

Press Information

SIRION

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DAIHATSU SIRION

The compact car market, which is broadly split into A and B segments, is going through a period of great change and is said to be the most exciting car market at present.

Against a background of increasingly serious environmental problems, the world's major car manufacturers are competing fiercely in this area and are bringing more and more new concept compact cars onto the market. This trend towards realising the functionality and advantages of compact cars is a change that Daihatsu welcomes and we are introducing our latest compact car into this very active market segment with the full intention of leading the rest, not following.

Today, here in Geneva and for the first time in Europe, Daihatsu would like to announce the release of our newest production model, the Daihatsu Sirion.

Originally, the base vehicle for the Sirion, the NCX, was displayed at the Frankfurt Motor Show in 1997 and we are sure people who saw the NCX concept car at that show will recognise that the Sirion is a higher development in passenger car form of the NCX platform.

The concept is Quality Life Compact. The target was to create a car that, while it improved our lifestyle, did not worsen the already major problems that face the environment, and in doing so contribute toward the creation of a new set of values in society. This set of new values is what we call Quality Life Attitude and it is by cultivating this new concept that we want to increase the harmony between man and automobile. A car that is not bigger than necessary, is fuel efficient, pleasant to drive in town, and is versatile in its uses; this is what we were aiming for.

In other words, if you have this one car your freedom won't be restricted, it will satisfy your needs, it will match the needs of your Quality Life Attitude and it will also be a well made, quality car.

The capacity of this newly developed DOHC engine is 989 cc. We at Daihatsu, in our role as well recognised compact car specialists, think that this engine is one of the most efficient engines in the world today. Even though the outside dimensions of this car are compact, five adults can sit in this mobile living space in comfort with plenty of room to store luggage in the flat, square storage compartment and feel at home and secure in the generous surroundings of the car. What we were aiming for was a car that would have a broad range of uses, suit a variety of owners at a variety of social levels, and meet a wide scale of needs so it could even be used as the main car of the household. What we came up with is a new compact car that is different in concept to any other at present available on the market.

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STYLING

The Sirion styling concept represents a new generation in city cars, a concept that says a compact car can have a comfortable and spacious interior that wouldn't be out of place in a much larger car.

The short nose and long roof look, packaged together with chrome trim, gives a classical yet modern air to this, the newest concept in compact car styling.

The body is sculpted with mildly accented lines and is gently flared from the shoulder line downwards making the car look wider and lower than it really is, while giving assurance that the car has great stability.

The long cabin equipped with six light windows exudes a sense of quality and spaciousness, while the uniquely shaped headlights featuring crystal lamps add to the car's high class image.

Unlike most hatchbacks, the styling of the rear of the Sirion gives a saloon like elegance through the clear separation of glass area and bodywork, while combining the real advantages of a hatchback door.

PACKAGING

The short nose/long roof design of the Sirion makes it possible to create an interior space with ample headroom and legroom for both front and back seat occupants. Even though the overall size of the car is quite compact (Length x Width x Height: 3675 mm x 1595 mm* x 1450 mm), the dimensions of the interior (Length x Width x Height: 1725 mm x 1330 mm x 1190 mm) show that this is no ordinary compact. Especially in length, the cabin is not that much different to a mid-sized saloon car. Moreover, the Sirion has 5 doors including the rear hatch. Due to this configuration, it is not only easy to get into and out of the rear seats, but the loading and unloading of luggage is made very convenient. While on that point, it should be mentioned that the flat and square luggage compartment is not just easy to use, but it is also big enough (235 dm³ VDA) to carry even a large size Samsonite suitcase.

* 1590 mm for the CL

ENGINE

The heart of this car is a newly developed 3 cylinder, 1-litre DOHC engine with the cams directly operating onto the valves. Not only does the use of scissors gears to drive the twin camshafts give the engine the graceful, smooth torque of a luxury car, the vertical small diameter straight ports mean that even during cold starting, lean air-to-fuel ratios can be used thus reducing pollution. This theme is followed with the transient fuel adhesion prediction control system, which also allows better air/fuel ratios. In addition, the integrated steel exhaust pipe manifold/400 cell catalytic converter unit means that

from the very first revolutions of the engine the dangerous gases are kept to a minimum, making this power plant one of the cleanest running engines in the world today.

The whole unit is mounted on liquid-sealed engine mounts and a secondary vibration damping frame, which together reduce vibration and hum, resulting in a top class quiet power unit.

Higher intake and combustion efficiency, along with a reduction of moving mechanical parts in the DOHC system means that there is reduced mechanical loss and increased fuel efficiency. Put this unit together with the five speed manual gearbox and you will get fuel consumption of 4.9 litres per 100 km, or 5.5 litres per 100 km with the 4 speed automatic transmission in 'Extra Urban' mode. Simply put, one of the lowest fuel consumption figures in any production car.

SUSPENSION

The suspension, which employs MacPherson struts at the front and a torsion beam/coil spring rear, has been tested and fine tuned in extensive testing in Europe.

In addition, the matching of the suspension with 14 inch tyres give the vehicle a very comfortable ride and advanced levels of straight-ahead stability. To top this off, the amazing 8.8 metre turning circle combined with hydraulic power steering mean that with the Sirion, Daihatsu has managed to give the driver the best overall handling and manoeuvring car in its class.

SAFETY FEATURES

One of the reasons that large car owners are hesitant to change to a compact model is their concern over increased vulnerability in accident situations. We at Daihatsu believe that the driver of a compact car should be given the same level of safety features that the owners of larger car expect. To that end, the Sirion is equipped with the very latest safety features.

For instance, even though the engine compartment is very compact, the construction of the front of the car is such that even if there is a collision, the amount of damage to the cabin area itself is kept to a minimum. This is achieved by having a front frame that bends groundward into a V shape in a front collision causing the engine mounting on the centre of the V to pull the engine/gearbox unit downward, thus preventing intrusion into the passenger cabin.

Of course, we have been very careful to ensure the Sirion will live up to the much stricter safety regulations of the future, including those concerning offset barrier deformation and side anti-intrusion. Airbags are standard for the driver and front seat passenger, and for the first time in a car of this class you can have the option of side airbags, also. Moreover, the front seat belts are equipped with pre-tensioner and force limit mechanisms that effectively protect the driver and front passenger.

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Whether doors should be kept locked or unlocked while driving is a subject of controversy. Some argue that the doors should be kept unlocked for easier occupant rescue in the event of an accident. Others maintain the doors should be locked at all times to protect the occupants from intruders. The power-lock-equipped CX eliminates the need to worry about what to do with the locks in either eventuality.

Keep the doors locked, and if an accident occurs the locks release automatically to allow quick rescue. At the same time, the interior light of the car comes on to let you see your best way out, and the hazard lights flash to alert those in the area of the existence of your vehicle. On top of that, regardless of whether your car is equipped with a power lock or not, in the event of an accident an impact sensing fuel cut switch shuts off the supply of fuel to the engine, thus preventing the outbreak of fire.

Daihatsu has also paid great attention to active safety, equipping the car with a braking system featuring ventilated front disc brakes and rear leading trailing drum brakes, and all four wheels are optionally equipped with 4-sensor, 4-channel, power-assisted ABS. In addition, the rear wiper helps to ensure a good rear view even in poor weather conditions, and a high-mounted rear brake lamp provides effective warning to motorists behind you when you brake.

A SOCIETY ALL WRAPPED UP IN CARS

It could be said that the automobile is the most wonderful invention of the 20th century. But, in the present day with great environmental problems, traffic congestion, etc. it cannot be said to be an invention without problems.

Daihatsu feels it must face and take on the challenge of the problems to do with automobiles and wants to produce a car for the 21st century that deserves the title 'Most Wonderful Invention of the 20th Century'.

We at Daihatsu have always stuck to making compact cars.

In fact, for the 90 years since the founding of our company we have made compact cars, putting our whole heart and soul into creating them. What we want to do is to have people understand how wonderfully convenient compact cars are, and to realise that they are in many ways the most suitable cars for life in today's world and the future.

The best example of our feelings is the Sirion. A present to the 21st century, from Daihatsu.

DAIHATSU SIRION

Technical Data

Dimensions and Weights

Overall length (mm)	3675
Overall width (mm)	1595 (CL: 1590)
Overall height (mm)	1450
Interior length (mm)	1725
Interior width (mm)	1330
Interior height (mm)	1190
Wheelbase (mm)	2345
Track, front (mm)	1395 (CL: 1405)
Track, rear (mm)	1365 (CL: 1375)
Ground clearance (mm)	110
Turning circle - tyre (m)	8.8
Kerb weight (5MT/4AT, kg)	835/845 (CL: 810/820)
Seating capacity	5
Tank capacity (L)	40
Luggage capacity (L)	235 dm ³ (VDA)

Engine

Type of engine	EJ-DE, petrol, water-cooled, 3-cylinder, 4-cycle, 12-valve, DOHC
Displacement (cc)	989
Bore x stroke (mm)	72.0 x 81.0
Compression ratio	10.0
Max. output (ECE)	40.5 kW/5200 rpm
Max. torque (ECE)	88.3 Nm/3600 rpm
Fuel induction system	EFI (Electronic Fuel Injection)

Chassis

Suspension, front	Independent by MacPherson struts, coil springs
Suspension, rear	Semi-independent by torsion beam axle, coil springs, stabiliser
Steering	Rack and pinion
Tyre size	165/65R14 (CL: 145/80R13)

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Power Transmission

Type of drive	Front-wheel drive
Type of transmission	5-speed manual, 4-speed automatic
Type of clutch	Dry single plate with diaphragm spring and mechanical actuation
Transmission ratios, 5MT	1st: 3.181, 2nd: 1.842, 3rd: 1.250, 4th: 0.916, 5th 0.750, Reverse: 3.142
4AT	1st: 2.800, 2nd: 1.540, 3rd: 1.000, 4th: 0.700, Reverse: 2.333
Final drive ratio (5MT/4AT)	4.500/4.438

Performance

Fuel consumption	
—Urban:	6.7 L/100 km (5MT) 7.8 L/100 km (4AT)
—Extra Urban:	4.9 L/100 km (5MT) 5.5 L/100 km (4AT)
—Combined:	5.6 L/100 km (5MT) 6.4 L/100 km (4AT)