

FUSES

■ Blade type



Normal



Blown

■ Cartridge type



Normal



Blown

■ Multi fuse



Normal



Blown



Normal



Blown

OLM079051N

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

This vehicle has 2 (or 3) 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 foil 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.

* NOTICE

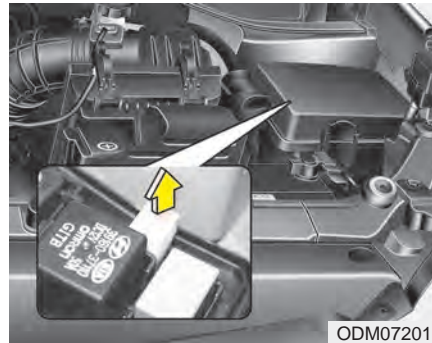
The actual fuse/relay panel label may differ from equipped items.



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.

Fuse switch



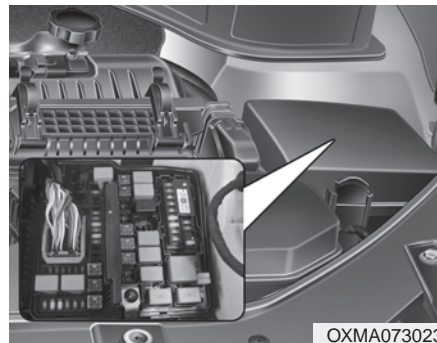
Always, put the fuse switch at the ON position.

If you move the switch to the OFF position, some items such as audio and digital clock must be reset and transmitter (or smart key) may not work properly.

CAUTION

Always place the fuse switch in the ON position while driving the vehicle.

Engine compartment fuse replacement



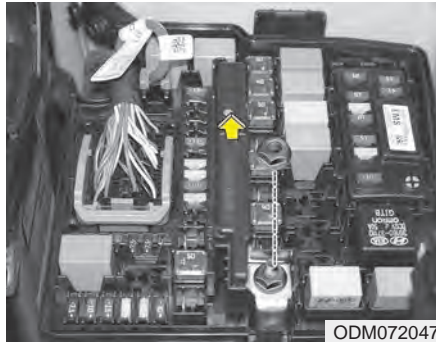
1. Turn the ignition switch and all other switches off.
2. Remove the fuse panel cover by pressing the tab and pulling the cover up.

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.

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 nuts shown in the picture above.
4. Replace the fuse with a new one of the same rating.
5. Reinstall in the reverse order of removal.

* NOTICE

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

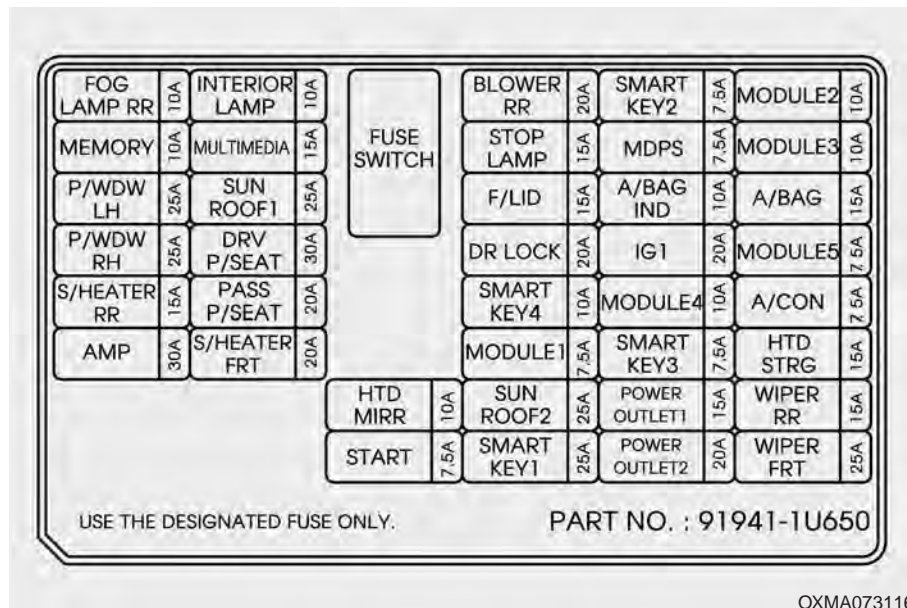
Fuse/relay panel description



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

* 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.



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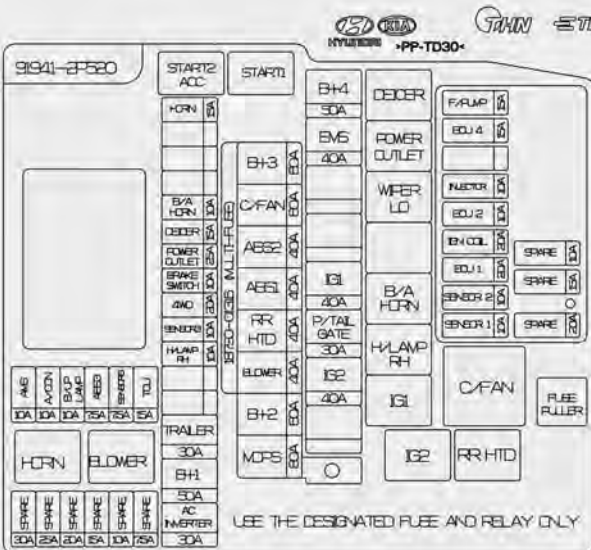
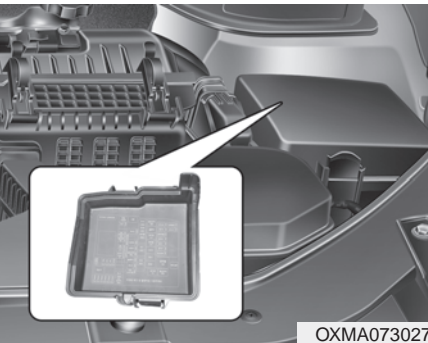
Inner fuse panel

Description	Fuse rating	Protected component
MODULE 2	10A	Instrument Cluster (IND./MICOM), Steering Angle Sensor, Alternator, Smart Key Control Module, A/V & Navigation Head Unit, STOP_SW, SI_ECU, HLLD LH/RH
MODULE 1	7.5A	SPORTS MODE SW/KEY_SOL, SPORT_MODE_SW
A/BAG IND	10A	Instrument Cluster (IND.), Digital Clock
A/BAG	15A	SRS Control Module, PODS 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, Multifunction Switch (Wiper)
WIPER FRT	25A	E/R Fuse & Relay Box (Wiper (Low) Relay), Front Wiper Motor, Multifunction Switch (Wiper)
MODULE 3	10A	ESC Off Switch, Front A/C Control Module, Instrument Cluster, Audio, MTS, A/V & Navigation Head Unit, Tire Pressure Monitoring Module, Power Window Main Switch, 4WD ECU, P_WDW_PASS_SW_IMS, Rear Parking Assist SNSR, FRT_DRV_SEAT_EXT, FRT_PASS_SEAT_EXT, CONSOLE_EXTN , IPM (BCM IG1)
A/CON	7.5A	Front A/C Control Module, Active Incar Sensor, Cluster Ionize, ICM Relay Box (Rear A/C Relay) E/R Fuse & Relay Box (Blower Relay)
AMP	30A	AMP
P/OUTLET 1	15A	-
P/OUTLET 2	20A	LUGGAGE_POWER_OUTLET, FRT_POWER_OUTLET_DRV
BLOWER RR	20A	ICM Relay Box (Rear A/C Relay)

Description	Fuse rating	Protected component
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
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, ICM Relay Box (T/GATE LATCH Relay)
SMART KEY 4	10A	PDM, Start Stop Button Switch, FOB Holder
S/HTR FRT	20A	FRT_DRV_SEAT_EXT, FRT_PASS_SEAT_EXT
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
F/LID	15A	Fuel Filler Door Switch
MODULE4	10A	O/S Mirror Switch, Power Window Switch, E/R Fuse & Relay Box(POWER OUTLET RLY), Digital Clock, MTS, Audio, A/V & Navigation Head Unit
HTD MIRR	10A	Driver/Passenger Power Outside Mirror, Front A/C Control Module
SMART_KEY_1	25A	SMART KEY/SMK_UNIT
SMART_KEY_2	7.5A	Smart Key Control Module
SMART_KEY_3	7.5A	Smart Key Control Module
S/HEATER RR	15A	ICM Relay Box (RR SEAT WARMER LH RLY), ICM Relay Box (RR SEAT WARMER RH RLY)
INTERIOR LAMP	10A	DR_SCUFF_LP_DRV, DR_SCUFF_LP_PASS, DR_WARNG_SW, S_VISOR_LP_LH/RH, OHC_LAMP, ROOM_LP, RL/RR_PERSONAL_LAMP, CARGO_LAMP
MULTIMEDIA	15A	Audio, A/V & Navigation Head Unit, MTS
MEMORY	10A	OBD_II, Front A/C Control Module, TPMS, Digital Clock, INSIDE_MIRR, S_WARMER_SW_LH/RH, AIR_VENT_SEAT_SW_LH/RH, CLUSTER, O_S_MIRR_SW, P_WDW_MAIN_SW, FRT_DRV_SEAT_EXT, P_WDW_PASS_SW



Engine compartment fuse panel



OXMA073131

Engine compartment fuse panel

Description		Fuse rating	Protected component
MULTI FUSE	I/P B+2	60A	IPM (Fuse - S/HTR FRT, P/Seat SUN ROOF-1 25A, IPS1 (FOG LH/RH, TAIL LAMP LH), ARISU LH (HEAD LAMP LOW LH, HEAD LAMP HI LH, TURN SIG RL, TURN SIG FL)
	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	SMART_KEY-1 25A, SMART_KEY-4 10A, MODULE-1 7.5A, SUNROOF-2 25A, (FUSE SW RLY, INTERIOR LAMP 10A : DR_SCUFF_LP_DRV, DR_SCUFF_LP_PASS, DR_WARNG_SW, S_VISOR_LP_LH/RH, OHC_LAMP, ROOM_LP, RL/RR_PERSONAL_LAMP, CARGO_LAMP, MULTI-MEDIA 15A : Audio, A/V & Navigation Head Unit, MTS, MEMORY 10A : OBD_II, Front A/C Control Module, TPMS, Digital Clock, INSIDE_MIRR, S_WARMER_SW_LH/RH, AIR_VENT_SEAT_SW_LH/RH, CLUSTER, O_S_MIRR_SW, P_WDW_MAIN_SW, FRT_DRV_SEAT_EXT, P_WDW_PASS_SW)
	I/P B+1	50A	AMP 30A, P/WDW LH 25A, P/WDW RH 25A, S/HEATER_RR 15A
	MDPS	80A	MDPS_ECU
	C/FAN	60A	E/R Fuse & Relay Box (C/FAN RLY)
FUSE	IGN 2	40A	Start Relay, W/O Smart Key - Ignition Switch, With Smart Key - E/R Fuse & Relay Box (IGN2 Relay)
	TRAILER	30A	Trailer Power Outlet
	IGN 1	40A	W/O Smart Key - Ignition Switch, With Smart Key - E/R Fuse & Relay Box (IGN1 Relay, ACC Relay)
	HORN	15A	Horn Relay
	DEICER	15A	Front Wiper Deicer Relay
	I/P B+4	50A	IPM (DR LOCK 20A, BLOWER RR 20A, FUEL LID 15A, IPS3 (TAIL LAMP RH, TAIL INT LAMP), ARISU RH (HEAD LAMP LOW RH, HEAD LAMP HI RH, TURN SIG RR, TURN SIG FR)
	ABS	7.5A	ESC Control Module, Multipurpose Check Connector
	B/UP LP	7.5A	Back-Up Lamp Relay (A/T), Back-Up Lamp Switch (M/T)
	4WD	20A	4WD_ECU



Description		Fuse rating	Protected component
FUSE	B/A HORN	15A	B/A RLY
	SENSOR 5	7.5A	PCM
	TCU	15A	Transaxle Range Switch, PCM
EMS BOX	A/CON	10A	E/R Fuse & Relay Box(BLOWER RLY, Front A/C Control Module)
	AC INVERTER	30A	AC_INVERTER_UNIT
	POWER OUTLET	25A	E/R Fuse & Relay Box (POWER OUTLET RLY), RR_P_OUTLET, FRT_POWER_OUTLET_PASS
	P/TAILGATE	30A	PTGM
	H/LAMP RH	10A	E/R Fuse & Relay Box(H/LAMP RH RLY), H_LP_RH
	AMS	10A	E/R Fuse & Relay WIPER LO RLY), PCM
	EMS	40A	EMS BOX(MAIN RLY(IGN_COIL 20A, ECU_1 20A, SNSR_1 10A, SNSR_2 10A, ECU_2 10A, INJECTOR_1 10A), F/PUMP 15A, ECU_4 15A
	SENSOR 1	10A	Theta : Purge Control Solenoid Valve, Oil Control Valve #1/2, Variable Intake Manifold Valve, Crankshaft Position Sensor, Oxygen Sensor Up/Down Lambda : PCM, Oxygen Sensor #1/2/3/4
	SENSOR 2	10A	Theta : C/FAN RLY, Canister Close Valve Lambda : C/FAN RLY, PCM, Canister Close Valve, Oil Control Valve #1/2 (Exhaust), Oil Control Valve #1/2 (Intake), Purge Control Solenoid Valve, Variable Intake Manifold Valve #1/2, Immobilizer Module
	ECU 1	20A	PCM
	F/PUMP	15A	Fuel Pump Relay
	IGN_COIL	20A	Theta : IG_COIL_CAPACITOR, IG_COIL_1/2/3/4, Lambda : CONDENSOR1/2,IGN_COIL_HARN_LAG, GN_COIL_2/4/6
	INJECTOR_1	10A	Theta : Immobilizer Module, F/PUMP RLY, Lambda : PCM, F/PUMP RLY
	ECU 4	15A	Theta : PCM, Lambda : PCM, IDB