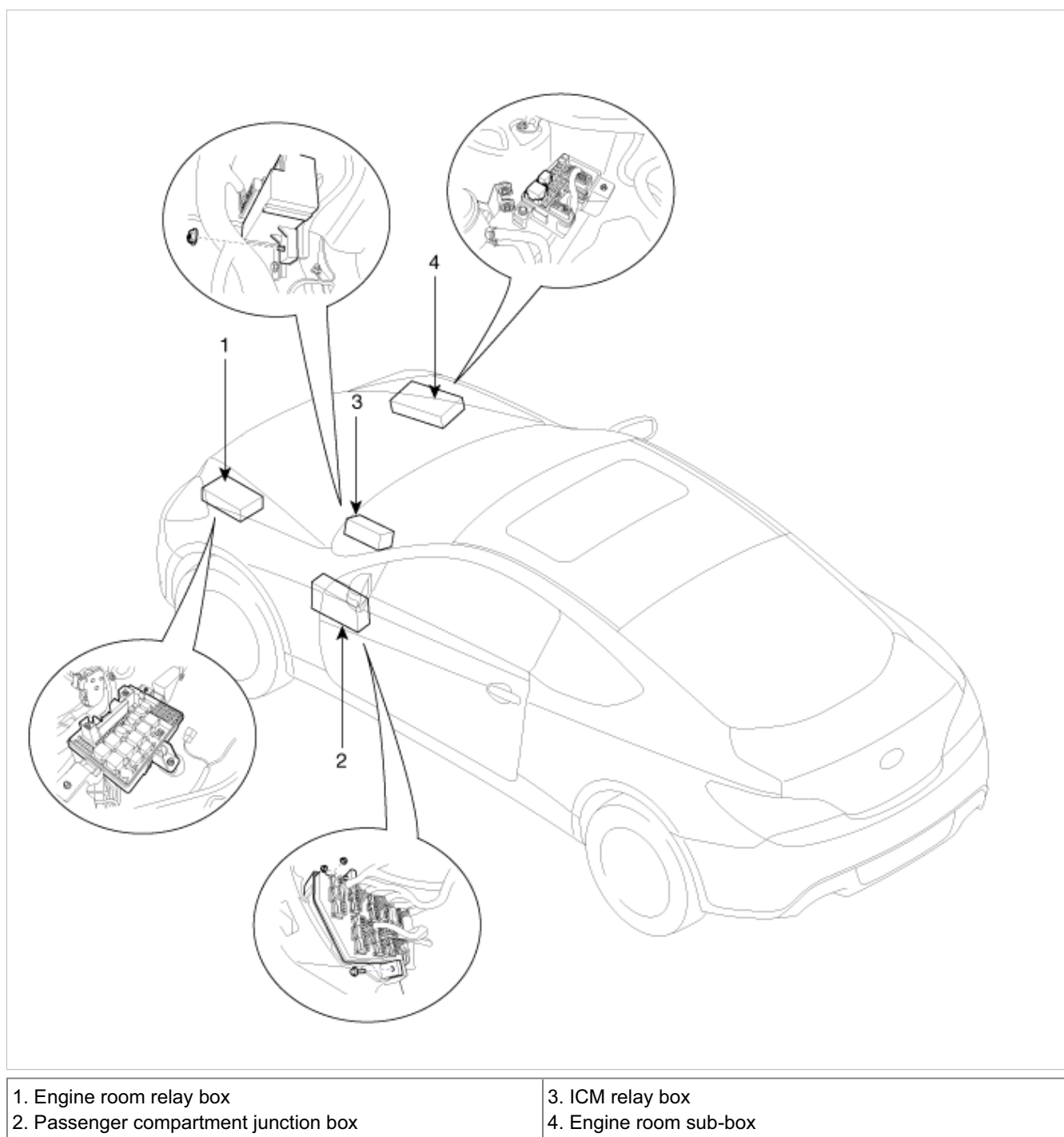
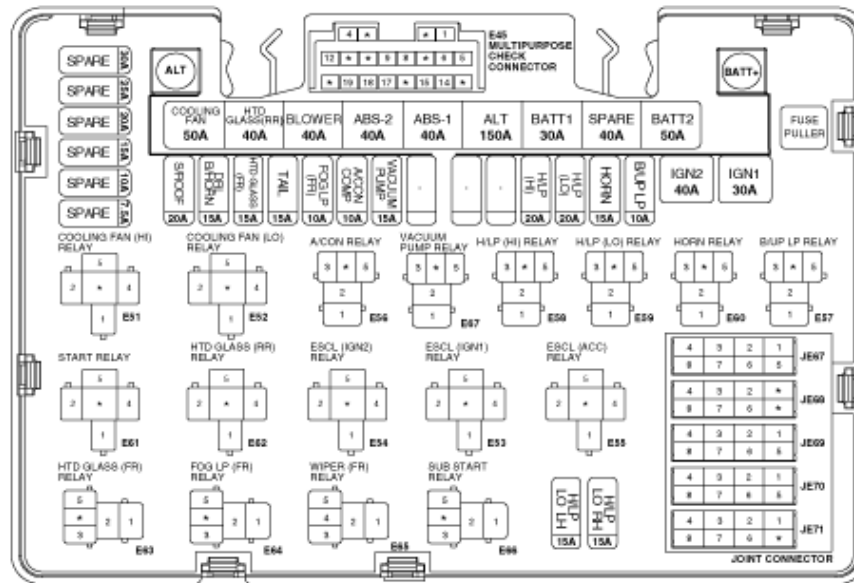


Component Location



GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Fuses And Relays > Relay Box (Engine Compartment) > Components and Components Location

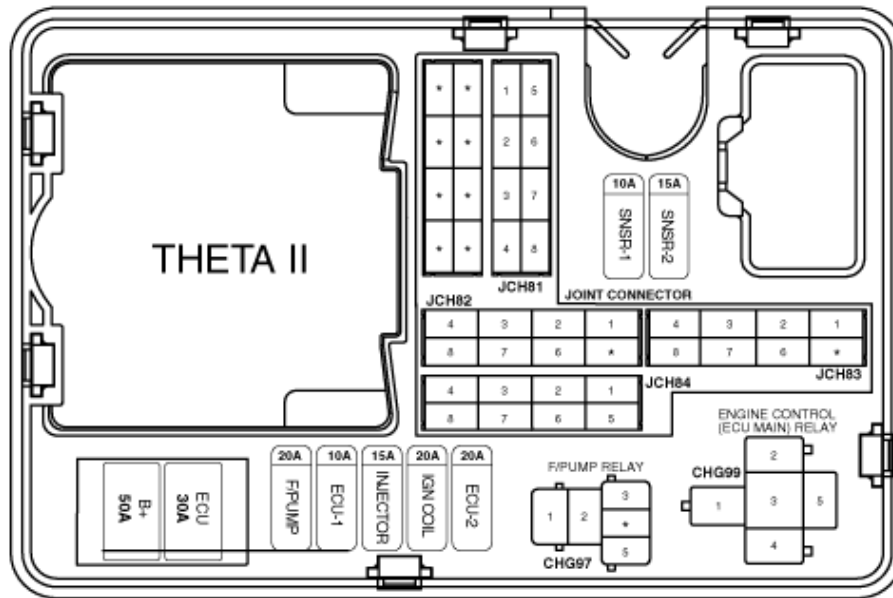
Components



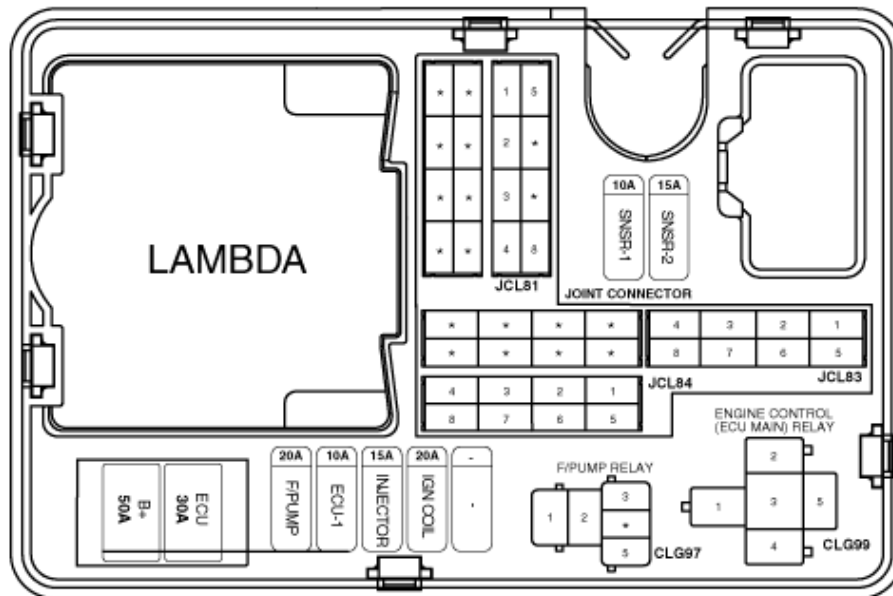
Description		(A)	Circuit Protected
MULTI FUSE	BATT 2	50A	I/P junction box Fuse(STOP LP 15A, AUTO SHIFT LOCK 7.5A, POWER CONNECTOR (AUDIO 15A, MEMORY 10A) DR LOCK 10A, P/SEAT (LH) 30A), FOG LP(RR) 10A)
	BATT 1	30A	I/P junction box Fuse Fuse (T/LID OPEN 15A, AMP 20A, HAZARD 10A, ESCL(PDM-A) 25A, P/WDW(RH) 25A P/WDW(LH) 25A, ESCL(PDM-B) 10A, ESCL SW 10A)
	ALT	150A	Generator, Fuse(ABS-1 40A, ABS-2 40A, BLOWER 40A, HTD GLASS(RR) 40A, COOLING FAN 50A, HTD GLASS(FR) 15A TAIL 15A, VACUUM PUMP 15A, DRL B/HORN 15A, A/CON COMP 10A, FOG LP(FR) 10A, S/ROOF 20A)
	ABS-1	40A	ESC control module, ABS control module, Multipurpose check connector
	ABS-2	40A	ESC control module, ABS control module
	BLOWER	40A	Blower relay
	HTD GLASS (RR)	40A	HTD glass (RR) relay
	COOLING FAN	50A	Cooling fan (HI) relay, Cooling fan (LO) relay
FUSE	IGN 1	30A	ESCL (IGN1) relay, ESCL (ACC) relay, Ignition switch
	IGN 2	40A	ESCL (IGN2) relay, Start relay, Ignition switch
	B/UP LP	10A	B/UP LP relay
	HORN	15A	Horn relay
	H/LP (LO)	20A	H/LP (LO) relay
	H/LP (HI)	20A	H/LP (HI) relay
	VACUUM PUMP	15A	Vacuum pump relay
	A/CON COMP	10A	A/CON relay
	FOG LP (FR)	10A	FOG LP (FR) relay
	TAIL	15A	TAIL relay
	HTD GLASS (FR)	15A	HTD glass (FR) relay
	DRL, B/HORN	15A	I/P junction box (DRL control module)
	S/ROOF	20A	Sunroof control module
	H/LP LO RH	15A	Head lamp RH, Head lamp leveling device actuator RH
	H/LP LO LH	15A	Head lamp LH, Head lamp leveling device actuator LH

※ USE THE DESIGNATED FUSE & RELAY ONLY

G4KF-GSL 2.0L



G6DA-GSL 3.8L



※ USE THE DESIGNATED FUSE & RELAY ONLY

CIRCUIT

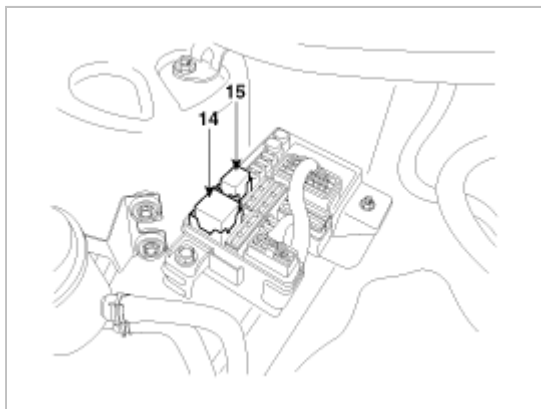
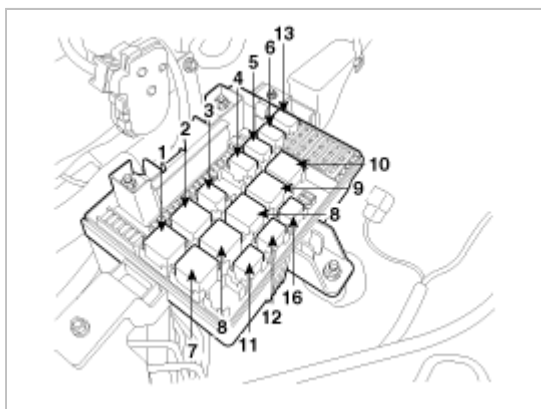
Description		(A)	Circuit Protected
FUSE	B+	50A	Fuse (F/PUMP 20A, ECU-1 10A, ECU 30A)
	ECU	30A	Engine control relay
	F/PUMP	20A	F/PUMP relay
	ECU-1	10A	ECM, TCM
	INJECTOR	15A	G4KF Injector #1, #2, #3, #4, F/PUMP relay
			G6DA Injector #1, #2, #3, #4, #5, #6, F/PUMP relay, ECM
	IGN COIL	20A	G4KF Ignition coil #1, #2, #3, #4, Condenser
			G6DA Ignition coil #1, #2, #3, #4, #5, #6, Condenser #1, #2
	SNSR-1	10A	G4KF E/R junction box (A/CON relay, Cooling fan (HI) relay, Cooling fan (LO) relay), Oxygen sensor (UP/DOWN)
			G6DA E/R junction box (A/CON relay, Cooling fan (HI) relay, Cooling fan (LO) relay), Oxygen sensor (#1, #2, #3, #4) ECM, Mass airflow sensor
	SNSR-2	15A	G4KF Oil control valve #1, #2, Canister purge control solenoid valve, RCV control solenoid valve, Immobilizer module Crankshaft position sensor, WGT control solenoid valve, Camshaft position sensor #1, #2, Canister close valve
			G6DA Oil control valve #1, #2 (INTAKE), Oil control valve #1, #2(EXHAUST), ECM, Purge control solenoid valve Immobilizer module, Canister close valve
	ECU-2	20A	ECM(G4KF)

※ USE THE DESIGNATED FUSE & RELAY ONLY

GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Body Electrical System > Fuses And Relays > Relay Box (Engine Compartment) > Repair procedures

Inspection

1. Cooling fan (HI) relay	9. ESCL (IGN1)
2. Cooling fan (LO) relay	10. ESCL (ACC)
3. A/con relay	11. Fog lamp relay
4. Head lamp (HI) relay	12. Wiper relay
5. Head lamp (LO) relay	13. Back up lamp relay
6. Horn relay	14. ECU main relay
7. Start relay	15. Fuel pump relay
8. ESCL (IGN2)	16. Sub start relay

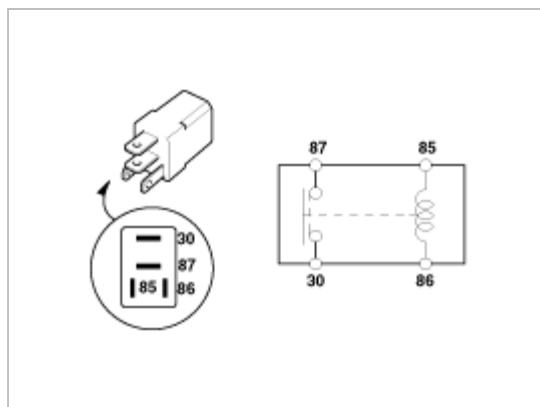


Power Relay Test (Type A)

Check for continuity between the terminals.

1. There should be continuity between the No.30 and No.87 terminals when power and ground are connected to the No.85 and No.86 terminals.
2. There should be no continuity between the No.30 and No.87 terminals when power is disconnected.

[A] Type:	
3. A/con relay	11. Fog lamp relay
4. Head lamp (LO) relay	13. Back up lamp relay
5. Head lamp (HI) relay	15. Fuel pump relay
6. Horn relay	16. Sub start relay



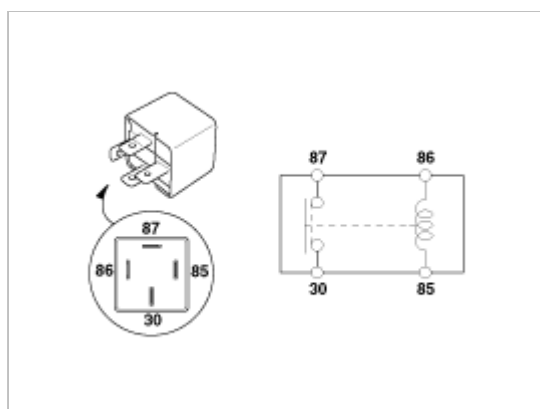
Terminal	85	86	87	30
Power				
Disconnected	○	○		
Connected	⊖	⊕	○	○

Power Relay Test (Type B)

Check for continuity between the terminals.

1. There should be continuity between the No.30 and No.87 terminals when power and ground are connected to the No.85 and No.86 terminals.
2. There should be continuity between the No.30 and No.87a terminals when power is disconnected.

[B] Type:	
1. Cooling fan (HI) relay	8. ESCL (IGN2)
2. Cooling fan (LO) relay	9. ESCL (IGN1)
3. Start relay	10. ESCL (ACC)



Terminal	86	85	87	30
Power				
Disconnected	○	○		
Connected	⊖	⊕	○	○

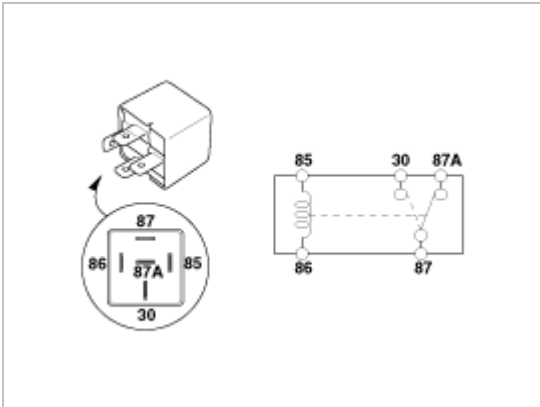
Power Relay Test (Type C)

Check for continuity between the terminals.

1. There should be continuity between the No.30, 87a and No.87 terminals when power and ground are connected to the No.85 and No.86 terminals.
2. There should be no continuity between the No.30, 87a and No.87 terminals when power is disconnected.

[C] Type :

14. ECU main relay



Terminal	86	85	87	87a	30
Power					
Disconnected	○	○			
Connected	⊖	⊕	○	○	○

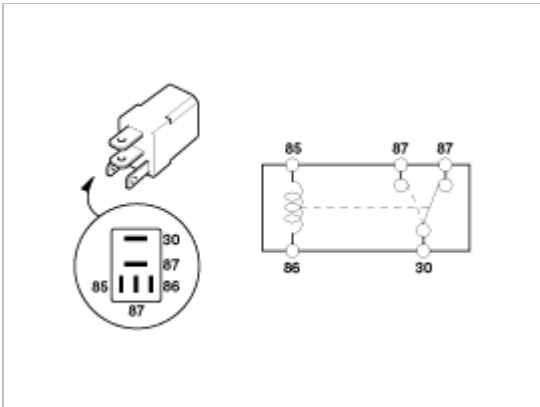
Power Relay Test (Type D)

Check for continuity between the terminals.

1. There should be continuity between the No.30 and No.87 terminals when power and ground are connected to the No.85 and No.86 terminals.
2. There should be continuity between the No.30 and No.87 terminals when power is disconnected.

[D] Type:

12. Wiper relay



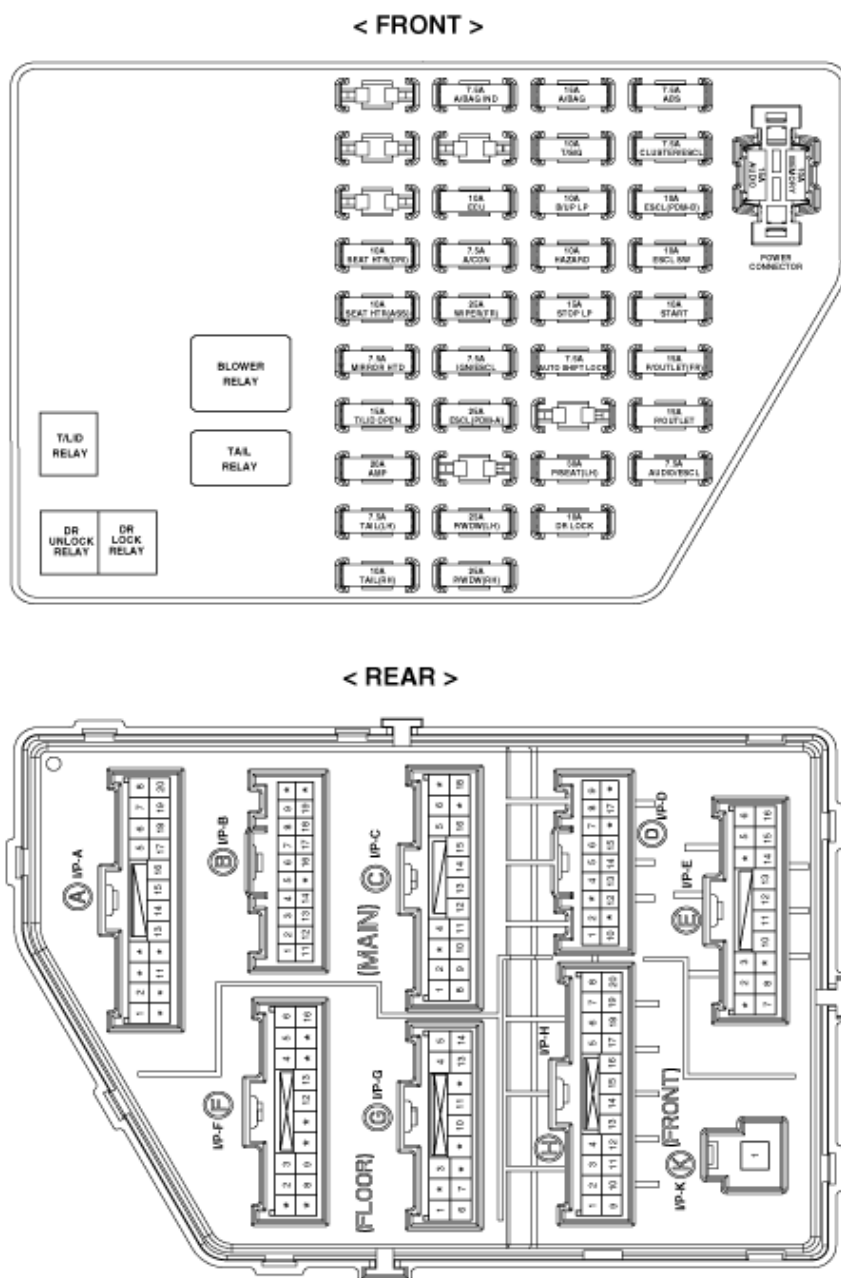
Terminal	85	86	30	87	87
Power					
Disconnected			○	○	○
Connected	⊖	⊕	○	○	

Fuse Inspection

1. Be sure there is no play in the fuse holders, and that the fuses are held securely.
2. Are the fuse capacities for each circuit correct?
3. Are there any blown fuses?

If a fuse is to be replaced, be sure to use a new fuse of the same capacity. Always determine why the fuse blew first and completely eliminate the problem before installing a new fuse.

Components



※ USE THE DESIGNATED FUSE & RELAY ONLY

CIRCUIT

Description		(A)	Circuit Protected
FUSE	ABS	7.5A	ESC switch, ESC control module, ABS control module, Multipurpose check connector
	CLUSTER/ESCL	7.5A	Smart key control module, PDM, Sport mode switch, BCM, Instrument cluster (IND.), Multifunction switch (Remocon)
	ESCL(PDM-B)	10A	PDM, Smart key control module
	ESCL SW	10A	FOB holder, Start stop button switch
	START	10A	ECM, E/R junction box(start relay, sub start relay), Ignition lock switch, ICM relay box(B/Horn relay)
	P/OUTLET (FR)	15A	Front power outlet
	P/OUTLET	15A	Console power outlet
	AUDIO/ESCL	7.5A	Audio, Multi monitor, Power outside mirror switch, BCM, PDM, Smart key control module
	A/BAG	15A	SRS control module, PQDS module, Teletail lamp
	T/SIG	10A	Hazard switch
	B/UP LP	10A	Back-up lamp switch (M/T), E/R junction box LH (B/UP LP relay)
	HAZARD	10A	Hazard switch, ICM Relay box (hazard relay)
	STOP LP	15A	Stop lamp switch
	AUTO SHIFT LOCK	7.5A	E/R junction box LH (Multipurpose check connector), Data link connector, Sport mode switch, Key solenoid
	P/SEAT(LH)	30A	Driver power seat switch
	DR LOCK	10A	DR LOCK/UNLOCK relay, ICM relay box (Two turn unlock relay)
	A/BAG IND	7.5A	Instrument cluster (Air bag IND.)
	ECU	10A	ECM, TCM, Stop lamp switch, sub start relay (A/T(G4KF)), Cruise clutch pedal position switch
	A/CON	7.5A	BCM, A/C control module, In-car temperature sensor, Blower relay
	WIPER(FR)	25A	Multifunction switch (Wiper), Front wiper motor, E/R junction box LH (WIPER (FR) relay)
	IGN/ESCL	7.5A	PDM, E/R junction box LH (H/LP(HI)/(LO) relay, Fog LP (FR) relay, Vacuum pump relay), Vacuum switch, Sunroof control module, Electro chromic mirror
	ESCL(PDM-A)	25A	Auto head lamp leveling device sensor, Head lamp leveling device actuator LH/RH, Home link
	PWDW(LH)	25A	PDM
	PWDW(RH)	25A	Driver safety window module
	SEAT HTR(DR)	10A	Passenger safety window module
	SEAT HTR(AS)	10A	Driver seat warmer switch
	MIRROR HTD	7.5A	Passenger seat warmer switch
	T/LID OPEN	15A	A/C control module, Power outside mirror LH/RH
	AMP	20A	Trunk lid & Fuel filler door switch (Fuel filler door switch), T/LID relay
	TAIL(LH)	7.5A	AMP
	TAIL(RH)	10A	Head lamp LH, Rear combination lamp LH
			Head lamp RH, Rear combination lamp RH, License lamp, Glove box lamp, Rheostat, Driver/Passenger seat warmer switch, ESC switch, Multi monitor
			Hazard switch, Audio, Power window main switch, Passenger power window switch, Sport mode switch, A/C control module, USB & AUX jack
			Instrument cluster (ILL.), Multifunction switch (Remocon)
POWER CONNECTOR	AUDIO	15A	Audio
	MEMORY	10A	Trunk room lamp, Power outside mirror switch, MAP lamp, Auto light & Photo sensor/Security indicator, Multi monitor, RF receiver, Vanity lamp LH/RH, Home link
			Instrument cluster (MICOM, IND.), A/C control module, Rear parking assist buzzer, Ignition key ILL. & Door warning switch, BCM, Tire pressure monitoring module

✳ USE THE DESIGNATED FUSE & RELAY ONLY

Fuse Inspection

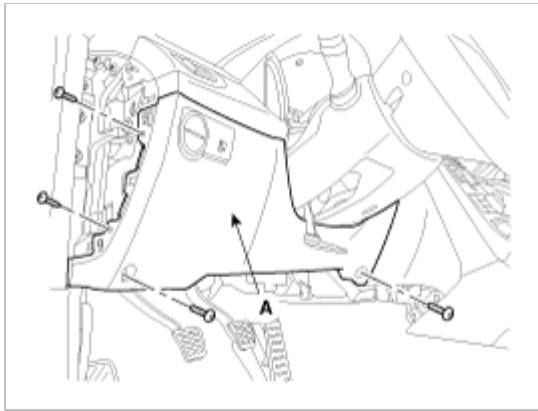
1. Be sure there is no play in the fuse holders, and that the fuses are held securely.
2. Are the fuse capacities for each circuit correct?
3. Are there any blown fuses?

If a fuse is to be replaced, be sure to use a new fuse of the same capacity. Always determine why the fuse blew first and completely eliminate the problem before installing a new fuse.

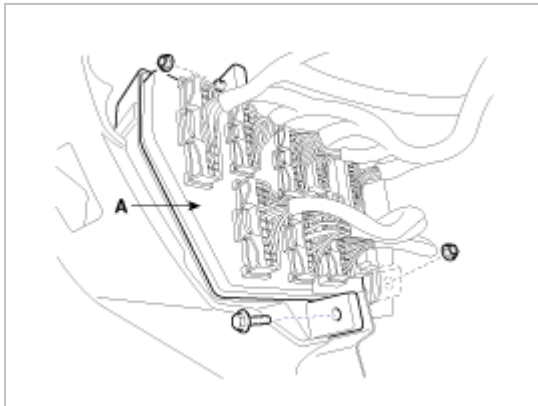
Replacement

Passenger Compartment Junction Box

1. Disconnect the negative(-) battery terminal.
2. Remove the crash pad lower panel(A).
(Refer to BD group - "Crash pad")

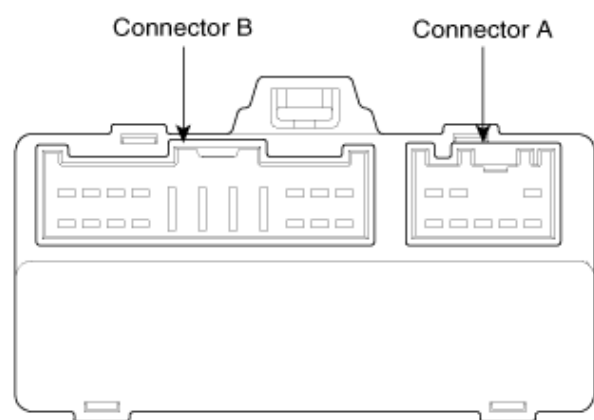
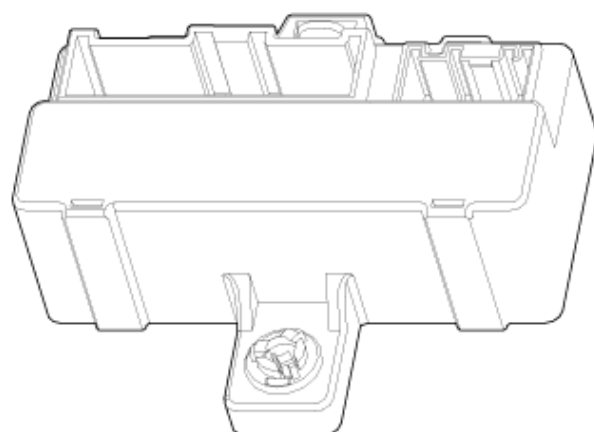


3. Remove the passenger compartment junction box(A) after loosening the mounting nut(2EA) and bolt(1EA) and disconnecting the connectors.



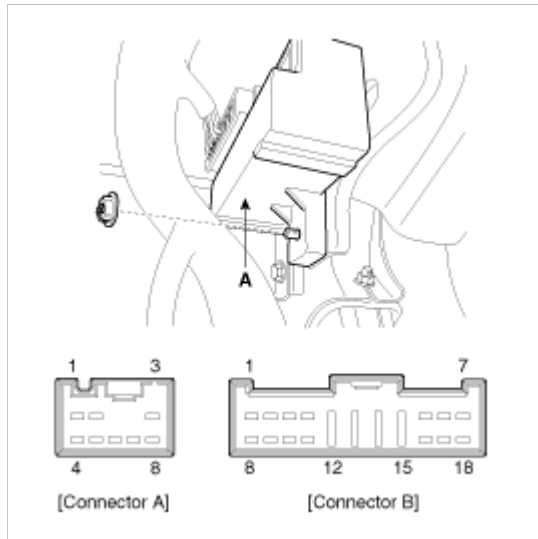
4. Installation is the reverse of removal.

Component



Description

The ICM is united with many kinds of relay and installed inside the driver crash pad lower panel.



Inspection

Hazard Lamp Relay

Check for continuity between the terminals.

1. There should be continuity between the No.13 and No.12 terminals when power and ground are connected to the No.13 and No.3 in the ICM relay B terminals.
2. There should be no continuity between the No.13 and No.12 terminals when power is disconnected.

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.

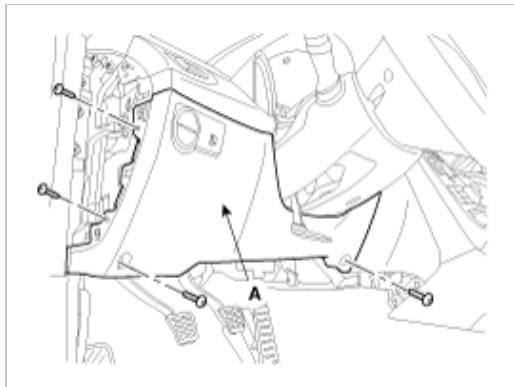
Burglar Alarm

Check for continuity between the terminals.

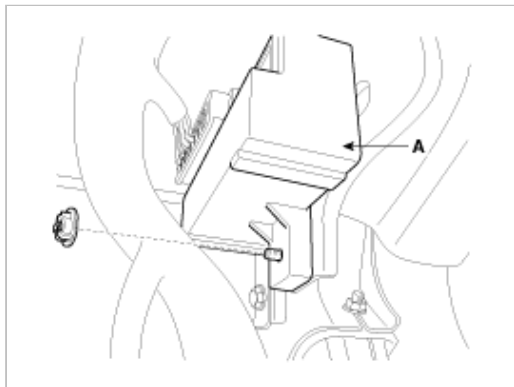
1. There should be no continuity between the No.11 and No.10 terminals when power and ground are connected to the No.11 and No.4 in the ICM relay B terminals.
2. There should be continuity between the No.11 and No.10 terminals when power is disconnected.

Removal

1. Disconnect the negative(-) battery terminal.
2. Remove the crash pad lower panel(A).
(Refer to BD group - "Crash pad")



3. Remove the ICM relay box(A) after disconnecting the connector and removing the mounting nut.



Installation

1. Install the ICM relay box.
2. Install the crash pad lower panel.