

FUSES

Blade type



Normal



Blown

Cartridge type

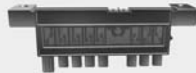


Normal

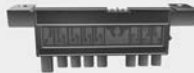


Blown

Multi fuse



Normal



Blown

OBK079042

G210000AAM

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 fuse panels, one located in the driver's side panel bolster, the other in the engine compartment near the battery.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse will melt.

If the electrical system does not work, first check the driver's side fuse panel.

Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized KIA dealer.

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.

⚠ WARNING - Fuse replacement

- **Never replace a fuse with anything but another fuse of the same rating.**
- **A higher capacity fuse could cause damage and possibly a fire.**
- **Never install a wire or aluminum instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and a possible fire.**

⚠ CAUTION

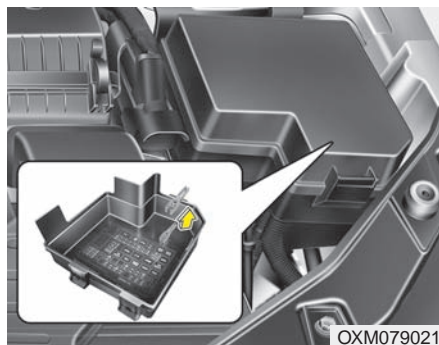
Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.



G210100AAM

Inner panel fuse replacement

1. Turn the ignition switch and all other switches off.
2. Open the fuse panel cover.



3. Pull the suspected fuse straight out. Use the removal tool provided on the engine compartment fuse panel cover.
4. Check the removed fuse; replace it if it is blown.

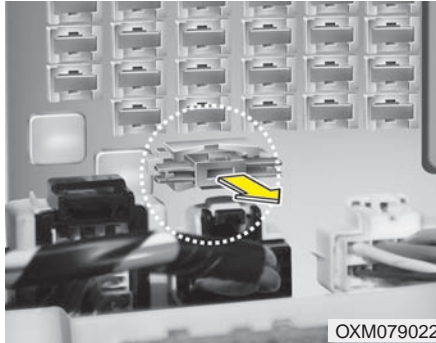
Spare fuses are provided in the engine compartment fuse panel.

5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips.

If it fits loosely, consult an authorized KIA dealer.

If you do not have a spare, use a fuse of the same rating from a circuit you may not need for operating the vehicle, such as the power outlet fuse.

If the headlights or other electrical components do not work and the fuses are OK, check the fuse panel in the engine compartment. If a fuse is blown, it must be replaced.



G210101AHM-C1

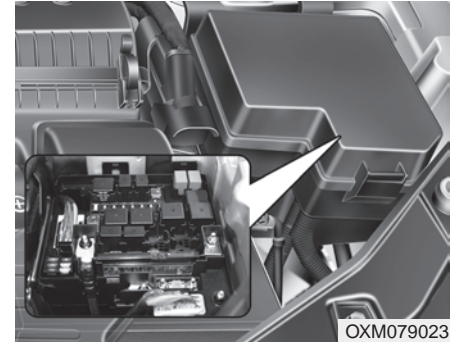
Memory fuse

Your vehicle is equipped with a memory fuse to prevent battery discharge if your vehicle is parked without being operated for prolonged periods. Use the following procedures before parking the vehicle for prolonged periods.

1. Turn off the engine.
2. Turn off the headlights and tail lights.
3. Open the driver's side panel cover and pull out the memory fuse.

*** NOTICE**

- If the memory fuse is pulled out from the fuse panel, the warning chime, audio, clock and interior lamps, etc., will not operate. Some items must be reset after replacement. Refer to "Battery" in this section.
- Even though the memory fuse is pulled out, the battery can still be discharged by operation of the headlights or other electrical devices.



G210200AHM

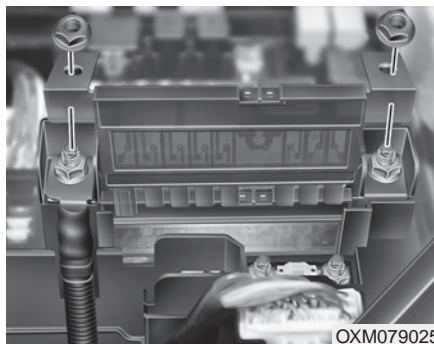
Engine compartment fuse replacement

1. Turn the ignition switch and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up.

3. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine compartment fuse panel.
4. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult an authorized KIA dealer.

CAUTION

After checking the fuse panel in the engine compartment, securely install the fuse panel cover. If not, electrical failures may occur from water contact.



G210201AAM

Multi fuse

If the multi fuse is blown, it must be removed as follows:

1. Turn off the engine.
2. Disconnect the negative battery cable.
3. Remove the fuse panel on the right side in the engine compartment.
4. Remove the nuts shown in the picture above.
5. Replace the fuse with a new one of the same rating.
6. Reinstall in the reverse order of removal.

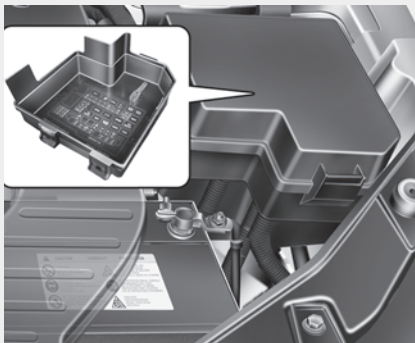
*** NOTICE**

If the multi fuse is blown, consult an authorized KIA dealer.

G210300AAM-EU

Fuse/relay panel description

Inside the fuse/relay panel covers, you can find the fuse/relay label describing fuse/relay name and capacity.

Inner fuse panel**Engine compartment fuse panel**

OXM079026/OXM079027

*** NOTICE**

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.

Inner fuse panel

Description	Fuse rating	Protected component
MODULE 2	10A	Instrument Cluster (IND./MICOM), Tire Pressure Monitoring Module, Audio, Multifunction Switch (Remocon), Rear Parking Assist Buzzer ICM Relay Box (DBC Relay), ESC Off Switch, DBC Switch, Steering Angle Sensor, Alternator, Smart Key Control Module A/V & Navigation Head Unit, Rear Monitor, IPM (BCM IG1)
MODULE 1	10A	Smart Key Control Module, Rear Parking Assist Control Module E/R Fuse & Relay Box (Fuse - B/UP LP, ABS, ECU 2), PDM, 4WD ECM
RPAS	7.5A	Rear Parking Assist Switch
A/BAG IND	10A	Instrument Cluster (IND.), PODS Module, Digital Clock
A/BAG	15A	SRS Control Module
START	7.5A	E/R Fuse & Relay Box (Relay - Start, Sub Start, Burglar Alarm), PDM
WIPER RR	15A	ICM Relay Box (Rear Wiper Relay), Rear Wiper Motor Rear Wiper Switch, Rear Washer Switch
WIPER FRT	25A	E/R Fuse & Relay Box (Wiper (Low) Relay), Front Wiper Motor, Multifunction Switch (Wiper)
AUDIO 2	7.5A	AMP, Power Outside Mirror Switch, Smart Key Control Module, PDM, Audio, A/V & Navigation Head Unit, Digital Clock, IPM (BCM ACC), DVD Player Can, Rear Monitor
P/OUTLET RR	15A	Rear Power Outlet
P/OUTLET FRT	25A	Driver/Passenger Power Outlet
MODULE 3	7.5A	Not Used
A/CON	7.5A	Front A/C Control Module, Active Incar Sensor, Cluster Ionize, PDM, ICM Relay Box (Front Seat Warmer Relay, Rear A/C Relay) E/R Fuse & Relay Box (Blower Relay), Sunroof Motor, Electro Chromic Mirror, IPM (BCM IG2)
AMP	30A	AMP
DRL	7.5A	Ground (GE01)
A/CON MANU	7.5A	PCM, Front Blower Resistor, Front A/C Control Module
A/CON AUTO	7.5A	Front A/C Control Module



Description	Fuse rating	Protected component
B/A HORN	10A	Burglar Alarm Horn Relay
A/CON REAR	20A	ICM Relay Box (Rear A/C Relay)
P/WDW LH	25A	Driver Power Window Relay, Power Window Main Switch, Rear Power Window Switch LH, Driver Safety Power Window Module
P/WDW RH	25A	Passenger Power Window Relay, Power Window Main Switch Passenger Power Window Switch, Rear Power Window Switch RH
MODULE	15A	Audio, A/V & Navigation Head Unit, RF Receiver, IPM (BCM B+), Rear Monitor
ROOM LP	10A	Instrument Cluster (IND.), Digital Clock, Front A/C Control Module Data Link Connector, Door Warning Switch, Personal Room Lamp Room Lamp Auto Cut Relay, Overhead Console (MAP Lamp) Room Lamp, Cargo Lamp, Driver/Passenger Vanity Lamp Electro Chromic Mirror
DOOR LP	10A	Driver/Passenger Door Scuff Lamp, DVD Player Can
DR LOCK	20A	Door Lock/Unlock Relay, ICM Relay Box (Two Turn Unlock Relay) Driver/Passenger Door Lock Actuator, Rear Door Lock Actuator LH/RH
PDM	20A	PDM
SUNROOF	20A	Sunroof Motor
SMART KEY	10A	PDM, Smart Key Control Module, Start Stop Button Switch, FOB Holder, Key Solenoid
S/HTR FRT	20A	ICM Relay Box (Front Seat Warmer Relay)
P/SEAT DRV	30A	Driver Power Seat Switch, Driver Lumbar Support Switch
P/SEAT PASS	20A	Passenger Power Seat Switch
HTD STRG	15A	Steering wheel heater
4WD	10A	4WD ECM, Sport Mode Switch
HAZARD	15A	IPM (Flasher Unit)
F/LID	15A	Tail Gate Relay, Tail Gate Actuator, Fuel Filler Door Switch
MODULE4	10A	TPMS, O/S Mirror Switch, Power Window Switch
HTD MIRR	10A	Driver/Passenger Power Outside Mirror, Front A/C Control Module
POWER CONNECTOR		FUSE - MODULE, ROOM LP, DOOR LP



Engine compartment fuse panel

Description		Fuse rating	Protected component
ALT		175A	Alternator
MULTI FUSE	I/P B+2	60A	IPM (Fuse - S/HTR FRT, P/SEAT, Power Connector - MODULE, ROOM LP DOOR LP)
	BLOWER	40A	Blower Relay
	RR HTD	40A	Rear Defogger Relay
	ABS 1	40A	ESC Control Module, Multipurpose Check Connector
	ABS 2	40A	ESC Control Module, Multipurpose Check Connector
	I/P B+3	60A	IPM (Fuse - HAZARD, TPMS, F/LID)
	I/P B+1	60A	IPM (Fuse - DR LOCK, SUNROOF, 4WD, PDM, SMART KEY)
FUSE	IGN 2	40A	Start Relay, W/O Smart Key - Ignition Switch, With Smart Key - PDM Relay Box (IGN2 Relay)
	TRAILER	30A	Trailer Power Outlet
	IGN 1	30A	W/O Smart Key - Ignition Switch, With Smart Key - PDM Relay Box (IGN1 Relay)
	HORN	15A	Horn Relay
	STOP LP	15A	Stop Lamp Switch, ICM Relay Box (DBC Relay)
	B+ SENSOR	15A	Battery Sensor
	DEICER	15A	Front Wiper Deicer Relay
	C/FAN	50A	Cooling Fan Relay Low/High
	I/P B+4	50A	IPM (Fuse - P/WDW LH, P/WDW RH, B/A HORN, A/CON REAR, AMP)
	ECU 2	7.5A	Sub Start Relay, PCM, Transaxle Range Switch, Alternator (G6DC)
	ABS	7.5A	ESC Control Module, Multipurpose Check Connector, Stop Lamp Switch (G4KE)
	B/UP LP	7.5A	Back-Up Lamp Relay (A/T), Back-Up Lamp Switch (M/T)

Description		Fuse rating	Protected component
EMS BOX	ECU	30A	Engine Control Relay
	ECU 3	20A	G4KE - Ignition Coil #1/2/3/4, Condenser G6DC - Ignition Coil #1/2/3/4/5/6, Condenser #1/2
	SENSOR 1	10A	G4KE - Variable Intake Manifold Valve, Crankshaft Position Sensor, Immobilizer Module, Camshaft Position Sensor #1/2, Oil Control Valve #1/2, Canister Purge Control Solenoid Valve, Canister Close Valve, Cooling Fan (Low) Relay G6DC - Variable Intake Manifold Valve #1/2, Immobilizer Module, Canister Purge Control Solenoid Valve, Oil Control Valve #1/2 (Exhaust), Oil Control Valve #1/2 (Intake), Canister Close Valve
	SENSOR 2	10A	G6DC - Cooling Fan (Low) Relay, Stop Lamp Switch
	SENSOR 3	10A	G4KE - Injector #1/2/3/4, A/C Relay G6DC - PCM, Injector #1/2/3/4/5/6, A/C Relay
	SENSOR 4	15A	G4KE - Oxygen Sensor Up/Down, Fuel Pump Relay G6DC - PCM, Oxygen Sensor #1/2/3/4, Fuel Pump Relay, Variable Charge Motion Actuator
	ECU 1	15A	PCM
	A/CON	10A	A/C Relay
	F/PUMP	15A	Fuel Pump Relay