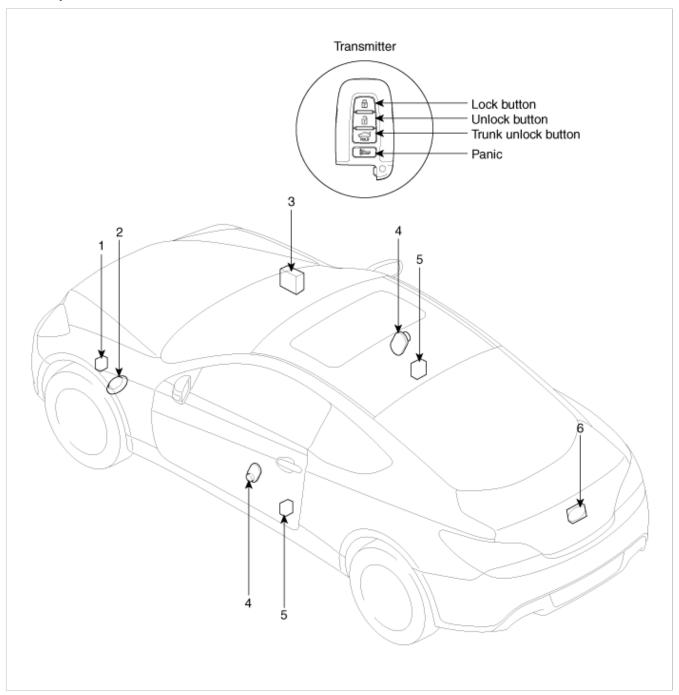
# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Keyless Entry And Burglar Alarm > Components and Components Location

### **Component Location**



- 1. Hood switch
- 2. Burglar horn
- 3. RF receiver

- 4. Front door switch
- 5. Front door lock actuator & switch
- 6. Trunk lid lock actuator

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Keyless Entry And Burglar Alarm > Description and Operation

**Description** 

#### **Burglar Alarm System**

The burglar alarm system is armed automatically after the doors, hood, and trunk lid are closed and locked.

The system is set off when any of these things occur:

- · A door is forced open.
- A door is unlocked without using the transmitter.
- The trunk lid is opened without using the key.
- The hood is opened.
- The engine starter circuit and battery circuit are bypassed by breaking the ignition switch.

When the system is set off, the alarm (horn) sounds and the hazard lamp flash for about two minutes or until the system is disarmed by unlocking the transmitter.

For the system to arm, the ignition switch must be off and the key removed. Then, the body control module must receive signals that the doors, hood, and trunk lid are closed and locked. When everything is closed and locked, none of the control unit inputs are grounded.

The door switches, hood switch and trunk lid switch are all close and lock the doors with the remote transmitter and then the system arms immediately.

If anything is opened or improperly unlocked after the system is armed, the body control module gets a ground signal from that switch, and the system is set off.

If one of the switches is misadjusted or there is a short in the system, the system will not arm. As long as the body control module continues to get a ground signal, it thinks the vehicle is not closed and locked and will not arm.

The receiver is integrated in the body control module.

#### **Keyless Entry System**

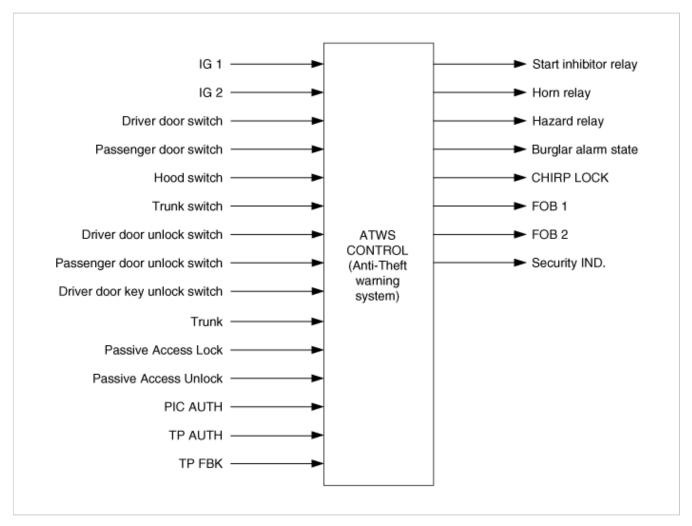
The burglar alarm system is integrated with the keyless entry system. The keyless entry system allows you to lock and unlock the vehicle with the remote transmitter. When you push the LOCK button, all doors lock. When you push the UNLOCK button all doors unlock.

The room lamp, if its switch is in the center position, will come on when you press the UNLOCK button. If you do not open a door, the light will go off in about 30 seconds, the doors will automatically relock, and the burglar alarm system will rearm. If you relock the doors with the remote transmitter within 30 seconds, the light will go off immediately.

You cannot lock or unlock the doors with the remote transmitter if the key is in the ignition switch.

The system will signal you when the doors lock and unlock by flashing the hazard lamp once when they lock, and twice when they unlock.

#### **Data Flow**



#### Transmitter(TX) Spec

- 1. Transmission Distance: 30m or more from outside of the car
- 2. Registration procedure of the transmitter
  - (1) In registration mode, it shall be possible to register up to Max 4EA.
  - (2) At re-registration, data are registered newly after deleting the previous TX DATA

No.	Saved CODE	CODE to change	Changed CODE
1	A	С	C (A is deleted)
2	A, B, C, D	Е	E (A, B, C, D is deleted)
3	A, B	C, D, E	C, D
4	A, B	C, C, D	С

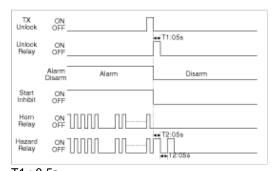
- (3) For the registration procedures by using Hi-scan tool, refer to "TRANSMITTER CODE REGISTRATION".
- 3. Transmitter signal & Receiver Spec
  - (1) Transmission signal
    - A. Transmit relevant transmission DATA (Transmission frame) twice by pushing TX SW.
    - $\ensuremath{\mathsf{B}}.$  Only LOCK signal is output when pushing TX LOCK SW and UNLOCK SW at the same time.

#### **Functions**

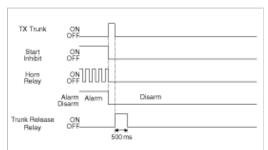
1. Disarm
Condition 1

State	Description
-------	-------------

Initial Condition	ALARM
Event	- IGN KEY ON during 30sec or ALT"L"=on during 3 sec.
	NON SMK(Smart key) - Any door open&TX UNLOCK - TX TRUNK-TX Lock & Lock confirm Failed
	SMK: - Any door open & RKE CMD=UNLOCK/Passive Access Unlock=1 - RKE_TRUNK=1-TP(Transponder)AUTH=1 / PIC AUTH=1 / TP FBK=X2 (X:Don't care) - RKE CMD=LOCK/Passive Access Lock=1 & Lock confirm Failed
	Mechanical Key OPTION Enable: - Mechanical UNLOCK - Mechanical LOCK&Lock confirm Failed
Action	The state goes to DISARM state - Horn Relay, Hazard Relay, Start Inhibit Relay OFF - TX Unlock  →Unlock Relay on for 0.5 sec →Hazard Relay on (twice)



T1: 0.5s T2: 0.5s +-0.1s



State	Description
Initial Condition	DISARMstate & (IGN KEY OUT) & Any Door open
Event	NON SMK : - Any door open & TX UNLOCK
	SMK: - Any door open & RKE CMD=UNLOCK / Passive Access Unlock=1 / RKE TRUNK=1 / Trunk reopen=1 - TP AUTH=1 / PIC AUTH=1 / TP FBK=X2 (X:Don't care)
Action	No state change - TX UNLOCK, RKE CMD=UNLOCK, Passive Access Unlock=1  →Hazard Relay for 0.5s ON/OFF(twice)

State	Description
Initial Condition	ARM WAIT state
Event	- Any door open or Hood Switch OPEN or Trunk switch OPEN - Any door is unlocked - Key In switch ON
	SMK: TP AUTH=1 / PIC AUTH=1 / TP FBK=X2
	Mechanical Key OPTION Enable: M UNLOCK
Action	The state goes to DISARM state - M-unlock →Hazard relay for 0.5 sec. ON/OFF(twice)

#### **Condition 4**

State	Description
Initial Condition	AUTOLOCK TIMER1 STATE
Event	- Any door open or Hood Swithc OPEN or Trunk Switch OPEN - Key In Switch ON - AUTO LOCK & Lock confirmation failure
	NON SMK spec: - AUTO LOCK & Lock confirmation failure
	SMK spec: - RKE CMD=LOCK / Passive Access Lock=1& Lock confirmation failure - TP AUTH=1 / PIC AUTH=1 / TP FBK=X2
	Mechanical Key option Enable: - Mechanical LOCK & Lock confirmation failure
Action	The state goes to DISARM state

#### **Condition 5**

State	Description
Initial Condition	AUTOLOCK TIMER2 STATE
Event	- Any door open - Key In Switch ON - AUTO LOCK & Lock confirmation failure - Hood Switch Open and Memory Hood was Close - Trunk Switch Open and Memory Trunk was Close
	NON SMK : - TX LOCK& Lock confirmation failure
	SMK: - RKE CMD=LOCK/ Passive Access Lock=1& Lock confirmation failure - TP AUTH=1/ PIC AUTH=1 / TP FBK=X2
	Mechanical Key option Enable: Mechanical LOCK & Lock confirmation failure
Action	The state goes to DISARM state

State	Description
Initial Condition	ARMSTATE
Event	- IGN KEY ON
	SMK: - TP AUTH=1 / PIC AUTH=1 / TP FBK=X2
	Mechanical Key option Enable: - Mechanical UNLOCK
Action	The state goes to DISARM state - M-unlock  →Hazard relay for 0.5 sec. ON/OFF(twice)

State	Description
Initial Condition	REARM state
Event	Execpt china spec: - IGN KEY ON during 30sec or ALT "L"=on during 3 sec.
	NON SMK : - TX LOCK & Lock confirmation failure - TX TRUNK
	SMK: - TP AUTH=1 / PIC AUTH=1 / TP FBK=X2 - RKE CMD=LOCK / PassiveAccess Lock=1 & Lock confirmation failure - RKE TRUNK=1 / Trunk reopen=1
	Mechanical Key option Enable: - Mechanical UNLOCK - Hazard relay for 0.5 sec. ON/OFF(twice) - Mechanical LOCK & Lock confirmation failure
Action	The state goes to DISARM state Start Inhibit Relay OFF

#### **Condition 8**

State	Description
Initial Condition	PREARM state
	- Key In Switch ON  - All entrance closed & Any Door is unlocked  - Any Door open & Tx Unlock
	NON SMK: - Any door open & TX UNLOCK
	SMK: - TP AUTH=1 / PIC AUTH=1 / TP FBK=X2 - Any door open & C RKE CMD=UNLOCK/ Passive Access Unlock=1
	Mechanical Key option Enable : - MECHANICAL UNLOCK
Action	The state goes to DISARMECHANICAL state - Hazard Relay for 0.5s ON/OFF(twice)

State	Description
Initial Condition	ARMHOLD
	- IGN KEY ON
	SMK: - TP AUTH=1 / PIC AUTH=1 / TP FBK=X2
	Mechanical Key option Enable: - MECHANICAL UNLOCK
Action	The state goes to DISAR state - M-unlock →Hazard relay for 0.5 sec. ON/OFF(twice)

#### 2. **Arm**

#### **Condition 1**

State	Description
Initial Condition	ARM state
Event	NON SMK : - TX LOCK  SMK: - RKE CMD=LOCK / Passive Access Lock=1
Action	No state change HazardRly 1Time on(1sec)

#### **Condition 2**

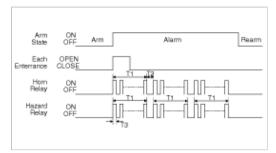
State	Description
Initial Condition	ARM WAIT state
Event	- Afte ARM WAIT TIMER finished
Action	The state goes to ARM state

#### **Condition 3**

State	Description
Initial Condition	ARMHOLD state
Event	Trunk close for at least Trunk Release Time Out(default 30sec) in ARMWAIT state
Action	The state goes to ARM state

#### 3. Alarm

State	Description
Initial Condition	ARM state
Event	Any door open or Hood Switch open or Trunk Switch open
Action	The state goes to ALARM state - Engine Start Inhibit is ON - The horn relay is ON one time for 27sec(±2sec) and OFF two times for 10sec(±1sec) The hazard is driven also (During Horn driving)



T1: 27s(±2sec), T2: 10s(±2sec), T3: 0.5s ± 0.1sec

#### **Condition 2**

State	Description
Initial Condition	REARM state
Event	Any door open or Hood Switch OPEN or Trunk Switch OPEN
Action	The state goes to ALARM state The horn relay is ON one time for 27sec(±2sec) and OFF two times for 10sec(±1sec). The hazard is driven also (During Horn driving)

#### **Condition 3**

State	Description
Initial Condition	ARMHOLD state
Event	Any door open or Hood Switch OPEN
Action	The state goes to ALARM state The horn relay is ON one time for 27sec(±2sec) and OFF two times for 10sec(±1sec). The hazard is driven also (During Horn driving).



#### 4. Arm Wait Mode

#### **Condition 1**

State	Description
Initial Condition	ARMWAIT state
Event	NON SMK : - TX LOCK
	SMK: - RKE CMD = LOCK / Passive Access Lock=1
Action	No state change Hazard Relay 1Time on(1sec)

State	Description
Initial Condition	DISARM state & IGN KEY OUT & All entrances closed(DOORS, HOOD and TRUNK)

Event	NON SMK: - Tx Lock & locked confirmed	
	SMK: - RKE CMD=LOCK / Passive Access Lock=1 & locked confirmed	
	Mechanical Key option Enable: - MECHANICAL LOCK & locked confirmed - DOOR LOCK state : Any door open → All door closed	
Action	- The state goes to ARMWAIT State - Start ARMWAITTIMER - Hazard Relay 1Time on(1sec)	

State	Description
Initial Condition	ALARM state & All entrances closed(DOORS, HOOD and TRUNK)
Event	NON SMK: - Tx Lock & locked confirmed
	SMK : - RKE CMD=LOCK / Passive Access Lock=1 & locked confirmed
	Mechanical Key option Enable: - MECHANICAL LOCK & locked confirmed
Action	- The state goes to ARMWAIT State - Horn Relay, Start Inhibit Relay = OFF - Hazard Relay 1Time on(1sec) (MECHANICAL LOCK : Except) - Start ARMWAIT TIMER

#### **Condition 4**

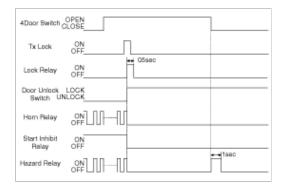
State	Description
Initial Condition	AUTOLOCK TIMER1 state
Event	AUTOLOCK & locked confirmed
	NON SMK: - Tx Lock & locked confirmed
	SMK: - RKE CMD=LOCK / Passive Access Lock=1 & locked confirmed
	Mechanical Key option Enable: MECHANICAL LOCK & locked confirmed
Action	- The state goes to ARMWAIT State  - Hazard Relay 1Time on(1sec)  - Start ARMWAIT TIMER

State	Description
Initial Condition	PREARM state
Event	All door closed and (Trunk Switch CLOSE & TRUNK MARK=CLEAR) & Hood Switch CLOSE & DOOR LOCK
Action	- The state goes to ARMWAIT State - Hazard Relay 1Time on(1sec)

#### - Start ARMWAIT TIMER

#### **Condition 6**

State	Description
Initial Condition	REARM state
Event	NON SMK : TX LOCK & locked confirmed
	SMK : - RKE CMD=LOCK/ Passive Access Lock=1 & locked confirmed
	Mechanical Key option Enable: - MECHANICAL LOCK & locked confirmed
Action	- The state goes to ARMWAIT State - Hazard Relay 1Time on(1sec) (MECHANICAL LOCK : Except) - Start Inhibit Relay OFF - Start ARMWAIT TIMER



### 5. Rearm Mode

#### **Condition 1**

State	Description
Initial Condition	ALARM state
Event	All entrance is closed & ALARM Patten finished
Action	The state goes to REARM state

#### 6. Autolocktimer1 Mode

#### **Condition 1**

State	Description
Initial Condition	ARM state
Event	NON SMK : TX UNLOCK
	SMK : RKE CMD=UNLOCK / Passive Access Unlock=1
Action	- The state goes to AUTO LOCK TIMER1 state  - Start AUTO LOCK TIMER1  - Hazard Relay Twice on (0.5s ON/0.5s OFF)

State	Description

Initial Condition	AUTO-LOCK TIMER1 state
Event	AUTOLOCK TIMER1 finished
	NON SMK: TX UNLOCK
	SMK: RKE CMD=UNLOCK / Passive Access Unlock=1
Action	No change state
	CASE1: AUTOLOCK TIMER1 Finished AUTOLOCK
	CASE2: TX UNLOCK, RKE CMD=UNLOCK, Passive Access Unlock=1 Hazard Relay Twice on(0.5s ON/0.5s OFF) Restart AUTOLOCK TIMER1

State	Description
Initial Condition	ARM WAIT state
Event	NON SMK : TX UNLOCK
	SMK: RKE CMD=UNLOCK / Passive Access Unlock=1
Action	- The state goes to AUTO LOCK TIMER1 state  - Start AUTO LOCK TIMER1  - Hazard Relay Twice on(0.5s ON/0.5s OFF).

#### **Condition 4**

State	Description
Initial Condition	DISARM state & All entrances closed(DOORS, HOOD & TRUNK) & IGN KEY OUT
Event	NON SMK: TX UNLOCK
	SMK: RKE CMD=UNLOCK/ Passive Access Unlock=1
Action	- The state goes to AUTO LOCK TIMER1 state - Start AUTO LOCK TIMER1 - Hazard Relay Twice on(0.5s ON/0.5s OFF).

State	Description
Initial Condition	ALARM state & All door closed and Trunk Switch CLOSE, Hood Switch CLOSE
Event	NON SMK: TX UNLOCK
	SMK: RKE CMD=UNLOCK / Passive Access Unlock=1
Action	- The state goes to AUTO LOCK TIMER1 state  - Start AUTO LOCK TIMER1  - Hazard Relay Twice on(0.5s ON/0.5s OFF).  - Start Inhibit Relay off / Horn Relay off

State	Description
Initial Condition	REARM state
Event	NON SMK: TX UNLOCK
	SMK: RKE CMD=UNLOCK/ Passive Access Unlock=1
Action	The state goes to AUTO LOCK TIMER1 state - Start AUTO LOCK TIMER1 - Hazard Relay Twice on(0.5s ON/0.5s OFF) Start Inhibit Relay off

### 7. Autolocktimer2 Mode

#### **Condition 1**

State	Description
Initial Condition	AUTO-LOCK TIMER2 state
Event	Finished AUTOLOCK TIMER2
	NON SMK: TX UNLOCK
	SMK: RKE CMD=UNLOCK/ Passive Access Unlock=1
Action	No change state
	CASE1: AUTOLOCK TIMER2 finished AUTOLOCK
	CASE2: TX UNLOCK, RKE CMD=UNLOCK, Passive Access Unlock=1 - Start AUTO LOCK TIMER2 - Hazard Relay Twice on(0.5s ON/0.5s OFF).

#### **Condition 2**

State	Description
Initial Condition	DISARM state & IGN KEY OUT & (Trunk or Hood Switch OPEN) state
Event	NON SMK : TX UNLOCK
	SMK: RKE CMD=UNLOCK/ Passive Access Unlock=1
Action	- The state goes to AUTO LOCK TIMER2 state  - Start AUTO LOCK TIMER2  - Hazard Relay Twice on(0.5s ON/0.5s OFF).  - Memo Hood/ Trunk state

State	Description
Initial Condition	ALARM state & All door closed & (Trunk or Hood Switch OPEN) state
Event	NON SMK: TX UNLOCK
	SMK: RKE CMD=UNLOCK / Passive Access Unlock=1

- The state goes to AUTO LOCK TIMER2 state - Horn Relay, Start Inhibit Relay = OFF
- Start AUTO LOCK TIMER2
- Hazard Relay Twice on(0.5s ON/0.5s OFF) Memo Hood/Trunk state
- S - H

State	Description			
Initial Condition	PREARM state & All door closed & (Trunk Switch or Hood OPEN)state			
Event	NON SMK: TX UNLOCK			
	SMK: RKE CMD=UNLOCK / Passive Access Unlock=1			
Action	- The state goes to AUTO LOCK TIMER2 state  - Start AUTO LOCK TIMER2  - Hazard Relay Twice on(0.5s ON/0.5s OFF).  - Memo Hood/Trunk state			

#### **Condition 5**

State	Description			
Initial Condition	ARMHOLD state			
Event	NON SMK: TX UNLOCK			
	SMK: RKE CMD=UNLOCK / Passive Access Unlock=1			
Action	- The state goes to AUTO LOCK TIMER2 state  - Start AUTO LOCK TIMER2  - Hazard Relay Twice on(0.5s ON/0.5s OFF).  - Memo Hood/Trunk state			

# 8. Prearm Mode Condition 1

State	Description			
Initial Condition	AUTO-LOCK TIMER2 state			
Event	AUTO LOCK & locked confirmed			
	NON SMK: TX LOCK & locked confirmed			
SMK :  RKE CMD=LOCK/ Passive Access Lock=1 & locked confirmed				
	Mechanical Key option Enable: MECHANICAL LOCK & locked confirmed			
Action	The state goes to PREARM state			

State	Description		
Initial Condition	DISARM state & IGN KEY OUT		

Event	NON SMK: - Any door open or Hood Switch OPEN or Trunk Switch OPEN state & locked confirmed
	SMK: - Any door open or Hood Switch OPEN or Trunk Switch OPEN state RKE CMD=LOCK / Passive Access Lock=1 & locked confirmed
	Mechanical Key option Enable:  MECHANICAL LOCK & locked confirmed  ALL DOOR LOCK state (Any door open → All doors closed) and (Trunk Switch OPEN or Hood Switch OPEN)
Action	The state goes to PREARM state

State	Description			
Initial Condition	ALARM state& IGN KEY OUT and(Any door open or Hood Switch OPEN or TrunkSwitch OPEN)			
Event	NON SMK : TX LOCK & locked confirmed			
	SMK : RKE CMD=LOCK/ Passive Access Lock=1 & locked confirmed			
	Mechanical Key option Enable: MECHANICAL LOCK & locked confirmed			
Action	The state goes to PREARM state Horn Relay, Hazard Relay, Start Inhibit Relay → OFF			

#### **Condition 4**

State	Description			
Initial Condition	RMHOLD state			
Event	ON SMK: K LOCK & locked confirmed			
SMK: RKE CMD=LOCK/ Passive Access Lock=1 & locked confirmed				
	Mechanical Key option Enable: MECHANICAL LOCK locked confirmed			
Action	The state goes to PREARM state			

#### **Condition 5**

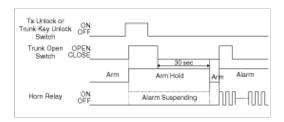
State	Description		
Initial Condition	ARMWAIT state		
Event	NON SMK: TX TRUNK		
	SMK: RKE TRUNK=1 / Trunk reopen=1		
Action	The state goes to PREARM state Start TRUNKTIMER TRUNK MARK = Set		

State	Description

Initial Condition	PREARM state	
Event	Trunk Switch OPEN TRUNKTIMER expired (Trunk Release Time Out: 30s)	
Action	No state change CASE Trunk Switch OPEN: • Stop to TRUNKTIMER. • TRUNK MARK = Clear CASE TRUNKTIMER expired • TRUNK MARK = Clear	

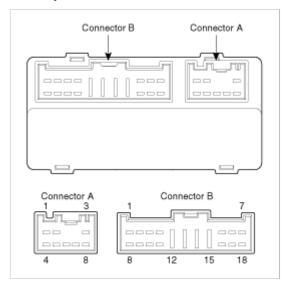
# 9. Armhold Mode Condition 1

State	Description
Initial Condition	ARM state
Event	NON SMK: TX TRUNK
	SMK: RKE TRUNK=1 / Trunk reopen=1
Action	The state goes to ARMHOLD state



# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Keyless Entry And Burglar Alarm > Repair procedures

#### Inspection



#### **Burglar Alarm Horn**

Check for continuity between the terminals.

- 1. There should be continuity between the No.8 and No.9 terminals when power and ground are connected to the No.8 and No.1 in the ICM relay B terminals.
- 2. There should be no continuity between the No.8 and No.9 terminals when power is disconnected.

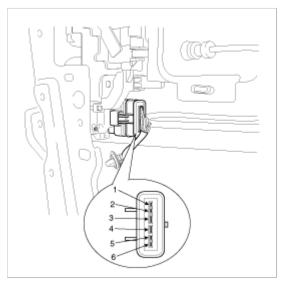
### **Burglar Alarm**

Check for continuity between the terminals.

- 1. There should be no continuity between the No.11 and No.10 terminals when power and ground are connected to the No.11 and No.4 in the ICM relay B terminals.
- 2. There should be continuity between the No.11 and No.10 terminals when power is disconnected.

#### Front Door Lock Actuator Inspection

- Remove the front door trim.
   (Refer to the Body group "Front door")
- 2. Remove the front door module.
- 3. Disconnect the 6P connector from the actuator.

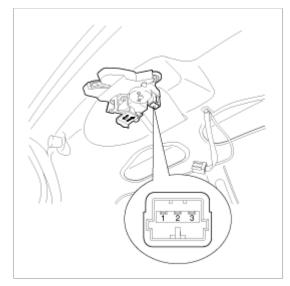


4. Check actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

Terminal Position		4	3
Front left	Lock	$\oplus$	$\ominus$
Frontier	Unlock	$\Theta$	0
Format diabat	Lock	$\ominus$	0
Front right	Unlock	0	$\ominus$

#### **Trunk Lid Release Actuator Inspection**

- Remove the trunk lid trim panel.
   (Refer to the Body group "Trunk lid")
- 2. Disconnect the 3P connector from the actuator.

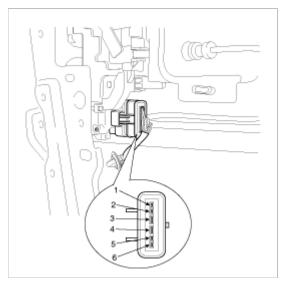


3. Check actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

Position	1	2
Lock release(Open)	$\Theta$	0

#### **Front Door Lock Switch Inspection**

- Remove the front door trim panel.
   (Refer to the Body group "Front door")
- 2. Remove the front door module.
- 3. Disconnect the 6P connector from the actuator.



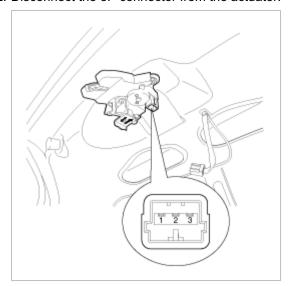
4. Check for continuity between the terminals in each switch position according to the table.

Position	Terminal	5	6	1	2
Front left	Lock				
	Unlock	$\overline{}$	$\overline{}$		
Front right	Lock				
	Unlock			0	9

### **Trunk Lid Open Switch Inspection**

Remove the trunk lid trim.
 (Refer to the Body group - "Trunk lid")

2. Disconnect the 3P connector from the actuator.

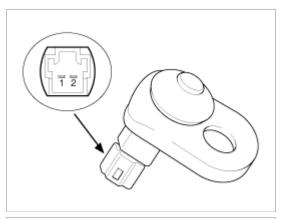


3. Check for continuity between the terminals in each switch position according to the table.

Position	1	3
Lock release(Open)	<u> </u>	

# **Door Switch Inspection**

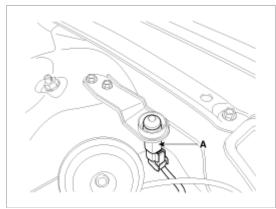
Remove the door switch and check for continuity between the terminals.



Position	1	2	Body (Ground)
Free(Door open)	$\overline{\bigcirc}$	$\overline{}$	_
Push(Door close)			

# **Hood Switch Inspection**

1. Disconnect the 1P connector from the hood switch(A).

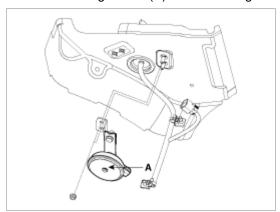


2. Check for continuity between the terminals and ground according to the table.

Terminal	2	1
Hood open (Free)	0	
Hood close (Push)		

## **Burglar Horn Inspection**

1. Remove the burglar horn(A) after removing 1 bolt and disconnect the 2P connector from the burglar horn.



2. Test the burglar horn by connecting battery power to the terminal 1 and ground the terminal 2.

3. The bu	ırglar horn should	I make a sound. If t	he burglar horn fa	ails to make a sou	ınd replace it.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Keyless Entry And Burglar Alarm > Transmitter > Specifications

## **Specifications**

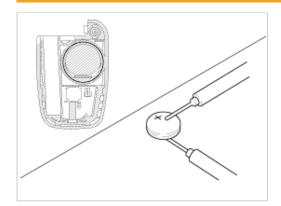
Items	Specifications
Keyless entry transmitter Power source	Lithium 3V battery (1EA, CR2032)
Transmissible distance	10m or more
Life of battery	2 years or more (at 20 times per day)
Button	Door lock Door unlock Trunk lid open Panic
ransmission frequency 315 MHz	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Keyless Entry And Burglar Alarm > Transmitter > Repair procedures

#### Inspection

- 1. Check that the red light flickers when the door lock or unlock button is pressed on the transmitter.
- 2. Remove the battery and check voltage if the red light doesn't flicker.

#### Standard voltage: 3V



- 3. Replace the transmitter battery with a new one, if voltage is below 3V then try to lock and unlock the doors with the transmitter by pressing the lock or unlock button five or six times.
- 4. If the doors lock and unlock, the transmitter is O.K, but if the doors don't lock and unlock, register the transmitter code, then try to lock and unlock the doors.
- 5. If the doors lock and unlock, the transmitter is O.K, but if the doors don't lock and unlock, replace the transmitter.

#### **Transmitter Code Registration (Using Code Saver)**

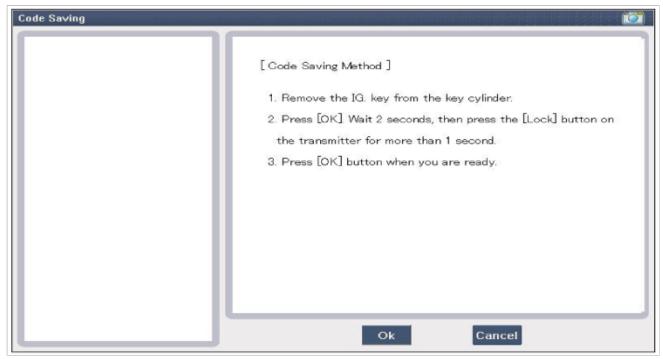
- 1. Open Door.
- 2. Connect POWER (B+) and GND, signal line of Code Saver.
- 3. If connection is normal, signal line is activated and RED LED turns ON.
- 4. If SW of Code Saver turns ON, data via signal line will be transmitted.
- 5. BCM enters into Code Save mode when it receives data from Code Saver and send Code Save Start signal via signal line.
- 6. Code Saver turns Green LED ON when it receives Code Save Start signal.
- 7. When you press Lock or Unlock button of transmitter, BCM will save Codes.
- 8. If there are 2 transmitters for Code Saving, register by performing item 7).
- 9. If SW of Code Saver turns OFF or is disconnected, Code Saving mode will be finished.

#### **Transmitter Code Registration (Using GDS)**

- 1. Connect the DLC cable of GDS to the data link connector (16 pins) in driver side crash pad lower panel, turn the GDS ON.
- 2. Select the vehicle model and then do "CODE SAVING"



3. After selecting "CODE SAVING" menu, button "ENTER" key, then the screen will be shown as below.



4. After removing the ignition key from key cylinder, push "ENTER" key to proceed to the next mode for code saving. Follow steps 1 to 4 and then code saving is completed.

