OWNER'S MANUAL

RODIUS/STAVIC

SSANGYONG

RECOMMENDED FLUIDS AND LUBRICANTS

Descriptions			Capacity	Specifications
Engine Oil	D20DTR		≒ 6.0ℓ	Quality class: Ssangyong genuine engine oil (Approved by MB Sheet 229.51 5W30)
	D22DTR			
	G32D		≒ 9.0ℓ	Quality class: Ssangyong genuine engine oil (Approved by MB Sheet 229.1 10W40, MB Sheet 229.51 5W30, SN/GF-5 5W20)
Engine Coolant	D20DTR		≒ 11.5ℓ	Ssangyong genuine coolant Anti-Freeze SYC-1025, Anti-Freeze:Water = 50:50 ORGANIC ACID TYPE, COLOR:BLUE
	D22DTR			
	G32D		11.5 ~ 12.0ℓ	
Automatic Transmission Fluid	5 A/T		≒ 8.0ℓ	Ssangyong genuine oil (Shell ATF 134 or Fuchs ATF 134)
	7 A/T		≒ 9.0ℓ	Ssangyong genuine oil (ATF 134 FE)
Manual Transmission Fluid	6-speed		≒ 2.2ℓ	Ssangyong genuine oil (HK MTF 75W85 (SK) or HD MTF 75W85 (SHELL)
Transfer Case Fluid			≒ 1.4ℓ	Ssangyong genuine oil (ATF DEXRON II or III)
Axle Oil	Front	Dymos	≒ 1.2ℓ	Ssangyong genuine oil (SAE 85W/90, API GL-5)
		S&T	≒ 1.4ℓ	
	Rear		≒ 1.5ℓ	Ssangyong genuine oil (TOTAL- ISU EP-B 85W90)
Brake / Clutch Fluid			As required	Ssangyong genuine oil (DOT4)
Power Steering Fluid			≒ 1.1ℓ	Ssangyong genuine oil (S-PSF3) *TOTAL FLUIDE DA (Extreme cold condition only)

⚠ WARNING

- Use only Ssangyong recommended fluids and lubricants.
- Do not mix any different types or brands of oils or fluids. This may cause damages.
- Keep the specified levels when adding or replacing the fluids.

FOREWORD

This manual has been prepared to acquaint you with the operation and maintenance of your **RODIUS/STAVIC** and to provide important safety information. We urge you to read it carefully and follow the recommendations to help assure the most enjoyable, safe, and trouble-free operation of your vehicle.

When it comes to service, remember that your SSANGYONG dealer knows your vehicle best and is interested in your complete satisfaction.

We would like to take this opportunity to thank you for choosing **RODIUS/STAVIC** and assure you of our continuing interest in your motoring pleasure and satisfaction.

This manual should be considered as a permanent part of your vehicle, and must remain with the vehicle at the time of resale.

SSANGYONG

PYEONGTAEK, KOREA

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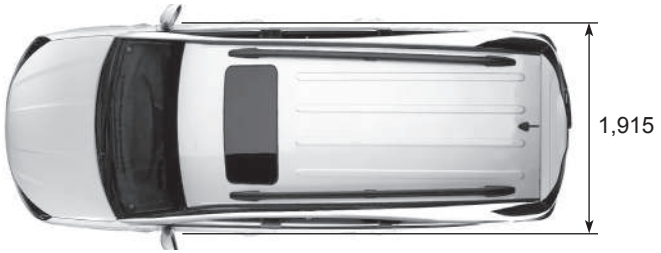
General Information

DIMENSIONS

This owner's manual is based on the finest specification and the images may somewhat differ depending on the vehicle model.

Unit: mm

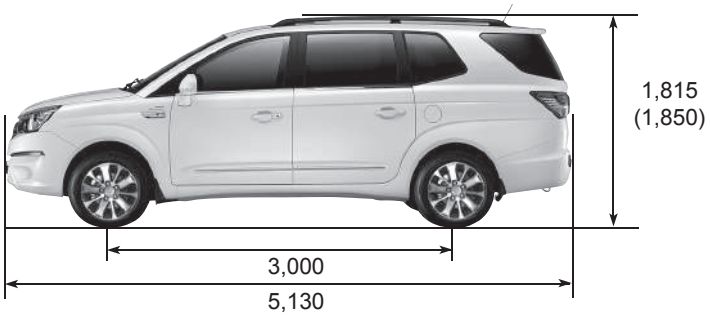
Top View



Front View



Side View



Rear View



*( ) : Optional

SPECIFICATIONS (I)

* ( ) Optional, [ ] 2WD

Descriptions				D22DTR	D20DTR	G32D
General	Overall length (mm)			5,130	←	←
	Overall width (mm)			1,915	←	←
	Overall height (mm)			1,815 (1,850)	←	←
	Gross vehicle weight (kg)	A/T	7 ~ 9 Seat	2,950 [2,820]	2,930 [2,800]	2,900 [2,800]
			11 Seat	-	3,060 [2,930]	3,030 [2,940]
		M/T	7 ~ 9 Seat	[2,820]	[2,800]	-
			11 Seat	-	[2,930]	-
	Curb vehicle weight (kg)	A/T	7 Seat	2,225 [2,085]	2,194 [2,082]	2,161 [2,074]
			9 Seat	-	2,244 [2,115]	2,211 [2,124]
			11 Seat	-	2,254 [2,120]	2,221 [2,134]
		M/T	7 Seat	[2,070]	[2,057]	-
			9 Seat	-	[2,112]	-
			11 Seat	-	[2,117]	-
	Fuel			Diesel	←	Gasoline
	Fuel tank capacity (ℓ)			80	←	←
Engine	Engine			D22DTR	D20DTR	G32D
	Numbers of cylinders/Compression ratio			4/15.5:1	4/16.5:1	6/10 : 1
	Total displacement (cc)			2,157	1,998	3,199
	Camshaft arrangement			DOHC	←	←
	Max. power	Normal power		178 PS / 4,000 rpm	155 PS / 3,400~4,000 rpm	220 PS / 6,100 rpm
		Low power		-	149 PS / 3,400~4,000 rpm	-
	Max. torque	Normal power		400 Nm / 1,400~2,800 rpm	360 Nm / 1,500~2,800 rpm	312 Nm / 4,600 rpm
		Low power		-	360 Nm / 1,500~2,800 rpm	-
	Idle speed			700 ± 50 rpm	750 ± 50 rpm	700 ± 50 rpm
	Cooling system			Water- cooled / forced circulation	←	←
	Coolant capacity (ℓ)			11.5	←	11.5~12.0

SPECIFICATIONS (II)

* ( ) Optional

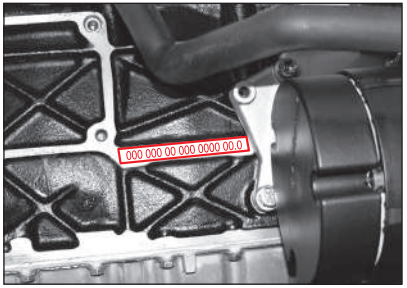
Descriptions			D22DTR	D20DTR	G32D
Engine	Lubrication type		Gear pump, forced circulation	←	←
	Max. oil capacity (ℓ) (when shipping)		6.0	←	9.0
	Turbocharger and cooling type		Turbocharger, air-cooled	←	-
Automatic Transmission	Model		Electronic, 7-speed	Electronic, 5-speed	←
	Operating type		Floor change type	←	←
	Gear ratio	1st	4.377	3.595	3.951
		2nd	2.859	2.186	2.423
		3rd	1.921	1.405	1.486
		4th	1.368	1.000	1.000
		5th	1.000	0.831	0.833
		6th	0.820	-	-
		7th	0.728	-	-
		Reverse 1st	3.416	3.167	3.147
		Reverse 2nd	2.231	1.926	1.930
Manual Transmission	Operating type		Floor change type	←	-
	Gear ratio	1st	4.489	←	-
		2nd	2.337	←	-
		3rd	1.350	←	-
		4th	1.000	←	-
		5th	0.784	←	-
		6th	0.679	←	-
		Reverse	4.253	←	-
Transfer Case	Model		Part-time	←	←
	Type		Planetary gear type	←	←
	Gear ratio	High (4H)	1.000 : 1	←	←
		Low (4L)	2.483 : 1	←	←

SPECIFICATIONS (III)

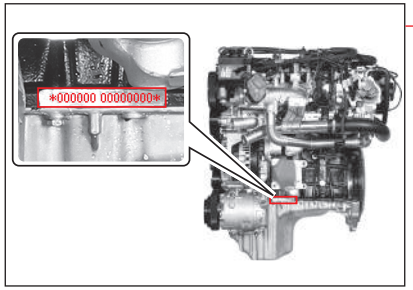
* ( ) Optional

Descriptions				D22DTR	D20DTR	G32D
Clutch (M/T)	Operating type			Hydraulic type	←	-
	Disc type			Dry single diaphragm type	←	-
Power Steering	Type			Rack and pinion	←	←
	Steering angle		Inner	40.04°	←	←
			Outer	33.86°	←	←
Front Axle	Drive shaft type			Ball joint type	←	←
	Axle housing type			Build-up type	←	←
Rear Axle	Drive shaft type			Ball joint type	←	←
	Axle housing type			IRDA type	←	←
Brake	Master cylinder type			Tandem type	←	←
	Booster type			Vacuum assisted booster type	←	←
	Brake type		Front wheels	Disc	←	←
			Rear wheels	Disc	←	←
	Parking brake			Cable type (internal expansion)	←	←
Suspen-sion	Front suspension			Double wishbone	←	←
	Rear suspension			Multi-link	←	←
Air Condi-tioner	Refrigerant (capacity)		EU	R-1234yf / 1050 ± 30g	-	-
			GEN	R-134a / 1050 ± 30g	←	←
Electrical	Battery type / Capacity (V-AH)			MF / 12 - 90	←	←
	Starter capacity (V-kW)			12 - 2.3	←	12 - 1.8
	Alternator capacity (V-A)			14 - 140	←	13.5 - 115
Tire	Inflation pressure			35 psi (2.4 bar)	←	
Wiper Blade	Driver side			600 mm (24 inch)	←	←
	Passenger side			450 mm (18 inch)	←	←
	Rear glass			300 mm (12 inch)	←	←

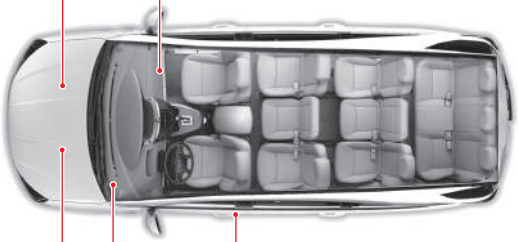
1. Engine Number



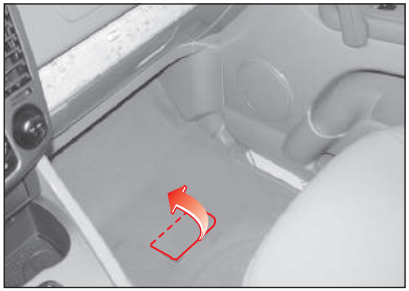
Gasoline Engine: The engine number is stamped on the lower area of cylinder block in exhaust manifold side.



Diesel Engine: The engine number is stamped on the lower area of cylinder block behind the Intake manifold.



2. VIN Number



The VIN number is stamped on the floor under the passenger's mat.

3. Certification Label

Type A

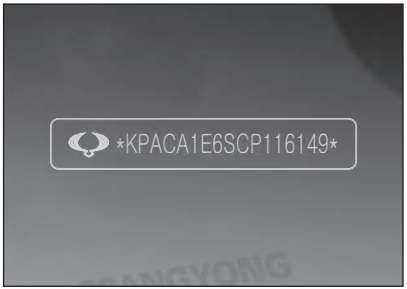
SsangYong Motor Co., Ltd.	
GROSS VEHICLE WEIGHT RATING	KG
GROSS VEHICLE WEIGHT TRAILER WITH BRAKE	KG
FRONT AXLE MAX WEIGHT RATING	KG
REAR AXLE MAX WEIGHT RATING	KG
BODY PAINT COLOR	
DATE OF MANUFACTURE	

Type B

SsangYong Motor Co., Ltd.	
	kg
	kg
1 -	kg
2 -	kg
BODY PAINT COLOR	
DATE OF MANUFACTURE	

The certification label is located on the driver's door sill.

4. Visual VIN Label





1. Headlamp 13-3
2. Front fog light 4-30
3. Front towing hook 11-26
4. Front view camera 6-21
5. Engine hood 3-13
6. Windshield wiper 12-31
7. Windshield heated glass 4-30
8. Auto light & rain sensor 4-7, 4-10
9. Sunroof 3-9
10. Door lock/unlock 2-2, 2-9
11. Wheel and tire 12-26

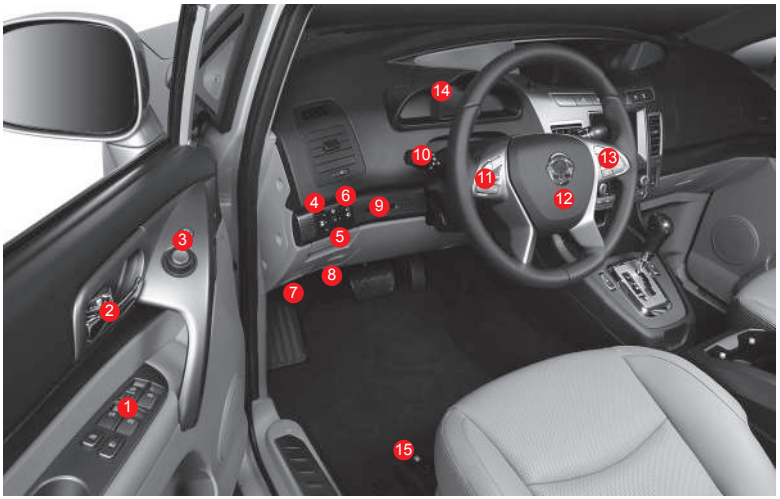
※ Actual appearance may differ from the image shown above.

QUICK GUIDE (REAR SIDE)



1. High mounted stop lamp 13-3
2. Heated rear glass 4-30
3. Rear wiper 12-31
4. Tailgate lock/unlock 3-14
5. Rearview camera system 6-20
6. Rear combination lamp 13-4
7. Parking aid system
   (Rear obstacle detection system) 6-17
8. Rear towing hook 11-26
9. Fuel filler 3-11

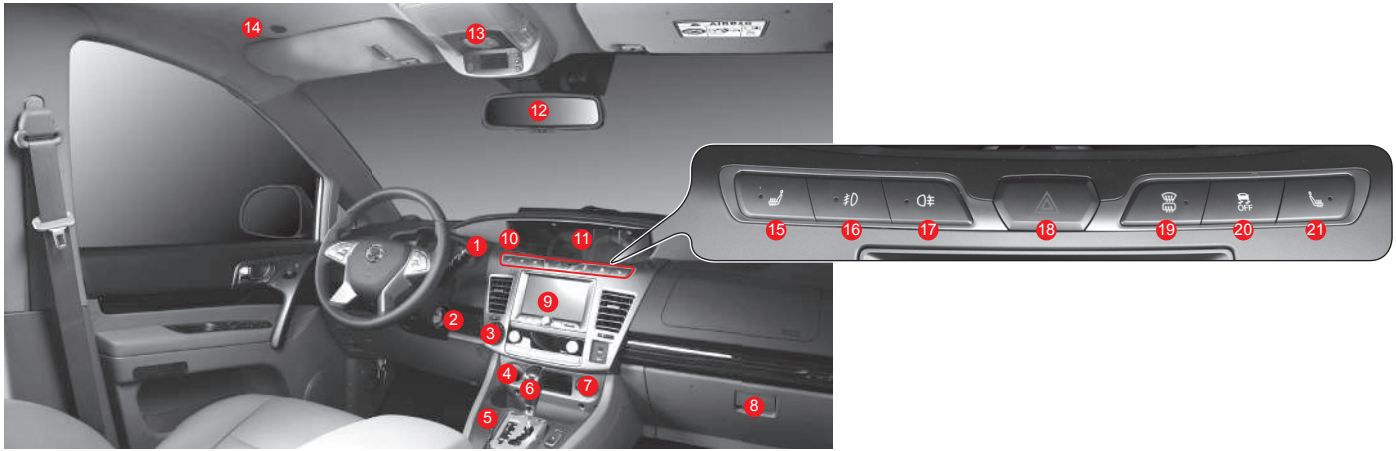
※ Actual appearance may differ from the image shown above.



1. Window and door control switches.....3-7
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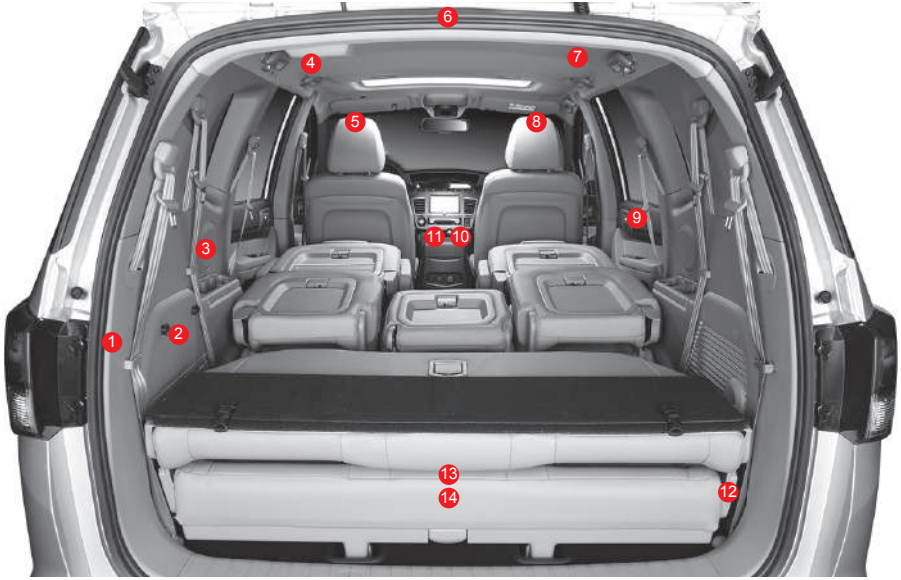
※ Actual appearance may differ from the image shown above.
※ The image shown above is a vehicle equipped with the smart key system and AV system. It may differ from your vehicle depending on your model.

QUICK GUIDE (INTERIOR - CENTER STACK AREA)



1. Front wiper and washer switch 4-8
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4. Cigarette lighter 10-14
5. Front seat heater/ventilation switch 4-31
6. TGS lever 6-2, 6-13
7. Power outlet 10-15
8. Glove box 10-9
9. Audio system 10-21
10. Trip and reset switch 5-10
11. Instrument cluster 5-3
12. Inside rearview mirror 10-6
13. Overhead switch cluster 4-35
14. Bluetooth hands-free 10-24
15. Seat warmer switch* (driver's seat - M/T) 4-31
16. Front fog lamp switch 4-6
17. Rear fog lamp switch* 4-6
18. Hazard warning flasher switch 4-30
19. Windshield*, tailgate and outside rearview mirror heated glass switch 4-30
20. ESP OFF switch* 4-32
21. Seat warmer switch* (passenger's seat - M/T) 4-31

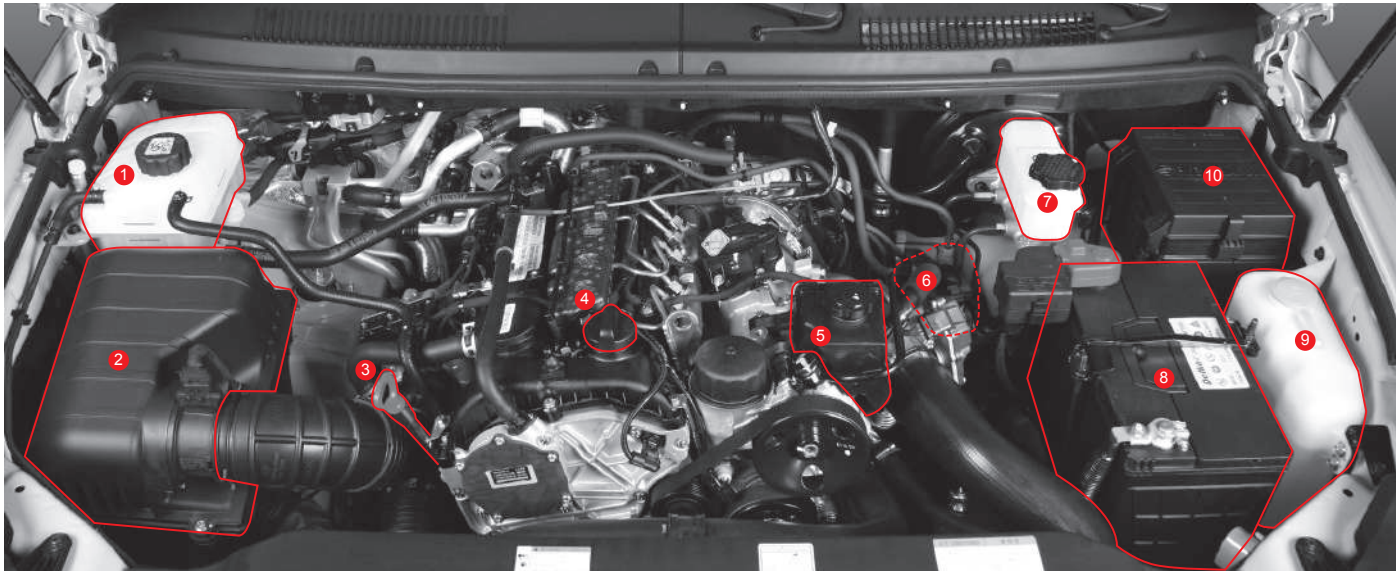
※ Actual appearance may differ from the image shown above.
※ The image shown above is a vehicle equipped with the smart key system and AV system. It may differ from your vehicle depending on your model.



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3. Rear cup holder 10-11
4. Rear heater/A/C switch 9-10, 9-13
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12. Power socket (fourth row seat right side) 10-16
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14. OVM tools and warning triangle 11-13

※ Actual appearance may differ from the image shown above.

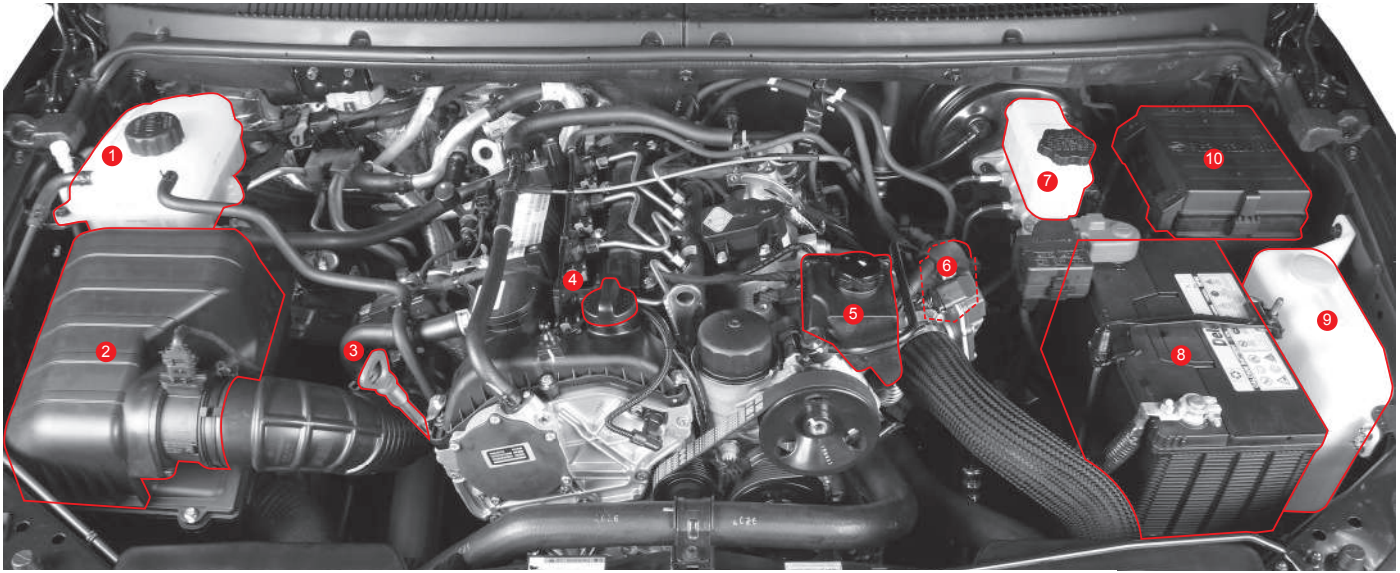
DIESEL ENGINE (D22DTR)



1. Coolant surge tank 12-9
2. Air cleaner 12-11
3. Engine oil dipstick 12-6
4. Engine oil filler cap 12-6
5. Power steering fluid reservoir 12-13
6. Fuel filter 12-14
7. Brake and clutch fluid reservoir (for manual transmission) 12-20
8. Battery 12-22
9. Front washer fluid reservoir 12-21
10. Relay and fuse box 12-24

※ Actual appearance may differ from the image shown above.

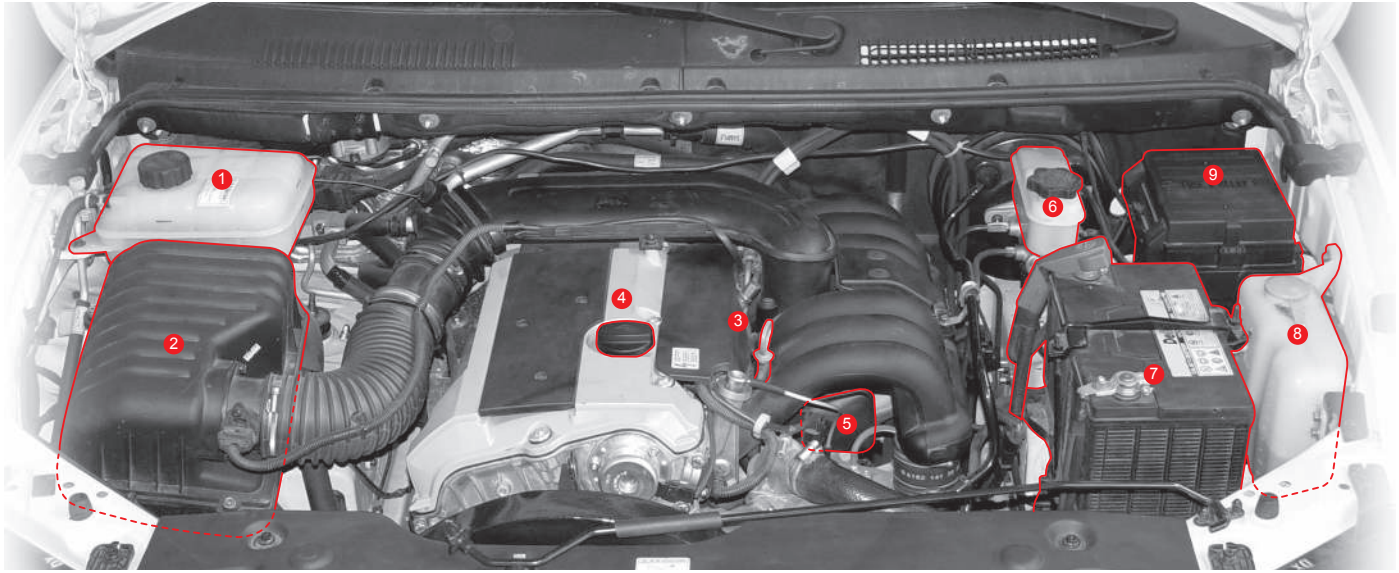
DIESEL ENGINE (D20DTR)



1. Coolant surge tank 12-9
2. Air cleaner 12-11
3. Engine oil dipstick 12-6
4. Engine oil filler cap 12-6
5. Power steering fluid reservoir 12-13
6. Fuel filter 12-14
7. Brake and clutch fluid reservoir (for manual transmission) 12-20
8. Battery 12-22
9. Front washer fluid reservoir 12-21
10. Relay and fuse box 12-24

※ Actual appearance may differ from the image shown above.

GASOLINE ENGINE (G32D)



1. Coolant surge tank 12-9
2. Air cleaner 12-11
3. Engine oil dipstick 12-6
4. Engine oil filler cap 12-6
5. Power steering fluid reservoir 12-13
6. Brake and clutch fluid reservoir (for manual transmission) 12-20
7. Battery 12-22
8. Front washer fluid reservoir 12-21
9. Relay and fuse box 12-24

※ Actual appearance may differ from the image shown above.

								
Engine oil pressure warning light	Engine overheat warning light	Water separator warning light	SSPS warning light	Charge warning light	Seat belt reminder	Air bag warning light	Brake warning light	4WD CHECK warning light

								
Door ajar warning light	Engine CHECK warning light	Low fuel level warning light	Glow indicator	ABS warning light	ESP warning light	ESP OFF indicato	Global warning light	Immobilizer indicator

							
Steering wheel heating indicator	4WD HIGH indicator	4WD LOW indicator	Illumination ON indicator	Winter mode indicator	Auto cruise Ready indicator	Cruise control indicator	High beam indicator


Turn signal/hazard warning lamp indicator

IMPORTANT NOTICE

Please read this manual and follow the instructions carefully.

Signal words such as “WARNING”, “CAUTION” and “NOTE” have special meanings.

WARNING

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

This must absolutely be observed for safety precautions.

NOTE

NOTE

NOTE indicates information to assist maintenance and instructions.

For product design changes

For a highest level of safety and quality, we are innovating our vehicles through our continual research and development efforts. As a result, the specifications are subject to change for the purpose of improvement without any notice and you may find material in this manual that does not apply to your specific vehicle.

All information, illustrations and specifications in this manual are based on the latest product information available at the time of publication.

Ssangyong reserves the right to change specifications or design at any time without notice and without incurring any obligation whatsoever.

This vehicle may not comply with the standards or regulations of other countries. Before attempting to register this vehicle in any other country, check all applicable regulations and make any necessary modifications.

This manual describes options and trim levels available at the time of printing, and therefore, some of the items covered may not apply to your vehicle. If any doubt exists about any of the options or trim levels, please do not hesitate to contact your Ssangyong Distributor for information on the latest specifications.

* : This asterisk in this manual signifies that an item of equipment is not included in all vehicles (model variants, engine options, models specific to one country, optional equipment, etc.).

We would like to point out that non Ssangyong Genuine parts and accessories have not been examined and approved by Ssangyong, and in spite of continuous market product monitoring, we cannot certify the suitability nor the safety of such products whether they are installed or intended for fitment in our vehicles. Ssangyong is not liable for any damage caused by the use of non Ssangyong Genuine parts and accessories.

CAUTIONS FOR ENVIRONMENT

Ssangyong Motor Company is pursuing environmental friendly policies and initiatives. This is the way we can save the natural resources and humankind can live harmoniously with nature.

You also can contribute to the protection of the environment while driving your Ssangyong vehicle.

The fuel consumption and engine speed, transmission, brake and wear of the tires are subject to the following factors:

- Driving conditions
- Driving habits



You can contribute to the protection of the environment by following the below rules.

Driving Conditions

- Drive off the vehicle slowly.
- Avoid short trip.
- Keep the specified tire inflation pressure.
- Unload the unnecessary goods from luggage compartment.
- Always check the fuel economy.
- Have the maintenance service regularly.
- Visit Ssangyong Dealer or Ssangyong Authorized Service Center for maintenance service.

Driving Habits

- Do not depress the accelerator pedal when starting the engine.
- Keep the safe distance with vehicle ahead.
- Avoid abrupt and frequent acceleration.
- Shift the gear at proper time and do not overrun the engine in each gear.
- Turn off the engine when you stop the vehicle for a long time.

Recycling

- Information about eco-friendly product development and vehicle recycling can be found on the SYMC website www.smotor.com/en

1. TIRE PRESSURE MONITORING SYSTEM

CE	Hereby, SsangYong, declares that the in-vehicle mounted radio systems are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC	EU
FCC	Model: TSSSG4G5 and TSSRE4Db FCC ID: OYGTSSRE4DB ORD. No: 14778/DFRS19614/F-50 This device complies with Part 15 of the Federal Communications Commission (FCC) rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. **WARNING** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.	AMERICA
CU TR	LOGO Certificate in the user manual due to product size **Tire Pressure Monitoring System** **Model: TSSRE4Db** The device passed all the conformity assesment procedures to CU TR. EAC mark in the user manual due to product size.	CIS

ANATEL	 **AVISO** Este equipamento opera em caráter secundário, isto é, não tem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo e não pode causar interferência a sistemas operando em caráter primário.	BRAZIL

2. FOB/FOLDING

FCC	FCC ID: DEO-MT-FLIP01 This device complies with Part 15 of the Federal Communications Commission (FCC) rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. **WARNING** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.	AMERICA
TR	LOGO  Certificate in the user manual due to product size	CIS

MEMO

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Safety Precautions

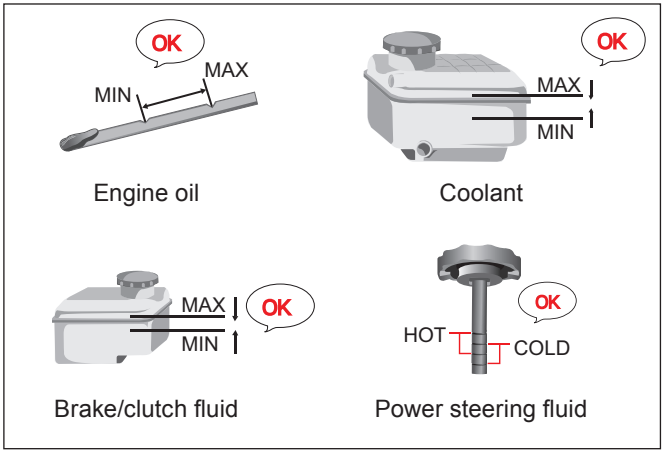
CHECK THE VEHICLE OUTSIDE



- Make sure to carry out the daily inspections before starting off your vehicle.
- Check the tire inflation and wear. Clean the windshield and rear glasses, side mirrors, and room mirror.
- Make sure that the engine hood and tailgate are properly closed.
- Make sure that there are no obstacles in the danger area around the vehicle.
- Make sure that there is not any trace of leak around the vehicle.

※ For details, refer to chapter 12 “Service and maintenance”.

INSIDE OF ENGINE COMPARTMENT



- Check the engine oil and other fluid/oil levels in the engine compartment.

CHECK THE TIRES

- Using wheel and tire other than the specified sizes could cause unusual handling characteristics and poor vehicle control, resulting in a serious accident.
- The use of tire sizes other than the specified sizes may cause abnormal operation of the steering wheel, increased fuel consumption, increase braking distance, vibration, improper operation of ABS/ESP, or uneven tire wear. It may also damage to the powertrain of the vehicle.
- Use only the same tires from same tire manufacturer for all the wheels. Otherwise, the powertrain may be damaged.
- Check the conditions and pressure of the spare tire as needed and always keep it available.
- Check the conditions of the emergency puncture repair kit. The air compressor and sealant canister should be available at any time.
- Check the tire inflation and wear everyday and replace if necessary.
- Be sure to keep the specified tire inflation pressure.
- Check and adjust the tire inflation pressure, including the spare tire, before any long journey. When driving the vehicle with insufficient tire inflation pressure, the tire could be blown out, because of standing wave symptom, resulting in severe injury and death.



NOTE

What is “Standing Wave”?

During driving, the rotating tire repeats deformation and restoring movement in its tread portion. However, when a tire with insufficient inflation pressure rolls on the road with high speed, a wave-like deformation occurs in the radial direction near and behind the tire tread portion. This wavy deformation is called “ standing wave”. If this symptom lasts for an extended period of time, the tire could be blown out in a short period of time.

CHECK THE VEHICLE INSIDE



- Adjust the driver's seat, headrest and steering wheel for comfortable driving.
- Adjust the outside and inside rear view mirrors.

CAUTION

Do not attempt to adjust the driver's seat, headrest, rear view mirrors, or steering wheel while driving. Adjustments should be done before driving.

- Do not put anything under driver's seat.

CAUTION

- Do not leave empty bottles or cans near or under the driver's seat. If it hinders the brake or accelerator pedal operation, it may cause an unexpected accident.
- Only use a floor mat with the correct size for your vehicle. And, make sure not to move the mat while driving. If it hinders the brake or accelerator pedal operation, it may cause an unexpected accident.
- Do not wear the uncomfortable shoes such as high hills or slippers when driving.



- Check that all appropriate warning lights, indicators and gauges (fuel, vehicle speed, engine rpm) are operating when turning the ignition key to the “ON” position.



- Check the operations of the clutch pedal, accelerator pedal, and brake pedal.

CAUTION

Release the parking brake and check that the Brake warning light on the instrument cluster is turned off.

WARNING

When releasing the parking brake, firmly press the brake pedal so that the vehicle is completely stationary.



- Fasten the seat belts and be sure that all other occupants have fastened theirs properly.
- Do not drive with a twisted or tangled seat belt.
- Slide the latch plate of the seat belt into the buckle until you hear a “click”.

CAUTION

Do not recline the seatback with the seat belt fastened. You could slide under the seat belt, which could result in serious injury or death.



- Keep the safety precautions for seat belt (refer to chapter 8).
- Objects placed in the rear seat or luggage room must not exceed the height of the seat. It may fall down during the hard braking and could result in an unexpected accident.
- Make sure that there are no person or obstacles in the dangerous area around the vehicle.
- Keep the brake pedal depressed when releasing the parking brake.

INFANT, CHILD, OLD PERSON



- Never leave infants and children unattended in the vehicle with the doors locked. They can move the vehicle unexpectedly. They can be suffocated in especially hot weather.
- To prevent children from interfering with your driving by accidental movements or misusing of devices, children should sit in the rear seat.
- Do not let children, infants, old people, or a pregnant woman sit in the front passenger seat with the airbag. The degree of shock of the airbag's expansion can be fatal or inflict serious injuries to such passengers. An infant or small child should always be restrained in a proper infant or child restraint in rear seat.

ANY CHILD MUST BE SEATED IN REAR SEAT WITH PROPER RESTRAINT SYSTEM



WARNING

Always transport children in the rear seat and use appropriate child restraints. Engage the child protection lock system of the rear doors, so that children in rear seats cannot open the rear doors. Sudden braking or a collision without proper child restraint can cause severe injury or death to children.

NO ALCOHOL, DRUGS!



- Avoid driving for an extended period of time. Driving continuously without rest makes you prone to dozing off and thus causes an accident. For your safety, take a rest every 2 hours.
- Driving under the influence of alcohol or drugs is prohibited. It impairs judgment, making driving highly risky. Drunk driving is also a legal offense.
- Driving after taking medicine can be more dangerous than the drunk driving depending on the medicine you took. Therefore do not drive the car after taking medicine.

WHEN SLEEPING IN YOUR VEHICLE

- Do not sleep in a parked car with closed windows. In particular, if you stay or sleep in the car with the engine running and the air conditioner or heater turned on, you can suffocate to death.
- Sleeping in a closed space with the engine running puts you at high risk of suffocation from the exhausts.
- While sleeping, you may accidentally touch the gear shift lever or accelerator and thereby cause an accident.
- While sleeping in the car with the engine running, you may accidentally step on the accelerator, thereby overheating the engine and exhaust pipe and causing a fire.

CABIN VENTILATION

- Volatile organic compounds, or VOCs, can be emitted from the materials in the cabin of the vehicle parked for a long time in direct sunlight. Therefore, to prevent the driver and passengers from being exposed to these harmful chemicals and keep the comfortable indoor environment, open all windows of the vehicle which is parked under the sun prior to entering.
- Prolonged driving without proper ventilation can cause headaches and dizziness. Set the air source selection switch to the fresh air intake mode for as long as possible or open the windows periodically while driving.

DO NOT DRIVE WITH TAILGATE OR DOORS OPEN

- Do not run the engine with the tailgate open to avoid exhaust gas entering into passenger compartment.
- If you drive your vehicle with the tailgate open, loose objects on the luggage compartment may cause an accident.
- Driving the vehicle with the doors open puts the passenger at risk of being thrown out, which can cause serious injury.
- Always drive the vehicle with the doors and tailgate locked. Opening a door during driving, especially by children, may cause a serious accident.

DO NOT STICK ANY PART OF YOUR BODY OUT OF THE WINDOW OR SUNROOF



Do not stick any part of your body out of the window and sunroof while the car is running or while you are maneuvering to park.

You might be hurt by the passing vehicles or other unseen obstacles.

POWER WINDOW



- When you operate the rear windows from the driver's seat while a child sits in the rear, make sure that no body part of the child is between the window and the window frame.
- When carrying children in the rear seat, press the rear door window lock switch to make the rear door switches inoperative.
- Make sure that all passengers have their body parts such as hands inside the vehicle.
- When closing the windows, be aware of safety conditions before operation.

CHECK FOR ANY PASSING VEHICLE WHEN GETTING OFF



When getting off, check the rear and side of the car for passing vehicles or pedestrians.

Vehicles or motorcycles coming from the rear, if unchecked, might stumble on you when you open the door.

STOPPING AND PARKING THE VEHICLE

- Never leave infants and children unattended in the vehicle with the doors locked. They can move the vehicle unexpectedly. They can be suffocated in especially hot weather.
- When parking the vehicle on a hilly road, apply the parking brake and chock the blocks under the wheels. And, place the gear shift lever in “R” (when parked downhill) or “1” (when parked uphill) for vehicles with the manual transmission or place the gear shift lever in “P” for vehicles with the automatic transmission.
- If possible, do not stop and park the vehicle on the steep road.
- If possible, do not park the vehicle in a humid area or enclosed area.
- Do not park in places where hay, foliage, paper, rags, oil, or other easily inflammable materials are kept. While driving or after immediately driving, the muffler and exhaust pipe are hot; inflammable materials near the vehicle might cause a fire.
- When running the engine while stopping, keep enough distance from the wall to avoid a fire and discoloration of vehicle.
- Apply the parking brake when you park the vehicle.
- Do not use “P” position as a parking brake. Securely apply the parking brake when you park the vehicle.

WARMING UP THE ENGINE

- Do not drive without warming up the engine. Driving immediately after starting the engine may decrease the engine’s life expectancy. Warm up the engine before moving your vehicle.
- Do not warm up the engine excessively. Warm up the engine just until the coolant temperature gauge begins to move.
- Excessive engine warming increases the fuel consumption and air pollution. An optimized warming up time is approx. 2 minutes.
- Do not warm up in an airtight space. Exhaust fume may result in toxicities.

※ Do not accelerate the engine during the warming up period.

DO NOT STOP THE ENGINE WHILE DRIVING

Do not stop the engine while driving. Otherwise, it makes the steering wheel heavier, the brake performance lower and, consequently, gets extremely dangerous.

PROHIBITION OF SUDDEN ACCELERATING, BRAKING AND STARTING

Do not accelerate, start and brake the vehicle suddenly. Otherwise, it may increase fuel consumption and cause risk of a car accident. Accelerate or decelerate softly.

DO NOT TURN THE STEERING WHEEL ABRUPTLY

Abrupt operation of steering wheel makes the vehicle unstable and may cause an accident.

DO NOT RUN THE ENGINE IN AN ENCLOSED AREA

Leaving the engine running in an enclosed place with no air ventilation, might result in death from carbon monoxide poisoning.

DO NOT USE A CELLULAR PHONE OR WATCH DMB INCLUDING DVD WHILE DRIVING

Using your cellular phone or watching DMB (including DVD) while driving will distract yourself and may cause an accident. If necessary, pull over your vehicle safely to use your cellular phone.

WHEN PASSING THE INTERSECTION OR RAILWAY CROSSING

When passing the intersection or railway crossing, stop the vehicle to check the safety and drive through as fast as you can while using low speed gear and without shifting the gear. If the engine is turned off in the middle of the intersection or railway crossing, get someone to help you and move the car to a safe place quickly.

HAZARDOUS MATERIALS

Do not store any flammable items or disposable lighters in the console box or other spaces. In hot weather, they can explode and cause a fire.

EXTINGUISHER

For safety, we strongly recommend that you have an extinguisher in your vehicle. Keep it ready for use at any time. Be familiar with how to use it.

ENGINE BRAKE

When driving down a long slope, use the engine brake effect by downshifting the transmission in steps according to the driving conditions while using the service brake. An excessive operation of the service brake could result in a “Fade” or “Vapor Lock” effect.

Fade?

Reduction or loss in braking force due to loss of friction between the brake pads and discs, caused by heat build-up through repeated or prolonged brake application.

Vapor Lock?

When the brake is excessively applied on a downhill, some bubbles can be formed in brake cylinder or in brake lines. Because of these bubbles, hydraulic braking pressure cannot be transferred to braking units of the vehicle despite the fully depressed brake pedal.

SYSTEM PROTECTION (DELAYED ACCELERATION)

Do not depress the brake pedal while driving with the accelerator pedal depressed. Otherwise, the response from accelerator pedal may be delayed. This symptom is the safety function to protect the vehicle’s powertrain system. This symptom can be eliminated if you depress and release the accelerator pedal once with the brake pedal not depressed.

BEING CAREFUL WITH ACCESSORIES

Do not attach accessories or other unnecessary things to your car’s windows as they might interfere with your driving. Attached accessories can work as a convex lens and cause a fire or cause an accident.

BEING CAREFUL WHILE CHECKING COOLANT

To avoid being scalded, do not remove the engine coolant reservoir cap when the engine is hot .

WARNING



Do not remove the coolant reservoir cap when the engine and the radiator are hot. The cooling system may spray hot coolant if the cap is removed, causing serious injuries.

ALWAYS USING SSANGYONG GENUINE PARTS

- You can maintain the safety and performance of your car by using only specified parts or Ssangyong genuine parts.
- You can distinguish specified parts by their part numbers and hologram.



Part numbers



Hologram

CAUTION

- The warranty does not cover problems caused by using non-Ssangyong genuine parts.
- You can distinguish an authentic Ssangyong genuine part by its hologram.

DRIVING ON A SNOWY OR ICY ROAD

- Shift to the lowest possible gear and drive slowly.
- Since your braking distance is longer than usual, allow a longer following distance.
- If you accelerate or brake too fast, your vehicle will slide and you might get in an accident, so drive with caution. When braking, use the engine brake; apply your brakes only after you have slowed down considerably.
- When going down a slippery downhill, use the engine brake and drive slowly.

CAUTION

When traveling on a snowy or icy road, use snow tires for safer driving.

DRIVING ON A SANDY OR MUDDY ROAD

- Keep your speed steady as low as possible.
- While driving, be careful not to accelerate or stop too quickly because you might get stuck in sand or mud.
- If your vehicle gets stuck in sand or mud, insert a rock or a piece of wood under the stuck wheel, lightly apply the accelerator pedal and gently shift back and forth between the reverse and forward gear to allow inertia to get your vehicle out.

CAUTION

When your vehicle is stuck in sand or mud and you step on the accelerator pedal excessively in order to get out of there, the tire slip may occur which results in the damage of the transmission and corresponding drive system. In that case, get another vehicle to tow you if possible.

DRIVING ON UNPAVED AND MOUNTAIN ROADS

- Before driving, check road conditions such as if the road suddenly ends, or if there is enough space for a U-turn in the middle of the road.
- It's easy to slide in a road covered with much sand or with much dry dirt. Keep your speed low and steady.
- There is a danger of driving off the mountain road, so stay alert.
- When coasting downhill, do not change gears; go down slowly by applying the engine brake.

WARNING

IN HIGH MOUNTAIN AREA

The operation stability of diesel engine is not guaranteed in high mountainous area over 2,500 meters. The short trip such as passing through tunnel in this area is acceptable. However, do not keep driving there for a long time. If you drive your vehicle in very high altitude for long time, the engine could be damaged. The engine power, climbing ability and emission are subject to the altitude.

GOING THROUGH WATER

- If water gets into the electric system or engine, it might cause irreparable damage to your vehicle. Please refrain from underwater driving.
- If going through water is unavoidable, choose a shallow spot where the exhaust outlet wouldn't get submerged in water and proceed slowly at a steady speed.
- Before going through water, get out of your vehicle and check the bottom of the river. Do not go through water if the bottom is sandy or covered with big rocks.
- If several vehicles are going through water together, the first vehicle might burrow into the bottom, so be careful and cross in a different place if possible.

▶ Important things to remember when going through water

- If the engine stops while you are going through water, do not try to restart. Get your vehicle towed.
- Be particularly careful not to allow water to enter into the engine through the air cleaner.
- Never change gears while going through water.

WARNING

If water gets into the brake system, the effectiveness of the brakes decreases. After going through water, move slowly and gently applying the brakes several times so that frictional heat dries the brake pads and discs. Check if the brakes work properly before continuing driving.

▶ Checking your vehicle after going through water

- Check the front, rear, right and left sides, transaxle, axle hubs, propeller shaft, oil and fluid levels, and underbody; if you discover problems, get your vehicle checked immediately.
- Check all lamps and other electrical devices. If necessary, replace damaged components and get your vehicle checked.
- Check for damages to the vehicle body and underbody; if you discover problems, get your vehicle checked immediately.
- If the vehicle body is very dirty, wash your car to protect it.

DRIVING ON HILL ROADS

Position the gearshift lever in accordance with the road conditions.

⚠ WARNING

- If you suddenly use the engine brake on an icy or slippery road, the vehicle might slide and get in an accident. Use the engine brakes after fully reducing your vehicle speed.
- If you repeatedly apply your brakes on a long downgrade, they may overheat, their effectiveness decreases and an accident might occur. When on a long downgrade, use the engine brake together with your brakes.

⚠ CAUTION

If you suddenly apply the engine brake while traveling at a high speed, the engine may get damaged. Slow down the vehicle speed and then downshift the gear.

FREEWAY DRIVING

- Before getting on a freeway, listen to the weather forecast, prepare thoroughly and check the fuel level, brake system, cooling system, and tires.
- Always respect the speed limit and refrain from speeding.
- Allow for a safe following distance, avoid sudden steering movements.
- When it rains or snows and the weather conditions are adverse, double the distance between your vehicle and the vehicle running in front of you. And reduce your speed by half.

⚠ CAUTION

Do not idle the engine for a long time; it wastes fuel and causes environmental pollution.

- Drive at a slow speed for the first 2 km if possible.
- Do not load your vehicle with unnecessary stuff.
- Refrain from quick accelerating and abrupt braking, travel at a steady speed.
- When you park or stop for a long time, turn the engine off.
- Keep tires at the recommended pressure.
- Keep your vehicle in the best possible condition by periodically checking it and perform maintenance.

ENGINE STARTING

1. Apply the parking brake.
2. Make sure that there are no persons or obstacles in the dangerous area around the vehicle.

CAUTION

- The engine in automatic transmission equipped vehicle can be started only when the gear selector lever is at the **"P"** or **"N"** position. The engine in manual transmission equipped vehicle can be started only when the clutch pedal is fully depressed.
- Do not turn the ignition key to the **"START"** position while the engine is running. It could result in serious start motor damage.

3. *** Automatic transmission equipped vehicle**

   Move the gear selector lever to the **"P"** position and depress the brake pedal.

   *** Manual transmission equipped vehicle**

   Move the gear shift lever to the Neutral position and fully depress the brake pedal and the clutch pedal.

WARNING

Depress the brake pedal when the gear shift lever is at the **"P"** (A/T) or **"Neutral"**(M/T) position. Never depress the accelerator pedal.

4. *** Gasoline engine equipped vehicle**

   Insert the ignition key into the key cylinder and turn it to **"START"** position and hold it there without depressing the accelerator pedal until the engine starts (a maximum of 10 seconds), then release the key.

   *** Diesel engine equipped vehicle**

   Insert the ignition key into the key cylinder and turn it to the **"ON"** position. As soon as the glow indicator ( ) goes out, turn it to **"START"** position and hold it there without depressing the accelerator pedal until the engine starts (a maximum of 10 seconds), then release the key.

CAUTION

If the engine fails to start, turn the key back to **"LOCK"** position and wait for 10 seconds. Then try again before any attempt to start the engine.

5. Warm up the engine properly according to the ambient temperature.

DRIVING OFF

1. Make sure that there are no persons or obstacles in the dangerous area around the vehicle.
2. Release the parking brake.
3. *** Automatic transmission equipped vehicle**

   Keep the brake pedal depressed and shift into the **"D"** or **"R"** position. Make sure that the position indicator of **"D"** or **"R"** comes on. Slowly release the brake pedal to begin moving.

   *** Manual transmission equipped vehicle**

   Keep the brake pedal and clutch pedal depressed and shift into the **"1"** or **"R"** position. Release the brake pedal and gradually depress the accelerator pedal while slowly releasing the clutch to begin moving.

STOPPING THE ENGINE

1. Depress the brake pedal to stop the vehicle.
2. *** Automatic transmission equipped vehicle**

   Move the gear selector lever to the **"P"** position.

   *** Manual transmission equipped vehicle**

   Move the gear shift lever to the Neutral position.
3. *** REKES system equipped vehicle**

   Turn the ignition key to the **"LOCK"** position.
4. Apply the parking brake.
5. Remove the ignition key from the key cylinder.

NOTE

Diesel engine learning mode: The learning mode of the fuel injector is performed while the vehicle is driven or stationary to maintain the optimized engine condition. Weak noise and vibration of the engine may be accompanied by this mode. But, it is normal operation.

ENGINE EMERGENCY SHUTDOWN

When a problem occurs in the fuel system, the vehicle enters emergency mode and activates the engine emergency shutdown function to protect the fuel system. If this function is activated, the Check engine indicator on the instrument cluster comes on and the engine rpm is limited to a certain value only to meet the minimum requirements for driving.

DANGER

If the engine emergency shutdown function is activated, pull over and stop the vehicle in a safe place immediately and have your vehicle checked and serviced as soon as possible at SsangYong service center/dealer.

In the emergency mode, only a few functions required for driving are allowed and normal driving is not maintained. If you continue driving in this mode, the ignition may be turned off. Or it may cause serious damage to the vehicle's systems.

CAUTION

- Starting the vehicle in the winter months or operating the A/C in the summer months increases the engine rpm. Drivers must be careful when driving at this time because the vehicle can move faster than normal.
- Any modifications or alterations to this vehicle, including installation of an electronic device such as after-market remote starting system, could seriously affect its performance and safety and may lead to a serious injury or death.
- Using a mobile telephone or two-way radio requires careful considerations. The electronic control system of the vehicle is subject to possible errors due to electronic interference caused by improper use of these devices, and the electromagnetic waves can be harmful to the human body.
- When leaving the vehicle unattended, always turn off the engine to prevent unexpected rolling away.
- Always apply the parking brake with the brake pedal depressed when the vehicle is stopped.
- Do not store personal belongs and valuables inside the vehicle. When leaving the vehicle unattended, always make sure all the doors including the tailgate are closed and locked.
- Improper alignment of vibration dampers for the exhaust system (rubber hanger bracket) may result in serious vibration problems. When reinstalling the exhaust system after undercoating, check the alignment of the dampers.
- Always check the accelerator and brake pedals with your right foot before starting the vehicle. Even an experienced driver can accidentally hit the wrong pedal if he/she drives different vehicles.
- Power unit of the vehicle operates independently of the braking system of the vehicle, so just calmly depress the brake pedal to stop the vehicle when it moves unintentionally due to the driver error including pedal misapplication or a malfunction.

CAUTION

- If your vehicle becomes stuck in snow, mud or sand, depressing the accelerator pedal harder only makes the tires slip more which in turn causes damage to the transmission. If this happens, tow the vehicle away or take other actions as appropriate.
- Always contact the nearest Ssangyong Dealer or Ssangyong Authorized Service Center for adding and changing transmission fluid. A non-genuine fluid can cause various problems including malfunction and performance deterioration of the transmission, and those damages are not covered by the warranty.
- The application of tint film, especially metallic film, may interfere with radio signals. Low visible light transmission (VLT) of the film can lead to malfunction in the headlamp. Also, make sure that no liquid solution for application of tint film flows into the electronic components of the vehicle to prevent error or malfunction.
- The tinted glass with very low VLT and enhanced solar control characteristics reduces visibility through the glass significantly, especially at night or in the rain, thereby causing unforeseen safety problems.
- The interior materials of the new vehicle within a year or use can emit volatile organic compounds (VOCs). Therefore, always open all the windows for sufficient ventilation before entering. Those chemicals can cause headaches and dizziness especially in the cabin of the vehicle parked for a long time in direct sunlight. Therefore, to prevent the driver and passengers from being exposed to these harmful chemicals and keep the comfortable indoor environment, set the air source selection switch to the fresh air intake mode for as long as possible or open the windows periodically while driving.

BREAK-IN PERIOD



There are no particular break-in rules for your new vehicle. However, following a few simple precautions for the first 1000 km can add to good future performance, fuel economy and long life of your vehicle.

- Allow the engine to warm up after starting.
- Avoid harsh operations such as abrupt starts, sudden acceleration and prolonged high speed driving.
- Do not race the engine.
- Do not maintain a single speed for long period of time. Varying engine speed is needed to properly break-in the engine.
- Avoid overload when climbing.
- Check the engine oil level more frequently until 5000 km of driving and add the oil if necessary.
- Do not tow a trailer during the first 1,000 km of operation.
- During the first 1,000 km of towing a trailer, do not drive the vehicle over 80 km/h or do not drive off the vehicle with full acceleration. Otherwise, engine or its components could be damaged due to overload.

CLEANING AGENTS

Follow the manufacturer's advice whenever cleaning agents or other chemicals are used for the inside or the outside of the vehicle. Some cleaners may be poisonous or flammable, and improper use may cause personal injury or damage. When cleaning the inside or outside of the vehicle, do not use volatile cleaning solvents such as: acetone, lacquer thinners, enamel reducers, nail polish removers; or cleaning materials such as laundry soaps, bleaches or reducing agents, except as noted in the fabric cleaning advice on stain removal. Never use carbon tetrachloride, petrol, benzene, or naphtha for any cleaning purpose. Open all vehicle doors for ventilation when any cleaning agents or other chemicals are used in the interior. Overexposure to some vapors may result in a health problem which is more likely to occur in small, unventilated spaces. To avoid possible permanent discoloration of light colored seats, do not let materials with non-fast colors come in contact with seat trim materials until these materials are totally dry. This includes certain types of casual clothing, such as colored denims, corduroys, leathers and suedes; also, decorative paper, etc.

VEHICLE WASHING

To avoid corrosion, wash your vehicle as soon as possible after driving on a coastal road (salted road), on a road where the snow removal chemicals (calcium chloride etc.) has been spreaded, in the area where the atmospheric fallout/industrial pollutants are exist, or on a muddy or dusty road. Also, immediately wash your vehicle when things such as tree sap or bird droppings get on the painted surface.

Do not wash your vehicle under direct sunlight. Always wash your vehicle in the shade. If your vehicle has been parked under direct sunlight for a long period, let it cool sufficiently before washing.

How To Wash:

- Rinse the vehicle throughly with cool water to remove dust and loose dirt.
- Clean the vehicle throughly using a mild soap or detergent mixed with clean and lukewarm water. Start at the top and work your way down.
- Check whether the vehicle is smeared with tree sap, coal tar or other foreign materials. Rinse them off while paying particular attention not to damage the painted surface.
- Remove the moisture using a soft cloth. If you detect any stone chips or scratches in the painted surface, to prevent corrosion, touch them up immediately.
- You should allow enough space between a high-pressure water gun and your vehicle when washing the car with a high pressure cleaner. When the water gun is too close to the vehicle body, the high pressure of the water gun can cause painted surface damage of the panels or malfunction of the sensors on the bumper.

CAUTION

- Be careful not to damage the air spoiler when cleaning the vehicle in an automatic car wash.
- Wash your car by hand or using an automatic car washing machine. Avoid using a high pressure cleaner as much as possible to maintain and manage the car performance. The high water pressure can cause painted surface damage of the panels or malfunction of the sensors on the bumper. In case where using a high pressure cleaner is unavoidable, pay attention to the conditions of your car by allowing enough space between a high-pressure water gun and your vehicle.
- If the engine compartment is cleaned with water (or high-pressure car washing), the water may go into the electrical circuits or air ducts located on the engine compartment, which causes the vehicle not to maneuver properly.
- After washing the vehicle, check whether the brake is affected by water by testing the brake operation while driving the vehicle at low speed.

BUMPER WASHING

- Remove the dirt or dust first with water and a sponge.
- If the bumper is contaminated by engine oil or any lubricants, wipe it off using mild soapy water.

CAUTION

Do not use abrasive wax and strong cleaning materials such as steel wool which will scratch the vehicle body and bumper.

CARE AND CLEANING OF THE INTERIOR



With the use of modern trim materials, it is very important that you use proper cleaning techniques and cleaners. Failing to do this on the first cleaning may result in water spots, spot rings, or setting of stains or soils. All of which are more difficult to remove in a second cleaning.

Dust and loose dirt that are accumulated on interior fabrics should be frequently removed with a vacuum cleaner or soft bristle brush. Wipe vinyl or leather trim regularly with a clean damp cloth. Normal trim soils, spots or stains can be cleaned with cleaners.

CAUTION

- Use only the mild detergent or cleaning agent with a small amount of alcohol when cleaning the leather product (steering wheel, seats etc.). Strong acid/alkali detergent or the cleaning agent with plenty of alcohol may cause the discoloration and peeling of surface.
- The Leather Seat Maintenance is necessary on Quarter basis with dedicated Leather Milk or Cream in order to feed the Leather and avoid any cracks on the seats and conserving the original look and comfort of the seat."

WARNING

To prevent from burning and electric shock, turn off the interior lights before cleaning the vehicle interior.

Seat Belt Care

- Keep belts clean and dry.
- Clean seat belts only with mild soap and lukewarm water.
- Do not bleach or dye belts since this may severely weaken them.

GLASS SURFACES

Glass surfaces should be cleaned on a regular basis. The use of a glass cleaner or a liquid household glass cleaner will remove normal tobacco smoke and dust films.

Never use abrasive cleaners on any vehicle glass, as they may cause scratches. If abrasive cleaners are used on the inside of the rear window, any electric demister element may be damaged. Avoid placing decals on the inside rear window, since they may have to be scraped off later.

Cleaning the Outside of the Windshield

If your windshield is not clear after using the windshield washer, or if the wiper blade chatters when running, wax or another material may be on the blade or windshield, clean the outside of the windshield with cleaning powder or an equivalent non abrasive cleaner. Your windshield is clean if beads do not form when rinsing with water.

CAUTION

- Be careful not to damage the heated wire.
- Do not install the additional tinting film other than factory setting on the windshield and rear glass. Otherwise, it may affect the operation of heated wire in the glasses.
- The vehicle with the rain sensor and the auto light sensor on windshield should be handled carefully. If the sensor installation area is dirty or corrupted by agent, the sensor may not work properly.

WARNINGS FOR WINDOW TINTING

- All vehicles from our factory have tinted windshield and rear window which meet the specified percentage of visible light transmission (VLT). Do not tint the windows of the vehicle delivered from the factory. Tinted window with certain percentage of VLT might be a legal requirement.
- Make sure that no liquid solution for application of tint film flows into the electronic components of the vehicle to prevent error or malfunction.
- Do not modify or apply additional sun films on the windshield and rear window of the vehicle with heated window system. Sharp edge of a knife or work tool may damage the heated wire and cause electrical shocks.
- The tinted windshield and rear window with very low VLT and enhanced solar control characteristics reduce visibility significantly, especially at night or in the rain, causing unexpected safety problems.

CARE AND CLEANING OF THE EXTERIOR

Exterior Finish

The paint finish on your vehicle provides beauty, depth of color, gloss retention, and durability.

Washing your Vehicle

The best way to preserve your vehicle's finish is to keep it clean by frequent washing.

Wash the vehicle with lukewarm or cold water.

Do not use hot water or wash your vehicle under direct sunlight. Do not use a strong soap or chemical detergent.

All cleaning agents should be washed promptly from the surface and not allowed to dry on the finish.

Ssangyong vehicles are designed to operate under normal environmental conditions and to withstand the natural elements. However, unusual conditions, such as high pressure car washers, may cause water to enter the inside of your vehicle.

Polishing and Waxing

Periodic polishing and waxing is recommended to remove surface residue from your paint finish. Approved products are supplied through your Ssangyong Distributor.

Protecting Exterior Bright Metal Parts

Bright metal parts should be cleaned regularly to keep their luster.

Special care should be taken when cleaning the aluminum trim. To avoid damaging the protective trim, never use automotive or chrome polish, steam, or caustic soap to clean the aluminum trim. A coating of wax is recommended for all bright metal parts.

Cleaning Aluminum Wheels, Alloy Wheels, and Wheel Covers

- Do not use abrasive cleaners, polishes, solvents, wire brushes or cleaning brushes for cleaning, as they could damage the finish.
- Use neutral detergents for cleaning the wheel, as acid or alkaline detergents could damage the wheel cover.
- Clean the wheels after driving on a coastal road to prevent the wheel from being corroded.

⚠ CAUTION

Never clean the aluminum wheel or alloy wheel with acidic or alkalic detergents. Otherwise, wheel's protective finish could be damaged.

CORROSION PROTECTION

Your car was designed to resist corrosion. When it was built, special and protective finishes were used on most parts of your car to help maintain a good appearance, strength and reliable operation. Some parts which normally are not visible (such as certain parts located in the engine compartment and the underbody of the vehicle) are such that surface rust will not affect their reliability. Therefore, corrosion protection is not needed or used on these parts.

Sheet Metal Damage

If your car is damaged and requires body panel repair or replacement, make sure the body repair shop applies proper anticorrosion material to the parts repaired or replaced so that corrosion protection is restored. (Also refer to "Finish Damage" on the next page).

Foreign Material Deposits

Calcium chloride and other salts, deicing agents, road oil and tar, tree sap, bird droppings, chemicals from industrial chimneys and other foreign materials may damage vehicle finishes if left on painted surface. Prompt washing may not completely remove all of these deposits. Other cleaners may be needed. When using chemical cleaners, be sure they are safe for use on painted surfaces.

Finish Damage

Any stone chips, fractures or deep scratches in the finish should be repaired promptly. Bare metal will corrode quickly and may develop into a major repair expense. Minor chips and scratches can be repaired with touch-up materials. Larger areas of finish damage can be corrected in your Distributor's body and paint shop.

Underbody Maintenance

Corrosive materials used for ice and snow removal and dust control can accumulate on the underbody. If these materials are not removed, accelerated corrosion (rust) can occur on underbody parts such as the fuel lines, frame, floor pan, and the exhaust system even though they have been provided with corrosion protection. At least every spring, flush these materials from the underbody with plain water. Take care to clean any area where mud and other debris can accumulate.

Sediment packed in closed areas of the frame should be loosened before being flushed. If desired, your Ssangyong Distributor can do this service for you.

CAUTION

- When the engine is washed, fuel, grease or oil residues are washed off. Therefore you should use only a filling station or a Ssangyong Distributor who has oil separator equipment in the car wash bay.
- Used engine oil, brake fluid, transmission fluid, antifreeze, batteries, and tires should be disposed by using the local authorized waste disposal facilities, or have them disposed of by the vendor who is under a statutory obligation to do so when you replace them.
- None of these items should be placed in the household recycling bins or poured into the sewage system.
- Everyone should be concerned about environmental protection.
- Help by doing your share.
- When a strong multi-purpose, acid, or alkaline detergent is used to clean up the surface of the painted body, side mirrors, windshield, plastic moldings or leather, changes, fading of colors or rusting can happen.
- When the windshield is cleaned with an oil-contained or waxed towel, strange sounds and vibrations may occur on the windshield surface when the wipers are operating. Also, decreased visibility, reflection at night, or poor removal of water on the windshield may happen. Do not clean the windshield with an oil-contained or waxed towel.
- An abrasive detergent may damage the painted surface of your vehicle, including the bumper. Do not buff or polish your vehicle with an abrasive detergent.
- An acid or alkaline detergent may damage the painted surface of the aluminum or alloyed wheels.
- When chemical products are used to clean up the interior, the chemical products may change some colors or distort the shape of some interior parts.
- When cleaning up interior parts, do not use chemical products such as acetone, enamel or bleach.

IGNITION KEY/DOOR REMOTE CONTROL

- Never use any duplicated key not provided by Ssangyong. It may cause a fire due to an overload in the electric circuit.
- If you lose your keys, you have to replace the whole key set to prevent from theft.
- Avoid shock to the transmitter in the door remote control and do not get it wet.
- Only use the batteries with the same specifications to replace the discharged battery. Do not reverse the polarity.

SYSTEM SAFETY MODE

The protective measures including illumination of engine warning lamp and reduced engine power are taken (engine turned off in worst case) when there is a critical fault in the system or a malfunction in the major electrical or fuel system. This indicates the system entering the safety mode to protect the vehicle's drive system.

⚠ DANGER

- If the safety mode is activated, pull over and stop the vehicle to a safe location immediately and contact your Ssangyong dealer. Then drive slowly or have the vehicle towed to a Ssangyong Dealer or Ssangyong Authorized Service Center according to the dealer's instruction and have your vehicle checked by a mechanic.
- If you continue to drive in this state, normal driving is not maintained due to the fixed engine rpm and engine can stop. But even more importantly, continued driving with this state may damage the drive system.

TURBOCHARGER SYSTEM

Insufficient oil supply to the bearing assembly in turbocharger may cause the turbocharger to seize. Therefore, the following cares are necessary to prevent the seizure.

- Use only the specified engine oil and observe inspection and replacement intervals.
- Operate the engine over the idling speed only after normal engine oil pressure has been established. Forcing the turbocharger to operate before the bearings are adequately lubricated creates unnecessary friction.
- After starting the engine, let it run for approx. 2 minutes at idle speed (Avoid acceleration or driving off the vehicle).
- Do not stop the engine immediately after coming back from high load driving (such as high speed driving or driving on long slope). Let the engine run for approx. 1 minutes at idle speed to cool it down.
- After changing the engine oil and oil filter, start the engine and let it run for approx. 1 minutes at idle speed (Avoid acceleration or driving off the vehicle).
- Do not rev the engine at high speed without air cleaner element when checking the engine.

Turbocharger?

The turbocharger consists of two turbo elements, a turbine and a compressor, both of which are driven from the main center shaft. The turbine rotates between 50000 ~ 160000 revolutions per minute and uses the energy of the exhaust gas to drive the compressor. The compressor, in turn, draws in fresh air which it supplies to the cylinders in the form of compressed air.

FUEL RECOMMENDATION

Commercially available high-quality fuels are suitable. Fuel quality has a decisive influence on the power output, driveability and life of the engine. The additives contained in the fuel play an important role in this connection. You should therefore use only high-quality fuels.

Diesel Engine

Use diesel fuel at 50 cetane rating or higher.

Gasoline Engine

Fuel with too low an octane number can cause pre-ignition (detonation). Ssangyong can not be held liable for resultant damage.

⚠ CAUTION

For correct octane rating setting and other use of gasoline (ex. Leaded), consult your Ssangyong Dealer.

⚠ CAUTION

Engine and exhaust system will be damaged.

- Do not use leaded fuel to the vehicle for unleaded fuel.
- Use the fuel with specified or higher Research Octane Number recommended for your country by Ssangyong.

It is not covered by warranty.

Do not Use Methanol

Fuel containing methanol (wood alcohol) which is not qualified EN228 and EN590 standards should not be used in your RODIUS/STAVIC. This type of fuel can reduce vehicle performance and damage components of the fuel system.

NOTE

The warranty policy will not cover damage of the fuel system and any performance problems that are caused by the use of methanol or fuel containing methanol.

Operation in Foreign Countries

If you are going to drive your RODIUS/STAVIC in another country, be sure to:

- Observe all regulations regarding registration and insurance.
- Check that a suitable fuel is available.

Vehicle Fueling from Drums or Storage Containers

For safety reasons (particularly when using noncommercial fueling systems) fuel containers, pumps and hoses must be properly earthed.

Static electricity build up can occur under certain atmospheric and fuel flow conditions if unearthed hoses, particularly plastic, are fitted to the fuel dispensing pump.

It is therefore recommended that earthed pumps with integrally earthed hoses be used, and that storage containers be properly earthed during all noncommercial fueling operations.

USING BIODIESEL FUEL AND LOW QUALITY FUEL

The fuel system of the common rail direct injection engine is precisely machined component. Using low quality fuel and excessive biodiesel fuel could result in a serious damage to the engine due to the water, impurities or suspended particles in fuel.

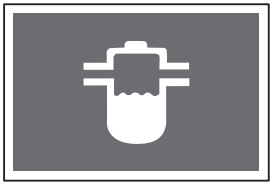
Using fuel mixed with too much biodiesel fuel can cause fuel filter clogging, power loss, engine idling problem, engine stall, difficulty with starting the engine in cold weather as well as damage to the engine and the fuel system, due to the naturally produced suspended particles.

Currently, the Ssangyong vehicle is designed so that only the mixed fuel of biodiesel and diesel with mixing ratio within the specified range can be used for safety. If any product in which the biodiesel fuel is exceeds the total amount of fuel is used or the aftermarket biodiesel fuel is added to the regular fuel, it can lead to malfunctions in the vehicle and this is not covered by warranty.

What is “Bio-diesel”?

The bio-diesel fuel is made by reacting vegetable oil extracted from beans, rapeseed, rice bran, etc. with alcohol. This can be solely used or used mixed with the diesel fuel for the diesel engine as its physical and chemical characteristics are similar to those of the diesel fuel. This is considered to be alternative energy to the diesel fuel nowadays.

WATER SEPARATOR WARNING LIGHT



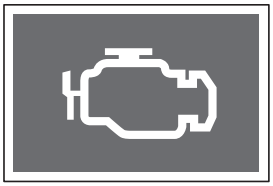
When the water in the fuel filter exceeds a certain level, this warning light and an alarming sound are activated. In addition, the driving force of the vehicle decreases.

Water separating interval: whenever changing the engine oil

WARNING

- If the water separator warning light comes on, have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- The fuel system in the engine may suffer serious damage if you keep driving while the warning light is on.

ENGINE CHECK INDICATOR



The Engine check indicator on the instrument cluster comes on when the fuel or major electronic systems of the engine are not working properly. As a result, the engine’s power output may decrease or the engine may stall. If this happens, please visit the nearest Ssangyong dealer or Ssangyong Authorized Service Center.

AIR BAG

- The airbags must never be impacted by hand or with tools.
- The air bag system serves as a supplement to the seat belt. Make sure that you and your passengers always fasten the seat belts properly even if the air bags are installed in the vehicle.
- Do not place any objects on the air bag inflation location. You may be injured by those objects during deployment.
- The air bag system should be inspected 10 years after installation regardless of its appearance and other conditions.
- Repairs to the air bag system should be done only by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- Do not diagnose the circuit with a circuit tester. Do not attempt to modify any air bag components including the steering wheel, air bag mounting area, and harness.
- Never install a child restraint in the front seat. The children sitting in the restraint could be seriously injured by the air bag in a collision.
- The deployed air bag unit should be removed from the vehicle and replaced with a new one.
- When the air bag is deployed, the relevant components will be very hot, so do not touch them until they have cooled down.
- A person who is smaller than 140 cm should sit in the rear seat.

USING SSANGYONG DEALER OR SSANGYONG AUTHORIZED SERVICE CENTER

Have the vehicle serviced at Ssangyong Dealer or Ssangyong Authorized Service Center. The customer warranty may be void for any concerns with in your vehicle if the vehicle is serviced by a third party or another service center.

GENUINE PARTS

Always use only Ssangyong genuine parts for replacement. Ssangyong is not liable for any damage caused by the use of non-Ssangyong genuine parts and accessories.

PRECAUTIONS ON THE DASHBOARD CAMERA INSTALLATION

The battery may be depleted if the vehicle remains unused for a long time with the permanent power supplied dashboard camera.

Be sure to turn the dash camera off during a long period of vehicle inactivity.

CARING FOR YOUR VEHICLE UNDER 0°C (32°F)

During the winter, undesirable road conditions frequently happen. Therefore, appropriate preparations for emergencies should occur.

Before driving in suburban or rural areas, or on a snowing day, have bags of sand, snow chains, a shovel, gloves, and old clothes in your vehicle.

Coolant

Before it gets cold, check the coolant level.

The conventional coolant is the 50:50 mixture of water and antifreeze.

If only water has been added into the coolant reservoir, the engine and the cooling system of your vehicle may seriously be damaged when the water freezes as it gets below the freezing point.

CAUTION

- When the vehicle is shipped, the cooling system is filled with a four-season coolant.
- Before adding or refilling coolant, ensure that the coolant is a 50:50 mixture of water and antifreeze.
- Use only Ssangyong genuine coolant.

Washer Fluid

Use a genuine washer fluid that does not freeze on a cold day.

When non-recommended washer liquid is used, the liquid may form an ice. This will damage the wiper motor and hinder your safe driving.

Engine Oil

When the vehicle is shipped, the engine is filled with four-season engine oil.

Tires

Snow tires are more desirable on an icy or snow-covered road. Have snow tires installed on your vehicle before driving on such a road.

CAUTION

- When snow tires are installed, drive your vehicle at a lower speed than normal.
- Install snow chains correctly. Otherwise, the chains may damage the wheelhouses or the body of your vehicle.

Air Conditioner

When the air conditioner has not been used for an extended period of time, internal moving components may become seized because the lubricating system has not worked for a prolonged amount of time. As a result, the refrigerant may leak or rusting may happen to the system. Malfunction of the air conditioner may result.

To maintain its optimal operating condition, it is recommended that the air conditioner be turned on for approximately 5 to 10 minutes every week throughout all seasons.

CAUTION

Do not remove the refrigerant in winter, even though you do not use the air conditioner.

STARTING THE ENGINE AND DRIVING IN WINTER

Starting the Engine in Winter

During winter, the engine experiences increased resistance from the powertrain; the battery and the starter have a decreased capacity. Therefore, start the engine in an appropriate way.

After starting the engine, allow time to warm it up before driving the vehicle. Warming up the engine will increase its life expectancy and help you drive safely.

CAUTION

- The glow plugs of the diesel engine should sufficiently be warmed up before the engine starts.
- Change the engine oil and fuel filter according to the specified service intervals. Contaminated engine oil will decrease its viscosity and clog the fuel filter and oil filter, causing a difficulty of engine start at low temperature.
- Do not add any additives other than the genuine fuel for better startability at owner's disposal. The additive may decrease the lubricating ability of the internal fuel system; the additive may have a different flashing point. This will damage the fuel system or produce an excessive exhaust fume.

Driving in Winter

Maintain at least twice as long of a normal driving distance between your vehicle and the vehicle in front of you. When stopping, shift into a lower gear to use the engine brake.

Avoid speeding, abrupt acceleration, sudden braking, or drastic maneuvering of the steering wheel.

PARKING IN WINTER

When the parking brake is applied in cold weather, ice may form on the brake system and cause some difficulty moving the vehicle. When parking on a hill, first, apply the parking brake. Put the shift lever into the "1" or "R" position (Manual Transmission) or into the "P" position (Automatic Transmission). Put a chock under a tire and release the parking brake.

WARNING

When ice forms on the parking brake system, an attempt to move the vehicle without removing the ice may damage your vehicle. Wait until the ice melts away and gently move your vehicle.

OTHER MAINTENANCE

After driving on a calcium chloride (salt) spayed road, wash the bottom of your vehicle as soon as possible to avoid any rust.

When parking on a snow-covered road, the brake system may begin to have some ice on it. The ice will decrease your vehicle's braking ability. If this happens, drive at a low speed and use the brake frequently to remove the ice. After regaining the braking ability, drive your vehicle at a normal speed.

WARNING

- When there is ice on the wiper blades, turning on the wiper switch may put an extra burden on the wiper motor and damage it. Avoid using the wipers when ice is on the blades.
- When driving on a snow-covered road, a large amount of snow may build up under each wheelhouse. This buildup prevents the steering wheel from moving freely. Therefore, remove the snow buildup frequently.

Diesel Fuel in Winter

On an extremely cold day, paraffin, one of the chemicals in diesel fuel, may separate from the diesel fuel. This separation makes starting the engine difficult. During the winter season, Kerosene is added to diesel in some markets to prevent the paraffin separation and secure stable flow of the fuel through the fuel filter. The amount of added Kerosene into diesel can vary by location and their average winter temperatures. Therefore, to ensure an easy start on a cold day, park your vehicle inside of a garage. If possible, fill up the fuel tank after each driving to prevent ice from forming inside of the fuel system.

CAUTION

- Change engine oil and the fuel filter as scheduled. Contaminated engine oil will lose its viscosity, clog the fuel filter and oil filter and cause difficulties starting the engine.
- Do not add any additives other than the genuine fuel for better startability at owner's disposal. The additive may decrease the lubricating ability of the internal fuel system; the additive may have a different flashing point. This will damage the fuel system or produce an excessive exhaust fume.

Do not modify this vehicle.

If unauthorized notifications are made on the vehicle, the company is not liable for repairing the modified parts even during the term of warranty. Other part problems caused by modification are also not covered.

The vehicle you bought is equipped with a large number of precision parts that have passed through countless experiments and tests. These parts are deeply and systematically interwoven. Therefore, if any part is modified or altered without authorization, said parts may be damaged from the decrease in performance or overloading, which can then cause critical damage to the vehicle and human life.

Do not modify without authorization the driving gear system, including the engine, just to upgrade the vehicle's performance and beauty.

- Unauthorized modification of the engine or parts for the exhaust is prohibited.

Changing without authorization the preset value in the fuel supply system and inlet, exhaust and electric systems, and changing or adding unauthorized parts is illegal and may cause serious problem with the vehicle's durability.

In particular, modifying your vehicle by fitting LPG might bring serious damage to the vehicle's performance and durability. Not only the engine but also the transmission and wheel alignment are excluded from the warranty.

If you install a wheel dust cover on the tires to enhance the beauty of tire parts, the heat caused by friction in braking might bring serious problems in performance, causing Vapor Lock and Fade phenomena.

Never install any remote engine starter.

When you modify your vehicle and install a remote engine starter, you may have some problems starting the engine or suffer fatal accidents.

Do not modify the car's audio system and install other additional electronic devices such as wireless communication equipment, rear view camera, LCD TV.

This vehicle's electronic system contains electronic circuits and fuses for the installation of standard electric and electronic devices. If you add new devices or circuits using the several existing devices and circuits at a time, electric and electronic devices can be damaged from overloading and may ignite. In addition, when you do drilling work in installing devices such as an antenna may expose the vehicle to rusting.

Do not use the nonstandard tires, wheels, and other related parts.

Installing nonstandard tires such as tires with greater width than prescribed can wear out the power delivery system or friction-damage related parts. In addition, other problems such as increase of fuel consumption and braking distance, vehicle's shudder, and decrease of steering power can all degrade the vehicle's performance. The speedometer and odometer can also become inaccurate. The vehicle with automatic transmission may have the shock in changing the speed.

Do not use duplicate key

A duplicate key might cause malfunction to the ignition key cylinder and deter the ignition motor to return to the original state. If so, electronic circuitry can be damaged and may ignite from the ignition motor's continuing rotation.

Do not equip the sunroof or color glasses at your discretion.

If you install a sunroof by cutting the vehicle's roof, rust and leakage may occur in the cut part. Installing color glasses to block ultraviolet rays and better appearance may cause leakage and other many problems.

Do not equip the vehicle with bumper guards sold in the market.

Installing bumper guard or other guard bars that are being sold in the market may cause problems in parking and stopping due to the extended length of vehicle, and increase in fuel cost due to additional vehicle weight, and rusting may occur in the holes for equipping the guards. And because of the absence of shock absorber in the bumper guard, even accidents during low-speed driving will be much serious compared with the damage that unmodified cars might sustain.

Do not modify or replace the vehicle flooring or the seats at your discretion.

- When replacing the interior flooring of vehicle with laminated paper

To improve the comfort of cushion and to facilitate the cleaning of the vehicle, some drivers replace the flooring with laminated paper after removing the seats. However, this may cause damage to the various electronic system control units and wiring. This also may hinder the function of the seat rail that enables for the seat to move forward and backward. In this case, the locking system to fix the location of seats may malfunction, which might lead to a serious accident if the loose seats tilt forward or backward during an uphill climb or downhill descent.

- When exchanging the seats with new ones or equipping separate seat covers.

There are several types of seat covers according to role and function although with the same vehicle type. Replacing the seats with new ones may alter the wiring system or over-use the wires because a seat has various electric connections and wiring diagram. As mentioned earlier, this may damage the wiring and related equipment or cause fire due to the overloading on the rated capacity.

In addition, replacing the seat cover may damage the electronic equipment caused by cut or pressured wire. Such a situation may also cause ventilation problems, fire, or noise.

Do not equip with a separate accessory or assistant device on the vehicle operational device.

Making the selection lever longer or equipping with an accelerator pedal and brake pedal pad may make the driver prone to make a mistake while driving.

Do not install products that may decrease the driving resistance such as sticker, molding, air dam, or windproofing products.

The sticker's adhesives may damage the coated surface of the vehicle. If parts of the car are drilled to attach molding and other functional parts, the area near the holes will rust and other unfamiliar sound may occur while driving. Especially if the attached parts are not fixed well, it may damage the vehicle or even cause a fatal accident.

In using audio in the vehicle, do not use illegally copied CD and DVD, which violates relevant laws. Such discs can also cause malfunction of the audio head unit and changer. In addition, such discs may also not play properly.

When installing the vehicle with unauthorized parts or modifying it in ways including the cases mentioned previously, please keep in mind that the changed parts and related problems with changed auto parts shall not be covered by warranty.

CAUTIONS FOR DIRECT INJECTION TYPE DIESEL ENGINE (I)

Direct Injection (DI) Type Diesel Engine

Compared to Indirect Injection (IDI) Type Diesel Engine that uses a mechanical fuel injection system, a Direct Injection (DI) Type Diesel Engine controls the amount of injected fuel and the fuel injection timing electronically. This advanced engine enhances the output power and reduces the noxious exhaust gas (CO, HC, NOx....). Because the Direct Injection Diesel Engine is operated by high pressure (1,600 bars), any removal, modification or service of the engine may contaminate the inside of the system and cause the system to malfunction. In that case, the malfunction and any related systems are not under warranty of this company.

Warning for Using Low Quality Fuel or Bio Fuel

The fuel system in a DI engine equipped vehicle has many precisely machined components. Using low quality fuel could result in serious damage to the engine due to the water or impurities in the fuel.

Never use the low quality fuel.

Diesel Engine

Use diesel fuel at 50 cetane rating or higher.

Gasoline Engine

Fuel with too low an octane number can cause pre-ignition (detonation). Ssangyong can not be held liable for resultant damage.

CAUTION

For correct octane rating setting and other use of gasoline (ex. Leaded), consult your Ssangyong Dealer.

CAUTIONS FOR DIRECT INJECTION TYPE DIESEL ENGINE (II)

System Safety Mode

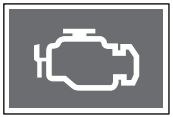
When the vehicle has a system error, the vehicle operates in safety mode to maintain minimum driving conditions and to prevent the system from being damaged. In this mode, the engine driving force may be decreased or the engine may stall. When this happens, have the system checked at a Ssangyong Dealer or Ssangyong Authorized Service Center.

Supplementary Heating Device

PTC (Positive Temperature Coefficient)

This supplementary heater is an electrical air heating type and installed on the heater outlet port. This device improves the heating effect by increasing the temperature of flowing air into the passenger room.

Engine Check Indicator



The engine check indicator on the instrument cluster comes on when the fuel or major electronic systems of the engine are not working properly. As a result, the engine's power output may decrease or the engine may stall. If this happens, please visit the nearest Ssangyong dealer or authorized service operator.

When flashing (for vehicles equipped with CDPF)

When a particular amount of particulates is collected in the Catalyst Diesel Particulate Filter (CDPF), these particulates are automatically combusted (regeneration process). However, this regeneration may not be performed due to several operating conditions. And in this case, the engine CHECK indicator flashes. This flashing function is to inform the driver to take action for the proper regeneration of the filter.

If the engine CHECK indicator flashes, drive the vehicle at over 80 km/h for 15 ~ 20 minutes to regenerate the CDPF. When the amount of particulates is lowered down to a certain limit, the engine CHECK indicator goes off.

Catalyst diesel particulate filter (CDPF)

The CDPF is a compound word for Diesel Oxidation Catalyst (DOC) and Diesel Particulate Filter (DPF), which are exhaust gas after-treatment devices.

CAUTIONS FOR DIRECT INJECTION TYPE DIESEL ENGINE (III)

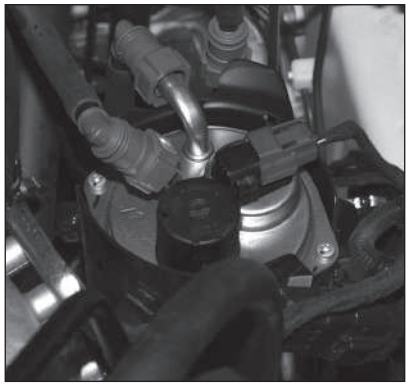
Water Separator Warning Light



Can be performed when engine oil is changed

When the water level inside of the water drain in the fuel filter exceeds a certain level, this warning light and an alarming sound are activated. In addition, the driving force of the vehicle decreases. If this happens, immediately drain the water from the fuel filter. Please refer to Chapter 5 “How to drain the water from the fuel filter” in this manual.

Priming Pump Operating Conditions



1. If the vehicle has been run out of fuel
2. After draining water from the fuel filter
3. After replacing the fuel filter

If this happens, pump fuel until the fuel filter is fully filled. Then, start the engine.

WARNING

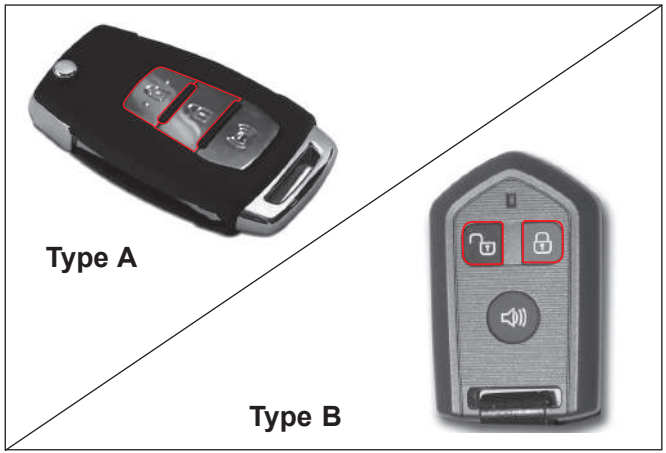
After replacing the fuel filter or draining the water from the fuel filter, bleed the air from the fuel filter by using priming pump. Otherwise, the engine cannot be started or the fuel system could be damaged due to the air in fuel line.

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Ignition Key & Door Remote Control



Unlock (briefly press)

- If you press this button briefly, all doors and the tailgate are unlocked and the theft deterrent mode is deactivated.
- When the deterrent mode is deactivated, hazard warning flashers blink once and the buzzer sound twice.
- If a door is not opened within 30 seconds after unlocking the doors with remote control key in theft deterrent mode, all doors will be automatically locked again (change to theft deterrent mode)

Lock (briefly press)

- If you press this button briefly, all doors and the tailgate are locked and the theft deterrent mode is activated.
- When the theft deterrent mode is activated, the hazard warning flashers blink twice and the buzzer sound once.

CAUTION

- To arm the theft deterrent mode, the ignition key should be removed from the ignition switch, all doors including the tailgate and the engine hood should be closed completely.
- To prevent from being stolen, after locking the doors and tailgate using the remote control key, check the doors and tailgate have been securely locked.

Coupled With Front Interior Lamp

If you press the door unlock button in door remote control when the front interior lamp switch is at “Door” position, the front interior lamps will come on for 30 seconds.

Automatic Door Locking

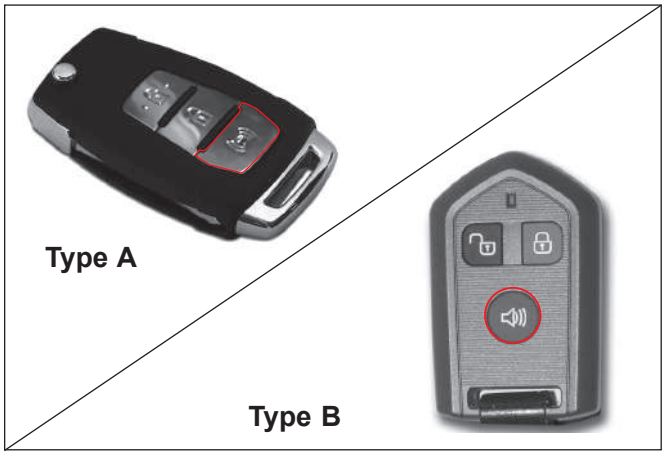
If a door is not opened within 30 seconds after unlocking the door with door remote control, all the doors will be locked automatically.

Theft Alarm Activation

If somebody tries to open the door, tailgate, or the hood in theft deterrent mode, the alarm will sound and the side turn signal lamps will blink for about 27 seconds.

Theft Alarm Deactivation

To stop the theft alarm during its activation, press any key on the door remote control.



Panic Function (press and hold)

- If you are in your vehicle and feel threatened while the ignition key is inserted into the key switch, you may activate the alarm to call attention. If you press this button, the warning siren will sound for approx. 27 seconds.
- The panic function will stop when any of the buttons on the remote control key is pressed.

NOTE

The alarm sounds only when the ignition key is inserted into the key switch hole.



To use the mechanical key:

Press the button. The mechanical key is automatically folded up.

To stow the mechanical key:

Press the button and push it into its slot.

CAUTION

The key can be broken when folding not to press button.

When a door remote control is lost

When the door remote control is lost and a new door remote control is purchased, bring the new one to the nearest Ssangyong Dealer or Ssangyong Authorized Service Center and have it recoded.

To prevent from being stolen by the lost key, Immediately take a recoding for new key when you lost a key.

CAUTION

If you lose your key, you have to replace the whole key set to prevent from theft.

Cautions when using door remote control

CAUTION

- To arm the theft deterrent mode, the ignition key should be removed from the ignition switch and all doors should be closed completely.
- To prevent from being stolen, after locking the doors using the door remote control, check the doors and tailgate have been securely locked.
- Doors cannot be locked by door remote control when a door is open.
- Under the following conditions, the door remote control does not operate.
  - When the key is in the ignition switch
  - When you are too far from your vehicle (over 10 m)
  - When the battery in door remote control is discharged
  - When your vehicle is behind other vehicles or obstacles
  - In very cold weather
- The door remote control could be damaged easily by moisture and heat. Be sure to keep away from them.
- Opening the tailgate will not trigger the theft deterrent alarm even in theft deterrent mode.
- Operating range could be changed depending on the surrounding conditions. It is recommended to use the remote control key in 10 m from your vehicle.
- Under the following conditions, the remote control key may not work due to another radio wave. In these cases, open the doors using key and key hole in door.
  - In the place near police office, government office, broadcasting station, military base, transmitting tower, airport, and port
  - When you have the radio or mobile phone with the remote control key
  - When another remote control key is using near your vehicle
- If your door remote control is not working properly, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

Certification for FOB/Folding

Logo



NOTE

The logos are depicted in the certificate manual because of the product size.

FCC ID: DEO-MT-FLIP01

CAUTION

- Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received. Including interference that may cause undesired operation.

TYPE A

When the operational distance noticeably decreases or the remote control does not work occasionally, replace the battery with a new one.

The internal circuit of remote control key is vulnerable to static electricity. If you are not familiar with replacing the battery, replace it at Ssangyong Dealer or Ssangyong Authorized Service Center.

Replacing Procedures: Type A

1. Unscrew the screw from the rear cover of the REKES key with a flat-blade screwdriver.



2. Remove the rear cover from the REKES key and replace the battery with new one.



3. Use only specified battery (CR2032). Make sure that the battery is installed in correct direction.
4. Install the battery in the reverse order of removal.

CAUTION

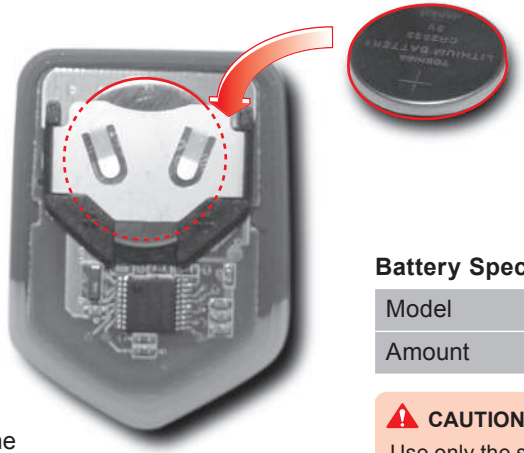
- Use only the specified battery. Otherwise, the remote control key may not work properly.
- Make sure that the battery is installed in correct direction.
- Dispose the used battery in accordance with local regulations.

TYPE B



When the operational distance noticeably decreases or the remote control does not work occasionally, replace the battery with a new one.

The internal circuit of door remote control is vulnerable to static electricity. If you are not familiar with replacing the battery, replace it at Ssangyong Dealer or Ssangyong Authorized Service Center.



Battery Replacement

1. Pry off the cover from the door remote control cover by using small flat screwdriver.
2. Remove the battery and insert new one with the positive pole faced upright.
3. Reassemble the cover of the door remote control.

Battery Specifications

Model	CR 2032
Amount	one

CAUTION

Use only the specified battery.

FUNCTIONS OF IGNITION KEY

ACC Position

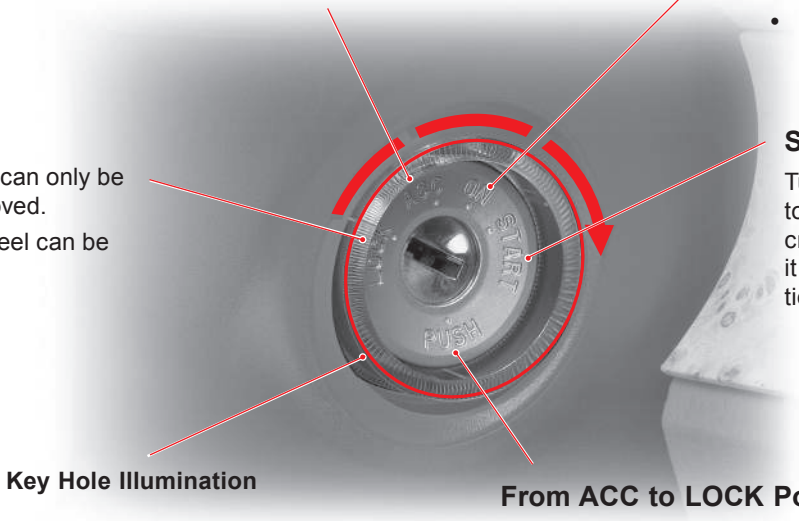
- The steering wheel is unlocked and electrical accessories are operative.
- The ignition key cannot be removed.

ON Position

- The engine runs and all electrical accessories can be used.
- The steering wheel is unlocked.

LOCK Position

- The ignition key can only be inserted or removed.
- The steering wheel can be locked.



START Position

Turn the ignition key to this position to start the engine. The engine will crank until you release the key; then it automatically returns to “ON” position.

Key Hole Illumination

From ACC to LOCK Position

Turn the key to LOCK position from ACC position while pushing the key inward.

Unlocking the Steering Wheel

To unlock the steering wheel, insert the key and gently turn it to the ACC or ON position while slightly moving the steering wheel right and left.

Key Hole Illumination

The illumination lamp comes on when opening the door. This lamp goes out about 10 seconds after closing the door.

Key Reminder

The buzzer will sound if the driver’s door is opened while the key is left in the ignition switch (ACC or LOCK position).

CAUTIONS WHEN STARTING THE ENGINE

- To unlock the steering wheel, insert the key and gently turn it to the **"ACC"** position while slightly moving the steering wheel right and left.
- The engine in a manual transmission equipped vehicle can only be started when the clutch pedal is fully depressed.
- Diesel engine equipped vehicle: Turn the ignition key to the **"ON"** position and wait until the glow indicator goes out. After then, turn the ignition key to the **"START"** position and hold it until the engine starts. But do not hold the ignition key at the **"START"** position for more than 10 seconds.
- The engine in an automatic transmission equipped vehicle can be started only when the gear selector lever is at the **"P"** or **"N"** position.
- Keep the brake pedal depressed when starting the engine.
- If the engine fails to start, turn the key back to the **"LOCK"** position and wait for 10 seconds. Then try again before any attempt to start the engine.
- After starting the engine, let it run for approx. 2 minutes at idle speed. Do not accelerate the engine during the warming up period.
- A warning buzzer sounds when opening the driver's door with the key positioned at the **"ACC"** or **"LOCK"** position.
- Do not leave the key at the **"ACC"** or **"ON"** position when engine is not running. Otherwise, the battery could run down.
- Never depress the accelerator pedal while starting.
- Do not operate the starter for more than 10 seconds at a time. (The starter may be damaged.)
- To prevent any damage to the starter, put the ignition switch to the **"LOCK"** position and wait for at least 10 seconds before restarting the engine.
- Never turn the key to the **"LOCK"** position or remove the ignition key from the ignition switch while driving. The steering wheel will be locked and you may end up with serious injuries.
- Never use any duplicated key not provided from Ssangyong.
- The duplicated key might not turn back to the **"ON"** position. It may cause a fire due to an overload in the electric circuit. In addition, the engine with the immobilizer system cannot be started with the duplicated key.
- For a vehicle with automatic transmission, apply the parking brake with the gear selector lever in "P" position. Otherwise, the vehicle can roll away unexpectedly causing a serious accident.
- Do not operate ignition switch or other switches while driving. You will not be able to control the steering wheel or the vehicle and could be seriously or even fatally injured.
- Do not stack luggage or other cargo around the driver seat. Any such objects could interfere with your control of the vehicle and can cause harm.

OPENING AND CLOSING THE DOORS WITH IGNITION KEY



① Locking the door and the tailgate

② Unlocking the door and the tailgate

To Lock the Door:

Turn the key to the lock position (toward front of the vehicle) from driver's door. All doors and the tailgate will be locked.

To Unlock the Door:

Turn the key to the unlock position (toward rear of the vehicle) from driver's door. All doors and the tailgate will be unlocked.

To Open the Door:

Pull out the door handle lever.

CAUTION

When you unlock the door with the ignition key after the door is locked with the remote control (the theft deterrent mode), a warning buzzer sounds. Stop the buzzer by pressing any button on the door remote control.

Automatic Door Locking

All doors will be automatically locked when you drive over 30 km/h while the doors are unlocked.

Automatic Door Unlocking

- All doors will be automatically unlocked when the engine is switched off.
- Even though all doors are locked, they will be automatically unlocked when the driver's door is opened.
- In the event of air bag deployment resulting from a vehicle impact, all doors will be automatically unlocked.

WARNING

When damage is done on a door or the body frame by an impact from an accident, the automatic door unlocking system may not work.

IMMOBILIZER SYSTEM*

The Immobilizer System provides an additional theft deterrent to the vehicle in which it is installed and prevents it from being started by unauthorized persons. The transponder integrated in the key and the engine control unit have the same code. When the ignition key with the integrated transponder is turned to the ON position, the ECU (Engine Control Unit) checks the crypto code of the key and, if correct, allows your vehicle to start the engine.



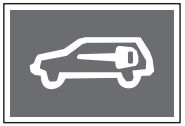
Immobilizer Key

When the ignition key with the integrated transponder is turned to the ON position, the ECU (Engine Control Unit) checks the crypto code of the key and, if correct, allows your vehicle to start the engine.

CAUTION

- Avoid impact to the transponder inside of the key. The transponder could be damaged.
- With a damaged transponder, the engine cannot be started.
- Do not install any metal object near the ignition switch and on the door remote control. Otherwise, they may disturb the signal between ignition switch and door remote control and result in engine starting problem.

Immobilizer Indicator



If this indicator blinks, it may indicate that there is something wrong in the immobilizer system. Have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

NOTE

The time needed for communication between the immobilizer key and ECU can vary. If it is very short, the immobilizer indicator does not come on.

CAUTION

- In addition, any remote engine starter cannot be installed to the vehicle equipped with the immobilizer system. So never install any remote engine starter.
- The immobilizer system should be inspected, replaced, serviced, or coded by only qualified service personnel in a Ssangyong Dealer or Ssangyong Authorized Service Center.
- When an old code should be replaced or another key is added, please observe the process personally.
- If you fail to start the engine due to the reason (ex, key chain) other than key itself, remove the key from the ignition switch and wait for around 10 seconds. And, try to start the engine again.

WARNING

In any case, the immobilizer system cannot be removed from the vehicle. Do not attempt to alter this system or add other device to it. Electrical problems could result that may make your vehicle inoperable.

ENGINE DOES NOT START DUE TO COMMUNICATION ERROR

If there is a communication error in immobilizer system, you cannot start engine. In this case, the immobilizer indicator in meter cluster blinks.

In the following cases, you may be unable to start the vehicle with the immobilizer.

- When two or more immobilizer keys come into contact with (each) other(s).
- When the key is close to any device sending or receiving electromagnetic fields or waves.
- When the key is close to any electronic or electric devices such as lighting equipment, security keys or security cards.
- When the key is close to a magnetic or metal object or a battery.
- When you start the engine before completing the pre-glow process.

⚠ CAUTION

- If you fail to start the engine due to the communication error or early start before completion of pre-glow, clear the reason and wait for around 10 seconds. And, try to start the engine again.
- If the indicator remains blinking, have the immobilizer system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

When the Transponder is Damaged

When the transponder is damaged, you must replace it with a new one and register a new code on the engine control unit at a Ssangyong Dealer or Ssangyong Authorized Service Center. Otherwise, the engine cannot be started.

When You Lost The Key

When you lost the key, the encrypted code should be removed from the Engine Control Unit to avoid any vehicle theft. Please contact a Ssangyong Dealer or Ssangyong Authorized Service Center.

The theft deterrent system is activated when locking the doors using the door remote control. When somebody tries to open the door, tailgate or engine hood with any other way other than using door remote control, the hazard flashers blink and the siren sounds.

ARMING THE THEFT DETERRENT SYSTEM

- When all doors are locked with the door remote control, the anti-theft mode will be activated. When the theft deterrent system is armed, the buzzer sounds once and the hazard flashers blink twice.
- If a door or tailgate is not opened within 30 seconds after unlocking the doors with door remote control in theft deterrent mode, all doors will be automatically locked again (back to theft deterrent mode).
- If you lock the doors using key hole in door, doors will be locked but the theft deterrent mode will not be armed.

CAUTION

To arm the theft deterrent system, the ignition key should be removed from the ignition switch, all doors including the tailgate and the engine hood should be closed completely.

ALARM

If somebody tries to open the door, the tailgate or the hood without using the door remote control, the alarm will be activated.

- When one of the doors or the tailgate is opened with the ignition key while the deterrent system is armed, the alarm will be activated.
- The engine hood or the tailgate is opened from the outside while the deterrent system is armed, the alarm will be activated.
- When the alarm is activated, the buzzer sounds and the hazard flashers will blink for 27 seconds.
- Alarm stops when:
  - pressing the door Lock/Unlock button on the door remote control.
  - turning the ignition switch to “ON” position.
  - activating the panic function.
  - opening driver’s door using a key (inserting key into the door key hole)

DISARMING THE THEFT DETERRENT MODE

- Unlock the door by using the door remote control.
- To deactivate the theft deterrent mode at the alarming stage, unlock the door by using the door remote control. When the deterrent mode is disarmed, the hazard flashers blink once.

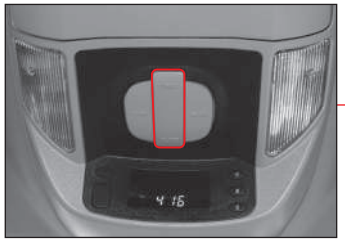
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Opening and Closing

Sunroof Switch

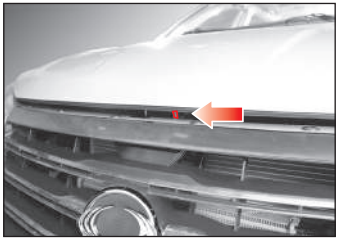


Fuel Filler Door

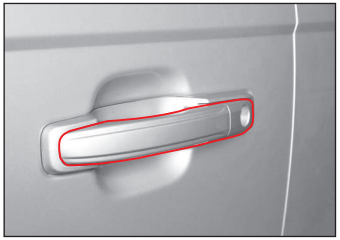




Engine Hood Lock Release Lever



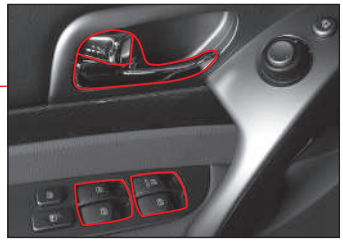
Outside Door Opening Lever



Central Door Lock Switch

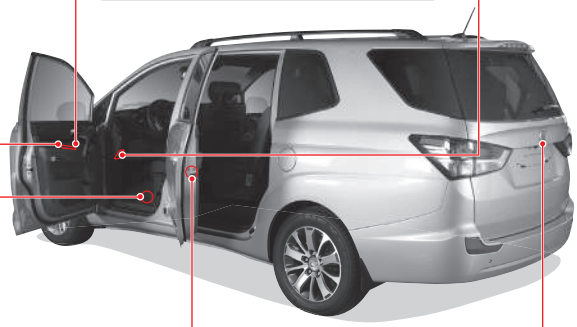


Window Switches/ Inside Door Opening Lever

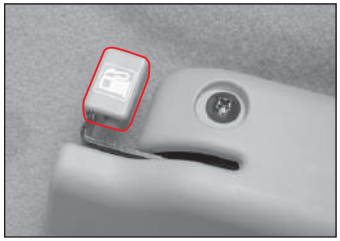


Engine Hood Opening Lever





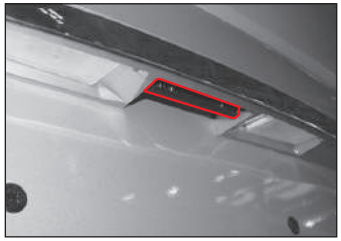
Fuel Filler Door Release Lever



Child Safety Door Lock

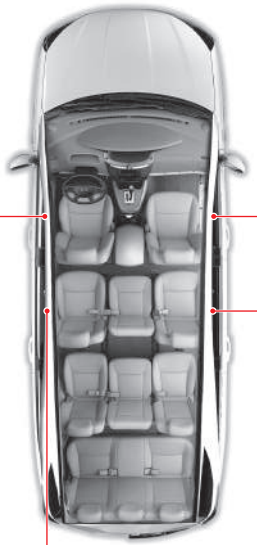


Tailgate Opening Lever



Driver's Door (Inside)





- If you press the door lock/unlock button (Ⓐ) to the lock (①) direction, all doors are locked, and vice versa.
- If any of doors is open, you cannot lock the doors with the door lock/unlock lever (Ⓐ).
- Pull the door opening lever (Ⓑ) to open the door.

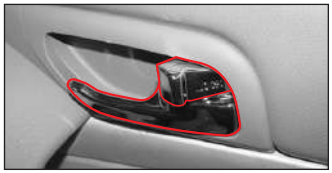
Central Door Lock/Unlock Switch



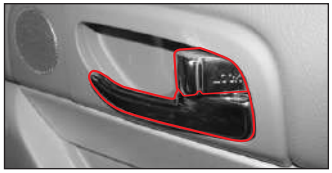
When the door lock/unlock switch is pressed while all doors including the tailgate are locked, all doors will be unlocked. When the switch is pressed again, all doors will be locked.

This switch is not available when any of doors are not fully closed and the vehicle is in theft deterrent mode.

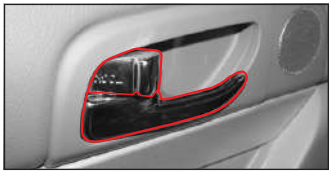
Passenger's Door (Inside)



Rear Right Door (Inside)



Rear Left Door (Inside)



The door lock/unlock knob on the rear right or rear left door can only lock or unlock its respective door.

Automatic Door Unlocking

- All doors will be automatically unlocked when the engine is switched off.
- Even though all doors are locked, they will be automatically unlocked when opening the driver's door.
- In the event of air bag deployment resulting from a vehicle impact, all doors will be automatically unlocked.

⚠ WARNING

When damage is done on a door or the body frame by an impact from an accident, the automatic door unlocking system may not work.

NOTE

If any of doors is open, you cannot lock the doors with the door lock/unlock lever, central door lock/unlock switch, and lock button on door remote control.

Automatic Door Locking

All doors will be automatically locked when you drive over 50 km/h while the doors are unlocked.

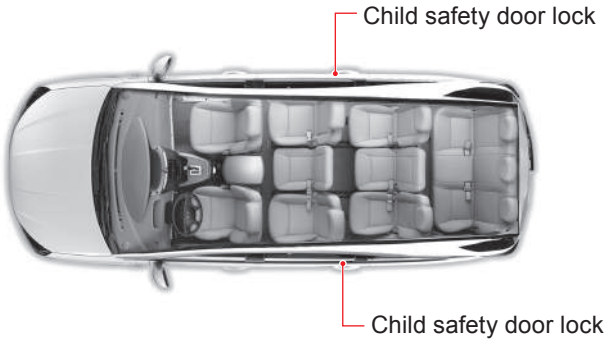
⚠ CAUTION

When you drive at 50 km/h or a higher speed and try to unlock all doors with the door lock/unlock knob or switch, all doors are automatically locked again.

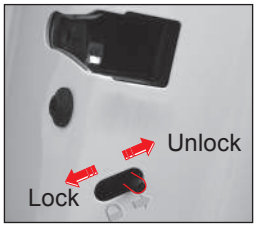
Room Lamp Coupled Operation

When you open a front door with the front room lamp switch pushed in ("Door" position), the front room lamps come on. When you close the door, the lamps go off.

When you open a rear door with the front and rear room lamp switches pushed in ("Door" position), the rear room lamps come on. When you close the door, the lamps go off.



Child Safety Door Lock



The child safety door lock is provided to help prevent children from accidentally opening the rear doors from inside the vehicle.

When the child-safe lever is in the **"LOCK ( )"** position, the rear door can be opened only from the outside.

⚠ WARNING

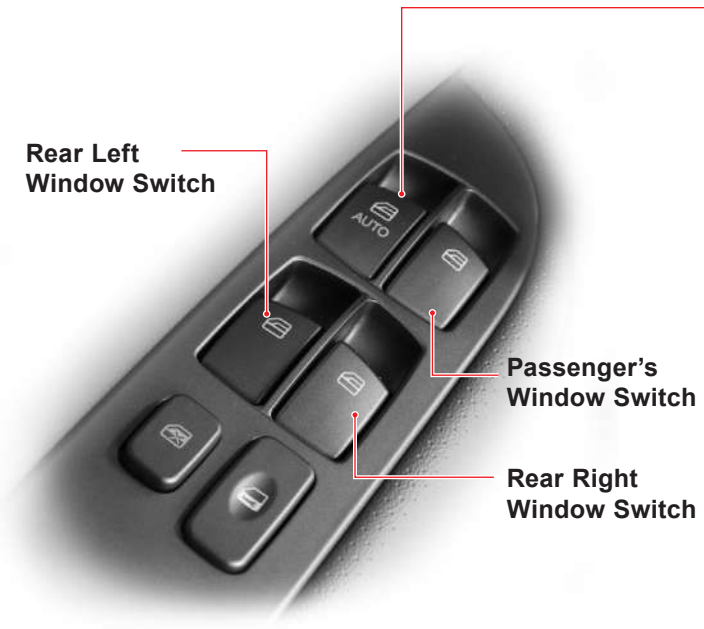
Children in rear seats can open rear doors. Move the child-safe lever to the **"LOCK ( )"** position.

⚠ WARNING

- Close the door properly. Otherwise it can be re-opened.
- If you do not pay attention to closing or opening a door, your fingers may be caught between the door and the vehicle body by accident.
- When you exit your vehicle, look for other vehicles, motorcycles, bicycles, or pedestrians before opening the door. Other people can be injured by the doors suddenly flung open.
- Make sure that all the doors are firmly closed before driving. It is extremely dangerous if any door is opened while the car is moving.
- Do not leave children or animals unattended in parked vehicles. The temperature in the vehicle gets too high or too low according to the outside temperatures, and a child or an animal could die or be seriously injured from suffocation.
- The drive door may be opened by pulling the inside door handle even if the doors are locked, depending upon the model. Do not open the door while driving, as it can be fatal. Failure to do so can result in an accident.
- Lock the all doors using the central door lock switch on the driver side before starting off the vehicle. In particular, do not forget to lock the doors when driving with children. It is very dangerous if any door is opened unintentionally during driving.
- A child can be severely injured or killed by opening a door while the vehicle is moving. Use the child protection door lock system for your child to prevent him/her from opening a door.

⚠ CAUTION

Do not apply excessive force to any door and door handle. It can cause them to break.



Driver's Door Window Switch

▶ **When opening the window**

- When the front of the switch is lightly pressed, the window will be lowered while the switch is pressed.
- When pressed to its end, the window will open automatically until it is fully open. If you want to stop the window while automatic lowering, lightly press the switch again or pull the switch up.

▶ **When closing the window**

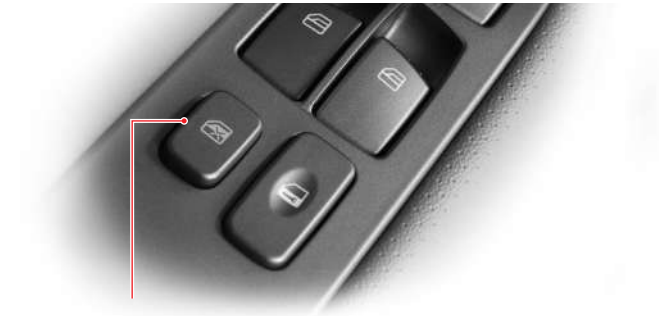
- When you lightly pull the switch up, the window will move up only while the switch is being operated.
- When pulling the switch up to its end, the window will be fully closed (auto-up operation (If equipped)). If you want to stop the auto-up function, pull up or gently press the switch again.

Anti-Trap System for Driver's Window*

The anti-trap system enables the driver's window to automatically reverse when something is caught in the window as it is closing. When the sensor detects an obstacle, the window will be lowered immediately.

CAUTION

- The anti-trap system is operated only when the driver's window is moving up automatically by the "AUTO" switch.
- The anti-trap system does not operate where the space between the top of the glass and window frame is very close.
- If the window is stuck in very cold weather, anti safety function may work. In this case, fully close the window by switch.



Window Lock Switch

If the window lock switch is pressed down, only driver's window is operative. Front passenger's and rear windows cannot be operated by its own switch.

WARNING

When carrying children in the rear seat, press the window lock switch to make the rear window switches inoperative. Do not allow children to play with the power window switch and rear door window switches.

CAUTION

When closing the front passenger's and rear windows from driver's seat, be aware of safety conditions before operation. Parts of the body can be trapped by the window.

Time Lag of Window Operation

The power window can be operated for 30 seconds even after the ignition key is turned to another position from the "ON" position. However, the function immediately stops when one of the front doors is opened.

Front Passenger's and Rear Window Switch





To move windows up or down, pull up or press the corresponding switch for the window.

WARNING

- Before operating the power windows, make sure that nothing can be trapped (such as heads, hands, or fingers) in the window.
- Make sure that passengers do not stick out their hands or heads from the vehicle while driving.

SUNROOF SLIDING OPERATION

▶ Open: 2-Step Opening

- Push “OPEN” switch briefly: 2-step auto sliding open
  When pushing “OPEN” switch briefly, the sunroof is automatically opened by two third of its travel (first step). When pushing and holding “OPEN” switch again, the sunroof is completely opened (second step).
- Push and hold “OPEN” switch: manual sliding open
  The sunroof is opened as long as pushing “OPEN” switch.

▶ Close: Sliding close

- Push “CLOSE” switch briefly: When pushing “CLOSE” switch briefly, the sunroof is automatically closed (auto sliding close). To stop the closing sunroof, operate the switch again.
- Push and hold “CLOSE” switch: The closing operation of sunroof is activated as long as the “CLOSE” switch is pushed (manual sliding close).

SUNROOF TILTING OPERATION

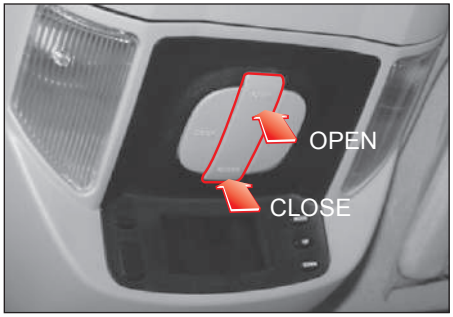
▶ Tilt Up

The rear side of the sunroof is tilted up when pushing “CLOSE” switch with the sunroof closed.

▶ Tilt Down

The rear side of the sunroof is tilted down when pushing “OPEN” switch with the sunroof tilted up.

Sunroof Switch



The sun-roof cover opens and closes manually.

For your safety, never operate the sunroof when the vehicle is moving.

⚠ CAUTION

- Even though the sunroof can be operated when the ignition key is in the ON position (the engine is not running), operating the sunroof repeatedly with the engine turned off will run down the battery. Operate the sunroof while the engine is running.
- When a desired sunroof operation is completed, release the switch. If you keep pressing the switch, it could cause a malfunction. Especially in winter, never operate the sunroof if moving areas are iced. Wait until the areas are deiced.
- When leaving the vehicle unattended, be sure to completely close the sunroof. Otherwise, there is a great risk of vehicle theft. Or, the interior of the vehicle will be wet when it rains or snows.
- When the sunroof is slid to its complete open position, the wind buffet phenomenon can increase. If this happens, adjust by opening the sunroof or only open two thirds of the sunroof by using only the first step of the opening system.
- When operating the sunroof, be aware of safety conditions before operation. Parts of the body can be trapped.
- Clean up the circumference of sunroof regularly. Otherwise, operating the sunroof may cause a noise due to foreign material and dirt.

⚠ CAUTION

- Opening the sunroof or driving with the sunroof open after a car wash or rain may lead to water entering
- Do not pull on the blind or apply excessive force on it. The blind may be damaged.
- Close the sunroof while driving in the dusty environment. The dusts or particles entered can cause operating problems.
- If a roof rack system is installed on the vehicle roof or any cargo is secured to the roof rack, do not operate the panorama sunroof. If you are required to operate the sunroof, carefully check that the roof rack system does not interfere with the sunroof and it is safe to open the sunroof.

⚠ WARNING

- When operating the sunroof, be aware of safety conditions before operation. Parts of the body can be trapped.
- Never stick any part of your body out of the sunroof even when the vehicle is stationary.
- Make sure that no passenger sticks out head, hand or any part of his/her body out of the sunroof opening while driving. There is a risk of personal injury when the vehicle is stopped suddenly.
- Before operating the sunroof, make sure that no head, hand, finger, or any object is capable of being trapped. There is a risk of personal injury or even death.

Wind Buffeting

When you drive this vehicle with the window or sunroof open at a certain position, you may feel some pressure upon your ears or hear some noises similar to those from a helicopter. This happens because of an influx in air through the window or sunroof and its resonance effect. If this happens, adjust by opening the window or sunroof.

Battery Discharge or Power Failure while Operating Sunroof

If the sunroof is stopped midway due to a discharged battery or power failure, you need to re-calibrate the starting point of the sunroof. In addition, the following cases need the re-calibration.

- The sunroof does not completely close or open by operating the switch once.
- The sunroof slides back to close. But the operation does not stop even after a complete close and tilts up the sunroof.
- The opening gap remarkably decreases for the sliding open or tilt up.
- The sunroof does not work.

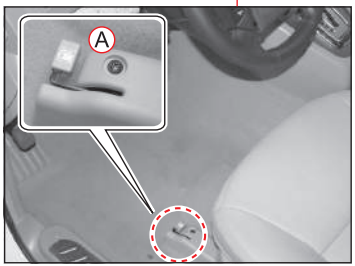
Re-calibrating the Sunroof Starting Point

- Press the sunroof switch for 5 seconds when the sunroof is in tilt-up position. The sunroof starting point will be reset with “clicking” sound.
- After re-calibrating the sunroof start point, the sunroof will be opened and closed automatically with a slight push of the “OPEN” switch.
- If the sunroof does not operate properly even after re-calibration, have the system checked at Ssangyong Authorized Service Center.

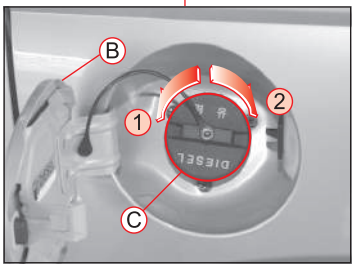


CAUTION

- Fuel damages paintwork. If fuel spills onto paintwork, immediately wash the affected area with cold water.
- The fuel filler door may not open in cold weather. Gently tap the fuel filler door to open.
- When you need to replace the fuel filler cap, use only the Ssangyong genuine part.



Ⓐ Fuel Filler Door Release Lever



① Open

② Close

1. Open the fuel filler door Ⓑ by pulling the release lever Ⓐ located on left lower side of driver's seat.

CAUTION

Stop the engine before refueling.

2. Open the fuel filler cap (Ⓒ) by turning it counterclockwise.
3. After refueling, tighten the fuel filler cap by turning it clockwise until you hear clicking sounds. Then close the fuel filler lid (Ⓑ) properly until it latches.

Gasoline Engine

Fuel with too low octane number can cause pre-ignition (detonation). Ssangyong cannot be held liable for resultant damage.

WARNING

Gasoline vapor is highly flammable.
It burns violently and that can cause very bad injuries.
When refueling,

- Switch off engine.
- No smoking.
- No naked flame.
- No sparking material.

CAUTION

- For correct octane rating setting and other use of gasoline (ex. Leaded), consult your Ssangyong Dealer.
- Gasoline damages paintwork. If gasoline spills onto paintwork, wash with cold water immediately.

CAUTION

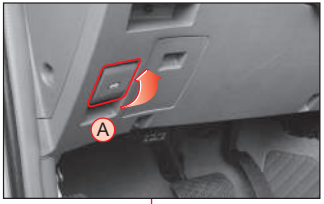
Engine and exhaust system will be damaged.

- Do not use leaded fuel to the vehicle for unleaded fuel.
- Use the fuel with specified or higher Research Octane Number recommended for your country by Ssangyong. Otherwise, it is not covered by warranty.

WARNING

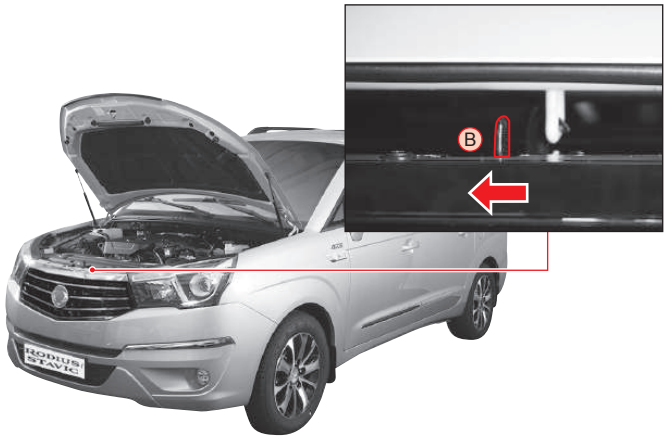
- Do not re-enter the vehicle while adding fuel. Never do anything which creates static electricity in or around the gas station. The vaporized fuel may be ignited by the static and this spontaneous combustion causes the fuel to explode. If you are required to re-enter and exit the vehicle, discharge any static electricity by touching any metal part which is a safe distance away from the fuel filler with your bare hands.
- If you use a portable container, Place the container on the ground before refueling. Putting the container on or inside the vehicle can create static electricity which ignites fuel vapor. Keep the container on the ground from the start of fuel filling to the end of fuel filling.
- Never use a cellular phone near a gas station. The electromagnetic (RF) waves or electronic impulses emitted by the phone might trigger fire of vaporized fuel. If you must use a cellular phone, use it in a place away from the gas station.
- In case of fire during the fuel refilling, stay away from your vehicle for safety and immediately call the manager of the gas station and fire station.





OPENING THE ENGINE HOOD

1. Pull the release lever (Ⓐ) located on the lower left side of the steering wheel to unlatch the engine hood.
2. Slightly lift up the engine hood and push the safety latch lever (Ⓑ) to left side with your fingers. Then completely lift up the engine hood.



WARNING

- When you open the hood while the engine is running, extra caution is needed to avoid any injuries by the moving parts in the engine compartment.
- Before driving, try to pull up the front edge of the hood to check that the hood is securely latched.
- When it is windy, extra caution is needed to prevent personal injury. Wind might be able to lift up the hood and the prop rod may be disengaged from its slot. This may result in an unexpected closing of the hood.
- Before closing the engine hood, ensure that none of your body parts are trapped.
- Before opening the engine hood, turn the engine OFF in flat terrain and move the gear selector lever to the “P” (Park) position with the parking brake pedal applied.
- Open the engine hood with the engine turned OFF, unless otherwise specified. If working with the engine running is necessary, make sure that loose clothing such as ties, handkerchiefs, scarves, or sleeves do not contact with the radiator fan. Failure to do so can result in severe personal injury and damage to the vehicle. Remove any watch, necklaces, rings and bracelets.

CAUTION

- Before closing the engine hood, ensure that all the caps are in place.
- Before closing the engine hood, ensure that nothing left in engine compartment.
- Keep head clearance in work at hood open position.



Ⓐ Tailgate Opening Lever

To open the tailgate, unlock the tailgate and pull up the tailgate opening lever Ⓐ.

CAUTIONS FOR OPENING/CLOSING DEVICES

- Do not allow children to play with any switch, door lever, and driving equipment.
- When closing the windows, sunroof, engine hood, and tailgate, be aware of safety conditions before operation. Parts of the body can be trapped.
- Make sure that doors, sunroof, engine hood, fuel filler door, and tailgate are completely closed before driving.
- When carrying children, use the child safety devices not to open the windows and doors.
- Parts of the body can be trapped in window or sunroof and can be struck by passing objects. Do not stick hands, head or anything else out of the openings.

WARNING

- Before closing the tailgate, ensure that none of your body parts are trapped. Also, because the tailgate is heavy, it might unexpectedly fall down and close. To prevent any injury, close the tailgate with caution.
- The tailgate swings upward. Make sure no objects or people are near the rear of the vehicle when opening the tailgate.
- Occupants should never ride in the rear cargo area where no restraints are available. To avoid injury in the event of an accident or sudden stops, occupants should always be properly restrained.
- If you drive with the tailgate open, you will draw dangerous exhaust fumes into your vehicle which can cause serious injury or death to vehicle occupants. If you must drive with the tailgate open, keep the air vents and all windows open so that additional outside air comes into the vehicle.
- No one should be allowed to occupy the luggage compartment of the vehicle at any time. The luggage compartment is a very dangerous location in the event of a crash.
- Exhaust gases are poisonous. Do not run the engine with the tailgate or tailgate window open to avoid exhaust gas in the cabin. Cargo can fall out of an open tailgate while the vehicle is in motion, resulting in an unexpected accident. Do not travel with the tailgate or tailgate window open.

CAUTION

- Cargo can fall out of an open tailgate while the vehicle is in motion, resulting in an unexpected accident. Do not travel with the tailgate open.
- Make sure that you close the tailgate before driving. Possible damage may occur to the tailgate lift cylinders and attached objects if the tailgate is not closed prior to driving.
- Remove any obstacles to interrupt closing the tailgate securely.

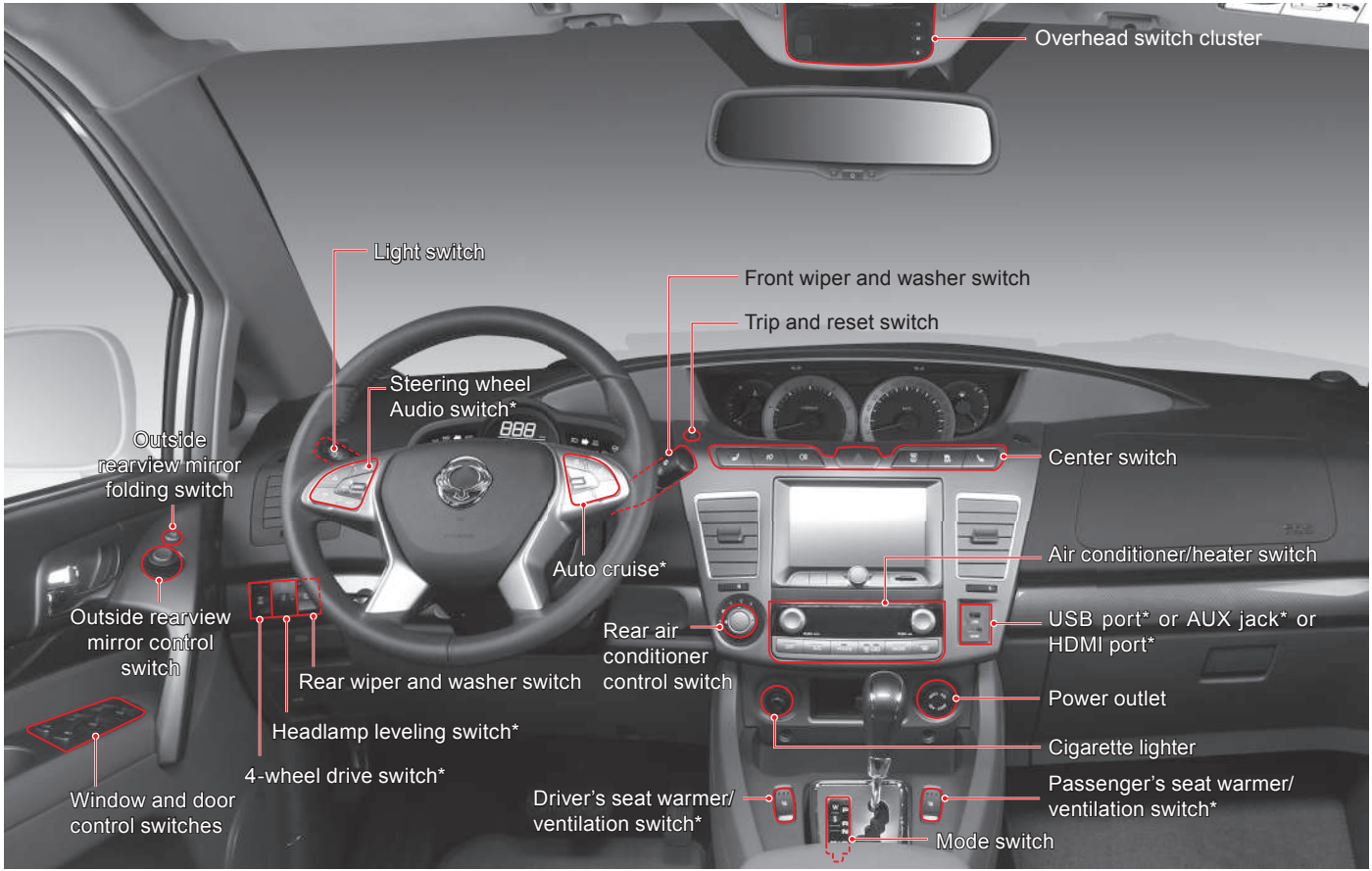
MEMO

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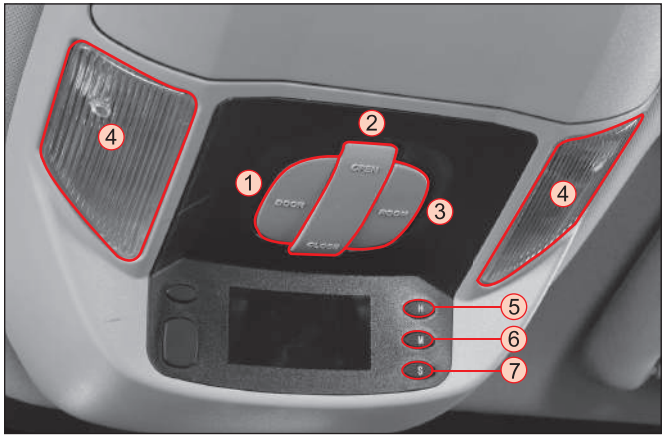


Interior Switches



※ Actual appearance may differ from the image shown above.

OVERHEAD SWITCH CLUSTER



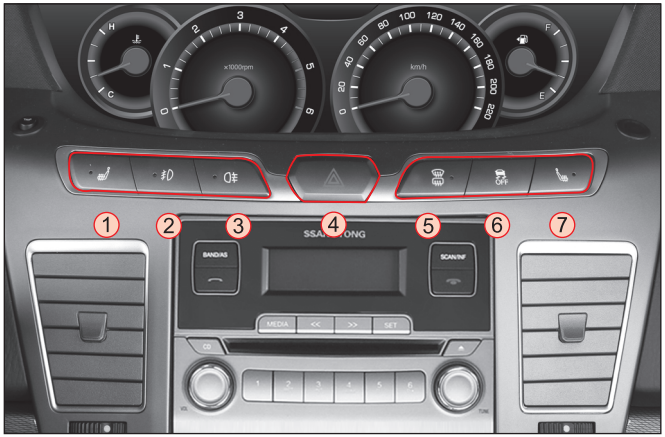
1. Door coupled front room lamp switch
2. Sunroof switch*
3. Door coupled side room lamp switch
4. Front room lamp switch
5. **H** (HOUR) : Hour Adjusting Button
6. **M** (MINUTE) : Minute Adjusting Button
7. **S** (SET) : Setting Button

- Press the “S” button to adjust the time to the nearest hour.
- When the time is between 00 and 29 minutes of a certain hour, the minute indicator will show “00” if this button is pressed.
- When the time is between 30 and 59 minutes of a certain hour, the minute indicator will show “00” and one hour will be added to the hour indicator if this button is pressed.

NOTE

When disconnecting the battery or replacing the fuse, the clock should be adjusted again.

CENTER SWITCH*



1. Seat warmer switch* (driver's seat - M/T)
2. Front fog lamp switch
3. Rear fog lamp switch*
4. Hazard warning flasher switch
5. Windshield*, tailgate and outside rearview mirror heated glass switch
6. ESP OFF switch*
7. Seat warmer switch* (passenger's seat - M/T)

Light Switch





Turn the barrel on the end of the lever as shown, then lights will be operated as follows.

Position	OFF			AUTO
Headlamp	X	X	O	Turns on and off all rights automatically.
Tail lamp	X	O	O	
License plate lamp	X	O	O	
Front fog lamp	X	O	O	
Rear fog lamp	X	O	O	
Instrument panel illumination lamp	X	O	O	

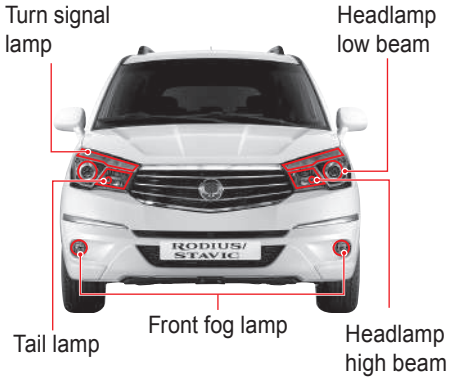
The fog lamp in the above table is turned on or off when the fog lamp switch is at “ON”.

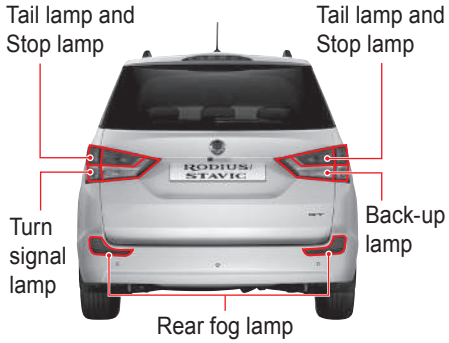
DAYTIME RUNNING LIGHT (DRL)*: DRL Regulation Region Only

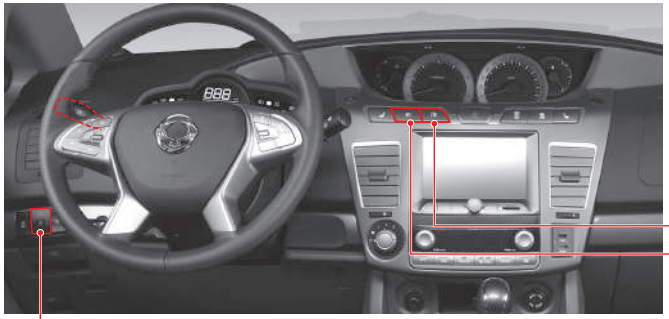
CONDITION		EXT TAIL LAMP	INT HEAD-LAMP	HEAD-LAMP	FOG LAMP	DRL
KEY OFF		X	X	X	X	X
ACC	TAIL LAMP OFF	X	X	X	X	X
	TAIL LAMP ON	O	O	X	X	X
IGN ON	TAIL LAMP OFF	O	X	X	X	O
	TAIL LAMP ON	O	O	X	X	O
	HEADLAMP ON	O	O	O	X	X
	FOG LAMP ON	O	X	X	O	X
	TAIL LAMP ON + FOG LAMP ON	O	O	X	O	X

CAUTION

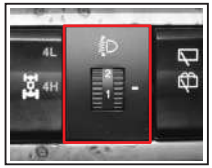
Turn on the headlamps when passing through the dark area such as tunnel.







Headlamp Leveling Switch*



With the low beam switched on, adjust the aiming angle of headlamp to suit the vehicle load.

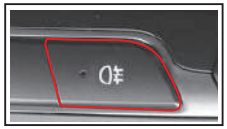
- To lower the aiming angle, rotate the switch downward.
- To raise the aiming angle, rotate the switch upward.

NOTE
According to load condition, adjust the aiming angle of headlamp.

Description of switch

- Position 0: One person on driver's seat
  Two persons on front seats.(One driver and one co-driver)
- Position 1: All the seats farthest to the rear are occupied.
  All seats are occupied
- Position 2: All seats are occupied. plus weight in loading compartment (136kg)
- Position 3: One person on driver's seat. plus weight in loading compartment (580kg)

Rear Fog Lamp Switch*



To turn on the rear fog lamp, push this switch while the light switch is placed in position.

Pushing this switch again will turn off the rear fog lamps.

Rear fog lamps can dazzle people behind.

Use rear fog lamps in severe weather conditions.

Front Fog Lamp Switch



To turn on the fog lamps, push this switch while the tail lamps or head-lamps are turned on. Push this switch again To turn if off.

CAUTION

- Do not use the fog lamp as a substitute for the headlamp.
- Turn on the headlamps when passing through the dark area such as tunnel.

LIGHT SWITCH

1. Headlamp High Beam

To turn on the headlamp high beam, push the lever towards the instrument panel ① with the headlamp low beam on. The headlamp high beam indicator in instrument panel comes on when the headlamp high beam is turned on.

WARNING

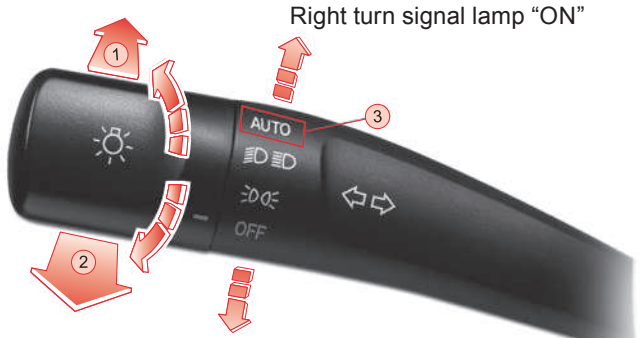
Driving with high beam headlamp disturbs the approaching vehicle's visibility for safe driving. Use the high beam headlamp only during very dark situations when it is very hard to see the road.

2. Passing

To flash the high beam, pull the lever towards the steering wheel ② and release it. The lever will return to the normal position when released. The high beam headlights stay on as long as you hold the lever.

Battery Saver (Automatically turns off the lights)

- To avoid discharging the battery, if the tail lamps are on after the ignition key is removed, a buzzer will sound to alert the driver when the driver's door is opened. The tail lamps will automatically turn off when the door is closed.(With the light switch on, if the ignition key is removed and all doors are closed, the tail lamps are off due to the battery saver function. However, if you open a door and turn the light switch to the "OFF" position and then to the "ON" position, the tail lamps will stay on after the door is closed.)
- To turn the tail lamps on again, insert the ignition key into the ignition switch. Or, turn the light switch to the "OFF" position and then to the "ON" position.



3. AUTO Light*

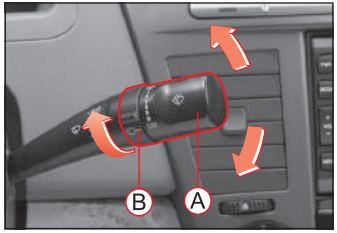
Headlamps and tail lamps will automatically come on or off according to the ambient illumination intensity when the light switch is at "AUTO" ③.

CAUTION

- Do not place any objects blocking the sensor. Do not clean the sensor with detergent or wax.
- In a foggy, snowy, rainy, or cloudy day, be sure to use manual mode. The turning on or off time of the lamps varies depending on the climate, season, or circumstances.
- The sun proof coating that can affect the illumination intensity inside the vehicle may cause the malfunction of the lighting system.

DAYTIME RUNNING LIGHT (DRL): DRL Regulation Region Only

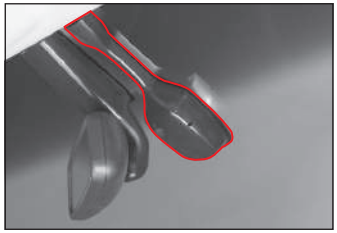
For vehicles equipped with the DRL, the tail lights automatically turn on when turning the starter key from ACC to ON.



Front Wiper and Washer Switch

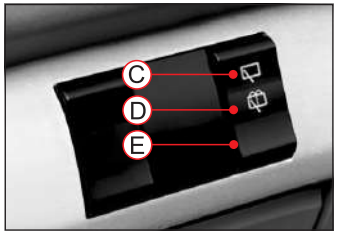
A. Front wiper and washer switch

B. Front automatic wiping speed control switch



Rain Sensor*

When the windshield wiper switch is at “AUTO” position, the rain sensor automatically turns on and off the wiper. And, it controls the wiping speed by detecting the amount of rain drops.

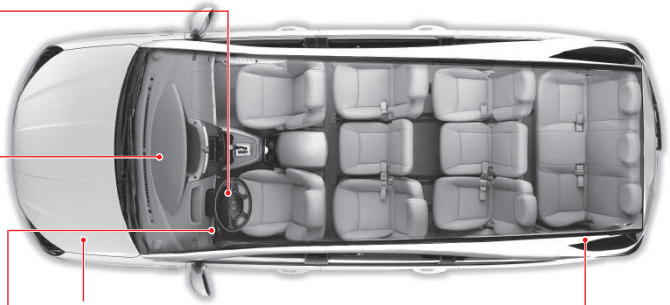


Rear Wiper and Washer Switch

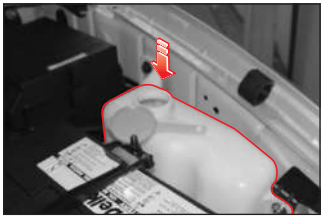
C. Rear wiper operation

D. Rear wiper and washer operation

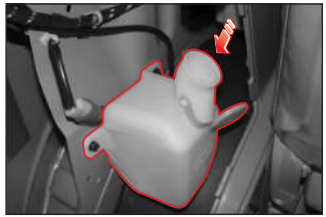
E. Rear wiper stops



Front Washer Fluid Reservoir



Rear Washer Fluid Reservoir



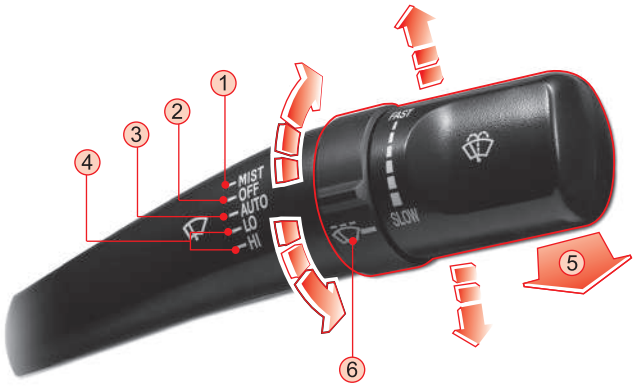
Frequently check the washer fluid level and add with specified washer fluid.

CAUTION

- If you use plain water as washer fluid, it will freeze during the winter and damage the washer fluid tank and motor. Use only specified washer fluid.
- Be careful not to spill the washer fluid around the reservoir.

WARNING

The washer fluid includes flammable materials to prevent freezing. It could cause a fire when directly contacted with flames. When checking the washer fluid, avoid the flames near the washer fluid reservoir.



1. MIST

If you move the wiper switch to “MIST” position and release it, the windshield wipers operate one wiping cycle. The wipers will operate continuously if the switch is held in this position.

2. OFF

Wipers are not in operation.

3. AUTO

Operates automatically according to the vehicle speed and amount of rainfall.

4. LO/HI

LO: Continuous wipe, slow operation

HI: Continuous wipe, fast operation

5. Wiper and Washer Coupled Operation

Pull the lever briefly (below 0.6 seconds): One wiping cycle without washer spray

Pull and hold the lever for more than 0.6 seconds: Three wiping cycles with washer spray

6. Front Automatic Wiping Speed Control Switch

The interval of wiping speed can be adjusted by turning the control knob upward or downward when the windshield wiper switch is in AUTO position.

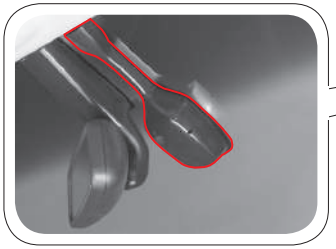
Fast: Fast interval

Slow: Slow interval

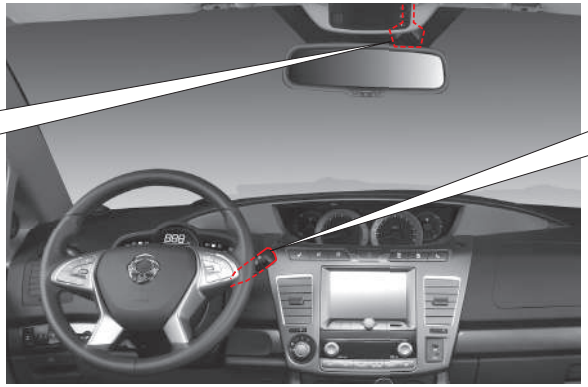
RAIN SENSING WIPER*

When the wiper switch is in the “AUTO” position, this sensor detects the amount of rain, turns on the wiper, and controls the intermittent wiper intervals.

Rain and Auto Light Sensor



It controls the wiping speed by detecting the amount of rain drops.



Wiper AUTO Position



CAUTION

- If you use only the wipers when the glass is dry, this could scratch the glass and wear the wiper blades prematurely. Use the wiper with the washer when the glass is dry.
- Turn the wiper switch to the “OFF” position before any car wash to avoid unwanted operation of the wipers.
- When it does not rain, turn the wiper switch into the “OFF” position.

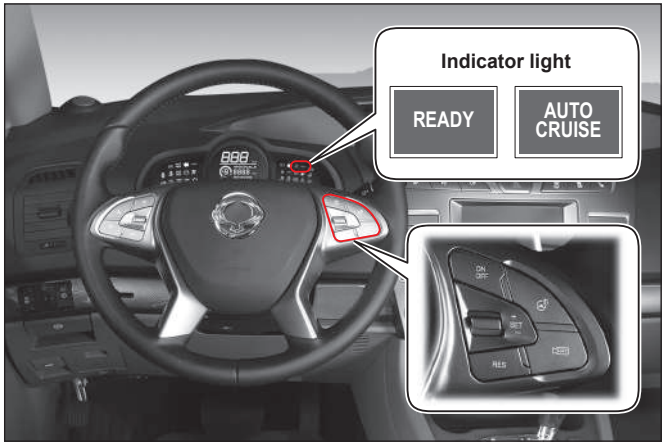
WARNING

When you clean the windshield over the sensor with damp clothes, the wiper may operate suddenly. It could cause serious injury. Make sure to place the wiper switch and ignition switch to the “OFF” position when not in use.

NOTE

- When the light switche is in the “AUTO” position, head lights come on if the rain sensor detects any rain.
- The speed of the wipers becomes a little faster when it is dark enough to turn on the automatic lights.
- When the ignition key is in the “ON” position, the wiper will automatically operate once if the wiper switch is turned from the “OFF” to the “AUTO” position. But the wiper will not operate again to prevent any damage to the window even though the wiper switch is turned from the “OFF” position to the “AUTO” position.

CRUISE CONTROL



The cruise control is an automatic speed control system that maintains a desired driving speed without using the accelerator pedal. READY or AUTO CRUISE indicator will come on in the instrument cluster depending on the operation of the cruise control switch.

The vehicle speed must be greater than 36 km/h to engage the cruise control. This feature is especially useful for motorway driving.

CAUTION

The cruise control system is a supplementary system, which helps the driver to drive the vehicle at a desired speed without using the accelerator pedal under the traffic condition where the vehicle-to-vehicle distance meets the legal requirement.

Auto cruise ready light

When the cruise control ON/OFF switch is pressed, READY indicator light appears on the instrument cluster. (Cruise control is now ready to operate)

Auto cruise control indicator light

With the READY indicator appeared on the instrument cluster, if you push the cruise control setting switch up or down, READY indicator turns off and AUTO CRUISE indicator will turn on (Min. vehicle speed is 36 km/h for operation).

Traffic Conditions for Using Cruise Control

Use the cruise control system only when the traffic is not jammed, driving on motorways or highways where there is no sudden change in the driving condition due to traffic lights, pedestrian, etc.

CAUTION

Improper use of the cruise control could be dangerous.

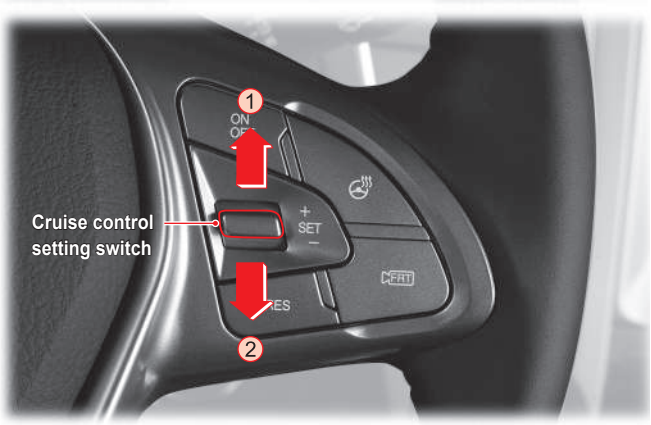
- Do not use on winding roads.
- Do not use in heavy traffic.
- Do not use on slippery, wet roads.

This could result in a loss of control, collision, and/or personal injuries.

NOTE

The described speed value may vary slightly depending on the road conditions.

CRUISE CONTROL (SETTING THE SPEED)

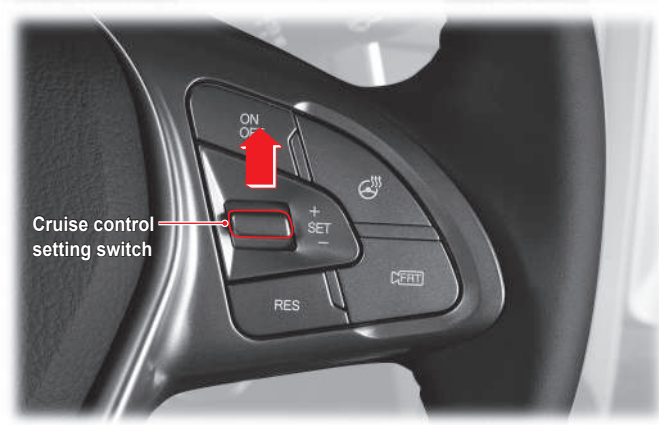


1. Press the cruise control ON/OFF switch. (READY indicator comes on)
2. In order to activate the cruise control system, depress the accelerator pedal until the vehicle speed reaches to the proper range.
   - Cruise control speed range: between 40 km/h and 140 km/h
   - For vehicles with manual transaxle, the cruise control will be available only when the gear shift lever position is in 3rd or higher.
3. Maintaining the vehicle speed in the specified range, set the desired speed by pushing the switch up in **SET+ (SET-)** direction (move the lever to position ① or ②). Remove your foot from the accelerator pedal slowly.
4. Take your fingers off the cruise control switch.
5. Now the vehicle is cruised with the set speed (the speed set at the moment when the cruise control starts operating) without depressing the accelerator pedal.
6. To reset the speed during cruise control operation, slowly press the accelerator pedal down until the desired speed is reached, and repeat the step 3.
7. Refer to the following contents for operation details depending on vehicle conditions.

⚠ CAUTION

Never use the cruise control system until you get used to it. Improper use or not fully aware of this function could result in collision and/or personal injuries.

ACCELERATING WITH THE CRUISE CONTROL SYSTEM



While the cruise control system is in operation

1. To increase the set speed during cruise control operation, push the cruise control switch up in SET+ direction until reached to the desired speed without depressing accelerator pedal.

   Continue pushing the switch up until the desired speed is reached.
2. Remove your finger from the control switch once the desired speed is reached.

While the cruise control system is not in operation

Following steps will describe how to set the speed by accelerating and start the cruise control while the cruise control system is not running.

1. Press the cruise control ON/OFF switch. (READY indicator appears in the instrument cluster)
2. Depress the accelerator pedal over 36 km/h to set the cruise control speed.
3. When the vehicle speed exceeds this value, push up or down the cruise control switch in SET+ or SET- direction, respectively to set the desired speed. Once the desired speed is reached, release the accelerator pedal slowly.
4. If the cruise control switch is pushed and held up in SET+ direction the vehicle set speed will continue to increase until the switch is released.
5. Take your finger off the cruise control switch.

Increasing the set speed while the cruise control system is in operation

If you want the fine increase of the control speed during the cruise control system operation, follow the steps below.

1. The speed will increase by approx. 1 km/h each time the cruise control switch is tapped up in SET+ direction (within 0.5 second).
2. If you want to increase the control speed by 10 km/h while driving with cruise control running, tap the control switch up in SET+ direction 10 times.

DECELERATING WITH THE CRUISE CONTROL SYSTEM



While the cruise control system is in operation

1. To decrease the control speed during cruise control operation, push the cruise control switch down in **SET-** direction until reached to the desired speed without pressing brake pedal.

   Continue pushing the switch down until the desired speed is reached. Be informed that the cruise control system will be deactivated when the vehicle speed gets lower than approx. 34 km/h.
2. Remove your finger from the control switch once the desired speed is reached.

Decreasing the set speed while the cruise control system is in operation

If you want the fine decrease of the set speed during the cruise control system operation, follow the steps below.

1. The speed will decrease by approx. 1.0 km/h each time the cruise control switch is tapped down in **SET-** direction (within 0.5 second).
2. If you want to decrease the set speed by 10 km/h while driving with cruise control running, tap the control switch down in **SET-** direction 10 times.

RESUMING THE SET SPEED (RESUME)



If the auto cruise stopping conditions are met during the activation of the auto cruise, the function of the cruise control is deactivated. But the last set speed memorized in the ECU will be resumed when the RES button is pressed.

The speed should be 40 km/h and the brake or accelerator pedal should not be depressed. (Deactivation by cruise control OFF switch will not restore the previous set speed.)



If any of the following conditions is met while cruise control is operating, it is cancelled. (READY indicator stays on)

Auto cruise stopping conditions (CANCEL)

- The brake pedal is depressed or ESP is activated.
- Drive the vehicle at less than 38 km/h.
- Parking brake is applied while driving.
- Depress the clutch pedal to change the gear (M/T).
- ON/OFF switch operation (once) during auto cruise activation (ON/OFF switch operation in auto cruise ready mode deactivates cruise control)

According to the vehicle conditions, the cruise control will be cancelled when:

1. The brake pedal is depressed or ESP is activated.
2. The speed is decelerated below 34 (38) km/h.
3. Parking brake is applied while driving.
4. Clutch pedal is depressed to shift (M/T only).
5. The speed increases or decreases drastically.
   - when driving at more than 50 km/h above the set speed
   - when driving for longer than 1 minute at more than 25 km/h above the set speed
   - when driving at less than 70 km/h below the set speed
   - when driving for more than 3 minutes at less than 65 km/h below the set speed
6. The cruise control switch malfunction occurs
7. The brake switch malfunction or disconnection occurs

If the cruise control is cancelled without normal conditions described above, or an intermittent malfunction occurs, stop the engine and remove the key. The system will reset and is back on when restarting the engine.

CAUTION

When not using the cruise control, press the cruise control ON/OFF switch and then the READY indicator light will go off.

CAUTION

- Abnormal changes of the gear selector lever can damage the engine. Do not move the gear shift lever to Neutral while driving at the set speed. Automatic transaxle damage may result.
- The speed that has been set may not be maintained on uphill or downhill slopes.
- The speed may drop to less than the set speed on a steep uphill grade. The accelerator must be used if you want to maintain that speed.
- The speed may increase to more than the set speed on a steep downhill grade. When the speed increases too much, turn off the cruise control.
- Always keep the safe stopping distance and depress the brake pedal when necessary.

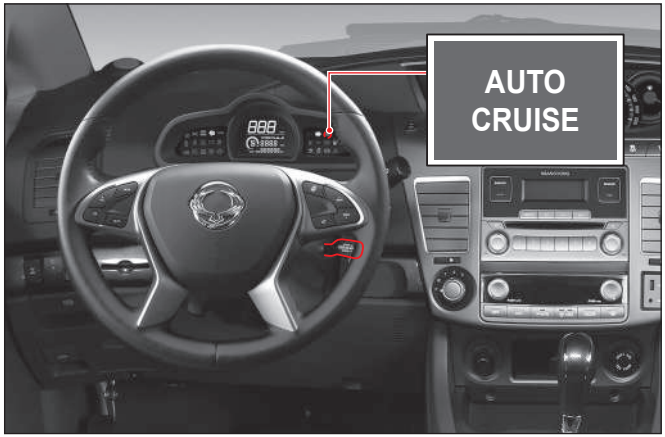
Using the Cruise Control on Hills

How well the cruise control works on hills depends on the speed, load, and the steepness of the hill.

When going up steep hills, you may have to depress the accelerator pedal to maintain your speed. When going downhill, you may have to brake or shift to a lower gear to keep your speed down.

Applying the brake takes you out of the cruise control.

CRUISE CONTROL



The cruise control is an automatic speed control system that maintains a desired driving speed without using the accelerator pedal.

The vehicle speed must be greater than 36 km/h to engage the cruise control. This feature is especially useful for motorway driving.

CAUTION

The cruise control system is a supplementary system, which helps the driver to drive the vehicle at a desired speed without using the accelerator pedal under the traffic condition where the vehicle-to-vehicle distance meets the legal requirement.

Traffic Conditions for Using Cruise Control

Use the cruise control system only when the traffic is not jammed, driving on motorways or highways where there is no sudden change in the driving condition due to traffic lights, pedestrian, etc.

CAUTION

Improper use of the cruise control could be dangerous.

- Do not use on winding roads.
- Do not use in heavy traffic.
- Do not use on slippery, wet roads.

This could result in a loss of control, collision, and/or personal injuries.

NOTE

The described speed value may vary slightly depending on the road conditions.

SETTING A DESIRED SPEED



1. To operate the cruise control, accelerate to the desired speed, which must be more than 36 km/h (23 MPH) and less than 150 km/h (90 MPH).
2. When the desired speed is reached, push up the ACCEL switch of the cruise control lever or push down the DECEL switch for 1 second per one switching and then release the accelerator pedal slowly.
3. Now, the vehicle is cruised by this system with the set speed.
4. And you can set to other vehicle speeds again with above steps after an accelerator pedal intervention during the cruise control running.

⚠ CAUTION

Never use the cruise control system until you get used to it.
Improper use or not fully aware of this function could result in collision and/or personal injuries.

Manual transmission equipped vehicle:

The cruise control is only available when the 3rd or higher speed gear is engaged.

ACCELERATING WITH THE CRUISE CONTROL SYSTEM



While the cruise control system is running

1. Push up the ACCEL switch of the cruise control lever and hold it until the desired speed is reached without an accelerator pedal intervention.
2. When the desired speed is reached, release the lever.

While the cruise control system is not running

1. Accelerate using the accelerator pedal over 36 km/h.
2. Push up the ACCEL switch of the cruise control lever and hold it.
3. And then release the accelerator pedal slowly.
4. When the desired speed is reached, release the lever.

Tap-up while the cruise control system is running

1. Push up the ACCEL switch of the cruise control lever less than 0.5 second per one switching while the cruise control system is running. This is a tap-up switching.
2. When you operate a tap-up switching, the vehicle is accelerated by 1.3 km/h over the previous set speed.
3. If you want to accelerate to 13 km/h, operate the tap-up switching ten times without accelerating with the cruise control system.

DECELERATING WITH THE CRUISE CONTROL SYSTEM



While the cruise control system is running

1. Push down the DECEL switch of the cruise control lever and hold it until the desired speed is reached without a brake pedal intervention. But the cruise control system cannot maintain the cruise function at less than 34 km/h.
2. When the desired speed is reached, release the lever.

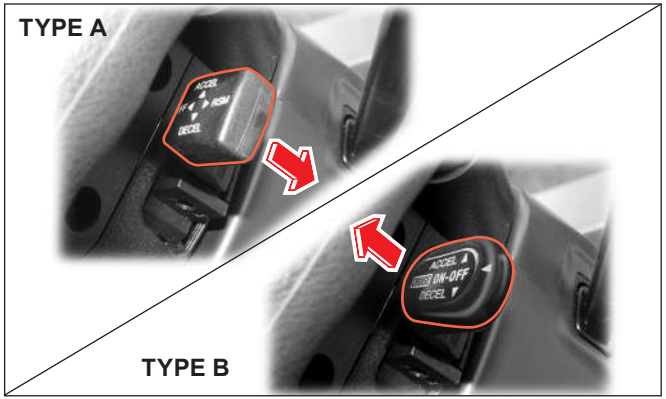
When the cruise control system is not running

1. Push down the DECEL switch of the cruise control lever and hold it.
2. And then release the accelerator pedal slowly.
3. When the desired speed is reached, release the lever. But the cruise control system cannot maintain the cruise function at less than 34 km/h.

Tap-down while the cruise control system is running

1. Push down the DECEL switch of the cruise control lever less than 0.5 second per one switching while the cruise control system is running. This is a tap-down switching.
2. When you operate a tap-down switching, the vehicle is decelerated by 1.0 km/h below the previous set speed.
3. If you want to decelerate to 10 km/h, operate the tap-down switching ten times without the brake pedal intervention.

RECOVERY OF SET SPEED

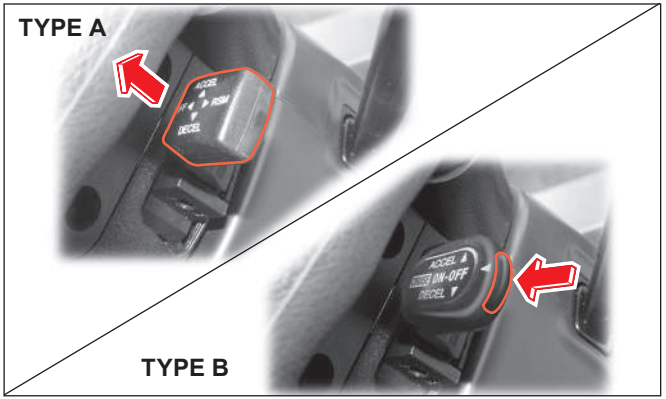


Even if the cruise control is cancelled, the previous set cruise speed can be recovered by pushing (Type A) or pulling (Type B) toward the cruise control lever when the current vehicle speed is over 36 km/h without an acceleration intervention. But if you turn off the ignition switch, the memorized set speed is cleared and you cannot recover the previous set speed.

CAUTION

The resume position should only be used if the driver is fully aware of this speed and wishes to resume this particular speed.

NORMAL CANCELLATION OF THE CRUISE CONTROL



The cruise control system will be canceled when one or more items of the following conditions are applied;

1. When the brake pedal is depressed.
2. When the cruising speed is downed less than 38 km/h.
3. When the OFF switch is operated by pulling the cruise control lever (Type A) or by pushing the ON-OFF switch of the cruise control lever (Type B).
4. When ESP is activated.
5. When applying the parking brake when driving.
6. When using the clutch in order to shift (M/T only).

And the cruise control system can be operated again in driving state.

CAUTION

Keep the main cruise control switch in the neutral position when not using the cruise control.

Abnormal Cancellation of the Cruise Control

1. When the rapid deceleration is applied without braking.
2. When the rapid acceleration is applied without acceleration pedal intervention.
3. When the cruise control lever is failed.
4. When the brake switch and the brake light switch input signal are implausible.

And the cruise control system cannot be operated again in driving state. In this case, you should stop the vehicle, and turn off the ignition switch and then turn it on again. After you do that, you can use the cruise control system again. But if the cruise control system isn't recovered, you should contact a Ssangyong Dealer for diagnosis of the cruise control system.

CAUTION

- Abnormal changes of the gear selector lever can damage the engine. Do not move the gear shift lever to Neutral while driving at the set speed. Automatic transmission damage may result.
- The speed that has been set may not be maintained on uphill or downhill slopes.
- The speed may drop to less than the set speed on a steep uphill grade. The accelerator must be used if you want to maintain that speed.
- The speed may increase to more than the set speed on a steep downhill grade. When the speed increases too much, turn off the cruise control.

Using the Cruise Control on Hills

How well the cruise control works on hills depends on the speed, load, and the steepness of the hill.

When going up steep hills, you may have to depress the accelerator pedal to maintain your speed. When going downhill, you may have to brake or shift to a lower gear to keep your speed down.

Applying the brake takes you out of the cruise control.

TYPE A

Bluetooth Handsfree

Phone switch using Bluetooth handsfree for mobile phone use

NOTE

For more detailed information on audio and bluetooth handsfree system, refer to Audio Operating Manual provided separately.

Cruise control ON/OFF

Pressing this switch turns on the READY indicator in the warning box. In this state, cruise control system is ready to operate.

- Pressing this switch during cruise control operation deactivates it.

Steering wheel heating*

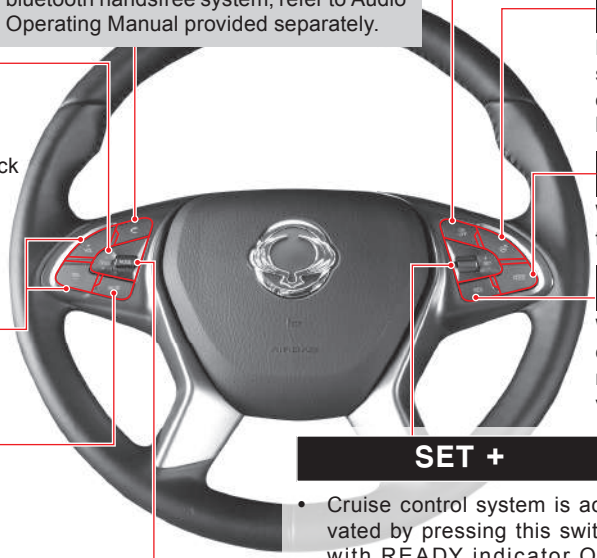
Pressing this switch with the ignition switch ON or the engine running turns on the indicator and activates the built-in heater of the steering wheel.

FRT Camera*

When this switch is pressed, front view of the vehicle is displayed on the front monitor.

RES*

When this switch is pressed during cruise control operation, the vehicle speed is returned to the speed before the deactivation of cruise control function.



∧ SEEK / SEEK ∨

- in CD(DVD) player mode
  - briefly press: Next/Previous track
  - press and hold:Moving in same track
- in radio mode
  - briefly press: Manual search, move to selected channel
  - press and hold: Auto search

+ VOL / VOL −

Increases/decreases volume

MUTE(POWER)

- Pressing this switch briefly with the audio system off turns the system on. Press and hold this switch to turn off the audio system again.
- Pressing this switch once with the audio system on turns off all sound outputs. To resume the audio output, press the switch again.

MODE

Audio mode changes when the switch is pressed.

SET +

- Cruise control system is activated by pressing this switch with READY indicator ON. (Vehicle speed should be 36 km/h or higher)
- Increase the speed set to the cruise control system.

SET -

- Resume the speed set before cancellation with the READY indicator ON. (for gasoline only)
- Decrease the speed set to the cruise control system.

NOTE

Refer to Chapter 4, Cruise control switch for detailed information.

TYPE B

MODE

- To change the audio mode, press this switch briefly.

  Radio → USB → BT Audio → AUX
- To change the Radio band, press and hold this switch.

  AM → FM1 → FM2

+ VOL / VOL −

Increases/decreases volume



Steering Wheel Heating Switch

To heat the steering wheel, press this switch. To stop the heating, press it again. The indicator on the instrument cluster comes on when heating and goes off when turning off.

∧ SEEK / SEEK ∨

- in CD(DVD) player mode
  - briefly press: Next/Previous track
  - press and hold: Moving in same track
- in radio mode
  - briefly press: Manual search, move to selected channel
  - press and hold: Auto search

MUTE

Stops audio output from the audio system. To resume the audio output, press the button again.

Bluetooth Switch

To receive a call in Bluetooth mode, press this switch.

To reject a call, press and hold this switch.

4-WHEEL DRIVE SYSTEM

The 4-wheel drive system automatically distributes torque to all four wheels using sophisticated electronic controls and ensures a more enhanced vehicle stability compared with that of the 2-wheel drive system.

The 4-wheel drive system is mainly used for unpaved, snowy, and slippery roads where extra traction is needed and for having a little fun in the mud. For maximum traction, “4L” mode is available.

Part-Time 4-Wheel Drive

Normally, the vehicle is driving in 2WD mode. But if needed, it can be changed into 4WD High (4H), and 4WD Low (4L) by pressing the switch. This is equipped with the control unit that supports the mode transfer. In 4WD mode, the system splits the torque between the front (50%) and rear (50%) wheels.

DRIVING MODE



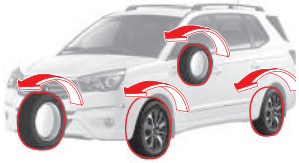
2H: 2-Wheel Drive, High

Rear-wheel drive mode. This is used under normal or high-speed driving conditions on public roads or highways.



4H: 4-Wheel Drive, High

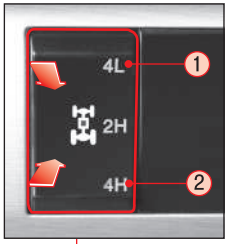
This is used under sandy, muddy or snow-covered road conditions.



4L: 4-Wheel Drive, Low

This is used for maximum traction.

4-WHEEL DRIVE SWITCH



Select a proper driving mode according to the road conditions.



Tight Cornering Symptom

When cornering with low speed in 4WD condition, there could be tire dragging, some mechanical shocks and resistances in vehicle's drive train. These are normal conditions due to internal resistance in the drive train when the 4WD system is properly working.

Driving Mode Change

2H ⇔ 4H

Shifting is possible while driving at the speed of 70 km/h or less.

4WD HIGH

- When shifting the driving mode to "4H", this indicate comes on.
- When shifting the driving mode from "4L" to "4H", the light blinks during shifting and comes on after completely shifting.

2H, 4H ⇔ 4L

- For vehicles equipped with automatic transmission, stop the vehicle on level ground and move the gear selector lever into the "N" position. Turn the switch to the desired position.
- For vehicle equipped with manual transmission, stop the vehicle on level ground and move the gear selector lever into the "N" position. Then turn the switch to the desired position while depressing the clutch pedal.

4WD LOW

- Completely shifting to "4L" turns on the light.
- Light blinks during shifting to "4L".

WARNING

To prevent possible damage to the 4WD system, do not drive off the vehicle when the 4WD indicator is still on.

4WD HIGH Indicator



- When shifting the driving mode from “2H” to “4H”, this indicator comes on.
- When shifting the driving mode from “4L” to “4H”, the light blinks during shifting and comes on after completely shifting.

4WD LOW Indicator*



- When shifting the driving mode to “4L”, the light blinks during shifting and it will come on after completely shifting.
- The blinking indicator indicates that the mode is shifting to “4L”.

4WD CHECK Warning Indicator



This warning indicator comes on when the ignition switch is turned to “ON” and should go out if the system is normal. If the “4WD CHECK” warning indicator stays on, have the 4WD system checked by the nearest Ssangyong Authorized Service Center.

⚠ CAUTIONS WHEN USING 4-WHEEL DRIVE MODE

- There could be mechanical noises and shocks during mode changes. However, these are normal conditions due to the mode changing operations.
- Use only the 2H mode on a normal paved surface. Do not drive your vehicle in the “4H” position on paved road surfaces. Doing so will result in damages to the drive train.
- Driving in a 4WD mode on a normal paved surface will cause unwanted noises, premature wear of tires, or increased fuel consumption.
- If the “4WD CHECK” warning light stays on, have the 4WD system checked by the nearest Ssangyong Dealer or Ssangyong Authorized Service Center.
- When cornering a curved road in a 4-wheel drive mode, there could be some mechanical shocks and resistances in vehicle’s drive train. These are normal conditions due to internal resistance in the drive train when the 4-wheel drive mode is properly working. To avoid damages to the drive train, do not drive your vehicle at an excessively high speed on a sharply curved road.
- If the driving mode cannot be changed or the corresponding indicator does not come on even when operating the 4WD switch, move the vehicle a little and move the gear shift lever to :N” position. Then turn the 4WD switch to desired driving mode again. This helps to make the mode change easily.
- Drive the vehicle at the speed of 80 km/h or less when driving in 4H mode (P/Time).
- We hope you will use 4L mode when high traction is required.
- Drive the vehicle in 2H mode when the spare tire is fitted. When driving in 4H mode, it will damage the drive system.
- Be sure to use the same size and type tires of the same manufacturer on all wheels so that the vehicle characteristics can be maintained safely.

Headlight Leveling Switch*



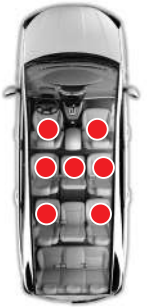
With the headlights ON, the level of headlight can be adjusted by turning the switch when the vehicle heights of front and back are different due to the number of passengers and the loading conditions of the vehicle.

4 stages (level 0 ~3) are available.

- To raise the level of headlight: press the button down (level 0 direction)
- To lower the level of headlight: press the button up (level 3 direction)



Headlight leveling guide (if a passenger weighs 75 kg)

Level 0	Level 1	Level 2	Level 3
1 or 2 passenger(s) (Normal driving)	3 to 7 passengers	7 passengers / 130 kg load	1 passenger / 150 kg load
			

CAUTION

- For safety, perform the headlight leveling before driving your vehicle.
- Adjust the level of headlight referring to the guide above, according to the number of passengers and the loading conditions.

WARNING

Inappropriate cases of leveling

- Driving with level 3 under level 0 conditions (lower the level): When an emergency occurs on the road ahead, safe driving may be affected by late recognition of the emergency.
- Driving with level 0 under level 3 conditions (Raise the level): Driving visibility for the vehicle driving ahead or opposite side road may be interrupted by your inappropriate leveling.



Power Steering

Power steering uses energy from the engine to assist you in steering the vehicle. If the engine is off or if the power steering system becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

Should you notice any change in the effort required to steer during normal vehicle operation, have the power steering checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

CAUTION

- Never hold the steering wheel to the extreme right or left for more than 10 seconds with the engine running. Holding the steering wheel for more than 10 seconds in either position may cause damage to the power steering pump.
- If the temperature of the power steering fluid is low, sometimes the power steering temporarily delays the vehicle activation. Therefore, start off the vehicle after idling for up to 3 minutes in the winter months (less than -10°C).

Indicator



The indicator on the instrument cluster comes on when heating and goes off when turning off.

Steering Wheel Heating Switch

Pressing this switch with the ignition switch ON or the engine running turns on the indicator and activates the built-in heater of the steering wheel. Pressing the switch again turns off the indicator and the heater.

The switch condition is maintained even after the ignition switch is cycled OFF and ON.

CAUTION

- Do not install the supplemental steering device. It may cause to damage the heated wire inside the steering wheel.
- Take care not to damage the grip surface of the steering wheel with a sharp object. The built-in heater could be damaged.
- When cleaning the steering wheel, do not use organic solvents such as thinner, alcohol or gasoline. These solvents can damage the heater and the surface of the steering wheel.

FOG LAMP, HAZARD LAMP SWITCH, HEATED GLASS SWITCH

Outside rearview mirror heated glass*

Defrost and defog

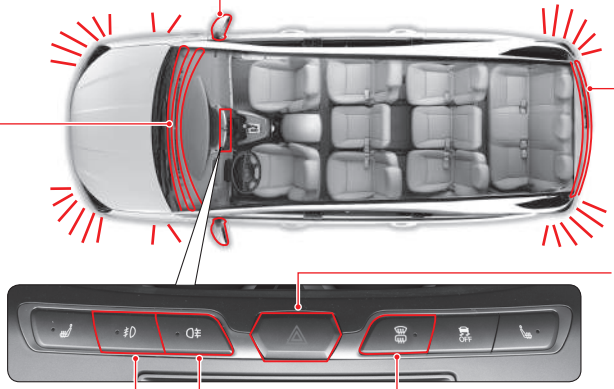
Windshield heated glass*

Avoid wiper frozen

Hazard warning flasher

Tailgate heated glass

Defrost and defog



Hazard Warning Flasher Switch

To turn on the hazard warning flashers, push this switch. All turn signal lamps will flash simultaneously with the hazard warning indicators. Push this switch again to turn them off.

CAUTION

Do not turn on the hazard warning flashers for an extended period of time when the engine is stopped. The battery could be discharged.

Fog lamp switch

When this switch is pressed with the tail lamps or headlights turned on, the fog lamps come on. Pressing this switch again in this condition turns off the fog lamps. The indicator on the switch stays on as long as the fog lamps remain on.

Windshield, Tailgate and Outside Rearview Mirror Heated Glass



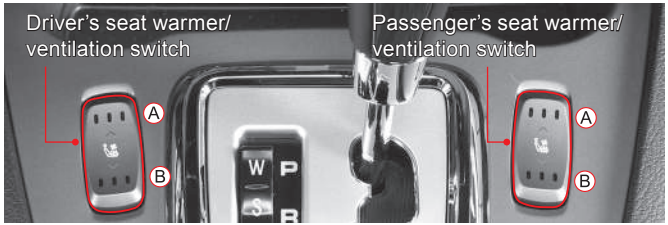
Tailgate and Outside Rearview Mirror Heated Glass



Windshield, Tailgate and Outside Rearview Mirror Heated Glass*

- Press this switch to turn on the windshield heated glass. It will operate for about 12 minutes. However, the outside rearview mirror heated glass is optional.
- Press the switch again to stop the operation.
- This switch is designed to defrost and defog on the windshield, tailgate glass and outside rearview mirrors.
- The heated glass will operate for about 6 minutes when the switch is pressed again within 10 minutes after completion of its first operation cycle.
- The indicators in the instrument panel and the switch come on when in use.

Seat Warmer/Ventilation Switch (A/T)

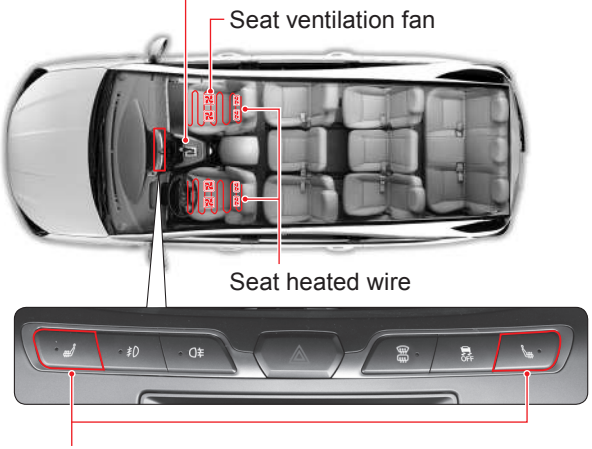


To heat the seat, press (Ⓐ) portion of the switch. There are three heating levels. The indicator on the switch illuminates in red.

To cool the seat, press (Ⓑ) portion of the switch. There are three fan speed levels. The indicator on the switch illuminates in blue.

CAUTION

- The seat ventilation is not air conditioned type.
- The seat ventilation function uses the air inside vehicle. Therefore, to improve the efficiency, use it with the air conditioner.
- To prevent personal injury, do not put your hand under the seat cushion when the ventilation fan is operating.



Seat Warmer Switch (M/T)

Press the switch to heat the seat and press again to stop the seat heating. During heating, the indicator light on the switch comes on.

WARNING

- Do not operate the seat heater for a long time when the passenger is an infant, child, old or handicapped person, person with sensitive skin, person under the influence of alcohol, or excessively fatigued person. They might receive minor burns.
- If your skin is in contact with the heated seat for a long time, you might get low temperature burns. Be careful.
- Do not put anything on the seat that insulates heat, such as a blanket, cushion or seat cover.
- If the temperature continues to rise, turn the switch off and have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- In the case of the driver's seat, an excessive usage of the heated seat might make you sleepy and could negatively affect your safety.
- Do not place anything sharp on the seat. This may cause damage to the seat heater.



ESP Indicator/Warning Lamp



Blinking: When ESP is operating

On: When ESP system is defective.

When ESP is activated, this indicator blinks and the alarm beeps.

If this indicator stays on (ESP warning lamp), immediately have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

NOTE

When you hit the brake while driving at more than 50 km/h or when ESP is in operation, the hazard warning flasher will blink for approx. 10 seconds to inform the emergency situation to the vehicles around.

ESP OFF Indicator



On: When ESP is deactivated by pressing ESP OFF switch

ESP OFF Switch



If you press the ESP OFF switch, ESP function is deactivated and the ESP OFF indicator in the instrument cluster comes on.

To resume the ESP function, press this switch again. At this time, ESP OFF indicator goes out.

Stopping ESP Function With ESP OFF Switch

If the driving wheels are slipping on snowy or icy roads, the engine rpm may not increase even when you depress the accelerator pedal, and accordingly, you may not be able to move your vehicle. In this case, stop the ESP function by pressing the ESP OFF switch. When the ESP OFF switch is pressed, the ESP function stops and the vehicle is driven independently from the sensor outputs.

Sensing ESP System In Operation

When ESP is activated (ESP indicator light blinks) due to sharp cornering and etc., you will sense that the corresponding tire is put on the brake, and brake pedal vibration and other noises can occur due to hydraulic pressure change in the system. Also the engine torque may not increase even with the accelerator pedal depressed, due to engine power control function.

Resuming ESP Function With ESP OFF Switch

If you push the ESP OFF switch when the ESP function is deactivated (ESP OFF indicator is ON), the ESP function will be resumed and ESP OFF indicator on the warning box goes out.

ESP (Electronic Stability Program) SYSTEM

The Electronic Vehicle Stability Control Program (ESP) is a supplementary driving safety system when your vehicle is unstably moving in a certain situation, such as during a sharp corner. The ESP applies brakes on a certain wheel(s) or controls the engine torque to compensate vehicle stability. These actions help your vehicle avoid dangerous situations. The ESP functions automatically, working only in very unstable conditions; it does not operate under normal driving conditions. If the ESP is operating, the ESP warning lamp will blink on the instrument cluster.

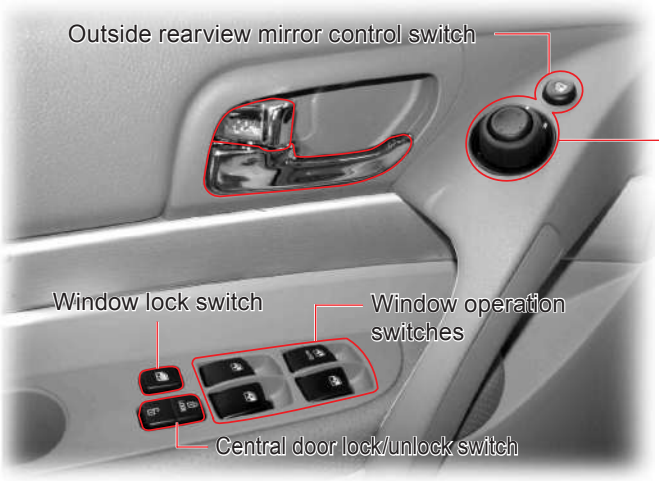
Symptoms when ESP is Working

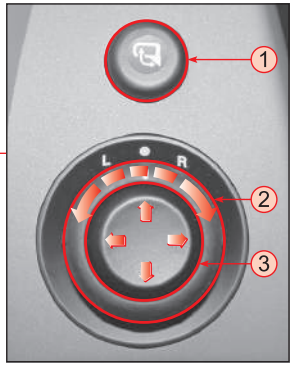
When ESP is applied in a certain situation (the indicator blinks and a warning buzzer sounds), such as during a sharp turn, you may feel that ESP controls each wheel and different levels of needed braking force are applied to wheels. You may hear some noise or feel some vibrations from the brake pedal or other systems. They are caused by pressure changes in relevant system. You may also notice the engine output decreases even when the accelerator pedal is being depressed.

CAUTION

- If ESP indicator comes on after engine starting, ESP related system is defective. Make sure to check the vehicle at the nearest Ssangyong Dealer or Ssangyong Authorized Service Center.
- The ESP system does not operate during reverse driving.
- The ESP system is activated when the vehicle is unstable to correct the vehicle stability. When the ESP indicator is blinking, reduce the speed and pay extra attention to the road.
- The ESP system is only a supplementary device for the vehicle. When the vehicle exceeds its physical limits, it cannot be controlled. Do not rely on the system. Keep driving safely.
- When ESP is applied, you may feel some noise or vibration from the brake pedal or other relevant systems. They are caused by pressure changes in the relevant systems.
- Do not drive off the vehicle immediately after starting the engine. The ESP system needs approx. 2 seconds to perform self-diagnosis. If the system could not complete the self-diagnosis, the ESP system cannot be activated even when the vehicle is in unstable conditions.
- Do not press the ESP OFF switch when the ESP system is in operation. Stopping the ESP function on the slippery road may cause a serious accident. To deactivate the ESP function, press the ESP OFF switch only on a long straight road.

OUTSIDE REARVIEW MIRROR CONTROL SWITCH





1. **Outside rearview mirror folding switch**

   To fold the outside rearview mirrors, press the switch for more than 0.5 seconds. To unfold the mirrors, press again.

2. **Mirror selection switch**

   "L": Driver side mirror

   "R": Passenger side mirror

   "•": Neutral position

3. **Aiming switch**

   Adjust the selected mirror up, down, left, or right by pressing the corresponding edges of the switch to get the direct rearview.

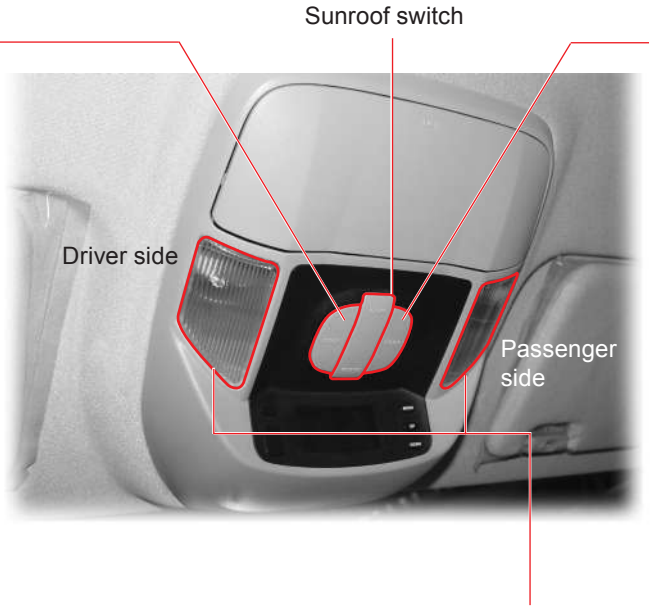
CAUTION

- Do not fold or unfold the outside rearview mirrors manually. It may cause a malfunction of the mirror folding system.
- If the outside rearview mirrors are folded or unfolded manually, an abnormal noise may be produced during the folding switch operations.
- If you operate the outside rearview mirror folding switch within 10 seconds after starting the recognizing operation of the mirror position, continuous abnormal noise may be produced.

Recognizing Operation of the Mirror Position

When you folded or unfolded the outside rearview mirrors, perform the recognizing operation of the mirror position in the following order.

1. Fold/unfold the mirrors with folding switch.
2. The mirrors are folded/unfolded.
3. Fold/unfold the mirrors with folding switch after 10 seconds.
4. The mirrors are folded/unfolded.
5. The mirrors can be operated with folding switch after 10 seconds.



Front Room Lamp Coupled Switch

Front room lamps (driver's and passenger's) are turned on when opening one of front doors with this switch pressed in. The front room lamps are dimmed out after closing the door. If this switch is pressed out, front room lamps are not turned on even when opening a front door.

Side Room Lamp Coupled Switch (GSL)

Four side room lamps are turned on when opening a rear door with this switch pressed in. The side room lamps are turned off when closing the door. If this switch is pressed out, side room lamps are not turned on even when opening a rear door.

Side and Rear Room Lamp Operating Condition

Side and rear room lamps are turned on only when the side room lamp coupled switch is pressed in.

Coupled Operation with Door Remote Control

With the front room lamp coupled switch pressed in, the front room lamps are turned on for 30 seconds when the doors are unlocked by the door remote control. The front room lamps are turned off immediately when closing the door.

Front Room Lamp Switch

The front room lamps are turned on when pushing the lamp body regardless of the positions of front room lamp coupled switch. Press the lamp body again to turn off.

NOTE

With the front room lamp coupled switch pressed in, the front room lamps are turned on when opening a front door regardless of the operation of front room lamp switch.

DIGITAL CLOCK



H (HOUR) : Hour Adjusting Button

M (MINUTE) : Minute Adjusting Button

S (SET) : Setting Button

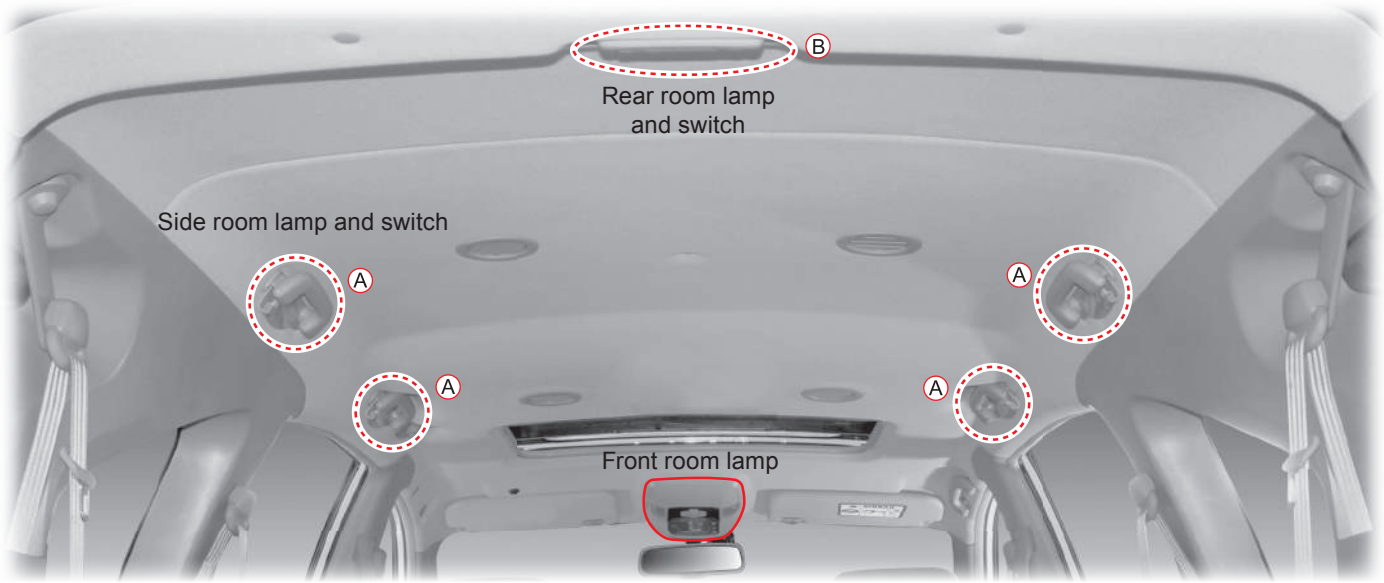
Press the “S” button to adjust the time to the nearest hour.

- When the time is between 00 and 29 minutes of a certain hour, the minute indicator will show “00” if this button is pressed.
- When the time is between 30 and 59 minutes of a certain hour, the minute indicator will show “00” and one hour will be added to the hour indicator if this button is pressed.

NOTE

When disconnecting the battery or replacing the fuse, the clock should be adjusted again.

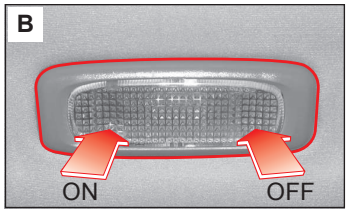
ROOM LAMPS





Press the lamp body to turn on. Press it again to turn off.

- Side room lamps and rear room lamp are available only when the side room lamp coupled switch is pressed in.



MEMO

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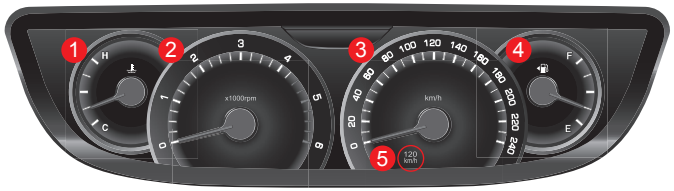


Instrument Cluster

Standard type



Black face type *



5 Over speed warning light (GCC only)

Sounds warning chime 5 times initially

1 Coolant temperature gauge

The temperature gauge indicates the temperature of the engine coolant.

WARNING

If the gauge moves beyond the normal operating range toward “H” mark. it indicates the engine overheating that may damage the engine. Allow engine to cool.

2 Tachometer

The tachometer indicates engine speed in revolutions per minute. Multiply 1000 to the current number, then it will be the current number of engine revolutions.

WARNING

Do not operate the engine within the red zone. This may cause severe engine damage.

3 Speedometer

The speedometer indicates the vehicle speed in kilometers per hour (km/h) or mile per hour (MPH).

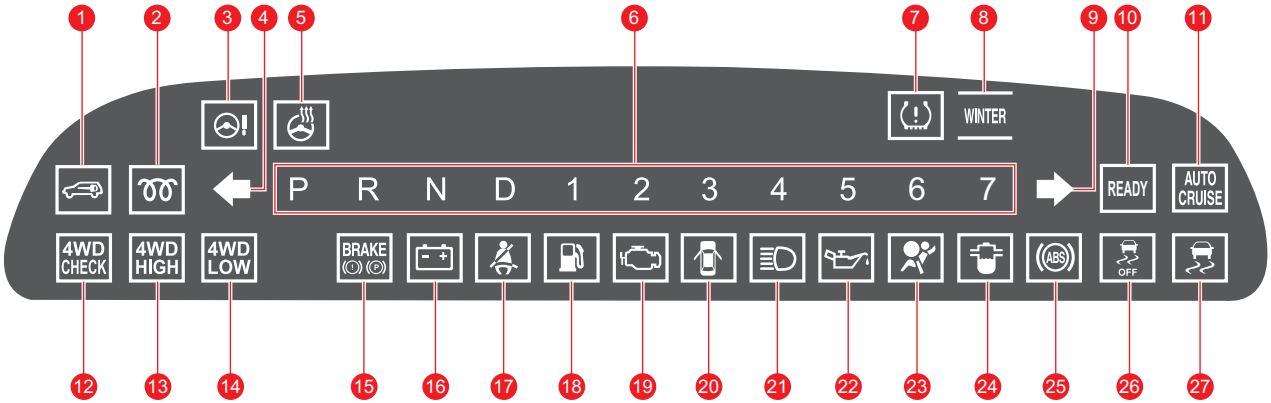
(EU5: 0~220km, EU6: 0~240km)

4 Fuel gauge

This gauge indicates the level of fuel remaining in the fuel tank. Fill up the fuel tank before the gauge pointer reaches “E”.

◂ : This symbole indicates that the fuel filler is located on the left side of vehicle.

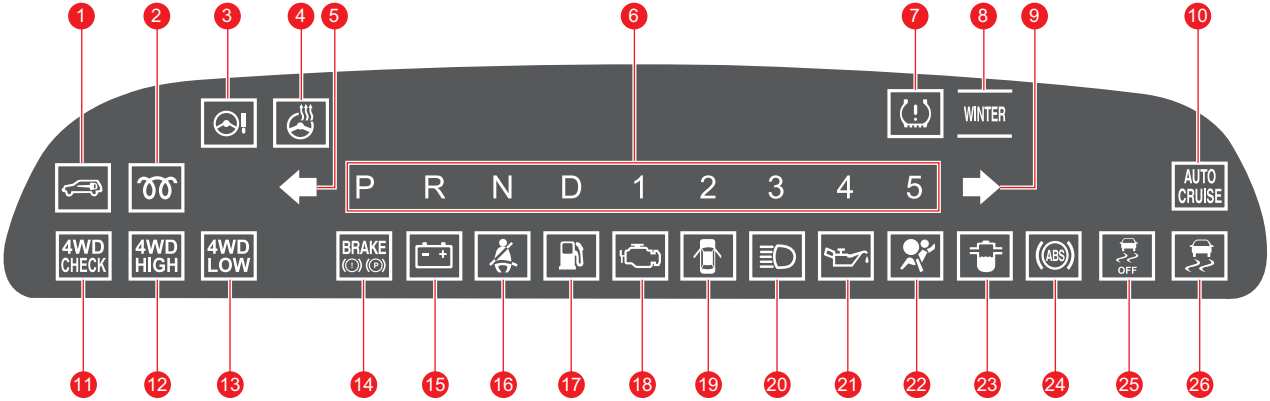
STANDARD (A/T) TYPE A



1. Immobilizer indicator
2. Glow indicator
3. SSPS warning light
4. Left turn signal indicator
5. Steering wheel heating indicator
6. Auto shift indicator (for automatic transmission)
7. Global warning light
8. Winter mode indicator
9. Right turn signal indicator
10. Auto cruise Ready indicator
11. Cruise control indicator*
12. 4WD CHECK warning light
13. 4WD HIGH indicator
14. 4WD LOW indicator
15. Brake warning light
16. Battery charge warning light
17. Seat belt reminder
18. Low fuel level warning light
19. Engine check warning light
20. Door ajar warning light
21. High beam indicator
22. Engine oil pressure warning light
23. Air bag warning light
24. Water separator warning light
25. ABS warning light
26. ESP OFF indicator
27. ESP warning light

※ The configuration of the instrument cluster varies with which equipments are mounted to the vehicle.

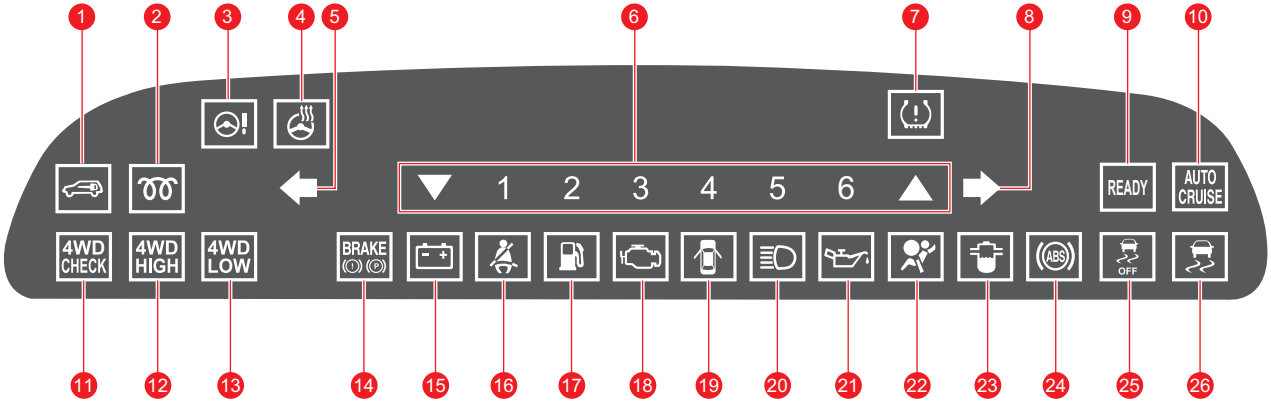
STANDARD (A/T) TYPE B



1. Immobilizer indicator
2. Glow indicator
3. SSPS warning light
4. Steering wheel heating indicator
5. Left turn signal indicator
6. Auto shift indicator (for automatic transmission)
7. Global warning light
8. Winter mode indicator
9. Right turn signal indicator
10. Cruise control indicator*
11. 4WD CHECK warning light
12. 4WD HIGH indicator
13. 4WD LOW indicator
14. Brake warning light
15. Battery charge warning light
16. Seat belt reminder
17. Low fuel level warning light
18. Engine check warning light
19. Door ajar warning light
20. High beam indicator
21. Engine oil pressure warning light
22. Air bag warning light
23. Water separator warning light
24. ABS warning light
25. ESP OFF indicator
26. ESP warning light

※ The configuration of the instrument cluster varies with which equipments are mounted to the vehicle.

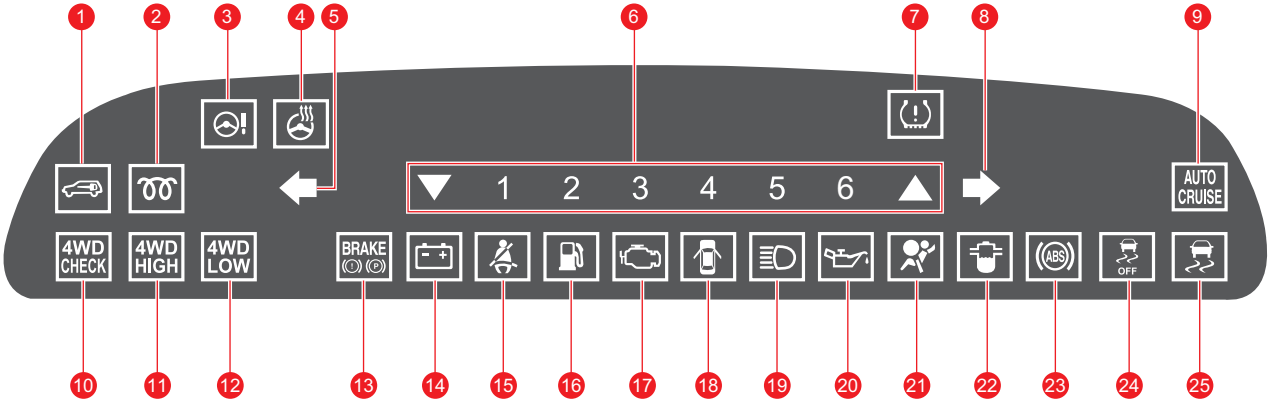
STANDARD (M/T) TYPE A



1. Immobilizer indicator
2. Glow indicator
3. SSPS warning light
4. Steering wheel heating indicator
5. Left turn signal indicator
6. Gear shift indicator
7. Global warning light
8. Right turn signal indicator
9. Auto cruise Ready indicator
10. Cruise control indicator*
11. 4WD CHECK warning light
12. 4WD HIGH indicator
13. 4WD LOW indicator
14. Brake warning light
15. Battery charge warning light
16. Seat belt reminder
17. Low fuel level warning light
18. Engine check warning light
19. Door ajar warning light
20. High beam indicator
21. Engine oil pressure warning light
22. Air bag warning light
23. Water separator warning light
24. ABS warning light
25. ESP OFF indicator
26. ESP warning light

※ The configuration of the instrument cluster varies with which equipments are mounted to the vehicle.

STANDARD (M/T) TYPE B



1. Immobilizer indicator
2. Glow indicator
3. SSPS warning light
4. Steering wheel heating indicator
5. Left turn signal indicator
6. Gear shift indicator
7. Global warning light
8. Right turn signal indicator
9. Cruise control indicator*
10. 4WD CHECK warning light
11. 4WD HIGH indicator
12. 4WD LOW indicator
13. Brake warning light
14. Battery charge warning light
15. Seat belt reminder
16. Low fuel level warning light
17. Engine check warning light
18. Door ajar warning light
19. High beam indicator
20. Engine oil pressure warning light
21. Air bag warning light
22. Water separator warning light
23. ABS warning light
24. ESP OFF indicator
25. ESP warning light

※ The configuration of the instrument cluster varies with which equipments are mounted to the vehicle.

BLACK FACE TYPE*



LCD Display
(Driving information display)

1. Light indicator
2. 4WD HIGH indicator*
3. Left turn signal indicator
4. Winter mode indicator*
5. Door ajar warning light
6. Seat belt reminder
7. 4WD CHECK warning light*
8. Battery charge warning light
9. Air bag warning light
10. Immobilizer indicator
11. 4WD LOW indicator*
12. Glow indicator
13. Engine check warning light
14. High beam indicator
15. Right turn signal indicator
16. Auto cruise indicator*
17. Auto cruise Ready indicator
18. SSPS warning light
19. Water separator warning light
20. Engine oil pressure warning light
21. Brake warning light
22. Low fuel level warning light
23. Steering wheel heating indicator
24. ESP indicator/warning light*
25. ESP OFF indicator*
26. ABS warning light
27. Engine overheat warning light
28. Global warning light

21+26. EBD warning light (when both indicators are turned on together)

※ The configuration of the instrument cluster varies with which equipments are mounted to the vehicle.

STANDARD TYPE

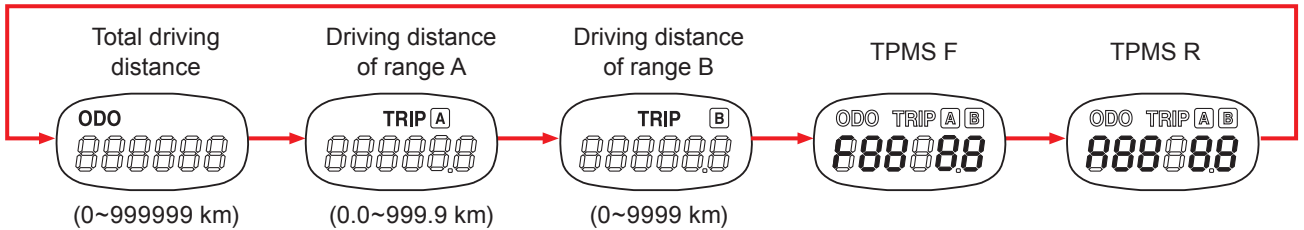
TRIP Button

The TRIP button is used for the display mode: ODO (total driving distance), Trip A, Trip B, TPMS F, TPMS R

To reset the trip odometer to 0 km, press the TRIP button for more than one second.

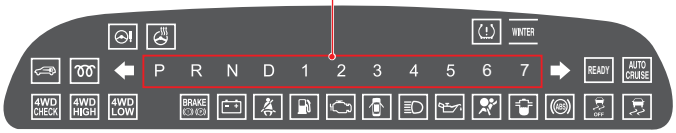


Mode Sequence

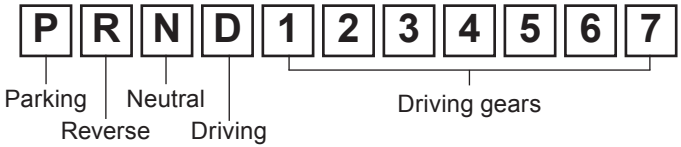


Gear Position Indicator

A/T

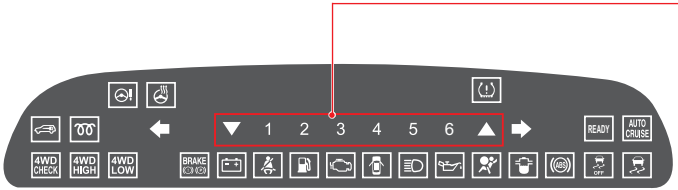


Auto Shift Indicator



This indicator shows the automatic transmission selector lever position.

M/T



Gear Shift Indicator (Diesel M/T only)



EX)



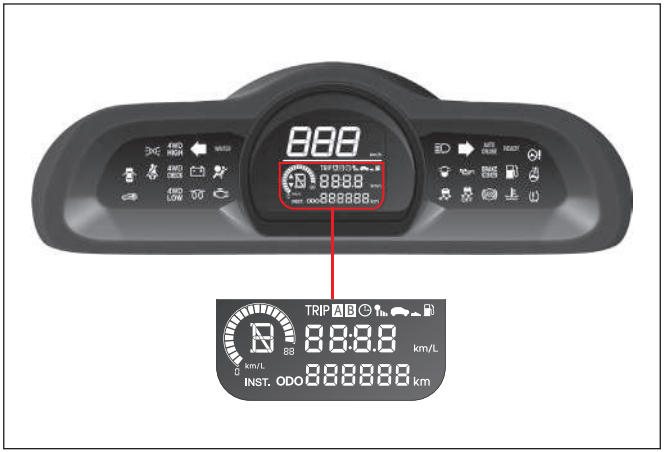
Shift-down to 3rd gear
(currently 4th gear or higher)



Shift-up to 3rd gear
(currently 2nd gear or lower)

BLACK FACE TYPE*





TRIP (TRIP/RESET) SWITCH

You can see the various vehicle information of your vehicle through LCD display when pressing this switch.

CAUTION

The driving information in LCD display is provides useful information to driver. However, to keep safe maneuvering, changing the mode and checking the data by using Trip switch should be done when the vehicle is stationary.

RESET (Initialization)

- The display for Trip A, Trip B, Drive time, Average speed and Average fuel consumption will be initialized to “0” when pressing the switch for over one second.
- The illumination level of meter cluster and warning box will be changed by 6 levels (1 to 6) when pressing the switch for over one second in “Illumination mode”.

Instant Fuel Consumption

This mode calculates the instant fuel consumption at every 0.6 seconds based on the data regarding fuel and driving distance, and displays it in graphic bars.

One bar corresponds to 1 km/ℓ. If there are ten bars, the instant fuel consumption is 10 km/ℓ.

Indication range: 0~20 km/ℓ (20 graphic bars)



Driving Information Window

This window shows the information according to the specified sequence as below when pressing the switch.

Refer to “LCD DISPLAY” in this section for further information.

Trip A → Trip B → Drive time → Average speed → Average fuel consumption → Distance to empty → TPMS F → TPMS R → Illumination level → Trip A

Gear Position Indicator (A/T only)



This indicator shows the gear selector lever position and currently selected gear.

Indication in auto mode: P, R, N, D
Indication in manual mode (position “M”):
7, 6, 5, 4, 3, 2, 1 (7 A/T)
5, 4, 3, 2, 1 (5 A/T)

P: Parking	**7: 7th gear**
R: Reverse	**6: 6th gear**
N: Neutral	**5: 5th gear**
D: Drive (1st to 5th gear)	**4: 4th gear**
	3: 3rd gear
	2: 2nd gear
	1: 1st gear

NOTE

For manual transmission equipped vehicle, the gear position indicator displays “R” only when the gear shift lever is in “R” position.

Odometer

The odometer indicates the total distance the vehicle has been driven in km (or mile).

Maximum indication: 999999 km (mile)

Gear Shift Indicator (Diesel M/T only)



This indicator indicates the proper gear shifting time.

EX) ▲3

Shift-up to 3rd gear (currently 2nd gear or lower)

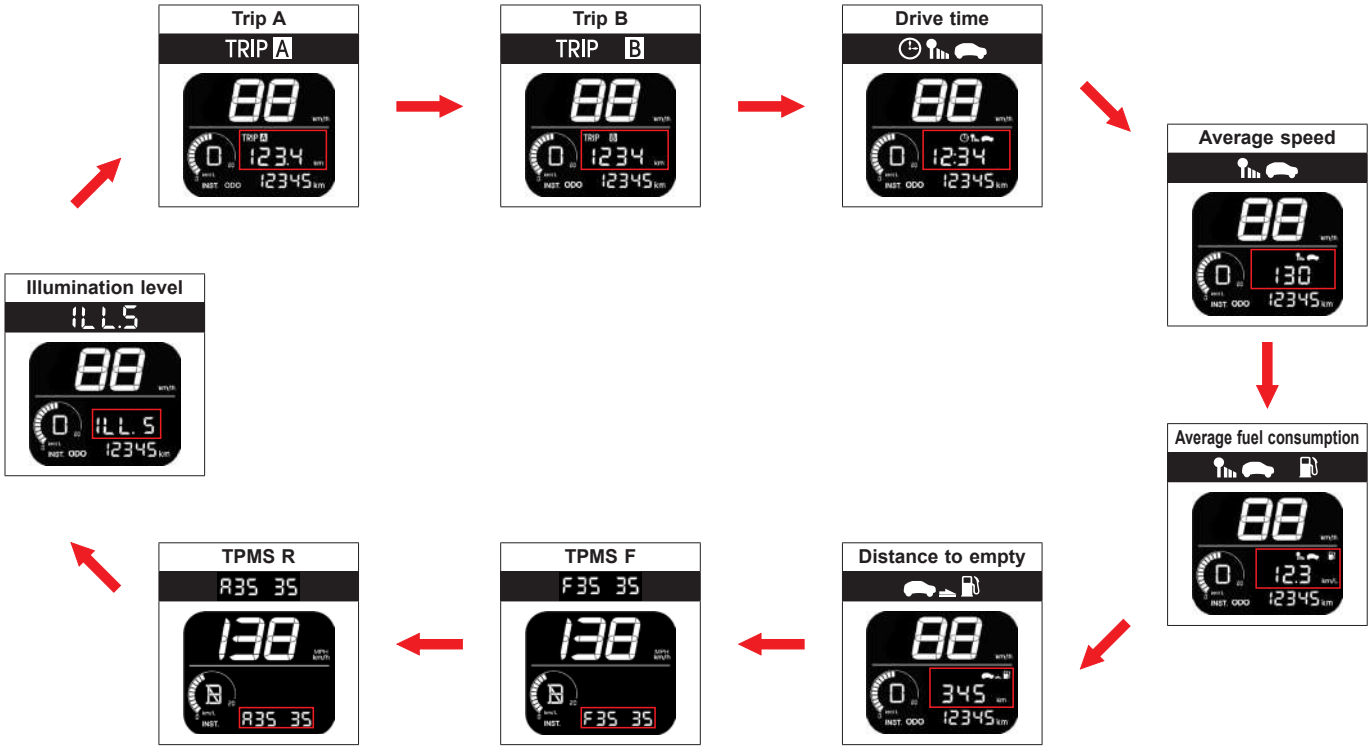
▼3

Shift-down to 3rd gear (currently 4th gear or higher)

5

Mode Sequence

The LCD display shows the information according to the specified sequence as below when pressing the Trip switch briefly (below 1 second).



DESCRIPTION FOR MODES

You can check the current driving conditions of your vehicle through LCD display.

Trip A

TRIP A

Standard cluster



Black face cluster



The LCD display indicates the distance of individual trips in km (or mile).

Maximum indication: 999.9 km (mile)

To reset the trip odometer to zero, press and hold the trip/reset switch for more than one second in Trip A mode. The trip odometer A is initialized to “0.0 km (or mile)”.

Trip B

TRIP B

Standard cluster



Black face cluster



The LCD display indicates the distance of individual trips in km (or mile).

Maximum indication: 9999 km (mile)

To reset the trip odometer to zero, press and hold the trip/reset switch for more than one second in Trip B mode. The trip odometer B is initialized to “0 km (or mile)”.

Drive time



This mode indicates the drive time since the last trip meter reset.

Even if the vehicle is not in motion, the drive time keeps going while the engine is running.

The indication range is from 00:00 to 99:59.

Press the Trip switch for more than 1 second, when the drive time is being displayed, clears the drive time to zero.

NOTE

If the battery has been discharged or disconnected, the drive time will be reset.

5

Average speed



This mode indicates the average speed since the last trip meter reset.

Even if the vehicle is not in motion, the average speed keeps going while the engine is running.

The indication range is from 0 to 999 km/h (or mph).

Press the Trip switch for more than 1 seconds, when the average speed is being displayed, clears the average speed to "---".

NOTE

If the battery has been discharged or disconnected, the average speed will be reset.

Average fuel consumption



This mode calculates the average fuel consumption from the total fuel used and the distance since the last average consumption reset.

Even if the vehicle is not in motion, the average fuel consumption keeps going while the engine is running.

The total fuel used is calculated from the fuel consumption input.

The indication range is from 0.0 to 99.9 km/ℓ.

Press the Trip switch for more than 1 seconds, when the average fuel consumption is being displayed, clears the average fuel consumption to "---".

NOTE

The average fuel consumption will be reset when driving over 1 km/h of vehicle speed after refueling.

Distance to empty



The LCD display indicates how long you can drive your vehicle with current amount of fuel in fuel tank.

Indication range: 50~999 km (30~999 mile)

If the remaining distance is below 50 km (30 mile), "---" will be displayed and the symbol ( ) will blink.

CAUTION

The distance to empty may differ from the actual trip meter according to driving conditions. This information should only be used as a reference.

TPMS



Standard cluster



Black face cluster



This displays the each tire pressure.

This displays the tire pressure for front wheels. To see the tire pressure for rear wheels, briefly press TRIP switch. If the tire pressure cannot be recognized or the tire pressure is abnormal, this displays “--”.

Illumination level



The LCD display indicates the illumination level of meter cluster and warning box by 6 levels.

To adjust the illumination level, press the Trip/Reset switch till the LCD shows the desired level (1 to 6).

And, if the Trip/Reset switch is not pressed in 3 seconds after getting into the illumination level mode, the LCD display changes the mode to Trip A mode.

NOTE

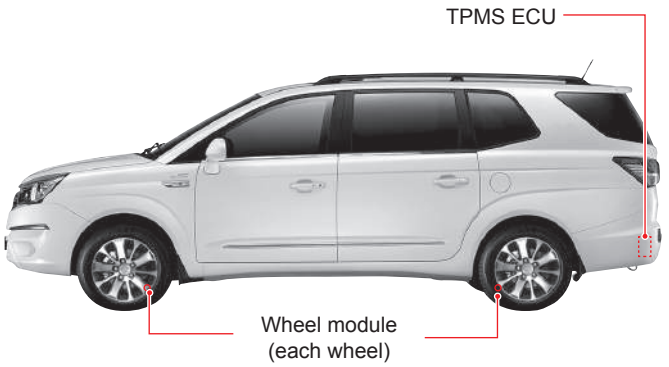
If the battery has been discharged or disconnected, the illumination level will be set to Level 5 (ILL5).

5

TIRE PRESSURE MONITORING SYSTEM (TPMS)*

What's TPMS?

As an additional safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates an abnormal tire pressure telltale when one or more of your tires are significantly under-inflated or over-inflated.



Proper tire pressure: 35 psi

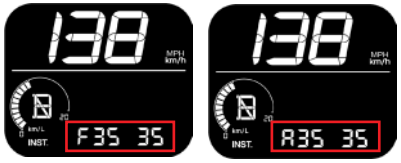
The tire pressure should be checked when there is nobody inside the vehicle and the tires are cold (approx. 18°C).

TPMS ECU receives the tire pressure temperature data from wheel module in each wheel and displays the tire pressure on the instrument cluster

Standard type



Black face type

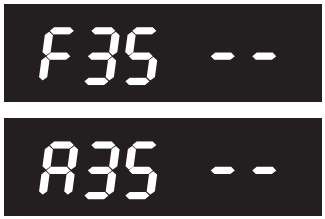


Tire pressure display (unit: psi)

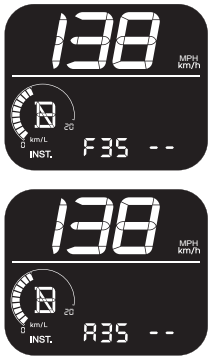
The tire pressure for front wheels is displayed on the LCD display. The tire pressure for rear wheels is displayed when pressing the Trip switch.

INDICATION OF TIRE PRESSURE

Standard type



Black face type



Tire Pressure

TPMS start to recognize the tire pressures in 10 minutes of continuous driving (over 30 km/h) after starting the engine. If the system is not ready yet, LCD display shows “--”.

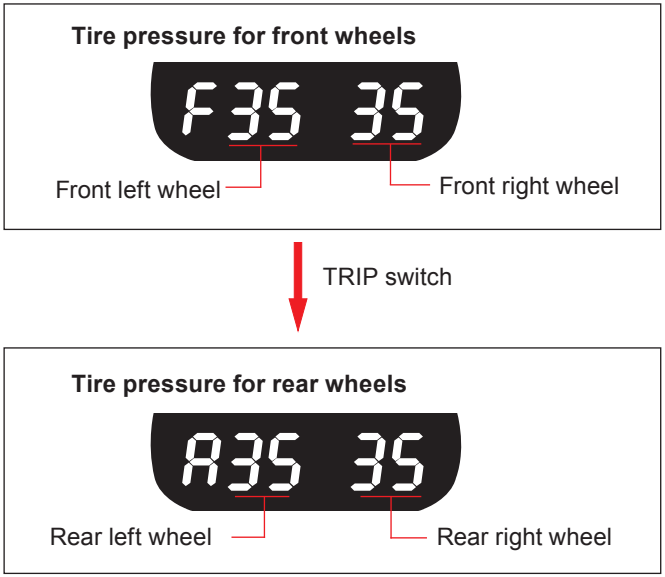
⚠ CAUTION

- If the vehicle is in stationary after starting the engine, the tire pressure cannot be displayed on LCD display.
- The tire pressure can be displayed after 10 minutes of driving with 30 km/h of vehicle speed.
- The tire pressure on LCD display may vary according to the external factors such as driving condition and, number of passengers.
- When inflating the tire, the tire pressure may vary until the air temperature is balanced.

TRIP Switch



To see the tire pressure, press TRIP switch in the illumination mode. The LCD display shows the tire pressure for front wheels. To see the tire pressure for rear wheels, press the switch again.



5

GLOBAL WARNING LIGHT

Standard type



Black face type



WARNING

- If the global warning light blinks when engine starts (IGN ON), the TPMS is not working. This prevents the TPMS from warning to driver for abnormal tire conditions. To reset the TPMS, restart the engine and drive (over 30 km/h) your vehicle for more than 10 minutes. If the global warning light still stays on, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.
- When the global warning light is illuminated, one or more of tires is significantly under-inflated. If this happens, have the tire inflation pressure checked by nearest service center.

Global Warning Light



This light blinks or stays on when the tire pressure is abnormal or TPMS (including sensor) has problem.

- Faulty TPMS (including sensor): The global warning light stays on after flashing for about 70 sec.
- Tire pressure abnormality (underinflated / overinflated / flatten): The global warning light stays on.

CAUTION

- Even with proper inflation of tire pressure, the global warning light ( ) can be illuminated due to the difference between interior and ambient temperatures. This happens because the tire pressure decreases in proportion to the temperature and does not mean TPMS is defective.
- If you need to drive while the ambient temperature rises or drops sharply, make sure to check and adjust your tire pressure before driving.
- For safe driving, do not depend solely on the tire monitoring system; instead check your tire pressure regularly.

WARNING

- Sudden tire damage due to external factors, such as nails, spikes, metal parts on the roads, will not be detected immediately. If you feel instability of the vehicle while driving, reduce the vehicle speed and safely pull over in a safe area to stop and check your vehicle.
- Do not attempt to modify or make any unauthorized changes to your vehicle which can interrupt TPMS operation.
- For safety, always use genuine wheels with tire pressure monitoring system.

WHEN CHANGING A TIRE

Changing Tire Locations

The TPMS automatically resets new location of tires after continuous driving (over 30 km/h) for around 10 minutes.

CAUTION

- The global warning light may come on when you change the location of tires and tire pressure sensor.
- The resetting time for new location of tires varied according to the driving conditions.
- Do not use any waterproof products on the tire with a tire pressure monitoring system. It can damage the tire pressure monitoring sensors.

WARNING

- If you have injected sealant into one of your tire for repairing, drive the vehicle to a Ssangyong Authorized Service Center within a driving distance of 200 km at a speed of 80 km/h or slower and replace the repaired tire with a new one.
- When replacing the sealant injected tire, the TPMS sensors should be checked for appearance and abnormality at a Ssangyong Authorized Service Center.

When Spare Tire Is Used

The spare tire is not equipped with a TPMS module on its wheel. Thus, if a spare tire is installed, the TPMS warning lamp comes on and the TPMS does not operate.

CAUTION

When the vehicle is driven with the deflated tire placed in the cargo area after the spare tire is installed, the tire pressure monitoring system can detect the pressure of the deflated tire and display “low tire pressure” message or turn on the global warning light.

When Low Tire Pressure Detected

- The global warning light ((!)) and the low pressure tire position indicator on the instrument cluster come on when a significantly under-inflated tire is detected. If this occurs, slow down and have your vehicle checked and serviced at a Ssangyong Authorized Service Center.
- If you drive continuously without replacing a inflated tire with a new one, the operating performance of the vehicle, breaking force and tire life will be adversely affected and fuel economy will decrease.
- If you cannot take the vehicle to a Ssangyong Authorized Service Center, check and follow the instructions for the service kit (emergency puncture repair kit).

CAUTION

- If the TPMS sensor is covered by some foreign materials such as snow or mud, the TPMS may not communicate with the TPMS unit. This may cause an abnormal operation of TPMS.
- If the snow chains are installed on the wheel, the TPMS may not work properly.
- If the vehicle is moving around electric power supply cable or radio transmitter which can interfere with normal operation of TPMS, the TPMS may not work properly.
- If you use the tire without TPMS sensor, the TPMS warning light comes on and the TPMS does not operate.
- The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as a nail on the road. If you feel any vehicle instability, immediately take your foot off the accelerator and slowly move to a safe position off the road.
- Unauthorized modification or alteration of the vehicle that may affect the performance of TPMS is not permissible.
- Tampering with, modifying, or disabling the TPMS components may interfere with the system's operation and may cause the TPMS malfunctions.
- Make sure not to damage the tire pressure sensor while changing a tire.
- Use only genuine TPMS specific tire with tire pressure sensor.
- After changing a tire or TPMS sensor, check the tire pressure and adjust the pressure to the specified value (35 psi) if necessary.
- Adjust the tire pressure when the tire is cold. Cold tire is defined as the tire of the vehicle that has not been driven for at least 3 hours, in shaded area or driven less than 1.6 km.
- Even if you have adjusted the tire pressure, the low tire pressure warning lamp can be turned ON in the cold weather. This is because the tire pressure falls below the low pressure limit for low temperature effects, and is not cause for concern.

  Check the tires and adjust the tire pressure, if necessary.

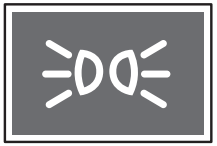
CAUTION

- If you need to drive when the temperature falls down or rises up rapidly, check the tire pressure before driving and adjust it to the recommended pressure, if necessary.
- All tires of the vehicle including the spare tire should be checked for proper pressure periodically.
- The tire pressure monitoring system may pick up electrical disturbances around the police stations, radio stations, military facilities, towers, etc. At this time, the tire pressure warning lamp can be turned on after flashing for a certain time.
- Also, the tire pressure warning lamp can be turned on after blinking when an after-market equipment, including a laptop, cellular phone charger, audio/navigation system, remote starting system, or wireless communication device, is used or installed to the vehicle.
- If another vehicle with a properly functioning tire pressure monitoring system drives near your vehicle, your tire pressure warning lamp may not be turned on temporarily even when the tire pressure monitoring sensor is malfunctioning.
- Do not use any waterproof products on the tire with a tire pressure monitoring system. It can damage the tire pressure monitoring sensor.
- The tire pressure monitoring system cannot detect a sudden failure of tires due to nails, metal debris, etc. on the roads.
- Never attempt to adjust or modify any components of the tire pressure monitoring system. The system may not work properly.
- The tire pressure monitoring sensors should be installed on each wheel to detect which tire has low pressure. The tire pressure monitoring sensor installed to a position on other than the wheels can turn on the tire pressure warning lamp.
- Make sure that the tire pressure monitoring sensors are not lost or damaged when replacing tires.

WARNING

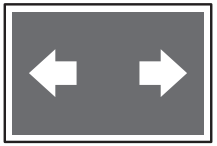
- Driving with low tire pressure for an extended time can result in tire overheating and burst failure. It may also decrease the tire life, braking force, fuel economy and stability of the vehicle. Consult with the nearest Ssangyong Dealer or Ssangyong Authorized Service Center for the recommended tire pressure.
- Sudden tire damage due to external factors will not be detected immediately. If the vehicle is unstable, immediately release the accelerator pedal, move the vehicle to the safe place and check the vehicle.
- Do not carry out any modification or alteration disrupting the operation of the tire pressure monitoring system.
- The wheels on the market have no tire pressure monitoring sensor. Always use a genuine wheel with tire pressure monitoring sensor for your safety.

LIGHT INDICATOR



This indicator comes on when the tail lamp or headlamp is switched on.

TURN SIGNAL/HAZARD WARNING FLASHER INDICATOR



When the turn signal switch is turned on, this indicator flashes to indicate operation of the external turn signal. Both right and left lights flash when the hazard warning switch is turned on.

HIGH BEAM INDICATOR

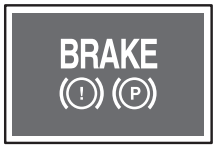


This indicator comes on when the high beam headlamp is switched on.

WARNING

Driving with high beam headlamp disturbs the approaching vehicle's visibility. For safe driving, use the high beam headlamp only when it is very hard to see the road.

BRAKE WARNING LIGHT



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

This warning light comes on when the parking brake is applied and/or the brake fluid level is lower than a specified level.

CAUTION

If the vehicle is driven for over 2 seconds (over 10 km/h) while the parking brake is applied, the parking brake warning light comes on and a warning buzzer sounds. If it occurs, immediately stop the vehicle and release the parking brake.

WARNING

Driving the vehicle with the brake fluid warning light on is dangerous.

If the parking brake light stays on, you must immediately have your vehicle checked and serviced by Ssangyong Dealer or Ssangyong Authorized Service Center.

ESP OFF INDICATOR*



This indicator comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

This indicator comes on when pressing the ESP OFF switch to deactivate the ESP function.

For detailed information for ESP (Electronic Stability Program) system, refer to Chapter 4.

ESP INDICATOR/ WARNING LIGHT*



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

This indicator blinks when the ESP system is operating.

If this warning light comes on while driving, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

For detailed information for ESP (Electronic Stability Program) system, refer to Chapter 4.

ABS WARNING LIGHT*



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

WARNING

- If this light stays on after starting the engine or comes on while driving, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center. In this case, the ABS function is not available, but the conventional brake system is properly working.
- ABS is a device that prevents wheels from locking during braking to allow steering. However, the ABS system does not shorten the stopping distance.

CAUTION

ABS system performs self diagnosis by transferring hydraulic pressure to the brake units for few seconds after starting the engine. This may cause some noise and vibrations. This means ABS is properly functioning.

EBD WARNING LIGHT*



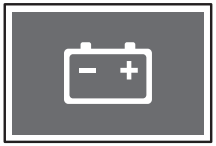
If the ABS warning light and the brake warning light come on simultaneously, EBD (Electronic Brake force Distribution) system is defective. In this case, ABS system also cannot be activated.

If this happens, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

WARNING

When the EBD system is not functioning, the vehicle could be unstable during hard braking. Therefore, you must pay particular attention to the driving conditions while this warning light is on.

BATTERY CHARGE WARNING LIGHT



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

If this light doesn’t go off after engine starting or comes on while driving, it means there is a malfunction in the system. Have the charging system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

SEAT BELT REMINDER



This warning light blinks and the warning buzzer sounds for 6 seconds when the ignition switch is turned to the “ON” position unless the driver’s seat belt is securely fastened. This reminding operation stops when the driver fastens the seat belt even during its operation period.

When the vehicle speed exceeds 10 (25) km/h without fastened driver’s seat belt, this indicator comes on and the alarm sounds.

AIR BAG WARNING LIGHT*



When the ignition is switched on, this warning light illuminates and then should go out, to confirm that the air bag is operational.

WARNING

If it does not come on, or if it does not go out, or if it flashes or illuminates continuously while driving, it means that there is malfunction in the system. Have the air bag system checked without delay by a Ssangyong Dealer or Ssangyong Authorized Service Operation.

LOW FUEL LEVEL WARNING LIGHT



This warning light indicates that the fuel level in the tank is getting exhausted. The illuminating point of this warning light varies according to the driving conditions such as driving angle and road conditions. If this warning light comes on while driving, immediately refuel the tank. However, it is recommended that fuel should be added before this warning light will come on.

DOOR AJAR WARNING LIGHT

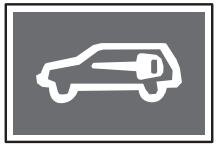


This light comes on when a door or the tailgate is either opened or not closed securely. If you drive over 10 km/h of vehicle speed without closing the door, the warning light blinks.

WARNING

Before driving, check that the door ajar warning light is off. When a door is not completely closed, it may accidentally open while driving.

IMMOBILIZER INDICATOR*



This indicator blinks when the immobilizer system is defective.

CAUTION

If this indicator blink, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

ENGINE OIL PRESSURE WARNING LIGHT



This warning light comes on when the oil pressure drops because of low engine oil level.

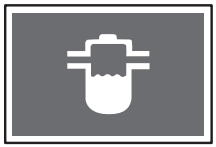
If this light turns on while driving, safely pull over and stop the vehicle to check the engine oil level. Add engine oil, if necessary, to maintain the proper oil level.

Continuous driving with this light on may lead to engine failure.

CAUTION

If this light does not go off after engine starting or comes on while driving, it means there is a malfunction in the system. Running the engine with this warning light on can cause serious damage to the engine. Have the lubricating system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WATER SEPARATOR WARNING LIGHT (DIESEL)



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds. When the water inside the water separator in the fuel filter exceeds a certain level, this warning light comes on and a buzzer sounds. Also, the driving force of the vehicle decreases. If this warning light comes on while driving, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

CAUTION

- The fuel system in the engine may get serious damage if you keep driving while the warning light is on. Prompt correction should be necessary.
- Using low quality fuel could result in serious damage to the engine due to the water or impurities in fuel. Never use low quality fuel.
- If the amount of water in the fuel filter exceeds the specified level, the warning lamp comes on, a chime sounds or the engine power decreases.

ENGINE OVERHEAT WARNING LIGHT

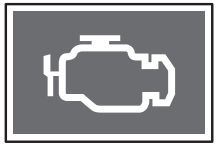


When the engine coolant temperature is abnormally hot, the engine overheat warning light blinks and a warning buzzer sounds. When this happens, stop the vehicle in a safe place and let the engine cool down. For more information, refer to Chapter 11 “When the engine is overheating.”

CAUTION

If you keep driving the vehicle with the warning light and buzzer on, the engine could be damaged and lead to a fire. After completely cooling down, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

ENGINE CHECK WARNING LIGHT



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

If the light stays on or comes on while driving, some of the engine control components including sensors and devices are defective.

CAUTION

If the engine halts due to a completely empty fuel tank and the engine check light comes on even after refueling, the engine’s power output may decrease within a certain driving distance (about 30 km).

WARNING

When this warning light comes on, the vehicle operates in safety mode to maintain minimum driving conditions and to prevent the system from being damaged. In this mode, the engine driving force may be decreased or the engine may stall. When this happens, have the system checked at the nearest Ssangyong Dealer or Ssangyong Authorized Service Center.

Blinking (vehicle equipped with CDPF)

This warning light is blinking when the CDPF (Emission collecting filter) is contaminated with carbon. If this warning light is blinking, drive your vehicle over 80 km/h of vehicle speed for more than 15 minutes (max. 20 minutes) to perform the recycling in CDPF system. If the recycling process is completed, the warning light goes out.

CRUISE CONTROL INDICATOR*



This indicator comes on when the cruise control system is switched on.

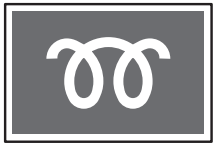
AUTO CRUISE READY INDICATOR*



This indicator comes on when the cruise control ON/OFF switch is turned on.

READY indicator will go off when pressing the cruise control ON/OFF switch once more.

GLOW INDICATOR (DIESEL)



When the ignition switch is turned to “ON”, this indicator comes on and stays for a short time or may go off right away. When the glow plugs are sufficiently heated, the light will go out.

CAUTION

When the glow indicator comes on while driving or the engine cannot be started properly, have the glow plug system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WINTER MODE INDICATOR (FOR AUTOMATIC TRANSMISSION)



The indicator comes on when the Winter mode (W) switch near the gear selector lever is presses.

Use this mode to drive off smoothly under icy and slippery road.

4WD WARNING LIGHT*



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

CAUTION

If this light stays on after starting the engine or comes on while driving, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

4WD HIGH INDICATOR*



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

This indicator comes on when the vehicle is in “4WD HIGH” driving mode.

4WD LOW INDICATOR*



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

This indicator comes on when the vehicle is in “4WD LOW” driving mode.

STEERING WHEEL HEATING INDICATOR*



This indicator comes on when turning on the steering wheel heater by pressing the steering wheel heating switch on steering wheel and goes off when turning off by pressing the switch again.

SSPS WARNING LIGHT*



This warning light comes on when the SSPS system is defective. When this warning light comes on, the steerability becomes heavier.

What is SSPS?

Speed Sensing Power Steering (SSPS) is the device that provides good driving condition and steering stability by making the steerability heavier in high-speed driving, and lighter in stop or low-speed driving.

CAUTION

If the SSPS warning light comes on or when you feel the steering wheel heavy, have the SSPS system checked by Ssangyong Dealer or Ssangyong Authorized Service Operation.

GLOBAL WARNING LIGHT*



This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

If the tire pressure is too low, this warning light blinks for 70 seconds and then ON.

WARNING

When this warning light comes on, one or more of tires is significantly under-inflated. Immediately reduce the vehicle speed, avoid hard cornering and anticipate increased stopping distances. If this happens, have the tire inflation pressure checked by nearest service center. If necessary, locate the under-inflated tire by using the tire pressure indicator and replace the under-inflated tire with spare tire.

MEMO

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Transmission and Brake

GEAR SELECTOR LEVER IN AUTOMATIC TRANSMISSION*

Gear Position

- **P** : Parking
- **R** : Reverse
- **N** : Neutral
- **D** : Driving

Mode Switch

- **W** : Winter mode
- **S** : Standard mode

Use the standard mode in normal driving conditions.

Selection of Manual/ Automatic Shift Function

- **D** : Automatic shift according to the driving condition
- **M** : Manual shift



Tip Switch in “M” Position (Manual Gear Shift)

The gear can be shifted by moving this switch to forward and rearward when the gear selector lever is in “M” position.

Shift Lock Release Button Hole when Locked in the “P” Position

If you cannot move the selector lever from the “P” position, try to move the lever while pushing down here with a sharp object such as a ballpoint pen. For your safety, turn off the engine and depress the brake pedal before the attempt.

To shift into any other positions from the “P” position after stopping the vehicle, you have to depress the brake pedal with the ignition switch “ON”.

Starting and Driving Off

1. Always start the engine while the selector lever is in **"P"** and the brake pedal is depressed. For your safety, avoid starting the engine from **"N"** even though you can do so.
2. Check whether or not the engine speed is in a normal operating range (below 1000 rpm). Keep the brake pedal depressed and shift into **"D"** or **"R"**.
3. Wait for few seconds before driving off with the brake pedal depressed.
4. To move the vehicle, release the brake pedal and depress the accelerator pedal gradually.

WARNING

- For your safety, always depress the brake pedal before moving the gear selector lever with the vehicle stopped.
- Never depress the accelerator pedal when moving the gear selector lever.
- If you have to stop on a hill, depress the brake pedal securely.
- When starting the engine with the accelerator pedal depressed, your vehicle may abruptly move and cause an accident.
- When the parking brake is released while the engine is running at a high rpm, your vehicle may abruptly move. Therefore, wait until the engine speed becomes stable.
- To avoid any mechanical damages or accidents, never shift into **"P"** or **"N"** while the vehicle is in motion.
- When driving at a high speed, any sudden attempt to shift from a higher to a lower gear can severely damage the vehicle. In addition, your vehicle may lose its stability and be at a high risk.
- A high engine speed can cause your vehicle to move abruptly from the parked position. To avoid this, wait until the engine rpm becomes stable.

CAUTION

- Do not abruptly drive off or sharply accelerate the engine after shifting into **"D"**. Otherwise the transmission will be damaged. Especially, when you start off after stopping, wait for a while until the **"D"** shift indicator comes on with the brake pedal depressed.
- When driving on a downhill, never shift the selector lever to **"N"**. If you try to shift the lever to **"D"** from **"N"**, a sudden gear engagement can damage the drive train.
- Even though you can start the engine with the selector lever in both **"P"** or **"N"**, for your safety, always start the engine with the selector lever in **"P"**.
- Never shift into **"R"** when the vehicle is moving.
- An engine control unit (ECU) is a type of electronic control unit that determines the amount of fuel, ignition timing and other parameters an internal combustion engine needs to keep running. Due to this reason, the ECU may make a light vibration and small noise for a short period during idling. This is normal and does not indicate a problem with your vehicle.
- Shift timing may vary according to the driving conditions such as roads, location of gear shift lever, vehicle speed and acceleration. This is to provide the smooth shift, good fuel economy and optimum vehicle performance.
- When moving the gear shift lever from **"P"** position on a steep grade from a standing start, a shock and noise may be felt. This is from the parking brake mechanism and not a failure.

Creep Phenomenon

Without any depression of the accelerator pedal, your vehicle can move slowly if the selector lever is in any position other than **"P"** or **"N"**. This is called the creep effect. You can control your vehicle's movement by only applying the brake in heavy traffic or narrow areas.

CAUTION

- On a steep decline or incline, your vehicle may move in the opposite direction of the intended direction in spite of the creep effect. When stopping on a steep hill, always depress the brake pedal.

Kickdown Function

If you need to accelerate rapidly, depress the accelerator pedal to its travel end. Then, a lower gear will be automatically engaged. This is called the Kickdown function.

CAUTION

- Do not use the kickdown function while driving on slippery or sharply curved roads.
- If you use the kickdown function too frequently, the durability and fuel economy of the vehicle will get worse.

Engine Brake

When the accelerator pedal is released while the vehicle is in motion, the engine speed decreases. This decreased engine speed creates an extra braking force. On a downhill, engaging a lower gear can generate a slower engine speed and eventually slow down the vehicle speed. By using this engine brake, you can decrease your vehicle speed without excessively using the brake system. The lower gear, the higher braking force.

CAUTION

- Do not excessively apply the brake pedal while going down a long slope. The brake system will overheat, experience vapor lock or the fade phenomenon, and lose the braking force.
- Be aware that the engine brake does not work when the gear selector lever is in the "N" position.
- Avoid any abrupt engine braking on slippery roads, or the tires may slip.

Automatic gear shift timing

The shift timing of the A/T varies with external circumstances, such as road conditions (level surface, hills), position of gear selector lever, vehicle speed, accelerator pedal depression amount. This is a normal condition to improve the economy of your driving and vehicle performance with smooth and balanced gear-changing.

CAUTION

When moving the gear selector lever with force applied to the drive system due to, for example, stopping or parking on a hill, shift shock or noise may occur. This is a part of normal operation of parking mechanism in the A/T.

P: PARK POSITION



Use this position to park your vehicle, start the engine, warm up the engine, or stay in a location for an extended length of time. To shift into any other position, depress the brake pedal with the ignition switch in the **"ON"** position.

WARNING

- Never shift into **"P"** when the vehicle is moving, or the transmission will be damaged. Stop the vehicle completely before shifting into **"P"**.
- To shift from the **"P"** position to another position, the ignition switch must be turned to the **"ON"** position and the brake pedal should be depressed. Any forcible attempts to move the selector lever from **"P"** without these two procedures may damage the selector lever and transmission.
- Do not use the **"P"** position in place of the parking brake. Always make sure the shift lever is in **"P"** position and apply the parking brake fully.



To shift from the **"P"**, the ignition switch must be turned to ON and the brake pedal must be depressed. If you cannot shift out of "P" with the ignition switch in ON, and the brake pedal depressed:

1. Turn the ignition off and apply the parking brake.
2. Push down the shift lock release button hole with a stick such as a pen. Then, shift the lever to the **"N"** position.
3. Start the engine, release the parking brake and shift the lever to the **"D"** position to drive off.

WARNING

If the selector lever is locked in the **"P"** position, release it by following the above instructions and have your vehicle serviced by the nearest Ssangyong dealer or Ssangyong Authorized Service Center.

R: REVERSE POSITION



Use this position to reverse the vehicle.

To shift into **"R"** from **"P"** or **"N"**, completely stop the vehicle and depress the brake pedal. When the selector lever is in **"R"**, the parking aid system will be activated (If equipped).

WARNING

- Never shift into **"R"** when the vehicle is moving.
- Please note that the vehicle may slowly move rearward when the selector lever is at **"R"**.

N: NEUTRAL POSITION



At this position, the engine does not transfer power to the wheels and the vehicle will not move on a flat road. However, for safety, apply the brake when the gear is in this position.

To shift into "D" or "R" position from "N" position after stopping the vehicle, you have to depress the brake pedal with the ignition switch "ON".

WARNING

- Warm up the engine for approx.3 minutes when the ambient temperature is below -15°C. Otherwise, the gear selector lever may not be moved smoothly (N→R). It is designed for protecting the vehicle and is not a fault.
- Never shift into “N” from the “D” position or vice versa when the vehicle is moving, or the transmission will be damaged.
- If you have to stop on a hill and would like to use this neutral position, depress the brake pedal firmly.
- Never attempt to move the gear selector lever to “N” when the vehicle is in motion.
- Never leave a child or pet alone in the vehicle when stopping and parking the vehicle with the ignition ON and the shift lever in neutral “N” position. Move the shift lever to the park “P” position or turn the ignition off in order to prevent the safety accident due to an unintentional operation.

D: DRIVE POSITION



Use this position for normal driving conditions. The transmission is automatically shifted from 1st gear up to 5th (7th) gears according to the level of depression on the accelerator pedal and the vehicle speed.

WARNING

- Do not abruptly drive off or sharply accelerate the vehicle after shifting into **“D”**, or the transmission will be damaged. Especially, when you start off on a hill after stopping and parking the vehicle, wait for a while until the **“D”** shift indicator comes on with the brake pedal depressed.
- Even while the gear is in **“D”**, the vehicle can roll down on an uphill according to the gradients, so you have to depress the brake pedal.

CAUTION

- Please note that the vehicle may slowly move forward on level ground when the selector lever is in **"D"**.
- Shifting to **"D"** position must be carried out with the vehicle completely stopped. Otherwise, the transmission can be damaged.
- Shifting from **"N"** to **"D"** position when the ignition is turned ON without the brake pedal depressed is possible. But move the gear shift lever with the brake pedal depressed as much as possible for your own safety.

M: MANUAL SHIFT



If the gear selector lever is in this position, you can shift gear manually using the tip switch on the lever.

WARNING

If the gear selector lever is moved to the **"M"** position accidentally during driving, the currently engaged gear may be shifted to another gear which endangers driving safety. Be careful not to touch the selector lever while driving (especially in winter season).

CAUTION

Upshifting should be done properly according to the road conditions, taking care to keep the engine speed below the red zone.

Manual Gear Selection

Driving gear can be adjusted by operating the tip switch after moving the gear selector lever from **"D"** to **"M"** position.

If the gear selector lever is moved to **"M"** position while driving, the gear is shifted down to the next lower gear.



Selecting "M": Manual gear shift

NOTE

- To prevent shift shock and to protect the system, in some cases, the current gear may not be shifted to the lower gear even if the gear selector lever is moved to **"M"** position.
- If you move the gear selector lever into M position (manual mode) while the vehicle is stopping, you can shift to the lower gear and the 2nd gear start is possible on snowy or rainy road.

Tip Switch on Gear Selector Lever



Use of Engine Brake

To use the engine brake, shift the selector lever to the "M" position first, then operate the tip switch to next lower shiftable gear.

CAUTION

- Operate the tip switch only once at a time. If you press and hold the switch, the gear may be shifted through several steps in series.
- Abruptly using the engine brake may make driving unstable. Do not use the engine brake abruptly especially when driving on roads covered with snow or ice.
- According to the driving conditions, the unexpected gear could be selected during engine braking. In this case, you may feel the shifting shock. Therefore, carefully use the engine brake effect.

GEAR POSITION DISPLAY ON INSTRUMENT CLUSTER



- 1st gear position
  Use on a rugged road, mountain path and steep hill. Engine braking effect on steep hill is available.



- 2nd gear position
  Use on a long and gentle slope. Engine braking effect is available.



- 3rd gear position
  Use on a long and gentle slope. Engine braking effect is available.



- 4th gear position
  Use on a long and gentle slope.



- 5th gear position



- 6th gear position (7A/T only)



- 7th gear position (7A/T only)

Standard Type



Black Face Type*



WARNING

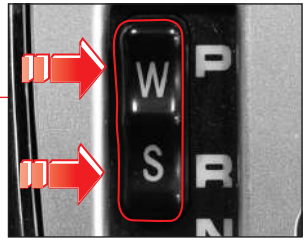
- Do not downshift abruptly (3rd, 2nd or 1st) when the vehicle is driven at high speed (D or 4th), or vehicle may be severely damaged. Also, the vehicle may slip, resulting in an accident (especially on a slippery road).
- If low-range maximum speeds are exceeded when the selector lever is in low gears, the transmission could be damaged.

CAUTION

- If you press and hold the tip switch, the gear may be shifted through several steps in series.
- Please note that the gear may be upshifted if you fully depress the accelerator pedal while driving with 1st, 2nd, 3rd, and 4th gear.
- If you apply excessive force to the tip switch, the gear may not be shifted into other gears to protect the vehicle system. Soft and smooth operation is recommended.

MODE SWITCH (DIESEL)





Mode Switch

Use the standard mode in normal driving conditions and use the winter mode on slippery roads.

Winter Mode

In this mode, the vehicle can start off from the 2nd gear (forward) or the 2nd gear (reverse). Use this mode in the event of starting-off on slippery roads to minimize tire slip.

Winter Mode (W)

- To select the winter mode, press the mode switch. The winter mode indicator (W) in the instrument cluster comes on. To return to standard mode, press the switch again. The indicator goes out.
- Use this mode to drive off smoothly on an icy and slippery road.
- This mode is useful when stopping on an uphill since the vehicle does not roll down.

Standard Mode (S)

Use the standard mode in normal driving condition.

How to Start Off the Vehicle with 2nd Forward/ 2nd Reverse Gear

1. Press the “W” portion of the mode switch to select the winter mode.
2. Place the selector lever to **“D”** and check if the shift lever indicator shows “D”.
3. You can now start off the vehicle with the 2nd forward gear.
4. Place the selector lever to the “R” position to start off the vehicle with the 2nd reverse gear.

CAUTION

Even while the gear is in “D”, the vehicle can roll down an uphill according to the gradients, so you have to depress the brake pedal.

SYMPTOMS

When the transmission has an electrical or mechanical fault, the transmission operates in the safety mode to maintain minimum driving conditions and to prevent the transmission from being damaged.

When the transmission is defective, the symptoms that can occur are as follows:

- Heavy shock when moving the selector lever
- Decreased driving force while driving at high speed
- Fixed gear position during driving (cannot accelerate the vehicle)

CAUTION

- If you find any symptoms caused by mechanical or electrical defects in the transmission, stop the vehicle immediately and reset the safety mode.
- If abnormal operation of the transmission (fixed at the 3rd forward gear in **"D"**) still exists, have the system checked by Ssangyong dealer or Ssangyong Authorized Service Center.
- If the mechanical or electrical problem still exists, have the system checked by Ssangyong dealer or Ssangyong Authorized Service Center.

RESETTING THE SAFETY MODE WHEN THE GEAR IS FIXED

How to reset the safety mode

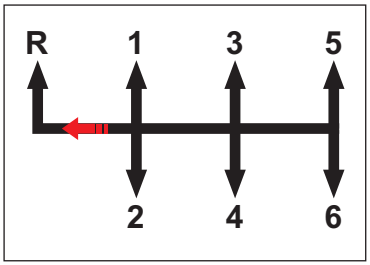
1. Park the vehicle and place the selector lever to **"P"**.
2. Stop the engine and wait for more than 10 seconds.
3. Start the engine.

Symptoms after resetting the safety mode

- If the vehicle operates normally after resetting, the problems are corrected.
- If the gear is fixed at the 3rd forward gear in the **"D"** position, have the system checked by Ssangyong dealer or Ssangyong Authorized Service Center.

SHIFT LEVER IN MANUAL TRANSMISSION (6-SPEED)

The manual transmission in your vehicle has 6 forward gears and 1 reverse gear. To change gears, fully depress the clutch pedal. Then, move the gearshift lever into a desire gear. After shifting, release the clutch slowly.



3rd Gear

For low- or mid-speed driving.

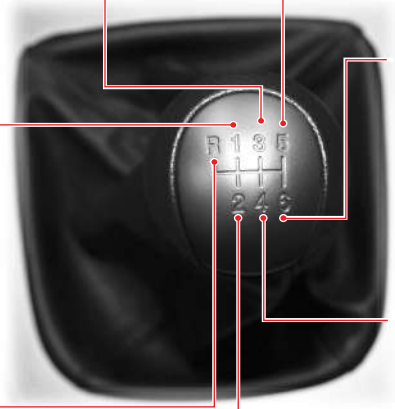
When upshifting from 2nd gear to 3rd gear, particular caution should be taken not to inadvertently press the gear shift lever sideways in such a manner that 5th gear is engaged.

5th Gear

Position for high speed driving on a highway. When downshifting from 5th gear to 4th gear, particular caution should be taken not to inadvertently press the gear shift lever sideways in such a manner that 2nd gear is engaged.

1st Gear

Position for driving off and high traction force. Depress the clutch pedal to its travel end and move the shift lever to “1”. Then, slowly release the clutch pedal while gently depressing the accelerator pedal to drive off.



6th Gear

Position for very high speed driving on a highway.

4th Gear

Position for normal and high speed driving

Reverse Gear

Position for reverse driving.

Neutral Position

Position for engine start, vehicle stop, and parking

2nd Gear

Position for low speed driving

Gear position indicator for M/T



This indicates the most appropriate timing for shifting to the 3rd gear (target) when the vehicle is driven in 1st to 2nd gear.

This indicates the most appropriate timing for shifting to the 3rd gear (target) when the vehicle is driven in 4th gear or higher.



CAUTION

- To start the engine in manual transmission equipped vehicle, you must fully depress the clutch pedal.
- You should stop your vehicle and fully depress the clutch pedal before you shift into the reverse position.
- If the clutch pedal is frequently half-depressed, the clutch disc will be easily worn out. Use only as needed.
- Do not put your foot on the clutch pedal if not shifting gears.
- When shifting from a higher gear into a lower gear, ensure that the RPM gauge pointer does not go into the red zone on the gauge. Especially, when shifting from the 5th to the 4th gear, moving the gear shift lever to the left too much may result in shifting into the 2nd gear. This will cause a sudden increase of the engine speed and may damage the engine and the transmission.
- When the temperature of the transmission oil is very low on a cold day, you may have some difficulty for shifting gears. This is a normal phenomenon.
- When you have difficulty for shifting into the 1st or reserve gear, put the gear shift lever into the neural position and release the clutch pedal. Then, depress the pedal again and shift into the intended gear.
- While your vehicle is moving, do not put your hand on the shift lever except to shift gears. Otherwise, the gear may be disengaged from the transmission and the internal transmission components may be damaged.
- Do not shift into the second next higher gear from a lower gear. Also, while the engine is rotating fast, do not shift into a lower gear.
- When using the half clutch mode, there is no need to abruptly depress the accelerator pedal because the engine power increases. When the accelerator pedal is continuously depressed in half clutch mode, the internal components can be worn or damaged. Frequent use of half clutch mode is not recommended.

SHIFTING TO R (REVERSE)

This manual transmission is designed with a detent to differentiate “1st” and “R (reverse)” gear position. To shift into “R” gear position, you must shift past “1” gear position and the detent in order to get into the “R” gear gate.

- “R” gear gate is located to the left side of the “1st” gear gate.
- After the vehicle is stopped, push the gear shift lever to the left side of the “1st” gear past the detent then push the gear shift lever upward.

CAUTION

- If you try to shift to the “1st” gear position too quickly, it is possible to shift to “R (Reverse)” instead of “1st” gear.
- When the gear shift into “R” position is completed, the “R” indicator (black face type) should be appeared on the instrument cluster and a warning chime should be heard. If the warning chime does not sound when you shift to R (Reverse) position, have the system checked at Ssangyong Authorized Service Center as soon as possible.

DOWNSHIFTING

When you need to slow down in heavy traffic or while driving up steep hills, downshift the gear to release the load to the engine. Downshifting reduces the chance of stalling and gives better acceleration when you need to increase the vehicle speed again. When the vehicle is driving down steep hills, downshifting provides a safe speed and prolongs the life span of brake system.

GEAR POSITION WHEN PARKING

Always apply the parking brake fully and shut the engine off after parking. Shift the transmission into 1st gear when the vehicle is parked on a level ground or uphill grade, and shift into “R” on a downhill grade.

USING THE CLUTCH

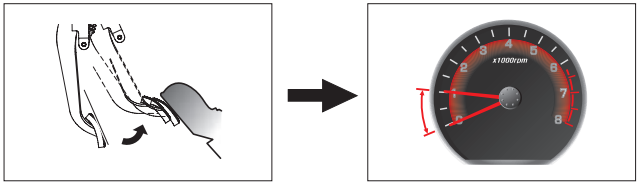
The clutch pedal should be depressed all the way to its travel end before shifting. The clutch pedal should be fully released while driving. Do not rest your foot on the clutch pedal while driving. This can cause unnecessary wear in clutch system. Do not operate the clutch pedal rapidly and repeatedly.

PARKING BRAKE OPERATION WHEN DRIVING UPHILL

When driving on a steep uphill, it is safer to use the parking brake as follows: Apply the parking brake, follow steps (Vehicle with M/T: steps 1 - 3, and release the parking brake when the vehicle starts to move.

DRIVING TIPS FOR NORMAL STARTING OFF OR STARTING OFF ON UPHILL

1. Depress the clutch pedal and the brake pedal, start the engine and move the shift lever to the 1st gear (reverse gear in reversing) position.
2. If the clutch pedal is released slightly with the brake pedal depressed, the engine rpm increases. (The increase in engine rpm varies depending on the road inclination).



Release the clutch pedal slightly Increase in engine rpm

3. The vehicle starts to move smoothly if you depress the accelerator pedal while releasing the brake pedal after checking that the engine rpm is raising.
4. Release the clutch pedal completely after the vehicle starts off.

PARKING AID SYSTEM

When the gear selector lever is shifted into “R” position, the parking aid system is activated and the sensors in rear bumper detect the distance to obstacle. You can figure out the distance from obstacle to vehicle with the alarming sound and the display in multimeter.

Obstacle Detecting Sensor

When you move the gear selector lever to “R” position, the alarm sounds according to the distance from obstacle to vehicle. The alarm interval becomes faster as the obstacle approaches.

Distance	Alarm interval
over 1.2 m	no alarm
80 cm ~ 120 cm	approx. 0.26 sec
50 cm ~ 80 cm	approx. 0.13 sec
30 cm ~ 50 cm	alarm stays on



CAUTION



In the parking lot as shown in the figure, the upper portion of the vehicle can be hit before the sensor operation, so check with outside rearview mirrors or by turning your head during parking.

CAUTION

- The alarm does not sound if the distance between sensor and obstacle is less than 30 cm. However, if the sensor detects the obvious obstacle, the alarm stays on.
- Do not rely on the parking aid system while gear selector lever is in **"R"** position. Drive backward while checking the rear side of your vehicle.
- If the buzzer sounds abnormally or sounds for over 3 seconds when placing the gear selector lever to **"R"** position, the parking aid system is defective. Have the system checked at Ssangyong Dealer or Ssangyong Authorized Service center.
- There could be ±10 cm of tolerance in distance to obstacle.

CAUTIONS

You should continue to utilize the mirrors or turning your head. When reversing, adhere to the common precautions.

- The parking aid system is a supplementary system to help your parking. It is not intended to replace the driver's attentiveness.
- Do not press or shock the sensors by hitting or using a high-pressure water gun while washing. The sensors could be damaged.
- Normally, when you select the **"R"** position with the ignition "ON", the alarm sounds "beep" once.
- If the alarm sounds for 3 seconds when you select the **"R"** position with the engine running or the ignition "ON", it means that there is a malfunction in the system. Have the parking aid system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

The alarm interval becomes faster as your vehicle approaches the obstacle.

▶ **Certain obstacles that sensors cannot detect**

- Thin and narrow objects, such as wires, ropes, or chains
- Cotton, sponge, clothes, snow that absorb ultrasonic waves.
- Obstacles lower than the bumper: Drainage or puddle

▶ **Sensor Cannot Detect**

- When the sensing portion is frozen.
- When the sensing portion is covered by rain, water drops, snow or mud.

▶ **Weak Sensing Scopes**

- When they are partially covered by snow or mud.
- When the ambient temperature is too high or too low.

▶ **Not defective but improperly working**

- When driving on rough roads, gravel roads, hills, or grass.
- When the bumper height is changed due to a heavy load.
- When receiving other ultrasonic signals (metal sounds or air braking noises from heavy-duty commercial vehicles).
- When a high-power radio is turned on.
- When there is heavy rainfall or water drops.
- When the sensor is hindered by improperly fitted accessories.

▶ **When towing trailer**

- The sensor detects the trailer and the warning beep may sound continuously.

REARVIEW CAMERA SYSTEM*

The rearview camera system is a supplementary function for safe driving to display the condition behind the vehicle while the gear selector lever in R position.



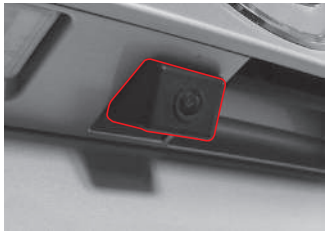
The monitor shows the view behind the vehicle when the gear selector lever is in R position.



Rearview monitor



Rearview camera

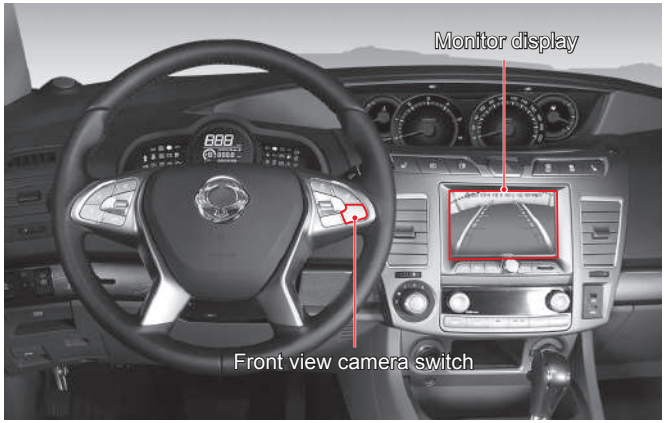


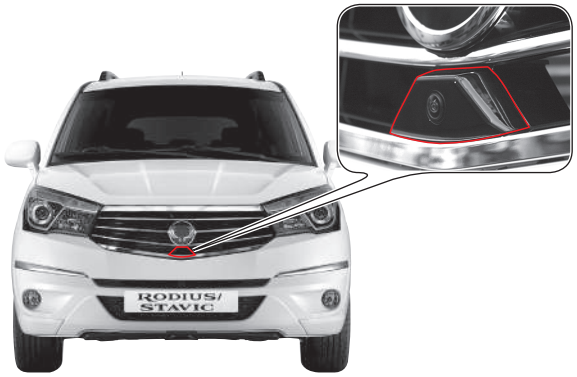
CAUTIONS FOR USING REARVIEW CAMERA SYSTEM

- Rear Detection Cameras use wide-angle lens to acquire a wider view, so there may be differences between the actual distance and the distance that appears on the screen. For safety, make sure to check the rear, right and left sides of the car yourself.
- Only the volume and incoming call features will operate when operating the rear detection camera.
- The rearview camera does not show the entire area behind the vehicle.
- Keep the camera lens clean using a camera lens cleaner so that the lens is free of foreign matter.

FRONT VIEW CAMERA SYSTEM*

The front view camera system is an auxiliary safety device which displays the front view image of the vehicle on the front monitor, with an easy operation of a switch.





▶ How to use

- When the driver presses the front view camera ON/OFF switch with the shift lever in P, N, D or M position, the front monitor displays the front view image of the vehicle.
- If the driver moves the shift lever to the R position, the front monitor displays the rear view image by linked operation with the rear view camera.
- If the driver presses the front view camera ON/OFF switch again with the front view of the vehicle displayed on the front monitor, the monitor displays the previously displayed image.

▶ Deactivation conditions

- Vehicle driven at 20 km/h or higher: Front monitor displays the previously displayed image.
- Front view camera switch OFF: Front monitor displays the previously displayed image.
- IGN OFF

▶ Inactivation conditions

- Shift lever in R position

CAUTION

- The distance to objects displayed on the front monitor may look different from the actual distance. Therefore always check the front, left and right spaces
- Clean the camera lens with a lens cleaner or equivalent frequently so that it is free from dust and dirt particles.

Warning Light and Indicator Related to Brake



ABS warning light



Brake warning light





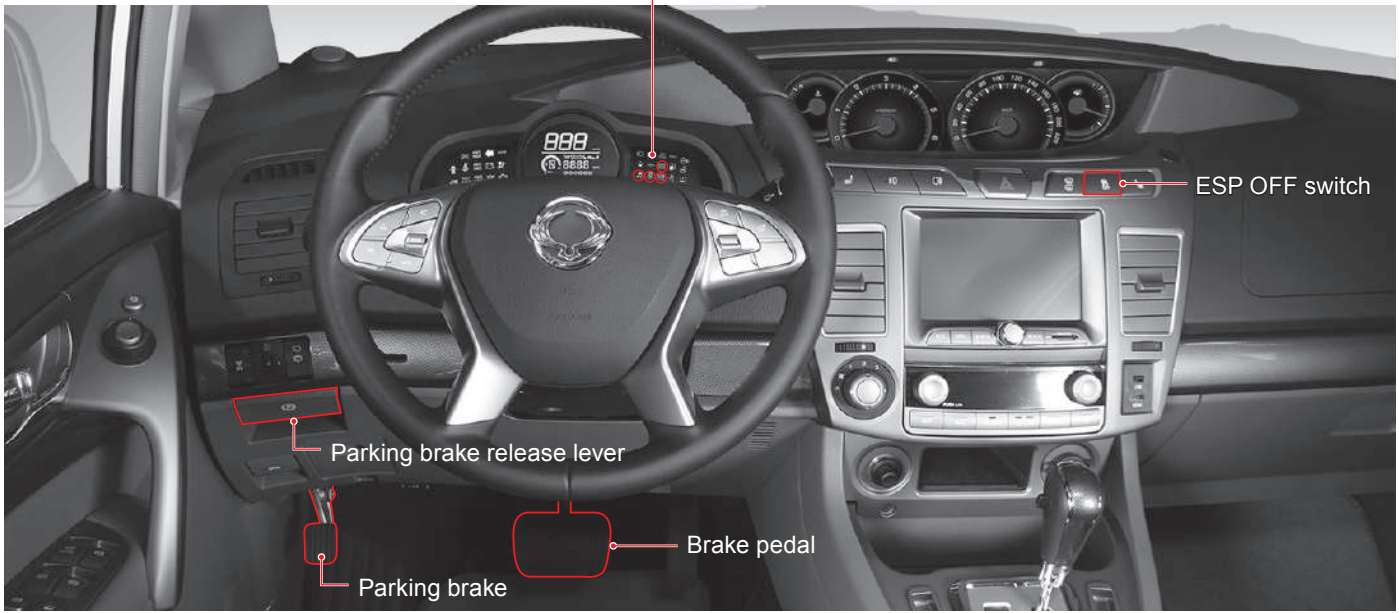
EBD warning light



ESP warning light



ESP OFF indicator



※ Actual appearance may differ from the image shown above.

BRAKE PEDAL (FOOT BRAKE)

The brake pedal (foot brake) is designed to decrease the vehicle speed and stop the vehicle. Do not excessively apply the brake pedal while going down a long hill. The brake system will overheat causing the vapor lock or fade phenomenon thus losing braking force. Use the foot brake along with the engine braking effects by selecting lower gears.

CAUTION

Avoid abrupt engine braking on slippery roads, or the tires may slip.

Engine brake?

A system that allows for the slowing of a vehicle that is independent of the conventional braking systems. A driver would normally down-shift to slow the driver's descent of a hill, using engine compression. The engine brake increases the effectiveness of this regarding force.

Fade?

Reduction or loss in braking force due to loss of friction between brake pads and discs.

Vapor Lock?

When the brake system is overheated, the fluid in the brake lines will boil and form bubbles. Only the bubbles will be compressed when the brake pedal is depressed. So the brakes cannot work properly due to loss of braking force.

Nothing Under Driver's Seat



Do not leave empty bottles or cans near or under the driver's seat. If it hinders the brake or accelerator pedal operation, it may cause an unexpected accident.

Brake Disc

Check the brake discs at every 10000 km of driving, and replace if necessary.

When the brake disc is badly worn, you may hear a squeaking sound from the brake system. If this happens, replace the brake discs as a set (left and right) as soon as possible.

CAUTION

The life span of brake disc depends on the driving habits.

When the Foot Brake Is Not Working

When the foot brake is not working, decelerate the vehicle speed by using the engine braking effect, then stop the vehicle by applying the parking brake slowly.

ABS (ANTI-LOCK BRAKE SYSTEM)*

ABS (Anti-Lock Brake System)?

When braking suddenly or braking on slippery roads, the vehicle keeps moving forward but the wheels are locking and not rotating. If these happen, your vehicle may lose stability or rotate resulting in an accident. ABS helps to maintain directional stability and control of the vehicle.

In normal braking conditions, the ABS system is not activated.



ABS Warning Light

This warning light comes on when the ignition switch is turned to “ON” and should go off in a few seconds.

WARNING

If this light stays on after starting the engine or comes on while driving, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center. In this case, the ABS function is not available, but the conventional brake system is properly working.

WARNING

- ABS is a safety system that allows the wheels on a vehicle to continue interacting tractively with the road surface as directed by driver steering inputs while braking, preventing the wheels from locking up (that is, ceasing rotation) and therefore avoiding skidding. The stopping distance varies according to the road conditions.
- While driving on the uneven, gravel, rough or snow-covered roads, reduce the vehicle speed and maintain a safe distance from a proceeding car.
- To get the maximum benefit from ABS in an emergency situation, do not pump the brake pedal.
- Even a vehicle equipped with ABS has a risk of skidding sideways. Therefore, always maintain a safe distance from the vehicle ahead and drive at low speed on slippery surfaces.

CAUTION

- ABS system performs self diagnosis by transferring hydraulic pressure to the brake units for few seconds after starting the engine. This may cause some noise and vibrations. This means ABS is properly functioning.
- When the ABS is operating, you may feel pulsations from the brake pedal along with noise. This is normal and indicates that the ABS is functioning properly.

EBD (ELECTRONIC BRAKE-FORCE DISTRIBUTION)

EBD (Electronic Brake-force Distribution)?

When the brake pedal is applied, it controls the braking pressure electronically to effectively distribute the braking forces to the front wheels and rear wheels. EBD operates when the speed differences between the fastest front wheel and the rear wheel are over 1 km/h. If ABS is engaged, it does not operate.

EBD Warning Light*



If the ABS warning light and the brake warning light come on simultaneously, EBD (Electronic Brake force Distribution) system is defective.

CAUTION

If the EBD warning light stays on, have the system checked at the Ssangyong Dealer or Ssangyong Authorized Service Center.

ESP (ELECTRONIC STABILITY PROGRAM)*

ESP SYSTEM?

The ESP system is an electronic vehicle stability control and safe driving system and driving safety supplementary system that helps to avoid dangerous situations by controlling the brakes on the wheels or the engine torque to compensate vehicle stability when it is extremely unstable under conditions such as sharp cornering.

ESP OFF Indicator



This indicator comes on when pressing the ESP OFF switch to deactivate the ESP function.

When the wheels are slipping on a snow-covered or iced road, you can stop ESP function by pressing ESP OFF switch. This may help to drive off the vehicle.

ESP Indicator/Warning Light



ON
This warning light comes on when ESP system is defective.

Blinking
This indicator blinks when the ESP system is operating.

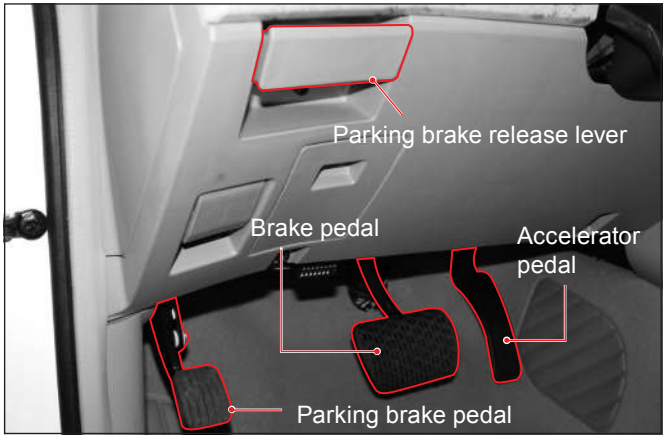
WARNING

- For your safety, reduce the vehicle speed when the indicator is blinking or you are driving on a slippery or curved road.
- If this warning light comes on while driving, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

CAUTION

- ESP system performs self diagnosis by transferring hydraulic pressure to the brake units for few seconds after starting the engine. This may cause some noise and vibrations. This means ESP is properly functioning.
- When the ESP is operating, you may feel pulsations from the brake pedal along with noise. This is normal and indicates that the ESP is functioning properly.

PARKING BRAKE OPERATION



Parking Brake Operation

Park at a safe place and depress the parking brake pedal firmly. When the pedal is depressed, the brake warning light cluster comes on.

Parking Brake Release

To release parking brake, pull up the parking brake release lever.

BRAKE WARNING LIGHT



- This warning light comes on when the parking brake is applied and/or the brake fluid level is lower than a specified level.
- If you drive the vehicle without releasing the parking brake, the brake warning light blinks and the buzzer sounds to warn the driver when the vehicle speed exceeds 10 km/h for more than 2 seconds. When this happens, stop the vehicle immediately and release the parking brake.

CAUTION

- Before driving off, be sure to check that the brake warning light is turned off.
- Driving with the parking brake applied could damage the rear brake system. Before driving, fully release the parking brake.
- To prevent unintentional movement when stopped and leaving the vehicle, set the parking brake and make sure the gear shift lever is securely positioned in P (Park).
- Regularly inspect the parking brake system including the parking brake pedal and cables.
- If the brake warning light (BRAKE) doesn't go out after releasing the parking brake, have the brake system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- Place the gear selector lever to "P" or "N" position when applying the parking brake.
- The parking brake cable should be checked and adjusted regularly.
- Do not use "P" position as a parking brake. Securely apply the parking brake when you park the vehicle.

MEMO

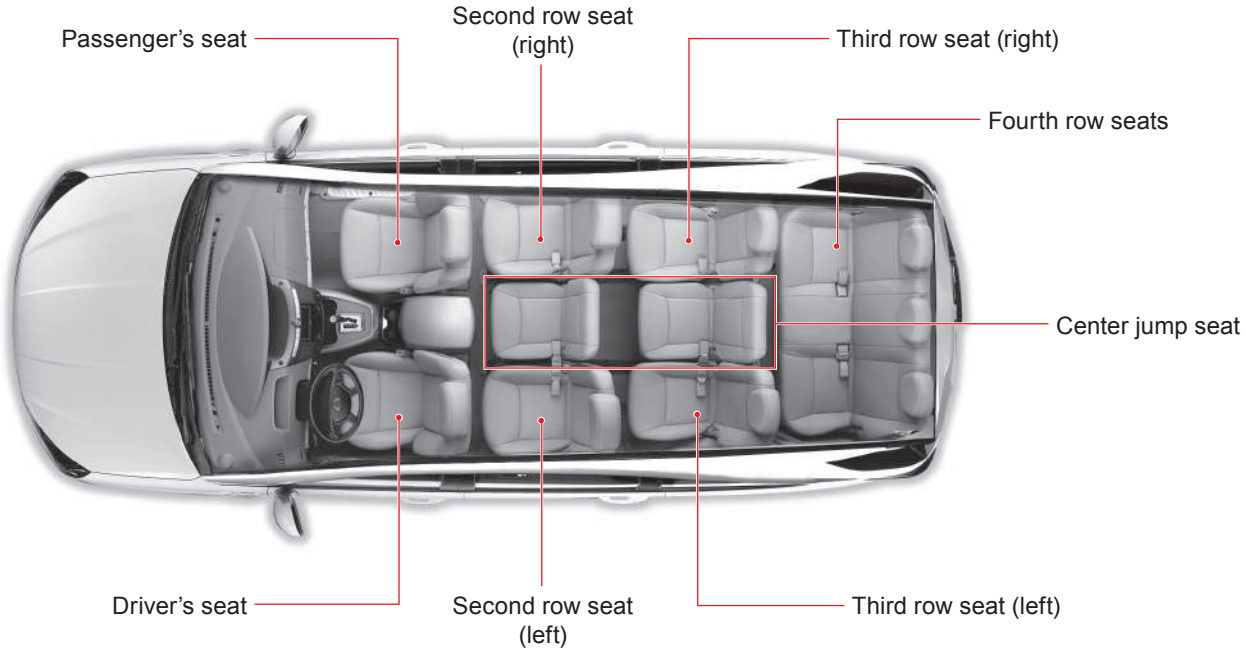
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7

Seats

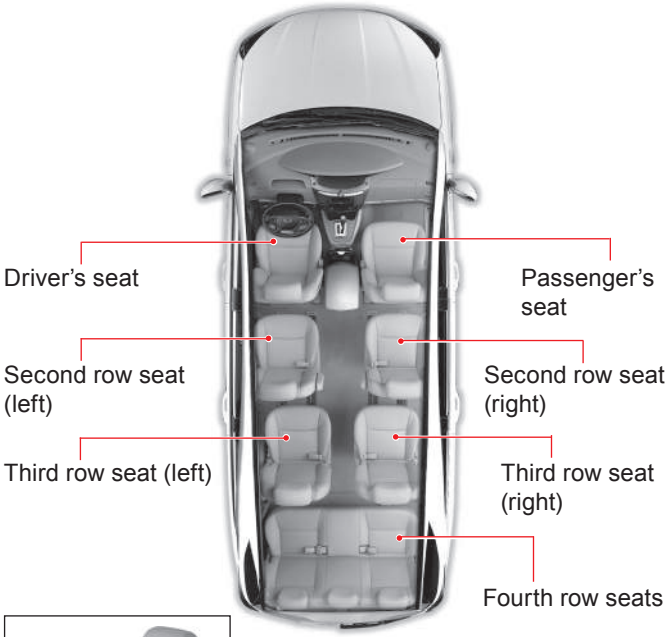
11-SEAT



WARNING

- Do not adjust driver's seat when vehicle is moving. Control of vehicle can be lost.
- When folding the seatback in rear seats, make sure that it is securely locked at its proper position.
- Removed or improperly adjusted head restraints can result in serious head and neck injuries in case of a collision.

9-SEAT

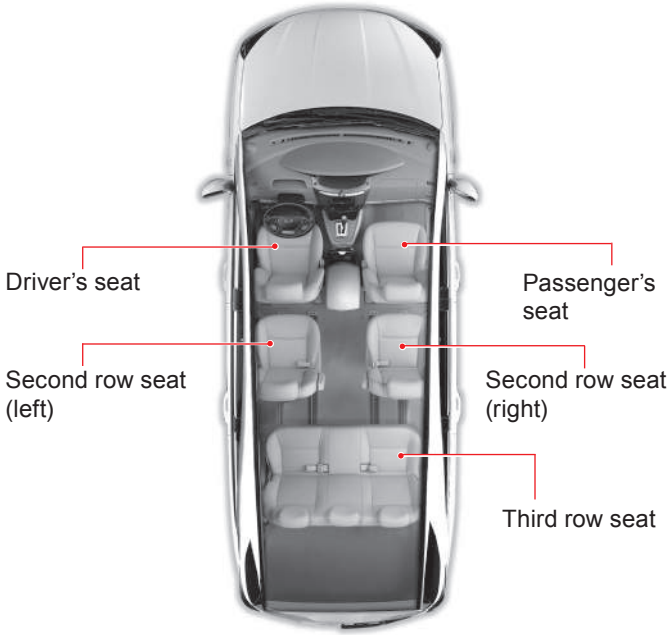




Second Row Seat

The second row seats have arm rests. Swing down them when you want to use.

7-SEAT



WARNING AND CAUTION

WARNING

- All necessary driver's seat adjustments should be made before any driving.
- Make sure that your seat is completely locked after adjusting.
- Any object that might damage the seat should not be placed on the seat.
- Front seats are equipped with heated lines. If the following types of persons sit on the heated seats, they might receive minor burns. Extra caution is needed for them: children, elderly persons, ill persons, persons with sensitive skin, excessively fatigued persons, persons under the influence of alcohol or sleep-inducing medication such as cold medicine or sleeping pills.
- Do not put anything on the seat that insulates heat, such as a blanket, cushion or seat cover.
- Removed or improperly adjusted head restraints can result in serious head and neck injuries in case of a collision. Make sure that the head restraints are in place and adjusted before driving.
- Do not recline the seatback more than needed for comfort while vehicle is in motion. The seat belt is the most effective when the passenger sits back and straight up in the seat. If the seatback is reclined too much, then the risks of sliding under the lap belt and getting injured are increased.

CAUTION

- Power seats will be operated even when the ignition switch is turned to the "OFF" position. However, to prevent battery discharge, operate your seats when the engine is running.
- Do not use two or more seat adjustment buttons simultaneously. It can damage the motor. Be sure to operate the electric seat button one by one.
- When cleaning leather seats, never use oil-based solvents such as benzene, alcohol, gasoline, or thinner. Or they will cause discoloration and dull the surface of the seats.
- Do not forcibly operate any power adjustment switch if the seat comes in contact with other object and cannot be adjusted anymore.
- If the power seats are not operational, the seats should be checked and fixed before any driving.

WARNING AND CAUTION

WARNING

- Do not leave children unattended in parked vehicles. This can cause unexpected accident.
- You can be hurt by the edges of the mechanism of the seat when trying to get the small objects (cigarette lighters, coins, credit cards) under the seat or caught between the seat and the center console. Wear protective gloves to prevent injury.
- Never try to adjust the seat while the vehicle is moving.
- Unexpected movement of the seat or seatback can cause loss of control.
- Take care not to bother the passenger behind you when adjusting the seat position.
- Sit upright in the center of the seat and wear the seat belt around your hip and pelvic bones.
- Do not place any objects in the path of seatback movement. Any obstruction in this path prevents the seatback from being locked, causing severe injuries or death during a collision.
- Always raise the seatback to the proper upright position before driving.
- Never drive the vehicle with the seat folded. In a collision, you will be seriously killed or injured as you lose the protection the seat belt can provide.
- To avoid unexpected accidents including severe injuries and death, sit in the position so that the distance between the steering wheel and your chest is at least 25 cm, as long as you are comfortable with driving.

WARNING

- Do not place a cigarette lighter on the floor or between the seats. The gas in the lighter container under the seat is potentially flammable when it is released from the container when the seat is moved.
- Additional cushion between you and the seat cushion reduces the frictional force and could make you slide under the seat belt. This could result in serious injury or death.
- Do not insert your hands under the seat or in the path of the seat movement when adjusting the seat. Your hands or fingers could get trapped between the seat and the frame.
- Do not ride with the seatback reclined too much. You could slide under the seat belt in a collision, which could result in severe injury or death. Also, you cannot be protected by the seat belt and the belt can strangle you or even cut into your stomach. Therefore, sit up straight in your seat by keeping your seatback upright while driving.
- When returning the seatback to the upright position, hold the seatback with your one hand and pull the release lever with the other hand. The more the seatback is reclined, the greater the restoring force of the seatback is. If you do not hold the seatback while adjusting the seatback, you could be injured by the restoring force.

POWER SEAT*

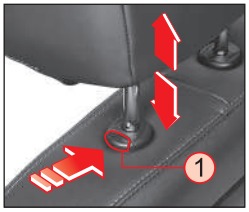


Seat Control Switch

WARNING

Do not adjust the driver's seat when the vehicle is moving. Control of the vehicle could be lost.

Head Restraint Adjustment



To raise the head restraint, pull it up without pressing the release button. To lower the head restraint, press the release button ① on top of the seatback and push the head restraint down.

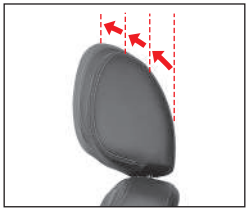
WARNING

Removed or improperly adjusted head restraints can result in serious head and neck injuries in case of a collision.

CAUTION

Do not apply excessive force to the head restraint during adjustment. It may be damaged.

Head restraint tilting (forward/backward)

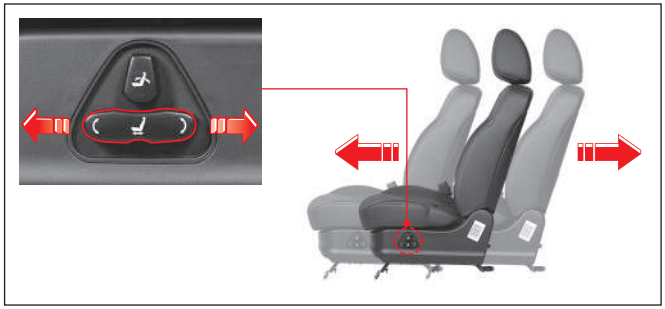


The head restraint can be tilted forward when it is pushed forward. The tilted head restraint returns to its normal position when you push it all the way forward until it stops and then release it.

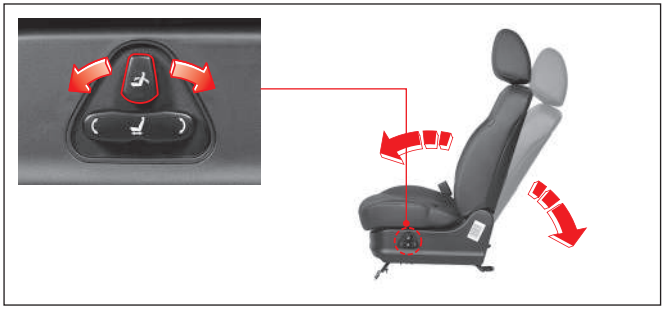
WARNING

Do not drive with the head restraint removed or lowered excessively. Body parts including your neck or spine can be seriously injured in an accident.

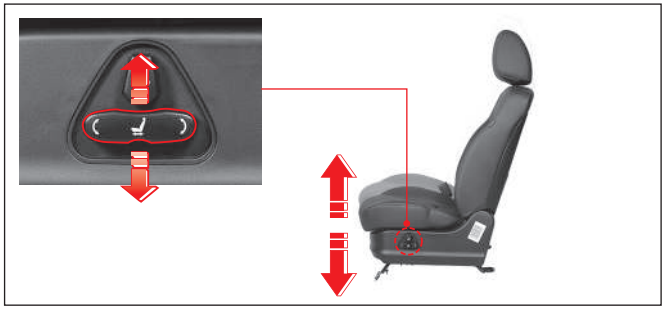
Seat Slide Adjustment



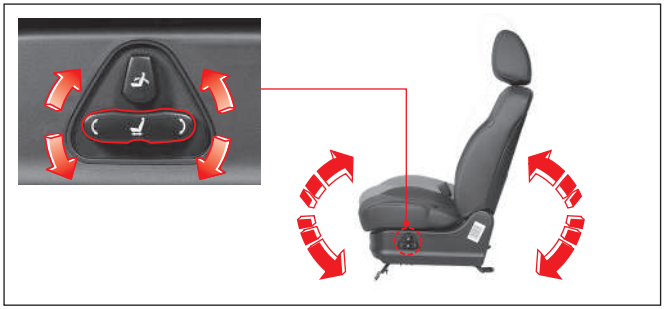
Seatback Reclining Adjustment



Seat Height Adjustment



Seat Tilt Adjustment



Head restraint height adjustment

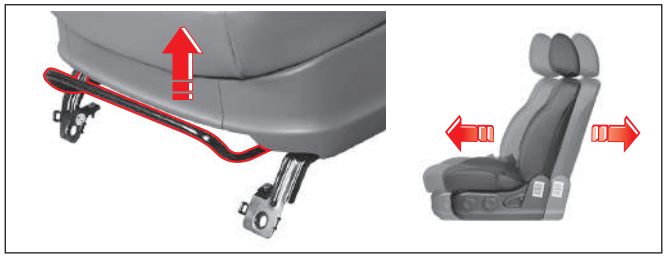
Same as shown in section "Power Seat"

Head restraint tilting (forward/backward)

Same as shown in section "Power Seat"

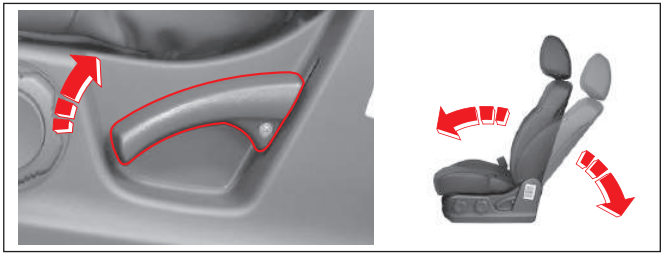


Seat Slide Adjustment



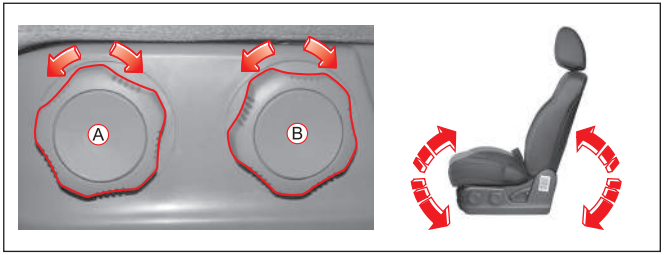
To move the seat forward or backward, pull and hold the seat slide lever up and move the seat as required. Then, release the lever in desired position.

Seatback Reclining Adjustment



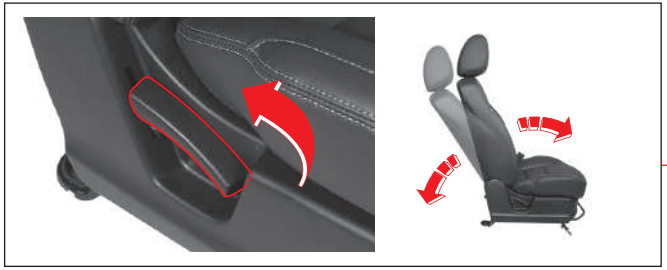
To change the seatback angle, lean forward slightly and raise the lever. Then, lean back to the desired angle and release the lever. After adjusting, make sure the lever is returned to its original position and the seatback is locked.

Seat Height Adjustment



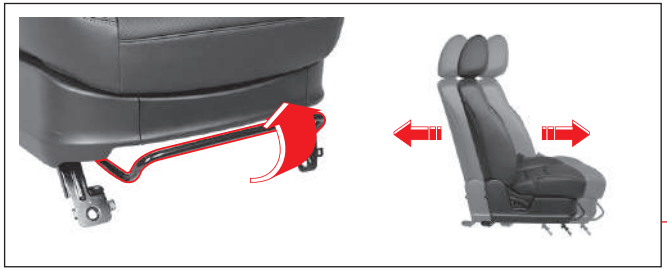
Rotate the front knob Ⓐ forwards to lower the front section of the seat cushion and rotate rearwards to raise it. Rotate the rear knob Ⓑ forwards to lower the rear section of the seat cushion and rotate rearwards to raise it.

Seatback Reclining Adjustment



To change the seatback angle, lean forward slightly and raise the lever. Then, lean back to the desired angle and release the lever. After adjusting, make sure the lever is returned to its original position and the seatback is locked.

Seat Slide Adjustment



To move the seat forward or backward, pull and hold the seat slide lever up and move the seat as required. Then, release the lever in desired position.



Head restraint height adjustment

Same as shown in section "Power Seat"

Head restraint tilting (forward/backward)

Same as shown in section "Power Seat"

* Locations of cup holder may vary according to the seats.



Head Restraint Adjustment



To raise the head restraint, pull it up without pressing the release button. To lower the head restraint, press the release button ① on top of seatback and push the head restraint down.

Seatback Reclining Adjustment



To change the seatback angle, lean forward slightly and raise the lever ②. Then, lean back to the desired angle and release the lever. This lever is designed to adjust the seatback up to a certain angle.

Seat Slide Adjustment



To move the seat forward or backward, pull and hold the seat slide lever up and move the seat as required. Then, release the lever in desired position.

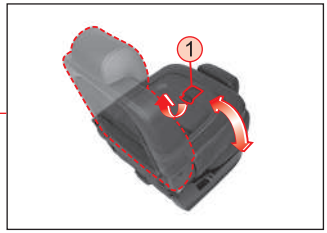


Seat Slide Adjustment



To move the seat forward or backward, pull and hold the seat slide lever ② up and move the seat as required. Then, release the lever in desired position.

Seatback Folding and Unfolding

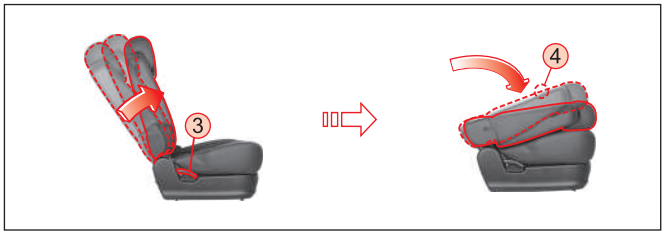


Pull up the lever ① and fold and unfold the seatback until it clicks.

⚠ WARNING

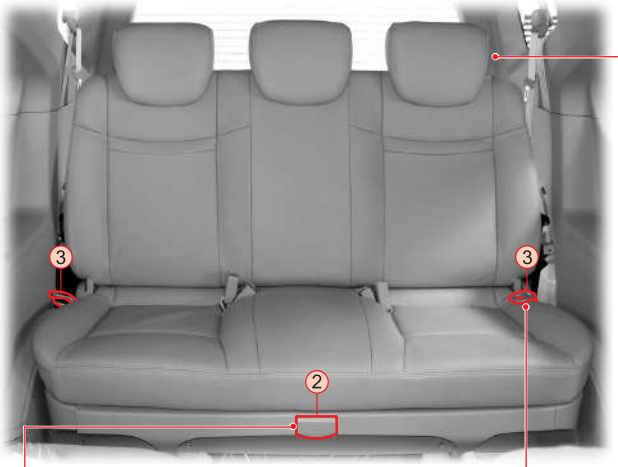
Make sure that the seatback is completely locked.

Seat Folding

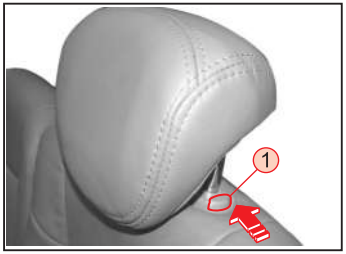


1. Pull up the seatback reclining lever ③ and set the seatback upright.
2. Pull up the seatback folding lever ④ and fold the seatback until it clicks.

7

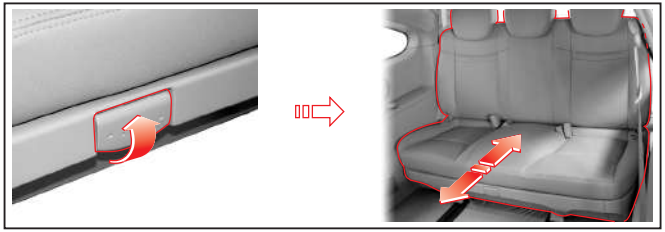


Head Restraint Adjustment



To raise the head restraint, pull it up without pressing the release button. To lower the head restraint, press the release button ① on top of seatback and push the head restraint down.

Seat Slide Adjustment

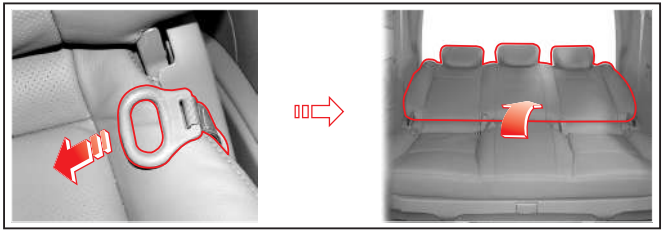


To move the seat forward or backward, pull and hold the seat slide lever ② up and move the seat as required. Then, release the lever in desired position.

NOTE

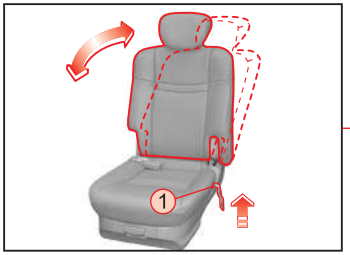
To make the seat sliding adjustment easier, adjust the seat while passengers are sitting on the seat.

Seatback Reclining Adjustment ③



To change the seatback angle, lean forward slightly and raise the lever. Then, lean back to the desired angle and release the lever. This lever is designed to adjust the seatback up to a certain angle.

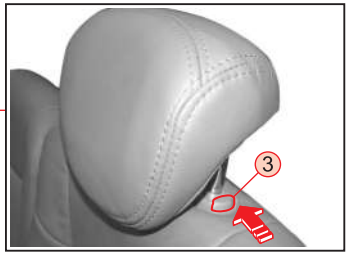
Seatback Reclining Adjustment



To change the seatback angle, lean forward slightly and raise the lever. Then, lean back to the desired angle and release the lever. This lever is designed to adjust the seatback up to a certain angle and to make it flat.



Head Restraint Adjustment



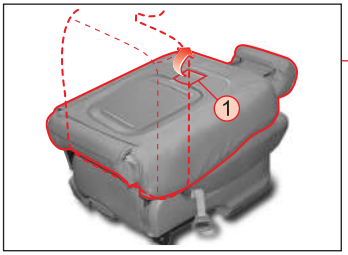
To raise the head restraint, pull it up without pressing the release button. To lower the head restraint, press the release button ③ on top of seatback and push the head restraint down.

Seat Slide Adjustment



To move the seat forward or backward, pull and hold the seat slide lever ② up and move the seat as required. Then, release the lever in desired position.

Seatback Folding and Unfolding



Pull up the lever ① and fold and unfold the seatback until it clicks.

⚠ WARNING

Make sure that the seatback is completely locked.

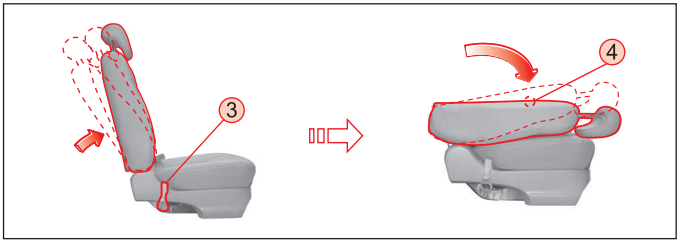


Seat Slide Adjustment



To move the seat forward or backward, pull and hold the seat slide lever ② up and move the seat as required. Then, release the lever in desired position.

Seat Folding



1. Pull up the seatback reclining lever ③ and set the seatback upright.
2. Pull up the seatback folding lever ④ and fold the seatback until it clicks.



Head Restraint Adjustment



To raise the head restraint, pull it up without pressing the release button. To lower the head restraint, press the release button ① on top of seatback and push the head restraint down.

Seatback Reclining Adjustment



To change the seatback angle, lean forward slightly and raise the lever. Then, lean back to the desired angle and release the lever. This lever is designed to adjust the seatback up to a certain angle and to make it flat.

Seat Slide Adjustment



To move the seat forward or backward, pull and hold the seat slide lever ③ up and move the seat as required. Then, release the lever in desired position.

Seatback Folding and Unfolding



Pull up the lever ① and fold and unfold the seatback until it clicks.

⚠ WARNING

Make sure that the seatback is completely locked.

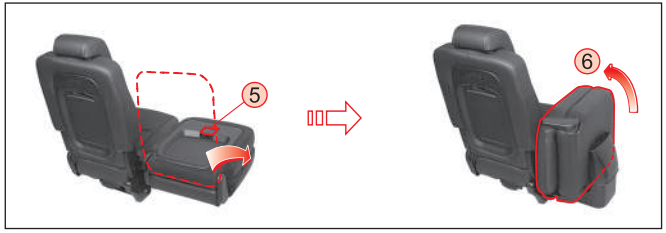


Seat Slide Adjustment



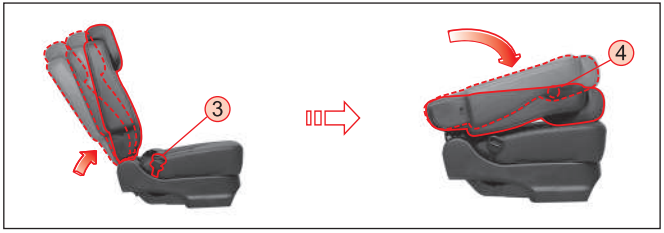
To move the seat forward or backward, pull and hold the seat slide lever ② up and move the seat as required. Then, release the lever in desired position.

Center Jump Seat Folding



1. Pull up the seatback folding lever ⑤ and fold the seatback completely.
2. Fold the center jump seat to arrow direction ⑥.

Seat Folding



1. Pull up the seatback reclining lever ③ and set the seatback upright.
2. Pull up the seatback folding lever ④ and fold the seatback until it clicks.



Head Restraint Adjustment



To raise the head restraint, pull it up without pressing the release button. To lower the head restraint, press the release button ① on top of seatback and push the head restraint down.

Seatback Folding and Unfolding



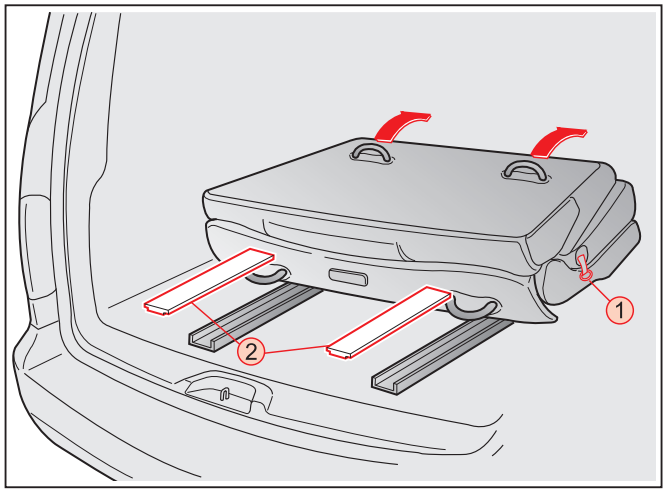
Pull up the lever ② and fold and unfold the seatback until it clicks.

WARNING

Make sure that the seatback is completely locked.

7

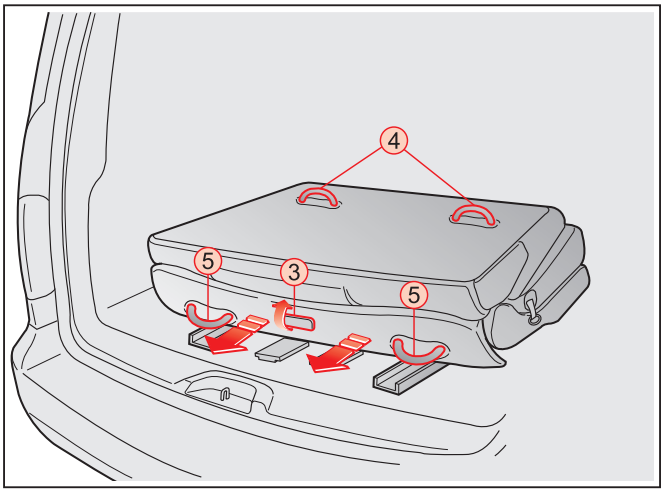
HOW TO REMOVE AND INSTALL THE THIRD ROW SEAT (7-SEAT)*



1. Fold down the seatback of the third row seat while pulling up the seatback reclining lever (①).
2. Remove the seat rail covers (②)

⚠ CAUTION

- Be careful not to drop the seat when removing it. It may cause apersonal injury.
- Make sure that the seat is securely engaged on the rail during installation.
- Do not put any luggage between the 2nd and 3rd row if the 3rdrow seat has been removed and the 2nd row seat is rotated. It may cause serious personal injury when the brake is applied suddenly. Please put the luggage only when the seat is installed in normal position.

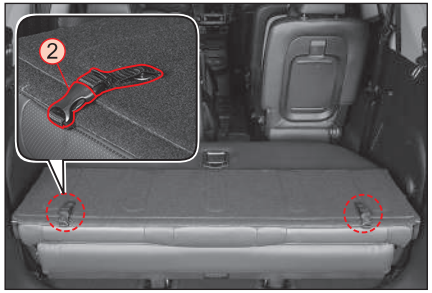


3. Slide the third row seat to its rear end (arrow direction) while pulling up the seat sliding lever (③).
4. Carefully remove the third row seat from the rail by using the hand grips (④, ⑤) on the seat as shown in the figure.
5. Install the seat in the reverse order of removal.

Making a luggage compartment on the fourth row seat



1. Pull up the fourth seatback folding lever ① and fold the seatback until it clicks.

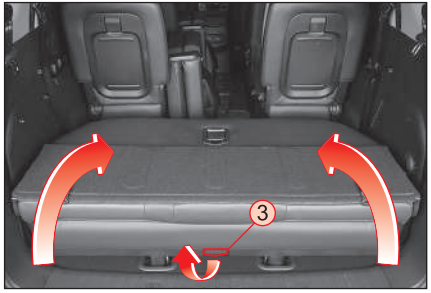


2. Release the cover locks ②.

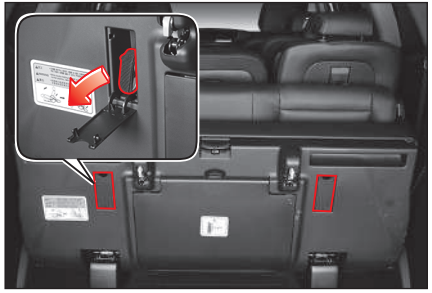


3. Unfold the cover completely.

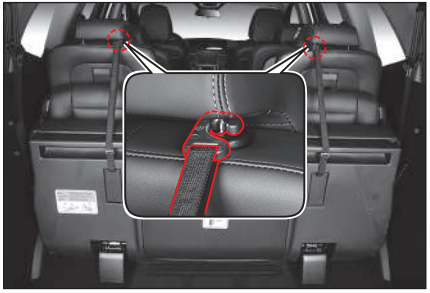
Making a luggage compartment by folding the fourth row seat



1. Pull up the fourth seatback folding lever and fold the seatback until it clicks.
2. Pull up the lever ③ and set the fourth row seat upright.



3. Open the covers and take out the supporting straps.



4. Hook two straps on the poles of head restraint as shown in above figure. Adjust the length of the straps to tighten the folded seat securely.

SEAT WARMER / VENTILATION SYSTEM*

Heated cushions and seatbacks create a pleasant driving environment by expelling chilliness on the surface of the seats.



SEAT WARMER SWITCH (M/T)

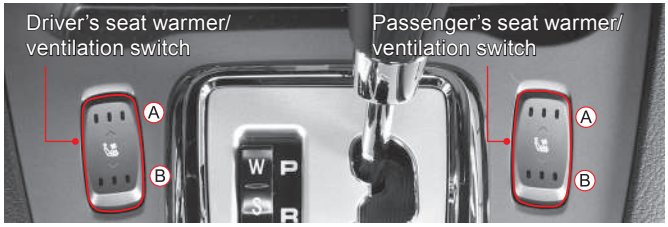


Press the switch to heat the seat and press again to stop the seat heating. During heating, the indicator light on the switch comes on.

WARNING

- Do not operate the seat heater for a long time when the passenger is an infant, child, old or handicapped person, person with sensitive skin, person under the influence of alcohol, or excessively fatigued person. They might receive minor burns.
- If your skin is in contact with the heated seat for a long time, you might get low temperature burns. Be careful.
- Do not put anything on the seat that insulates heat, such as a blanket, cushion or seat cover.
- If the temperature continues to rise, turn the switch off and have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- In the case of the driver's seat, an excessive usage of the heated seat might make you sleepy and could negatively affect your safety.
- Do not place anything sharp on the seat. This may cause damage to the seat heater.

SEAT WARMER/VENTILATION SWITCH (A/T)



To heat the seat, press (Ⓐ) portion of the switch. There are three heating levels. The indicator on the switch illuminates in red.

To cool the seat, press (Ⓑ) portion of the switch. There are three fan speed levels. The indicator on the switch illuminates in blue.

⚠ CAUTION

- The seat ventilation is not air conditioned type.
- The seat ventilation function uses the air inside vehicle. Therefore, to improve the efficiency, use it with the air conditioner.
- To prevent personal injury, do not put your hand under the seat cushion when the ventilation fan is operating.

⚠ CAUTION

Using the seat warmer switch or other electrical equipment may discharge the battery while the IGN is ON with the engine OFF.



7

MEMO

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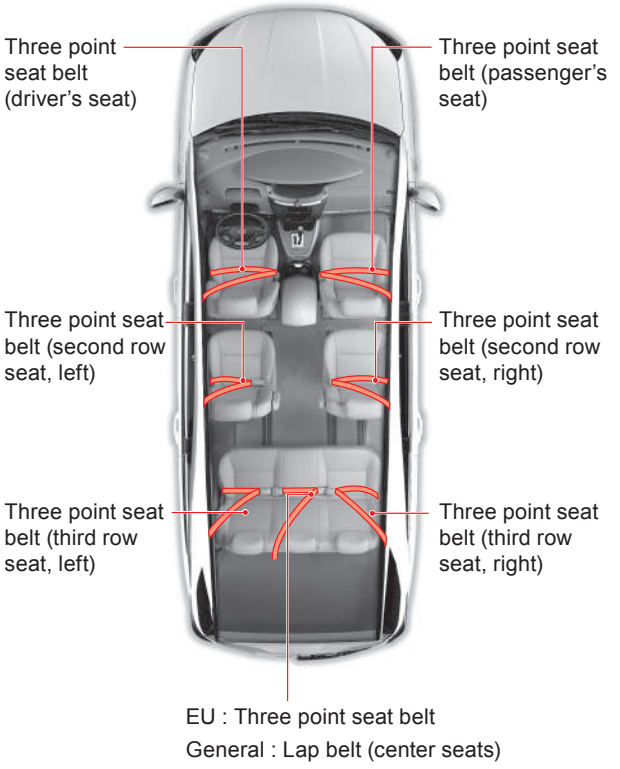
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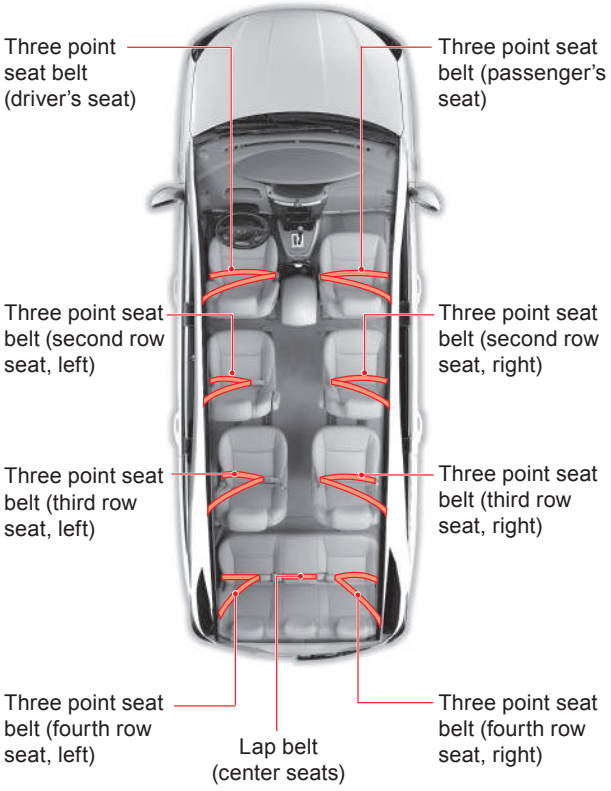
Seat Belt and Air Bag

To protect you and your passengers in the event of an accident, it is highly recommended that the seat belts should be used by all occupants inside of your vehicle.

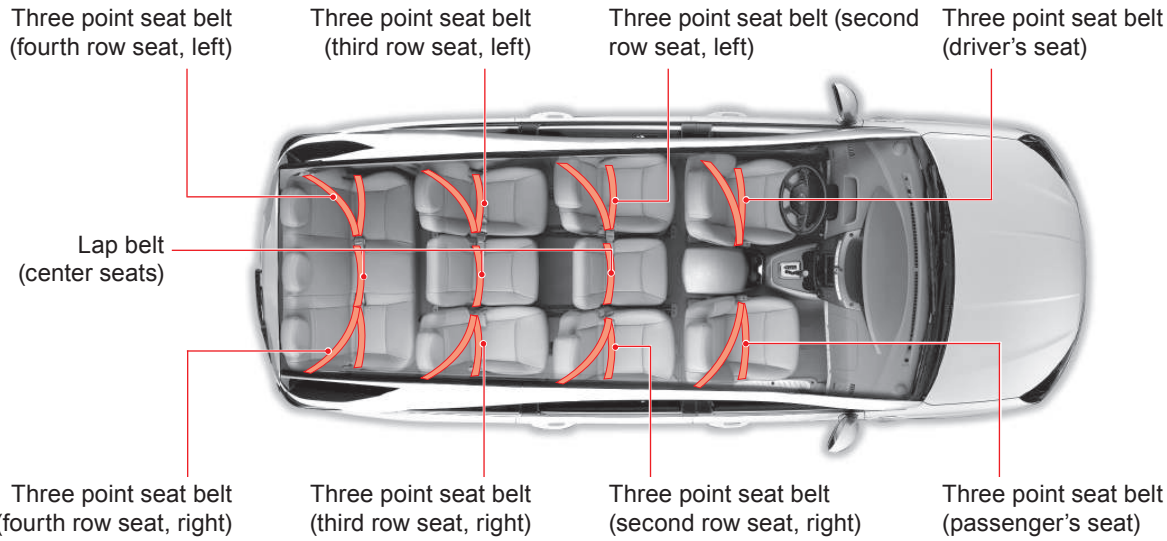
7-SEAT



9-SEAT



11-SEAT

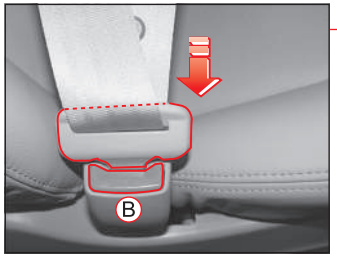


WARNING

- Before driving, all occupants should fasten their seat belts. If not, the occupants can seriously be injured in a collision or sudden maneuvering of the vehicle.
- Each seat belt should be used by only one occupant at a time.
- Seat belts and air bags can significantly minimize possible injury to occupants. But they cannot perfectly protect occupants from fatal collisions.
- Modifications and improper maintenance for the safety systems could cause serious injury. The safety systems including seat belts should be checked and repaired by only a Ssangyong Dealer or Ssangyong Authorized Service Center.
- An infant or small child should always be restrained in an infant or child restraint.
- If the seat belt cannot be pulled out of the retractor, firmly pull the seat belt and release it. You will then be able to smoothly pull the seat belt out of the retractor.

SEAT BELT IN FRONT SEATS

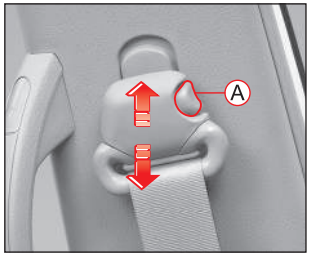
Fastening the Seat Belt





- Insert the metal latch plate into the buckle until it clicks.
- To unfasten the seat belt, press the button Ⓑ on the buckle.

Seat Belt Height Adjustment



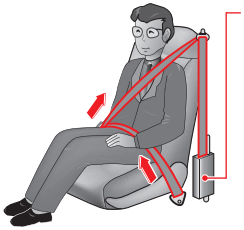
- To raise the seat belt, slide the seat belt height adjustor up.
- To lower the seat belt, press the Ⓐ button and slide it down.

⚠ WARNING

- Adjust the seat belt height before driving.
- Shoulder belt should be positioned midway over the shoulder, never across the neck.

⚠ RESTRAINT OF PREGNANT WOMEN

- Expectant mothers must position the lap portion of the belt as low as possible below the rounding of the abdomen to avoid the belt pushing the fetus when a collision or sudden braking occurs.
- Driving while pregnant can be very dangerous, so avoid driving if possible.
- Consult your doctor about seatbelt position during pregnancy.



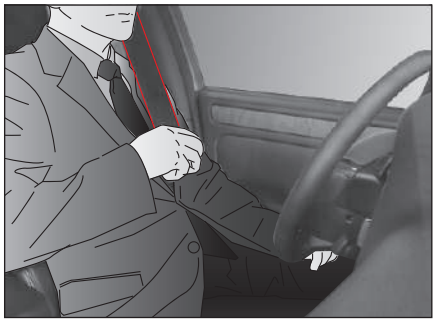
Pretensioner (for Front Seat)

When a severe frontal impact occurs, seat belt pretensioners rewind the seat belts immediately to restrain the occupants to their seats. It helps the effective operation of the seat belts and airbags.

⚠ WARNING

Deployed seat belt pretensioners cannot be deployed again. Have the deployed seat belt pretensioners replaced by an authorized dealer.

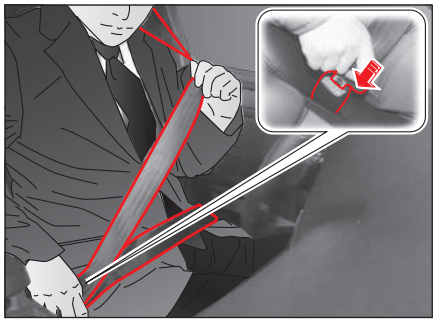
HOW TO FASTEN THE THREE POINT SEAT BELT



1. Pull out the latch plate from the retractor. If the seat belt is locked when being pulled out, rewind it completely in the retractor, then pull it out to the desired length.

WARNING

If it is not easy to pull out the seat belt from the retractor, strongly pull the belt out and release it. Then you may pull the belt out smoothly.



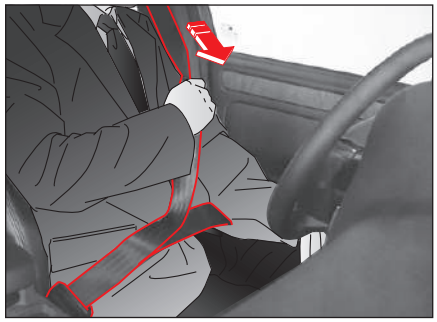
2. Position the shoulder belt across the body and the lap belt as low as possible across the hips. Insert the latch plate into the buckle until it clicks.
3. Adjust the seat belt height as needed.

CAUTION

Sit back in the seat with the seatback in an upright position and wear the seat belt.

WARNING

Make sure that the seat belt webbing is not twisted.



4. Pull the latch plate to make sure it is securely locked. A slack belt will greatly reduce the protection afforded to the wearer.
5. To unfasten the seat belt, press the red button on the buckle.

WARNING

Improperly worn seat belts could cause serious injury or death.

- Put the lap belt as low as possible across the hips. Do not put it across the waist. In an accident, the belt may apply pressure to your abdomen. This may cause internal injuries.
- The shoulder belt should be positioned midway over the shoulder, never across the neck.

SEAT BELT IN SECOND AND THIRD ROW SEAT

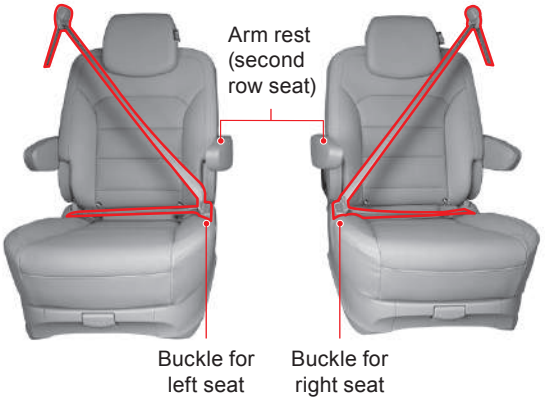
* 7 & 9-Seat vehicle does not have the center jump seat in the second row seat.

The center jump seat has a lap belt, and both side seats have a lap and three point belt. Use the three point seat belt when the seat is facing forwards, and use the lap belt when the seat belt is facing rearwards.

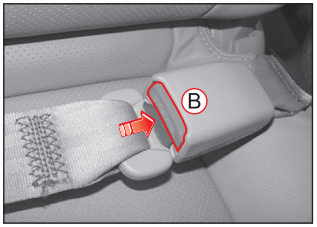
Second Row Seat (11-seat)



Second Row Seat (7 & 9-seat)/ Third Row Seat (9-seat)

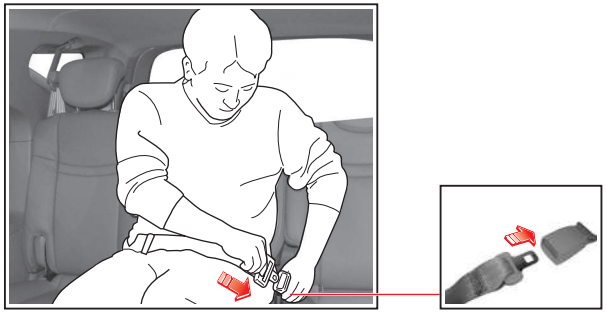


Fastening the Seat Belt

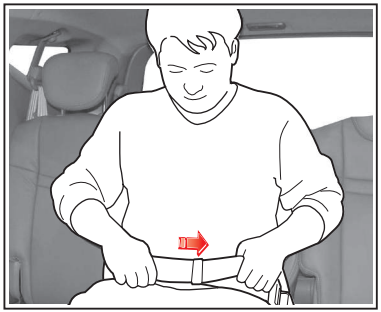


- Insert the metal latch plate into the buckle until it clicks.
- To unfasten the seat belt, press the button Ⓑ on the buckle.

Lap Belt in Center Jump Seat



1. Pull out the latch plate from the retractor in the side pocket.

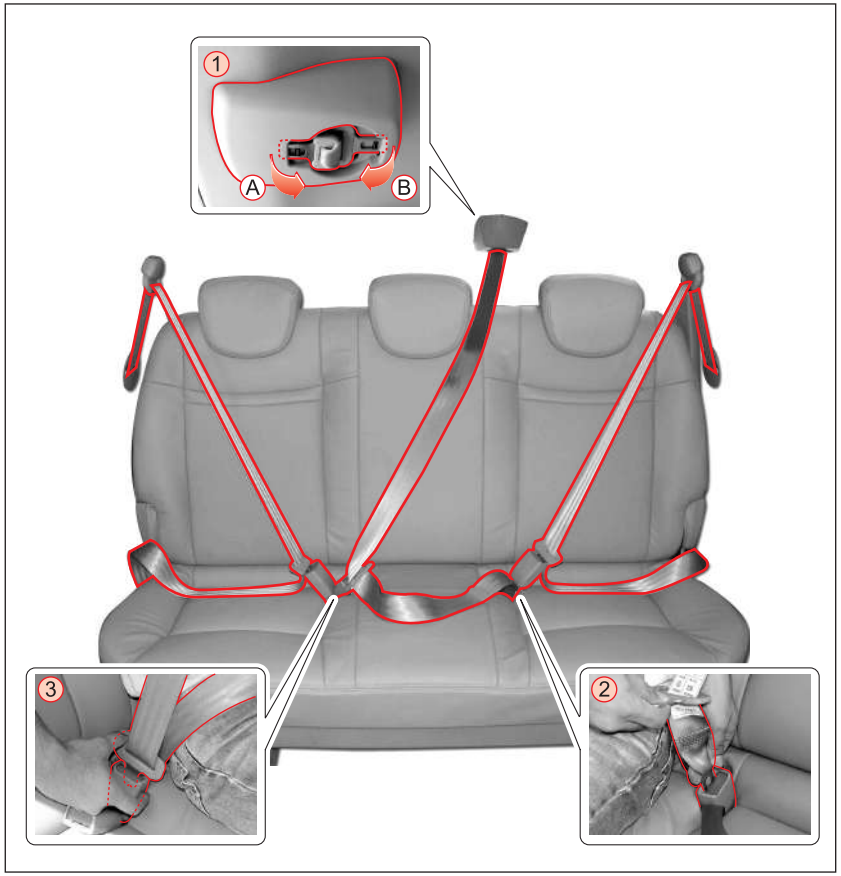


2. Insert the metal latch plate into the buckle until it clicks.
3. Position the belt as low as possible across your hips, not across your abdomen.
4. To unfasten the seat belt, press the button (B) on the buckle.

WARNING

- Put the lap belt as low as possible across the hips. Do not put it across waist. In an accident, the belt may pressurize on your abdomen. This may also result serious internal injuries.
- Make sure that the latch plate is inserted into a correct buckle.

Third Row Seat (7-seat)



Wearing Order

1. Pull out the Mini-latch plate (A).
2. Insert the Mini-latch plate to the buckle 2 (black button).
3. Pull out the Latch plate (B).
4. Insert the Latch plate (B) to the buckle 3 across the shoulder.

To release it, do in the reverse order of wearing.

WARNING

- Make sure to fasten the seat belt according to the order as described so that it functions properly.
- To prevent the seat belt bumping against the rear glass, unfasten the seat belt while holding it.
- This seat belt is designed only for a passenger who sits on the center seat in the second row seat.
- Tug on the seat belt to make sure the latch plate is securely locked.
- Make sure that the seat belt is not twisted.
- Improper wearing of seat belts increases the chance of injury or death in a crash.
- Do not position the seat belt to pass across your neck and abdomen.

CAUTION

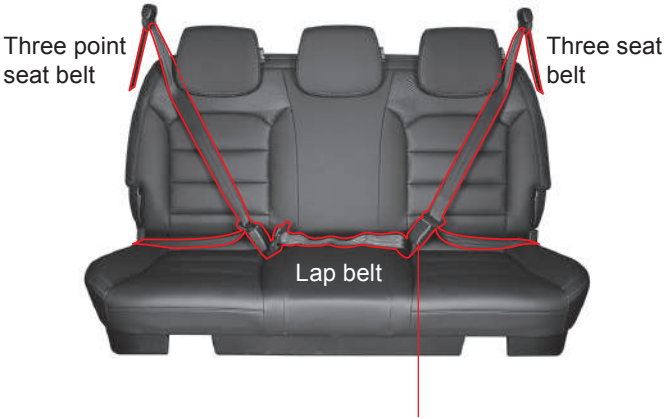
Stow the seat belt into the console when it is not in use.

Third Row Seat (11-Seat)

The seat belt fastening procedures in third and fourth row seat are same with that of second row seat. However, both side seats do not have the lap belt.



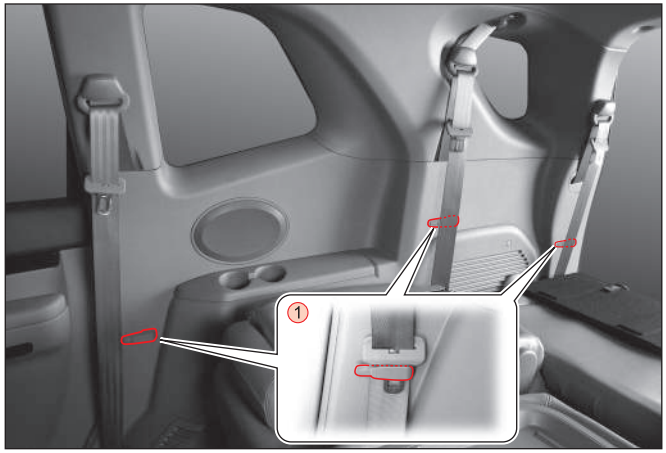
Fourth Row Seat (9 & 11-Seat)



Latch Plate for Center Seat Belt

The latch plate for center seat belt is stowed in a clevis between center seat and left seat.

Seat Belt Holder



Secure the rear 3-point seat belt to its holder (1) as shown in the figure, when it is not in use or if you want to fold up the rear seatback.

CAUTION

In order to use the seat belt, always pull out the seat belt from its holder and tug it. If you tug the seat belt with it secured to the holder, it may cause the holder or seat belt to be damaged.

PREGNANT WOMEN

We recommend that pregnant women use the seat belts throughout their pregnancy. Keeping the mother safe is the best way to keep the baby safe.

WARNING

- Pregnant women should wear 3-point seat belt whenever possible according to the professional recommendations by her doctor.
- Pregnant women should wear the lap portion of the belt across the thighs and as snugly and low as possible.

CHILD RESTRAINTS

When transporting infants or small children, an appropriate child restraint system should always be used. The child restraint system should be appropriate for your child's weight and height and properly fit the car's seat. Accident statistics indicate that children are safer when properly restrained in the rear seat rather than in the front seat.

SECURING METHODS OF CHILD RESTRAINT SYSTEM

Child restraint systems are designed to be secured in vehicle seats by seat belts or the latch system (ISOFIX seat - if equipped).

WARNING

- Infants and tiny children should always be restrained in an infant or child restraint.
- Never install a rear-facing child restraint in the front seat with front passenger air bag.
- A child in a rear-facing child restraint installed in the front seat can be seriously injured if the front passenger air bag inflates. Secure a rear-facing child restraint in the rear seat.
- A front-facing child restraint should be secured in the rear seat whenever possible. If installed in the front passenger seat, adjust the seat as far back as it will go.
- When installing a child restraint system, follow the instructions provided by the manufacturer.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or remove it from the vehicle.
- In a collision an unrestrained child, even a tiny baby, can become a missile inside the vehicle. The force required to hold even an infant on your lap can become so great that you could not hold the child, no matter how strong you are.
- Do not allow a child in the cargo areas while the vehicle is moving.
- If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle. Never allow a child to put the shoulder belt under an arm or behind their back.
- Please note that the three point seat belt is designed for a person who is taller than 140 cm.

INFANT AND CHILD SAFETY

Child Seat

Children that are too small to use the seat belts must be properly secured in a child restraint system.

WARNING

- Do not place a child restraint system in the front seat. The infant or child could be severely injured by an air bag inflation in case of an accident.
- Use only the qualified child restraint systems. Follow the manufacturer's instructions for installation and use of the child restraint systems.
- Do not carry your child on your lap while driving. You cannot resist against the impact pressure in an accident. The child could be crushed between you and the parts of vehicle.
- Remember that a child restraint seat left in a concealed vehicle can cause it to be very hot. Check the seating surface before putting your child in the child restraint.
- When your child restraint is not in use, remove it from the vehicle or keep it secured with a seat belt to prevent it from being thrown forward in case of a sudden stop or an accident.
- When installing a child restraint, do not let the seat belts come across the child's neck.

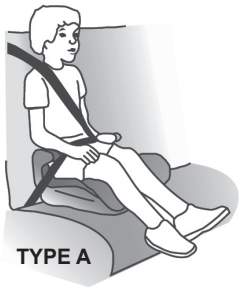
Table of Vehicle Handbook Information on Child Restraint Systems Installation Suitability for Various Seating Positions

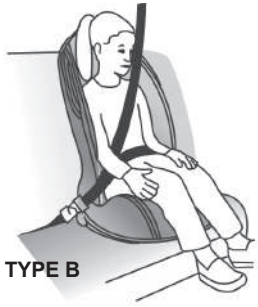


Rear-facing child seat



Forward-facing child seat





Booster seat

Mass group	Restraint device figure	Front Pas-senger	2nd seat row out board	2nd seat row center	Mounting method of vehicle
O ~ up to 10 kg (0 ~ 9 month)	Rear facing child seat	X	U	NA	3-point belt rear-facing
O+ ~ up to 13 kg (0 ~ 2 year)	Rear facing child seat	X	U	NA	3-point belt rear-facing
I ~ 9 to 18 kg (9 month ~ 4 year)	Forward facing child seat	X	U	NA	3-point belt
II ~ 15 to 25 kg (4 year ~ 6 years)	Booster seat	X	U	NA	3-point belt
III ~ 22 to 36 kg (6 year ~ 12 years)	Booster seat	X	U	NA	3-point belt

U: Suitable for “universal” category restraints approved for use in the mass group.

UF: Suitable for forward-facing “universal” category restraints approved for use in the mass group.

L: Suitable for particular child restraints given on attached list. These restraints may be of the “semi-universal” categories.

B: Built-in restraint approved for this mass group.

X: Seat position not suitable for children in the mass group.

ILLUSTRATION OF CRS SECURED BY THE SEATBELT.

Front-facing Child Seat



Secure the child restraint with a seat belt as shown in the figure.

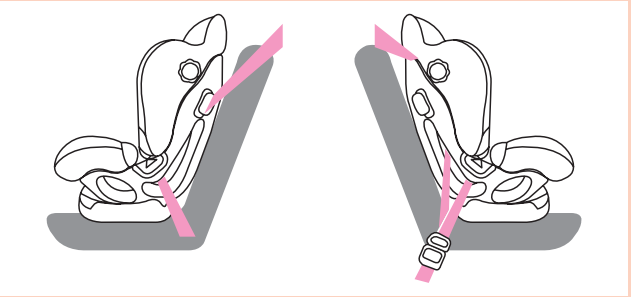
CAUTION

When installing a child restraint system, follow the instructions provided by the manufacturer.

WARNING

Do not use the car seat unless the followings are met.

The child seat may not perform as intended, which may result in a serious injury.



- Make sure that the buckle of the seat belt is securely engaged.
- Make sure that the seat belt is not loose or twisted.
- Make sure that the base does not move due to excessive play in all directions.
- You can't adjust the angle of the backrest with the child seat installed. If you're trying to do so, the seat belt will be slack, which incurs danger. Always adjust the angle of the backrest before installing the child seat.

Rear-facing Child Seat



Secure the child restraint with a seat belt as shown in the figure.

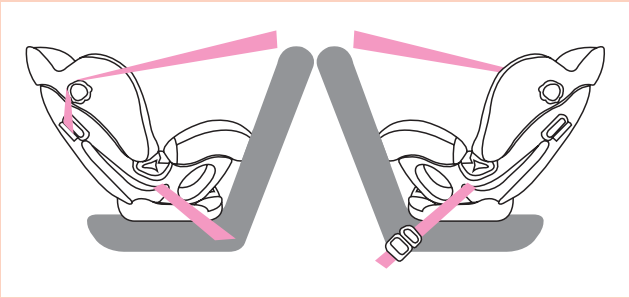
WARNING

Never install a rear facing child restraint on the front seat without ensuring that the front airbag is deactivated. Ssangyong Motor Company recommends that a child restraint to be installed on the rear seat.

When installing a child restraint, adjust the seat back angle as desired.

WARNING

Do not use the child seat unless the followings are met.
The child seat may not perform as intended, which may result in a serious injury.



- Make sure that the buckle of the seat belt is securely engaged.
- Make sure that the seat belt is not loose or twisted.
- Check if the angle of the backrest is set to 4 stage.
- Make sure that the base does not move due to excessive play in all directions.
- Make sure that the seat belt is routed through the rear-facing belt path and buckled up.

SECURING A CHILD RESTRAIN SYSTEM WITH “ISOFIX” SYSTEM

How to use the ISOFIX Lower Latch Anchor



- The ISOFIX lower latch anchors are located in the left and right outboard rear seating positions. Their locations (1) are shown in the illustration.
- Insert the child restraint attachments into the ISOFIX lower latch anchors until it clicks.
- Do not use the seat belt for installing the ISOFIX child restraint.

ISOFIX system is a standardised method of fitting child seats that eliminates the need to use the standard adult seatbelt to secure the seat in the vehicle. This enables a much more secure and positive location with the added benefit of easier and quicker installation.

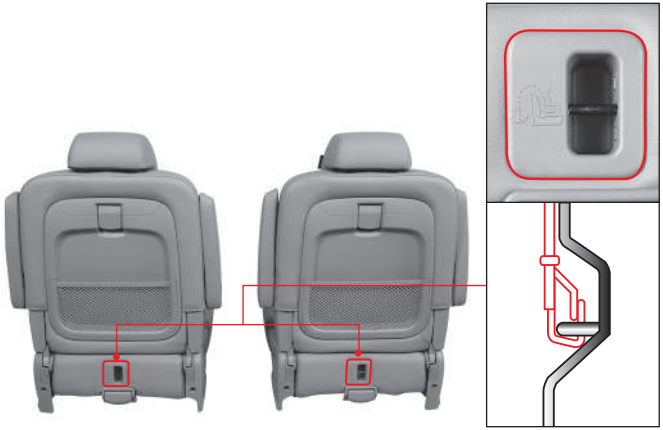


⚠ WARNING

- When using the “ISOFIX” lower latch system, all unused vehicle rear seat belt metal latch plates or tabs must be latched securely in their seat belt buckles and the seat belt webbing must be retracted behind the child restraint to prevent the child from reaching and taking hold of unretracted seat belts. Unlatched metal latch plates or tabs may allow the child to reach the unretracted seat belts which may result in strangulation and a serious injury or death to the child in the child restraint.
- Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the vehicle.

How to use the Top Tether

- The top tether anchors for securing the child seat are located on the back side of second row seat.



- Remove the headrest from the second row seat.
- Place the child restraint on the second row seat.
- Connect the tether connector in child restraint to the rear anchor. Securely tighten the child restraint by adjusting the webbing of the tether connector.

CAUTIONS FOR ISOFIX SEAT

- The rear anchor is the supplemental device to secure the child restraint system after engaging it by the lower latches. Therefore, do not secure the child restraint system only with the seatback anchors. The increased load may cause the hooks or anchors to break, causing serious injury or death.
- If a child restraint is not properly secured to the vehicle and a child is not properly restrained in the child restraint, the child could be seriously injured or killed in a collision. Always follow the instructions provided by the manufacturer for installation.
- Make sure the latches of the child restraint system are latched to the lower latches. In this case, you can hear the “click” sound.
- Incorrectly installed child restraint system may cause an unexpected personal injury.
- Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints.
- The tether strap may not work properly if attached somewhere other than the correct rear anchor.
- Rock the child restraint to check if it is securely installed. Refer to instructions provided by the manufacturer of the child restraint.
- Do not install the child restraint if it hinders the operations of front seat.

Table of Vehicle Handbook Information on ISOFIX Child Restraint Systems Installation Suitability for Various ISOFIX Positions

Mass group	Size Class	Fixture	Vehicle ISOFIX Positions		
			Front Passenger	Rear Centre	Rear Out Board
CARRYCOT	F	ISO/L1	X	X	X
	G	ISO/L2	X	X	X
GROUP 0 UP TO 10KG	E	ISO/R1	X	X	IUF
GROUP 0+ UP TO 13KG	E	ISO/R1	X	X	IUF
	D	ISO/R2	X	X	IUF
	C	ISO/R3	X	X	IUF*
GROUP I 9 TO 18KG	D	ISO/R2	X	X	IUF
	C	ISO/R3	X	X	IUF*
	B	ISO/F2	X	X	IUF
	B1	ISO/F2X	X	X	IUF
	A	ISO/F3	X	X	IUF

**** Installation condition: first row in formost. (RH only)***

NOTE: Key of letters be inserted in the above table

IUF: Suitable for ISOFIX forward child restraints systems of universal category approved for use in this mass group.

IL: Suitable for particular ISOFIX child restraint systems (CRS) given in attached list.
These ISOFIX CRS are those of the “specific vehicle”, “restricted” or “semi-universal” categories.

X: ISOFIX position not suitable ISOFIX child restraint systems in this mass group and/or this size class.

WARNING FOR CHILD RESTRAINT

- **Use only the officially approved child restraint.**
  Ssangyong is not responsible for the personal injury and property damage due to the defect of child restraint.
- **Use only the child restraint with proper type and size for your baby.**
- **Use only the child restraint at proper location.**
- **Child restraint has 5 categories based on the weight as below:**
  GROUP 0: 0 ~ 10KG
  GROUP 0+: 0 ~ 13KG
  GROUP I: 9 ~ 18KG
  GROUP II: 15 ~ 25KG
  GROUP III: 22 ~ 36KG
- **Group 0 & 0+**
  Rear facing child restraint fitted on the rear seat
- **Group I**
  Forward facing child restraint fitted on the rear seat
- **Group II & III**
  Booster seat fitted on the rear seat with seat belt fastened
  Always follow the installation and use instructions provided by the manufacturer of the booster seat.

WARNINGS FOR SEAT BELT

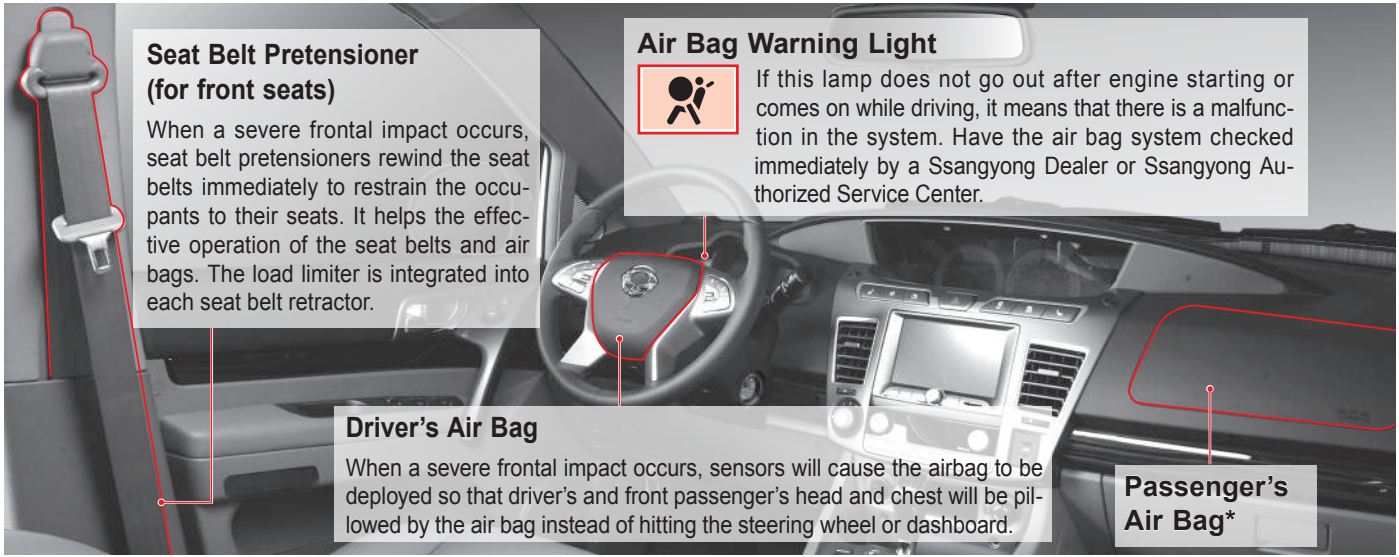
- Always put on your shoulder belt over the shoulder and across the chest. Do not put the shoulder belt across your neck.
- Put the lap belt as low as possible across the hips. Do not put it across the waist. In an accident, the belt may apply pressure to your abdomen.
- Do not wear the shoulder belt under the arm. It increases the danger of sliding out of the belt and can cause serious injury or even death. The belt may also tighten the chest which is not as strong as the shoulders. This may also result in serious internal injuries.
- Do not lock the seat belt with a clip or a clamp. If the seat belt is too loose, it may not protect your body from injury or death in an accident.
- Before driving, all occupants should wear the seat belts. Otherwise, occupants could be seriously injured in collisions or sudden maneuvers. In many countries, there are regulations regarding the use of the seat belts. Please observe local laws and regulations.
- Do not buckle up two or more persons with one seat belt.
- Do not wear the seat belt over any hard or breakable objects in pockets or on clothes.
- An infant and tiny child must be restrained in a child restraint system. Note that the three point seat belt is designed for a person who is taller than 140 cm.
- Periodically check that the seat belt and its components work properly. A damaged seat belt can cause serious injuries. Repair or replace the damaged seat belt immediately at a Ssangyong Dealer or Ssangyong Authorized Service Center.
- The warning light comes on whenever the ignition is switched on. The light goes out when the driver's seat belt is securely fastened. If the light does not go off after fastening the seat belt, it means that there is a malfunction in the system. Have the seat belt system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- Additional devices or accessories on the seat belt may result in improper operation. Do not add any adjusting devices which restrict the seat belt operation.
- Periodically inspect all parts of the belt and have the damaged parts replaced. The belt that has been overstretched in an accident must be replaced with a new one. Ssangyong recommends replacing all component parts of the seat belt after a collision. No replacement is required after a minor collision if a Ssangyong Dealer or Ssangyong Authorized Service Center finds that no damage has occurred and everything is in proper working order. The seat belt components that were not used during a collision must also be inspected and replaced if they show signs of damage or faulty operation.
- Replace the entire seat belt assembly after a severe impact even if the damage is not obvious.

WARNINGS FOR SEAT BELT

- Never modify the seat belt.
- Always keep the seat belts clean and dry. Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Use mild soap and water for cleaning. The seat belt must be replaced if webbing becomes frayed, contaminated or damaged.
- Adjust the seat properly before wearing the seat belt.
- Sit back in the seat with the seatback in an upright position and wear the seat belt. If the seat belt is positioned too high or fastened too loose, it may not protect your body from an injury or death in the event of a collision.
- Do not recline the seatback more than needed for comfort while vehicle is in use. Seat belt is the most effective when the passenger sits back and straight up in the seat. If the seatback is reclined too much, then the risks of sliding under the lap belt and getting injured are increased.
- If the latch plate is inserted into a wrong buckle, the belt may exert pressure on your abdomen instead of your pelvis. This may cause serious internal injury.
- If the seat belt is twisted, there will not be enough contact of the belt to spread the impact pressure.
- Make sure that the latch plate is securely locked.
- When pregnant women use the seat belt, consult with a doctor for specific recommendations.
- Keep the buckle clean.
- Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the hips, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.
- Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.
- Belts should not be worn with straps twisted.
- Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.
- No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.
- If the seat belt cannot be pulled out of the retractor, firmly pull the belt and release it. You will then be able to smoothly pull the belt out of the retractor.
- Never unbuckle the seat belt while traveling. Careless driving actions, such as fastening/releasing the seat belt repeatedly, may result in serious injury.
- Make sure that the seat belt does not go around any solid body or fragile objects.
- Keep the buckle clean. Foreign materials caught inside the buckle can prevent the seat belt latch plate from being locked.

AIR BAG*

The air bag Supplemental Restraint System (SRS) can provide additional protection for the driver and passenger in the event of a collision.

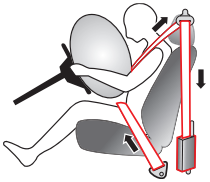


Driver's Seat Air Bag

The seat air bags are integrated into the side wall (window side) of both front seats. The seat air bag is designed to inflate only in certain side collision and protect occupants' chest.

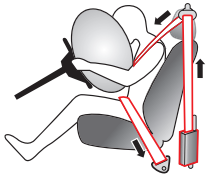
Air Bag Inspection

The air bag system should be inspected 10 years from its installation regardless of its appearance and other conditions.



Operation of pretensioner

When a severe frontal impact occurs, seat belt pretensioners rewind the seat belts immediately to restrain the occupants to their seats.



Operation of load limiter

After frontal collision, the load limiters releases the seat belt to prevent the occupant from being injured due to belt force.

SRS AIR BAG

The Supplemental Restraint System air bag is designed to supplement the seat belts and provide the driver and front passenger with protection against head, chest, and other injuries in the event of a collision. For maximum protection, seat belts should always be worn by all occupants. Therefore, the SRS is not a substitute for the seat belts, but supplemental.

WARNING

- The air bag system serves as a supplement to the seat belt. Make sure you and your passengers always wear seat belts properly, even if air bags are installed in the vehicle.
- Depending on the severity or the angle of impact, the air bag may not deploy.
- The driver's and front passenger's air bags simultaneously deploy.
- EXTREME HAZARD! Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.

WARNING

- If you see "SRS" on a certain area, the air bag is contained underneath it. Therefore, do not apply any impact upon it and never place any accessories or objects on the area. And avoid any direct contact with the area.
- As a reminder of possible dangers of the air bag, air bag warning labels are affixed on the driver's and front passenger's sun visors.

Locations of Air Bag Warning Labels

WARNING

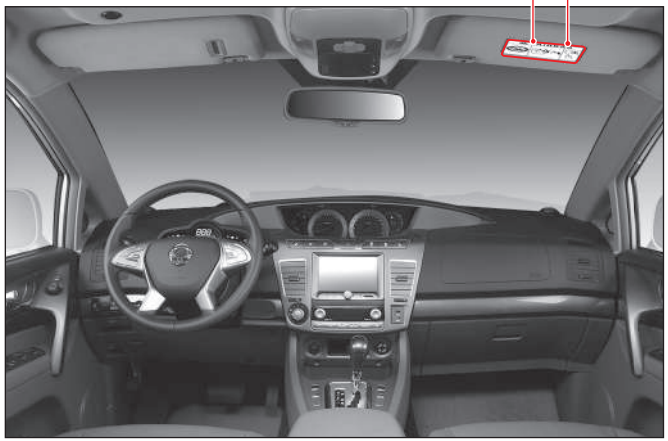
NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the Child can occur

Type A (FRT/RR)



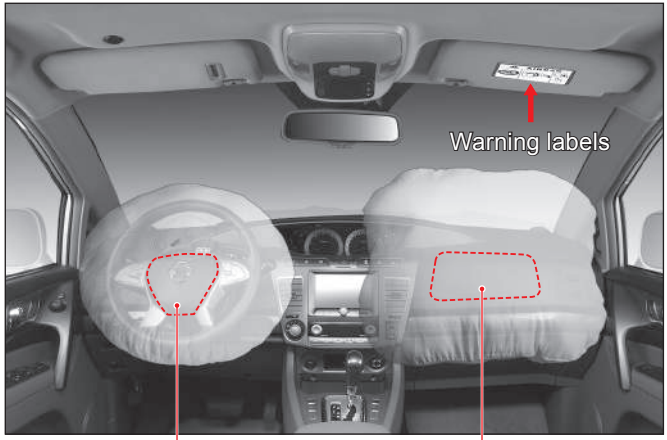
Type B (FRT/RR)





8

FRONT AIR BAGS



Driver's Air Bag

The driver's air bag is located at center of the steering wheel.

Passenger's Air Bag*

The front passenger's air bag is located on the dashboard.

Pretensioner (for Front Seat)

When front air bags deploy, the seat belt pretensioners simultaneously work too.

1st operation: When a severe frontal impact occurs, seat belt pretensioners rewind the seat belts immediately to restrain the occupants to their seats.

2nd operation: After frontal collision, the load limiters releases the seat belt to prevent the occupant from being injured due to belt force.

Air Bag Operation

▶ **The air bag inflates when:**

- In response to a severe frontal impact, the driver's and front passenger's air bags deploy at the same time to supplement the seat belts to prevent or reduce any personal injuries.

▶ **The air bag can inflate when:**

- Underbody impact from the road surface; impact against the curb at a very high speed; dropping impact onto the road surface with a large angle

▶ **The air bag does not inflate when:**

- Rollover, side impact or rear impact
- If the severity of impact to the vehicle is not significant and the seat belts are enough to protect occupants.

▶ **The air bag seldom inflates when:**

- Oblique impact, rollover
- Weak impact in which the sensor is unable to detect (under the inflation requirements)
- Impact against narrow objects such as a utility pole or a tree
- The vehicle falls into a drainage or a puddle
- The front of the vehicle crashes into a high impact point vehicle such as a truck
- Impact on the hood by falling stones
- The air bag warning light is on
- Moderate or severe impact to the middle of the vehicle body's side structure. In that case, only the side curtain air bags deploy.

SEAT AIR BAG*



⚠ WARNING

- Do not apply any impact on the installation area of impact sensor. The air bag might deploy.
- Depending on the severity or the angle of impact, the seat air bag may not deploy.
- Do not bang the door. The seat air bag might deploy.
- Driver's and passenger's air bags are inflated simultaneously. At the same time, the pretentioners for seatbelts are also activated. The seat air bags, however, are inflated individually in case of side impact.

Seat Air Bag Operation

▶ **The air bag inflates when:**

- A moderate to severe impact to the middle of the vehicle body's side structure.

▶ **The air bag can inflate when:**

- Vehicle rolls onto its side and causes a severe side impact.

▶ **The air bag does not inflate when:**

- Frontal collision while vehicle stops or is moving at a low speed.
- Rear end collision
- If the severity of impact to the vehicle is not significant.

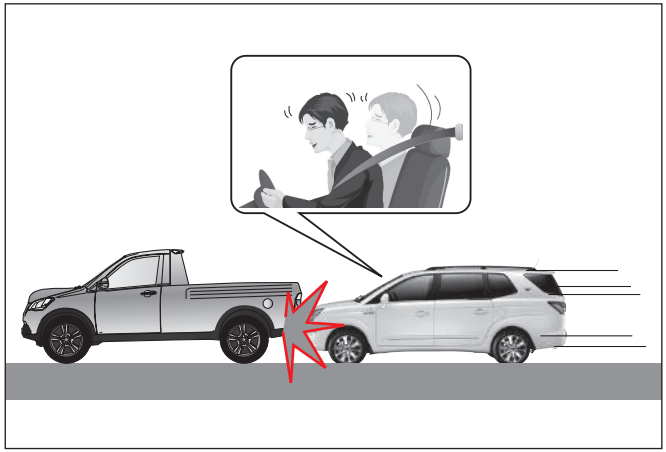
▶ **The air bag seldom inflates when:**

- Oblique impact (diagonal direction)
- Frontal impact or rear impact
- Rollover but without a severe impact
- The air bag warning lamp is on

AIR BAG INSPECTION

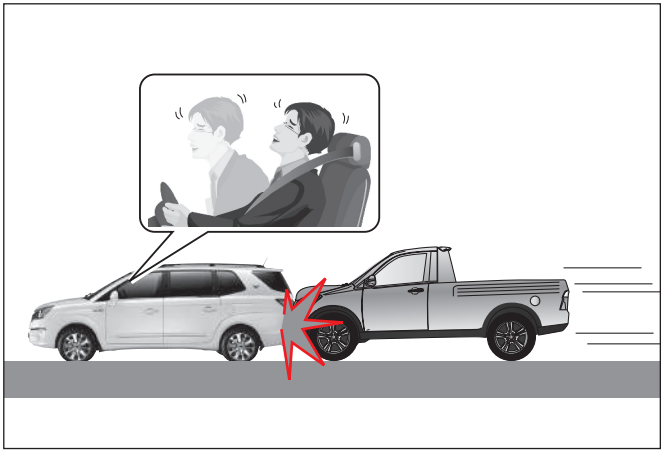
The air bag system should be inspected 10 years from its installation regardless of its appearance and other conditions.

LOW SPEED COLLISION



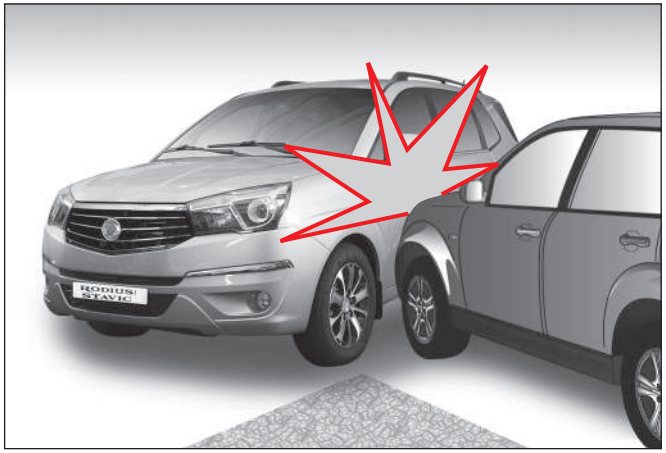
In collisions, the seat belts are sufficient to protect the vehicle occupants and the air bags may not deploy. In some cases, deploying air bags in low-speed collisions can cause a secondary impact to the occupants (light abrasions, cuts, burns, etc.), or loss of vehicle control.

REAR COLLISION



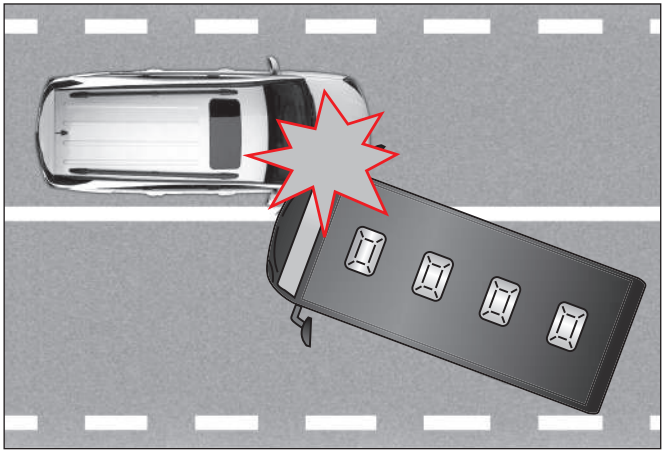
Air bags may not inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, the air bags do not provide proper protection.

SIDE COLLISION



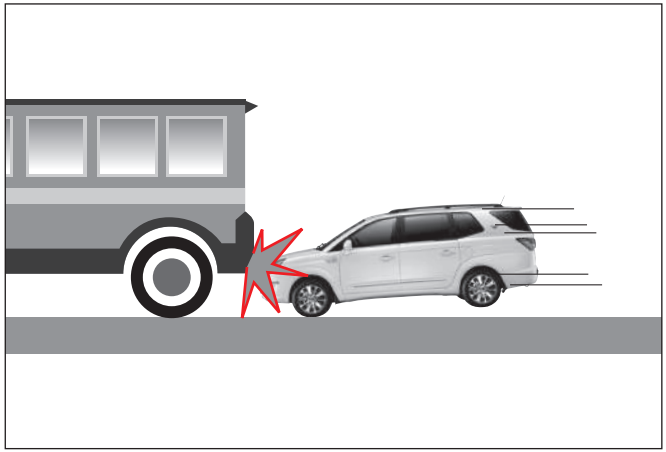
Front air bags may not inflate in side impact collision, because occupants move to the direction of the collision, and thus front air bag deployment does not provide proper protection.

ANGLED COLLISION



In a slant impact or collision, the force delivered will be relatively weaker than that of frontal collision. So, the air bags may not inflate.

RIDING



At the moment of an accident, drivers brake heavily with reflex. In such heavy braking, the front portion of the vehicle is lowered by the force of the braking and the vehicle can go under a vehicle with a higher ground clearance. Air bags may not inflate in this situation because impacts may not be delivered or may be delivered with less intensity.

ROLLOVER



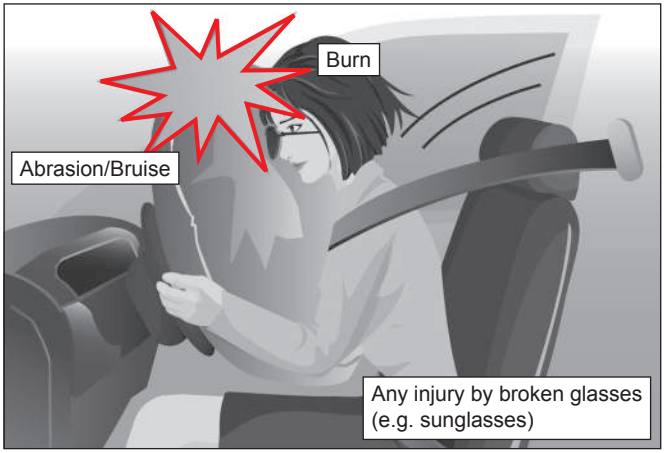
Air bags may not inflate in rollover accidents because air bag deployment would not provide proper protection to the occupants.

COLLISION WITH NARROW OBJECT



Air bags may not inflate if the vehicle collides with objects such as utility poles or trees, where the point of impact is concentrated to one area and the full force of the impact is not delivered to the sensors.

SECONDARY INJURY DUE TO AIR BAG DEPLOYMENT



If the air bag control module detects the impact during an accident, it transmits the signal to deploy the air bag. This signal triggers the explosion of the powder, which is included in the air bag module, and the air bag deploys in a very short time to protect the occupants. When the air bag inflates, there will be heavy noise, glare and smoke. You could suffer secondary injuries caused by inflated air bag such as an abrasion, a bruise, a burn or injury by broken glasses.

WARNINGS FOR AIR BAG (I)

- Do not diagnose the circuit with a circuit tester. Do not attempt to modify any air bag components including the steering wheel, air bag mounting area, and harness.
- Incorrect air bag inspection can be dangerous and cause injuries. The air bag system must be disposed only by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- Replace the steering wheel with only Ssangyong genuine parts.
- When the engine starts, the air bag warning light comes on for a system check. It goes out after 6 seconds when the system is normal. If this warning light stays on then the system may be defective. Have the air bag system checked immediately by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- Never let small children or infants sit in the front passenger seat or be held in your arms. When the front air bags deploy, they could be seriously injured or killed.
- The child restraint system should be installed in the rear seat.
- The child restraint system must not be placed on the front seat. The infant or child can severely be injured by an air bag inflation in case of an accident.
- The seat belt and air bags are the most effective when you sit well back and upright in the seat.
- Do not move your seat too close to the steering wheel or dashboard. If you lower your head, the air bag can hit your head during inflation and can cause severe injury or even death.
- Do not impact any air bag components including the steering wheel, air bag mounting area, and harness by hand or tools. You may get injured by sudden deployment.
- The air bag/pretensioner contains explosive materials, so contact a Ssangyong Dealer or Ssangyong Authorized Service Center when disposing or replacing it.
- The air bag/pretensioner components will be very hot after deployment. Do not touch them.
- Once the air bag/pretensioner system is triggered, the triggered air bag assembly should be removed from the vehicle and replaced with a new one.
- Do not attach any objects such as a sticker, scent bottle, or phone holder on the steering wheel pad and to the dashboard.
- Do not bang doors. It may cause malfunction in the front air bag.
- Hold only the outer rim of the steering so that the air bag can inflate without any hindrance.
- Do not hold and operate the steering wheel by crossing your arms. You could get seriously injured when the air bag deploys.

WARNINGS FOR AIR BAG (II)

- Do not place your face or chest near the steering wheel and dashboard. Also, do not allow anyone to place their hands, leg or face on the dashboard. The air bag cannot work properly.
- When the air bag/pretensioner inflates, it makes a loud noise and smoke. However, the smoke is a non-toxic nitrogen gas.
- When the air bag/pretensioner inflates, non-toxic gas will come out. This gas may cause skin, eyes or nose irritation. Wash it out with cold and clean water and consult your doctor if irritation continues.
- The windshield glass may be broken when the passenger's air bag deploys.
- When any repairs are needed for the steering wheel, or when an accident occurred without the air bag deployment, have the air bag system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- You could suffer secondary injuries caused by an inflated air bag such as an abrasion, a burn or injuries by broken glass. Non-toxic gas will come out when the air bag is inflated.
- If the severity of impact to the vehicle is not significant and the seat belts are enough to protect occupants, the air bags do not deploy to prevent any secondary injuries such as cuts, abrasions, or burns.
- Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.
- The driver's and passenger's air bags inflate during a severe frontal collision, and the side and curtain air bags inflate during a severe side collision or rollover. Typically, the air bags are not deployed during a rear collision. In most cases, the air bags does not inflate during a mild collision or some pole collisions. The air bag cannot protect the passenger from the impact created in a rear end collision accident.
- Do not impact the area where an air bag or impact sensor is installed with a hammer or similar hard tool. You could be severely injured by the unexpectedly deployed air bag. The side impact sensor built in the front seat door detects the pressure applied to the door. Therefore, applying impact on the door (e.g. shopping cart, basket ball) can activate the side air bag. Always make sure that the engine is turned OFF when checking the engine compartment.
- If the vehicle is submerged in water (carpet is wet, the water is up to the floor mat, etc.), never start the engine or turn ON the ignition key. As soon as the currents are supplied to the electronic systems, the air bag may deploy unexpectedly causing harm to the driver or passengers. Have the vehicle towed to the nearest Ssangyong Dealer or Ssangyong Authorized Service Center for necessary checks and services.

WARNINGS FOR AIR BAG (III)

- Unauthorized modifications to the genuine parts or use of after-market accessories, including side steps, other electronic devices, can adversely affect performance of the air bag system.
- Tow the vehicle with the ignition switch in OFF or ACC position. If a vehicle with side and curtain air bags is tilted to one side, the system can treat it as a rollover and activate the air bag system.
- When disassembling an air bag assembly, some integral parts can be deformed or damaged. If this is the case, the damaged/deformed part may not be engaged normally and can move out of its position, causing serious malfunction.
- The passenger's air bag is larger and stronger than the driver's air bag. Therefore, the passenger in the front passenger seat should sit in the center of the seat with the seat belt fastened. Failure to do so can result in serious injury or even death. The front passenger should move the seat in the rearmost position and sit upright.
- If the driver apply brakes suddenly, a passenger without the seat belt fastened can be thrown out from the vehicle or too close to the air bag during inflation. The unrestrained passenger will be severely injured or killed by the inflation of the air bag.
- No objects, such as cellular phone holder, cup holder, cassette holder, air freshener bottle, stickers, should be placed/attached over or near on the instrument panel where the passenger's air bag is installed. Do not install any accessories on the windshield or extra wide mirror on the inside rearview mirror. Any such objects may cause harm to the driver and passengers if the vehicle is in a collision severe enough to cause the airbag to deploy.

Secondary Injury Due To Air Bag Deployment

- If the air bag control module detects the impact during an accident, it transmits the signal to deploy the air bag. This signal triggers the explosion of the powder, which is included in the air bag module, and the air bag deploys in a very short time to protect the occupants. When the air bag inflates, there will be heavy noise, glare and smoke. You could suffer secondary injuries caused by inflated air bag such as an abrasion, a bruise, a burn or injury by broken glasses.

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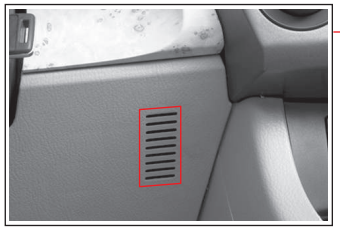
9

Ventilation, Heating, Air Conditioning and Air Purification System

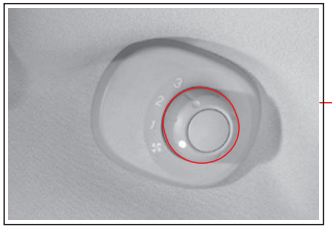
AQS and Ambient Temperature Sensor

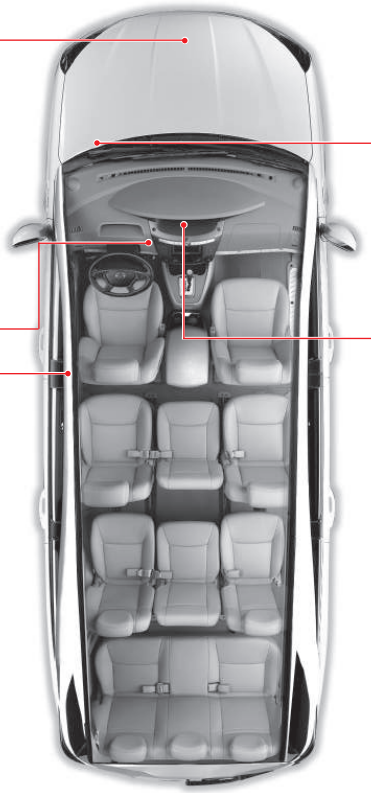


Interior Temperature and Humidity Sensor



Rear Fan Control Switch

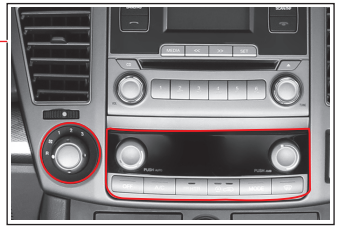




Sun Sensor



Control Panel (Auto type)

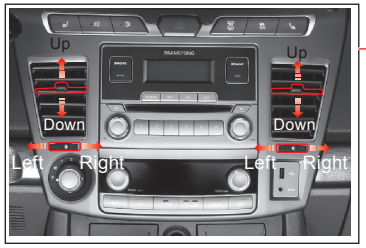


Control Panel (Manual type)

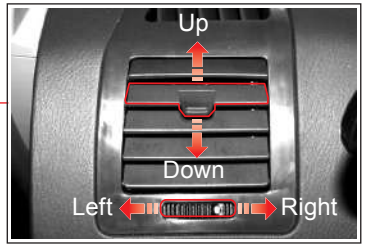


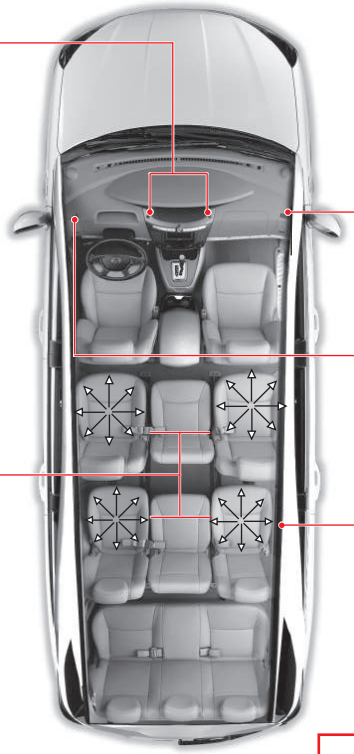
AIR VENTS

Front Vent (heating and cooling)

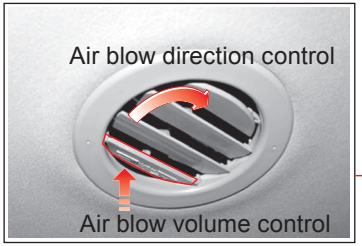


Front Vent (heating and cooling)

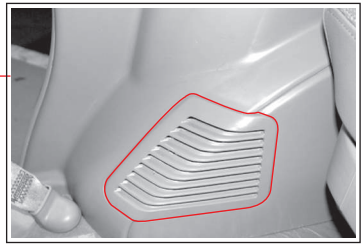




Rear Vent (cooling)



Rear Vent (heating)



Heating
Cooling

9

Refrigerant Specification & Capacity

ITEM	EU	GENERAL
Specification	R-1234yf	R-134a
Capacity	1,050 ± 30g	1,050 ± 30g

NOTE

Check the coolant specification before adding or replacing the coolant.



WARNING

- If you sleep while the air conditioner or heater is on, with all windows closed, you may suffocate to death.
- Continued operation in the recirculation mode may cause the interior to become stuffy and windows to fog. Use the recirculation mode for a short period of time.
- If exhaust gas comes in, there is danger of carbon monoxide poisoning. Use the recirculation mode for a short period of time when driving through an area of smoke or fumes. Be sure to switch back to fresh air mode after passing through an area of smoke or fumes.
- If you sleep while operating the air conditioner or heater with all the windows closed, you may suffocate to death due to lack of ventilation. When you operate the air conditioner or heater, ventilate frequently.
- Never leave a child or a handicapped person alone in the vehicle with the air conditioner or heater on in hot or cold weather. The child or handicapped person can be in serious danger by the heat and lack of oxygen.
- The coolant is flammable which can cause the fire by the gas leakage or static, so be very careful when handling the coolant (R-1234yf).

CAUTION

- If your vehicle has been parked in direct sunlight, open all windows to extract heat before turning on the air conditioning (A/C).
- Operating the air conditioning (A/C) for a long time while the vehicle is parked may cause the engine to overheat.
- When driving up a long hill for an extended period of time, turn on and off the air conditioner every 3 to 5 minutes.
- To prevent battery discharge, do not run the fan for an extended period of time when the engine is not running.
- To maintain the system at its optimum state and to keep the lubrication of the air conditioner compressor and related components, run the air conditioner at low speed once a week.
- Do not stop the engine when the air conditioner is operating. It may produce an unpleasant odor trapped in the duct. Turn the fan off and wait for a few minutes in the fresh air mode before stopping the engine.
- If you start the engine with the air conditioner on, the engine may not start easily and the engine idling can be unstable causing the vehicle to vibrate. Be sure to turn off electrical systems such as the fan.
- When the air conditioner is not used in periods, odors will come out. Run the air conditioner for 20 ~ 30 minutes with the doors opened and you could remove the odors.
- During the winter when the air conditioner is not used regularly, run the air conditioner once or twice every month for 5 ~ 10 minutes.
- If the air conditioner is not used regularly, the lubricant in the A/C compressor will not circulate causing the A/C to malfunction. Be sure to turn the air conditioner at low speed.
- When a sudden acceleration is attempted while the air conditioner is on, you may hear a clicking sound from the magnetic clutch in compressor. This is a normal operation to lower internal pressure of the compressor and to protect the air conditioning system.

SUPPLEMENTARY HEATING DEVICE*

The DI engine equipped vehicle has the supplementary heating devices to increase the heating effect before the engine coolant is fully heated. The supplementary heating devices are as follows:

- **PTC** (Positive Temperature Coefficient)

PTC (Positive Temperature Coefficient)

This supplementary heater is an electrical air heating type and installed on the heater outlet port. This device improves the heating effect by increasing the temperature of flowing air into the passenger room.

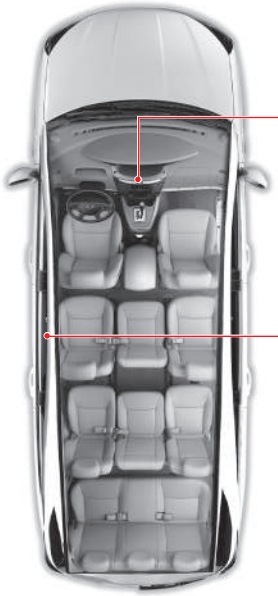
This device is operational/non-operational when the engine control unit supplies/cuts off the voltage to PTC according to the coolant temperature and the ambient temperature.

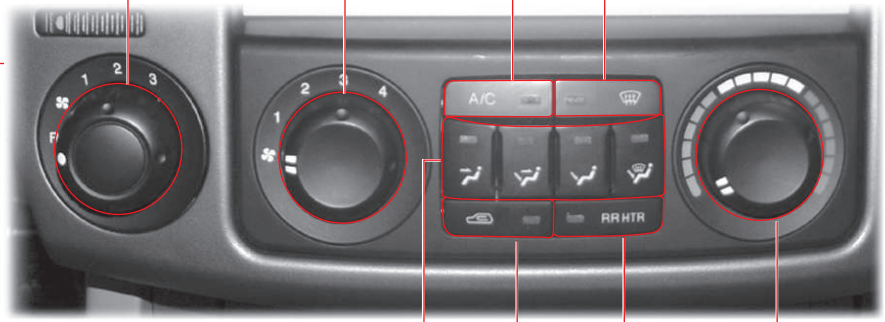
▶ Operational Condition

This device is activated when the temperature switch is at any position other than “OFF” position and the coolant temperature and the ambient temperature is within a specified range.

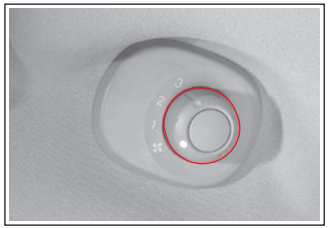
▶ Non-operational Condition

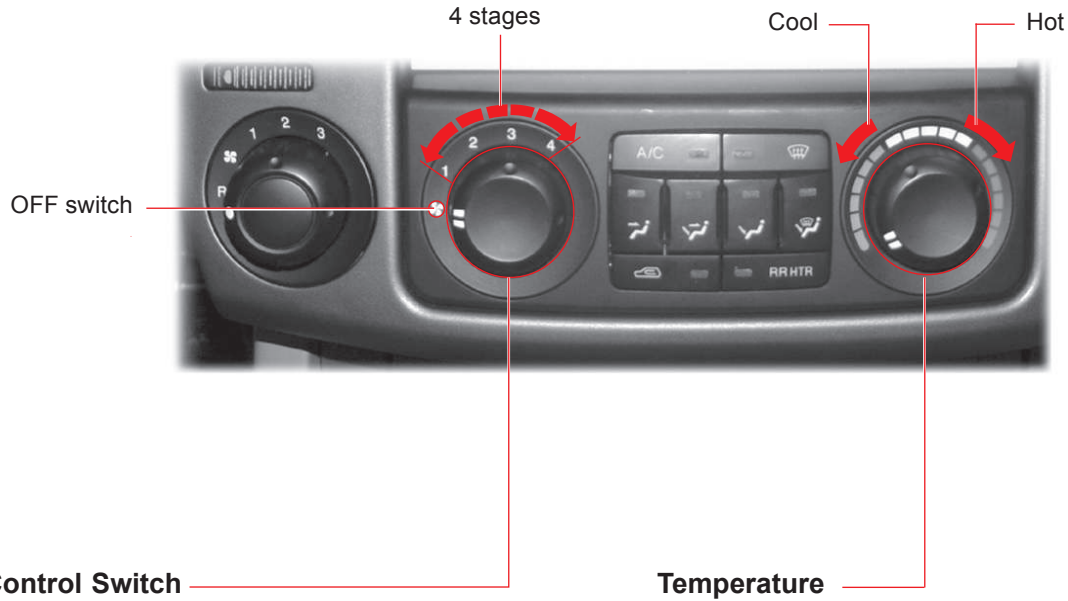
- The temperature switch is at “OFF” position
- Defective ambient temperature sensor
- During engine cranking
- Too low battery voltage
- During pre-glowing process (indicator ON)





Rear Fan Control Switch





Fan Control Switch

The fan speed can be adjusted in 4 stages.

CAUTION

If the air conditioner switch is turned off, the air conditioner does not work even when the fan switch is operated. However, the air flows due to fan operation.

Temperature Control Switch

Adjust the temperature of flowing air by turning the dial.

Red direction: Hot

Blue direction: Cool

White direction: Bi_level zone

Air conditioner ON/OFF switch

To turn on the air conditioner, press this switch when the fan speed switch is at any positions except OFF ( ) position.

At this moment, the indicator in the switch comes on.

To turn off the air conditioner, press the switch again.

Defroster switch

When you press the switch, the airflow direction will be changed to windshield and door glasses, the air conditioner operates automatically and outside air comes in. When the defrosting is completed, press the switch to return to normal operations.



Air source selection switch

By pressing the switch, fresh air intake mode and recirculation mode changes alternatively. When the recirculation mode is selected, the indicator in the switch comes on. To defog, set the air source to the fresh air intake mode and use the defroster mode.

WARNING

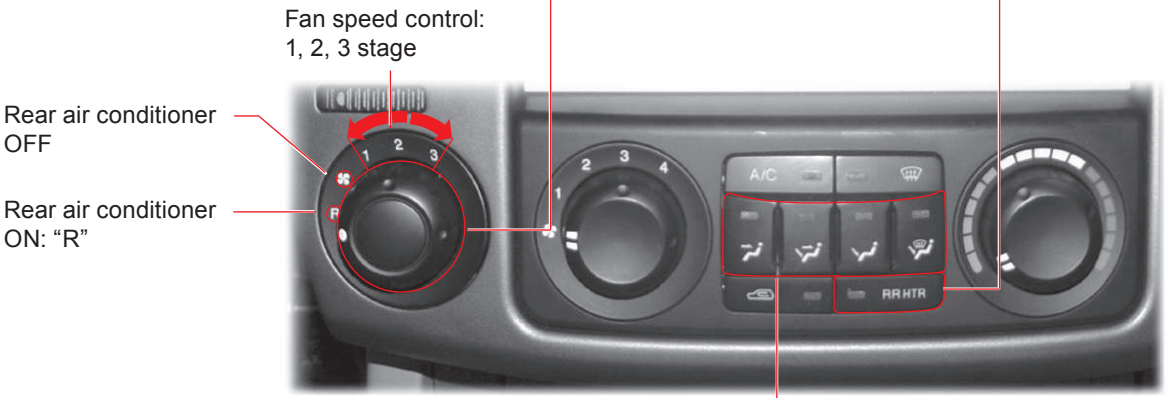
- Use of recirculation mode for a long period of time can cause stuffiness, headache, drowsiness, and fogged window.
- If exhaust gas comes in, there can be danger of Carbon monoxide toxication. Set to fresh air intake mode after passing through dusty or polluted area.

Rear air conditioner switch

- Rear air conditioner OFF:
- Fan speed control: 1, 2, 3 stage
- Rear air conditioner ON: “R” position

Rear heater switch

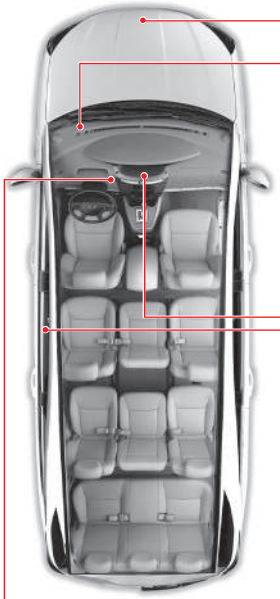
- Rear heater ON
- This function is not available when the rear air conditioner switch is at ( ) position.



Mode Switch

By pressing the switches, the air flow mode changes.

Vent	Bi-level	Floor	Defroster and Floor



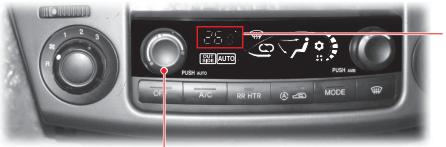
Ambient Temperature Sensor



Sun Sensor



Air Conditioner Control Panel

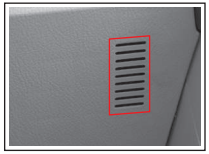


Fault Code Display

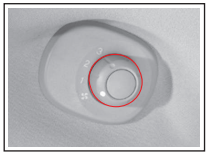
This display blinks for about 5 seconds when the system is defective or the engine is started.

Auto Button

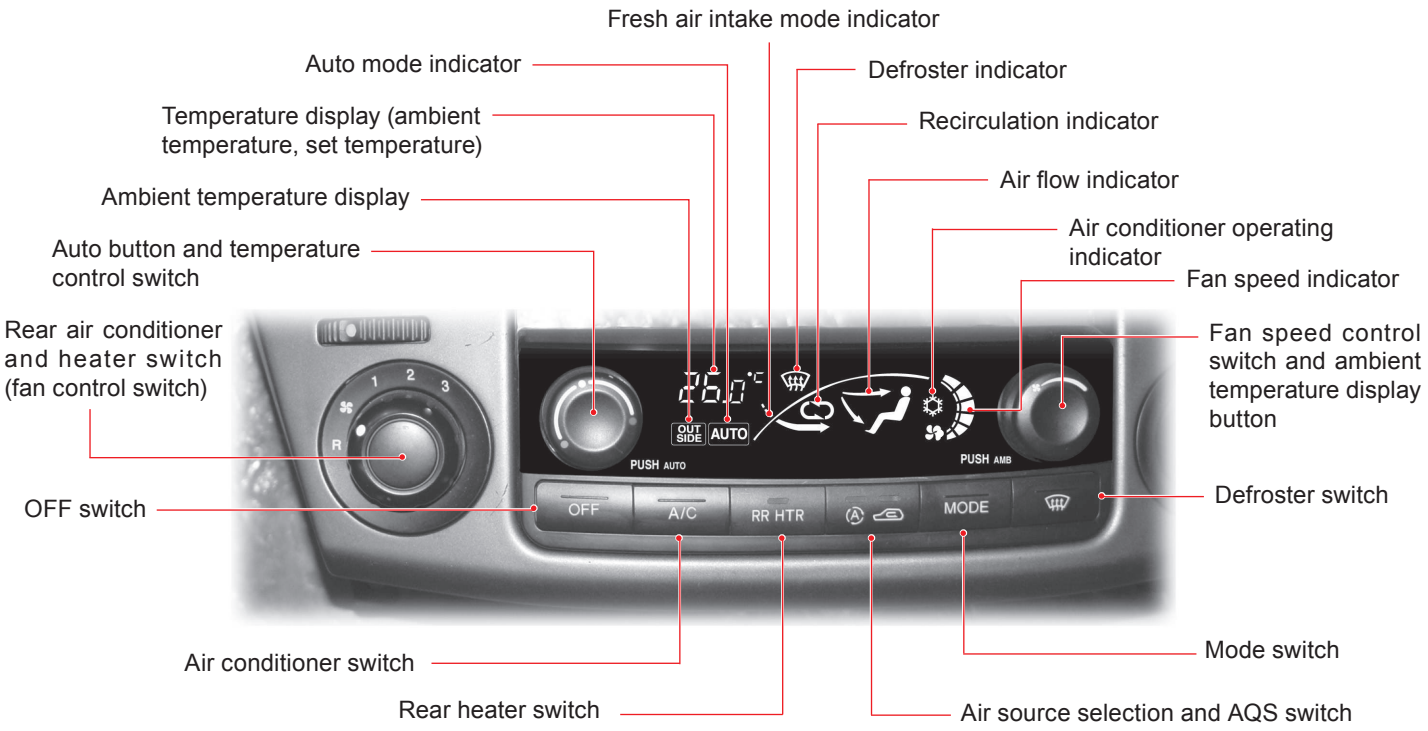
Interior Temperature and Humidity Sensor



Rear Fan Control Switch



- If the Auto button is pressed, the temperature of the passenger compartment is automatically maintained according to the set temperature.
- By operating the relevant switch of the automatic air conditioner, you can manually control the air conditioner operation, air flow direction, fan speed and air source.
- To turn off the air conditioner and heater, press “OFF” button (OFF).
- If you use wiper during A/C operation, the air conditioner may be automatically changed to defroster mode according to the wiper operating conditions (A/C ON, fresh air intake mode).



Auto Operation Mode

When you press Auto button, the “AUTO” indicator is displayed on the VFD and the temperature of the passenger compartment is automatically maintained according to the set temperature.

When you press Auto button during manual operation mode, the system is changed to Auto operation mode.

Manual Operation Mode

When you use fan speed control switch, air conditioner switch or mode switch during auto operation mode, the “AUTO” indicator on the VFD goes out and the air conditioner system can be controlled manually.

Auto Button And Temperature Control Switch

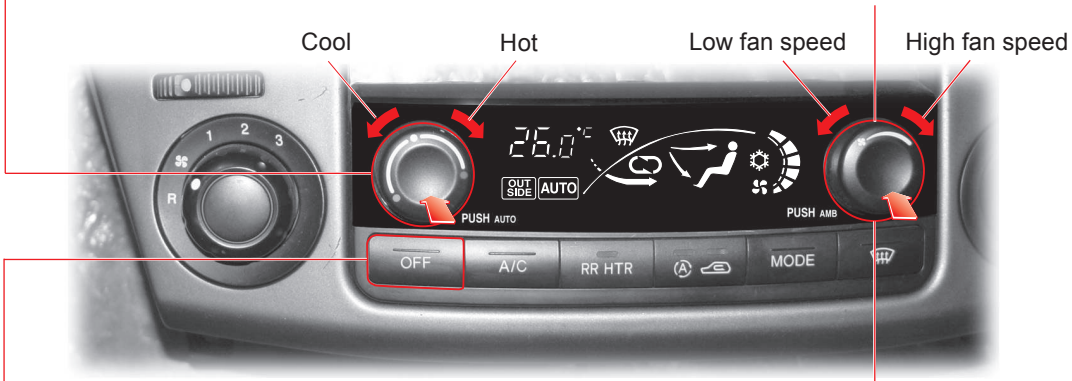
When you press Auto button, the “AUTO” indicator is displayed on the VFD and the temperature of the passenger compartment is automatically maintained according to the set temperature. To adjust the temperature and fan speed, turn the switch as required. When you press Auto button during manual operation mode, the system is changed to Auto operation mode.

Ambient Temperature Display Button

When you press this button, the “OUTSIDE” indicator appears and the ambient temperature is displayed on the VFD for about 5 seconds.

CAUTION

The ambient temperature may not display the actual ambient temperature due to engine heat or ground heat.



OFF Switch

To stop the air conditioner operation, press this switch.

Fan Speed Control Switch

To control the fan speed, turn this switch. When turning this switch in Auto mode, the “AUTO” indicator goes out and the system is changed to manual mode.

CAUTION

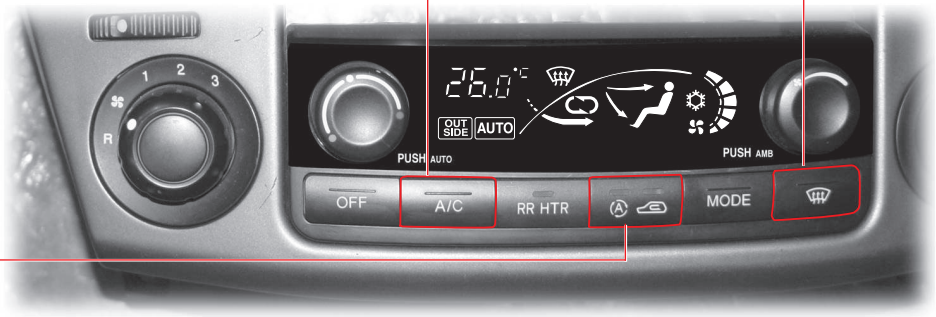
If the air conditioner switch is turned off, the air conditioner does not work even when the fan switch is operated. However, the air flows due to fan operation.

Air Conditioner Switch

When you press the switch, the (⎔) indicator comes on and the air conditioner starts to operate, however, the “AUTO” indicator goes out. When you press the switch again, the air conditioner stops operation and indicator goes out.

Defroster Switch

When you press the switch, the airflow direction will be changed to windshield and door glasses, the air conditioner operates automatically and outside air comes in. At this moment, the (⛆), (⎔), and (↘) indicators come on. When the defrosting is completed, press the switch to return to normal operations.



Air Source Selection and AQS (Air Quality System) Switch

By pressing the switch, fresh air intake mode, recirculation mode, and AQS ON/OFF changes alternatively. For details, refer to the AQS section.

⚠ CAUTION

To change the air source to recirculation mode during auto air conditioner operation, get into manual air conditioner mode, then press the air source selection switch.



AQS system activated



AQS system deactivated, recirculation mode



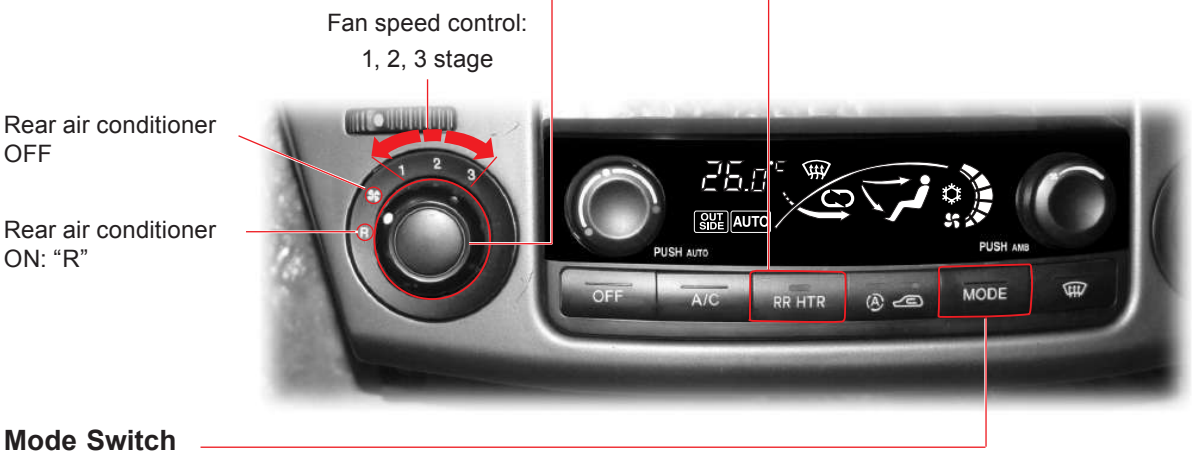
AQS system deactivated, fresh air intake mode

Rear air conditioner switch

- Rear air conditioner OFF:
- Fan speed control: 1, 2, 3 stage
- Rear air conditioner ON: “R” position

Rear heater switch

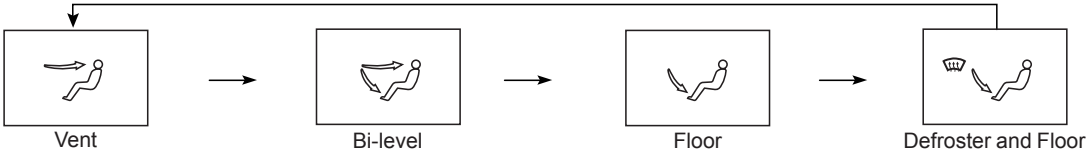
- Rear heater ON
- This function is not available when the rear air conditioner switch is at ( ) position.



Mode Switch

By pressing the switch, the air flow mode changes.

When you press this switch in auto air conditioner operation (“AUTO” indicator appears), the system is changed to manual air conditioner mode (“AUTO” indicator disappears).



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Inside

1. Press the defroster switch.
2. Adjust the fan speed with the fan speed control speed.
3. To quickly remove the fog on the glass, set the switch at high speed position.
4. To prevent the fog generating on the glass, setting the air source selection switch to the fresh air intake mode is recommended.

Outside

1. Press the defroster switch.
2. Adjust the fan speed with the fan speed control speed.
3. To quickly remove the fog on the glass, set the switch to high speed position.
4. Set the temperature control switch to hot position.

⚠ CAUTION

- To prevent the fog generating on the glass, setting the air source selection switch to the fresh air intake mode is recommended.
- An extended air conditioner operation in bi-level mode or defrost mode may cause the fogged outside glass due to high temperature difference between inside and outside of the vehicle. In this case, change the air flow to vent mode and use the low fan speed.
- Especially in winter and summer, to avoid glass fogging, remove any obstacles such as snow or leaves on the air inlets.

Automatic air conditioner



Manual air conditioner



NOTE

When you press this switch, the air conditioner turns on automatically and the system selects the fresh air intake mode.

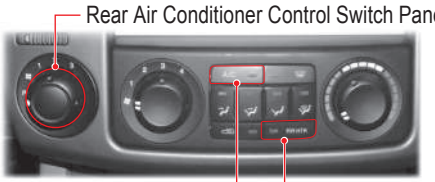
REAR AIR CONDITIONER

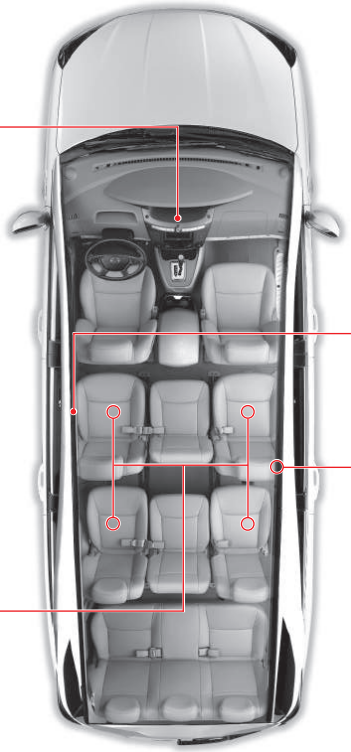
The appearance of rear air conditioner switch in automatic air conditioner equipped vehicle is different from that of manual air conditioner equipped vehicle, but its functions are same.

- **AUTO**

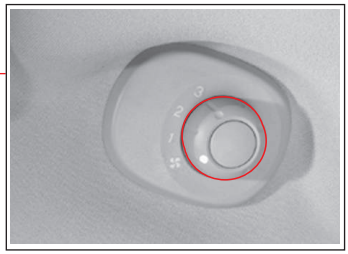


- **MANUAL**

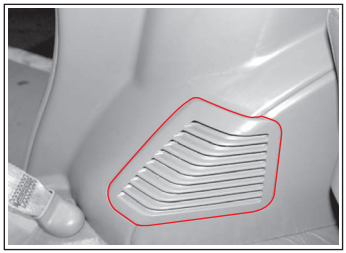




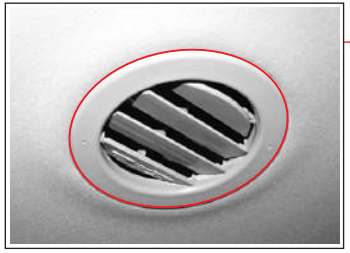
Rear Fan Speed Control Switch



Rear Heater Vent



Rear Air Conditioner Vent



9

1. Position the rear air conditioner control switch to any position except (❄) position.



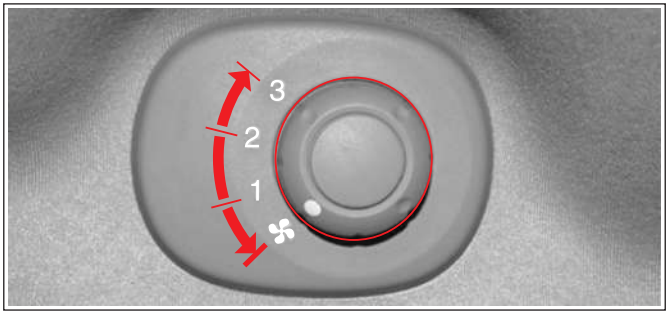
2. To operate the heater, press “RR HTR” switch. To operate the air conditioner, press “A/C” switch.



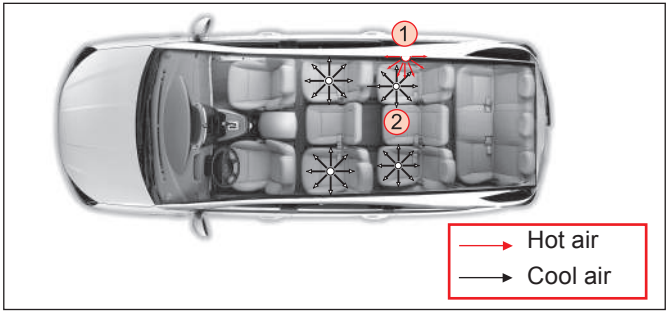
⚠ WARNING

If the “A/C” switch or “RR HTR” is turned off, the air conditioner does not work even when the rear air conditioner switch is operated. However, the air flows due to fan operation.

3. When the rear air conditioner switch is at “R” position, the fan speed can be controlled by this switch.



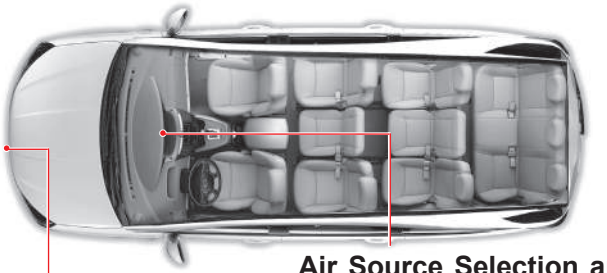
4. Hot air flows out from (①) vent when heating, and cool air flows out from (②) vent when cooling.



⚠ CAUTION

Do not operate the fan for a long time when the engine is not running. The battery could be discharged.

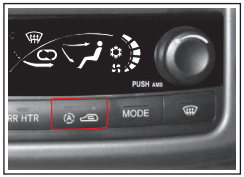
AIR SOURCE SELECTION AND AQS (AIR QUALITY SYSTEM) SWITCH



AQS Sensor



Air Source Selection and AQS (Air Quality System) Switch



AQS System?

Air Quality System (AQS) automatically changes the air source selection to recirculation mode when polluted air is detected through AQS sensor. The air source selection returns back to fresh air intake mode after a specified period or the polluted air is disappeared.

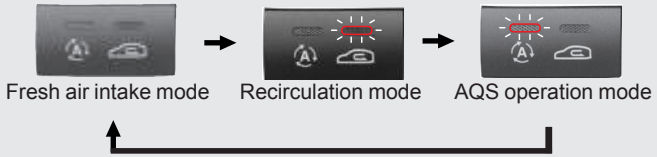
NOTE

The AQS also can be operated according to the vehicle's driving conditions.

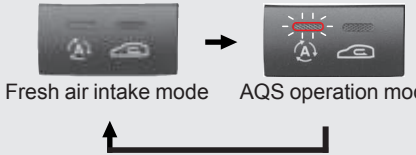
Air Source Selection and AQS (Air Quality System) Switch

By pressing the switch, the mode changes as below:

Manual Operation ("AUTO" indicator OFF)



Auto Operation ("AUTO" indicator ON)

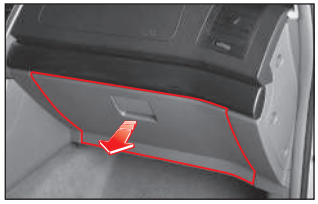


To change the air source to recirculation mode in AUTO mode, get into MANUAL mode first, then press the air source selection switch.

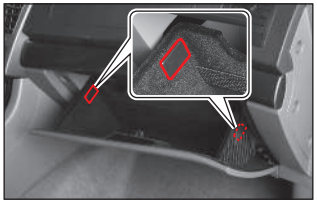
9

REPLACING AIR CONDITIONER FILTER

Replace the air conditioner filter at every 10,000 km of driving. However, if the vehicle is operated under severe conditions such as dusty road, unpaved road, and excessive air conditioner and heater operation, shorten the replacement interval.

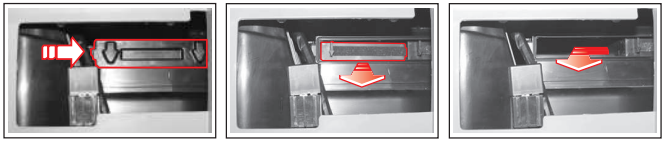


1. Open the glove box.

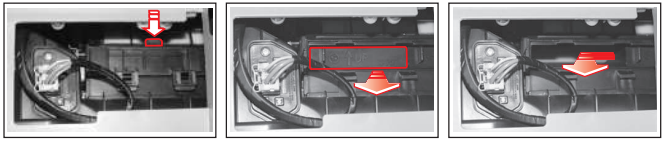


2. Remove the glove box from dash panel by moving both holders to arrow direction.

Auto



Manual



3. Remove the filter cover while pushing the holder to arrow direction.
4. Pull out the first filter.
5. Slightly move the second filter to left side and pull it out.

Replace the air conditioner filter when

- Unpleasant odor is generated at first operation after long unused period.
- Cooling and blowing capacity are decreased.

CAUTION

- Do not apply excessive force to the holders when removing the glove box. It may cause a deformation of holders and results in a loose installation.
- Replace both air conditioner filters at a time and pay attention to the installing direction.

6. Replace the filters with new ones. Install in the reverse order of removal. Make sure that the filters are facing correct direction.

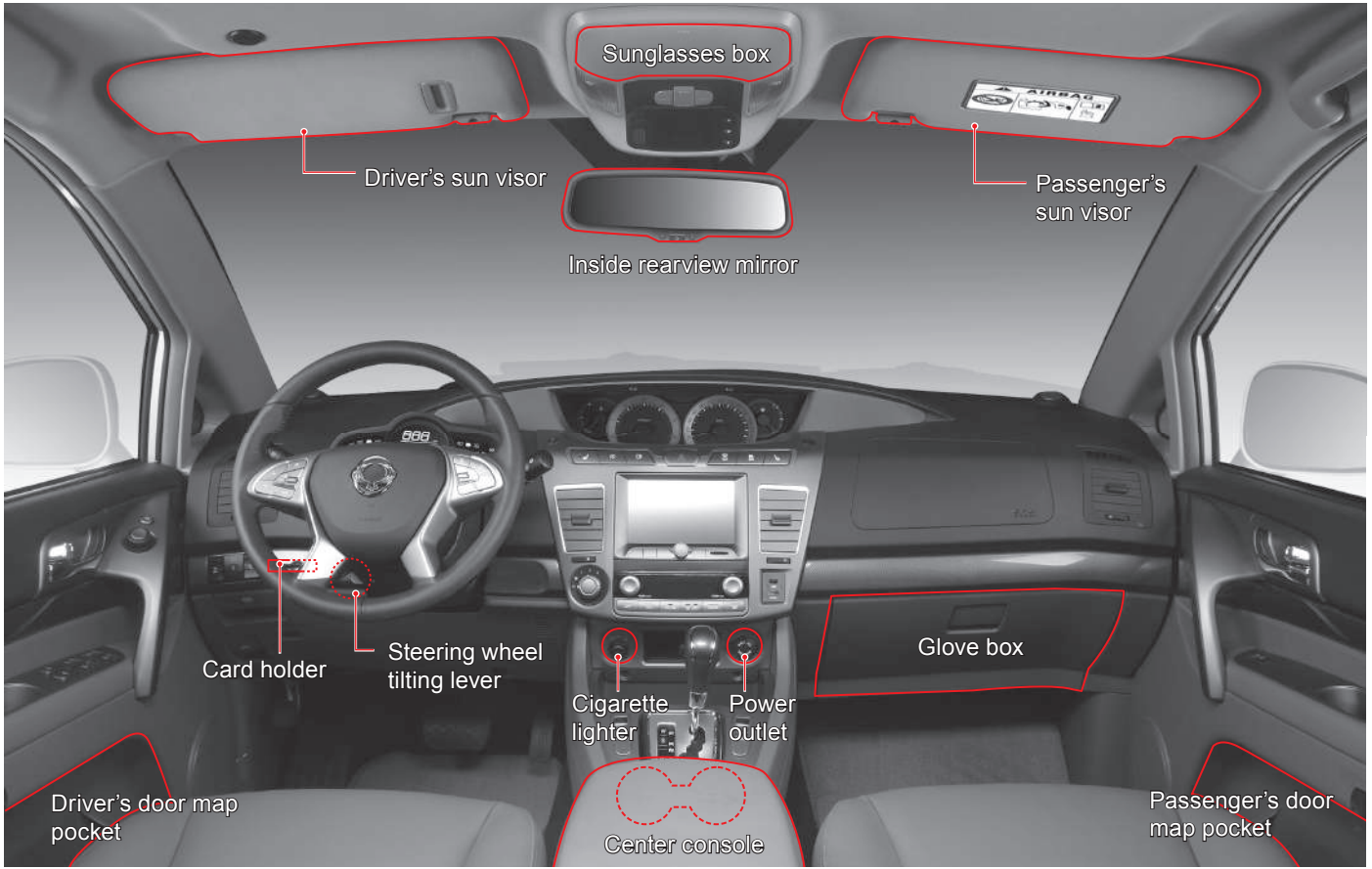
Auto	Manual
	
The arrow should face upward.	The arrow should face downward.

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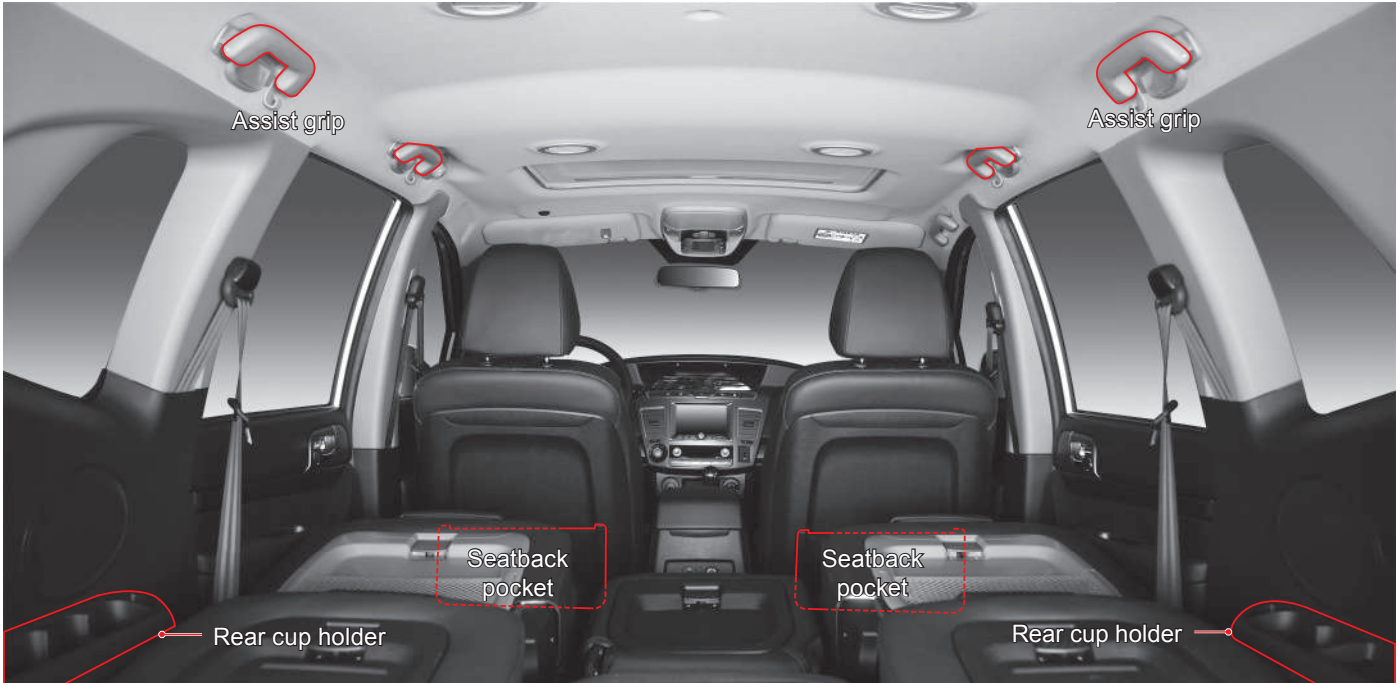
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10

Convenience Devices



※ Actual appearance may differ from the image shown above.

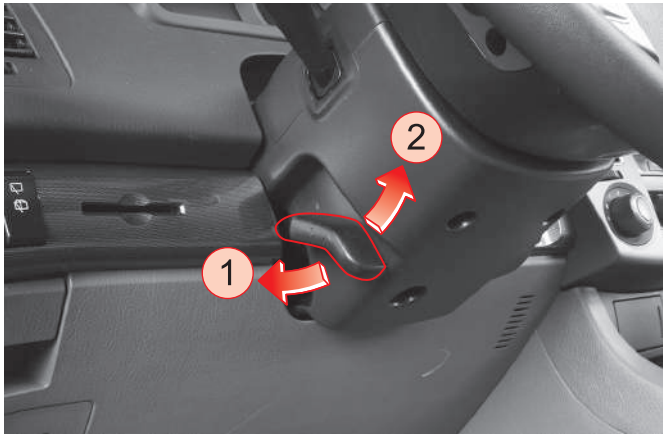


※ Actual appearance may differ from the image shown above.

WARNING

- Driving with any storage box open can cause injury in case of an accident or a sudden stop. Keep all the storage boxes closed while driving.
- Do not store any flammable items or disposable lighter in the console box or other space. In hot weather, they can explode and cause a fire.
- When vehicle is in motion, the liquid may spill out. Spilled liquid can damage the vehicle and cause burns if it is hot. Do not use cup holder while vehicle is in motion.

ADJUSTABLE STEERING WHEEL (TILTING)



The steering wheel can be adjusted up or down to the desired position. To adjust the steering wheel, move the control lever to arrow direction ① and adjust the wheel up or down to the proper position. To lock the steering wheel at the position, move the control lever to arrow direction ②.

CAUTION

- Control of vehicle can be lost. Do not adjust steering wheel position while vehicle is moving.
- Before driving, make sure that the steering wheel is locked.
- Never hold the steering wheel to the extreme right or left for more than 10 seconds with the engine running. Holding the steering wheel for more than 10 seconds in either position may cause damage to the power steering pump.
- If the temperature of the power steering fluid is low, sometimes the power steering temporarily delays the vehicle activation. Therefore, start off the vehicle after idling for up to 3 minutes in the winter months (less than -10°C).
- When cleaning the steering wheel, do not use organic solvents such as thinner, alcohol or gasoline. These solvents can damage the heater and the surface of the steering wheel.

HORN



Press the horn pad on the steering wheel to sound the horn.

CAUTION

The sound of the horn can startle pedestrians. Use only when needed.

INSIDE REARVIEW MIRROR*

The inside rearview mirror can be adjusted up, down or side ways to obtain the best rear view.

ECM (ANTI-GLARE AUTO ADJUSTMENT FUNCTION)*



The reflection rate of the inside rearview mirror can be automatically adjusted by the light intensity from a vehicle behind you by pressing the anti-glare auto adjustment switch. While pressing the switch, its corresponding indicator comes on. Pressing the switch once more turns off the indicator and deactivates the function.

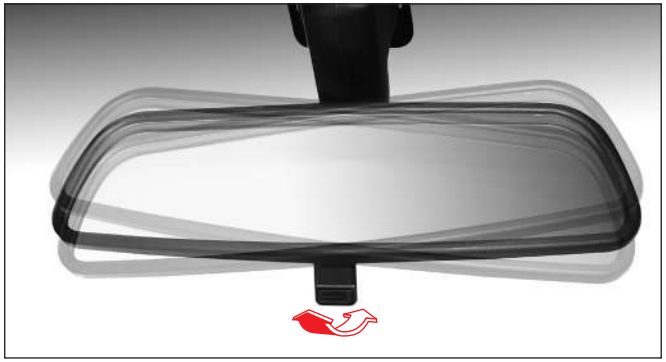
CAUTION

- Under the following conditions, automatic anti-glare function may not operate properly.
- When the rear vehicle's headlamp is not beamed directly to the inside rearview mirror's sensor.
- When the rear window has a dark tinted glass.
- When the gear selector lever is in the R position, automatic anti-glare function will be cancelled to obtain the best rearview.
- For your safety, never adjust the mirror while the vehicle is in motion.

WARNING

- The electrolyte may come out when the mirror is broken. Do not allow it to contact your skin or eyes. If you accidentally get it in your eyes, flush with water and see your doctor.
- For your safety, adjust the mirror before driving off the vehicle.

MANUAL TYPE INSIDE REARVIEW MIRROR



Manual Day/Night Adjustment

You can manually adjust the rearview mirror by pushing or pulling its adjusting lever to avoid blindness at night due to other vehicles behind you.

CAUTION

When you are not able to see the back of your vehicle at night, adjust the rearview mirror by holding the mirror body and pushing or pulling it to a desired angle so that you can secure a clear rear view.

WARNING

For your safety, adjust the mirror before driving off the vehicle.

SUNGLASSES BOX



Press the button to open the console and place the sunglasses onto the hook.

CAUTION

- If glasses falls down, it may be damaged. Fix it firmly.
- The unclosed console can block your rearview. Also, the console can injure you in an accident or a sudden stop. Therefore, close the console before driving off your vehicle.
- Do not store any item that can be deformed in a hot temperature.
- Do not store any heavy items inside the console. When it falls out of the console, occupants may get injuries.

CENTER CONSOLE

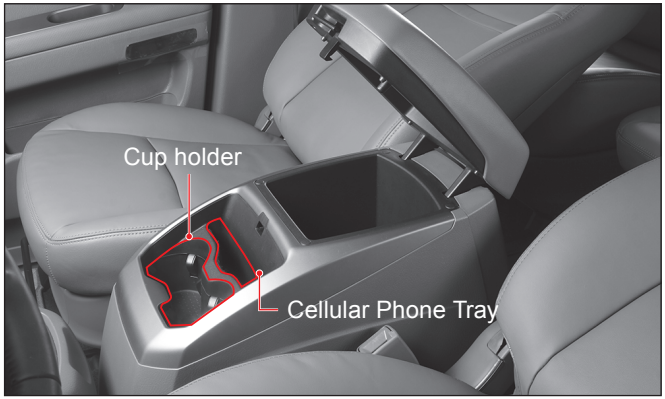


Push the button and lift the cover lid to open in order to store small items. It can be used as an armrest for both the driver and passenger.

CAUTION

Do not store any flammables including disposable lighters in the console box or other space. In hot weather, they may explode and cause a fire.

FRONT CUP HOLDER AND CELLULAR PHONE TRAY



The holder is located in order to put the cup or ashtray into it.

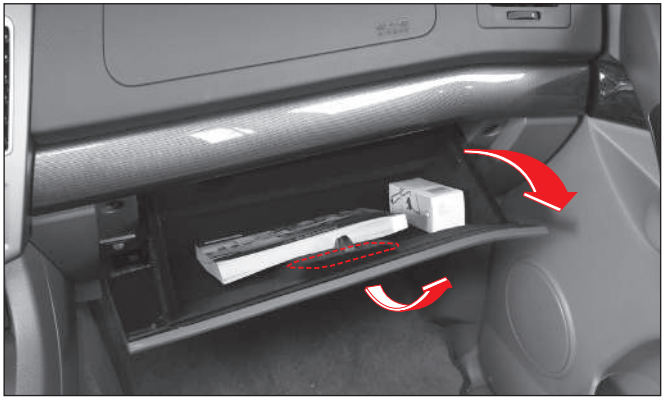
CAUTION

- When the vehicle suddenly brakes or starts, liquid may spill.
- Danger of burning! Do not store a hot beverage in the cup holder.
- Do not place any can or bottle under the direct sunlight or in the hot vehicle as it may burst.

Cellular Phone Tray

The cellular phone tray can be used to store small personal belongings, such as cell phones, purses, wallets.

GLOVE BOX



Pull up the lever to open the glove box.

CAUTION

- Driving with the glove box lid open can cause injury in case of an accident or a sudden stop. Keep glove box lid closed when driving.
- Do not store any flammable materials such as cigarette lighter in the glove box or other space. In hot weather, it may explode and cause a fire.

NOTE

The glove box lamp comes on when opening the glove box with the tail lamp on.

CARD HOLDER



Tickets and cards can be stored.

MAP POCKET

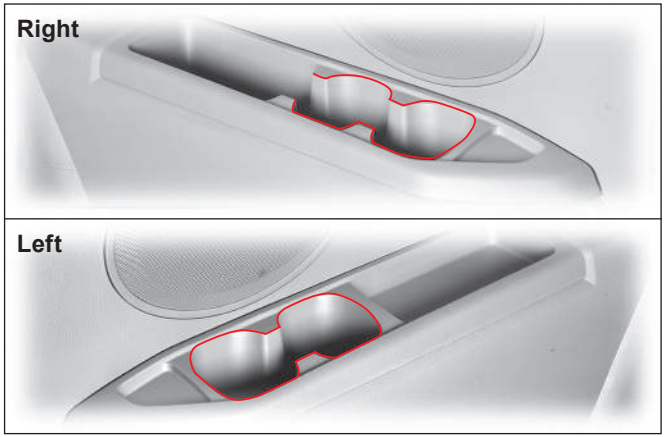


The map pocket is located on each front door. Maps, magazines, newspapers, and other items can be stored.

CAUTION

- Do not open the door for an extended period of time while the room lamp switch is pushed in with the engine stopped. The battery could be discharged.
- A cold/hot beverage placed in the map pocket may be thrown out causing a burn or an accident while driving.
- Be careful with the leftover beverage not to be spilled.

REAR CUP HOLDER



There cup holders are on the left and right sides of the rear 2nd row seats.

WARNING

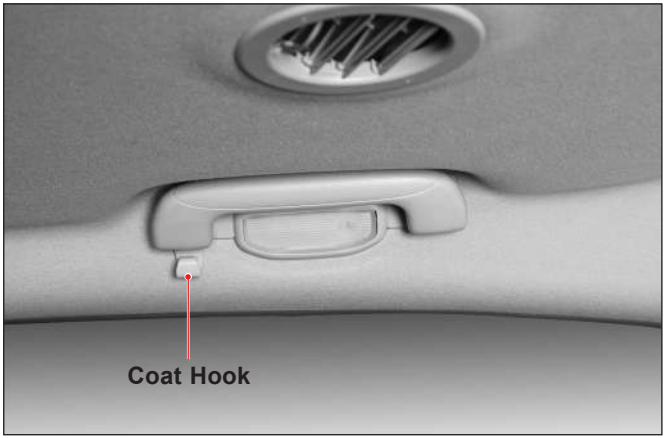
When vehicle is in motion, the liquid may spill out. Spilled liquid can damage the vehicle and cause burns if it is hot. Do not use cup holder while vehicle is in motion.

ASSIST GRIP



Assist grip is not installed on the driver side.

ASSIST GRIP AND COAT HOOK



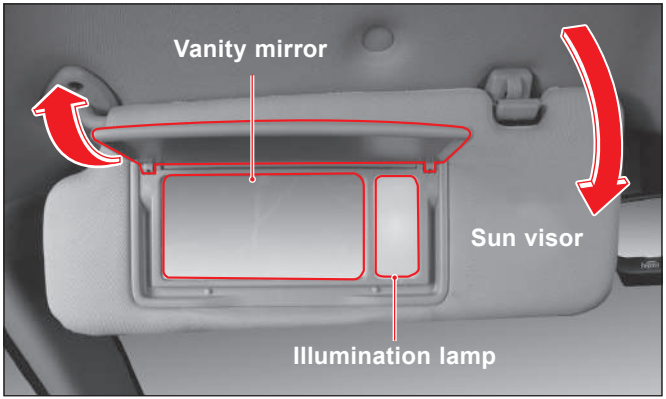
A coat hook is installed on the grips above the rear door.

TICKET HOLDER



You can store a ticket in the ticket holder located at front of the driver's sun visor.

SUN VISOR AND ILLUMINATION LAMP



Sun visor

Pull the sun visor down or to the side, if necessary.

Vanity mirror

Swing the sun visor down and lift up the cover to reveal the mirror.

Illumination lamps (driver's and passenger's seats)

Swing the sun visor down and lift up the cover to illuminate the lamp.

CAUTION

- If you move the sun visor or use the vanity mirror or ticket holder on the sun visor while driving, it may cause careless driving or driver's visibility to be obscured, resulting in a traffic accident.
- If you want to operate the sun visor, stop the vehicle first.

CIGARETTE LIGHTER



To operate the cigarette lighter, press it in all the way down. When it becomes heated, it automatically pops out and is ready for use.

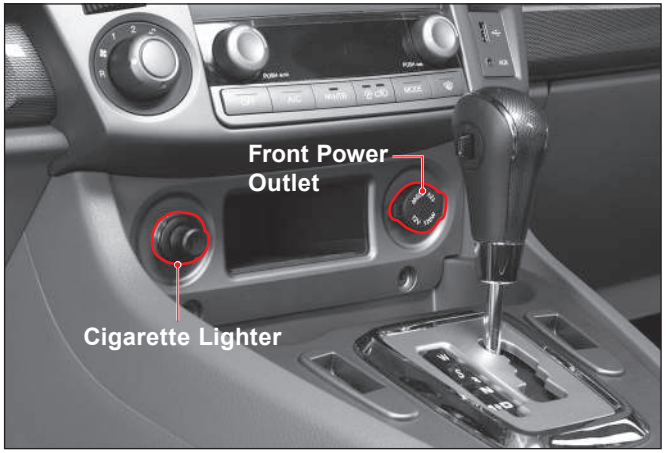
WARNING

- When the cigarette lighter does not automatically pop up after 30 seconds, there is a danger of overheating. If this happens, pull it out and have the problem corrected by Ssangyong Dealer or Ssangyong Authorized Service Center.
- Inserting your finger into the cigarette lighter outlet can cause burns or electric shock.
- The barrel of the cigarette lighter becomes very hot when it is fully charged. When touched by or dropped on bare skin, this may cause burns. Dropping the hot lighter can cause damage to a car seat or even start a fire.
- Use only the genuine cigarette light in the cigarette lighter shock. To prevent from electrical damage and fire, never use any other electric device such as shaver, vacuum cleaner or coffee pot.

CAUTION

Do not tap the cigarette lighter strongly to clean up. That may damage the coil.

FRONT POWER OUTLET



An auxiliary power outlet for extra electrical devices is installed. This power outlet supplies power when the ignition key is in the “ACC” or “ON” position.

CAUTION

Keep the power outlet cover closed if not in use. Electrical defects can occur if objects other than power outlet plugs or water gets in. This will prevent the socket from becoming clogged or short circuiting.

WARNING

- For the extra electrical devices, you must use this power outlet. If you alter the vehicle’s wire lines and leave the wires to hang freely, it could cause an accident like a fire.
- Abide by the nominal capacity of 120W.
- Do not put a finger into the outlet. It may cause an electric shock.
- The battery can be discharged if the power outlet is used excessively when the engine is not running.

REAR POWER OUTLET (REAR SIDE OF CENTER)

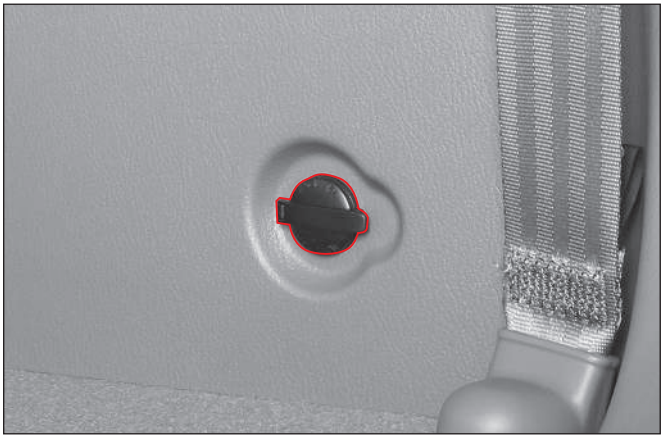


An auxiliary power outlet for extra electrical devices is installed. This power outlet supplies power when the ignition key is in the “ACC” or “ON” position.

CAUTION

Keep the power outlet cover closed if not in use. Electrical defects can occur if objects other than power outlet plugs or water gets in. This will prevent the socket from becoming clogged or short circuiting.

REAR POWER OUTLET (RIGHT SIDE OF FOURTH ROW SEAT)



This power outlet can be found at right side of body wall when you raise the fourth row seat.

WARNING

- For the extra electrical devices, you must use this power outlet. If you alter the vehicle’s wire lines and leave the wires to hang freely, it could cause an accident like a fire.
- Abide by the nominal capacity of 120W.
- Do not put a finger into the outlet. It may cause an electric shock.
- The battery can be discharged if the power outlet is used excessively when the engine is not running.

USB CHARGE PORT*



You can charge your smart phones or tablet devices by using this port.

- Connect a USB cable connected to your device to the USB charge port with the engine running. If it is connected correctly, the indicator on the USB charge port is illuminated.
- For charging progress, check the display of your device.

CAUTION

- Using this port to charge your device with the ignition turned OFF may run down the vehicle battery faster.
- Be careful to avoid contamination from foreign matter or moisture which can damage the USB charge port.
- Do not connect a device with current consumption of higher than 2.1 A to this port.

SEATBACK STORAGE POCKET

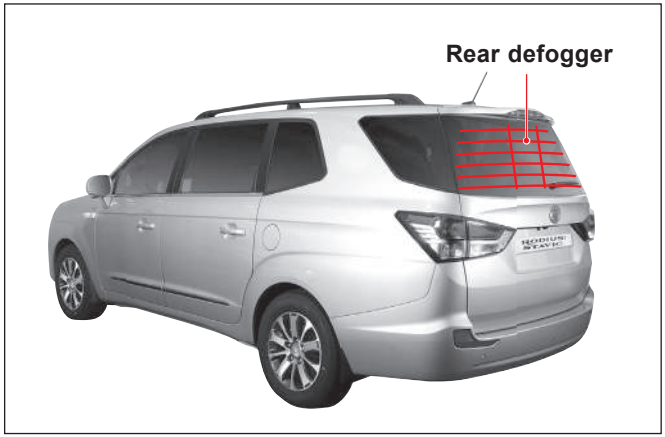


The front seatback storage pocket is provided to store small personal properties.

WARNING

Do not store the scissors, knife or any object with too big size in the seatback pocket. If so, it may cause the personal injury in the event of sudden braking or collision.

REAR DEFOGGER



There are heating grids on the tailgate glass. Be careful not to damage the heating grids while cleaning inside of the tailgate window.

CAUTION

Do not coat the tailgate window with commercial anti-glare film. When the metal anti-glare film and two-tone anti-glare film is used, the sensitivity of the heating grids can be deteriorated.

REMOVABLE ASHTRAY



This portable ashtray can be easily placed on where you want. Tab the ash off your cigarette.

WARNING

To avoid danger of fire, do not accumulate inflammable materials, such as garbage or cigarette butts, in your ashtray and make sure the cigarettes are completely extinguished.

ROOF RACK*



If the vehicle has a roof rack, you can load things on top of your vehicle.

When loading, stowage on the vehicle should not damage the vehicle as well as not interfere with the sunroof operation (for sunroof equipped vehicle).

Use any auxiliary equipment for loading, such as a carrier, considering the vehicle condition and safety.

NOTE

It is recommended to put cloth or cushions between stowage and roof to protect them.

WARNING

- In case the sunroof is equipped, do not position roof rack loads that could interfere with opening of the sunroof.
- The following specification is maximum weight when loading cargo or luggage.
- Roof rack: 45 kg (99 lbs.) evenly distributed
- Loading cargo or luggage above specification on the roof rack may damage your vehicle.
- When you carry large objects, never let them hang over the rear or the sides of your vehicle.
- To prevent damage or loss of cargo as you are driving, check frequently to make sure the luggage carrier and cargo are still securely fastened.
- Always drive your vehicle at a moderate speed.
- Loading cargo or luggage over specification on the roof rack may damage stability of your vehicle.

CAUTION

When loading the cargo on the roof rack over the vehicle equipped with the sun roof, be careful not to interrupt the sun roof operation.

AUDIO SYSTEM

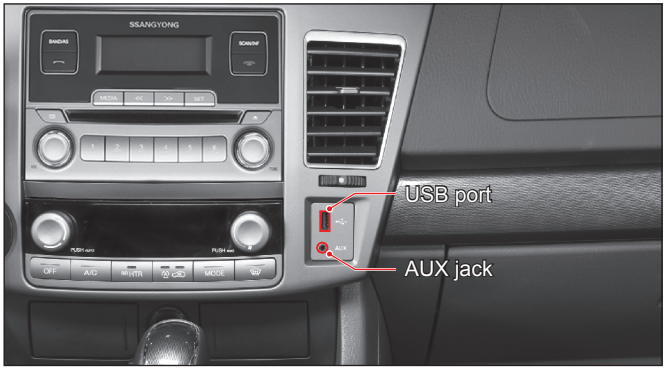


For detailed information for the audio system, refer to the audio operation manual provided with this manual.

CAUTION

- An illegal copy of a CD may cause a malfunction in the audio head unit and abnormal replay. Use only original CD.
- Incompatible discs may cause a malfunction in the system. Use only compatible discs. Please refer to the audio manual to check disk compatibility.
- Do not use the audio/video/navigation system for a long time when the engine is not running. The battery could be discharged.
- Be careful not to spill water on the unit or to let any foreign objects into the system.
- Do not apply any impacts and pressure to the monitor screen. The LCD panel or touch screen panel can be damaged.
- When cleaning, turn off the system and clean the surface with a dry and soft cloth. Never use a coarse cloth, hard cloth, chemical agent, or volatile cleaning solvent (alcohol, benzene, thinner) for cleaning the screen.

USB PORT AND AUX JACK



The USB port and AUX jack are provided.

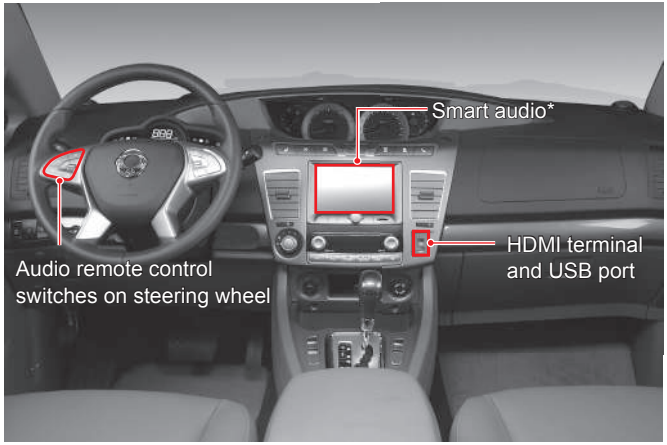
Use them when you want to hear the music in USB memory stick or an external audio device through with the speakers in your vehicle.

For detailed information, refer to the audio operation manual provided with this manual.

CAUTION

Some USB memory sticks and external audio devices may not work in this Audio system.

10



Supporting USB / HDMI / SD card / Camera, this audio system can be controlled by using the touch panel and steering switches.

NOTE

This owner's manual describes all audio models. Check the audio model fitted to the vehicle you have purchased and for detailed information regarding audio system, refer to the operating manual provided separately.

⚠ CAUTIONS FOR USING SMART AUDIO*

- It is available on devices which support HDMI. (Some devices may not be supported)
- Some applications may not be supported.
- The connection of HDMI (such as gender or cable) may cause image quality degradation.
- When the HDMI cable or gender is disconnected from the system, noise may occur on the screen.
- For some devices, you should supply power to the HDMI gender using a USB cable when connecting HDMI.
- For some devices, voice output may be limited when connecting HDMI while Bluetooth is enabled.
- For safety reasons, only the voice is played without video during driving. (video played again when vehicle stops)

SD CARD SLOT, TERMINAL FOR CONNECTING EXTERNAL DEVICE AND PORT*

NAVIGATION SD CARD* (WITH NAVIGATION SYSTEM)



The slot for inserting the navigation SD card is under the touch panel navigation monitor. For more information on this device, please refer to the operating manual provided separately.

CAUTION

- Make sure that the engine is turned off when inserting or removing the SD Card.
- If the SD Card is removed while the navigation is in operation, the unit may become defective.

HDMI TERMINAL AND USB PORT* (WITH SMART AUDIO)



You can play the music file stored on the memory stick using a USB port or use mirroring between the HDMI terminal and applications in the smart devices.

For more information, refer to the operating manual provided separately.

CAUTION

Some USB memories and smart devices may not be supported.

10

BLUETOOTH HANDS-FREE SYSTEM*

The Bluetooth hands-free system allows you to make calls through the vehicle microphone and speakers by connecting the audio system of the vehicle to your mobile phone.

NOTE

For detailed information on how to make a call with Bluetooth hands-free system and how to use the system, refer to the separate booklet (Audio Operating Manual).



Bluetooth hands-free call switch



► To make a call

Pull over and stop the vehicle in a safe area. Pick up your mobile phone and dial the number you wish to call. After that press the Bluetooth hands-free call switch briefly.

► To accept a call

Press the Bluetooth hands-free call switch briefly to accept a call.

► To end a call

Press and hold the Bluetooth hands-free call switch to end a call.

► To redial

Press and hold the Bluetooth hands-free call switch with no call currently in progress.

NOTE

You can redial the last call without pressing the numbers on the key-pad by pressing and holding the Bluetooth hands-free call switch.

WARNING

- Talking on a mobile phone while driving is banned in many countries. Always observe applicable local laws wherever you drive.
- Using a mobile phone while driving is extremely dangerous even if you are using the Bluetooth hands-free system. Make sure to park or stop the vehicle before using/programming your mobile phone/Bluetooth hands-free system.

CAUTION

- Pressing the Bluetooth hands-free call switch shortly does not end a call.
- Be careful not to press and hold the Bluetooth hands-free call switch after the other caller has ended the call. If you press and hold this switch in this situation, the number of the last call is redialed.
- Not all functions of the Bluetooth hands-free system may be available or work the same depending on your mobile phone.

CAUTIONS FOR USING BLUETOOTH HANDS-FREE SYSTEM

- The hands-free system may not fully support a certain mobile phone.
- For some mobile phone models, you should press the Bluetooth hands-free call switch once or twice to redial the last call you made. Or you may need to press CALL/END buttons on the mobile phone, not the Bluetooth hands-free call switch to make or end a call. Therefore, you should be familiar with your mobile phone.
- For some mobile phone models, you may need to press the CALL button on the mobile phone if you cannot make or answer a call by pressing the Bluetooth hands-free call switch.
- You may experience howling depending on mobile phone models.
- In this case, try to adjust the call volume.

MEMO

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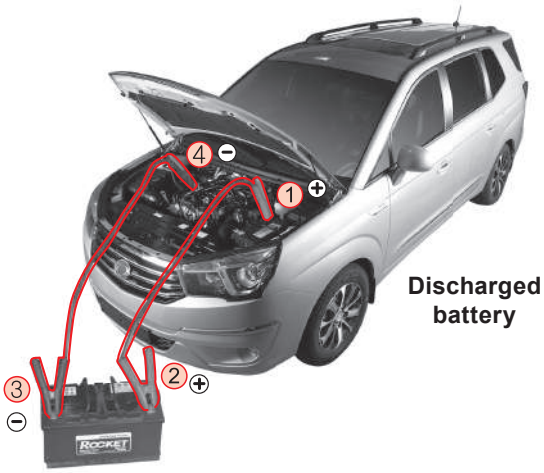
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11

In Case of Emergency

STARTING THE ENGINE WITH JUMPER CABLES

If the batter is weak or dead, the battery from another vehicle can be used with jumper cables to start the engine.



Discharged battery

Booster battery

The positive (+) cable to the positive (+) terminal.

The minus (–) cable to the minus (–) terminal.

Be sure to observe the connecting sequence specified below.

Connecting order:

(1) The + terminal of the discharged battery

(2) The + terminal of the booster battery

(3) The - terminal of the booster battery

(4) Connect one end of the other jumper cable to the body of the discharged vehicle, such as the engine block or a front towing hook.

Disconnecting order:

Disconnect the jumper cables in the reverse order of connection.

1. Prepare a set of jumper cables.
2. Place another vehicle that has the same 12 V of power near to the discharged vehicle.
3. Switch off all electrical accessories for the discharged vehicle.
4. Apply the parking brake and shift the transmission to the P position (automatic transmission) or neutral (N) position (manual transmission).
5. Connect the jumper cables.
6. Try to start the discharged vehicle while accelerating the engine rpm in the booster vehicle.
7. Attempt to start the engine with the discharged battery.
8. After starting the engine, carefully disconnect the jumper cables in the reverse sequence of connection.

WARNING

- Connecting the jumper cable to the negative terminal of the discharged battery could result in arcing and possibly a battery explosion. Serious personal injury or vehicle damage can result.
- Make sure that the jumper leads are securely connected. Otherwise, an abrupt disconnection due to vibration during engine starting may cause an electrical short resulting in severe damage to electric components.
- Make sure that the booster battery has the same voltage rate with the discharged battery.
- While connecting the jumper cables, make sure that the negative (–) and positive (+) cables never touch each other. Otherwise sparks might cause an explosion of the battery.
- Battery fluid contains acid that can burn you. Do not allow battery fluid to contact eyes, skin, or painted surfaces. If you accidentally get it in your eyes or on your skin, flush the place with water and contact your doctor. If you swallow battery fluid, drink a large quantity of water or milk and see your doctor as soon as possible.
- While being transported in an ambulance, gently wipe out the contacted area with a water-wet cloth or sponge.

CAUTION

- When starting your vehicle with jumper cable, turn off the engine of the boost vehicle and connect the jumper cables.
- Ensure that the jumper cables are clear of fan blades before starting the engine.
- After the engine starts, leave the jumper cables connected and let the engine run for several minutes.
- If you do not know why your battery became discharged (because the lights were left on, etc.), have the charging system checked by Ssangyong Authorized Dealer.

CAUTIONS WHEN A TIRE IS FLAT



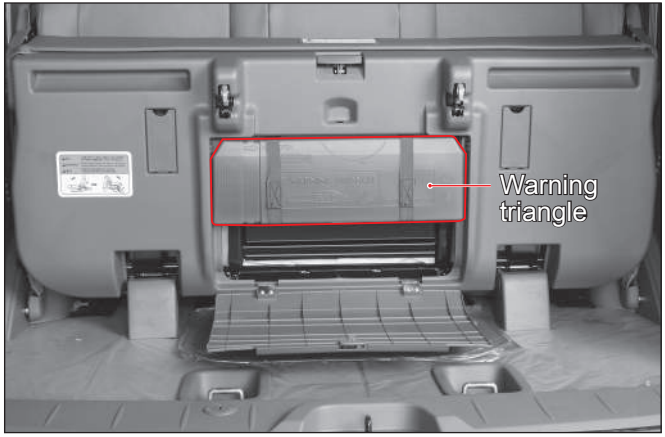
If one of the tires becomes flat while driving, grab the steering wheel firmly and remove your foot from the accelerator pedal. Gradually slow down and park your vehicle in a safe place. Replace the flat tire with a spare tire. For the process, refer to sections about the spare tire.

NOTE

If you are not familiar with the tire replacement, do not try to do yourself. Contact a nearest service center.

WARNING

- Don't panic! Improper operation of the steering wheel or abrupt braking may cause a consequential accident on the road. Stop your vehicle in a safe place and turn on the hazard flasher and then apply the parking brake.
- Do not drive with a flat tire for even a very short distance. In addition to damages to the rim of the tire, abnormal driving conditions can cause a very danger situation.
- Stop the engine and set up the warning triangle behind your vehicle (daytime: 100 m, night time: 200 m - on express way).
- Chock the front and rear of the wheel diagonally opposite to the wheel being changed.
- Have all passengers get out of vehicle and stand in a safe place.
- Make sure to apply the parking brake.



The warning triangle is under the 4th row seat. To access it, fold up the 4th row seat.



When you pull over your breaking down vehicle to a safe place, set up a warning triangle behind your vehicle.

(Daytime: 100 meters behind, Night: 200 meters behind)

When the vehicle has a serious problem during driving

1. Turn on the hazard flasher and move the vehicle out of traffic to a safe place. Set up the warning triangle behind your vehicle (day: 100 m, night: 200 m) to warn other vehicles.
2. Have all passengers get out of the vehicle and stay away from the traffic. When your safety is secured, contact your Ssangyong dealer for your emergency service.

CAUTION

- Set up a warning triangle on a place where it can be very visible while paying attention to traffic conditions.
- On a highway or vehicle-designated road, evacuate yourself to a safe place after pulling over your vehicle.
- At night time, set up a blinking emergency triangle behind your vehicle (over 200 meters) to warn others.
- On a curved road, provide a emergency hand signal to others at the point over 200 meters behind your vehicle.
- If your vehicle is operational or the problem is fixed, resume driving paying extra attention to traffic conditions.

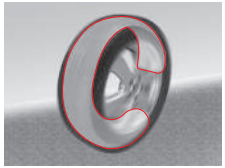
EMERGENCY PUNCTURE REPAIR KIT*

The repair kit is stored in luggage compartment.



What's the repair kit?

The emergency puncture repair kit is used to seal the puncture and to check and adjust the tire pressure. When a tire is punctured, you can put the sealant into the tire by using compressor. After short driving, the sealant will be applied on the inner surface of the tire and the puncture is sealed by the sealant. The kit works as a temporary repair.

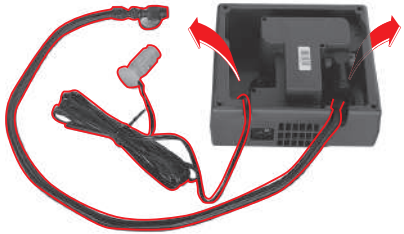


Evenly applied sealant during driving

⚠ CAUTION

- This repair kit can be used only for small puncture (approx. 6 mm) on tire tread. If the puncture is too large or the side wall is torn, do not repair that with this kit. Use a towing service or contact a tire center.
- If the tire inflation pressure is not increased when you operate the compressor, stop pumping and use a towing service or contact a tire center.
- You should not drive faster than 80 km/h after the emergency puncture repair kit has been used.
- If you feel vibration, unstable steering and noise while driving, immediately stop driving and use a towing service or contact a tire center.
- The temporarily sealed tire must be changed as soon as possible (maximum driving distance: 200 km).
- According to the tire conditions, replace the temporarily sealed tire with new one, or remove the sealant and repair the tire and reuse it.

INFLATING A TIRE



When the tire pressure is low, you can add the air to your tire using the service kit according to the specified air pressure.

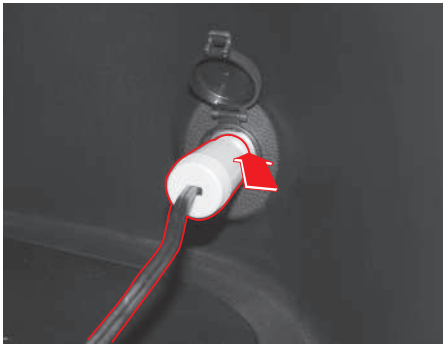
1. Take out the service kit from the storage box in the luggage compartment.
2. Take out the air valve and power cable from the service kit unit.



3. Remove the valve cap from the tire, in which the air will be added.
4. Unscrew the protective cap from the air hose and connect the air hose to the tire's air valve.

CAUTION

The power switch of the service kit should be in OFF position.

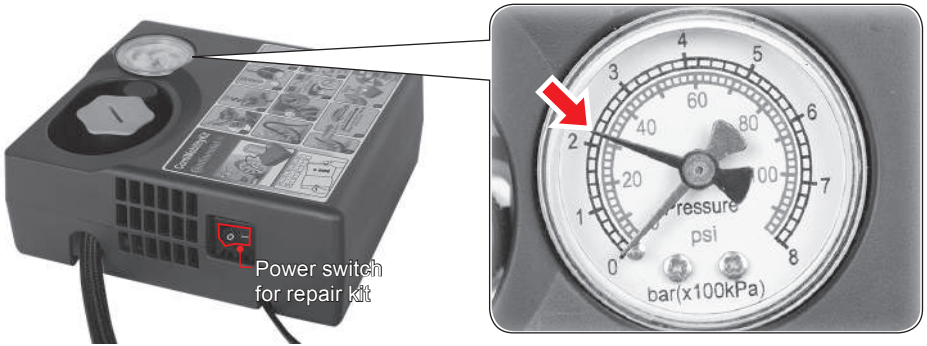


5. Plug the power cable of the service kit into the power socket of the vehicle.
6. Start the engine.

WARNING

To avoid a danger of suffocation due to the exhaust gas, start the engine in the well ventilated area.

11



7. Start the compressor by pressing the power switch of the service kit.
8. Wait until the pressure reaches to the standard pressure, 35 psi (2.4 bar) while checking the pressure gauge of the service kit.
9. Once the standard pressure is reached, switch off the service kit.

⚠ CAUTION

To prevent overheating, do not operate the compressor for more than 10 minutes.

NOTE

To measure the tire pressure, switch off the service kit and read the pressure gauge.

10. Disconnect the air hose from the tire and install the protective cap.
11. Install the air valve cap of the tire.
12. Turn off the engine and place the service kit back to the original position.

SEALING PUNCTURED TIRE



To seal the punctured tire, carefully observe the procedures as follow.

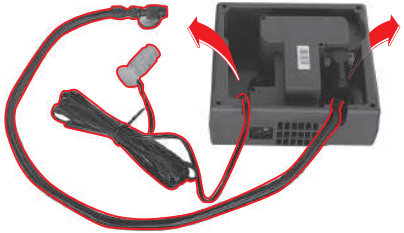
1. Take out the emergency puncture repair kit from the luggage compartment.
2. Open the lid of the repair kit and detach the decal for maximum permitted speed and affix it to the steering wheel.

CAUTION

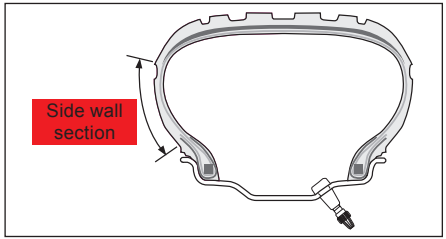
The decal indicates the current tire is sealed by repair kit. You should not drive faster than 80 km/h after the emergency puncture repair kit has been used.

WARNING

Before repairing with this repair kit, check the side wall of tire first. If it is torn, cracked and damaged, do not use the repair kit.



3. Take out the air hose and power cable from the repair kit box.



WARNING

Check the side wall of tire prior to repairing it with the repair kit. If it is torn, cracked or damaged, contact the Ssangyong Authorized Service Operation for any necessary action without using the repair kit.



4. Unscrew the orange cap.



5. Remove the red cap from the sealant bottle.

CAUTION

- Do not break the bottle seal. The seal is broken when the bottle is screwed in.
- It is recommended to use one bottle of sealant per tire.
- The sealant from the temporary tire repair kit can't be used permanently.
- Please follow the expiration date written on the sealant bottle.
- The sealant and spare parts are available through a Ssangyong Authorized Service Center. Please discard properly after use. (The empty sealant bottle can be disposed of as regular trash. Please contact a nearest service center for the sealant residue.)



6. Screw the bottle into its holder.

CAUTION

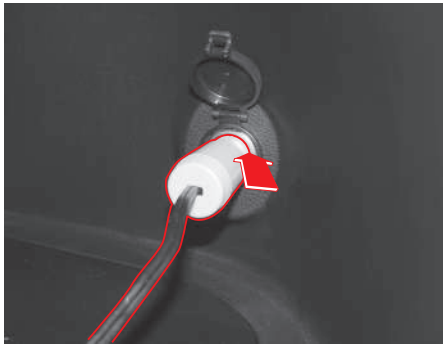
The sealant can irritate the skin. In the case of contact with skin, wash away the sealant with soap and water.



7. Unscrew the wheel's dust cap and screw in the air hose valve connection to the bottom of the tread on the tire's air valve.

CAUTION

Check that the switch is in position "OFF".



8. Plug the cable into the power outlet in vehicle.
9. Start the engine.

WARNING

Inhaling car exhaust fumes can result in danger to life. Never leave the engine running in sealed areas or areas that lack sufficient ventilation.



10. Flick the switch to position “I”. The compressor starts pumping.
11. Inflate the tire by 35 psi (2.4 bar).



12. Switch off the compressor and unplug the cable from the power outlet.
13. Stop the engine and disengage the air hose from the tire valve and install the valve cap.

CAUTION

Risk of overheating. The compressor must not run for more than 10 minutes. If the inflation pressure cannot be reached to 26 bar for 10 minutes, you cannot repair the tire with this repair kit.

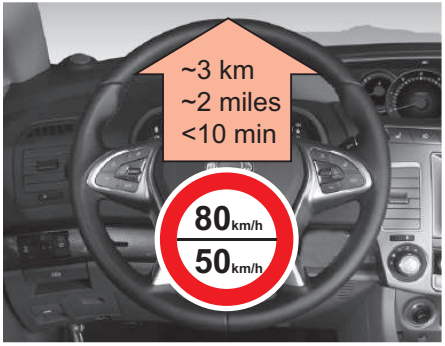
WARNING

Never stand next to the tire when the compressor is running. If cracks or unevenness arise then the compressor must be switched off immediately.

14. As soon as possible drive approximately 3 km at a maximum speed of 80 km/h so that the sealant can seal the tire.

CAUTION

- The sealant bottle and hose must be replaced after use. Purchase one set again.
- If the air hose is clogged with sealant, replace it.
- To avoid splashes, leave the bottle in its holder.



15. Stop the vehicle at a safe place and check the tire pressure with the repair kit.

CAUTION

- You should not drive over 10 minutes and faster than 80 km/h after the emergency puncture repair kit has been used.

WARNING

- The temporarily sealed tire must be changed as soon as possible (maximum driving distance: 200 km).

16. Return the repair kit to the luggage compartment.

WARNING

If it is below 22 psi, the journey should not be continued. Contact a service center.

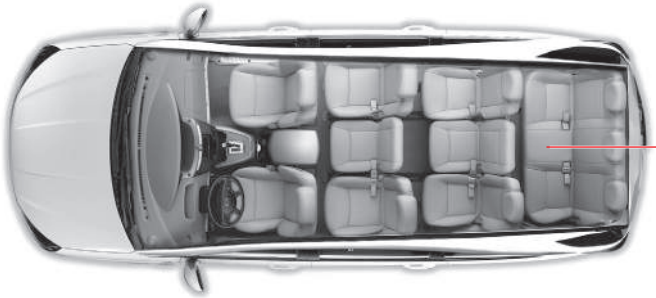
TYRE PRESSURE CHECK AFTER REPAIRING

Check the pressure of the tire repaired with the service kit as follows after driving about 3 km.

1. Take out the service kit from the luggage compartment.
2. Take out the air hose from the service kit box.
3. Disengage the air valve cap of the repaired tire.
4. Unscrew the protective cap from the air hose and connect the air hose to the tire's air valve.
5. Read the tire pressure displayed on the pressure gauge of the service kit.
6. If the value is higher or lower than the specified tire inflation pressure (35 psi, 2.4 bar), adjust it to the specified value using the air valve.

WARNING

If the tire inflation pressure is not maintained at the specified value (35 psi, 2.4 bar) after repeating the step 6 up to 3 times, the tire is damaged beyond repair with the service kit. Take your car to a Ssangyong Authorized Service Center and have the vehicle serviced immediately.

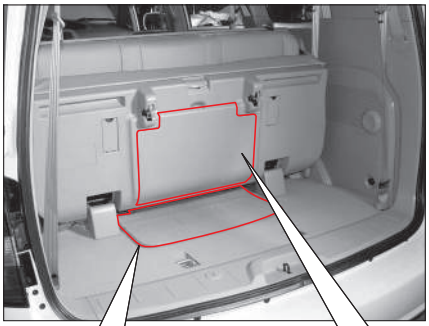


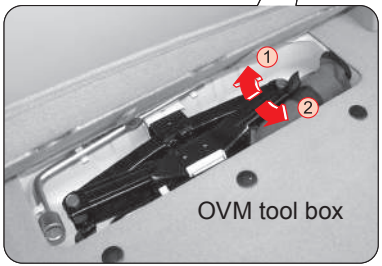
The OVM tool box is located under the fourth row seat.

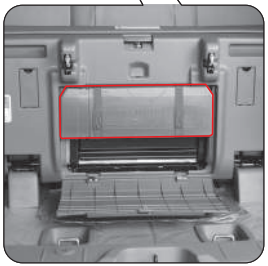
The OVM tool kit consists of:



1. Jack
2. Wheel nut wrench
3. Jack connection
4. Spanner
5. Spare tire connection
6. Screwdriver (+ and -)







To disengage the jack, turn it direction ②. To engage the jack, turn it direction ①.

CAUTION

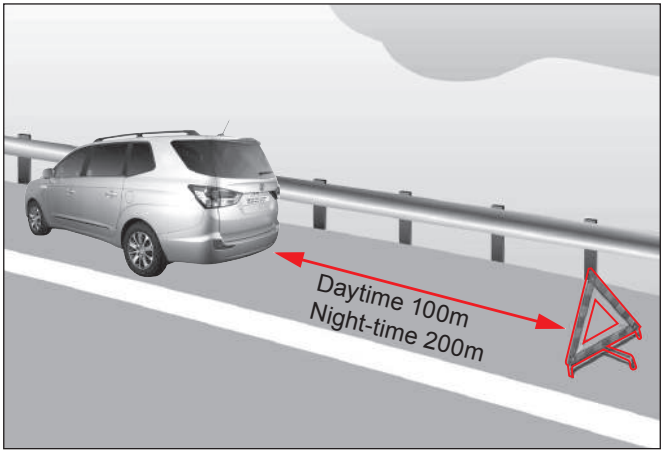
Install the OVM tolls in place.

NOTE

The jack (1), wheel nut wrench (2), and jack connection (3) in the figure are not included in the vehicles with the tire quick-repair kit.

PREPARATIONS BEFORE REPLACING SPARE TIRE

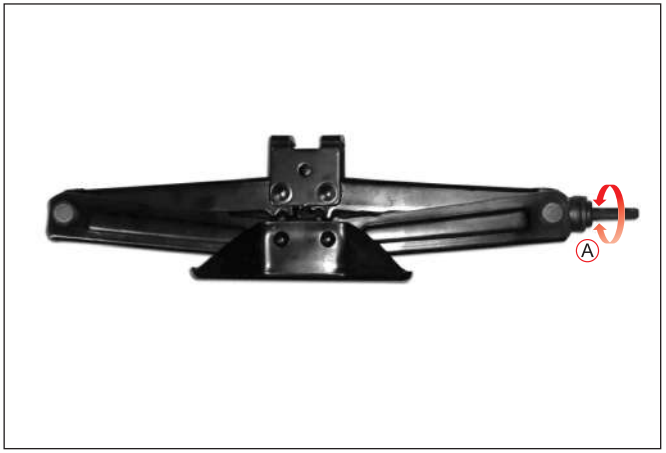




1. Turn on the hazard warning flashers and park the vehicle at a place with low traffic and on the level ground.
2. Move the selector lever to “P” position (gear in “N” position for vehicle with manual transmission), switch off the engine and apply the parking brake.
3. Let all passengers out of the vehicle and place the warning triangle 100 m (daytime) or 200 m (night-time) behind your vehicle so that other road users can see that there is a disabled vehicle.



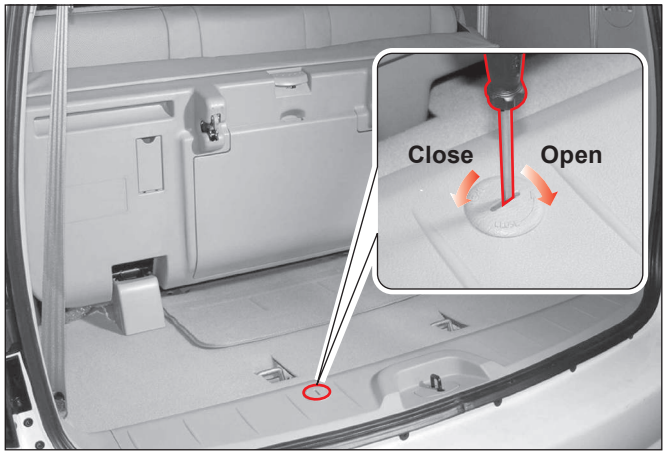
4. Place the wheel chocks or similar before and after the tire at the diagonal direction of the tire to be replaced.



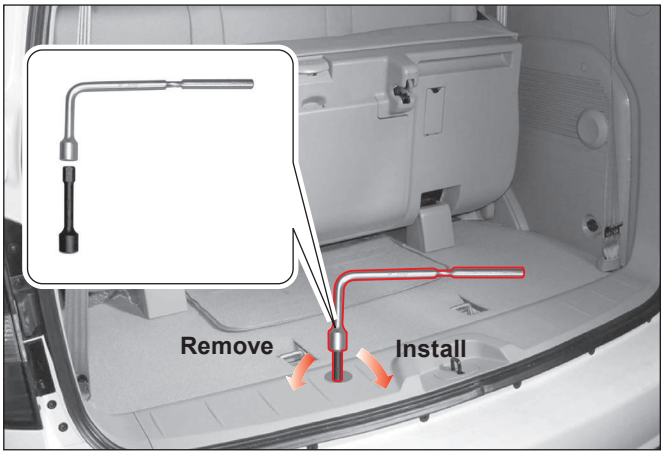
5. Turn the ring (A) to remove the jack from the holder. Pull out other tools from tool box.

CAUTION

Put the tools into their own locations. Turn the ring (A) to tighten the jack into the holder.



6. Open the tailgate and remove the cap for spare tire mounting hole with a screwdriver or coin.



7. Combine the wheel nut wrench and the spare tire connection, and insert it into the hole. Turn the wheel nut wrench to counter-clockwise to remove the spare tire.

CAUTION

When refitting the spare tire to the carrier, be sure to securely lock it at its location.



8. Pry off the wheel cap with a flat blade screwdriver.

CAUTION

When reinstalling the wheel cap, be sure to completely fit into its location.



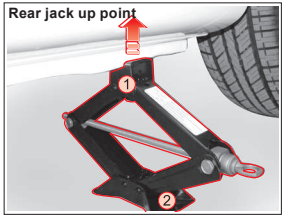
9. Loosen the wheel nuts one or two turns by turning counter-clockwise with the wheel nut wrench.

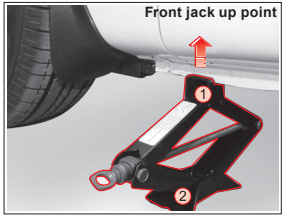
WARNING

- Do not remove the nuts yet from the wheel. If they are removed, the wheel could slip off from the vehicle. Then, the body of the vehicle will fall down on you and you may get seriously injured
- The parking brake should always be applied when replacing the flat tire.
- Chock the front and rear of the wheel diagonally opposite to the wheel being changed.
- Loosen the wheel nuts two or three turns.

CAUTION

When reinstalling the wheel cap, be sure to completely fit it into its location.





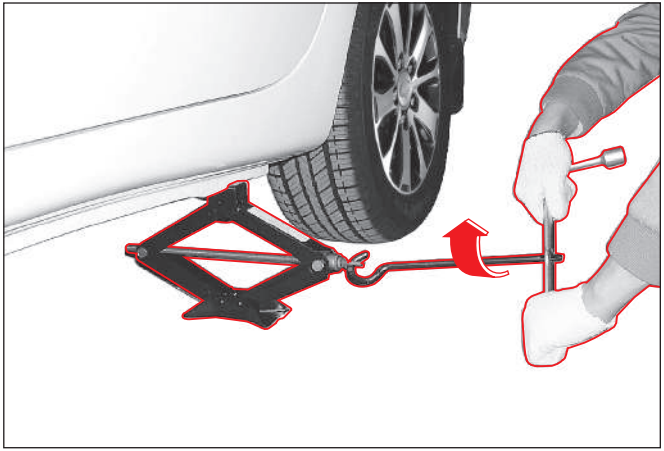
- Locate the jack at a correct jack-up point.
- The jack-up point is reinforced. Before setting up the jack, check the jack-up point by hands.

① Jack head
② Base plate

10. Place the jack directly under the jack-up points so that top of the jack contacts the vehicle at the jack-up point. Align the center of both the jack head and the jack-up point by turning the connecting ring with hands.

⚠ WARNING

- The jack should be used on level firm ground wherever possible.
- It is recommended that the wheels of the vehicle be chocked, and that no person should remain in a vehicle that is being jacked.
- No person should place any portion of their body under a vehicle that is supported by a jack.
- Jack working load limit 1,000 kg.



11. Combine the wheel nut wrench and the jack connection as shown in figure and hook it into the connecting ring. Jack up the vehicle by rotating combined wrench clockwise until the tire is off ground about 3 cm.
12. Remove the wheel nuts by hands while the vehicle is stationary. For rear tire, release the parking brake carefully.
13. Remove the tire and put it under the vehicle body.



14. Fit the spare tire tighten the wheel nuts by hands.
15. Lower the vehicle by rotating the combined wrench counter-clockwise until the tire touches the ground.
16. Remove the jack and tighten the wheel nuts securely by 2 or 3 steps in the sequence as shown in the figure.

⚠ WARNING

While the jack is supporting your vehicle, do not use too much force to tighten the nuts. Otherwise, the vehicle may slip off and you may get injured.



17. Put the removed tire in the luggage compartment and put the tools into the tool box.

CAUTION

- If over tightened, the wheel nuts could be damaged. Do not over tighten the wheel nuts by pressing the wheel nut wrench by foot or using assist pipe.
- When the tire has been replaced, retighten it after 1,000 km of driving.

WARNING

- As soon as possible, take your vehicle to a Ssangyong dealer or Ssangyong Authorized Service Operation and have the wheel nuts tightened according to Ssangyong specifications.
- Improperly tightened wheel nuts can cause the wheel to become loose and even come off. This could lead to an accident. Be sure to tighten the wheel nuts as specified.
- Mixing tires could cause you to lose control while driving. Be sure to use the same size and type tires of the same manufacturer on all wheels.

CAUTIONS WHEN CHANGING THE TIRE

► Before Changing the Tire

- Turn on hazard flashers and move off the road to a safe place away from traffic. Park on a firm and level ground.
- Set up the jack at the specified position. Never get under the vehicle while it is supported by the jack. While the vehicle is on the jack, never start or run the engine or push the vehicle.
- Have all passengers get out of the vehicle and stay in a place away from traffic.

► During Changing the Tire

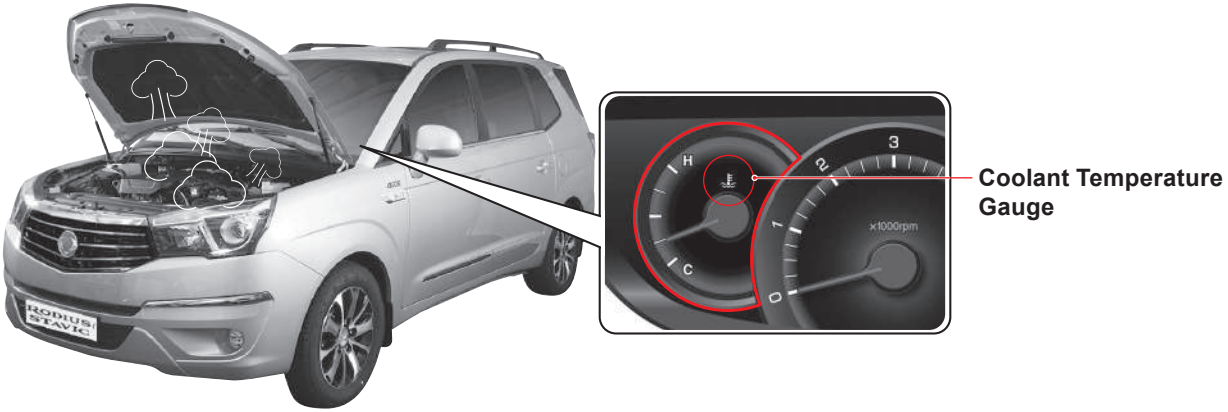
- Tighten up the wheel nuts in the diagonal sequence as shown in the figure. Each nut should be turned a couple of times at a time.
- Never apply oil or grease to either wheel studs or nuts as it will cause them to overtighten.

► After Changing the Tire

- Check, repair, and retighten the replaced tire at the nearest Ssangyong Authorized Service Center or a qualified tire shop after an emergency change.
- Securely store the tire in its carrier. When storing the spare tire, make sure that the outer surface of the tire (wheel nut side) is facing down. And, check to see if the spare tire is securely locked into the carrier without any looseness. Check the tightness of the wheel nuts and tire pressure before driving.
- Retighten the wheel nuts after 1,000 km of driving.
- Check the wheel nuts tightening and tire pressure before driving.
- Repair or change the flat tire. Stow the emergency tire in its location properly.
- Make sure to check the tightness and inflation pressure of tires before driving.

WARNING

- Make sure that tighten the wheel nuts again after driving of about 1,000 km when the tires have been replaced.
- Drive the vehicle at the speed of 60km/h or less (maximum speed 80 km; maximum distance 200 km) when the vehicle is driven with the spare tire.
- Drive the vehicle in 2H mode when the spare tire is fitted. When driving in 4H mode, it will damage the drive system.
- Be sure to use the same size and type tires of the same manufacturer on all wheels so that the vehicle characteristics can be maintained safely.



Symptoms:

- The engine overheat warning light blinks (Buzzer sounds)
- The gauge indicates beyond the normal range (or in the red zone).
- Steam or spray from the engine compartment.
- Reduced engine output.

When the engine overheats, steam or spray may come out the engine compartment. Or, the coolant temperature gauge touches “H”. If this happens, the engine overheat warning light comes on and a buzzer will sound. Immediately stop your vehicle in a safe place.

1. Move off the road to a safe place away from traffic. Park on a firm and level ground. Apply the parking brake and shift the transmission to the P position (automatic transmission) or the neutral position (manual transmission).
2. Turn off the air conditioner or heater if used. Open the engine hood and idle the engine until it cools down.
3. If you see steam under the hood, stop the engine immediately.

   If there is no steam, open the hood and leave the engine running in idling speed.
4. However, if the gauge doesn't go down to the normal range even in idling, stop the engine and cool it down.
5. Check the coolant level in the reservoir. If it is too low, check for leaks in the radiator hoses and connections.
6. Add coolant into the reservoir if necessary.
7. If necessary, cover the reservoir cap with a cloth and turn the cap a little to release any pressure. After fully releasing the pressure, remove the cap and fill up the reservoir. Then, put the cap back on the reservoir.
8. If the coolant level is normal, have the cooling system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

CAUTION

- When the engine overheats because of the low coolant level, immediately turn off the engine and let it cool down.
- Opening the reservoir cap should be performed when the engine is off and has cooled down.
- Scalding hot coolant and steam could be blown out under pressure, which could cause serious injury. Never remove the coolant reservoir cap when the engine and the radiator are hot.
- The engine may be damaged if you add cold water abruptly when the engine is still hot.
- Use only Ssangyong recommended (antifreeze) coolants.
- If the problem continues, have the cooling system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WARNING

- To avoid being scalded, carefully open the engine hood.
- Scalding hot coolant and steam could be blown out under pressure, which could cause serious injury. Never remove the coolant reservoir cap when the engine and the radiator are still hot.
- Extremely careful not to contact to running parts such as drive belt when the engine is running.

HOW TO RELEASE THE SHIFT LEVER LOCK



1. Apply the parking brake firmly and turn the ignition off.
2. Depress the brake pedal and push down the shift lock release lever with a stick such as a pen. Then, shift the lever to other position.
3. Start the engine, release the parking brake, and place the selector lever to the “D” position.

WARNING

- If the automatic gear selector does not move out of “P”, take the steps mentioned above and take the vehicle to a Ssangyong dealer or authorized service center. Have the vehicle checked and repaired.
- The brake pedal must be depressed when you try to move the selector.

Symptoms after Resetting of the Safety Mode

- Heavy shock when moving the selector lever
- Decreased driving force while driving at a high speed
- Fixed gear position during driving
- If the safety mode is activated, the shift indicator displays “D”.

If one of these symptoms happens, reset the automatic transmission safe mode.

How to Reset the Safety Mode

1. Park the vehicle and place the selector lever to the “P” position.
2. Stop the engine and wait for over 10 seconds.
3. Start the engine.

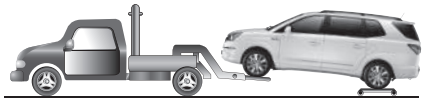
WARNING

If abnormal operation of the transmission (fixed at the 2nd forward gear in the “D” position or the 2nd(1st) reverse gear in the “R” position)still exists, have the system check by a Ssangyong Dealer or Ssangyong Authorized Service Center.

- Flat towing



- Towing with front wheels on ground



Dolly

- Towing with rear wheels on ground



Dolly

Towing with tow truck

The best towing method is to lift the entire vehicle onto the flatbed so that all wheels are off the ground. If it is impossible, put the front or rear wheels on the jig and tow the vehicle using a dolly, with other wheels off the ground.

For 4WD vehicle

Your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.

WARNING

- The 4WD system equipped vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transmission or the 4WD system.
- If your vehicle should be towed due to wheel slips in mud or sand, you can use the towing hooks in your vehicle. However, if the load to hooks is too heavy, the towing hook, rope or chain could be broken, resulting in serious personal injury and vehicle damage.
- To prevent damage to your vehicle, proper lifting and towing procedures are necessary. When you need a towing service, contact Ssangyong Dealer or Ssangyong Authorized Service Center.

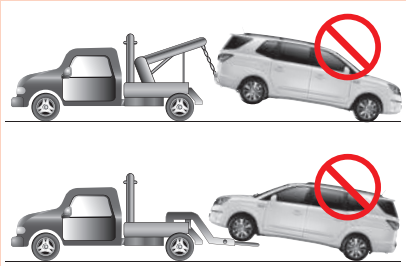
For 2WD vehicles

It is not allowed to use a tow truck or keep the rear wheels from moving with the parking brake released for towing, as shown in the following figure.

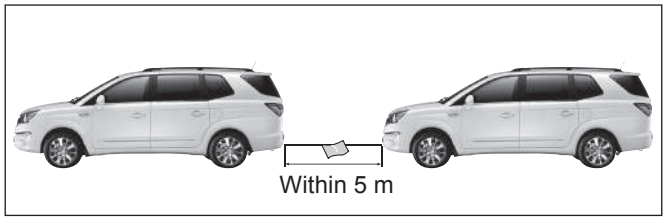
Do not tow the vehicle with the rear wheels on the ground.



CAUTION



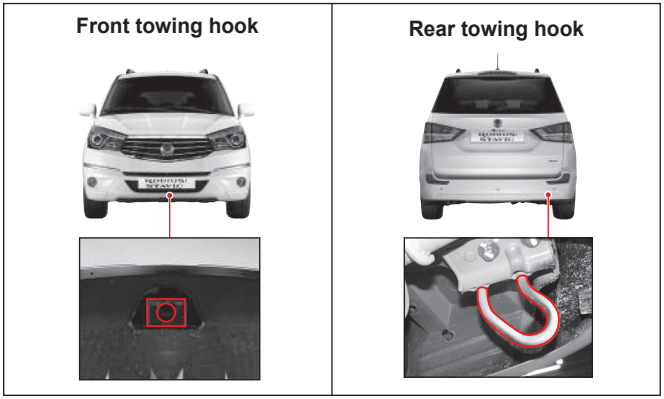
- Do not tow with the sling-type equipment or the bumper and lower parts can be damaged.
- If the vehicle is towed with the driving wheels on the ground, the transmission may be damaged.
- Be careful not to damage the bumper and lower parts during towing.



- When towing your vehicle with the towing rope:

1. Securely tie up the towing rope to the towing hooks. Secure the rope to both of the towing hooks under the front of the vehicle as tight as possible.
2. To make the rope conspicuously visible, bind a white colored cloth on the center of the rope.
3. Place the gearshift lever in the neutral position and release the parking brake.
4. Switch on the hazard warning flashers of both vehicles.
5. Maintain the towing distance. Apply more force to depress the brake pedal of the vehicle that will be towed.
6. Set the ignition in the ON position.
7. Total length of the towing and towed vehicle and the towing rope should be less than 25 meters. And tow the vehicle within 25 km with 5 km/h of the towing speed. The length of the rope should be less than 5 m.

LOCATION OF TOWING HOOKS



WARNING

- The towing hook should be used only for temporary and short-distance recovery or towing in an emergency situation. Avoid using it all the time. Misusing can have serious consequences.
- Special cares should be taken when towing. Avoid an abrupt start-off or reckless driving because it could over-tighten the towing hook, towing rope or chain with excessive force. To prevent damage, do not take up slack in the towing rope or chain too quickly.
- If the towing hook is required for towing as the vehicle becomes stuck in snow, mud or sand or it can't get out by itself due to poor traction, make sure no excessive force is applied to the towing hook. Otherwise, the towing hook, towing rope or chain may be broken, resulting in an injury or damage to the vehicle. For safe towing, it is recommended to contact Ssangyong authorized service shop or a professional towing company.

CAUTION

- If you cannot use a professional towing service, the driver of the towed vehicle should stay behind the steering wheel. But, never use this emergency towing when the electrical system, steering system, or brake system is not operative.
- Ensure that only horizontal tension is applied to the front or rear towing hook.
- If there are steep hills or sharp turns in your towing path, do not use this method.
- Depress the brake pedal stronger than normal condition when the engine is not running.
- When your electrical systems operate properly, turn on the hazard warning flashers or turn signal lamps according to the towing vehicle's signals.
- Avoid overloaded towing and do not tow a heavier vehicle than yours.
- Position the ignition switch to "ACC" or "ON" so that the steering wheel is not locked.



ACCIDENT

Turn on the emergency hazard warning switch. If possible, move your vehicle to a safe place to avoid any secondary accidents. If anyone is injured, call an ambulance and contact the nearest police station.

FIRE

Stop immediately in a safe place. Turn off the engine. Use fire extinguishers to put out the fire. If it is not possible to extinguish the fire, contact the nearest fire or police station.

WARNING

- In an accident, fuel can be leaked from the vehicle. Therefore, stop the engine and avoid any sparks or flames.
- If you have even a minor burn, see your doctor.

FIRE EXTINGUISHER

The fire extinguisher is necessary device to extinguish a fire in early stage. Purchasing it is strongly recommended. Keep it ready for use at any time and familiar with how to use it.

HEAVY SNOW

- Reduce the vehicle speed on curved road, steep hill and bridge.
- For snow removing truck, do not leave your vehicle on the road. If necessary, leave your contact number.
- Keep the safety distance from the proceeding vehicle and minimize the brake operation.
- Remove the snow around your vehicle so that the exhaust pipe will not be blocked by snow.

Your vehicle is designed primarily as a passenger vehicle therefore handling, braking, durability and economy will be affected by towing a trailer.

Your safety and satisfaction depend upon proper use of correct equipment. Also, you should avoid overloading and other abusive use.

The maximum loaded trailer weight you can pull with your vehicle depends on your intended use and what special equipment has been installed on it. Before attempting any towing, ensure that the correct equipment is fitted to your vehicle.

Your Ssangyong Dealer will help supply and install towing equipment to suit your requirement.

Maximum Load Limits

(unit: kg)

Engine	Type	Trailer	Trailer coupling weight	
			Maximum permissible static vertical load on the coupling device	Maximum trailer hitch
D22DTR / D20DTR	with brake	2,000	80	25
	without brake	750		
G32D	with brake	2,000		
	without brake	750		

TRAILER LOADING

To load your trailer properly, you must know how to measure gross trailer weight and trailer ball weight. Gross trailer weight is the weight of the trailer plus all cargo in it.

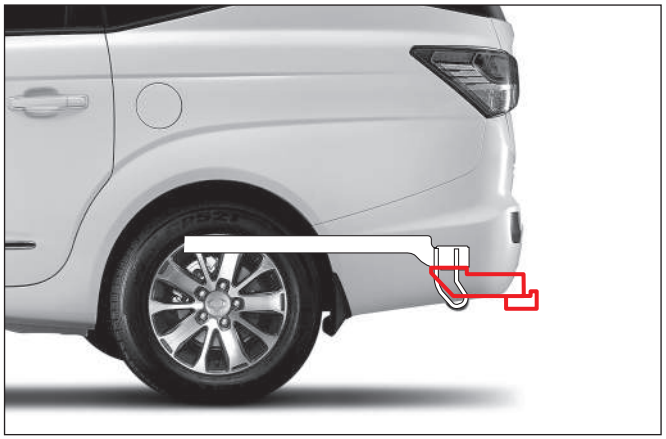
You can measure gross trailer weight by putting the fully loaded trailer on a vehicle scale.

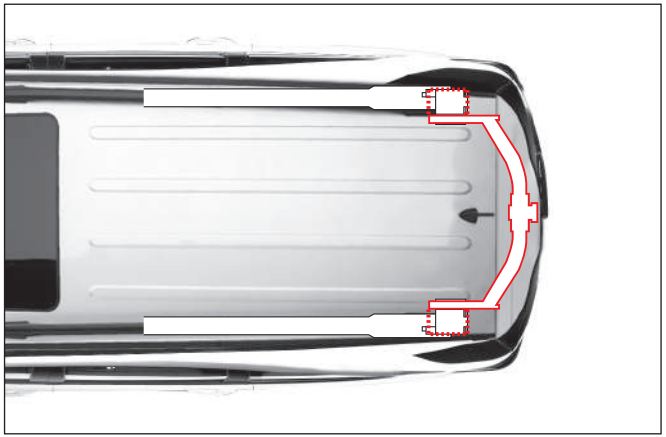
Trailer ball weight is the downward force exerted on the hitch by the trailer coupler at its normal towing height. This weight can be measured using a bathroom scale.

The weight of your loaded trailer (gross trailer weight) should never exceed the specified values.

The permissible trailer loads are valid for several gradients from 6.8% to 12.6% according to engine power applied.

When the trailer has been coupled, the permissible rear axle load for the fully loaded towing vehicle (including occupants) must not be exceeded.





IF YOU WANT TO PULL A TRAILER

Important points:

- You have to consider a sway control. You can check the sway control to hitch dealer.
- If the total driving distance of your new vehicle is under 800 km (500 miles), do not tow a trailer. For the first 800 km (500 miles) that you tow a trailer, do not drive over 80 km/h (50 mph) and do not start off your vehicle at full throttle. Otherwise, your engine and other parts could be damaged due to heavier loads.
- Always drive your vehicle at a moderate speed (less than 80 km/h).
- You have to consider the weight of trailer.
- The permissible trailer ball weight varies according to the cargo weight on the deck.

WEIGHT OF TRAILER

To keep the vehicle and trailer safely, you must consider many factors except the maximum load limit.

The vehicle and trailer's safety depends on how you use your trailer. Vehicle speed, altitude, load, outside temperature and frequency of using trailer are all very important. Any special equipment on your vehicle also affects on your vehicle.

WEIGHT OF TRAILER TONGUE

The tongue load of a trailer is also considered very carefully because it affects the gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of vehicle, any luggage in trailer, and the passengers in vehicle. In addition to that, you must add the trailer tongue load to the GVW because your vehicle will carry all the weight.

The trailer tongue should weigh a maximum of 4% of total loaded trailer weight. To check the weights are proper, you must weigh the trailer and the tongue separately after loading. If the weights are not proper, unload some items from the trailer.

CAUTION

- Never load a trailer with more weight in the rear side than in the front side. (Recommendation - Front: approx. 60%, Rear: approx. 40%)
- Never exceed the maximum load limits of trailer or trailer towing equipment. Improper loading may result in damage to your vehicle. It may occur the personal injury. Before driving, check the weight and loading at a commercial scale or highway patrol office equipped with scales.
- An improperly loaded trailer may cause the loss of vehicle control.

TRAILER BRAKES

If the trailer brakes are used, you should follow all instructions provided by the manufacturer. Never modify the brake system of your vehicle.

TRAILER LIGHTS

Make sure your trailer is equipped with lights which meet country and local requirements.

Always check for the proper operation of all trailer lights before you start to tow.

TIRES

When towing trailers, be sure your tires are properly inflated to the inflation pressure.

SAFETY CHAINS

Always attach safety chains between your vehicle and the trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack to permit full turning. Never allow safety chains to drag on the road.

BRAKE FLUID

Change the brake fluid every 15,000 km (9,000 miles) under the following conditions.

- Towing a trailer frequently.
- Driving in hilly or mountainous terrain.

AUTOMATIC TRANSMISSION FLUID

More frequent maintenance is required if your vehicle tows trailer frequently.

TOWING TIPS

When towing a trailer, your vehicle will handle differently compared with normal driving condition.

- For safety, observe the following precautions:
- Practice turning, stopping, and reversing before you begin towing in traffic.

  Do not tow in traffic until you are confident that you can handle the vehicle and trailer safely.
- Before driving, make sure that the lighting system of the trailer works properly.
- Do not drive faster than 80 km/h.
- Make sure that you have enough room when cornering and avoid sudden maneuvers.
- Avoid abrupt starts, acceleration or stops.
- Avoid sharp turns or lane changes.
- Always have someone guide you when reversing.
- Allow adequate stopping distance.

  Stopping distance is increased when you tow a trailer.
- Avoid holding the brake pedal down too long or too frequently, which will cause the brakes to overheat and result in reduced brake efficiency.
- Always block the wheels on both vehicle and trailer when parking. Apply the parking brake firmly.
- Parking on a steep slope is not recommended.

  You really should not park your vehicle, with a trailer attached, on a hill.

  If something goes wrong, such as the trailer/caravan hitch becoming disengaged, people can be injured and both the vehicle and trailer can be damaged.
- If someone removing the blocks stands directly behind the trailer, he could be injured. If your brakes or the hitch slipped, the trailer could roll backward. Make sure anyone removing blocks from your wheels stands to one side.
- Take note of trailer manufacturer's instructions.

DRIVING ON HILL

Reduce speed and shift to a lower gear before you start down a long or sleep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer work well.

On a long uphill grade, shift down and reduce your speed to a level which minimizes the possibility of engine and transmission overheating.

NOTE

- When towing a trailer on steep hill (over 12%), pay particular attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the gauge reaches to the "H" mark, stop your vehicle at a safe place and allow the engine to idle until it cools down. When the engine has cooled sufficiently, you may proceed.
- To avoid the engine and transaxle overheating, you must check the driving speed depending on trailer weight and uphill grade.

PARKING ON HILLS

You really should not park your vehicle, with a trailer attached, on a hill. If something goes wrong, your rig could start to move. People can be injured, and both your vehicle and the trailer can be damaged.

But if you ever have to park your rig on a hill, here's how to do it:

1. Apply your regular brakes, but don't shift into PARK (P) for automatic transmission yet, or into a gear for a manual transmission.
2. Have someone place chocks under the trailer wheels.
3. When the wheel chocks are in place release the regular brakes until the chocks absorb the load.
4. Reapply the regular brakes. Then apply your parking brake, and then shift to PARK (P) for automatic transmission, or First or Reverse gear for a manual transmission.
5. Release the regular brakes.

WHEN YOU ARE READY TO LEAVE AFTER PARKING ON A HILL

1. Apply your regular brakes and hold the pedal down while you:
   - Start your engine
   - Shift into a gear and
   - Release the parking brake.
2. Let up on the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

MAINTENANCE WHEN TOWING TRAILER

Your vehicle will need service more often when you're towing a trailer. See the maintenance Schedule for more on this. Things that are especially important in trailer operation are engine oil, brake pads & discs, automatic transmission fluid. Each of these is covered in this manual and the index will help you find them quickly. If you want to tow a trailer, it's a good idea to review these sections before you start your trip.

Check periodically to see that all hitch nuts and bolts are tight.

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Service and Maintenance

EXTERIOR



The following checks are recommended before driving to maintain safe and dependable vehicle operation.

1. Check the tires for inflation pressure and damage.
2. Check the wheel nuts for looseness.
3. Check the operation of the lights.
4. Check for any oil, water, fuel and fluid leaks.

INTERIOR

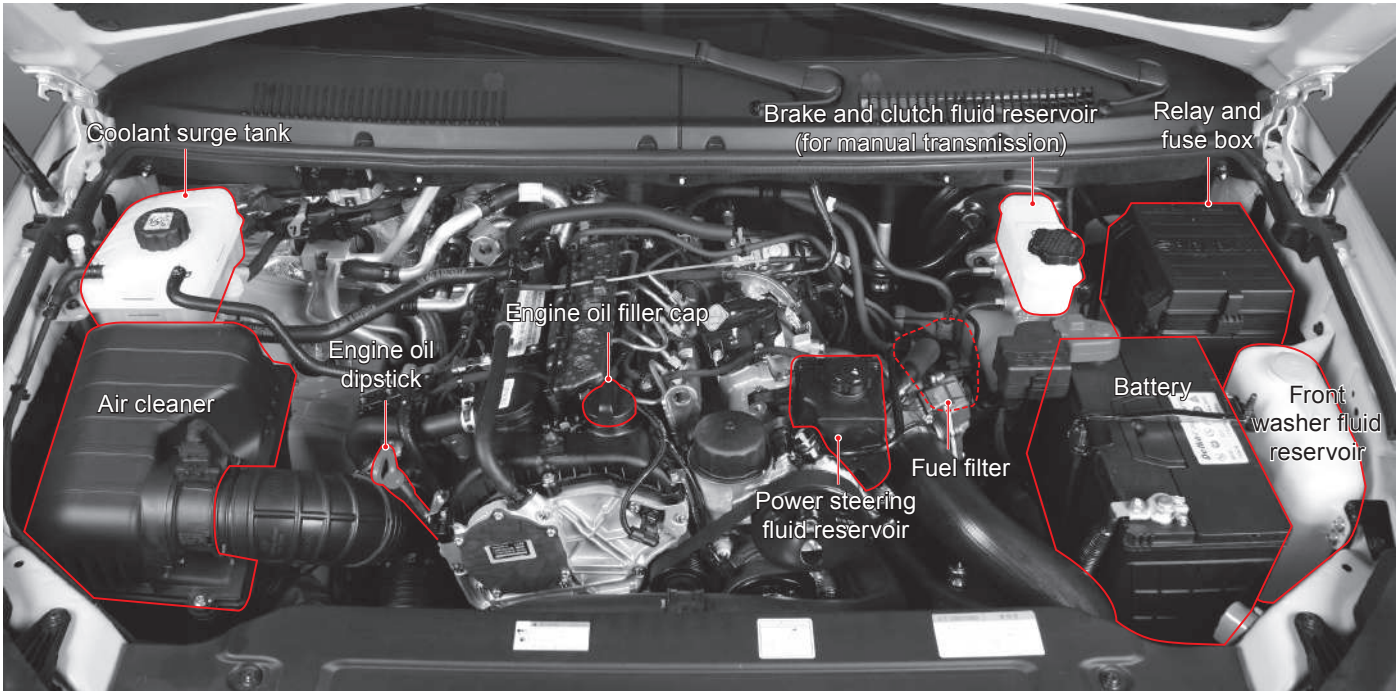


1. Check for the steering wheel's free play and looseness.
2. Check the travel of parking brake lever.
3. Check the operation of the horn, windshield wipers and turn signals.
4. Check the operation of the instrument cluster, indicators and warning lights.
5. Check the level of fuel in the fuel tank.
6. Check the position of the rearview mirrors.
7. Check the operation of the door and window locking mechanism.
8. Check the brake and clutch pedal's free play, height and function.
9. Check the seat belts.

CAUTION

If in doubt about driving and operating conditions, have your vehicle checked at a Ssangyong Dealer or Ssangyong Authorized Service Center.

DIESEL ENGINE (D22DTR)

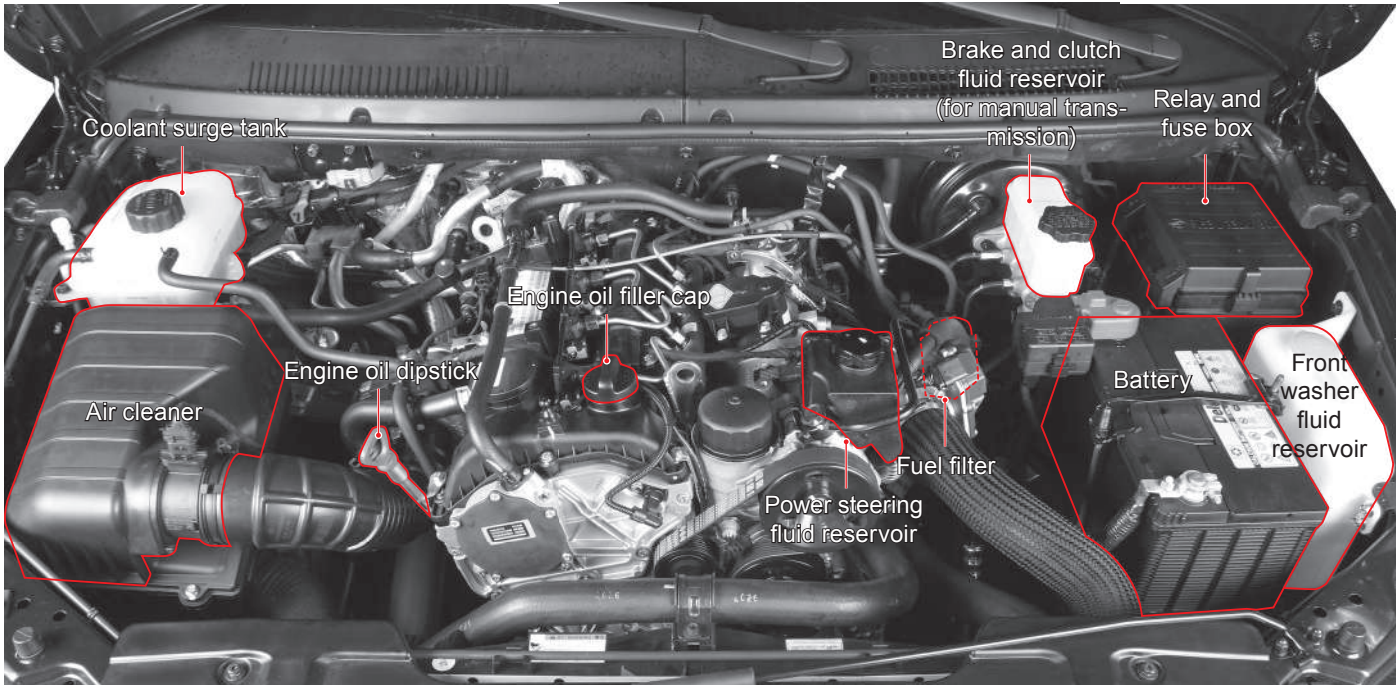


※ Actual appearance may differ from the image shown above.

CAUTION

Do not work on the engine compartment while the engine, radiator, exhaust manifold, muffler or catalytic converter is hot. Always turn the engine off and allow it to cool before starting the maintenance.

DIESEL ENGINE (D20DTR)

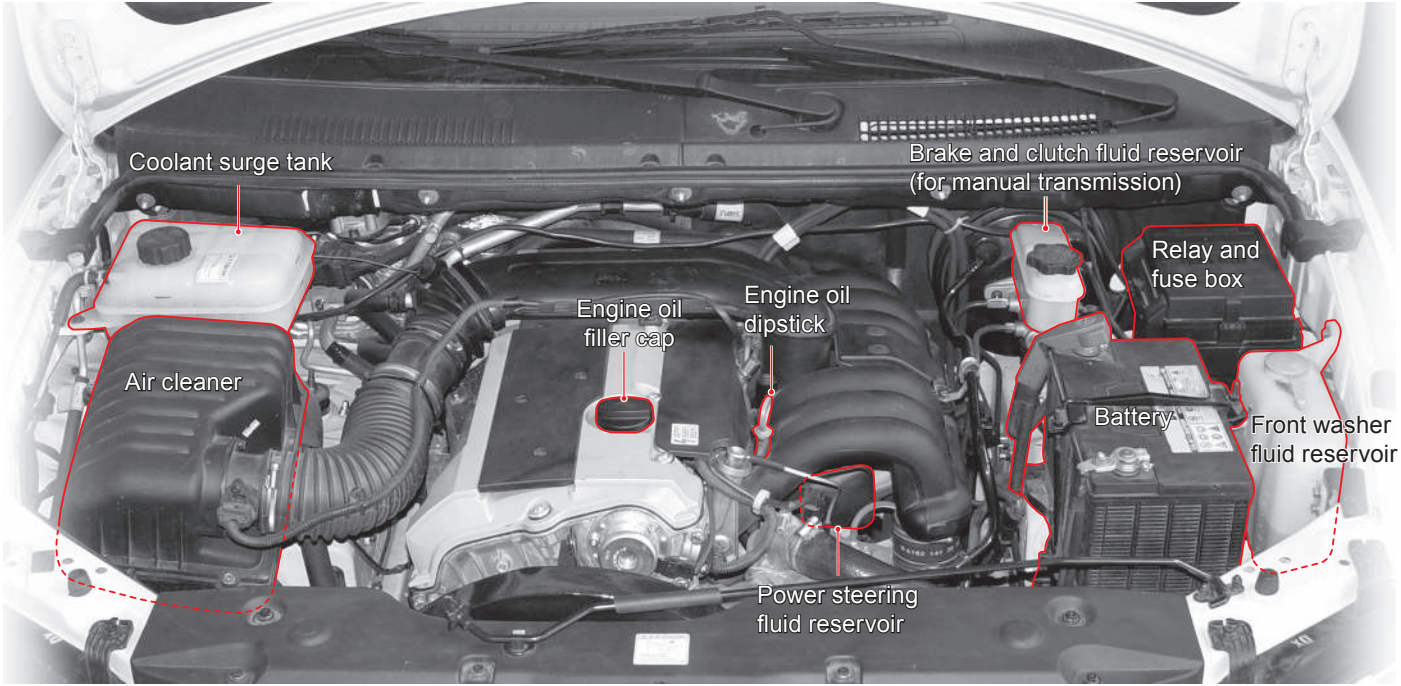


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CAUTION

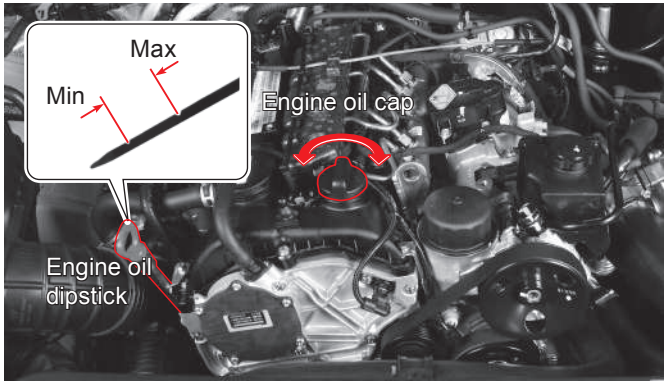
Do not work on the engine compartment while the engine, radiator, exhaust manifold, muffler or catalytic converter is hot. Always turn the engine off and allow it to cool before starting the maintenance.

GASOLINE ENGINE (G32D)

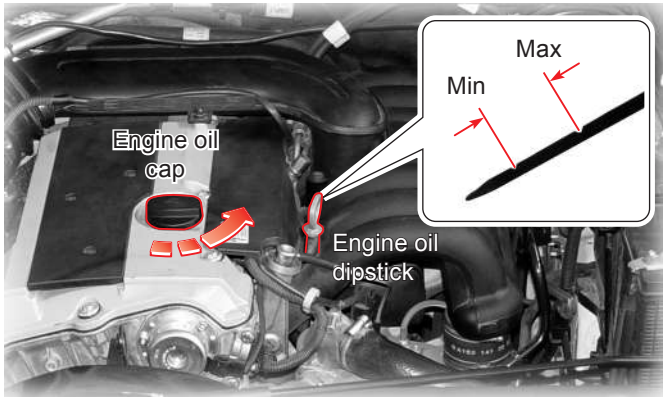


※ Actual appearance may differ from the image shown above.

Diesel Engine



Gasoline Engine



Level Check

Park the vehicle on a level ground and apply the parking brake. Stop the engine and wait more than 5 minutes.

1. Pull out the dipstick and wipe it with a clean cloth. Reinsert it all the way.
2. Pull out it again and check the oil level.
3. The oil level should be between the maximum (Max) mark and minimum (Min) marks on the oil dipstick. Oil should be replenished before the level goes below the minimum mark.

Replenishment

1. If the level gets to the lower point, open the filler cap on top of the cylinder block and add the genuine oil without exceeding the level of the upper mark.
2. Recheck the oil level after 5 minutes.

Specification and Capacity

Specification	Diesel	Quality class: Ssangyong genuine engine oil (Approved by MB Sheet 229.51 5W30)
	Gasoline	Quality class: Ssangyong genuine engine oil (Approved by MB Sheet 229.1 10W40, MB Sheet 229.51 5W30, SN/GF-5 5W20)
Capacity	Diesel	≒ 6.0ℓ
	Gasoline	≒ 9.0ℓ

WARNING

Use only Ssangyong genuine engine oil and filters. Use of non-recommended products could cause damage to the engine.

FUNCTION OF ENGINE OIL

Engine oil's major function is to lubricate and cool the parts inside of the engine, which enables engine to work properly.

Consumption of Engine Oil

The consumption of engine oil is depending on the viscosity and quality of the oil, and the driving habit. More oil may be required under the following conditions;

- When the Vehicle is New

A new engine usually consumes more oil because its pistons, piston ring and cylinder walls are not yet adjusted with an optimal condition.

Oil Consumption : Max. 0.5 Liter per 1,000 km

Accordingly, it is necessary for the driver to check frequently the oil level and to replenish oil if needed. SYMC recommends that the oil level be checked every time you refuel the vehicle or you drive the long distance until the first 5,000 km.

- When driving at High Engine Speeds

As long as you keep the followings with sufficient care in your first running the vehicle, it will guarantee you to get excellent and comfortable performance for a long with your vehicle.

- Remember to check the engine oil level and shorten the cycle to refuel the engine oil under severe driving conditions.
- Avoid subjecting to engine to heavy loads by driving at full throttle, especially be careful when the outside temperature remains below freezing for the first 1,000 km.
- Do not use the trailing in the first 1,000 km driving

*** What's Severe Driving Condition?**

- Driving at the high engine speed or at high-speed
- Driving for consecutive two hours at high speed
- Driving the rough road, off-road, dirt-laden road, and muddy roads
- Driving in areas where salt or other corrosive materials are being used
- Repeated driving in short-distance
- Driving with the excessive idling
- High load driving such as trailing

CHANGE INTERVAL

- The engine oil filter element should be changed at the same time with the engine oil.
- Use only the Ssangyong genuine engine oil and filter.

Engine Oil

Refer to Section "SCHEDULED MAINTENANCE SERVICES".

Engine Oil Filter

Item	Service interval
Engine oil filter	Same interval with the engine oil

WARNINGS AND CAUTIONS WHEN CHECKING

WARNING

- Clean the dipstick with a clean cloth so that any foreign materials cannot get into the engine.
- Use only the Ssangyong genuine engine oil.
- The oil should not go above the upper mark on the dipstick.
- Operating with insufficient or too much amount of oil can damage the engine.

CAUTION

Regularly check the engine oil level and add the Ssangyong genuine engine oil if necessary.

*** How to check engine oil specification**

Example:

0W, 5W, 10W, 15W, 20W, 25W — Winter oil viscosity (W: Winter)

20, 30, 40, 50, 60 — Summer oil viscosity

- The numerical, for example SAE 10W, relates to viscosity at particular temperature and the alphabet “W” indicates the oil’s suitability for colder temperature.
- For summer oil viscosity, higher numbers mean higher viscosities.

NOTE

In severely cold or hot region, using the engine oil with SAE (viscosity) classification suitable for the prevailing outside temperatures is strongly recommended.

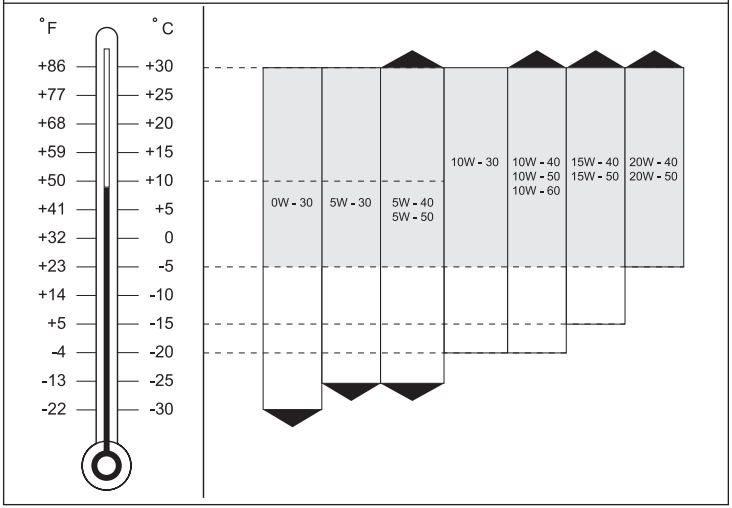
SAE VISCOSITY CLASSES

The SAE classes (viscosity) should be selected in accordance with the average seasonal air temperature.

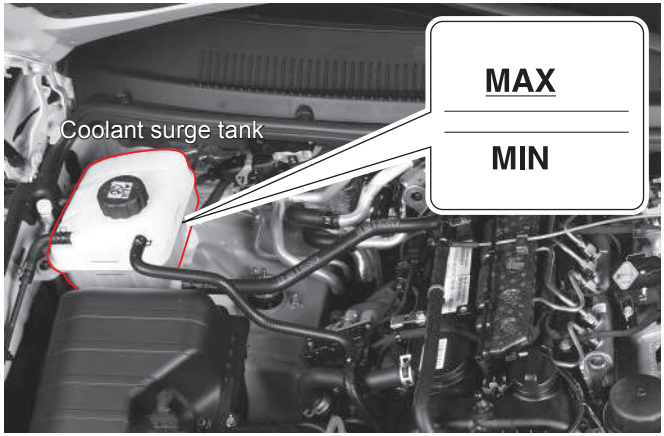
Applying the SAE classes exactly on the basis of the outside air temperatures would necessitate frequently changing the engine oil. The temperature limits for the SAE classes should therefore be regarded as reference temperatures and the actual air temperature may be higher or lower for a short period of time.

Engine

The viscosity should be selected according to outside temperature. Do not switch to a different viscosity in the event of brief temperature fluctuations.



Diesel Engine



Level Check

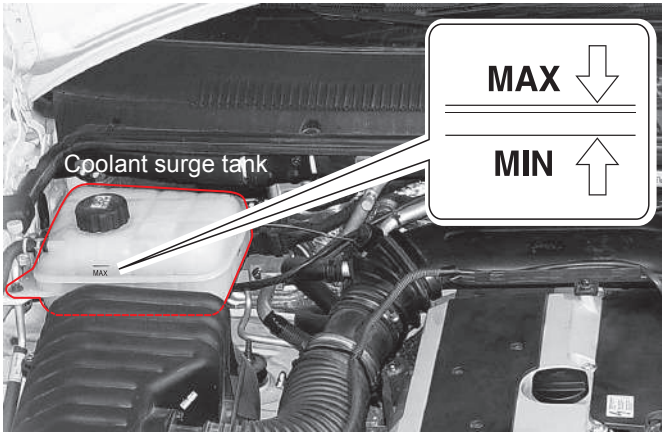
Park the vehicle on level ground and apply the parking brake. Stop the engine and wait until it cools.

1. The coolant level should be between the MAX and MIN mark on the coolant surge tank.
2. Check the coolant level. If the level is below the “MIN” mark, immediately add coolant.

WARNING

- Do not remove the coolant reservoir cap when the engine and the radiator are hot. The cooling system may spray hot coolant if the cap is removed, causing serious injuries.
- Use only the Ssangyong genuine coolant and anti-freeze.

Gasoline Engine



Service Interval

Replacement: Every 5 years or every 200,000 km

Diesel Engine	11.5ℓ	Ssangyong genuine coolant Anti-Freeze SYC-1025, Anti-Freeze:Water = 50:50 ORGANIC ACID TYPE, COLOR:BLUE
Gasoline Engine	11.5 ~ 12.0ℓ	

Check: Everyday, before driving off

Replenishment: Replenish as necessary

Replenishment

Use only the 50/50 mixture of soft water and antifreeze as specified.

1. Open the coolant surge tank cap slowly when the engine is cold. At this time, you can hear a “hissing” sound.
2. When there is no more “hissing” sound, remove the cap from the surge tank.
3. Add the 50:50 mixture of water and antifreeze to the coolant reservoir tank.
4. If no unusual things happen, tighten the coolant reservoir cap.

CAUTION

Avoid any direct contact of the coolant to the painted body of the vehicle.

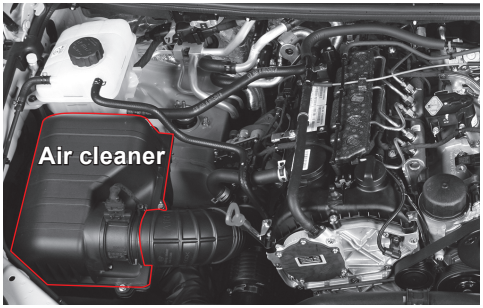
WARNING

When the coolant level is too low, the engine can overheat. If the coolant temperature gauge in the instrument cluster goes up abnormally, immediately check the coolant level. Use only the Ssangyong genuine coolant and anti-freeze. If different types of coolants or unapproved coolants are used to refill, chemical reactions can be caused and block the flow of the coolant. This may cause the engine to overheat or burning inside the engine.

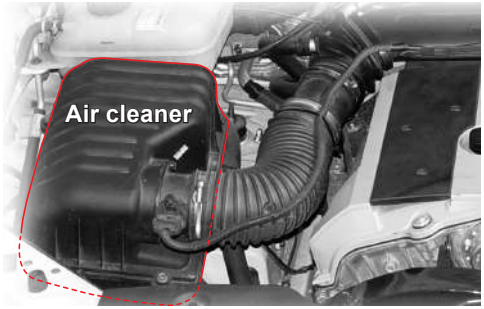
WARNING

- Scalding hot coolant and steam could be blown out under pressure, which could cause serious injury. Never remove the coolant surge tank cap when the engine and radiator are hot.
- Use only the Ssangyong genuine coolant and anti-freeze.

Diesel Engine



Gasoline Engine



Cleaning

Refer to Section “SCHEDULED MAINTENANCE SERVICES”.

Blow the compressed air through the element in the opposite direction to normal air flow to clean the element.

WARNING

- Do not drive your vehicle with an improperly installed air cleaner element or without it. It may damage the engine or may cause a fire.
- Do not let any object enter the housing when cleaning the air cleaner. It may damage the engine or may cause an engine to stall.

CAUTION

- If you blow the compressed air to normal air flow, the engine will be damaged due to foreign materials entering.
- Be careful with the direction of the compressed air on the air cleaner.

CAUTION

If vehicle is operated under severe condition

- Pollutant area or off-road driving
- Driving in dusty condition or sandy condition

frequently inspect the air cleaner, if necessary, change the air cleaner.

If the vehicle is operated in very dusty or sandy areas, replace more often than at the usual recommended intervals. If it is dirty, shake the element to remove dust. Clean the inside of the air cleaner housing and cover with a damp cloth.

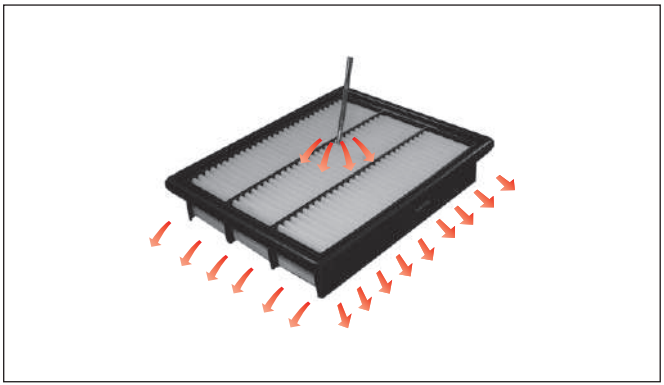
Clean the air cleaner element by blowing compressed air through it in the opposite direction to normal air flow.

WARNING

- Engine can be damaged.
- Do not operate the vehicle without air cleaner element.

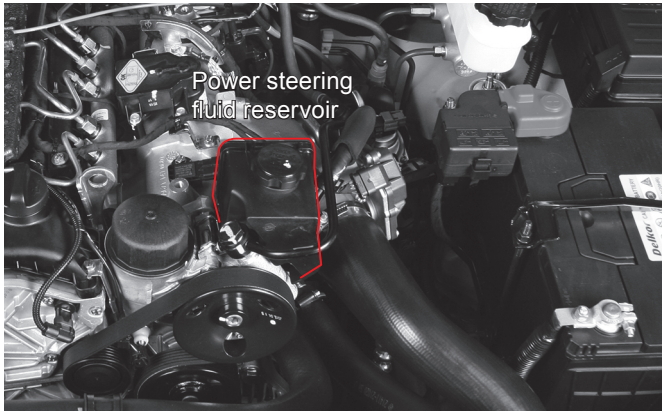
Change

1. Unscrew the cover bolts and remove the cover.
2. Replace the air cleaner element with a new one. Make sure that the element is correctly installed in the air cleaner housing.
3. Close the cover and tighten the bolts.

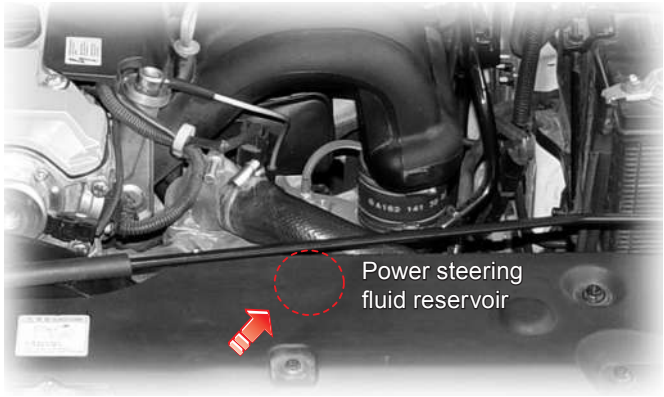


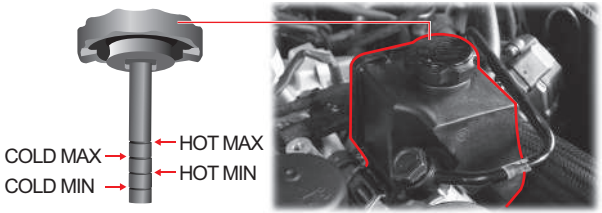
Blow the compressed air through the element in the opposite direction to normal air flow to clean the element as shown above.

Diesel Engine



Gasoline Engine





Check the fluid level on a level ground with the engine turned off. The fluid level should be between the MIN and MAX marks on the reservoir cap gauge. If it drops to or below the MIN mark, refill the reservoir with the specified fluid. Only use the specified fluid. The difference between the MIN and MAX marks shows fluctuations of the steering fluid between when it is hot and when it is cold.

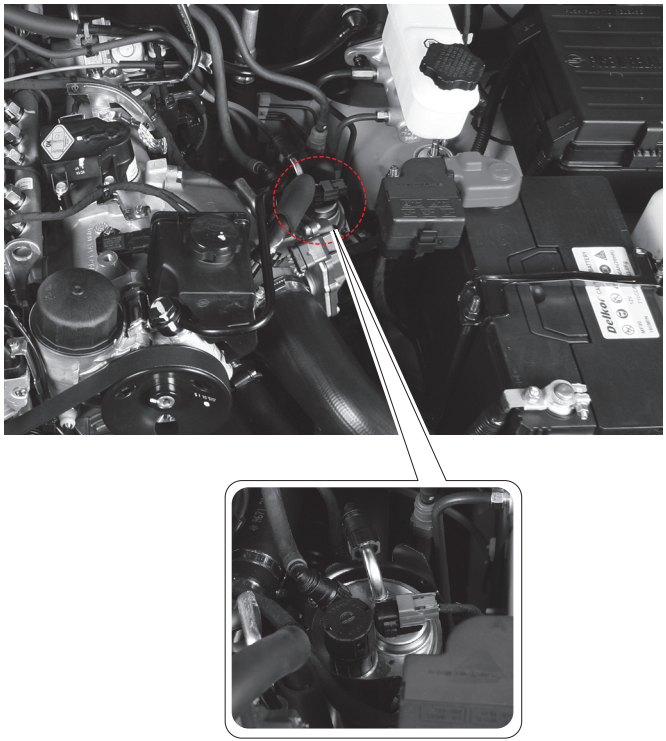
Specification and Capacity

Specification	S-PSF3
Capacity (L)	Approx. 1.1 See NOTE 1: TOTAL FLUIDE DA (Extreme cold condition only)

NOTE 1: Super multigrade fluid with an exceptionally high viscosity index and a very low pour point, allowing functionality of hydraulic systems at extremely low temperatures. Excellent lubricating properties even at very low and very high temperatures.

CAUTION

- Be careful not to let any foreign materials enter the tank when adding the fluid.
- Do not allow the fluid to make contact with the body paintwork.
- After adding the fluid, tighten the cap securely.



Water Separating Function

If water in fuel gets into the engine and fuel system, it may cause serious damage to the fuel system. The fuel filter provides the water separating function to block the inflow of water. When the water level inside the water separator in the fuel filter exceeds a certain level, the warning light comes on and the buzzer sounds. If it occurs, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Center.

	Service Interval
EU	Change every 40,000 km (Draining water from fuel filter: whenever replacing the engine oil)
General	Change every 45,000 km (Draining water from fuel filter: whenever replacing the engine oil)

CAUTION
Change the fuel filter according to the specified service interval.

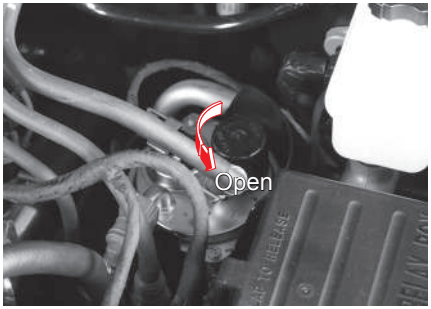
Priming Pump Operating Conditions

1. If the vehicle has been run out of fuel
2. After draining water from the fuel filter
3. After replacing the fuel filter

If this happens, pump fuel until the fuel filter is fully filled. Then, start the engine.

WARNING
After replacing the fuel filter or draining the water from the fuel filter, bleed the air from the fuel filter by using priming pump. Otherwise, the engine cannot be started or the fuel system could be damaged due to the air in fuel line.

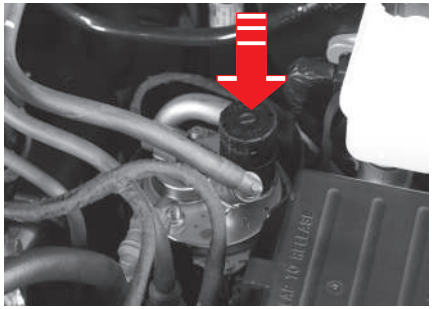
How to use priming pump



1. Press down the pump knob and turn it counterclockwise (Open direction).

CAUTION

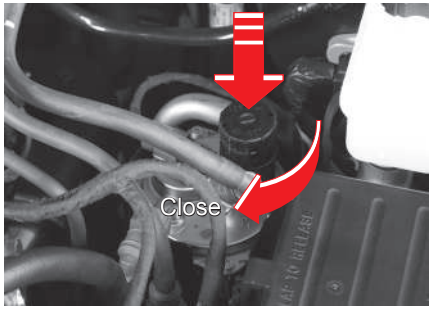
To open and close the pump knob easier, please use a pair of pliers.



2. Pump the knob until the fuel comes out from the priming hole.

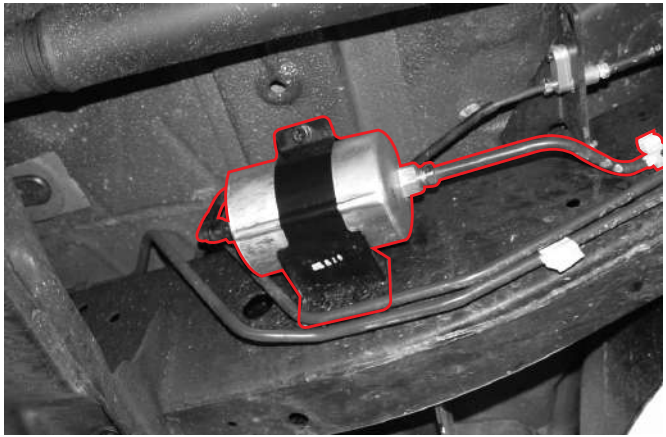
CAUTION

Pay particular attention when pumping the priming pump. It can damage your vision if it gets into your eyes.



3. Press down the pump knob and turn it clockwise (Close direction).
4. Close the engine hood and start the engine.

FUEL FILTER



If the filter is contaminated, the supplied fuel will be reduced, main components will be damaged due to entering the contaminated materials and the performance of catalytic converter will be deteriorated.

Replace the fuel filter according to the specified maintenance schedule.

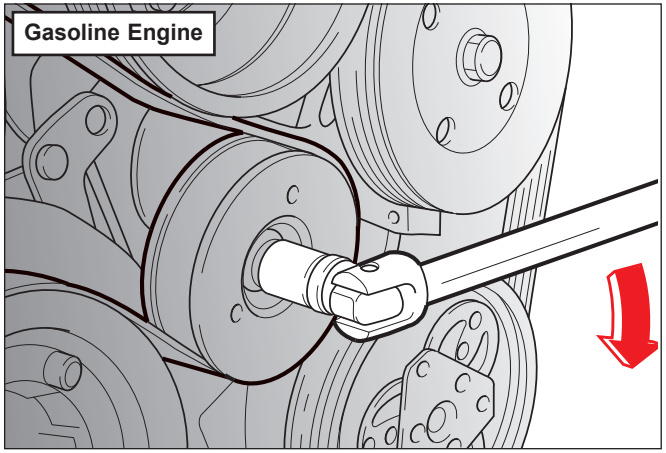
Service Interval

Replacement	Every 100,000 km (if using poor quality of fuel, replace every 30,000 km)

CAUTION

Replace with a Ssangyong genuine part with specified intervals.

DRIVE BELT



You do not need extra tension adjustment, but check belt for wear or tension by pushing the belt and replace if necessary.

Belt replacement: Gasoline Engine

Install a device onto the tension adjuster and rotate clockwise to release the tension and take off the belt.

WARNING

The engine could inadvertently start while checking the belt and cause moving parts to crush or cut. Remove key from ignition switch.

BRAKE PEDAL

Checking pedal free play

Turn off the engine and depress the brake pedal several times to deplete the vacuum in the brake system. Gently depress the brake pedal by hand and measure the distance it moves until slight resistance is felt. If the free play is more or less than specified, have the brakes adjusted by a Ssangyong Dealer or Ssangyong Authorized Service Operation.

Brake pedal free play	1 ~ 4 mm

CLUTCH PEDAL

Checking pedal free play

Depress the pedal by hand until clutch resistance is felt; ensure free play is within specification.

If the free play is more or less than specified, have the clutch or linkage adjusted by Ssangyong Dealer or Ssangyong Authorized Service Operation.

Clutch pedal free play	5 ~ 10 mm

SPARK PLUGS



Spark plugs should be inspected periodically for carbon deposits. When carbon accumulates on a spark plug, a strong spark may not be produced.

If necessary, clean the electrodes with a fine wire brush and carefully scrape the carbon off the insulator with a small file. The spark plugs should then be blown clean with compressed air and the upper insulator wiped clean. And adjust the spark plug gap.

Service Interval

Replacement (G32D)	Change every 30,000 km

Specification (G32D)	NGK	BKUR5ETZ-10
	Gap	1.0 ± 0.1 mm

CAUTION

- When replacing the spark plugs, disconnect the negative terminal of the battery and turn off all the switches.
- It is recommended that the engine be cool or cold when changing the spark plugs (you could burn yourself).
- Do not use non-recommended spark plugs.
- Do not allow contaminants to enter spark plug hole.

WARNING

Spark plugs may be very hot. Be careful not to burn yourself.

CATALYTIC CONVERTER

The catalytic converter is located between exhaust manifold and center muffler. The catalytic converter consists of monoliths with honeycomb shaped structure of ceramic material which are elastically mounted in a wire mesh structure.

This precious metal coating on the monoliths accelerate the reduction and/or oxidation of toxic components.

On vehicles with a catalytic converter for unleaded fuel, lead fuel will damage the catalytic converter and parts of the electronic system, thereby rendering them inoperative.

Damage to the catalytic converter or the vehicle may result if the following points are not observed :

Consult a Ssangyong Dealer or Ssangyong Authorized Service Operation as Quickly as possible in the event of misfiring, irregular engine running following a cold start, a significant loss of engine power or other unusual malfunctions which may indicate a fault in the ignition system.

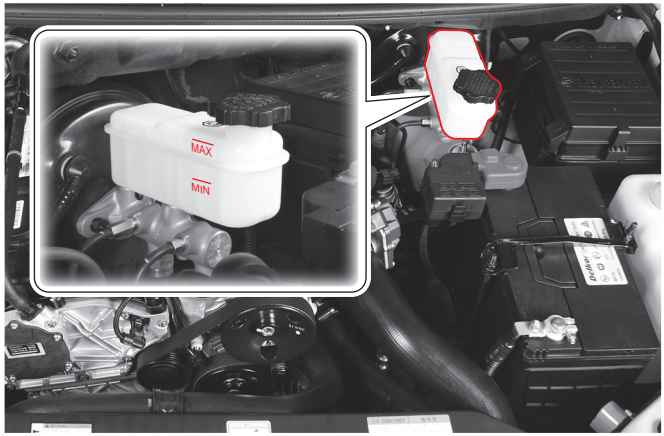
If necessary, driving may be continued for a short time at a low speed and with low engine revolutions.

You should therefore avoid :

- Frequent repeated cold starts.
- Actuation of the starter for an unnecessarily long time during starting (fuel is injected during the starting procedure).
- Allowing the tank to become empty (an irregular fuel supply leads to overheating)
- Starting the engine by pushing or towing (unburned fuel may enter the catalytic converter) : use jump leads.

Have all maintenance work carried out by a Ssangyong Dealer or Ssangyong Authorized Service Operation. You can then be certain that all components of the vehicle's electrical, injection and ignition system will be operating correctly, that your vehicle has a low level of pollutant emission and that the catalytic converter system will have a long life.

Diesel Engine



Specification and Replacement

Specification	DOT4
Service interval	Every 2 years

Level Check and Replenishment

- The fluid level should be between the “MAX” and “MIN” levels on the reservoir.
- Check the level on a level surface. If it drops to or below the MIN mark, refill the tank with the specified fluid. Only use the specified fluid.

CAUTION

- Be careful not to let any foreign materials enter the tank when adding the fluid.
- Do not add the fluid above the “MAX” level.
- Do not allow the fluid to make contact with the body paintwork.
- After adding the fluid, tighten the cap securely.
- If frequent refills are required, have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WARNING

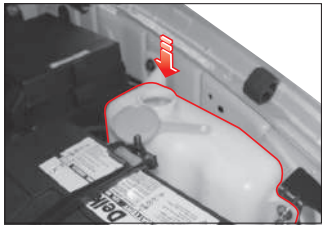
- Use only the Ssangyong genuine brake fluid.
- Do not allow the fluid to make contact with skin or eyes. If contact happens, rinse affected areas immediately with plenty of water. If irritation persists, consult a doctor.
- The fluid gradually decreases according to brake pad wear. A sudden drop of the fluid level may indicate a leak in the system. In this case, have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WASHER FLUID

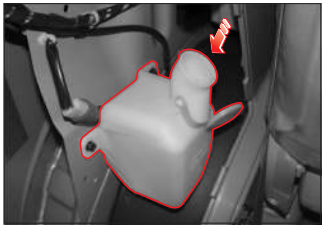
Frequently check the washer fluid level and add the specified product as needed.
In winter, use only the specified washer liquid for winter season.



Front washer reservoir



Rear washer reservoir



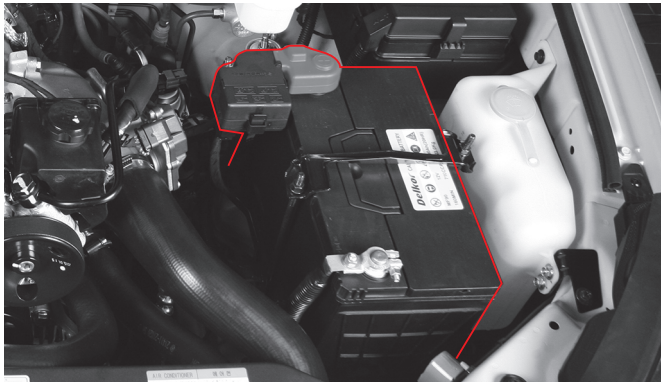
WARNING

- The washer fluid includes flammable materials to prevent freezing. It could cause a fire when directly contacted with flames. When checking the washer fluid, avoid the flames near the washer fluid tank.
- If engine oil or antifreeze is used as the washer fluid, it will decrease your visibility through the windshield and may cause an accident.

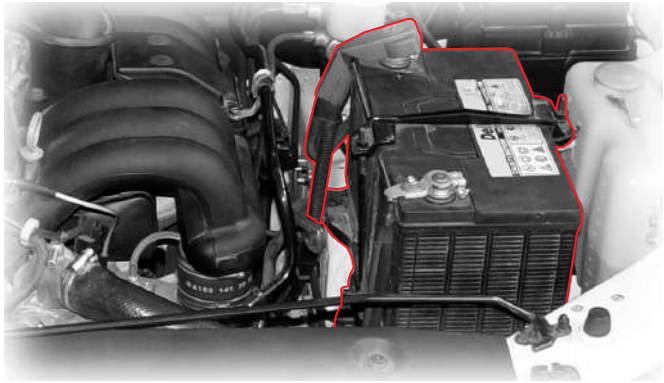
CAUTION

- If you use plain water as washer fluid, it will freeze during the winter and damage the washer fluid reservoir and motor. Use only the specified washer fluid.
- If you operate the washer switch without washer fluid, the motor could be damaged due to overloads. Therefore, if there is no washer fluid, do not operate the washer motor.
- Operating the wipers on a dry surface on the windshield or rear window without any washer fluid may cause damage to the glass. Operate the wipers after sufficiently spraying the washer fluid.
- Avoid any spills of washer fluid on the engine or body paint of your vehicle during replenishment. If washer fluid spills onto your hand or other body part, wash it away under a clean water flow.
- There is no independent washer reservoir for the tailgate window. The front washer reservoir is also for the tailgate window.

Diesel Engine



Gasoline Engine



When the battery charge warning light ( ) on the instrument cluster comes on, the battery is not normally charging. If the warning light comes on while driving, turn off all unnecessary electrical devices and have the system checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

Battery Maintenance

- Make sure the terminal connections are securely tightened.
- If the terminals are corroded, clean them with a wire brush or sand paper.
- The battery terminal should be disconnected only when the ignition key is removed from the key cylinder. Disconnecting the terminal with the key in the “ON” or “ACC” position may cause a sudden change in voltage and damage various electrical systems.
- Check the battery for any cracks, damages or leaks. Replace it if necessary. To remove any battery fluid on the battery surface, wear rubber gloves and wipe the fluid out with a wet-soapy cloth.

Specification

Specification	DC 12V
Capacity	90AH

CAUTION

- If you disconnect the battery terminal when the engine is running, electrical systems could be damaged.
- To remove the battery cable, disconnect the negative cable first. And be careful on the battery terminal polarity when you connect the cables. The negative and the positive should not be confused.
- The polarity of the battery, i.e. the connections for positive and negative cables, must not be interchanged. Never short-circuit the battery.
- When the ambient temperature is too low, the battery capacity will drop and can be frozen.
- Keep the battery electrolyte at its specified level. If the electrolyte level is higher than the MAX level, it can overflow during battery charging and if the electrolyte is overcharged, the battery can explode.
- Only use a battery with the approved voltage and capacity. Otherwise, an incompatible battery can catch fire.

WARNING

- The battery has acid that can burn you. And its gas can explode. You can get serious injuries if you are not careful. Keep naked flames, sparks and smoking items away from the battery.
- Loosely connected batter terminals can set up sparks. These sparks can cause a fire with flammable gas. Therefore, tightly connect the terminals.
- At night, if you need to check the engine room, do not use a lighter, but only use a battery-powered flashlight.
- Because the battery electrolyte is very strong acid, avoid any direct contact of the battery electrolyte on your skin or vehicle's body. If the acid contacts your skin, thoroughly wash your skin with fresh water and see your doctor. Do the same on your vehicle.
- Wear eye protection when working with a battery. If working in a closed area, keep good ventilation.

WARNING

- Always use the battery with correct voltage for the vehicle. Otherwise, there is a risk of fire.
- Observe the indications on the battery.



Always read the safety instructions in the User Manual before working on the battery.



The battery cell always contains highly flammable hydrogen gas which may explode if ignited. Be sure to keep it away from a cigarette, a spark or other flames.



Wear a protective goggle when charging the battery or performing any work.
In addition, ensure adequate ventilation of the enclosed space.



The battery electrolyte solution contains a highly corrosive sulfuric acid. Be careful not to contact it with skin, eyes, clothes or paint. In particular, keep out of the children's reach.



When in contact with the skin, wash off the contact area; In case of eye contact, flush with running water for at least 15 minutes, and seek medical help immediately.



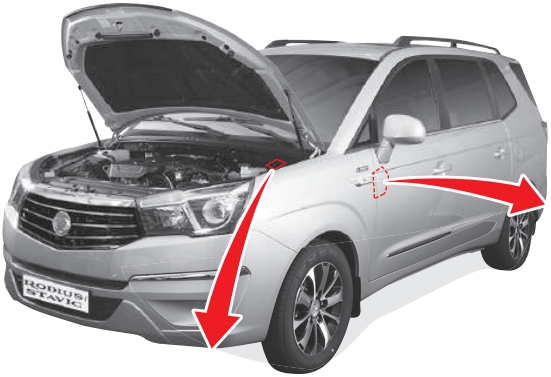
The hydrogen gas in the battery is highly flammable and may explode if ignited.



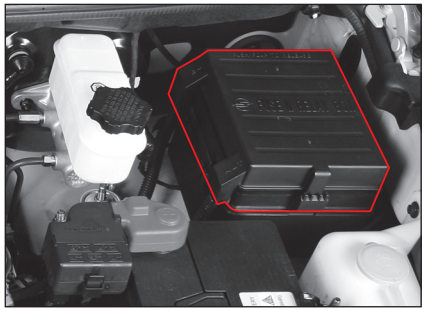
Do not throw out used battery as this pollutes the environment and is hazardous to our health. For environmental protection, used, properly dispose of used battery at designated disposal sites only.

FUSE AND RELAY BOX

If any of the electrical system components do not operate, check its corresponding fuse. If the fuse is blown, replace it with the same capacity.

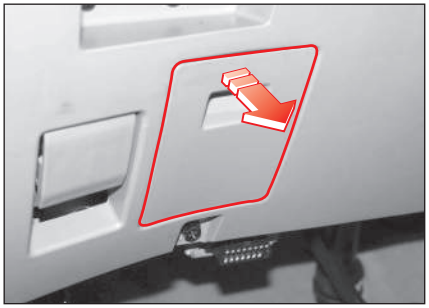


Underhood relay and fuse box



Underhood fuse box is located at the right side in engine compartment.

Interior fuse box



Interior fuse box is located at the left side of the instrument panel.

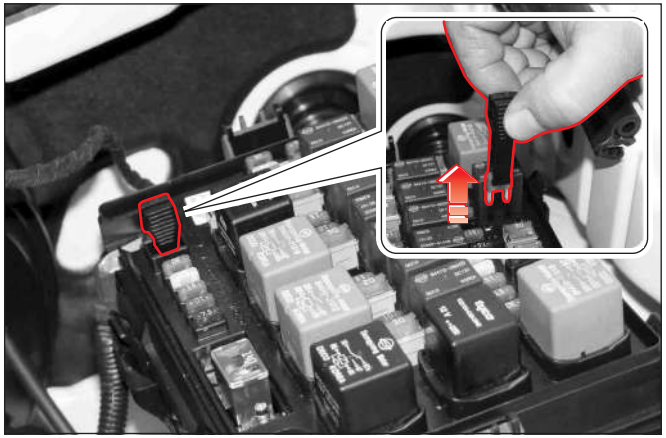
CAUTION

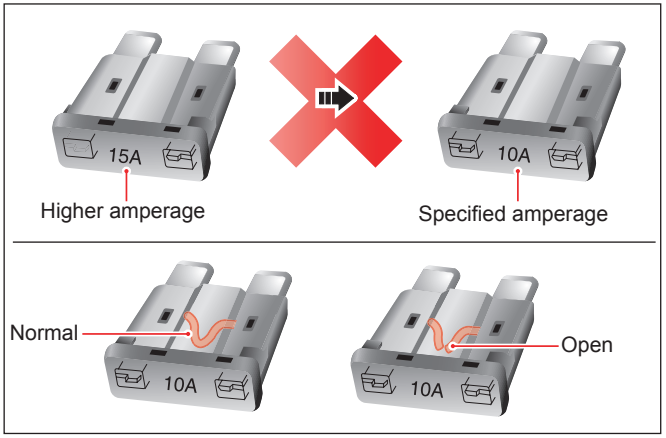
- When an electrical system does not operate, check its fuse first. If a fuse is blown, check its capacity and replace it with the same capacity.
- If you remove an electric system's fuse while the system is operating, the electrical equipment could be damaged. Always remove the ignition key from the ignition switch and turn off all electric devices.
- Always replace a specified fuse with the same rating.
- If a newly inserted fuse blows again after a short time, have the electrical system checked and repaired by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WARNING

If you do not use genuine parts or specified light bulb, and if you alter the HID bulb or LED lamp wiring, fuse disconnection, malfunction and other wiring damages could occur.

HOW TO CHECK AND REPLACE FUSE





1. Turn off all electrical systems and remove the ignition key from the key cylinder.
2. Open the fuse and relay box cover.
3. Locate the defective fuse.
4. Pull out the relevant fuse by using the fuse puller.
5. Visually check whether it is blown or not.
6. If normal, insert it to its original position.
7. If blown, check its capacity and replace it with the same capacity.

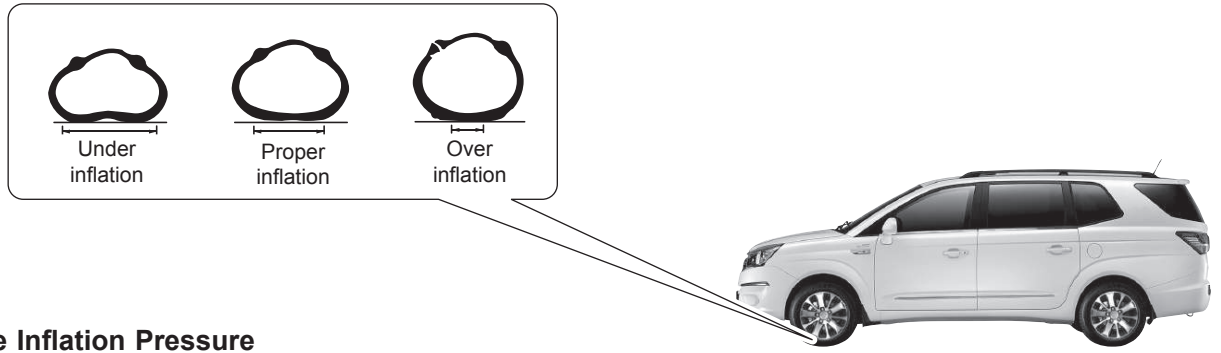
WARNING

- The use of anything other than the specified fuse could cause damage to the electrical system and even cause a fire.
- The use of different types or different rating fuses could cause damage to the electrical system and even cause a fire. Always replace a fuse with the one with the same rating.

NOTE

The underhood fuse and relay box has some spare fuses. Refill the fuses immediately as you use them. The fuse rating is indicated on the upper surface of the fuse.

TIRE INFLATION PRESSURE



Tire Inflation Pressure

Vehicle	Tire	Wheel	Tire Inflation Pressure
7 ~ 9 Seat	225/65R16	6.5J x 16	35 psi (2.4 bar)
11 Seat	LT225/65R16	6.5J x 16	
7 ~ 11 Seat	235/60R17	7.0J x 17	

Wheel alignment and balance between tire and wheel

If the wheels are not aligned as specified, it leads to uneven and faster wear of tire and the vehicle pulls to one side. If the wheels and tires are not balanced, it could result in uneven wear of tire and vehicle vibration. If the above symptoms occur, immediately stop driving and have the vehicle checked at a Ssangyong Authorized Service Center.

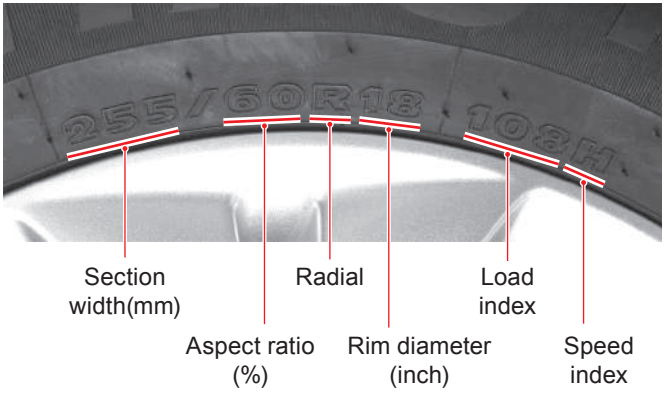
CAUTION

- Maintaining the specified tire pressure is essential for comfortable riding, driving safety, and long tire life. Incorrect inflation pressures will increase tire wear and will impair safety, vehicle handling, comfortable driving and fuel economy. Always make sure that the tire inflation pressure is correct.
- Check and adjust the tire inflation pressure, including the spare wheel, prior to any long journey (before the tire is heated up).
- Even the temporarily installed spare tire should be inflated properly.

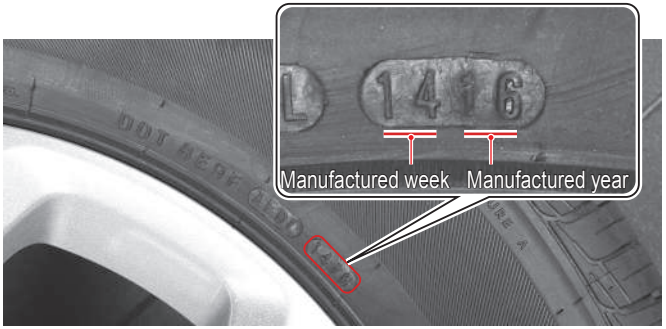
NOTE

The tires should be checked before they are heated up using an tire pressure gauge.

TIRE SIZING CHART



Load index		Speed index	
Symbol	Maximum Load (kg)	Symbol	Maximum speed (Km/h)
102	850	S	180
104	900	T	190
106	950	U	200
108	1,000	H	210
110	1,060	V	240
112	1,120	Z	Over 240



Tire Date of Manufacture

In general, all tires should be replaced after six years from the date of manufacture regardless of the remaining tread.

You can check the date of manufacture by looking for the DOT Tire Identification Number (TIN). The last 4 digits of TIN indicates the date of manufacture with the front 2 digits representing the week and the last 2 digits representing the year in which the tire was manufactured.

Temperature Inside the Tire



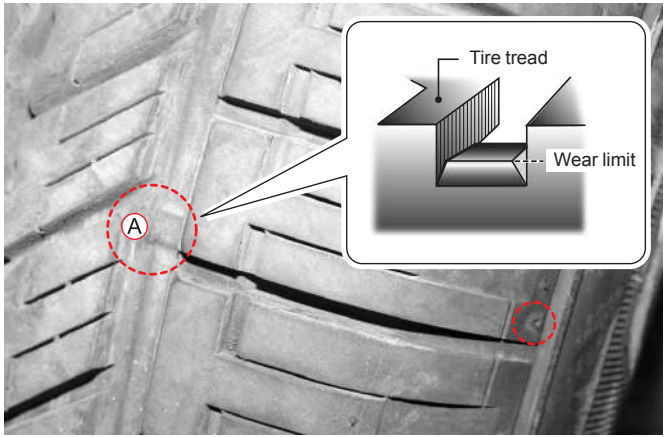
The temperature inside the tire increases during driving.

Overloaded vehicle, low tire pressure or driving at a high speed creates more heat and the heat builds in the tire. The limit temperature of tires is about 125°C. If the temperature exceeds this limit, the adhesion between the underlying layers of tire is significantly reduced, and this may result in an accident.

Always maintain correct tire inflation pressure specified by the manufacturer and take a break every 2 or 3 hours of highway driving.

The temperature inside the tire drops about 20°C for 10 minutes of vehicle stationary.

TIRE WEAR CHECK

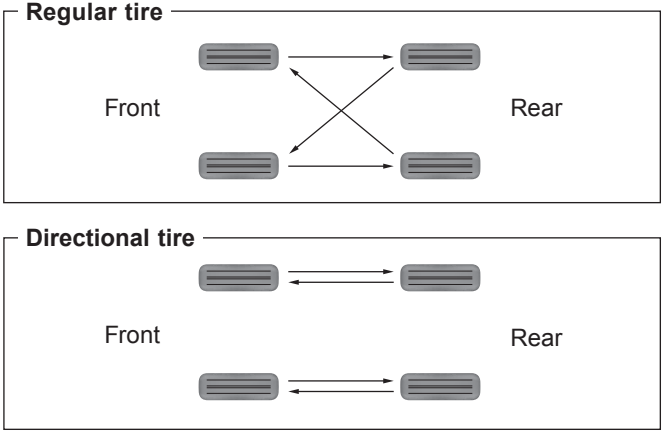


The tires on your vehicle have built-in tread wear indicators that appear between the tread grooves. The tire should be replaced when the wear indicators appear in two or more adjacent grooves.

WARNING

- Driving on worn or damaged tires is very dangerous and may cause an accident. Also, a damaged tire could burst.
- Check tires regularly for any damage (foreign objects, punctures, cuts, cracks, bulges in side walls) and replace if necessary.

TIRE ROTATION



To avoid uneven wear of tires and to prolong tire life, inspect and rotate your tires every 5,000 km.

WARNING

- Be sure to replace and rotate the tires at a Ssangyong Authorized Service Center or professional tire shops.
- Mixing tires could cause you to lose control while driving. Be sure to use the same size and type tires of the same manufacturer on all wheels.

SPARE TIRE

The size and type of the full-size tire is same as those of general tires.

Check the tire conditions and pressure as needed and always keep it available. For replacing procedures, refer to “In Case of Emergency” section in this manual.

CAUTION

After replacing the tire, be sure to adjust the pressure to the specified pressure of the tire. Otherwise, the suspension system and driving system may be damaged.

WINTER TIRE

Use snow tires when driving on snowy or icy roads.

If winter tires are used, they must be installed to all 4 wheels.

WARNING

- Drive very slowly with extra caution on snowy or icy roads.
- The snow tire with arrow direction markings on its side wall should be installed according to the arrow direction.
- The snow tires cannot guarantee your safety on icy and slippery road. Drive with extra caution, avoiding sudden acceleration, braking or movements of the steering wheel.
- When the snow tires are not needed anymore, replace them with ordinary tires. Keep the removed snow tires in a cool and shady place. Be careful not to contact them with any oil, grease, or fuel.

TIRE CHAINS

Install tire chains on rear wheels for a 2-Wheel Drive vehicle. And install tire chains on all wheels for a 4-Wheel Drive vehicle. If installing chains on only two wheels is unavoidable, tire chains should be installed on rear wheels.

If at all possible, install snow tires instead of tire chains for vehicles equipped with aluminum wheels, since the aluminum wheels can be damaged by chains. If installing tire chains is the only alternative, use wire-type tire chain with a thickness of less than 15 mm.

Drive the vehicle with tire chains installed at a speed of 30 km/h or less or at the specified speed recommended by the chain manufacturer. If a sound of chains being slammed against the vehicle body, stop the vehicle in a safe place immediately. Check the installation of the chains carefully and tighten the chains, if needed. Take tire chains off on dry pavement to avoid damaging the chains.

Do not drive the vehicle with tire chains installed on dry pavement.

WARNING

- Check the installation of tire chains and inspect the vehicle body for damage after driving about 0.5 to 1 km with the chains installed. If tire chains have been loosened, retighten the chains.
- Improper installation or use of incorrect tire chains can damage the vehicle or seriously endanger the operating reliability of the vehicle and road safety. Use tire chains that meet the specifications and install them in a professional manner.

CAUTION

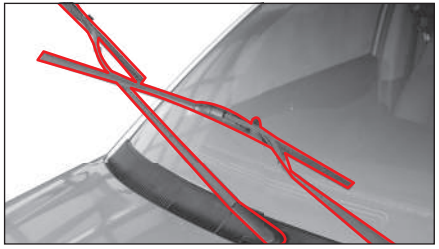
- Installing tire chains on front wheels is not required. If you need to install them on the front wheels, do not drive your vehicle at a high speed and/or change the direction of travel suddenly to prevent the surrounding components from being damaged.
- Do not use 4-Wheel Drive mode (4H, 4L) when tire chains are installed only on the rear wheels of a 4-Wheel Drive vehicle equipped with part-time transfer case. The driveline of the system can be seriously damaged. Use 4-Wheel Drive mode (4H, 4L) only when tire chains are installed on both the front and rear wheels or tire chains are not used.

CAUTIONS WHEN CHECKING THE WHEEL AND TIRE

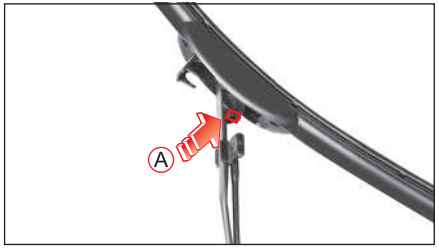
- Mixing tires could cause you to lose control while driving. Be sure to use the same size and type of tires of the same manufacturer on all wheels. If you do not use the same tires on the vehicle equipped with the 4WD (4 wheel drive), it may cause a serious damage to the vehicle's drive system.
- Check the inflation pressure, cracks and tearing of tires before driving.
- Improperly tightened wheel nuts can cause the wheel to become loose and even come off. This could lead to an accident. Be sure to check and tighten the wheel nuts as specified before any long journey.
- Do not use non-genuine wheel and tire. Non-genuine wheel and tire may have inferior performance and function and dangerous for safe driving. Also, any defects due to using them cannot be covered by warranty.
- Be sure to check the tires and wheels before driving. If a wheel is damaged, the tire inflation pressure can be decreased and the tire can be damaged.
- If a tire has been impacted by a stone or any other objects during driving, have it checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.
- The use of tire sizes other than the specified sizes may cause abnormal operation of the steering wheel, increased fuel consumption, damage to the powertrain or the braking system, vibration, or uneven tire wear. Always use the specified tires from the same manufacturer.

WIPER BLADE REPLACEMENT

Front Wiper



1. Remove the ignition key and lift the wiper arm up from the windshield.

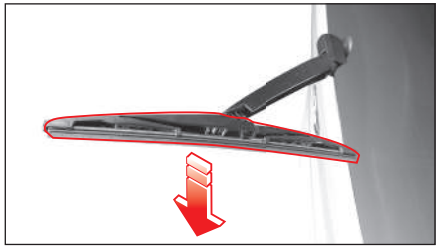


2. Pry up the blade lock (A).
3. Slide the blade out from the wiper arm.
4. Install a new blade.
5. Put the wiper arm down.

Rear Wiper



1. Remove the ignition key and lift the wiper arm up from the rear glass.



2. Slide the blade out from the wiper arm.
3. Install a new blade.
4. Put the wiper arm down.

Specification

Front wiper		Rear wiper
Left	Right	
600mm(24in)	450mm(18in)	300mm(12in)

CAUTION

- Do not open the hood when the wiper arm is lifted up. The wiper and hood may be damaged.
- Do not operate the wiper when the washer fluid reservoir is empty.
- Be certain not to apply any fluid polish containing oil to the windshield of your vehicle since this will result in streaks which impair vision. Contamination of either the window or the wiper blades with foreign materials can reduce the effectiveness of the windshield wipers. Never clean up the windshield with a waxed or oil-saturated cloth.

WARNING

- Malfunctioning wipers on a raining or snowing day may be detrimental to your driving safety. Never drive your vehicle with malfunctioning wipers on a raining or snowing day.
- Do not touch the running wipers. It may cause a personal injury.

When performing any inspection or maintenance work on your vehicle, always take care to prevent serious accidental injury to yourself or damage to the vehicle.

WARNINGS AND CAUTIONS WHEN PERFORMING DO-IT-YOURSELF OPERATION

WARNING

- Be careful not to touch any hot components such as the engine, radiator, exhaust manifold, catalytic converter, or muffler when the engine is just stopped. They may burn you badly. Let the engine cool down before any service.
- When working with the battery or fuel related components, always stop the engine and do not smoke. Also, remove all flames or sparks near the vehicle.
- Do not connect and disconnect the battery terminals when the ignition key is in the “ON” position.
- The polarity of the battery, i.e. the connections for the positive and negative cables, must not be interchanged.
- The battery cables and wires transfer high voltage and current. Avoid any short circuit.
- Make sure that the ignition key is “OFF” when performing any work in an enclosed space such as a garage.
- Keep the used oil and coolant out of reach of children. (For a proper disposal of them, contact a professional service.)
- When checking your vehicle, you must turn off the engine first. Then, put the shift lever into the “P” (automatic transmission) or “Neutral” (manual transmission) position and apply the parking brake.
- The electrical cooling fan can start to operate unexpectedly even when the engine is stopped. Disconnect the negative battery cable before you check the radiator, cooling fan or nearby parts.

CAUTION

- Check the level of the engine oil and every fluid including coolant daily. If you drive while the fluid levels are low, your vehicle can be damaged and such damages will not be covered by warranty.
- Use only the genuine Ssangyong oils and fluids.
- Do not allow oils and coolant to make contact with skin or painted surfaces during inspection or refill of them. They can also damage paint finish. If skin contact happens, rinse affected areas immediately with plenty of water and then consult a doctor.
- Do not overfill the oil or coolant, otherwise the engine and transmission may be damaged. Maintain the specified level.
- The performance of oils and coolant may be deteriorated when they are exposed to dust and moisture. Be careful not to allow contact with dust while refilling.
- In spite of very limited driving of your vehicle, oils and other fluids can disappear over the time. Therefore, check their levels frequently.
- Improperly disposed engine oil and/or other fluids can pollute the environment. Dispose used fluids in accordance with local environmental regulations.

Harmful Exhaust Gas

Exhaust fumes contain carbon monoxide (CO), hydrocarbon (HC), nitrogen oxide (Nox), sulfur oxide (SOx) those are harmful to the environment and human health.

WARNING

- Fuel damages paintwork. If fuel spills onto paintwork, immediately wash the affected area with cold water.
- Poor grade fuel or inappropriate additives can ruin the engine and the exhaust system. Use the designated fuel only.
- Warranty does not cover problems caused by using unqualified fuel.
- For diesel engine: Low sulfur diesel
- Using fuel with over 0.5% of sulfur could increase the amount of exhaust gas and obstruct oil flow on the inner cylinder wall.

How to Reduce the Emission

The emission is greatly influenced by air cleaner, fuel filter, injection nozzle, injector, engine setting and cargo weight.

1. Avoid idling the engine for prolonged period.

   During idling, the carbon could be easily accumulated in muffler due to low exhaust speed. Especially, using the air conditioner and electric devices during idling accelerates this accumulation.

2. Replace the consumables in accordance with the maintenance schedule.

   To obtain maximum performance and minimize exhaust emissions, replace or clean the related components (fuel filter, air cleaner, engine oil etc.) in accordance with the specified maintenance schedule.

3. Do not modify the engine intake system without authorization.

   Unauthorized modification of engine components including engine ECU may increase the exhaust emission.

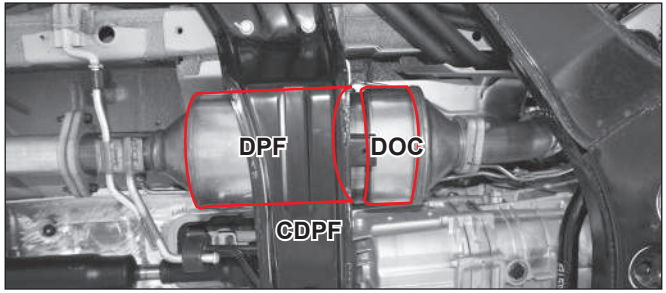
4. Evacuate the muffler regularly.

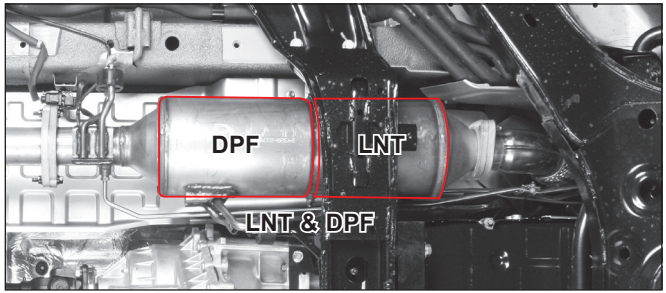
   The accumulated carbon in muffler decreases the fuel economy and engine performance.

5. Do not load the cargo exceeding the limit.

   Overloading may increase the exhaust emission and reduce the life of engine.

6. Inspect the exhaust system regularly.





This vehicle is equipped with the Diesel Oxidation Catalyst (DOC) and Diesel Particulate Filter (DPF) for emission reduction devices.

The DOC converts HC and CO2 in the fuel to H2O and removes 80% of the Soluble Organic Fraction (SOF) among particulate materials, thereby reducing 25% or more of particulate materials.

The DPF collects particulate materials to the filter and removes them by combustion. This device removes 95% or more of particulate materials.

Catalyst Diesel Particulate Filter (CDPF) - EU5

The CDPF is a compound word for Diesel Oxidation Catalyst (DOC) and Diesel Particulate Filter (DPF), which are exhaust gas after-treatment devices.

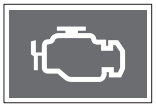
LNT (Lean & NOx Trap) DPF (Diesel Particulate Filter) - EU6

The LNT (Lean & NOx Trap) DPF (Diesel Particulate Filter) is a system to eliminate the nitrogen oxide from exhaust emissions. Use the specified fuel to avoid exhaust smell due to the poor quality fuel and to maintain the normal performance of the LNT DPF.

Regeneration Process

“Regeneration” is the process of combusting particulates when a certain amount of particulates is collected in the filter. In this process, the temperature of exhaust gas rises to approx. 600°C by fuel control and particulates are effectively incinerated.

When the Engine CHECK Indicator Flashes



Regeneration may not be performed due to several operating conditions. And in this case, the engine CHECK indicator flashes. This flashing function is to inform the driver to take action for the proper regeneration of the filter.

If the engine CHECK indicator flashes, drive the vehicle at over 80 km/h for 20 minutes to regenerate the DPF. When the amount of particulates is lowered down to a certain limit, the engine CHECK indicator goes off.

CAUTION

- The vehicle equipped with DPF system may generate the white smoke when using the fuel with high sulfur content (over 100 ppm). This is caused by the sulfur attached and accumulated in DPF. However, this is very natural situation, not caused by your vehicle.
- How to fix the problem

  Replace current fuel with high grade fuel as soon as possible. However, even after replacing the fuel, the white smoke may be seen due to residual sulfur in DPF system. For safety driving, have the system checked at Ssangyong Authorized Service Center.
- The presence of an excessive amount of particulates in the DPF may reduce the engine power.
- An excessive amount of accumulated particulates can damage the DPF. Therefore, make sure to drive the vehicle at 80 km/h or more for 20 minutes at every 500 km.
- When the engine CHECK indicator comes on, it means that a sensor related to the engine control or an electric device is malfunctioning. In this case, have your vehicle checked by a Ssangyong Dealer or Ssangyong Authorized Service Center.

WARNING

- The engine CHECK indicator blinking means an excessive amount of particulates accumulated in the DPF. If this happens, you must drive the vehicle at the speed of 80 km/h or higher for 15~20 minutes. If you keep driving the vehicle at the speed of less than 80 km/h without following this instruction, it may cause damage to the exhaust system related to the DPF.
- The regeneration process of the DPF produces so much heat, so never drive or stop the vehicle near flammable materials to avoid causing fire. Also, be sure to stay away from the exhaust pipe and the DPF to avoid getting burned.

SCHEDULED MAINTENANCE SERVICES (EU) - DIESEL ENGINE (D22DTR)

* Use only approved Ssangyong genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	20	40	60	80	100	120	140	160
	x1,000 miles	12.5	25	37.5	50	62.5	75	87.5	100
	Months	12	24	36	48	60	72	84	96

ENGINE CONTROL SYSTEM

Drive belt	I	I	I	I	I	I	I	I
* Engine oil & filter *1 (1)* (3)* (4)*	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions							
Cooling system hose & connections	I	I	I	I	I	I	I	I
Engine coolant (3)* (4)*	Change every 200,000 km or 5 years. And, inspect and replenish if necessary.							
* Fuel filter (1)*	I	R*	I	R*	I	R*	I	R*
	Draining water from fuel filter: whenever replacing the engine oil							
Fuel line & connections	I	I	I	I	I	I	I	I
Air cleaner (2)*	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.
  *1 Check the engine oil level and leak every 3,000 km (2,000 miles) or before starting a long trip.

R - Replace or change.
  (1)* If vehicle is operated under severe condition: Shorten the service interval.
    - Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing
    - Driving in a hilly or mountainous terrain, sandy, or dusty area
    - High load driving such as trailer towing
    - Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
  (2)* If vehicle is operated under severe condition, driving in dusty condition or sandy condition, pollutant area or off-road driving, frequently inspect the air cleaner, if necessary, change the air cleaner.
  (3)* More frequent maintenance is required if under dusty driving condition.
  (4)* Refer to "Recommended fluids, coolant and lubricants".

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	20	40	60	80	100	120	140	160
	x1,000 miles	12.5	25	37.5	50	62.5	75	87.5	100
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Exhaust pipes & mountings		I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*		Change every 2 years (inspect frequently)							
Parking brake / Brake pads (Front & Rear) (4)*		I	I	I	I	I	I	I	I
		Inspect every 20,000 km or 1 years, adjust or replace if necessary							
Brake line & connections (including booster) (4)*		I	I	I	I	I	I	I	I
		Inspect every 20,000 km or 1 years, adjust or replace if necessary							
Manual transmission oil (5)*				I			I		
Clutch & brake pedal free play		I	I	I	I	I	I	I	I
Transfer case fluid (3)*		I	I	R	I	I	R	I	I
		Frequent check of oil leak							
Front & Rear differential fluid (3)*	Front	Inspect frequently, change every 30,000 km							
	Rear	Inspect frequently, change every 60,000 km							
Automatic transmission fluid (6)*		I	I	I	I	I	I	I	I
		Change every 60,000 km under severe condition							
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*		Check frequently and adjust or replace if necessary							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)
Normal driving condition: Fill for Life
Severe driving condition: Change every 120000 km

(6)* If vehicle is operated under severe condition: Change every 60,000 km.
- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	20	40	60	80	100	120	140	160
	x1,000 miles	12.5	25	37.5	50	62.5	75	87.5	100
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary							
Wheel alignment (7)*	Inspect when abnormal condition is noted							
Steering wheel & linkage	I	I	I	I	I	I	I	I
Power steering fluid & lines (3)*	I	I	I	I	I	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	Change every 10,000 km or 1 years.							
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.
- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter
- Pollutant area or off-road driving, extended air conditioner or heater operation
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher

SCHEDULED MAINTENANCE SERVICES (GEN) - DIESEL ENGINE (D22DTR)

* Use only approved Ssangyong genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first									
	x1,000 km	7.5	15	30	45	60	75	90	105	120
	x1,000 miles	5	10	20	30	40	50	60	70	80
	Months	6	12	24	36	48	60	72	84	96

ENGINE CONTROL SYSTEM

Drive belt	I	I	I	I	I	I	I	I	I
* Engine oil & filter *1	R	R	R	R	R	R	R	R	R
(1)* (3)* (4)* (Initial change: 7,500 km)	Initial change: 7,500 km, and replenish if necessary. Shorten the service interval under severe conditions								
Cooling system hose & connections	I	I	I	I	I	I	I	I	I
Engine coolant (3)* (4)*	Change every 200,000 km or 5 years. And, inspect and replenish if necessary.								
* Fuel filter (1)*	I	I	I	R*	I	I	R*	I	I
	Draining water from fuel filter: whenever replacing the engine oil								
Fuel line & connections	I	I	I	I	I	I	I	I	I
Air cleaner (2)*	I	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

*1 Check the engine oil level and leak every 3,000 km (2,000 miles) or before starting a long trip.

R - Replace or change.

(1)* If vehicle is operated under severe condition: Shorten the service interval.
- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- High load driving such as trailer towing
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, driving in dusty condition or sandy condition, pollutant area or off-road driving, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* More frequent maintenance is required if under dusty driving condition.

(4)* Refer to "Recommended fluids, coolant and lubricants".

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* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM		Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	7.5	15	30	45	60	75	90	105	120
	x1,000 miles	5	10	20	30	40	50	60	70	80
	Months	6	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Exhaust pipes & mountings		I	I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*		Change every 2 years (inspect frequently)								
Parking brake / Brake pads (Front & Rear) (4)*		I	I	I	I	I	I	I	I	I
		Inspect every 15,000 km or 1 years, adjust or replace if necessary								
Brake line & connections (including booster) (4)*		I	I	I	I	I	I	I	I	I
		Inspect every 15,000 km or 1 years, adjust or replace if necessary								
Manual transmission oil (5)*					I			I		
Clutch & brake pedal free play		I	I	I	I	I	I	I	I	I
Transfer case fluid (3)*		I	I	I	I	R	I	I	I	R
			Frequent check of oil leak							
Front & Rear differential fluid (3)*	Front	Inspect frequently, change every 30,000 km								
	Rear	Inspect frequently, change every 60,000 km								
Automatic transmission fluid (6)*		I	I	I	I	I	I	I	I	I
		Change every 60,000 km under severe condition								
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*		Check frequently and adjust or replace if necessary								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)
Normal driving condition: Fill for Life
Severe driving condition: Change every 120,000 km

(6)* If vehicle is operated under severe condition: Change every 60,000 km.
- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first									
	x1,000 km	7.5	15	30	45	60	75	90	105	120
	x1,000 miles	5	10	20	30	40	50	60	70	80
	Months	6	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary								
Wheel alignment (7)*	Inspect when abnormal condition is noted								
Steering wheel & linkage	I	I	I	I	I	I	I	I	I
Power steering fluid & lines (3)*	I	I	I	I	I	I	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch		Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	Change every 10,000 km or 1 years.								
	Shorten the service interval under severe conditions								

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.
- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter
- Pollutant area or off-road driving, extended air conditioner or heater operation
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher

SCHEDULED MAINTENANCE SERVICES (EU) - DIESEL ENGINE (D20DTR)

* Use only approved Ssangyong genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	20	40	60	80	100	120	140	160
	x1,000 miles	12.5	25	37.5	50	62.5	75	87.5	100
	Months	12	24	36	48	60	72	84	96

ENGINE CONTROL SYSTEM

Drive belt	I	I	I	I	I	I	I	I
* Engine oil & filter *1 (1)* (3)* (4)*	R	R	R	R	R	R	R	R
	Initial check: 5,000 km, and replenish if necessary. Shorten the service interval under severe conditions							
Cooling system hose & connections	I	I	I	I	I	I	I	I
Engine coolant (3)* (4)*	Change every 200,000 km or 5 years. And, inspect and replenish if necessary.							
* Fuel filter (1)*	I	R*	I	R*	I	R*	I	R*
	Draining water from fuel filter: whenever replacing the engine oil							
Fuel line & connections	I	I	I	I	I	I	I	I
Air cleaner (2)*	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

*1 Check the engine oil level and leak every 3,000 km (2,000 miles) or before starting a long trip.

R - Replace or change.

(1)* If vehicle is operated under severe condition: Shorten the service interval.

- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- High load driving such as trailer towing
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, driving in dusty condition or sandy condition, pollutant area or off-road driving, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* More frequent maintenance is required if under dusty driving condition.

(4)* Refer to "Recommended fluids, coolant and lubricants".

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	20	40	60	80	100	120	140	160
	x1,000 miles	12.5	25	37.5	50	62.5	75	87.5	100
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Exhaust pipes & mountings		I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*		Change every 2 years (inspect frequently)							
Parking brake / Brake pads (Front & Rear) (4)*		I	I	I	I	I	I	I	I
		Inspect every 20,000 km or 1 years, adjust or replace if necessary							
Brake line & connections (including booster) (4)*		I	I	I	I	I	I	I	I
		Inspect every 20,000 km or 1 years, adjust or replace if necessary							
Manual transmission oil (5)*				I			I		
Clutch & brake pedal free play		I	I	I	I	I	I	I	I
Transfer case fluid (3)*		I	I	R	I	I	R	I	I
		Frequent check of oil leak							
Front & Rear differential fluid (3)*	Front	Inspect frequently, change every 30,000 km							
	Rear	Inspect frequently, change every 60,000 km							
Automatic transmission fluid (6)*		I	I	I	I	I	I	I	I
		Change every 60,000 km under severe condition							
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*		Check frequently and adjust or replace if necessary							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)
Normal driving condition: Fill for Life
Severe driving condition: Change every 120000 km

(6)* If vehicle is operated under severe condition: Change every 60,000 km.
- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	20	40	60	80	100	120	140	160
	x1,000 miles	12.5	25	37.5	50	62.5	75	87.5	100
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary							
Wheel alignment (7)*	Inspect when abnormal condition is noted							
Steering wheel & linkage	I	I	I	I	I	I	I	I
Power steering fluid & lines (3)*	I	I	I	I	I	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	Change every 10,000 km or 1 years.							
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.
- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter
- Pollutant area or off-road driving, extended air conditioner or heater operation
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher

SCHEDULED MAINTENANCE SERVICES (GEN) - DIESEL ENGINE (D20DTR)

* Use only approved Ssangyong genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	15	30	45	60	75	90	105	120
	x1,000 miles	10	20	30	40	50	60	70	80
	Months	12	24	36	48	60	72	84	96

ENGINE CONTROL SYSTEM

Drive belt	I	I	I	I	I	I	I	I
* Engine oil & filter *1 (1)* (3)* (4)*	R	R	R	R	R	R	R	R
	Initial check: 5,000 km, and replenish if necessary. Shorten the service interval under severe conditions							
Cooling system hose & connections	I	I	I	I	I	I	I	I
Engine coolant (3)* (4)*	Change every 200,000 km or 5 years. And, inspect and replenish if necessary.							
* Fuel filter (1)*	I	I	R*	I	I	R*	I	I
	Draining water from fuel filter: whenever replacing the engine oil							
Fuel line & connections	I	I	I	I	I	I	I	I
Air cleaner (2)*	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

*1 Check the engine oil level and leak every 3,000 km (2,000 miles) or before starting a long trip.

R - Replace or change.

(1)* If vehicle is operated under severe condition: Shorten the service interval.
- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- High load driving such as trailer towing
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, driving in dusty condition or sandy condition, pollutant area or off-road driving, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* More frequent maintenance is required if under dusty driving condition.

(4)* Refer to "Recommended fluids, coolant and lubricants".

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE ITEM \ MAINTENANCE INTERVAL		Kilometers (miles) or time in months, whichever comes first							
	x1,000 km	15	30	45	60	75	90	105	120
	x1,000 miles	10	20	30	40	50	60	70	80
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Exhaust pipes & mountings		I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*		Change every 2 years (inspect frequently)							
Parking brake / Brake pads (Front & Rear) (4)*		I	I	I	I	I	I	I	I
		Inspect every 15,000 km or 1 years, adjust or replace if necessary							
Brake line & connections (including booster) (4)*		I	I	I	I	I	I	I	I
		Inspect every 15,000 km or 1 years, adjust or replace if necessary							
Manual transmission oil (5)*				I			I		
Clutch & brake pedal free play		I	I	I	I	I	I	I	I
Transfer case fluid (3)*		I	I	I	R	I	I	I	R
		Frequent check of oil leak							
Front & Rear differential fluid (3)*	Front	Inspect frequently, change every 30,000 km							
	Rear	Inspect frequently, change every 60,000 km							
Automatic transmission fluid (6)*		I	I	I	I	I	I	I	I
		Change every 60,000 km under severe condition							
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*		Check frequently and adjust or replace if necessary							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)
Normal driving condition: Fill for Life
Severe driving condition: Change every 120,000 km

(6)* If vehicle is operated under severe condition: Change every 60,000 km.
- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

* Use only approved Ssangyong genuine parts.

* EU Countries: Only countries that belong to EU. (It does not apply to all countries in EU.)

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	15	30	45	60	75	90	105	120
	x1,000 miles	10	20	30	40	50	60	70	80
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary							
Wheel alignment (7)*	Inspect when abnormal condition is noted							
Steering wheel & linkage	I	I	I	I	I	I	I	I
Power steering fluid & lines (3)*	I	I	I	I	I	I	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	Change every 10,000 km or 1 years.							
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.
- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter
- Pollutant area or off-road driving, extended air conditioner or heater operation
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher

SCHEDULED MAINTENANCE SERVICES (GASOLINE ENGINE)

* Use only approved Ssangyong genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	10	20	30	40	50	60	70	80
	x1,000 miles	6	12	18	24	30	36	42	48
	Months	12	24	36	48	60	72	84	96

ENGINE CONTROL SYSTEM

Drive belt	I	I	I	I	I	I	I	I
Engine oil & engine oil filter (1)* (3)* (Initial check: 5,000 km)	R**	R	R	R	R	R	R	R
Cooling system hose & connections	I	I	I	I	I	I	I	I
Engine coolant (3)*	Change every 200,000 km or 5 years. And, inspect replenish if necessary.							
Fuel filter (2)*	Replace every 100,000 km (if using poor quality of fuel, replace every 30,000 km)							
Fuel line & connections	I	I	I	I	I	I	I	I
Air cleaner (2)*	I	I	I	I	I	R	I	I
Ignition timing	I	I	I	I	I	I	I	I
Spark plugs	Change every 30,000 km or 3 years.							
Charcoal canister & vapor lines	-	-	I	-	-	I	-	-

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 10,000 km.

(1)* If vehicle is operated under severe condition: short distance driving, extensive idling or driving in dusty condition, shorten the service interval.

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

* Use only approved Ssangyong genuine parts.

MAINTENANCE INTERVAL / MAINTENANCE ITEM		Kilometers (miles) or time in months, whichever comes first							
	x1,000 km	10	20	30	40	50	60	70	80
	x1,000 miles	6	12	18	24	30	36	42	48
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Exhaust pipes & mountings		I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*		Change every: 2 years (inspect frequently)							
Parking brake / Brake pads (Front & Rear) (4)*		Periodic check: every 10,000 km, adjust or replace if necessary.							
Brake line & connections (including booster)		Inspect every 10,000 km or 1 years, adjust or replace if necessary							
Clutch & brake pedal free play		I	I	I	I	I	I	I	I
Front & Rear differential fluid (3)*	Front	Inspect frequently, change every 30,000 km							
	Rear	Inspect frequently, change every 60,000 km							
Transfer case fluid (3)*		Inspect every 10,000 km, change every 60,000 km (Frequent check of oil leak)							
Automatic transmission fluid (6)*		Inspect every 10,000 km or 1 years. (But change every 60,000 km under severe condition)							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(6)* Change automatic transmission fluid and every 60,000 km if the vehicle is mainly driven under severe conditions: Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)

* Use only approved Ssangyong genuine parts.

MAINTENANCE INTERVAL / MAINTENANCE ITEM	Kilometers (miles) or time in months, whichever comes first								
	x1,000 km	10	20	30	40	50	60	70	80
	x1,000 miles	6	12	18	24	30	36	42	48
	Months	12	24	36	48	60	72	84	96

CHASSIS AND BODY

Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary							
Tire condition & inflation pressure	Check frequently and adjust or replace if necessary							
Wheel alignment (7)*	Inspect when abnormal condition is noted							
Steering wheel & linkage	I	I	I	I	I	I	I	I
Power steering fluid & lines (3)*	I	I	I	I	I	I	I	I
Drive shaft boots	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (8)*	Inspect every 10,000 km							
Air conditioner filter	Change every 10,000 km (But, shorten the service interval under severe conditions)							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(6)* After completion of off-road operation, the underbody of the vehicle should be thoroughly inspected. Examine threaded fasteners for looseness.

(7)* If necessary, rotate and balance wheels.

(8)* Inspect propeller shaft grease every 5,000 km or 3 months if the vehicle is mainly driven under severe condition.

- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

Severe Conditions in Air Conditioner Filter

- Pollutant area or off-road driving, extended air conditioner or heater operation

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Lamp

BULB SPECIFICATIONS

Description			Amount	Specification (EU)	Specification (General)
Exterior lamp	Head-lamp	High beam + DRL	2	55W + 15W	55W
		Low beam (HID)	2	55W(25W)	←
		Turn signal lamp	2	21W	←
		Position lamp	2	5W	←
	Front fog lamp		2	H16	←
	Side repeater		2	5W	←
	Rear combina-tion lamp	Tail (stop) lamp	4	5W(21W)	←
		Turn signal lamp	2	21W	←
		Back-up lamp	2	16W	←
	Rear fog lamp		1	21W	-
	License plate lamp		2	5W	←
	High mounted stop lamp		5	5W	←
Interior lamp	Front room lamp		2	5W	←
	Glove box lamp		1	5W	←
	Door courtesy lamp		4	5W	←
	Side room lamp		4	5W	←
	Rear room lamp		1	5W	←

FUNCTIONAL CHECK

1. Check whether the lamp comes on or off when its switch operation.
2. Check the corresponding fuse when the lamp doesn't come on.
3. If the fuse is blown, replace it with new one. For replacing procedures, refer to "Fuse Replacement" section in this manual.
4. If the fuse is not blown, check the bulb and replace it with new one if needed.
5. If the bulb is not defective, have the system checked by Ssangyong Dealer or Ssangyong Authorized Service Operation.

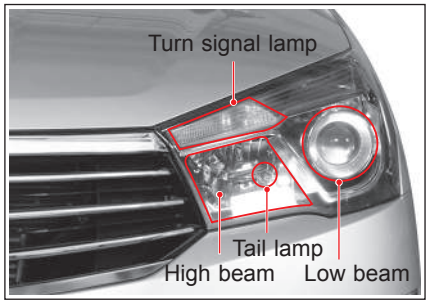
CAUTION

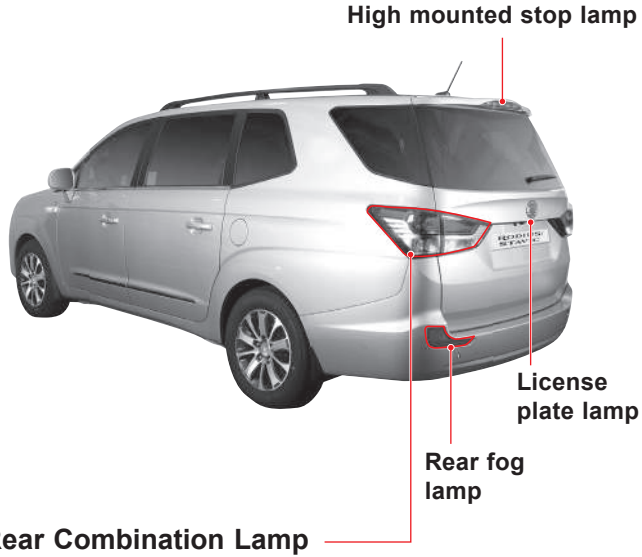
- Use only a specified capacity bulb for replacement.
- Disconnect the negative cable on the battery before replacing the bulb.
- Do not apply excessive force to remove the bulb cover.
- Make sure that the corresponding switch and the ignition switch are turned off before replacing a bulb.
- Do not touch a bulb with bare hands immediately after turning off the lamp.
- Do not touch a bulb when it is still illuminating.
- Do not touch a bulb with bare hands. Fingerprint, dust, or moisture stuck to bulb may shorten a bulb life or cause a bulb bursting. In this case, wipe the bulb glass with a soft cloth.
- Never try to adjust the headlamp aiming by yourself. It should be done by a qualified technician in Ssangyong Dealer or Ssangyong Authorized Service Operation.

LOCATION OF EXTERIOR LAMPS

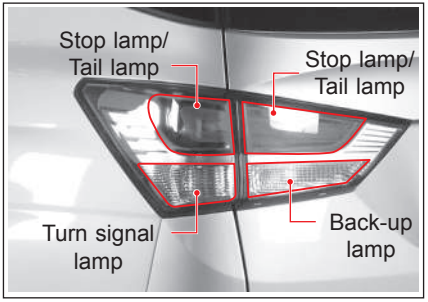


Headlamp



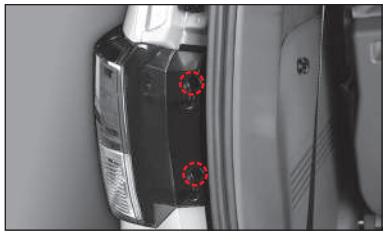


Rear Combination Lamp

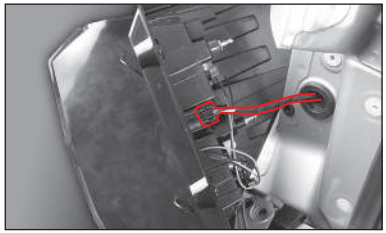


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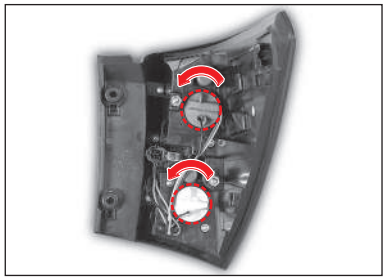
REAR COMBINATION LAMP – ON QUARTER PANEL (STOP LAMP/TAIL LAMP & TURN SIGNAL LAMP)



1. Disconnect the negative cable on the battery.
2. Open the tailgate and unscrew two screws from the rear combination lamp assembly.



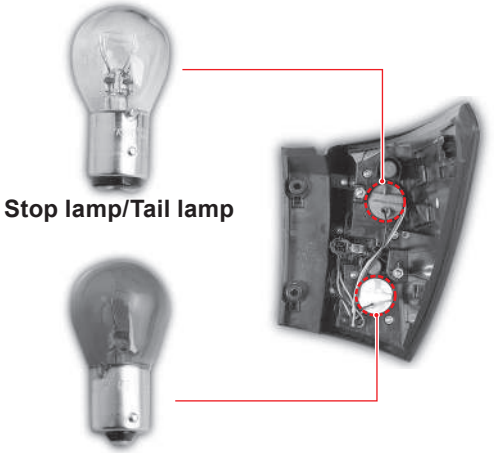
3. Disconnect the connector and remove the rear combination lamp assembly.



4. Turn the bulb housing counter-clockwise to remove it from the rear combination lamp assembly.
5. Press and turn the bulb to remove it from the bulb housing.
6. Replace the bulb with new one. Do not touch a bulb with bare hands. Fingerprints, dust, or moisture stuck to the bulb may shorten its life or cause it to explode.
7. Install the rear combination lamp assembly in the reverse order of removal.



Rear combination lamp (on quarter panel)



Stop lamp/Tail lamp

Turn signal lamp

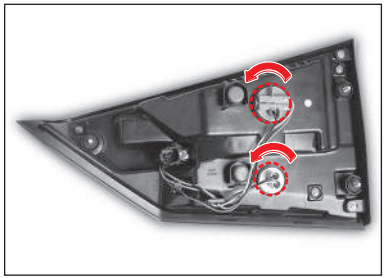
REAR COMBINATION LAMP – ON TAILGATE



1. Disconnect the negative cable on the battery.
2. Open the tailgate and remove the trim service cover.



3. Unscrew three nuts (3 mm) from the rear combination lamp assembly.
4. Disconnect the connector and remove the rear combination lamp assembly.



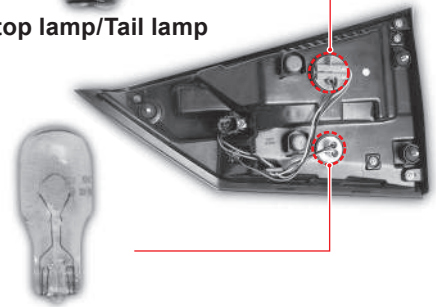
5. Turn the bulb housing counterclockwise to remove it from the rear combination lamp assembly.
6. To remove the bulb for stop and tail lamp, press and turn it from the bulb housing. To remove the bulb for back-up lamp, pull it out from the bulb housing.
7. Replace the bulb with new one. Do not touch a bulb with bare hands. Fingerprints, dust, or moisture stuck to the bulb may shorten its life or cause it to explode.
8. Install the rear combination lamp assembly in the reverse order of removal.



Rear combination lamp (on tailgate)

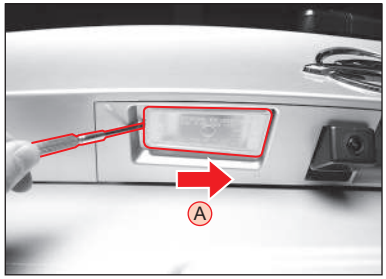


Stop lamp/Tail lamp

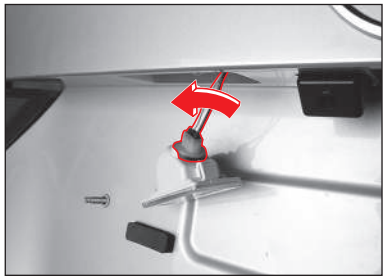


Back-up lamp

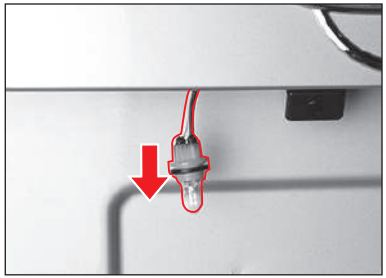
LICENSE PLATE LAMP



1. Disconnect the negative cable on the battery.
2. Insert the flat blade screwdriver into the groove of lens cover and push it the arrow direction (Ⓐ) to remove the cover.



3. Disconnect the connector by rotating it counterclockwise and remove the bulb housing.



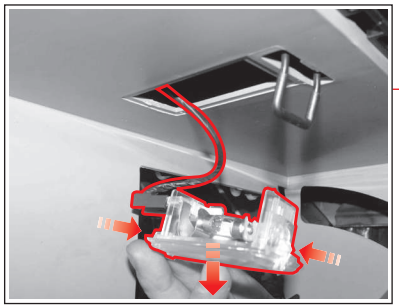
4. Pull the bulb out from the bulb housing.
5. Replace the bulb with new one. Do not touch a bulb with bare hands. Fingerprints, dust, or moisture stuck to the bulb may shorten its life or cause it to explode.
6. Install the bulb housing in the reverse order of removal.



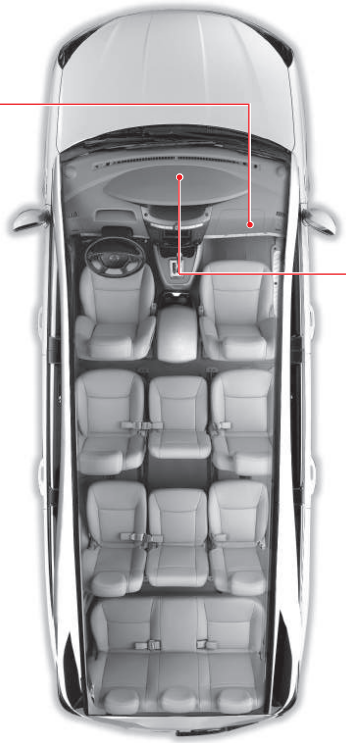
License plate lamp

GLOVE BOX LAMP AND FRONT ROOM LAMP

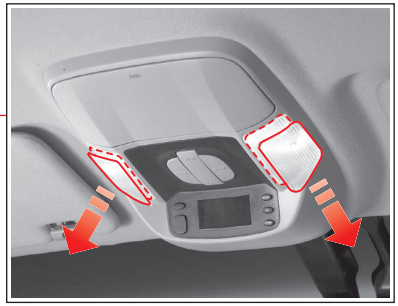
Glove Box Lamp



1. Disconnect the negative cable on the battery.
2. Remove the lamp housing by pushing the holder.
3. Remove the bulb.
4. Install the new bulb in the reverse order of removal.



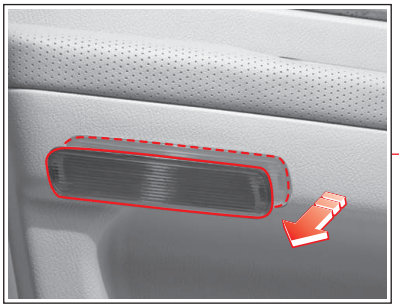
Front Room Lamp



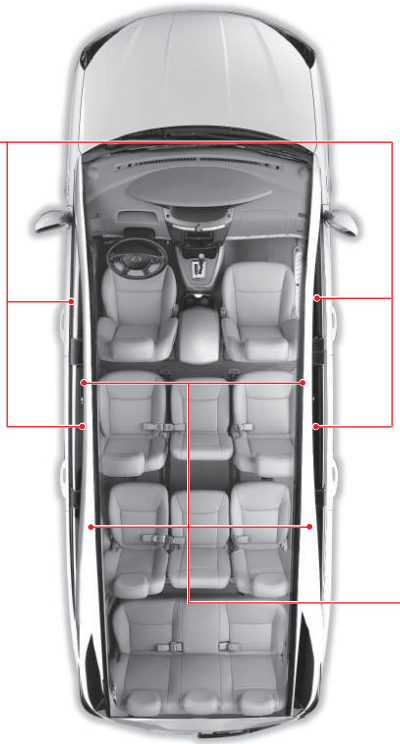
1. Disconnect the negative cable on the battery.
2. Pry off the cover with a flat blade screwdriver.
3. Remove the bulb.
4. Install the new bulb in the reverse order of removal.

DOOR COURTESY LAMP AND SIDE REPEATER

DOOR COURTESY LAMP



1. Disconnect the negative cable on the battery.
2. Pry off the cover with a flat blade screwdriver.
3. Remove the bulb.
4. Install the new bulb in the reverse order of removal.



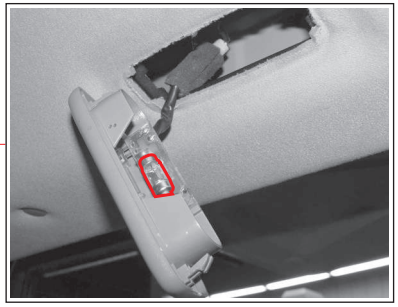
Side Repeater



1. Disconnect the negative cable on the battery.
2. Pry off the cover with a flat blade screwdriver.
3. Remove the bulb.
4. Install the new bulb in the reverse order of removal.



Rear Room Lamp



1. Disconnect the negative cable on the battery.
2. Pry off the cover with a flat blade screwdriver.
3. Remove the bulb.
4. Install the new bulb in the reverse order of removal.

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MEMO

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