


<h1 style="text-align: center;">EURO 4 SERVICE MANUAL</h1> <h2 style="text-align: center;">FOREWORD</h2> <p>This manual includes procedure for maintenance, adjustment, service operation and removal and installation of components.</p> <p>All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of manual approval.</p> <p>The right is reserved to make changes at any time without notice.</p>  SSANGYONG PYUNGTAEK, KOREA	SECTION INDEX	
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Section 1

D27DTP / D27DT ENGINE

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- ▶ **FUEL SYSTEM**
- ▶ **INTAKE SYSTEM**
- ▶ **EXHAUST SYSTEM**
- ▶ **PRE - HEATING SYSTEM**
- ▶ **LUBRICATION SYSTEM**
- ▶ **COOLING SYSTEM**
- ▶ **SWITCHABLE ENGINE MOUNT**
- ▶ **ENGINE ECU**
- ▶ **DIAGNOSIS**

SYSTEM

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1. MAJOR CHANGES IN D2ZDTP (POWERUP) ENGINE (FOR MORE INFORMATION, REFER TO ENGINE SERVICE MANUAL)

1913 VGT TURBOCHARGER



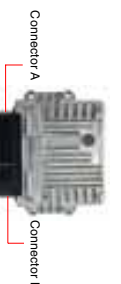
This enhances the output power and torque, reduces the fuel consumption, and decreases the exhaust gas by changing the exhaust gas flow by controlling the vane in low and high speed range.

2433 VGT TURBO VACUUM MODULATOR



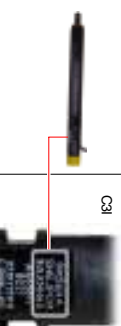
Only the vacuum modulator that controls VGT turbo charger actuator is adopted in accordance with the electrically controlled E-EGR.

1490 ENGINE ECU - VERSION 3.2



E-EGR valve, throttle body and AOGS are adopted to D2ZDTP engine, along with two connectors to control the exhaust gas.

1881 INJECTOR (C3 LABEL)



Two injection holes are added (currently 7 holes) to the injector and C3I coating is adopted to control the amount of injected fuel more precisely.

1881 COMMON RAIL & FUEL PIPE



The diameter of fuel supply rail (including high pressure rail) is increased due to the increase of engine power and torque, and the office is installed in common rail and HP pump to prevent fuel pulsation.

1222 PCV OIL SEPARATOR



PCV oil separator with large capacity has been adopted to improve the separation efficiency for the oil and gas from crankcase.

2330 HFM SENSOR - VERSION 6.0



To control the engine more precisely, the digital signal for inlet air mass is newly adopted and the arrangement of connector pin is changed.

1792 E-EGR VALVE



The E-EGR valve electrically controls EGR valve, and transmits the location signal of EGR valve to ECU (Vacuum modulator for control eliminated).

1792 EGR COOLER PIPE



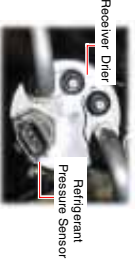
This reduces the content of NOx in EGR gas by decreasing the temperature.

1520 HIGH-CAPACITY WATER PUMP



The EGR cooler and the coolant port (inside the cylinder block) are adopted to improve the cooling performance in high power engine.

6820 REFRIGERANT PRESSURE SENSOR



With the continuous monitoring of refrigerant pressure, the engine ECU controls the air conditioner compressor precisely.

1990 SWITCHABLE ENGINE MOUNT & VACUUM SOLENOID VALVE



This engine mounting system can be electrically controlled in two stages (soft/hard) depending on the vehicle's condition.

1533 IOP (OIL PAN)



This is integrated in the front axle so that the center of gravity of the vehicle can be lowered and NVH performance and power transfer can be improved.

2411 CDPF SYSTEM (D2ZDT)



In pursuit of the exhaust gas reduction policy, this system drastically reduces polluted material. This consists of CDPF assembly and sensors.

1431 BOOST PRESSURE SENSOR

Mounting location and specification are changed due to the newly added throttle body.

8410 FUSE AND RELAY BOX

1412 GLOW PLUG



The glow plug for quick preheating function and CAN communication is used with AOGS (Incompatible).

2820 AOGS



The glow plug for quick preheating function and CAN communication with ECU.

1715 ELECTRONIC THROTTLE BODY

Normal: Open



During engine stopping: Close




When the engine is not turning, the flap in the throttle body is closed to block the intake air to prevent the engine turning off with abnormal noise. This is directly controlled by ECU.

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2. MAJOR CHANGES IN INTERIOR ELECTRIC COMPONENTS

8511	4WD SWITCH	
Part-time	TOD	AWD (Including 2WD)



The 4WD system with three different specifications can be used since All Wheel Drive (AWD) is adopted in D27DTP engine. The AWD system, the mechanical drive without electric controls, has no TCCU and control switch (Distribution ratio of driving force to the front wheel and rear wheel = 40:60).

8010	INSTRUMENT CLUSTER (BLACKFACE)
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This uses CAN communication and also has adopted new technologies (EAS, TPMS and EPB), along with the relevant warning lights and indicators. TPMS pressure value is displayed on the ODO (Trip Odometer) display window. (Press trip switch for two seconds in ODO display mode.)

7770	OVERHEAD CONSOLE SWITCH
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Sun roof can be opened in 2-step operation with this switch. In the 1st step, the sun roof is opened as much as it can minimize wind buffet phenomenon (2nd step: Fully Open).

8611	RAIN & AUTO LIGHT SENSOR (INTEGRAL TYPE)
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As an integral sensor, this controls wiper by sensing the amount of rain drops and the exterior lights according to the ambient illumination intensity (in Auto position).

8511	MULTIFUNCTION SWITCH
-------------	-----------------------------



Auto washer & wiper switch and auto hazard warning flasher switch have been added to the existing switches.

8511	REMOTE CONTROL SWITCH ON STEERING WHEEL
-------------	--




The lip switch, which can shift the gear when the shift lever is in "M" position, has been added to the system.

7120	DRIVER SEAT'S POWER WINDOW MOTOR
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Auto-up function and anti-trap function are adopted to the driver's door glass. The system is initialized when the part is replaced or it is abnormally operated.

7410	SPWM UNIT
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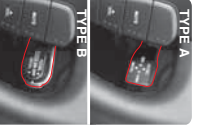
This unit has the function that memorize and adjust driver's seat and outside rearview mirror. In addition, it has the function that automatically lowers the outside rearview mirror by 3.5 degrees as well as the easy access function.

7010	IMMOBILIZER (REMOTE FUNCTION ELIMINATED)
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It has the immobilizer function and its battery can be replaced unlike.

8511	CRUISE CONTROL
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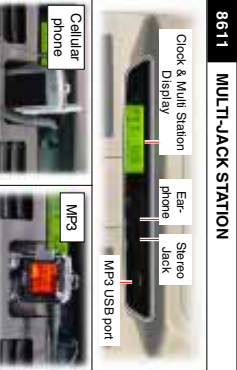
The cruise control is an automatic speed control system that maintains a desired driving speed without using the accelerator pedal. The vehicle speed must be greater than 36 km/h to engage the cruise control. This feature is especially useful for motorway driving.

8611	VARIABLE SEAT WARMER SYSTEM
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This system is similar to the one of CHAIRMAN, and its control units are installed in the front and rear area of vehicle. (AUX Jack between switches is available in AV system type.)

8611	MULTI-JACK STATION
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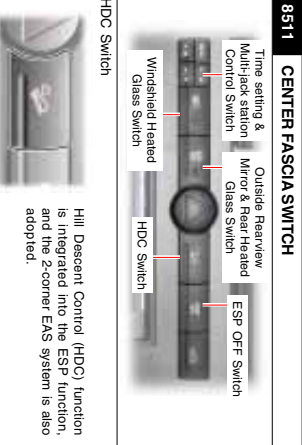
The multi-jack station has the digital clock and audio functions. It can be connected to the separate audio device with the stereo jack to listen to the music through the speakers in the vehicle. Moreover, USB memory stick can be connected to the multi-jack station for playing music (The MP3 USB memory port is optional).

6810	AIR CONDITIONER CONTROLLER (FATC)
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With FATC Air Conditioner Controller System adopted, Air Quality System (AQS) automatically changes the air source by detecting the contamination degree of ambient air.

8511	CENTER FASCIA SWITCH
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Hill Descent Control (HDC) function is integrated into the ESP function, and the 2-corner EAS system is also adopted.

3. MAJOR CHANGES IN ELECTRIC COMPONENTS AND UNITS

8790 PAS UNIT



This unit controls three sensors made of piezo ceramic element in the rear bumper, and indicates the sensor's malfunction with buzzer, not with LED (LED eliminated).

8931 AV HEAD UNIT





The image quality of AV head unit has been improved by adopting 6.5 inch wide type TFT LCD panel. It can be connected to DSP amplifier and DVD changer with optic cables.

AUDIO SYSTEM




2-DIN type audio system is equipped in the vehicle as basic, and the tape slot is eliminated. The AUX button has been added to the system in accordance with introducing multi-jack station.

8931 TV ANTENNA MODULE



This antenna module receives TV channels and transfers them to tuner after amplifying them. Those are located on the rear quarter upper panel.

8711 RK STICS

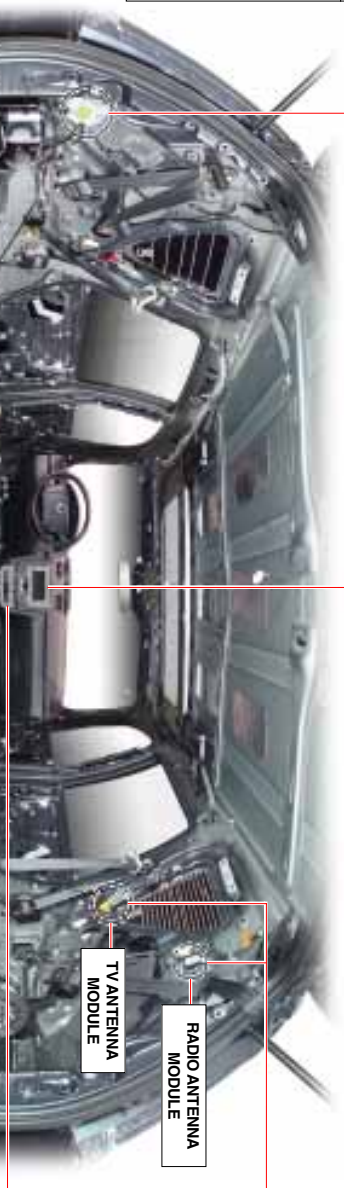


As the remote engine starting function is eliminated, RK STICS is eliminated too. Auto hazard warning flasher, auto washer synchronized wiper, SPWM unit and other new technologies are newly adopted.

8931 RADIO ANTENNA MODULE



This amplifies the radio signal received from glass antenna and transfers it to tuner. It is installed on the rear right quarter upper panel.



8711 SENSOR CLUSTER & CHIME BELL




Installed at the inner bottom of audio head unit, the yaw rate sensor and acceleration sensor are installed inside. Those sensors detect the vehicle stability to control ESP.

1490 ENGINE ECU - VERSION 3.2



E-EGR valve, throttle body and ACGS are adopted to D2ZDTP engine, along with two connectors to control the exhaust gas.

8931 DVD CHANGER



DVD Changer
8-DVD changer is installed inside the rear left quarter lower panel.

8811 REAR SEAT WARMER UNIT



The front seat warmer unit and rear seat warmer unit are mounted respectively. This variable seat warmer system is controlled in 5 stages.

8931 DSP AMPLIFIER



TCU
DSP Amplifier
Aside from the basic speaker control function, this exterior digital AMP can separate digital audio source to give digital effects.

8611 WOOFER SPEAKER



Installed at the bottom of passenger's seat, it enforces mid-low sounds by receiving the output signal from DSP amplifier.

8931 TUNER



This device precisely tunes the input signal by filtering the signals from each antenna module.

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4. MAJOR CHANGES IN CHASSIS

4122 FRONT AXLE: INTEGRATED OIL PAN (IOP) AXLE & OTHER DEVICES	
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Used for the vehicle with D27DTP (POWER-UP) engine, the engine oil pan and axle is integrated in the axle system. This system can lower the height of the mounted engine. In addition, engine vibration can be greatly reduced due to the mass increase effect under the condition that the front axle and engine are integrated.

4116 WE LOCKING HUB SYSTEM	<p>4WD: Unlocked by vacuum pressure</p> <p>2WD: Locked by vacuum pressure</p> <p>Gear disengaged</p>
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This vacuum locking hub system engages or disengages the gears at the end of the drive shaft and the end of hub by using vacuum pressure. This system is used for the vehicle with 4WD system.

3260 ALL WHEEL DRIVE (AWD)	
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Adopted to the vehicle with D27DTP engine, this full-time 4-wheel drive system is the mechanical type which has no control unit, shift motor and other shift switches. Its power distribution ratio to the front and rear is 40/60.

4420 INDEPENDENT SUSPENSION REAR AXLE	
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Independent suspension is used for the vehicle with D27DTP. Accordingly, rear axle types are varied.

4450 REAR SUSPENSION	<p>Independent Suspension (IRS) Type: D27DTP</p> <p>S-line (rigid) Type: D27DT</p>
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This system independently controls the vertical vibration of the vehicle in both sides. Accordingly, this suspension guarantees the vehicle stability even on the uneven road, and enhances the driving comforts by distributing the shocks from the road surface into the number of links.

3721 TGS LEVER	<p>TGS Lever Knob</p> <p>TGS Lever Assembly</p>
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The TGS lever of REXTON II communicates with Engine Control Unit (ECU), ESP Control Unit (ESP ECU) and Instrument cluster. In addition, it is possible to select the gear manually in M position of shifting lever by fitting the tip switch on the lever knob and steering wheel.

4480 EAS SYSTEM	<p>EAS Supply Unit</p> <p>Normal Level</p> <p>Easy Loading Level (30 mm Down)</p> <p>Air Spring</p> <p>Height Sensor</p>
------------------------	--

The EAS system in REXTON II adopts the air springs only on the rear wheels. (2-corner Open EAS system). 2-corner open EAS system enhances the driving comforts and driving stability by maintaining the height at the certain level irrespective of the road condition in the rear. The system is adopted to optimize the spring constant according to the load condition.

4920 EPB SYSTEM	<p>EPB Unit</p> <p>EPB Control Switch</p> <p>Auto Parking Switch</p>
------------------------	--

The existing mechanical parking brake is operated manually by pulling up the lever. However, the vehicle with EPB system enables to automatically apply the parking brake by considering parking performance, driving speed, and the time when the main brake pedal is depressed. The parking brake system with out EPB system is the same as the existing parking brake system.

4190 TPMS SYSTEM	<p>TPMS Wheel Module</p> <p>TPMS ECU</p> <p>TPMS Antenna</p>
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TPMS system aims to ensure the driving stability and performance in advance, to prevent the unnecessary fuel waste, and to reduce the tire wear, when inflation pressure values of each tire are different each other. This system enables a driver to check the tire condition before or during driving by indicating the abnormally or defects on the instrument cluster.

SYSTEM
D27DTP/D27DT (EUA) SW-2006.08

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5. MAJOR CHANGES IN VEHICLE EXTERIOR

8310 HEAD LAMP

- High Beam (H1)
- 12V-55W (one at each side)
- Low Beam (H7)
- 12V-55W (one at each side)
- Position/Turn Signal Lamp Bulb
- 12V-8W/P21W (one at each side)



7410 AIMING DOWN BY 3.5° WHEN REVERSING

Blue Mirror

3.5°

Blue mirror is adopted to improve vehicle appearance and to reduce the beaming out of the head lamp of the vehicle behind. And when reversing, the outside mirror which downs the aiming by 3.5° is adopted.



8310 FRONT FOG LAMP

- Fog Lamp Bulb
- 12V-H27W/2
- Bulb

7910 RADIATOR GRILL



7910 HOOD OPENING LEVER

The shape of radiator grill is changed, and the hood opening lever is located in the top right of the grill.



8320 TAIL LAMP

- Tail/Stop Lamp
- 12V-8W/27W
- Tail Lamp
- 12V-5W
- Back-Up Lamp
- 12V-1W/16W
- Stop Lamp
- 12V-27W
- Turn Signal
- 12V-27W



REAR GLASS ANTENNA & DEFOGGER

7770 ROOM LAMP (OVERHEAD CONSOLE LAMP)

- Spot Lamp
- 1
- 2
- 3
- Spot Lamp
- Front Door Coupled Lamp

Press each switch (1 or 2) to turn on or off the room lamp in driver side or passenger side. If pressing the door coupled lamp (3), the lamp comes on or off when opening or closing a front door.



7840 GLASS SPECIFICATION (SYMBOL)

- Antenna Glass
- Noise Shield Glass
- Solar Glass
- Privacy Glass

4190 18-INCH WHEEL (256/60R18) AND TPMS MODULE

18-inch wheel is adopted, and the wheel shape is also changed. The wheel module can be installed on the wheel by adopting the TPMS.



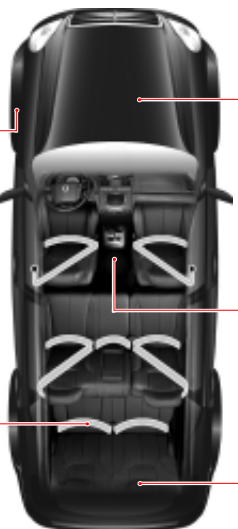
6110 ENGINE HOOD

7630 CENTER CONSOLE

7410 SEAT

5720 FENDER PANEL

7430 SEAT BELT



7870 FRONT BUMPER

- Front End Member Lower
- Bumper Upper
- Front Bumper
- Bumper Upper Garnish

• Front bumper nudge bar and energy absorber eliminated.

GLASS ANTENNA

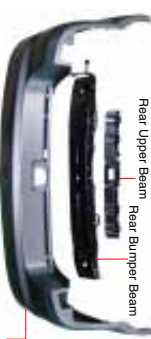


SIDE SILL MOLDING

7880 REAR BUMPER

- Rear Upper Beam
- Rear Bumper Beam
- Rear Bumper Beam
- Rear Bumper Fascia Assembly

• Rear bumper energy absorber eliminated.



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GENERAL INFORMATION

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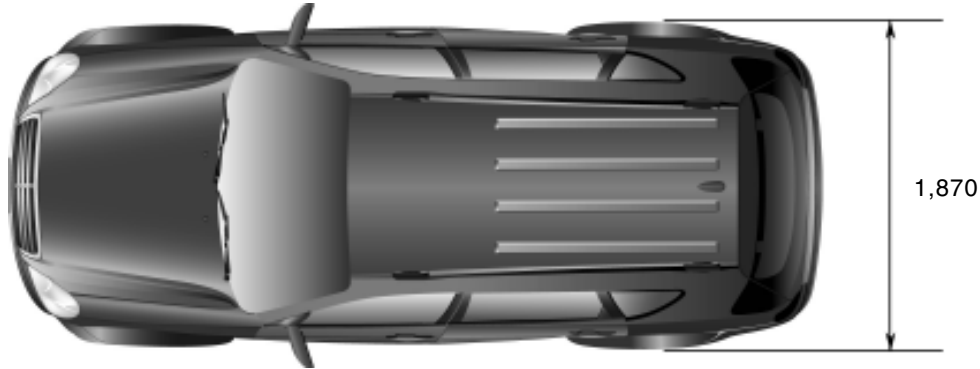
DIMENSIONS

GENERAL

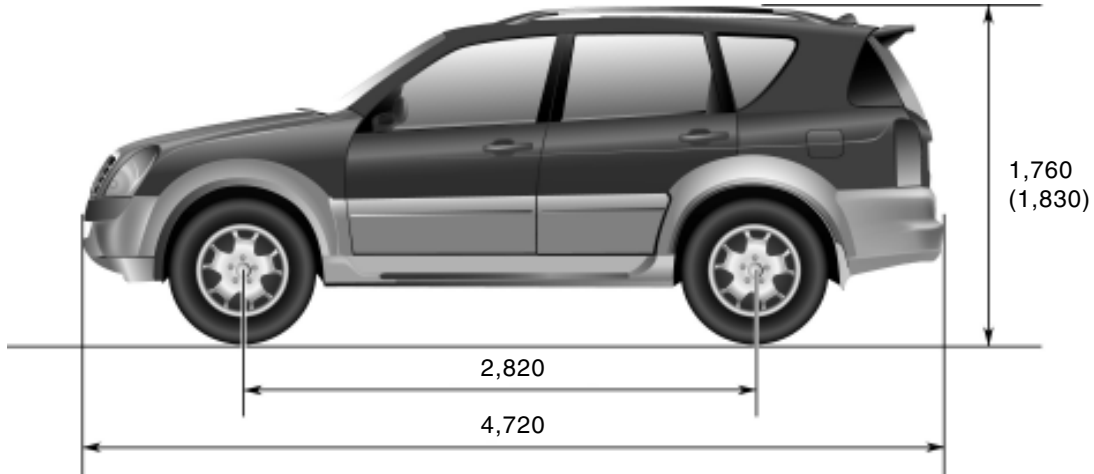
1. REXTON II

Unit: mm

Top View



Side View



Front View



Rear View



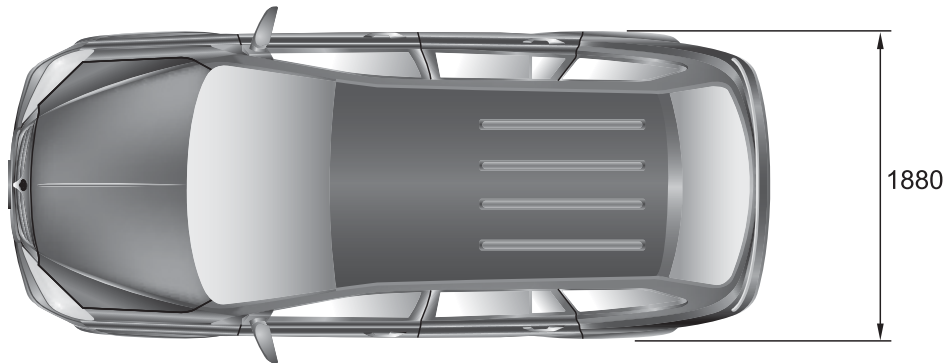
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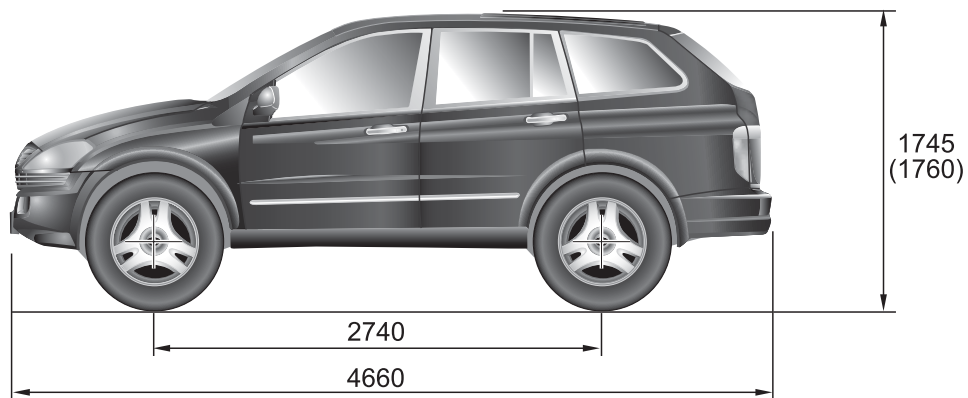
2. KYRON

Unit: mm

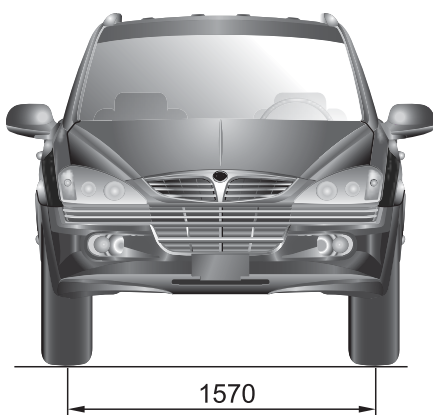
Top View



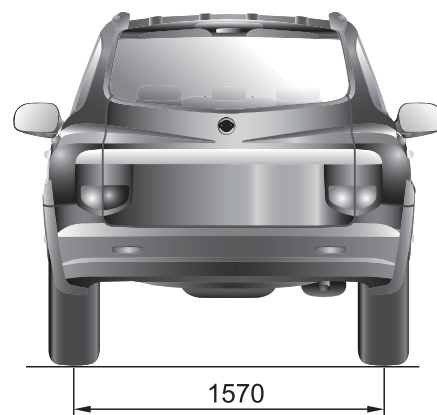
Side View



Front View



Rear View



* () : Optional

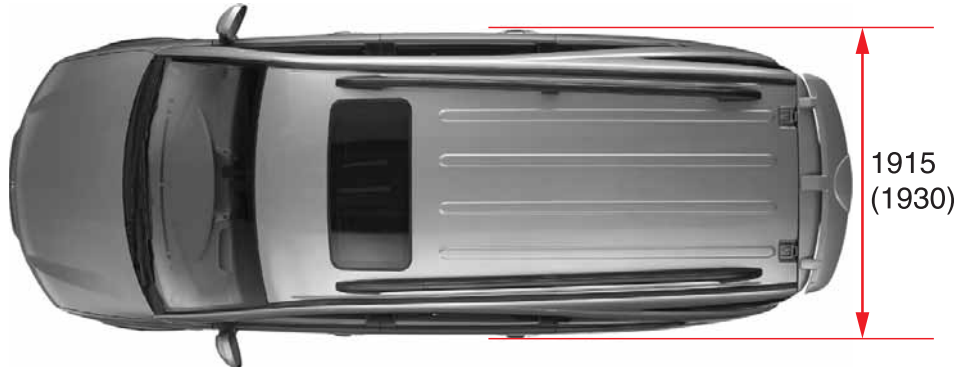
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3. RODIUS / STAVIC

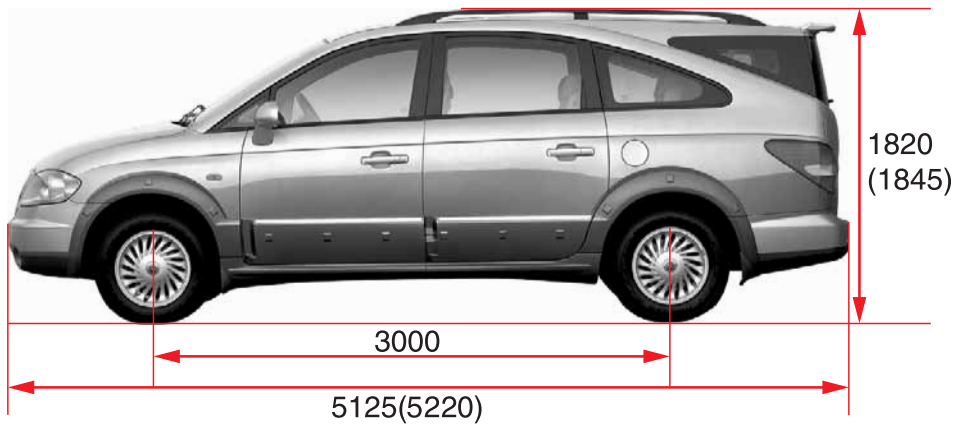
Unit: mm

GENERAL

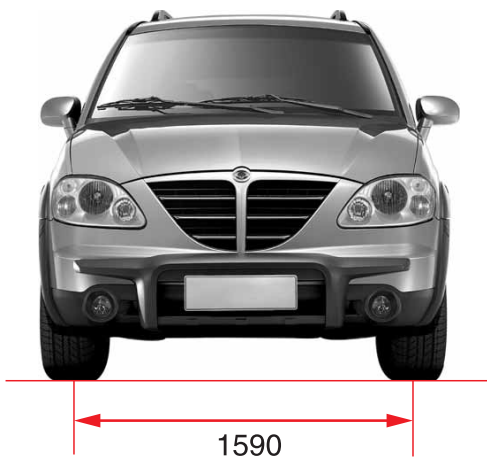
Top View



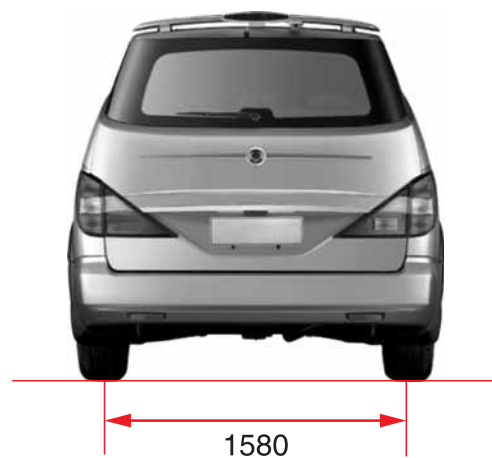
Side View



Front View



Rear View

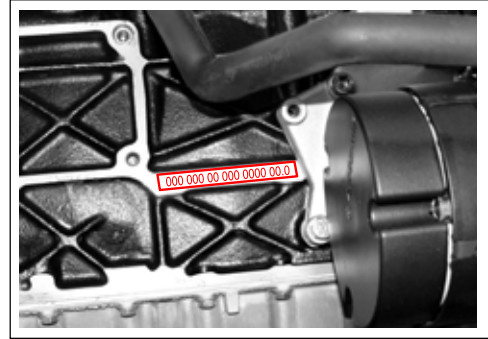
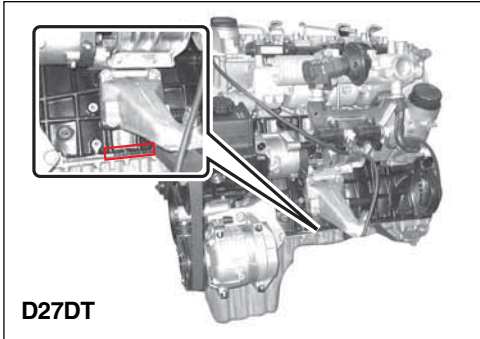


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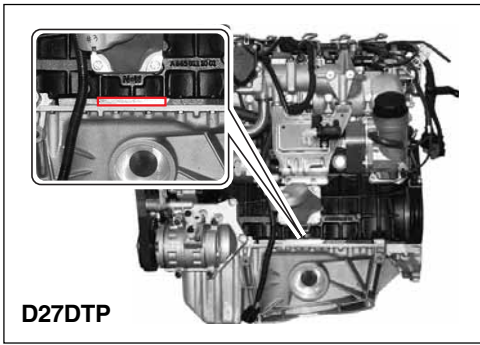
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VEHICLE IDENTIFICATION

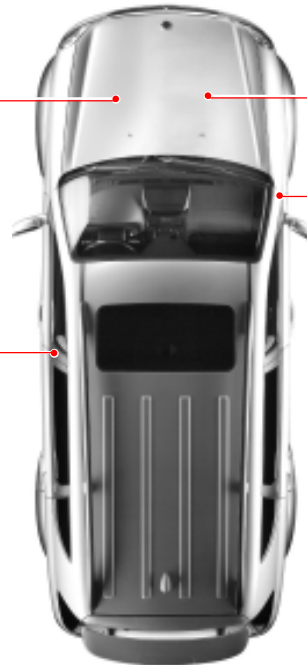
1. Engine Number



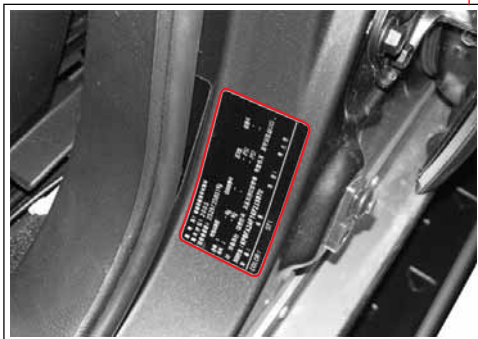
Gasoline Engine: The engine number is stamped on the lower area of cylinder block in exhaust manifold side.



Diesel Engine (D27DTP, D27DT): The engine number is stamped on the lower area of cylinder block behind the Intake manifold.

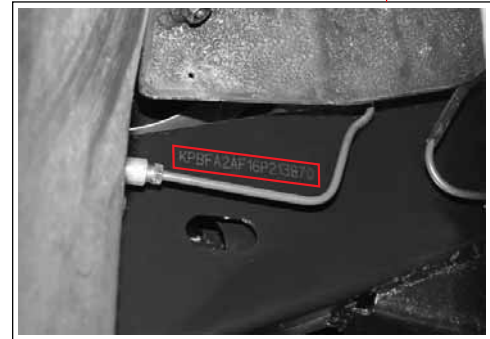


3. Certification Label



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

2. Chassis Number



The chassis number is stamped on the frame behind the front right tire.

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SPECIFICATIONS

1. REXTON II

* (): Optional, []: 2WD, D27DTP: Diesel 2.7 Power-Up, D27DT: Diesel 2.7, G32D: Gasoline

Descriptions		D27DTP	D27DT	G32D	
General	Overall length	4,720 mm	←	←	
	Overall width	1,870 mm	←	←	
	Overall height	1,760 mm (1,830 mm)	←	←	
	Gross vehicle weight	2,760 kg	←	←	
	Curb vehicle weight	A/T	2,099 kg	2,101 kg	2,088 kg
		M/T	–	2,088 kg	–
	Fuel	Diesel	←	Gasoline	
	Fuel tank capacity	78 ℓ	←	←	
	Minimum Turning Radius	5.7 m	←	←	
Engine	Numbers of cylinders / Compression ratio	5 / 17.5:1	←	6 / 10:1	
	Total displacement	2,696 cc	←	3,199 cc	
	Camshaft arrangement	DOHC	←	←	
	Max. power	A/T	186 PS / 4,000 rpm	165 PS / 4,000 rpm	220 PS / 6,100 rpm
		M/T	–	165 PS / 4,000 rpm	–
	Max. torque	A/T	402 Nm / 1,600 ~ 3,000 rpm	340 Nm / 1,800 ~ 3,250 rpm	312 Nm / 4,600 rpm
		M/T	–	340 Nm / 1,800 ~ 3,250 rpm	–
	Idle speed	750 ± 20 rpm	←	700 ± 50 rpm	
	Cooling system	Water-cooled / forced circulation	←	←	
	Coolant capacity	11.0 ~ 11.5 ℓ	←	11.5 ~ 12.0 ℓ	
	Lubrication type	Gear pump, forced circulation	←	←	
Max. oil capacity (when shipping)	9.2 ℓ	←	9.8 ℓ		
Turbocharger and cooling type	Turbocharger, air-cooled	←	–		
Manual Transmission	Operating type	–	Semiremote control, floor change type	–	
	Gear ratio	1st	–	4.315	–
		2nd	–	2.475	–
		3rd	–	1.536	–
		4th	–	1.000	–
		5th	–	0.807	–
		Reverse	–	3.919	–

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Descriptions		D27DTP	D27DT	G32D	
Automatic Transmission	Model		Electronic, 5-speed	←	
	Operating type		Floor change type	←	
	Gear ratio	1st	3.595	←	3.951
		2nd	2.186	←	2.423
		3rd	1.405	←	1.486
		4th	1.000	←	1.000
		5th	0.831	←	0.833
		Reverse 1st	3.167	←	3.147
Reverse 2nd		1.926	←	1.930	
Transfer Case	Model		AWD	Part-time (TOD)	Part-time (AWD)
	Type		Planetary gear type	←	←
	Gear ratio	High (4H)	–	1.000 : 1	←
		Low (4L)	–	2.483 : 1	← (AWD: –)
Clutch (M/T)	Operating type		–	Hydraulic type	–
	Disc type		–	Dry single diaphragm type	–
Power Steering	Type		Rack and pinion	←	←
	Steering angle	Inner	35.72°	←	←
		Outer	32.11°	←	←
Front Axle	Drive shaft type		Ball joint type	←	←
	Axle housing type		IOP type	Build-up type	Build-up type (IOP type)
Rear Axle	Drive shaft type		Semi-floating type (Ball joint type)	Semi-floating type	Semi-floating type (ball joint type)
	Axle housing type		Build-up type (IRS type)	Build-up type	Build-up type (IRS type)
Brake	Master cylinder type		Tandem type	←	←
	Booster type		Vacuum assisted booster type	←	←
	Brake typ	Front wheels	Disc type	←	←
		Rear wheels	Disc type	←	←
	Parking brake		Cable type (EPB)	←	←
Suspension	Front suspension		Wishbone + coil spring	←	←
	Rear suspension		5-link + coil spring (Multi-link + Coil spring) (EAS)	5-link + coil spring	5-link + coil spring (Multi-link + Coil spring) (EAS)

2. KYRON

Descriptions		D20DT	D27DT	G32D	
General	Overall length	4,660 mm	←	←	
	Overall width	1,880 mm	←	←	
	Overall height	1,740 (1,755: with roof rack) mm	←	←	
	Gross vehicle weight	A/T	2,530 kg	←	←
		M/T	2,530 kg	←	—
	Curb vehicle weight	A/T	2WD: 1,920 kg / 4WD: 2,028 kg	2,071 kg (AWD: 2,053 kg)	2,046 kg
		M/T	2WD: 1,893 kg / 4WD: 2,001 kg	2030 kg	—
	Fuel	Diesel	←	Gasoline	
Fuel tank capacity	75 ℓ	←	←		
Engine	Numbers of cylinders/ Compression ratio	4 / 17.5:1	5 / 17.5:1	6 / 10 : 1	
	Total displacement	1,998 cc	2,696 cc	3,199 cc	
	Camshaft arrangement	DOHC	←	←	
	Max. power	A/T	141 PS / 4,000 rpm	165 PS / 4,000 rpm	220 PS / 6,100 rpm
		M/T	141 PS / 4,000 rpm	165 PS / 4,000 rpm	—
	Max. torque	A/T	310 Nm / 1,800 ~ 2,700 rpm	340 Nm / 1,800 ~ 3,250 rpm	312 Nm / 4,600 rpm
		M/T	310 Nm / 1,800 ~ 2,700 rpm	340 Nm / 1,800 ~ 3,250 rpm	—
	Idle speed	780 ± 50 rpm	750 ± 20 rpm	700 ± 50 rpm	
	Cooling system	Water- cooled / forced circulation	←	←	
	Coolant capacity	10.5 ~ 11.0 ℓ	11.0 ~ 11.5 ℓ	11.5 ~ 12.0 ℓ	
	Max. oil capacity (when shipping)	8.2 ℓ	9.2 ℓ	9.8 ℓ	
	Lubrication type	Gear pump, forced circula- tion	←	←	
	Turbocharger and cooling type	Turbocharger, air-cooled	←	—	
Manual Transmission	Operating type	Semi-Remote control, floor change type	←	—	
	Gear ratio	1st	4.315	←	—
		2nd	2.475	←	—
		3rd	1.536	←	—
		4th	1.000	←	—
		5th	0.807	←	—
		Reverse	3.919	←	—
Automatic Transmission	Model	Electronic, 5-speed	←	←	
	Operating type	Floor change type	←	←	
	Gear ratio	1st	3.951	3.595	3.951
		2nd	2.423	2.186	2.423
		3rd	1.486	1.405	1.486
		4th	1.000	1.000	1.000
		5th	0.833	0.831	0.833
		Reverse 1st	3.147	3.167	3.147
Reverse 2nd	1.930	1.926	1.930		

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Descriptions		D20DT	D27DT	G32D	
Transfer Case	Model	Part-time	Part-time (AWD)	AWD	
	Type	Planetary gear type	←	←	
	Gear ratio	High (4H) Low (4L)	1.000 : 1 2.483 : 1	← ← (AWD: -)	← -
Clutch (M/T)	Operating type	Hydraulic type	←	-	
	Disc type	Dry single diaphragm type	←	-	
Power Steering	Type	Rack and pinion	←	←	
	Steering angle	Inner	35.88°	←	←
		Outer	32.08°	←	←
Front Axle	Drive shaft type	Ball joint type	←	←	
	Axle housing type	Build-up type	Build-up type (IOP type)	IOP type	
Rear Axle	Drive shaft type	Semi-floating type	Semi-floating type (Ball joint type)	Ball joint type	
	Axle housing type	Build-up type	Build-up type (IRS type)	IRS type	
Brake	Master cylinder type	Tandem type	←	←	
	Booster type	Vacuum assisted booster type	←	←	
	Brake type	Front wheels	Disc type	←	←
		Rear wheels	Drum (disc)	←	Disc type
	Parking brake	Cable type: internal expansion	Cable type: internal expansion (EPB type)	←	
Suspension	Front suspension	Wishbone + coil spring	←	←	
	Rear suspension	5-link + coil spring	5-link + coil spring (Multi link + coil spring) (EAS)	Multi link + coil spring (EAS)	
Air Conditioner	Refrigerant (capacity)	R-134a (650 ± 30g)	←	←	
Electrical	Battery type / Capacity (V-AH)	MF / 12 - 90	←	←	
	Starter capacity (V-kW)	12 - 2.2	←	12 - 1.8	
	Alternator capacity (V-A)	12 - 140 (12 - 115)	←	12 - 115	

GENERAL INFORMATION

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