Starter control relay off circuit)	When comparing the following items, IPDM E/R detects that starter control relay is stuck in the OFF position for 1 second or more. • Starter control relay signal (CAN) from BCM • Starter relay status signal (CAN) from BCM • Starter control relay and starter relay status signal (IPDM E/R input) • Starter control relay control signal (IPDM E/R output)

POSSIBLE CAUSE

- IPDM E/R
- BCM
- Battery

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B210C is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to PCS-36, "DTC Description". U1010: Refer to PCS-38, "DTC Description".

NO >> GO TO 2.

2.perform dtc confirmation procedure

- Turn ignition switch ON.
- Turn ignition switch OFF and wait for 1 second or more.
- Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

- >> Refer to SEC-143, "Diagnosis Procedure".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

What is the display history of DTC "B210C"?

1. CHECK SELF DIAGNOSTIC RESULT

"CRNT">> GO TO 3.

"PAST" >> GO TO 2.

Revision: November 2016

2.CHECK BATTERY VOLTAGE

Measure the battery voltage.

Which is the measurement result?

More than 12.4 V>>GO TO 5

SEC

M

N

Р

INFOID:0000000012792751

SEC-143 2016 Q50

B210C STARTER CONTROL RELAY

< DTC/CIRCUIT DIAGNOSIS >

Less than 12.4 V>>Perform battery inspection. Refer to <u>PG-245, "VR30DDTT : How to Handle Battery"</u> (VR30DDTT) or <u>PG-248, "2.0L TURBO GASOLINE ENGINE : How to Handle Battery"</u> (2.0L turbo gasoline engine).

3.CHECK P/N POSITION SIGNAL CIRCUIT VOLTAGE

- 1. Turn ignition switch ON
- 2. Selector lever is in P position.
- 3. Measure the voltage between IPDM E/R harness connector and ground.

(+)					Voltage
IPDM E/R		(-)	Condition		
Connector	Terminal				
E121	37	Ground	Shift position	P or N	9 – 16 V

Which is the measurement result?

Approx. 12 V>>Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

Approx. 0 V>>GO TO 4.

4. CHECK P/N POSITION SIGNAL CIRCUIT

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

IPDI	M E/R	В	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
E121	37	M13	39	Existed	

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

B210D STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

B210D STARTER RELAY

DTC Description INFOID:0000000012792752

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition		
B210D	STARTER RLY ON CIRC (Starter relay on circuit)	When comparing the following items, IPDM E/R detects that starter relay is stuck in the ON position for 5 seconds or more. • Starter control relay signal (CAN) from BCM • Starter relay status signal (CAN) from BCM • Starter control relay and starter relay status signal (IPDM E/R input) • Starter control relay control signal (IPDM E/R output)		

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

Harness or connectors

(The CAN communication line is open or shorted.)

- IPDM E/R
- BCM

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B210D is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to PCS-36, "DTC Description". U1010: Refer to PCS-38, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE 1

- Press push-button ignition switch under the following conditions to start engine, and wait 5 seconds or
- Selector lever: In the P position
- Brake pedal: Depressed
- Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-145</u>, "<u>Diagnosis Procedure</u>".

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

CHECK SELF DIAGNOSTIC RESULT

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

What is the display history of DTC "B210D"?

"CRNT">> GO TO 2.

"PAST" >> GO TO 4.

2.CHECK STARTER RELAY CONTROL SIGNAL CIRCUIT VOLTAGE

- Turn ignition switch ON
- Selector lever is in P position.
- Measure the voltage between IPDM E/R harness connector and ground.

SEC

Α

В

D

Е

F

Н

L

N

INFOID:0000000012792753

Р

2016 Q50

Revision: November 2016

B210D STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

((+)				
IPDM E/R		(-) Condition	Condition	Voltage	
Connector	Terminal				
E121	33	Ground	Other than at engine cranking	6 – 16 V	

Which is the measurement result?

Approx. 12 V>>Replace IPDM E/R. Refer to <u>PCS-44, "Removal and Installation"</u>. Approx. 0 V>>GO TO 3.

3. CHECK STARTER RELAY CONTROL SIGNAL CIRCUIT

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

IPDN	И E/R		Continuity	
Connector Terminal		Ground	Continuity	
E121 33			Not existed	

Is the inspection result normal?

YES >> Perform the diagnosis procedure for DTC B2608 of BCM. Refer to <u>SEC-131, "Diagnosis Procedure"</u>.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

B210E STARTER RELAY

DTC Description

DTC DETECTION LOGIC

When IPDM E/R power supply voltage is low (Approx. 7 - 8 V for about 1 second), the DTC B210E may be detected.

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B210E	STARTER RLY OFF CIRC (Starter relay off circuit)	When comparing the following items, IPDM E/R detects that starter relay is stuck in the OFF position for 5 seconds or more. • Starter relay control signal (CAN) from BCM • Starter relay status signal (CAN) from BCM • Starter control relay and starter relay status signal (IPDM E/R input) • Starter control relay control signal (IPDM E/R output)

POSSIBLE CAUSE

Harness or connectors

(The CAN communication line is open or shorted.)

- Harness or connector
- (Starter relay control signal circuit is open or shorted.)
- IPDM E/R
- BCM
- Battery

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B210E is displayed with DTC U1000, U1010, or B2605 first perform the trouble diagnosis for DTC U1000, U1010, or B2605.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description". U1010: Refer to BCS-87, "DTC Description". B2605: Refer to SEC-128, "DTC Description".

NO >> GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- Press push-button ignition switch under the following conditions to start engine, and wait 5 seconds or more.
- Selector lever: In the P position
- Brake pedal: Depressed
- Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

>> Refer to <u>SEC-147</u>, "<u>Diagnosis Procedure</u>". YES

>> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

CHECK SELF DIAGNOSTIC RESULT

Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

What is the display history of DTC "B210E"?

"CRNT">> GO TO 3.

"PAST" >> GO TO 2.

SEC

Α

В

D

Е

F

Н

INFOID:0000000012792754

L

M

Ν

INFOID:0000000012792755

Р

SEC-147 Revision: November 2016 2016 Q50

B210E STARTER RELAY

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK BATTERY VOLTAGE

Measure the battery voltage.

Which is the measurement result?

More than 12.4 V>>GO TO 5

Less than 12.4 V>>Perform battery inspection. Refer to <u>PG-245</u>, "VR30DDTT: How to Handle Battery" (VR30DDTT) or <u>PG-248</u>, "2.0L TURBO GASOLINE ENGINE: How to Handle Battery" (2.0L turbo gasoline engine).

3.CHECK STARTER RELAY CONTROL SIGNAL

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

(+)					
IPDM E/R		(-)	Condition	Voltage	
Connector	Terminal				
E121	33	Ground	Other than at engine cranking	6 – 16 V	

Which is the measurement result?

Approx. 12 V>>GO TO 4.

Approx. 0 V>>Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

4. CHECK STARTER RELAY CONTROL SIGNAL CIRCUIT

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

В	CM	IPDN	Continuity	
Connector Terminal		Connector Terminal		Continuity
M14	62	E121	33	Existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> Repair or replace harness.

5.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH

DTC Description

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B210F	INTRLCK/PNP SW ON (Interlock/park neutral position switch on)	 IPDM E/R detects a difference between the following signals P/N position signal from TCM P/N position signal (CAN) from BCM

POSSIBLE CAUSE

- Harness or connectors
 - (The CAN communication line is open or shorted.)
- Harness or connectors
 - (P/N position signal circuit is open or shorted.)
- BCM
- IPDM E/R

FAIL-SAFE

_

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B210F is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to PCS-36, "DTC Description". U1010: Refer to PCS-38, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Shift selector lever to the P position.
- 2. Turn ignition switch ON and wait 1 second or more.
- 3. Shift selector lever to the N position and wait 1 second or more.
- 4. Shift selector lever to any position other than P and N, and wait 1 second or more.
- Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

- YES >> Refer to <u>SEC-149</u>, "<u>Diagnosis Procedure</u>".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK P/N POSITION SIGNAL

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

SEC

J

Α

В

D

Е

F

Н

SEC

L

M

INFOID:0000000012792757

Ν

Р

B210F SHIFT POSITION/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

(+) BCM		(–)	Condition		Voltage
Connector	Terminal				
M13	39	Ground	Selector lever	P or N position	(V) 15 10 5 0 10 ms JSMIA1472GB
				Other than above	0 V

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> GO TO 2.

2.CHECK P/N POSITION SIGNAL CIRCUIT

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

IPDI	M E/R	В	Continuity	
Connector	Terminal	Connector Terminal		Continuity
E121	37	M13	39	Existed

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

IPDI	/I E/R		Continuity
Connector	Terminal	Ground	Continuity
E121	37		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

NO >> Repair or replace harness.

B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH

DTC Description INFOID:0000000012792758

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B2110	INTRLCK/PNP SW OFF (Interlock/park neutral position switch off)	P/N position signal from TCM P/N position signal (CAN) from BCM

POSSIBLE CAUSE

- Harness or connectors
 - (The CAN communication line is open or shorted.)
- Harness or connectors
 - (P/N position signal circuit is open or shorted.)
- TCM
- BCM
- IPDM E/R

FAIL-SAFE

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B2110 is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to PCS-36, "DTC Description". U1010: Refer to PCS-38, "DTC Description".

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- Shift selector lever to the P position.
- 2. Turn ignition switch ON and wait 1 second or more.
- 3. Shift selector lever to the N position and wait 1 second or more.
- 4. Shift selector lever to the position other than P and N, and wait 1 second or more.
- 5. Check DTC in "Self Diagnostic Result" mode of "IPDM E/R" using CONSULT.

Is DTC detected?

- YES >> Refer to SEC-151, "Diagnosis Procedure".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. CHECK P/N POSITION SIGNAL

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

SEC

Α

В

D

Е

F

Н

M

N

INFOID:0000000012792759

Р

B2110 SHIFT POSITION/CLUTCH INTERLOCK SWITCH

< DTC/CIRCUIT DIAGNOSIS >

(+) BCM		(–)	Condition		Voltage
Connector	Terminal				
M13	39	Ground	Selector lever	P or N position	(V) 15 10 5 0 10 ms JSMIA1472GB
				Other than above	0 V

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-99, "Removal and Installation".

NO >> GO TO 2.

2.CHECK P/N POSITION SIGNAL CIRCUIT

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

IPDI	M E/R	В	CM	Continuity
Connector	Terminal	Connector	Terminal	Continuity
E121	37	M13	39	Existed

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

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E121	37		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

NO >> Repair or replace harness.

B219B SECURITY CODE

< DTC/CIRCUIT DIAGNOSIS >

B219B SECURITY CODE

DTC Description INFOID:0000000013492609

DTC DETECTION LOGIC

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B219B	ID DISCORD SVT-BCM (Identification discord SVT - body control module)	The ID verification results between BCM and TCU are NG.

POSSIBLE CAUSE

- BCM
- TCU

FAIL-SAFE

Inhibit engine cranking

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

- YES >> Refer to SEC-153, "Diagnosis Procedure".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".
- NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

1. INTELLIGENT KEY REGISTRATION

Using CONSULT, register all Intelligent Keys again.

Can engine be started with the registered Intelligent Key?

YFS >> INSPECTION END

NO >> GO TO 2.

2.CHECK SELF DIAGNOSTIC RESULT

- Select "Self Diagnostic Result" mode of "BCM" using CONSULT.
- Erase DTC.
- Perform DTC CONFIRMATION PROCEDURE for DTC B219B. Refer to SEC-153, "DTC Description".

SEC-153

Is DTC detected?

YES >> GO TO 3.

NO >> INSPECTION END

3.CHECK COMMUNICATION BETWEEN BCM AND INTELLIGENT KEY

Turn the ignition switch ON for checking communication between BCM and Intelligent Key.

Can the ignition switch be turned ON?

YFS >> GO TO 4.

NO >> GO TO 5.

4.REPLACE TCU

- Replace TCU. Refer to AV-771, "Removal and Installation".
- Perform registration of all Intelligent Keys using CONSULT.

>> INSPECTION END

5. REPLACE BCM

Revision: November 2016

Replace BCM. Refer to BCS-99, "Removal and Installation".

SEC

Ν

Α

В

D

Е

F

Н

INFOID:0000000013492610

2016 Q50

B219B SECURITY CODE

< DTC/CIRCUIT DIAGNOSIS >

2. Perform registration of all Intelligent Keys using CONSULT.

>> INSPECTION END

B261B REMOTE ENGINE START

< DTC/CIRCUIT DIAGNOSIS >

B261B REMOTE ENGINE START

INFOID:0000000013492613

Α

В

D

Е

F

Н

DTC DETECTION LOGIC

DTC Description

DTC No.	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B261B	RES ENG RUN STUCK MALFNC (Remote engine starter engine run stuck malfunction)	Engine status signal, which is received from ECM via CAN communication 10 seconds after BCM stops engine while remote engine start function is in operation, indicates that engine is in operation status.

POSSIBLE CAUSE

- Harness or connectors (CAN communication line is open or shorted.)
- BCM
- ECM

FAIL-SAFE

Fuel cut

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B261B is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

>> Perform diagnosis of applicable. U1000: Refer to BCS-86, "DTC Description", U1010: BCS-87, YES "DTC Description".

NO >> GO TO 2.

2.PPERFORM DTC CONFIRMATION PROCEDURE

- Operate REMOTE ENGINE START button of Intelligent Key. Start engine.
- 2. Operate REMOTE ENGINE START button of Intelligent Key. Stop engine.
- Check DTC in "Self Diagnostic Result" mode of "BCM" using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-155</u>, "Diagnosis Procedure"

NO-1 >> To check malfunction symptom before repair: Refer to GI-45, "Intermittent Incident".

NO-2 >> Confirmation after repair: INSPECTION END

Diagnosis Procedure

INFOID:0000000013492614

1. CHECK DTC OF ECM

Check DTC in "Self Diagnostic Result" mode of "ECM" using CONSULT.

Is DTC detected?

YES

>> Perform the diagnosis procedure related to the detected DTC. Refer to EC6-164, "TURBO HIGH PRESSURE MODEL: DTC Index" (VR30DDTT engine models for USA and Canada) or EC6-1139, "DTC Index" (VR30DDTT engine models for Mexico).

NO >> GO TO 2.

2.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

SEC

M

Ν

Р

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

B26FE HOOD SWITCH

DTC Description

DTC DETECTION LOGIC

DTC	CONSULT screen items (Trouble diagnosis content)	DTC detecting condition
B26FE	HOOD SW CAN DIAG ERROR (Hood switch CAN communication diagnostic error)	Hood switch signals received from IPDM E/R via CAN communication are different.

POSSIBLE CAUSE

- Harness or connector (hood switch circuit is open or shorted)
- Hood switch
- IPDM E/R

FAIL-SAFE

Inhibit remote engine start

DTC CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC B26FE is displayed with DTC U1000 or U1010, first perform the trouble diagnosis for DTC U1000 or U1010.

Is applicable DTC detected?

YES >> Perform diagnosis of applicable. U1000: Refer to <u>BCS-86, "DTC Description"</u>, U1010: Refer to <u>BCS-87, "DTC Description"</u>.

NO >> GO TO 2.

2.PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Open the hood.
- 3. Close the hood.
- 4. Check Self Diagnostic Result mode of BCM using CONSULT.

Is DTC detected?

YES >> Refer to <u>SEC-156</u>, "<u>Diagnosis Procedure</u>".

NO >> Hood switch is OK.

Diagnosis Procedure

INFOID:0000000013492616

1. CHECK HOOD SWITCH SIGNAL

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

(+)				
Hood	Hood switch		(–) Condition	Voltage
Connector	Terminal			
	1	1 Ground	Close the hood	0 - 1 V
E192			Open the hood	9 – 16 V
E 192	2		Close the hood	9 – 16 V
	2		Open the hood	0 - 1 V

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

$\overline{2}$.check hood switch signal circuit

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

IPD	M E/R	Hood switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E126	96	E192	1	Existed
E120	94	E 192	2	Existed

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

IPDM E/R			Continuity
Connector	Terminal	Ground	Continuity
E126	94	Not existe	Not existed
⊏120	96		INOL EXISTED

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK HOOD SWITCH GROUND CIRCUIT

Check continuity between hood switch harness connector and ground.

Hood switch			Continuity
Connector	Terminal	Ground	Continuity
E192	3		Existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK HOOD SWITCH

Refer to SEC-157, "Component Inspection".

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

NO >> Replace hood lock assembly. Refer to <u>DLK-227, "HOOD LOCK: Removal and Installation"</u>.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

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	Continuity
Terr	minal	Condition	Continuity
1	3	Close the hood	Existed
ı		Open the hood	Not existed
2		Open the hood	Existed
2		Close the hood	Not existed

SEC

В

D

Е

F

Н

_

M

IV

Ν

INFOID:0000000013492617

Ρ

B26FE HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace hood lock assembly. Refer to <u>DLK-227</u>, "HOOD LOCK: Removal and Installation".

SECURITY INDICATOR LAMP

< DTC/CIRCUIT DIAGNOSIS >

SECURITY INDICATOR LAMP

Component Function Check

1. CHECK FUNCTION

- Perform "THEFT IND" in "ACTIVE TEST" mode of "IMMU" of "BCM" using CONSULT.
- Check security indicator lamp operation.

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>SEC-159</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

1.CHECK FUSE

- Turn ignition switch OFF.
- Check that the following fuse in the fuse block (J/B) is not blown (open).

Signal name	Fuse No.
Battery power supply	6 (10 A)
Ignition power supply	11 (5 A)

Is the fuse blown (open)?

YES >> Replace the blown (open) fuse after repairing the cause of blowing.

NO >> GO TO 2.

2.CHECK SECURITY INDICATOR LAMP POWER SUPPLY CIRCUIT

- Disconnect combination meter connector.
- Check voltage between combination meter harness connector and ground.

(+) Combination meter		(–)	Condition		Voltage
Connector	Terminal				
M58	45	Ground	Ignition switch	ON	Battery voltage
IVIOO	46	Giodila	ignition switch	OFF, ACC or ON	Dattery Voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK SECURITY INDICATOR LAMP SIGNAL

- Connect combination meter connector.
- Disconnect BCM connector.
- Check voltage between BCM harness connector and ground.

	(+)		
E	BCM	(–)	Voltage
Connector	Terminal		
M13	18	Ground	Battery voltage

Is the inspection result normal?

>> GO TO 5.

YES >> GO TO 4.

NO

SEC-159 Revision: November 2016 2016 Q50

SEC

Α

В

D

Е

F

Н

INFOID:0000000012792760

INFOID:0000000012792761

Ν

Р

SECURITY INDICATOR LAMP

< DTC/CIRCUIT DIAGNOSIS >

4. REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation".

>> INSPECTION END

5.CHECK SECURITY INDICATOR LAMP CIRCUIT

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

Combina	tion meter	BCM		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M57	7	M13	18	Existed

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

Combina	tion meter		Continuity
Connector	Connector Terminal		Continuity
M57	7		Not existed

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-141, "Removal and Installation".

NO >> Repair or replace harness.

HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

HOOD SWITCH

Component Function Check

INFOID:0000000014663647

Α

В

D

Е

F

Н

1. CHECK FUNCTION

- 1. Select "HOOD SW" in "Data Monitor" mode of "IPDM E/R" using CONSULT.
- 2. Check "HOOD SW" indication under the following condition.

Monitor item	Condition		Indication
HOOD SW	Hood	Open	ON
FIOOD SW	Hood	Close	OFF

Is the indication normal?

YES >> Hood switch is OK.

NO >> Refer to <u>SEC-161</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000014663648

1. CHECK HOOD SWITCH SIGNAL

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

(+)			
Hood	switch	(–)	Voltage
Connector	Terminal		
E77	2	Ground	9 – 16 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK HOOD SWITCH SIGNAL CIRCUIT

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

IPDI	M E/R	Hood switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E126	96	E77	2	Existed

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

IPDM E/R			Continuity
Connector Terminal		Ground	Continuity
E126	96		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-44, "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			Continuity
Connector	Terminal	Ground	Continuity
E77	1		Existed

SEC

M

N

Р

HOOD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4. CHECK HOOD SWITCH

Refer to SEC-162, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace hood lock assembly. Refer to <u>DLK-227</u>, "HOOD LOCK: Removal and Installation".

5. CHECK INTERMITTENT INCIDENT

Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000014663649

1. CHECK HOOD SWITCH

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

Hood switch Terminal		Condition	Continuity
		Condition	
1	2	Close the hood	Not existed
ı	2	Open the hood	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace hood lock assembly. Refer to <u>DLK-227</u>, "HOOD LOCK: Removal and Installation".

HEADLAMP FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

HEADLAMP FUNCTION

Component Function Check

INFOID:0000000012792765

Α

В

D

Е

F

Н

1. CHECK FUNCTION

- 1. Perform "HEAD LAMP(HI)" in "ACTIVE TEST" mode of "THEFT ALM" of "BCM" using CONSULT.
- 2. Check headlamps operation.

Test item		Description	
HEAD LAMP (HI)	ON	Headlamns (Hi)	Light
	OFF	- Headlamps (Hi)	Do not light

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>SEC-163, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000012792766

1. CHECK HEADLAMP FUNCTION

Refer to EXL-166, "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-45, "Intermittent Incident".

>> INSPECTION END

SEC

J

M

Ν

0

Р

Revision: November 2016 **SEC-163** 2016 Q50

< DTC/CIRCUIT DIAGNOSIS >

HORN FUNCTION

Component Function Check

INFOID:0000000012792767

1. CHECK FUNCTION 1

- 1. Disconnect vehicle security horn relay.
- Perform "VEHICLE SECURITY HORN" in "ACTIVE TEST" mode of "THEFT ALM" of "BCM" using CON-SULT.
- 3. Check the horn operation.

Test item		Description	
VEHICLE SECURITY HORN	ON	Horn (LOW and HIGH)	Sounds (for 0.5 sec.)

Is the operation normal?

YES >> GO TO 2.

NO >> Refer to <u>SEC-164, "Diagnosis Procedure"</u>.

2. CHECK FUNCTION 2

- 1. Reconnect vehicle security horn relay.
- Disconnect horn relay.
- Perform "VEHICLE SECURITY HORN" in "ACTIVE TEST" mode of "THEFT ALM" of "BCM" using CON-SULT.
- 4. Check the horn operation.

Test item		Description	
VEHICLE SECURITY HORN	ON	Vehicle security horn	Sounds (for 0.5 sec.)

Is the operation normal?

YES >> INSPECTION END

NO >> Refer to SEC-164, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000012792768

1.INSPECTION START

Perform inspection in accordance with procedure that confirms malfunction.

Which procedure confirms malfunction?

Component Function Check 1>>GO TO 2.

Component Function Check 2>>GO TO 5.

2. CHECK HORN FUNCTION

Check horn function using horn switch.

Do the horn sound?

YES >> GO TO 3.

NO >> Check horn circuit. Refer to HRN-3, "Wiring Diagram".

3.CHECK HORN RELAY CONTROL SIGNAL

- 1. Turn ignition switch ON.
- Select "VEHICLE SECURITY HORN" in "ACTIVE TEST" mode of "THEFT ALM" of "BCM" using CON-SULT.
- 3. Check voltage between IPDM E/R harness connector and ground.

	+) /I E/R	(–)	Test item		Voltage
Connector	Terminal				
E121	23	Ground	VEHICLE SECURITY	On	0 – 1 V
LIZI	23	Glound	HORN	Off	9 – 16 V

Is the operation normal?

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 10. NO >> GO TO 4.

4.CHECK HORN RELAY CONTROL SIGNAL CIRCUIT

1. Disconnect IPDM E/R connector and horn relay connector.

2. Check continuity between IPDM E/R harness connector and horn relay harness connector.

IPDM E/R		Horn relay		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E121	23	E102	2	Existed

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

IPDI	IPDM E/R		Continuity
Connector	Terminal	Ground	Continuity
E121	23		Not existed

Is the inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-44, "Removal and Installation".

NO >> Repair or replace harness.

5. CHECK VEHICLE SECURITY HORN RELAY CONTROL SIGNAL

Turn ignition switch ON.

Select "VEHICLE SECURITY HORN" in "ACTIVE TEST" mode of "THEFT ALM" of "BCM" using CON-SULT.

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

(+)		Test item		
IPDN	M E/R	(–)			Voltage
Connector	Terminal				
E121	22	Ground	VEHICLE SECURITY	On	0 – 1 V
LIZI	22	Oround	HORN	Off	9 – 16 V

Is the operation normal?

YES >> GO TO 10.

NO >> GO TO 6.

6. CHECK VEHICLE SECURITY HORN RELAY POWER SUPPLY

Check voltage between vehicle security horn relay harness connector and ground.

(+)			
Vehicle security horn relay		(–)	Voltage
Connector	Terminal		
E101	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 7.

NO-1 >> Check 10 A fuse [No. 65 located in the fuse block (J/B)].

NO-2 >> Check harness for open or short between vehicle security horn relay and fuse.

7.CHECK VEHICLE SECURITY HORN CONTROL CIRCUIT

Disconnect IPDM E/R connector and vehicle security horn relay connector.

Check continuity between IPDM E/R harness connector and vehicle security horn relay harness connector.

SEC

Α

В

D

Е

F

Н

ı

Ν

Revision: November 2016 **SEC-165** 2016 Q50

< DTC/CIRCUIT DIAGNOSIS >

IPDM E/R		Vehicle security horn relay		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E121	22	E101	2	Existed

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

IPDI	M E/R		Continuity
Connector	Terminal	Ground	Continuity
E121	22		Not existed

Is the inspection result normal?

YES >> GO TO 8.

NO >> Repair or replace harness.

8.CHECK VEHICLE SECURITY HORN CIRCUIT

- 1. Disconnect vehicle security horn connector.
- Check continuity between vehicle security horn relay harness connector and vehicle security horn harness connector.

Vehicle security horn relay		Vehicle security horn		Continuity
Connector	Terminal	Connector	Terminal	Continuity
E101	3	E73	1	Existed

3. Check continuity between vehicle security horn relay harness connector and ground.

Vehicle secu	rity horn relay		Continuity
Connector	Terminal	Ground	Continuity
E101	3		Not existed

4. Check continuity between vehicle security horn harness connector and ground.

Vehicle security horn			Continuity
Connector	Terminal	Ground	Continuity
E74	2		Existed

Is the inspection result normal?

YES >> GO TO 9.

NO >> Repair or replace harness.

9. CHECK VEHICLE SECURITY HORN RELAY

Refer to SEC-166, "Component Inspection".

Is the inspection result normal?

YES >> Replace vehicle security horn.

NO >> Replace vehicle security horn relay.

10. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to GI-45, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000012792769

1. CHECK VEHICLE SECURITY HORN RELAY

- Turn power switch OFF.
- Disconnect vehicle security horn relay.
- Check voltage between vehicle security horn relay terminal and ground under the following conditions.

< DTC/CIRCUIT DIAGNOSIS >

(+) Vehicle security horn relay Terminal	(-)	Condition	Voltage
3	Ground	12 V direct current supply between terminals ① and ②	Battery voltage
3	Cround	No current supply	0

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace vehicle security horn relay.

Α

В

С

D

Е

F

G

Н

-

J

SEC

L

M

Ν

0

Ρ

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

ENGINE DOES NOT START WHEN INTELLIGENT KEY IS INSIDE OF VEHICLE

Description INFOID:000000012792770

Engine does not start when push-button ignition switch is pressed while carrying Intelligent Key.

Diagnosis Procedure

INFOID:0000000012792771

1.PERFORM WORK SUPPORT

Perform "INSIDE ANT DIAGNOSIS" in "Work Support" mode of "INTELLIGENT KEY" of "BCM" using CONSULT.

Refer to SEC-37, "INTELLIGENT KEY: CONSULT Function (BCM - INTELLIGENT KEY)".

>> GO TO 2.

2. PERFORM SELF-DIAGNOSIS RESULT

Select "Self Diagnostic Result" mode of "BCM", and check whether or not DTC of inside key antenna is detected.

Is DTC detected?

YES >> Perform the trouble diagnosis for detected DTC. Refer to <u>BCS-63, "DTC_Index"</u>.

NO >> GO TO 3.

3.check push-button ignition switch

Check push-button ignition switch.

Refer to PCS-99, "Component Function Check".

Is the operation normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts.

4.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation"

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK

< SYMPTOM DIAGNOSIS >	
SECURITY INDICATOR LAMP DOES NOT TURN ON OR BLINK	А
'	00000012792772
Security indicator lamp does not blink when ignition switch is other than ON.	В
Diagnosis Procedure	00000012792773
1. CHECK SECURITY INDICATOR LAMP	С
Check security indicator lamp. Refer to SEC-159, "Component Function Check".	
Is the inspection result normal?	D
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.REPLACE BCM	Е
Replace BCM. Refer to BCS-99, "Removal and Installation"	
Is the inspection result normal? YES >> INSPECTION END	F
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".	G
	Н
	1
	J
	SEC
	L
	M
	N
	0

SEC-169 2016 Q50 Revision: November 2016

VEHICLE SECURITY SYSTEM CANNOT BE SET

< SYMPTOM DIAGNOSIS >

VEHICLE SECURITY SYSTEM CANNOT BE SET

INTELLIGENT KEY

INTELLIGENT KEY: Description

INFOID:0000000012792774

ARMED phase is not activated when door is locked using Intelligent Key.

INTELLIGENT KEY: Diagnosis Procedure

INFOID:0000000012792775

1. CHECK INTELLIGENT KEY SYSTEM (REMOTE KEYLESS ENTRY FUNCTION)

Press the LOCK button of Intelligent Key.

Are all doors LOCKED?

YES >> GO TO 2.

NO >> Check Intelligent Key system (remote keyless entry function). Refer to <u>DLK-152, "Diagnosis Procedure"</u>.

2. CHECK HOOD SWITCH

Check hood switch.

Refer to SEC-161, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace malfunctioning parts. Refer to SEC-161, "Diagnosis Procedure".

3.CHECK TRUNK ROOM LAMP SWITCH

Check trunk room lamp switch.

Refer to DLK-139, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts. Refer to <u>DLK-139</u>, "<u>Diagnosis Procedure</u>".

4. REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation"

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

DOOR REQUEST SWITCH

DOOR REQUEST SWITCH: Description

INFOID:0000000012792776

ARMED phase is not activated when door is locked using door request switch.

DOOR REQUEST SWITCH: Diagnosis Procedure

INFOID:0000000012792777

1. CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)

Carry the Intelligent Key and press the door request switch.

Are all doors LOCKED?

YES >> GO TO 2.

NO >> Check Intelligent Key system (door lock function). Refer to <u>DLK-149, "ALL DOOR REQUEST SWITCHES</u>: Diagnosis Procedure".

CHECK HOOD SWITCH

Check hood switch.

Refer to SEC-161, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace malfunctioning parts. Refer to SEC-161, "Diagnosis Procedure".

Revision: November 2016 SEC-170 2016 Q50

VEHICLE SECURITY SYSTEM CANNOT BE SET

< SYMPTOM DIAGNOSIS >

COTIVITION DIAGNOSIS	
3.CHECK TRUNK ROOM LAMP SWITCH	
Check trunk room lamp switch. Refer to DLK-139, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace malfunctioning parts. Refer to <u>DLK-139, "Diagnosis Procedure"</u> .	
4.REPLACE BCM	
Replace BCM. Refer to BCS-99, "Removal and Installation"	
Is the inspection result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".	
DOOR LOCK AND UNLOCK SWITCH	
DOOR LOCK AND LINEOCK SWITCH - Decaription	
DOOR LOCK AND UNLOCK SWITCH : Description	INFOID:0000000012792778
Armed phase is not activated when door is locked using door lock and unlock switch.	
DOOR LOCK AND UNLOCK SWITCH : Diagnosis Procedure	INFOID:0000000012792779
1. CHECK INTELLIGENT KEY SYSTEM (DOOR LOCK FUNCTION)	
Press the LOCK button of door lock and unlock switch.	
Are all doors LOCKED?	
YES >> GO TO 2.	. Dia a dia Daa
NO >> Check Intelligent Key system (door lock function). Refer to <u>DLK-145, "ALL DOOR cedure"</u> .	: Diagnosis Pro-
2.check hood switch	
Check hood switch.	
Refer to SEC-161, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace malfunctioning parts. Refer to <u>SEC-161</u> , "Diagnosis Procedure"	
3. CHECK TRUNK ROOM LAMP SWITCH	•
Check trunk room lamp switch. Refer to <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a doi.org="" href="https://doi.org/li> <a hr</td><td></td></tr><tr><td>Is the inspection result normal?</td><td></td></tr><tr><td>YES >> GO TO 4.</td><td></td></tr><tr><td>NO >> Repair or replace malfunctioning parts. Refer to <u>DLK-139, " procedure"<="" u="">.	
4.REPLACE BCM	
Replace BCM. Refer to BCS-99, "Removal and Installation"	
Is the inspection result normal?	
YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".	
DOOR KEY CYLINDER	
DOOR KEY CYLINDER : Description	INFOID:0000000012792780
ARMED phase is not activated when door is locked using mechanical key.	
DOOR KEY CYLINDER : Diagnosis Procedure	INFOID:0000000012792781
1.CHECK POWER DOOR LOCK SYSTEM	

Revision: November 2016 **SEC-171** 2016 Q50

Mechanical key inserted in the door key cylinder on driver side, turning it to LOCK position.

VEHICLE SECURITY SYSTEM CANNOT BE SET

< SYMPTOM DIAGNOSIS >

Are all doors LOCKED?

YES >> GO TO 2.

NO >> Check power door lock system. Refer to <u>DLK-151</u>, "<u>Diagnosis Procedure</u>".

2. CHECK HOOD SWITCH

Check hood switch.

Refer to SEC-161, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace malfunctioning parts. Refer to <u>SEC-161, "Diagnosis Procedure"</u>.

3. CHECK TRUNK ROOM LAMP SWITCH

Check trunk room lamp switch.

Refer to DLK-139, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts. Refer to DLK-139, "Diagnosis Procedure".

4. REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation"

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

VEHICLE SECURITY ALARM DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

< SYMPTOM DIAGNOSIS > VEHICLE SECURITY ALARM DOES NOT ACTIVATE		
Description	INFOID:0000000012792782	Α
Alarm does not operate when alarm operating condition is satisfied. Diagnosis Procedure	INFOID:0000000012792783	В
1.check door switch		С
Check door switch circuit. Refer to DLK-117, "Component Function Check". Is the inspection result normal?		D
YES >> GO TO 2. NO >> Repair or replace malfunctioning parts. Refer to <u>DLK-117, "Diagnosis Procedure"</u> . 2.CHECK HOOD SWITCH		Е
Check hood switch circuit. Refer to SEC-161, "Component Function Check". Is the inspection result normal?		F
YES >> GO TO 3. NO >> Repair or replace malfunctioning parts. Refer to <u>SEC-161, "Diagnosis Procedure"</u> . 3.CHECK HEADLAMP FUNCTION		G
Check headlamp function. Refer to SEC-163. "Component Function Check". Is the inspection result normal?		Н
YES >> GO TO 4. NO >> Repair or replace malfunctioning parts. Refer to <u>SEC-163, "Diagnosis Procedure"</u> .		I
4. CHECK HORN FUNCTION Check horn function. Refer to SEC-164, "Component Function Check".		J
Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace malfunctioning parts. Refer to SEC-164, "Diagnosis Procedure".		SEC
S.REPLACE BCM Replace BCM. Refer to BCS-99, "Removal and Installation"		L
Is the inspection result normal? YES >> INSPECTION END NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".		M
		Ν
		0
		Р

PANIC ALARM FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

PANIC ALARM FUNCTION DOES NOT OPERATE

Description INFOID:000000012792784

Panic alarm does not operate when press the PANIC ALARM button of Intelligent Key.

Diagnosis Procedure

INFOID:0000000012792785

1. CHECK INTELLIGENT KEY SYSTEM (REMOTE KEYLESS ENTRY FUNCTION)

Press the LOCK button of Intelligent Key.

Are all doors LOCKED?

YES >> GO TO 2.

NO >> Check Intelligent Key system (remote keyless entry function). Refer to <u>DLK-152</u>, "<u>Diagnosis Procedure</u>".

2.CHECK HEADLAMP FUNCTION

Check headlamp function.

Refer to SEC-163, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace malfunctioning parts. Refer to SEC-163, "Diagnosis Procedure".

3. CHECK HORN FUNCTION

Check horn function.

Refer to SEC-164, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace malfunctioning parts. Refer to SEC-164, "Diagnosis Procedure".

4.REPLACE BCM

Replace BCM. Refer to BCS-99, "Removal and Installation"

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

REMOTE ENGINE START FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

REMOTE ENGINE START FUNCTION DOES NOT OPERATE
Description INFOID:000000013497637
Engine does not start when operating REMOTE ENGNE START button of Intelligent Key. NOTE: Check that vehicle is under the condition shown in "Conditions of vehicle" before starting diagnosis, and check each symptom.
Conditions of Vehicle (Operating Conditions) • Shift position is in P position. • Vehicle security system is not in operation. • Registered Intelligent Key is not in the vehicle.
Diagnosis Procedure
1. CHECK INTELLIGENT KEY SYSTEM (REMOTE KEYLESS ENTRY FUNCTION)
Lock/unlock door with Intelligent Key. Refer to DLK-31, "REMOTE KEYLESS ENTRY FUNCTION: System Description". Is the inspection result normal?
YES >> GO TO 2. NO >> Check Intelligent Key system (remote keyless entry function). Refer to <u>DLK-152, "Diagnosis Procedure"</u> .
2.check door switch
Check door switch. Refer to DLK-117, "Component Function Check".
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace malfunctioning parts.
3. CHECK HAZARD SWITCH
Check hazard switch. Refer to EXL-196, "Component Function Check".
Is the inspection result normal? YES >> GO TO 4.
NO >> Repair or replace malfunctioning parts.
4.CHECK SHIFT LOCK SYSTEM Check shift lock system.
Refer to TM-266, "WITHOUT ICC: Component Function Check".
Is the inspection result normal?
YES >> GO TO 5. NO >> Repair or replace malfunctioning parts.
5. REPLACE BCM
Replace BCM. Refer to BCS-99, "Removal and Installation".
Is the result normal? YES >> INSPECTION END
NO >> Check intermittent incident. Refer to GI-45, "Intermittent Incident".

REMOVAL AND INSTALLATION

NATS ANTENNA AMP.

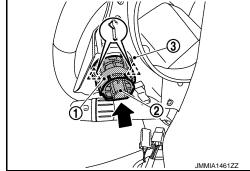
Removal and Installation

INFOID:0000000012792786

REMOVAL

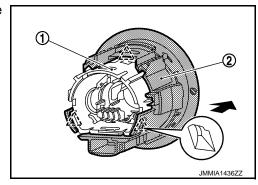
- 1. Disengage cluster lid A fixing pawls. Refer to IP-13, "Removal and Installation".
- 2. Disconnect push-button ignition switch connector and NATS antenna amp. connector.
- 3. Disengage NATS antenna amp. fixing pawls and then remove NATS antenna amp. ① and push-button ignition switch ② as a set from cluster lid A ③.





4. Disengage NATS antenna amp. fixing pawl and then remove NATS antenna amp. ② from push-button ignition switch ①.





INSTALLATION

Install in the reverse order of removal.