

# **Fiat** *barchetta*

**F I A T**

# Fiat barchetta

**Bridging the gap  
between past  
and present**

"Barchetta", the name given with a certain touch of malicious irony to the new Fiat spider, will conjure up many memories for motor sport fans.

Ferrari made a victorious return to racing after the end of the war in the first Fiat barchetta designed by Touring, which launched a long



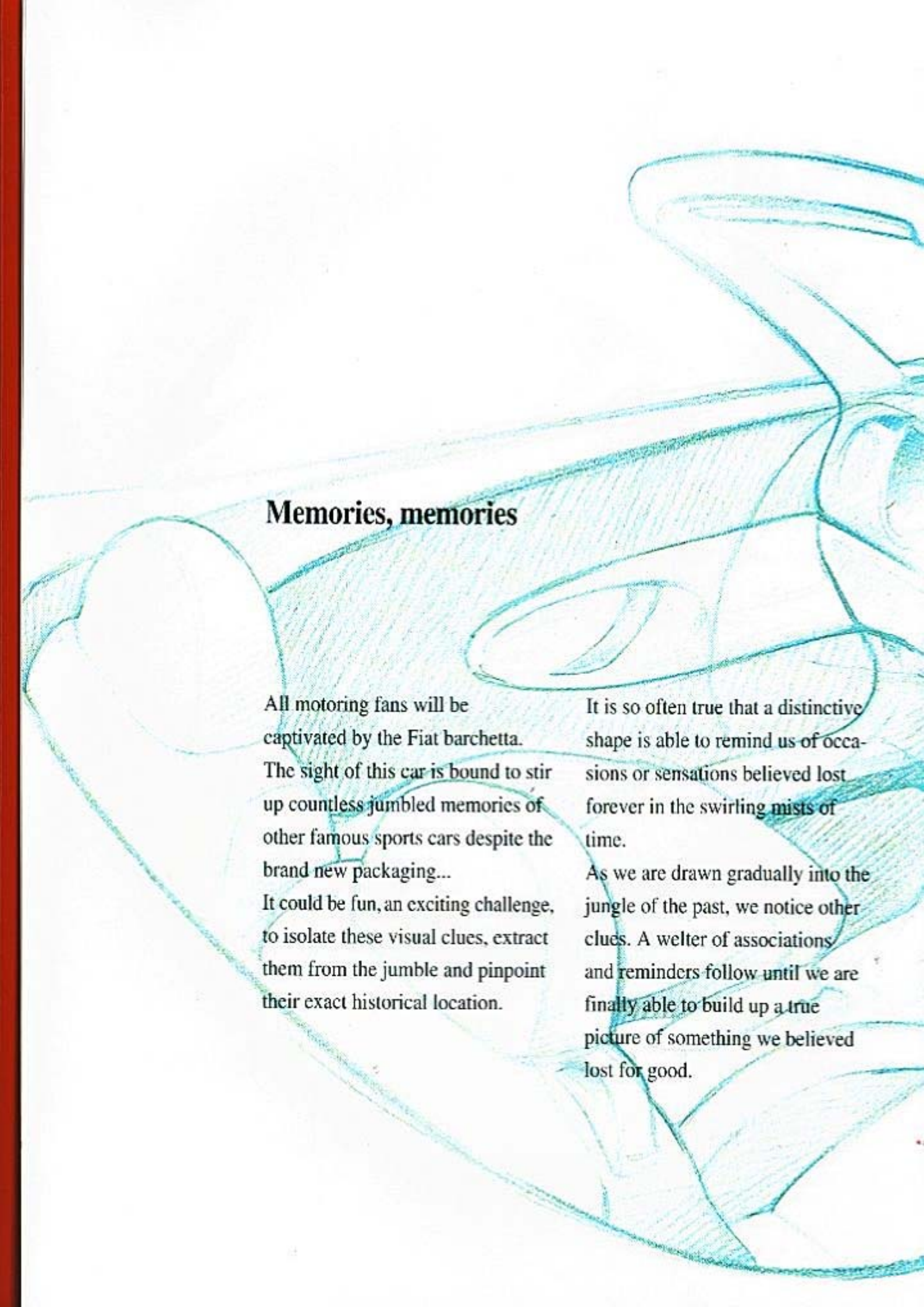
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string of racing successes. Yet the renowned Fiat 519 'Torpedo Bateau' of 1925 was an equally important name because this car sired the long succession of blue-blooded Torpedos produced by Fiat between the first decade of this century and the mid-twenties.

This new sports car can be interpreted in at least two ways: as a nod to the past (through a series of entertaining references and shrewd evocations) and a kind of commitment to the future.

It is a statement of Fiat's specific intent to open up a new chapter in sports car history.



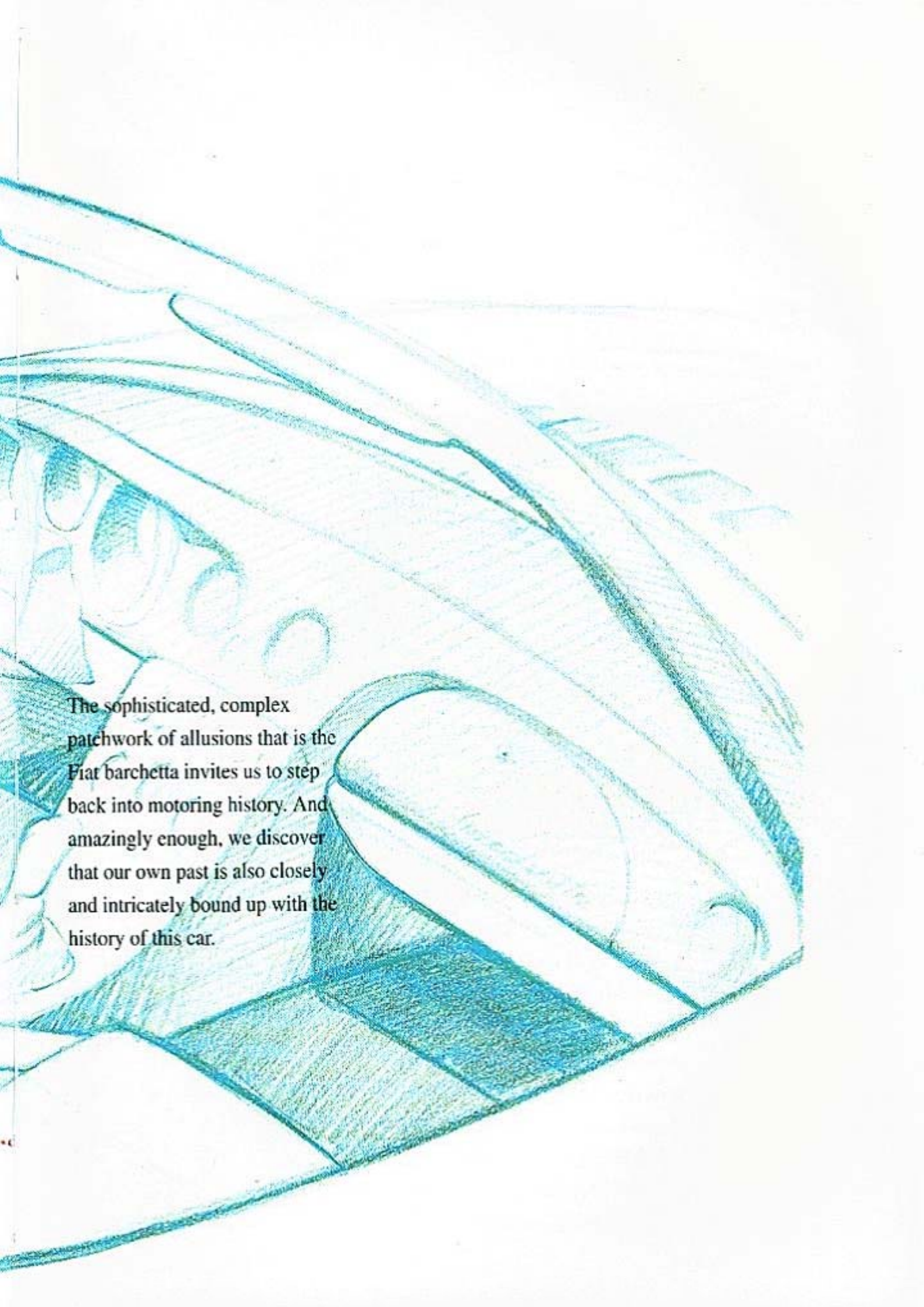


## Memories, memories

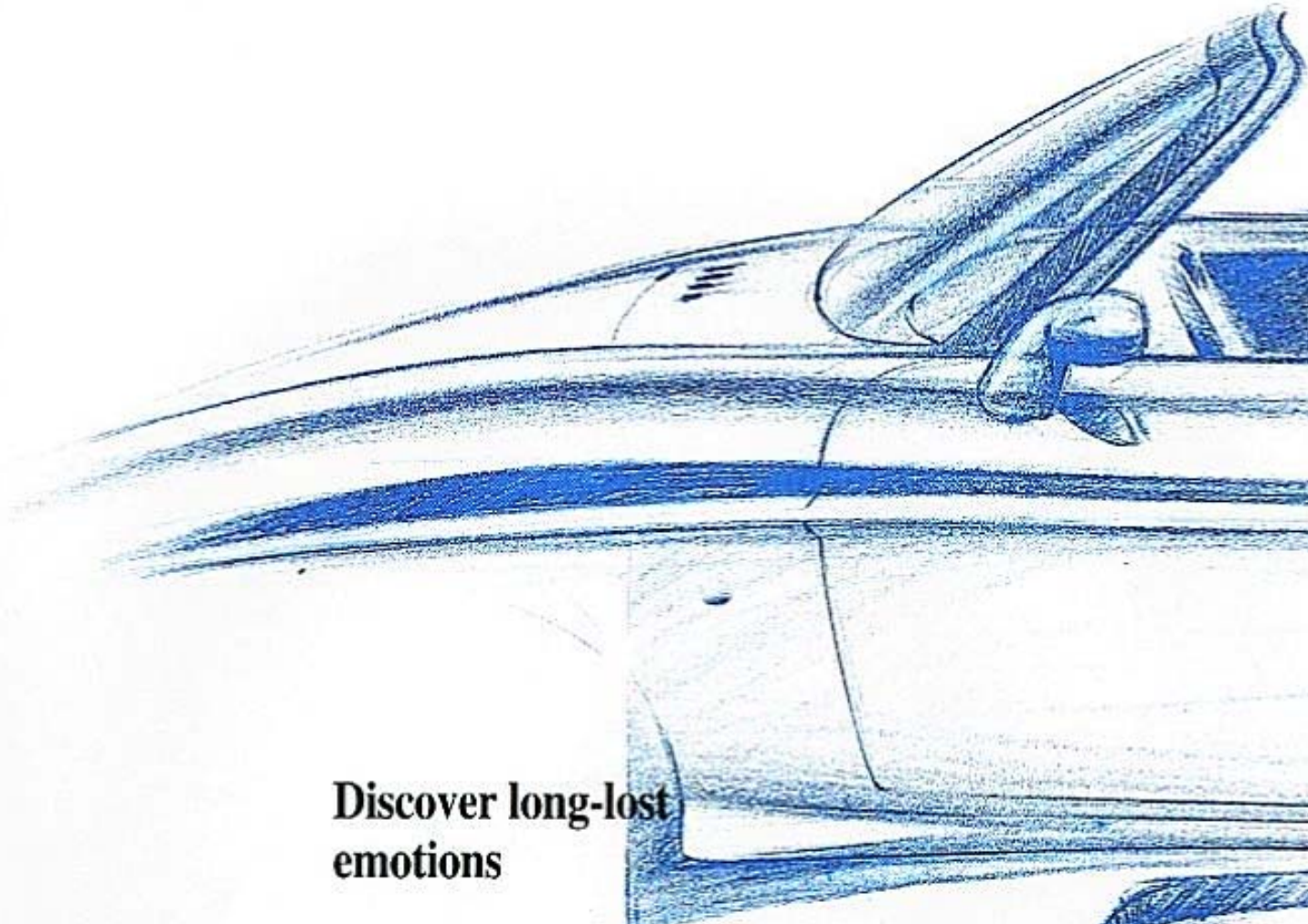
All motoring fans will be captivated by the Fiat barchetta. The sight of this car is bound to stir up countless jumbled memories of other famous sports cars despite the brand new packaging... It could be fun, an exciting challenge, to isolate these visual clues, extract them from the jumble and pinpoint their exact historical location.

It is so often true that a distinctive shape is able to remind us of occasions or sensations believed lost forever in the swirling mists of time.

As we are drawn gradually into the jungle of the past, we notice other clues. A welter of associations and reminders follow until we are finally able to build up a true picture of something we believed lost for good.

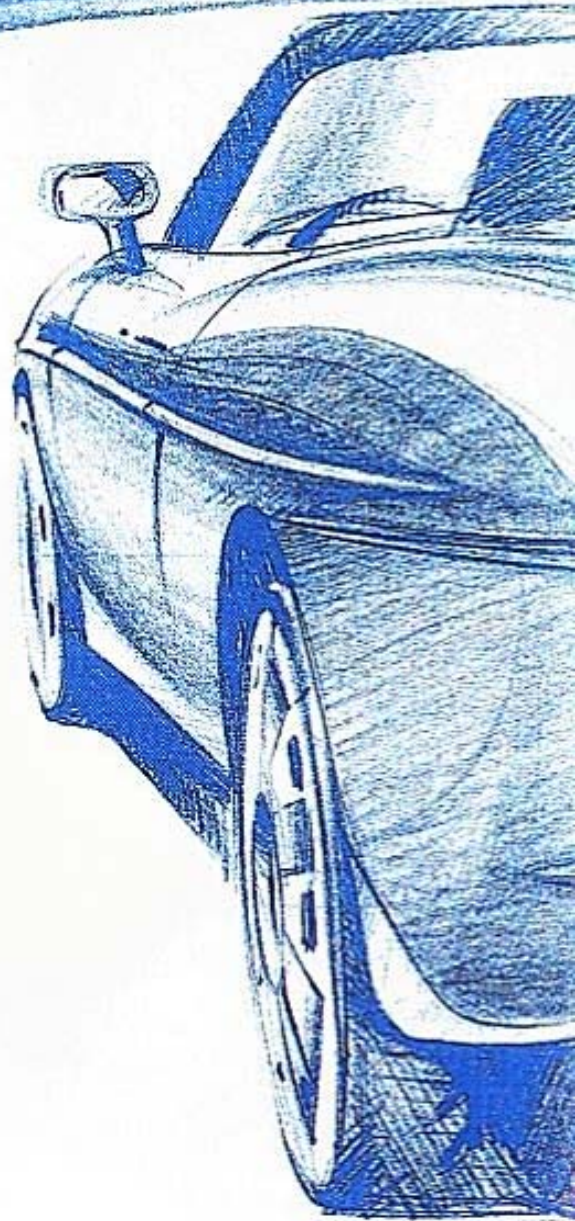


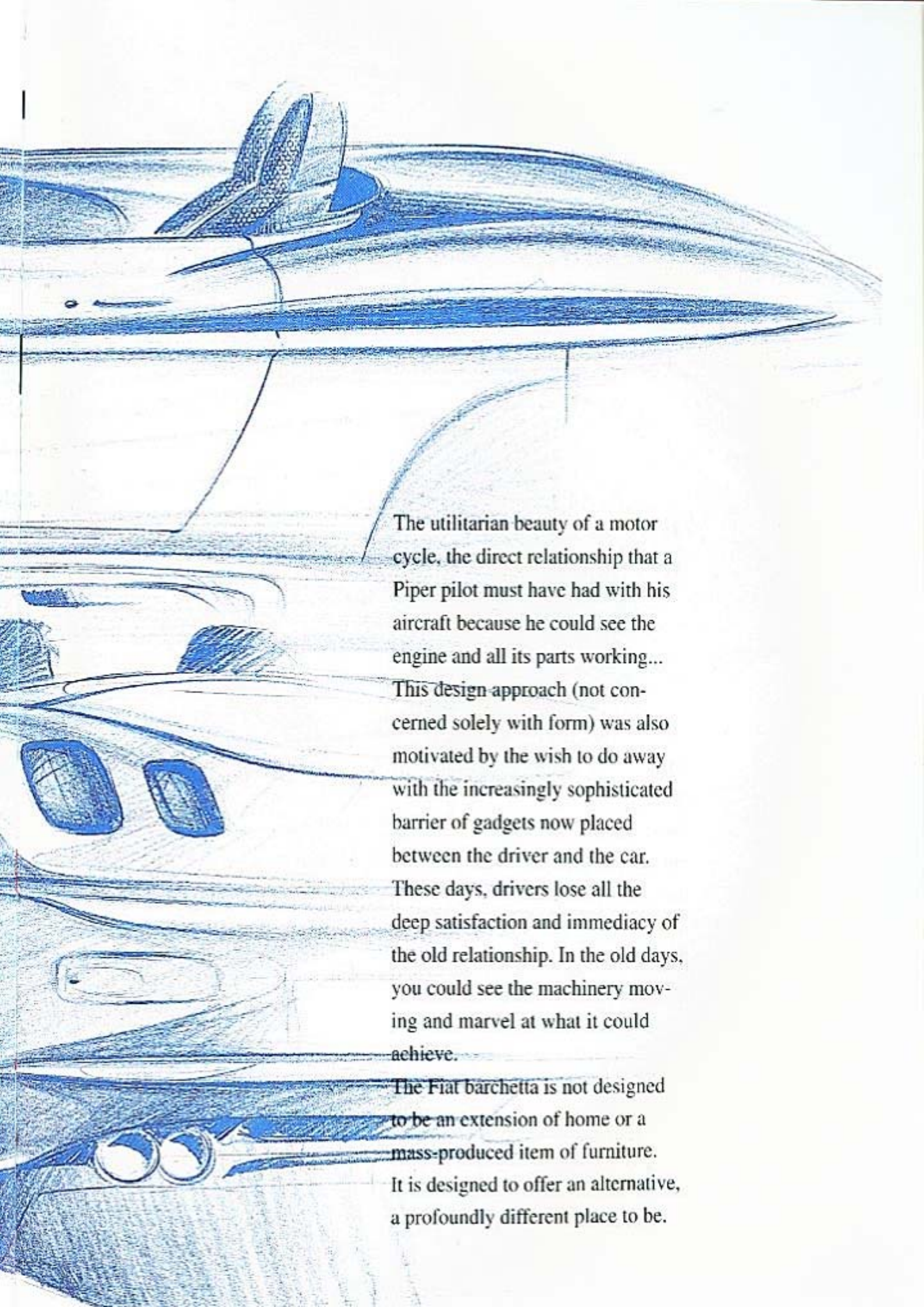
The sophisticated, complex patchwork of allusions that is the Fiat barchetta invites us to step back into motoring history. And amazingly enough, we discover that our own past is also closely and intricately bound up with the history of this car.



## Discover long-lost emotions

The Fiat barchetta is a comfortable, stylish car. Its restrained nature is symbolically underscored by the use of exterior panelling to ring much of the interior. The designer's intention is to allow the driver to re-establish a relationship with the car, with all its nuts, bolts and cogs, that has been gradually lost over the years as cars have become increasingly sophisticated. In years gone by, spiders, coupés and sports cars were simply about having fun. The deliberately understated interior alludes symbolically to other worlds and relationships.





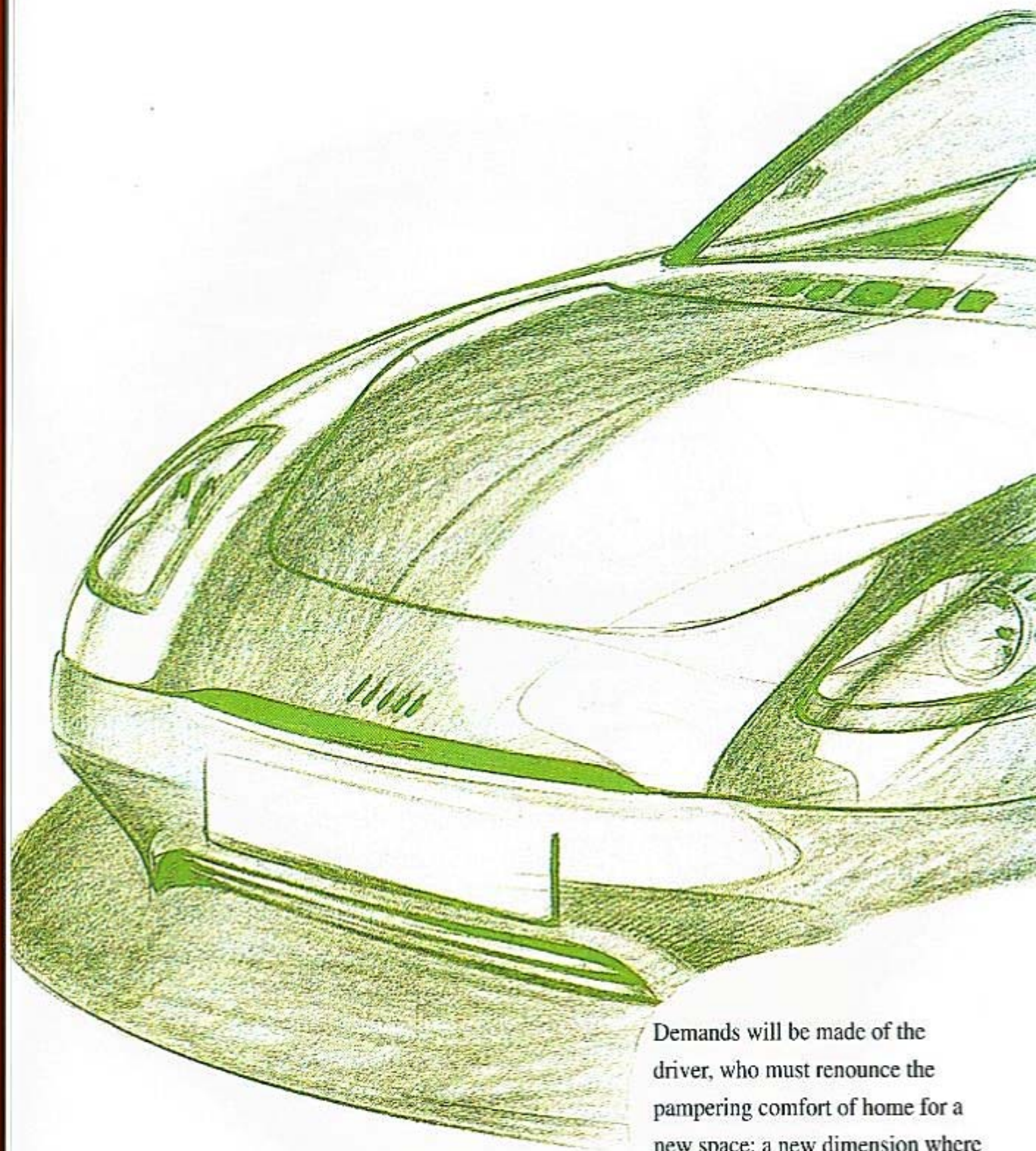
The utilitarian beauty of a motor cycle, the direct relationship that a Piper pilot must have had with his aircraft because he could see the engine and all its parts working...

This design approach (not concerned solely with form) was also motivated by the wish to do away with the increasingly sophisticated barrier of gadgets now placed between the driver and the car.

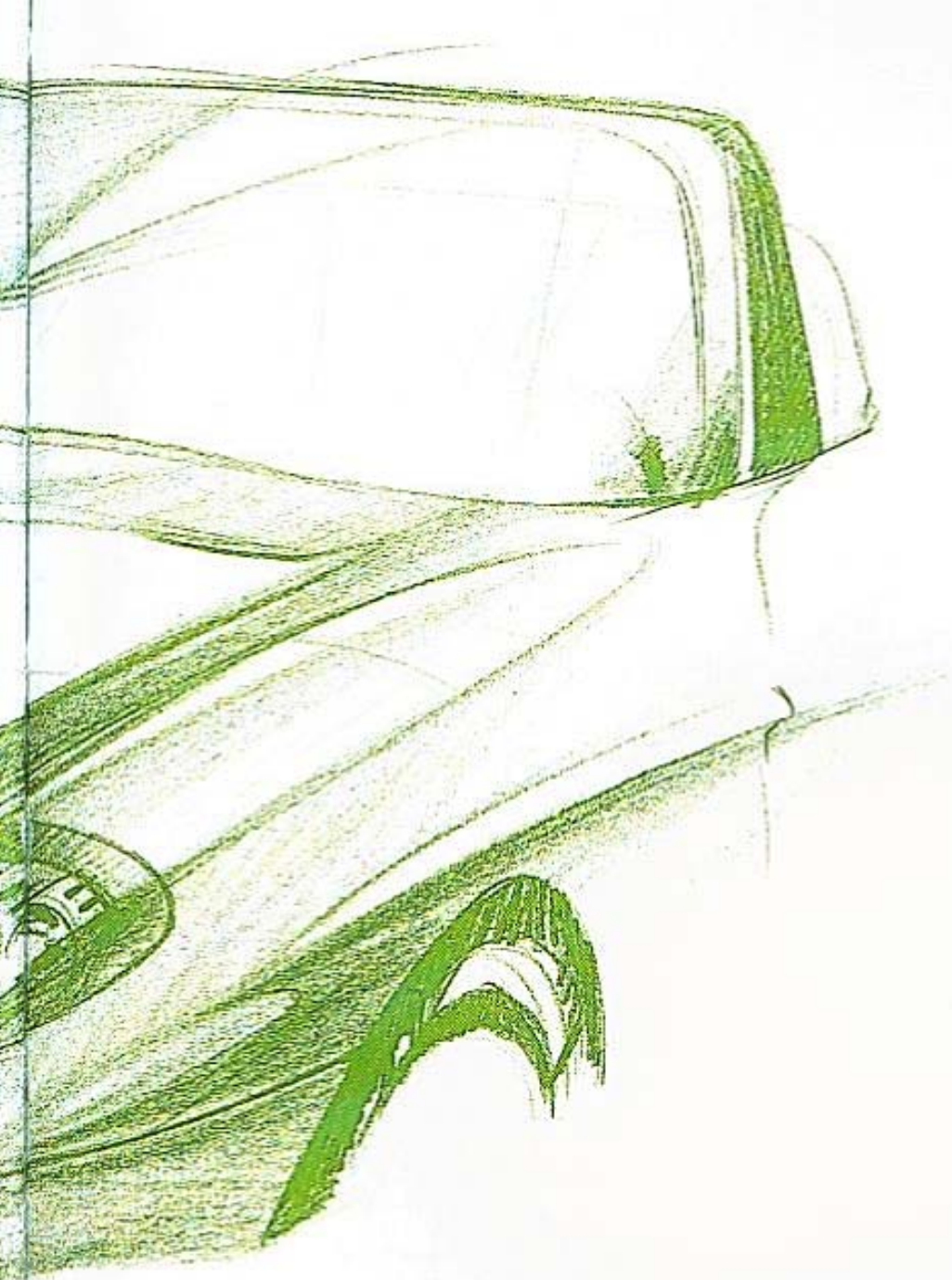
These days, drivers lose all the deep satisfaction and immediacy of the old relationship. In the old days, you could see the machinery moving and marvel at what it could achieve.

The Fiat barchetta is not designed to be an extension of home or a mass-produced item of furniture.

It is designed to offer an alternative, a profoundly different place to be.

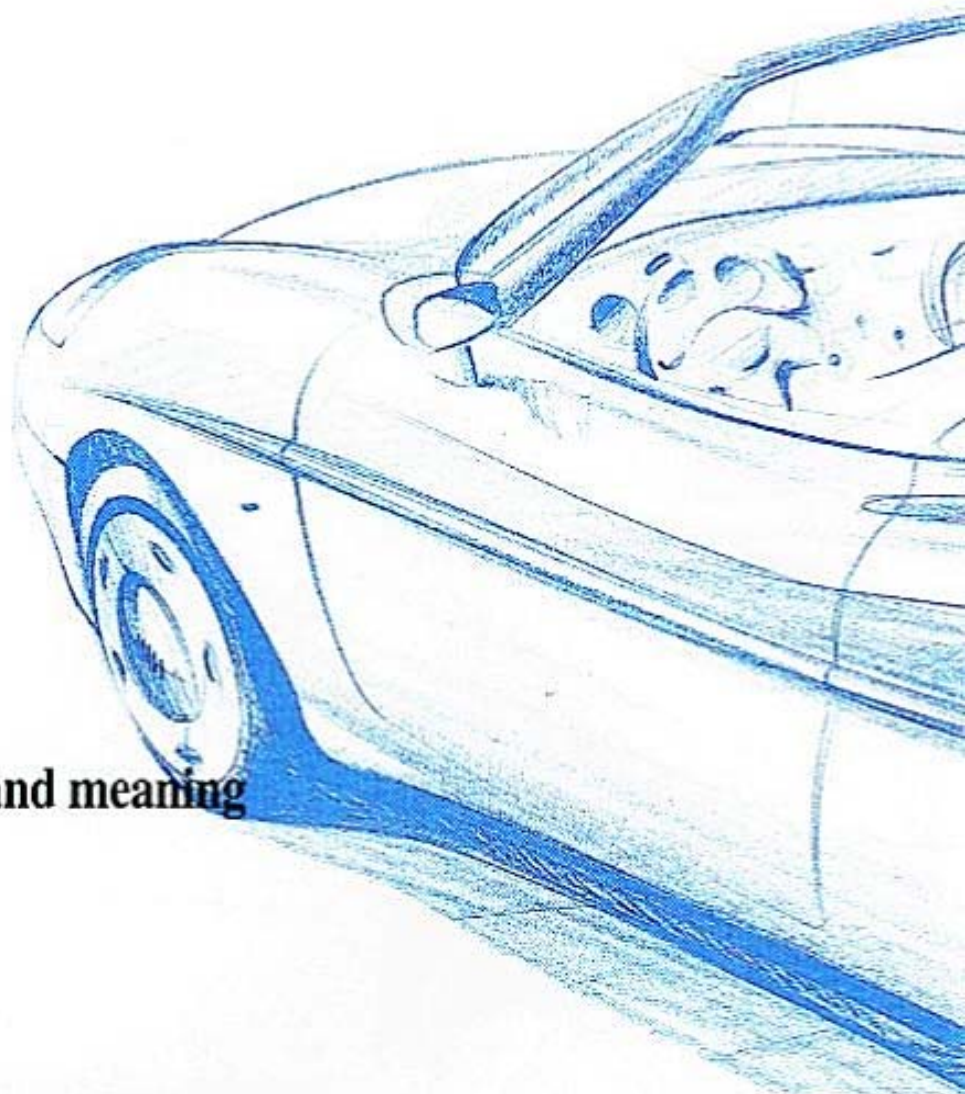


Demands will be made of the driver, who must renounce the pampering comfort of home for a new space; a new dimension where movement rules; the exciting roar and smell of a powerful engine; controls representing a direct link between man and machine; instruments interpreting its signals, decoding its mechanical voice.



“Fiat barchetta drivers must dress appropriately”; or so say the designers to emphasise the exceptional nature of the experience. This will not be like entering the calm, familiar atmosphere of an ordinary car. This is abandoning yourself to the love of sport, wind in your hair, all five senses alive to your car as machine.

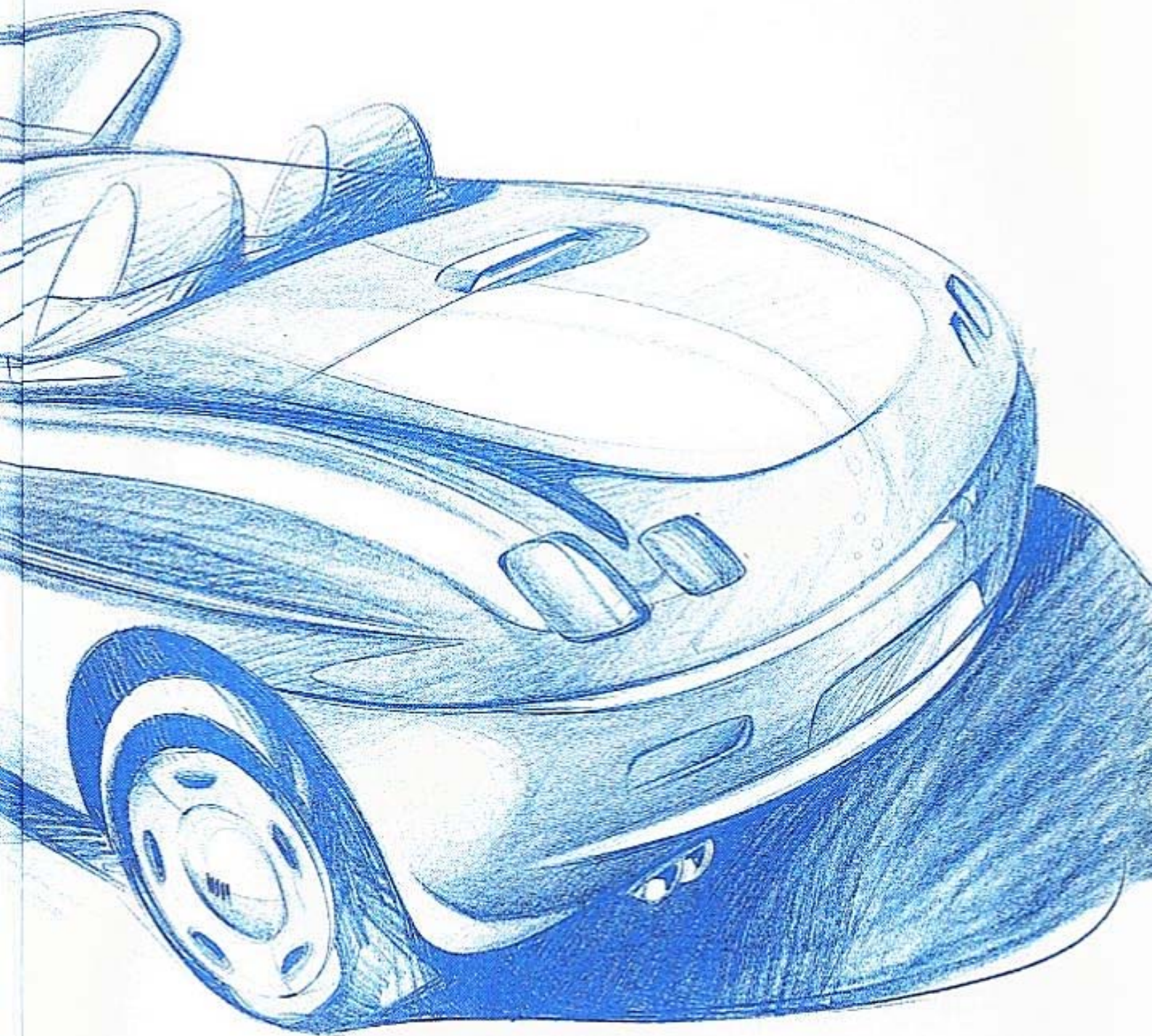
The Fiat barchetta was designed in the belief that this sort of passionate involvement with a car cannot simply be sated by the act of driving. Other emotions come into play, a complex set of sensations: looking, listening, touching... The Fiat barchetta may prove the source for a unique, new form of satisfaction because it is a sophisticated blend of hopes for the future and nostalgia for the past.



## Form and meaning

The lines of the Fiat barchetta are mostly reminiscent of spiders successful in the fifties and sixties. For example, the Italian Giulietta and Duetto designed by Pininfarina, or the English MG and Triumph. But they also recall all the sports cars dreamed up by the great bodybuilders (mainly Italian) who began their work during the first decade of the century and reached the peak of their powers between the mid twenties and end of the thirties. All these cars made no secret of their sporting vocation. A touring

car would often be brought out at the same time as its racing version. The simple, no-frills styling was designed strictly for aerodynamics and road-holding. The car's shape was designed to emphasise plasticity of form and expressive force. All these sports cars were fast, nippy, capable of extraordinary performances in competitions. The designer's job was to wave a magic wand and translate all these suggestions into statements. They found that information about these cars could be best conveyed by sticking to certain rules. The



body was kept very low; normally with a very low H point.

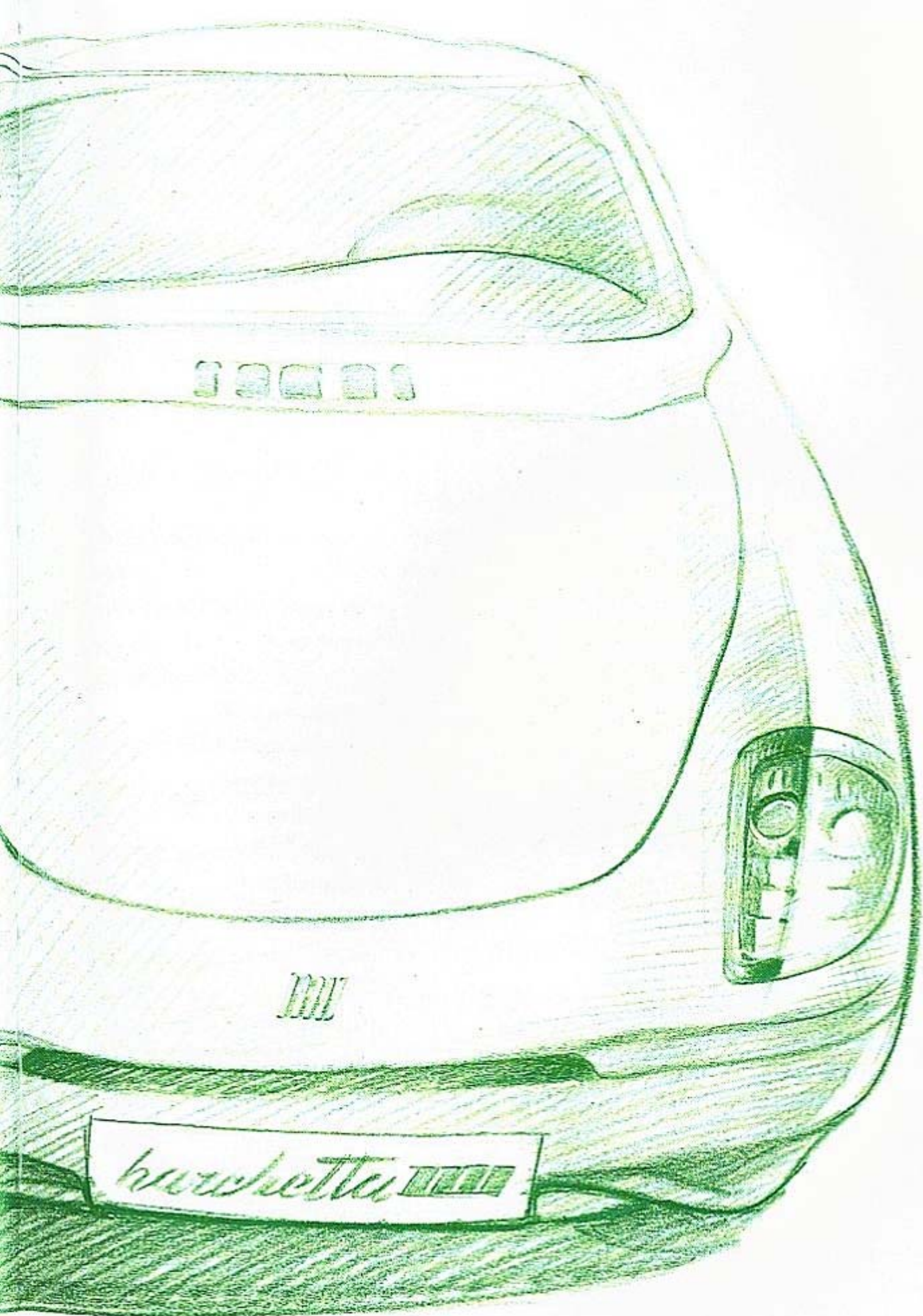
The cockpit was kept well back to emphasise the size of the bonnet.

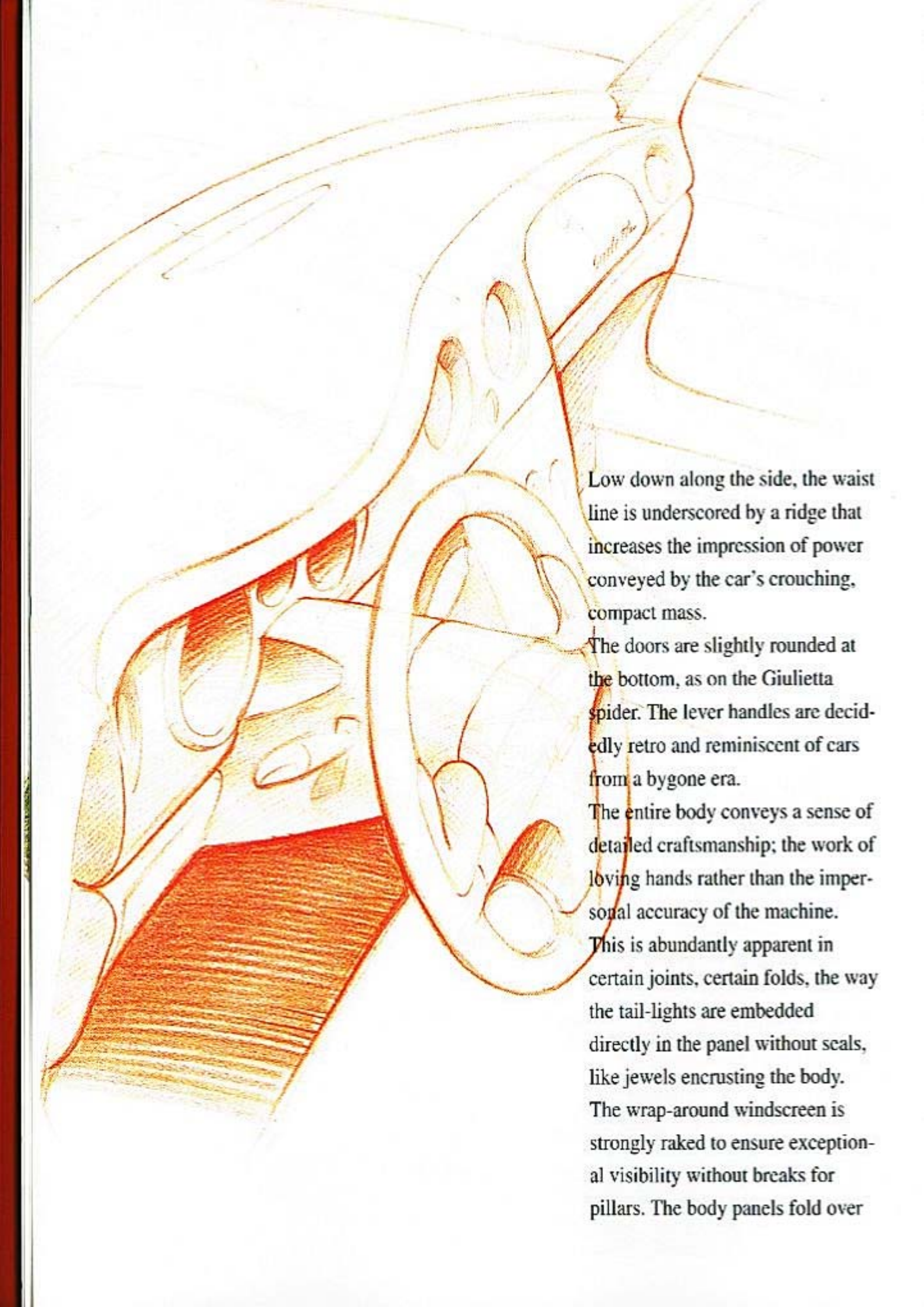
The sides were moulded smoothly to provide a continuous surface over which the wind could flow uninterrupted. Interiors were of a

spartan simplicity. The array of controls and instruments was vaguely reminiscent of a motor bike. All these rules have been re-invented with great vision on the Fiat barchetta. The aim was to build an object bursting with expressive force and huge emotional appeal.

The one-piece, compact body is moulded with care. The surfaces curve smoothly without corners or joints, flowing pliantly over even the most obdurately geometrical of features. The great Italian designers used to love these, but they disappeared rapidly when mass production became the norm. The boot, bonnet, hood cover and fuel cap form stylish design statements against this smooth background.







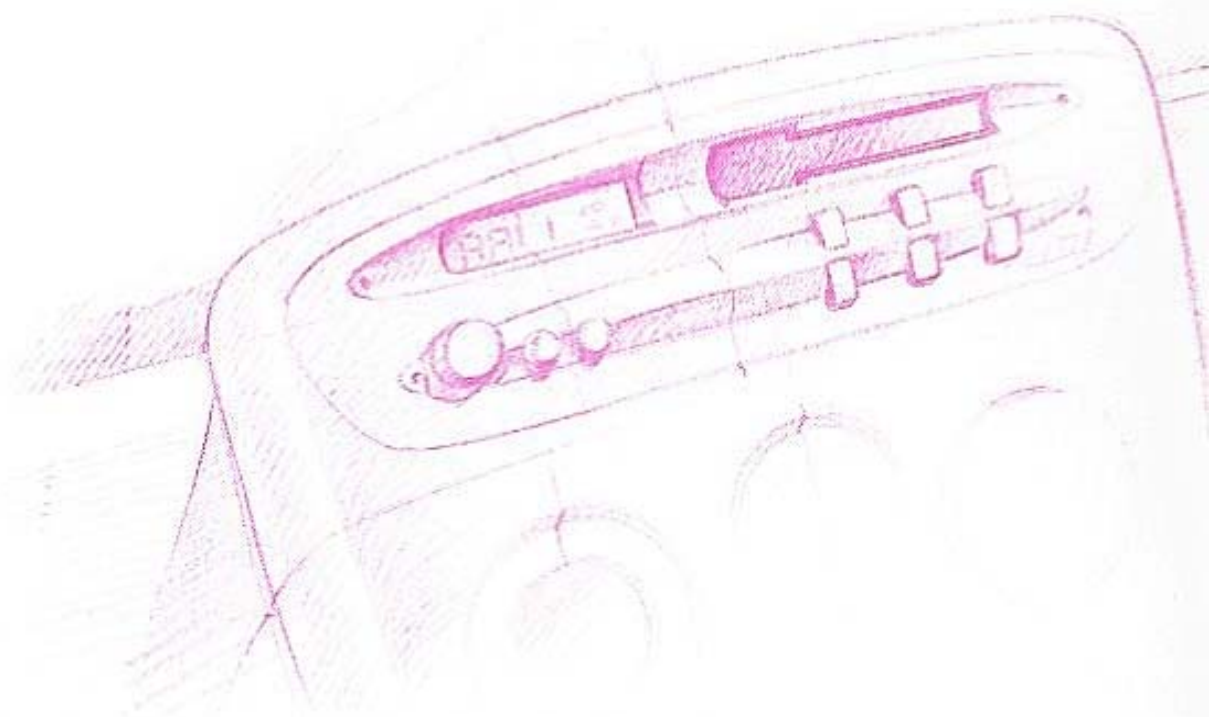
Low down along the side, the waist line is underscored by a ridge that increases the impression of power conveyed by the car's crouching, compact mass.

The doors are slightly rounded at the bottom, as on the Giulietta spider. The lever handles are decidedly retro and reminiscent of cars from a bygone era.

The entire body conveys a sense of detailed craftsmanship; the work of loving hands rather than the impersonal accuracy of the machine.

This is abundantly apparent in certain joints, certain folds, the way the tail-lights are embedded directly in the panel without seals, like jewels encrusting the body.

The wrap-around windscreen is strongly raked to ensure exceptional visibility without breaks for pillars. The body panels fold over



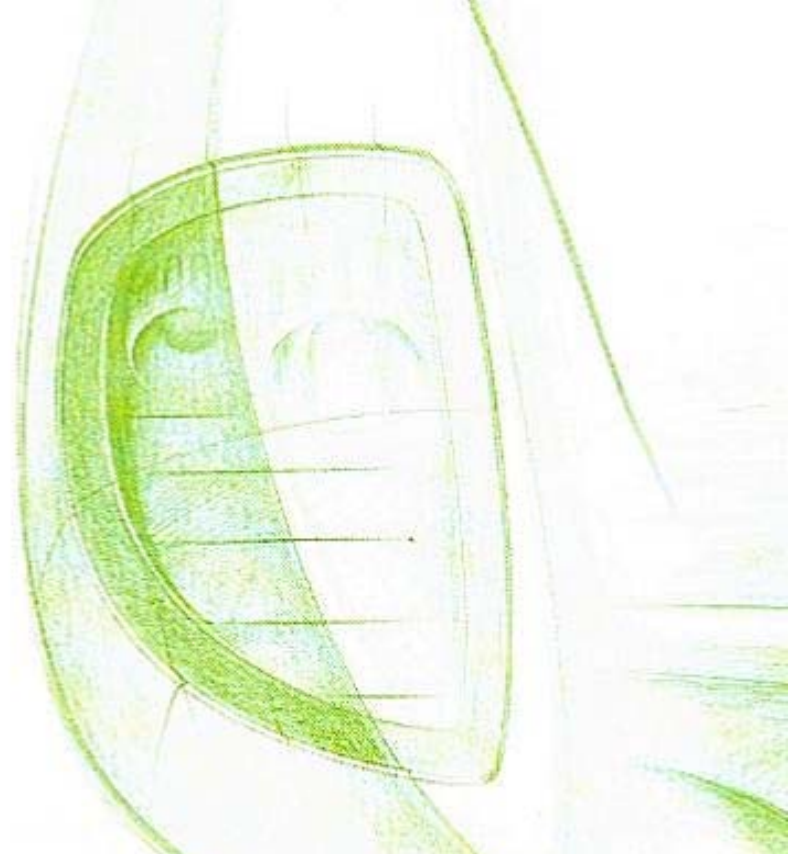
and run into the interior without any change in colour or rhythm. The curved exterior is mirrored by a rounded, seamless interior casing conceived as a snug nest for driver and passenger.

The driving position is typical of earlier spiders and has the driver sitting low down with legs and arms outstretched, surrounded by the body.

The driver is able to bend his left arm to rest it on the upper part of the door because at this point the door moulding actually invites this relaxed, somehow slightly unconformist attitude. The analogue instruments are round, like those of spiders in the fifties, and protected against the sun's glare by a very pronounced lip or mini-dome.

Many details and signs hark back to

the old spiders. Yet these clever, stylish reworkings are designed to play subtly on the memory and nostalgic feelings. Here you will see none of the vulgar imitations or fake features typical of cheap period reproductions. Paradoxically, new research on the barchetta led designers back to the past.



## **From design to finished product: here lies the paradox**

The development of the Fiat barchetta project from drawing board to final definition of form reveals something of a paradox. The original aim was to make the sort of sports car a child might draw. In other words, a square shape, a box obtained by joining surfaces practically at right angles, with jutting corners to emphasise the overall architectural approach to structure.

This shape was also prompted by Fiat's manufacturing requirements at that time. But then the Punto came along and everything

changed. The original concept was revised to give the car its current shape partly due to expediency and partly through a wish to give this new car greater expressive force and more impact.

The original guiding principles of stark, rational neutrality had to be left behind in order to achieve these results on an emotional level. The design began to focus on surface rhythm and the plasticity of volumes and materials.

In other words, the car was no longer built up bit by bit in an architectural way, but conceived from the beginning as a sculpted object of different parts. The idea was now to produce one compact volume enfolded by a continuous, gently curving surface without corners or breaks.

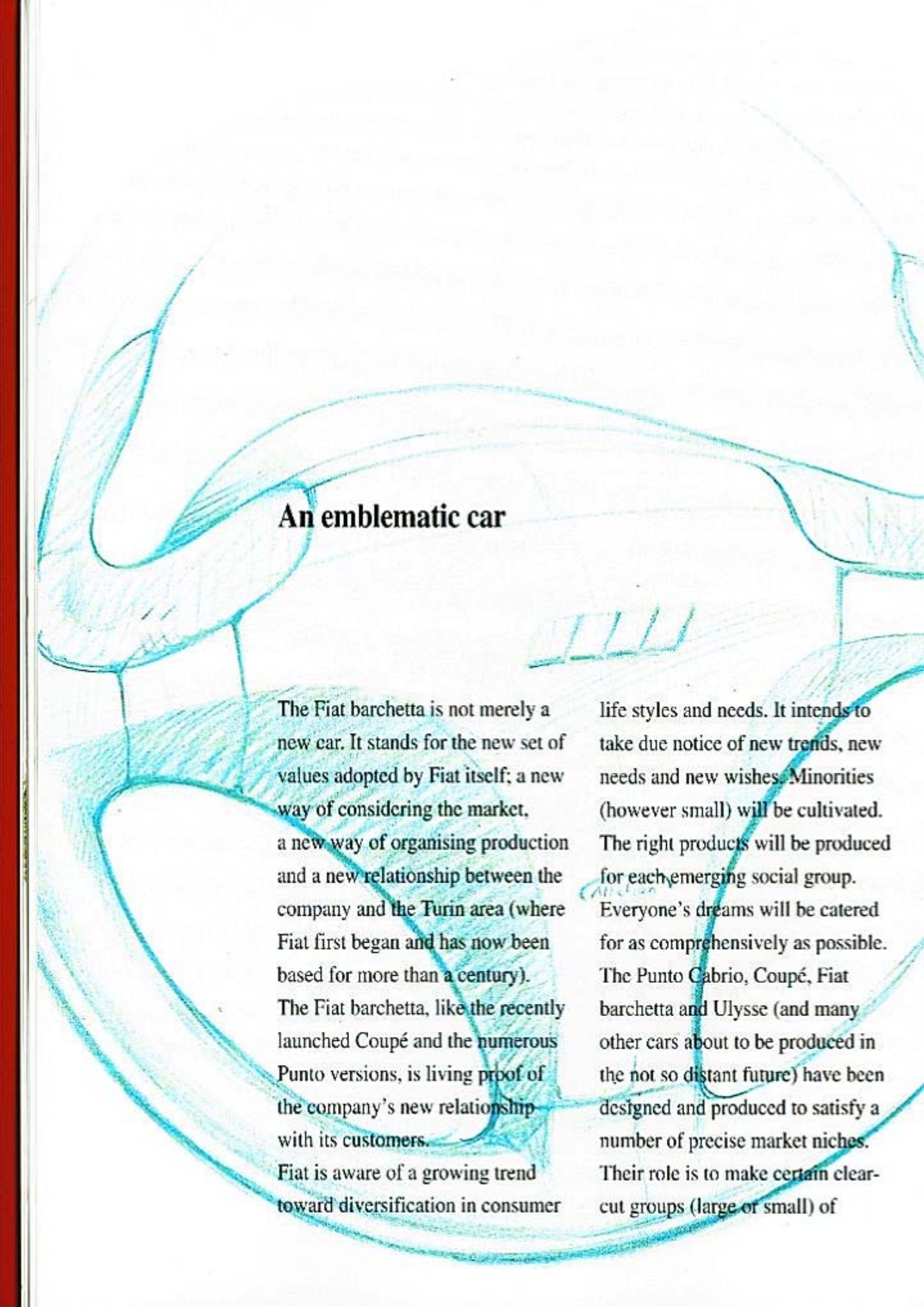


This approach led designers quite naturally back to the great Italian (and Turinese) body builders, who used to carry out research into form before mass production intervened with its own inflexible rules.

The original architectural, rationalist approach to car design did not merely involve thinking up a shape and then adjusting it to meet consumers' needs. Design was also affected by financial and manufacturing constraints imposed by rigid factory organisation.

A car made out of a set of flattish panels welded together at right angles to enclose an inner space would actually have been much cheaper and easier to produce. It would have reduced the number of problems connected with machining quality and accuracy.

It has only been possible to make a car such as the Fiat barchetta because Fiat has completely changed its approach to manufacturing. The process is now more flexible and benefits from the active involvement of employees who are again able to express their knowledge and enthusiasm for doing a good job well, with attention to detail.



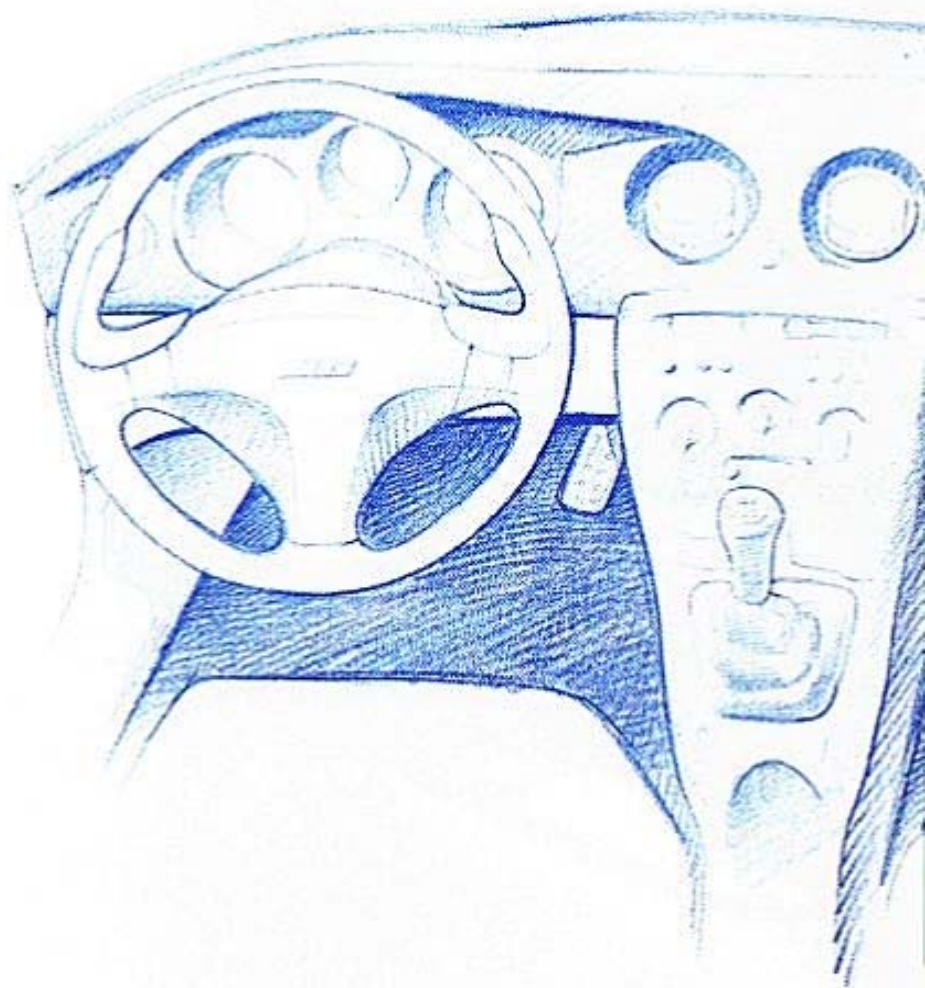
## An emblematic car

The Fiat barchetta is not merely a new car. It stands for the new set of values adopted by Fiat itself; a new way of considering the market, a new way of organising production and a new relationship between the company and the Turin area (where Fiat first began and has now been based for more than a century).

The Fiat barchetta, like the recently launched Coupé and the numerous Punto versions, is living proof of the company's new relationship with its customers.

Fiat is aware of a growing trend toward diversification in consumer

life styles and needs. It intends to take due notice of new trends, new needs and new wishes. Minorities (however small) will be cultivated. The right products will be produced for each emerging social group. Everyone's dreams will be catered for as comprehensively as possible. The Punto Cabrio, Coupé, Fiat barchetta and Ulysse (and many other cars about to be produced in the not so distant future) have been designed and produced to satisfy a number of precise market niches. Their role is to make certain clear-cut groups (large or small) of

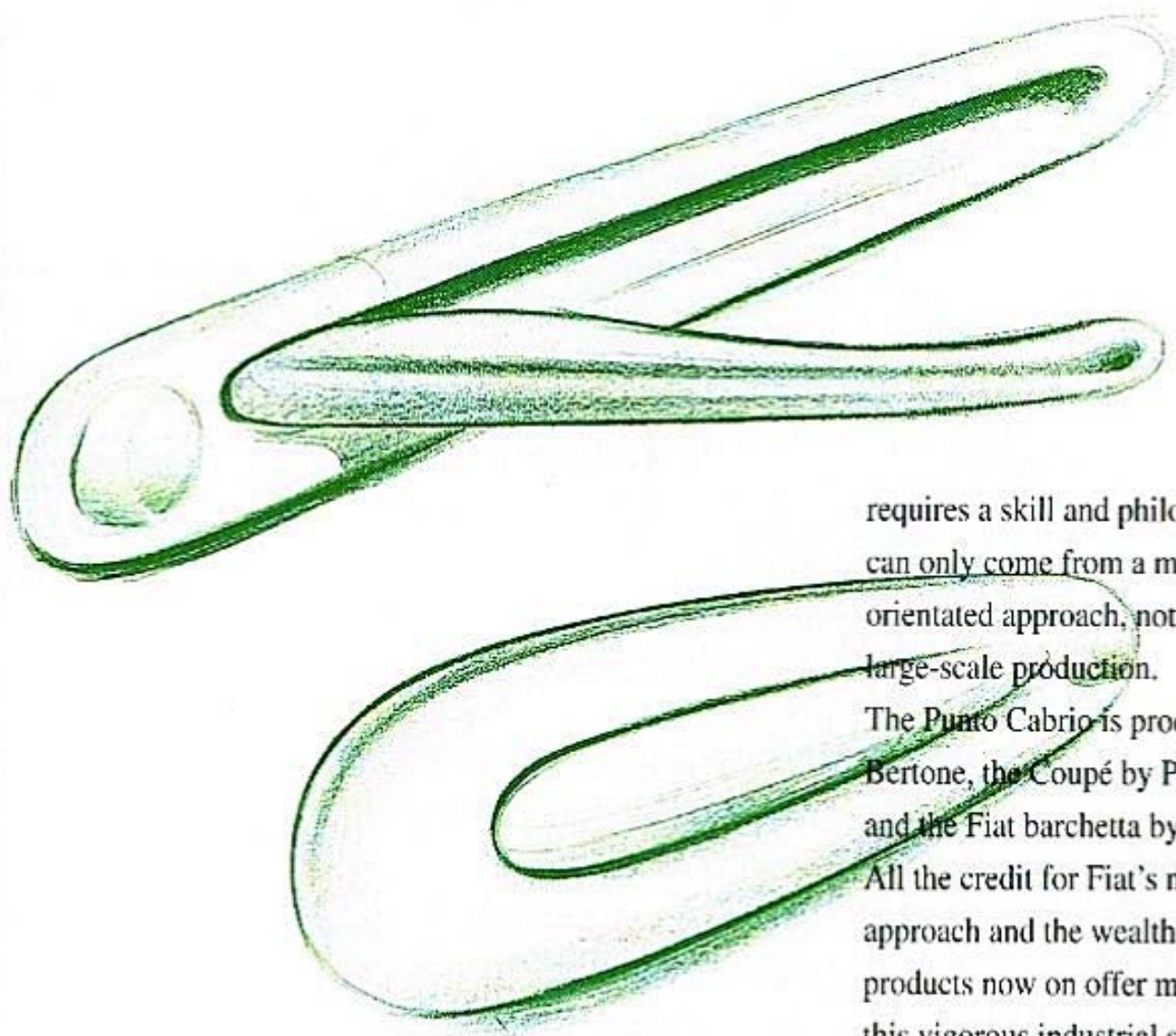


enthusiasts very happy. The company's new organisational structure allows many different types of car to be produced profitably, even if production numbers are small. The new structure also helps promote freedom of design. The steady loosening of rigid constraints imposed by outdated automated manufacturing methods and a new emphasis on skill, sense of responsibility and the spirit of creative initiative has allowed Fiat to do away (beginning with the Punto) with rigid rationalistic principles of car design.

It is now possible to work effectively on forms that incorporate a wealth of ideas, with more complex geometries, to achieve greater emotional impact.

More complex forms, greater plasticity and smoother surfaces require more accurate workmanship and a high level of finish.

And this can only be achieved by obtaining the active, intelligent and enthusiastic involvement of workers. The Fiat barchetta also reflects a change in the way Fiat views its history and surroundings. The introduction of the Coupé,



requires a skill and philosophy that can only come from a more craft-orientated approach, not from large-scale production.

The Punto Cabrio is produced by Bertone, the Coupé by Pininfarina and the Fiat barchetta by Maggiora.

All the credit for Fiat's new approach and the wealth of products now on offer must go to this vigorous industrial sector, typified by skill, production capacity, creativity and hand-honed car quality.

If you love cars and do not think of them merely as tools for getting from A to B, you will recognise the Fiat barchetta as a sign of Fiat's new commitment.

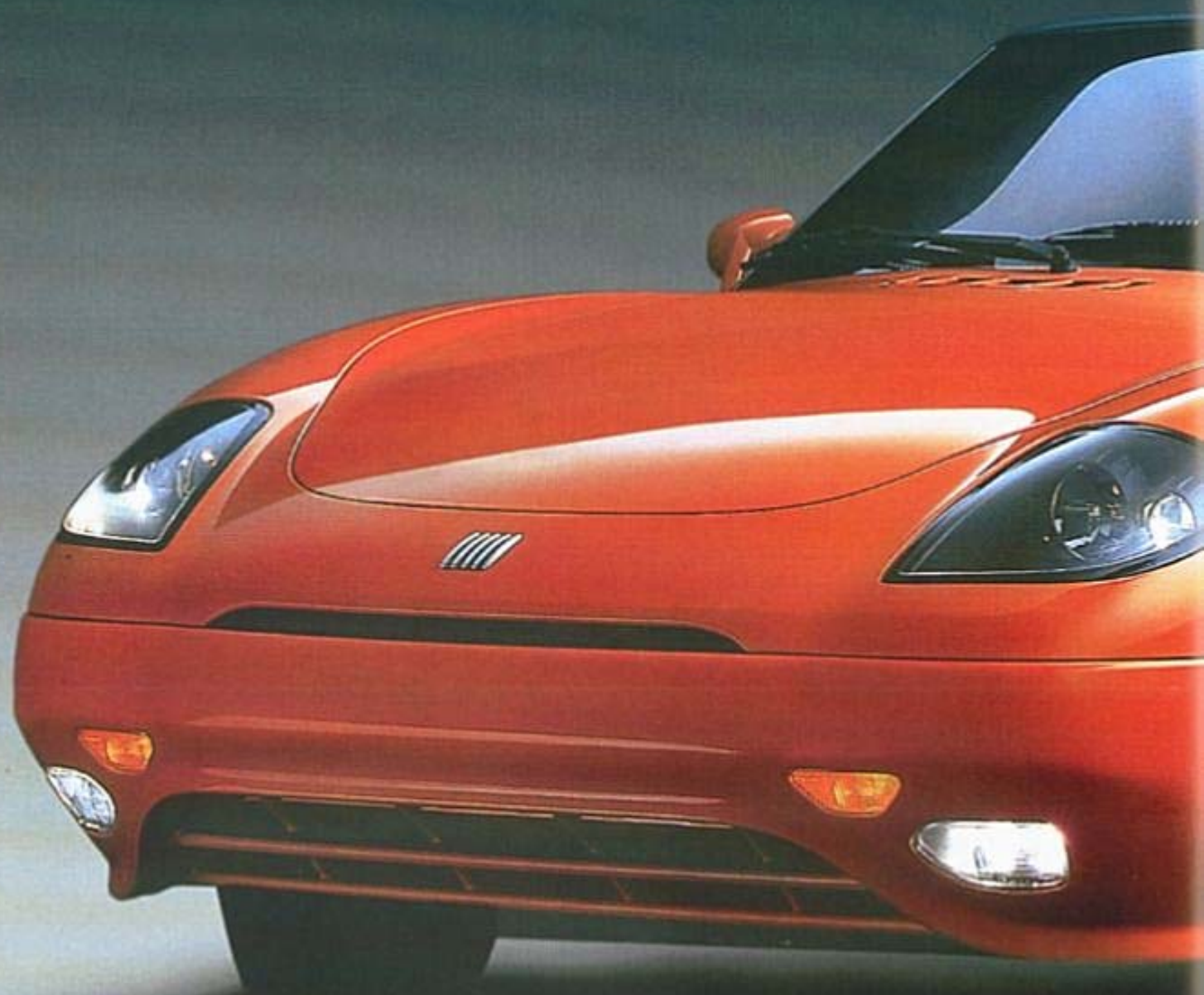
The beginning of a whole new story.

spiders, special cars and small niche products have allowed Fiat to re-establish links with some of the great body builders famous in the history of the motor car, who constitute such an important part of Turin's industrial past.

The task of producing these special cars was entrusted to some of these body builders because such work

**Fiat**  
*barchetta*





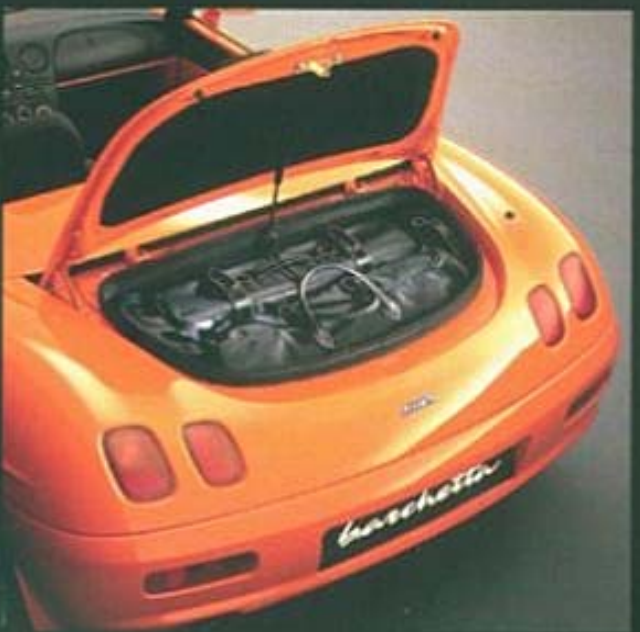




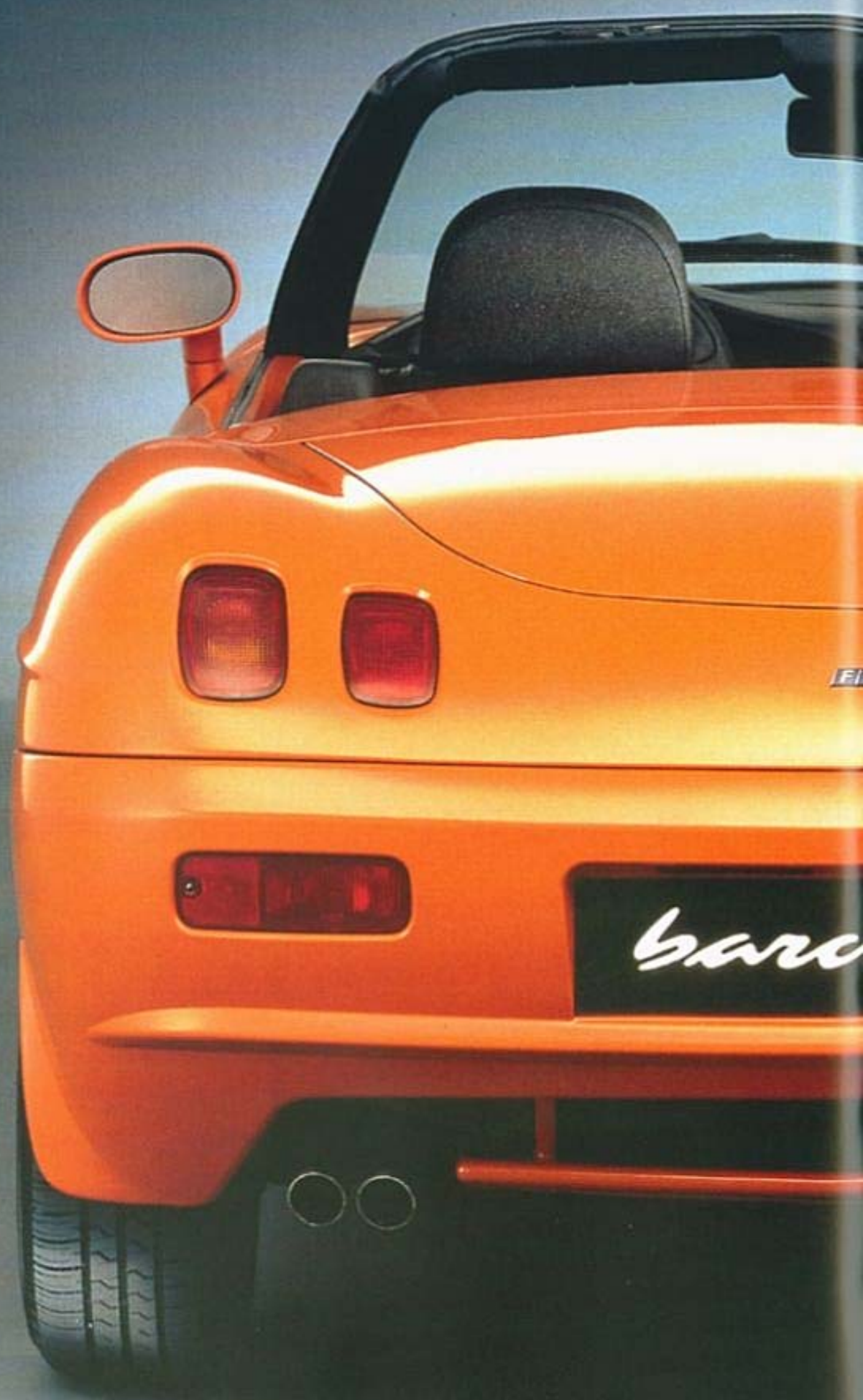


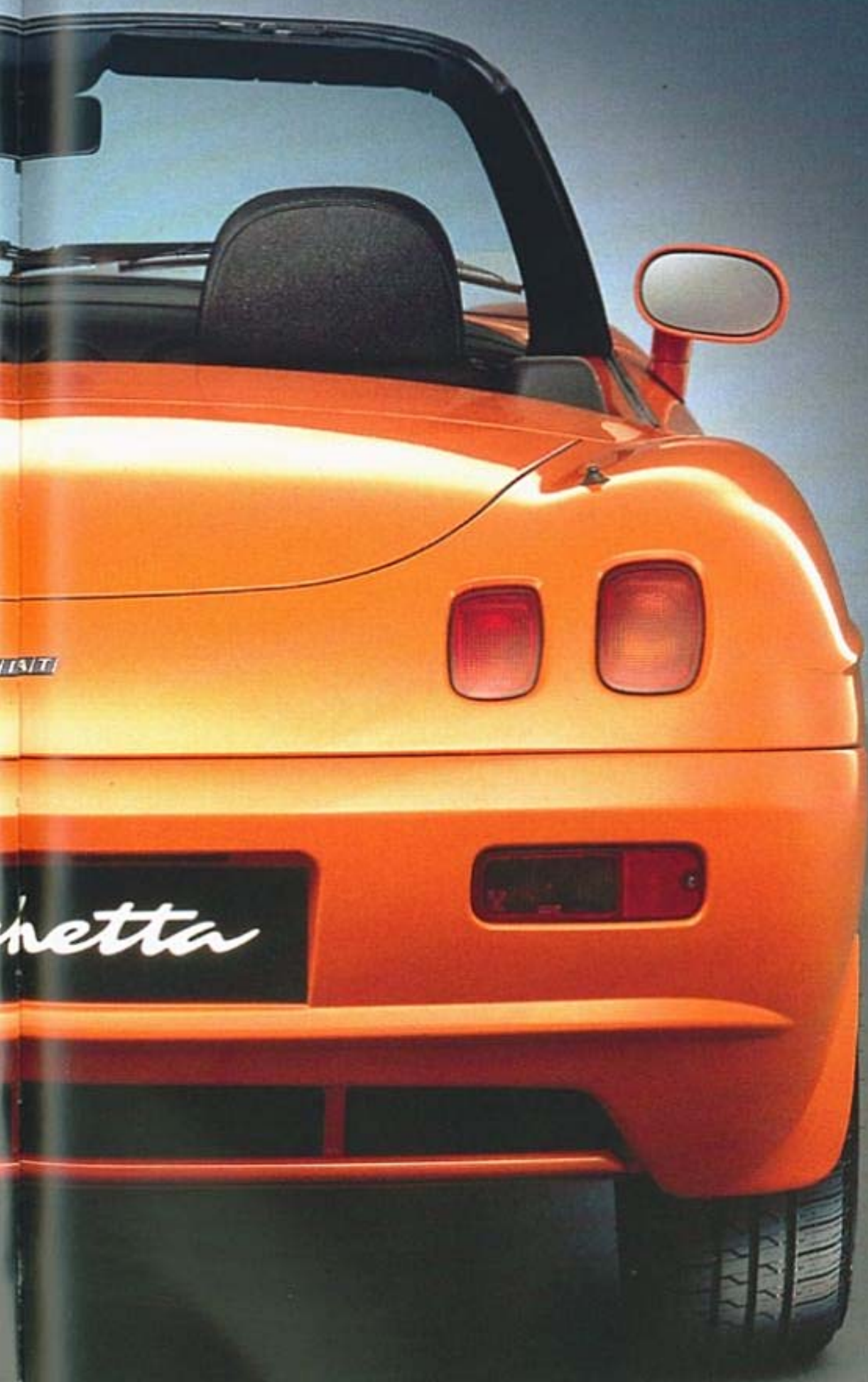


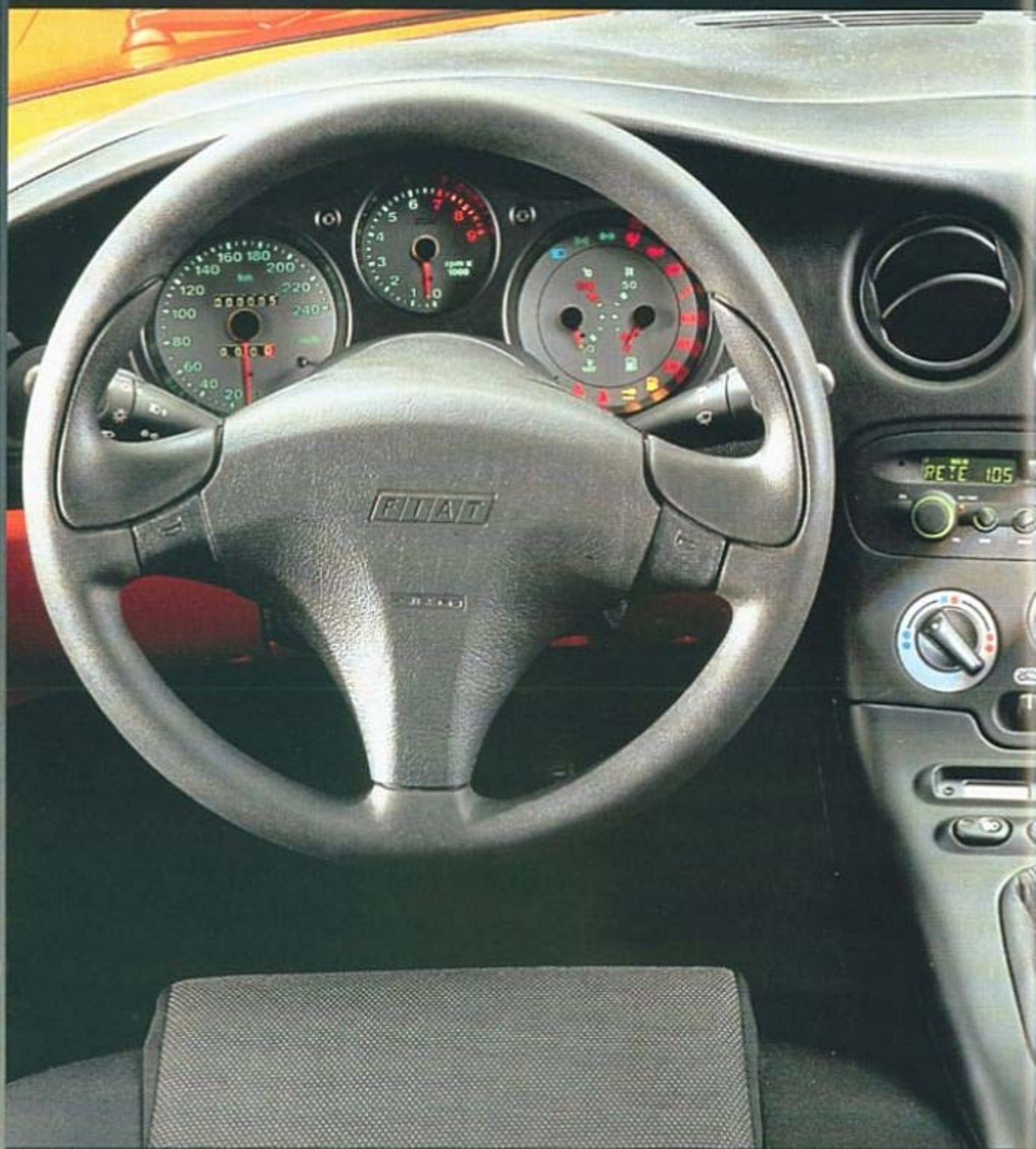


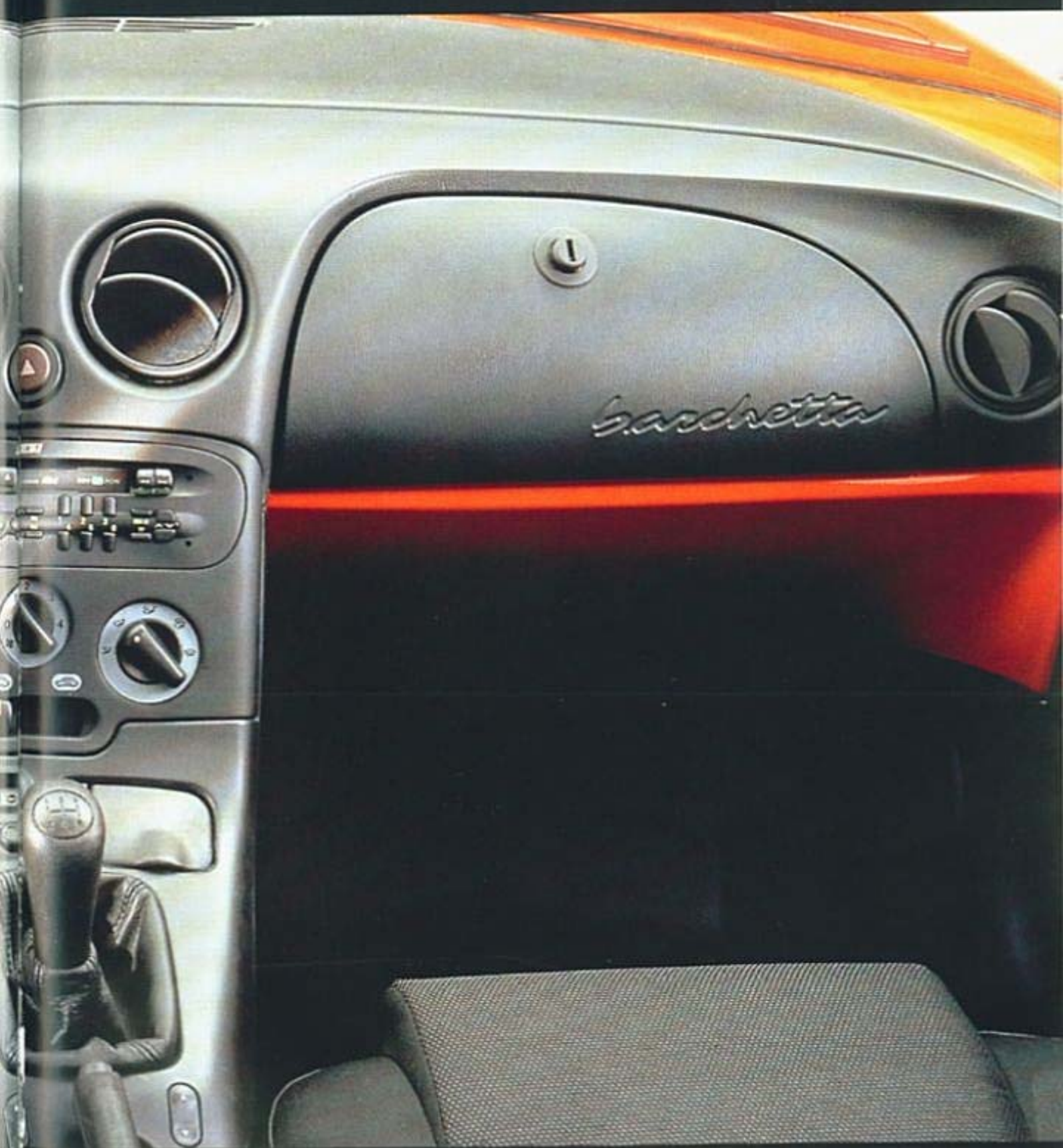


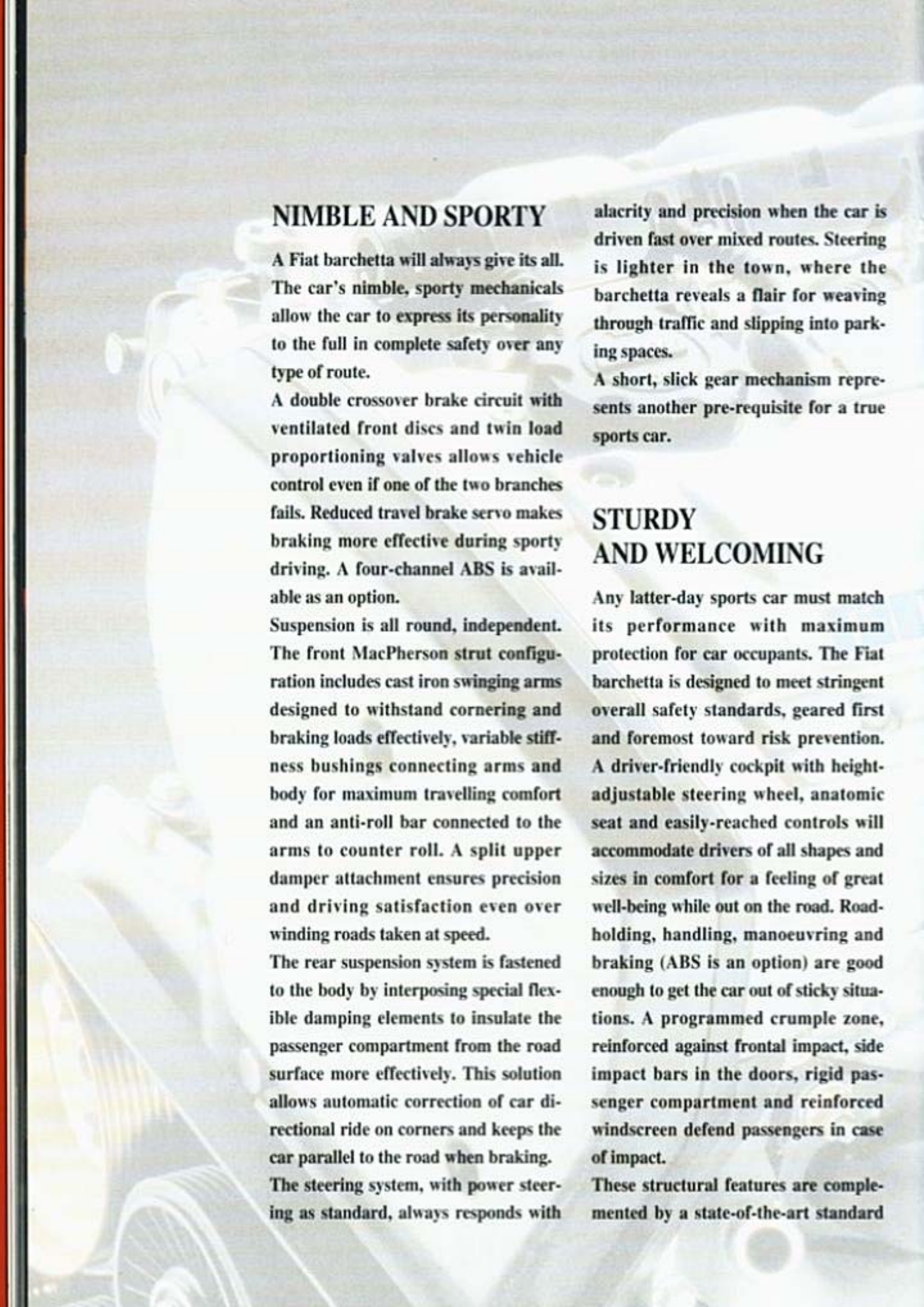












## NIMBLE AND SPORTY

A Fiat barchetta will always give its all. The car's nimble, sporty mechanicals allow the car to express its personality to the full in complete safety over any type of route.

A double crossover brake circuit with ventilated front discs and twin load proportioning valves allows vehicle control even if one of the two branches fails. Reduced travel brake servo makes braking more effective during sporty driving. A four-channel ABS is available as an option.

Suspension is all round, independent. The front MacPherson strut configuration includes cast iron swinging arms designed to withstand cornering and braking loads effectively, variable stiffness bushings connecting arms and body for maximum travelling comfort and an anti-roll bar connected to the arms to counter roll. A split upper damper attachment ensures precision and driving satisfaction even over winding roads taken at speed.

The rear suspension system is fastened to the body by interposing special flexible damping elements to insulate the passenger compartment from the road surface more effectively. This solution allows automatic correction of car directional ride on corners and keeps the car parallel to the road when braking. The steering system, with power steering as standard, always responds with

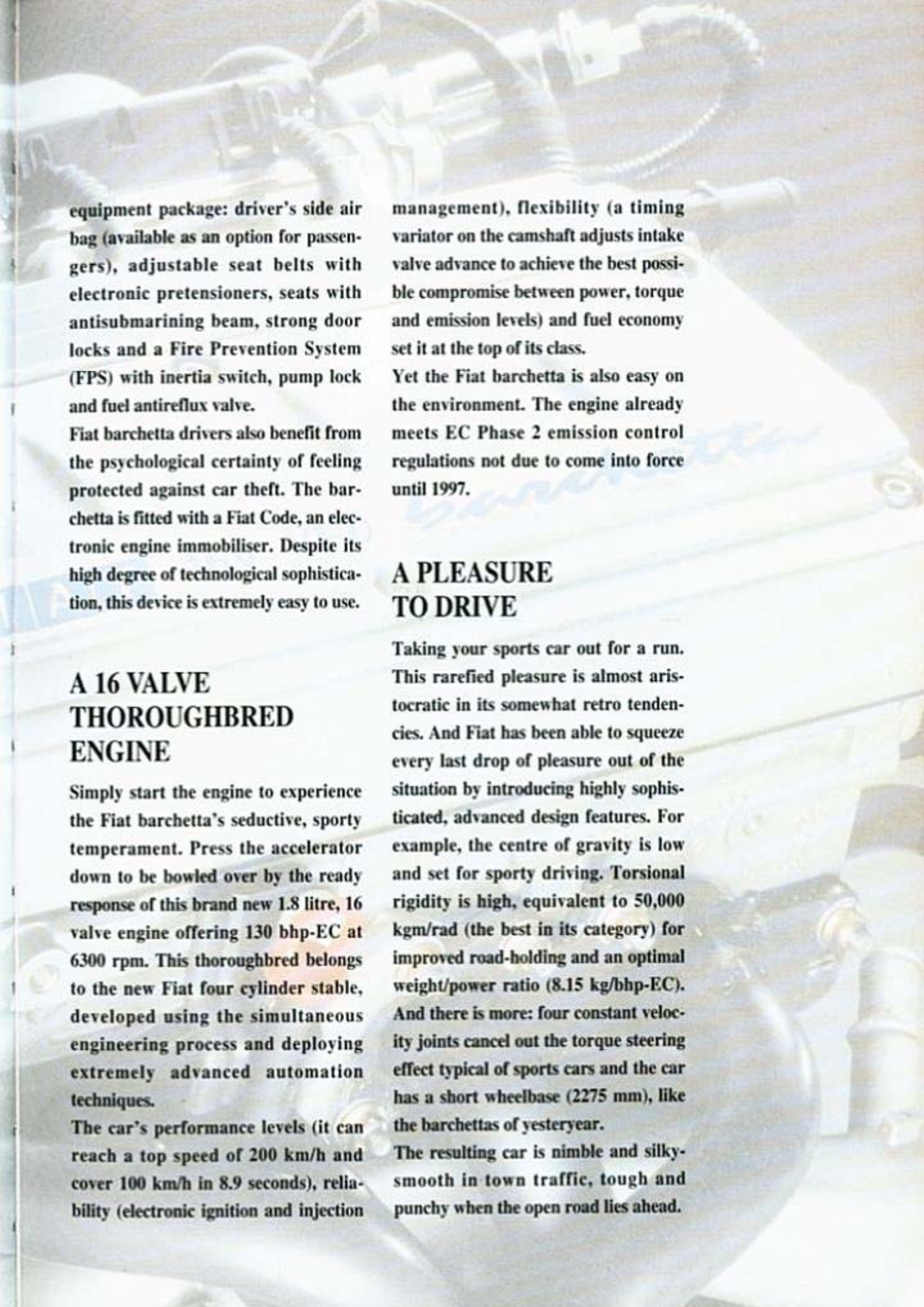
alacrity and precision when the car is driven fast over mixed routes. Steering is lighter in the town, where the barchetta reveals a flair for weaving through traffic and slipping into parking spaces.

A short, slick gear mechanism represents another pre-requisite for a true sports car.

## STURDY AND WELCOMING

Any latter-day sports car must match its performance with maximum protection for car occupants. The Fiat barchetta is designed to meet stringent overall safety standards, geared first and foremost toward risk prevention. A driver-friendly cockpit with height-adjustable steering wheel, anatomic seat and easily-reached controls will accommodate drivers of all shapes and sizes in comfort for a feeling of great well-being while out on the road. Road-holding, handling, manoeuvring and braking (ABS is an option) are good enough to get the car out of sticky situations. A programmed crumple zone, reinforced against frontal impact, side impact bars in the doors, rigid passenger compartment and reinforced windscreen defend passengers in case of impact.

These structural features are complemented by a state-of-the-art standard



equipment package: driver's side air bag (available as an option for passengers), adjustable seat belts with electronic pretensioners, seats with antirubbing beam, strong door locks and a Fire Prevention System (FPS) with inertia switch, pump lock and fuel antireflux valve.

Fiat barchetta drivers also benefit from the psychological certainty of feeling protected against car theft. The barchetta is fitted with a Fiat Code, an electronic engine immobiliser. Despite its high degree of technological sophistication, this device is extremely easy to use.

## A 16 VALVE THOROUGHbred ENGINE

Simply start the engine to experience the Fiat barchetta's seductive, sporty temperament. Press the accelerator down to be bowled over by the ready response of this brand new 1.8 litre, 16 valve engine offering 130 bhp-EC at 6300 rpm. This thoroughbred belongs to the new Fiat four cylinder stable, developed using the simultaneous engineering process and deploying extremely advanced automation techniques.

The car's performance levels (it can reach a top speed of 200 km/h and cover 100 km/h in 8.9 seconds), reliability (electronic ignition and injection

management), flexibility (a timing variator on the camshaft adjusts intake valve advance to achieve the best possible compromise between power, torque and emission levels) and fuel economy set it at the top of its class.

Yet the Fiat barchetta is also easy on the environment. The engine already meets EC Phase 2 emission control regulations not due to come into force until 1997.

## A PLEASURE TO DRIVE

Taking your sports car out for a run. This rarefied pleasure is almost aristocratic in its somewhat retro tendencies. And Fiat has been able to squeeze every last drop of pleasure out of the situation by introducing highly sophisticated, advanced design features. For example, the centre of gravity is low and set for sporty driving. Torsional rigidity is high, equivalent to 50,000 kgm/rad (the best in its category) for improved road-holding and an optimal weight/power ratio (8.15 kg/bhp-EC). And there is more: four constant velocity joints cancel out the torque steering effect typical of sports cars and the car has a short wheelbase (2275 mm), like the barchettas of yesteryear.

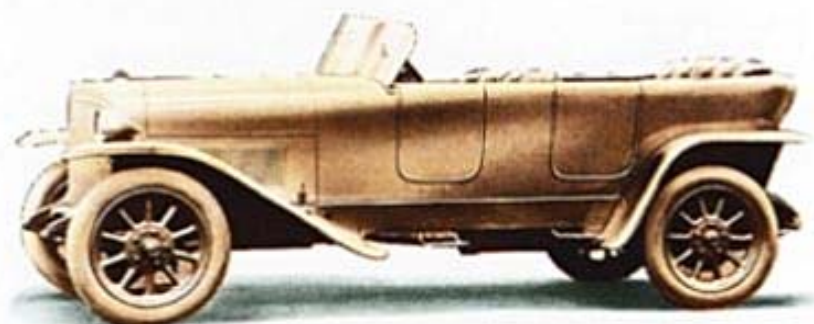
The resulting car is nimble and silky-smooth in town traffic, tough and punchy when the open road lies ahead.

## History

The first cars were open-topped like carriages. Although the next step of placing the driver inside ("conduite intérieure") brought a series of considerable advantages, this new idea did not take over until practically the end of the twenties. Open-top cars still remained a symbol of a higher standard of living, like the aristocratic chauffeur-driven torpedos ridden in by heads of state, or the esoteric cabriolets designed by great Italian and French stylists that were driven along Hollywood boulevards by screen idols. Times changed and cars became an everyday sight on the road. Open topped cars enjoyed new popularity and went on to conquer significant market niches. Spiders have followed their own distinctive evolutionary path over the years. These special, individual, exclusive cars have often been associated with racing (carried out by gentlemen drivers and professionals, of course). Even off the track, they still enjoy the idiosyncratic and sporty reputation that has filtered through to us today.

### Fiat 510 S

1922-1925 Torpedo Sport version based on the 510, with a six cylinder engine designed to gratify the expectations of more sophisticated customers.



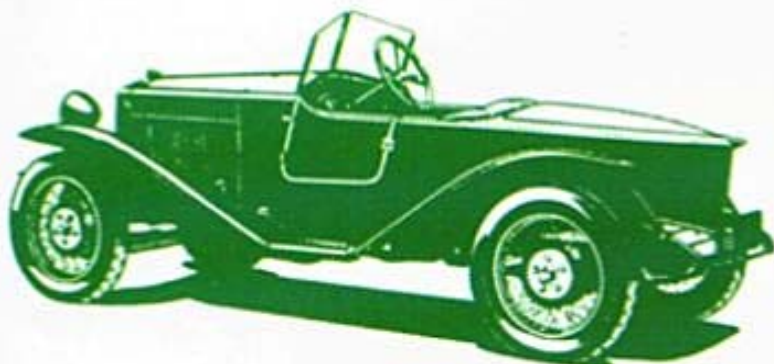
### Fiat 519 S

1922-1924. This car has won a place in Fiat's all-time hall of fame. Mechanical improvements included brakes on all four wheels, a brake servo and an adjustable steering wheel.



### **Fiat 501 S**

1921-1926. 1st in the Berceto Parma-Poggio rally (1921); 1st in the Pontedecimo-Giovi (1922); 1st in its class in the Aosta-Gran S. Bernardo (1922); 1st in the Targa Florio; 1st in the Paris-Nice. The successes went on and on until 1926.

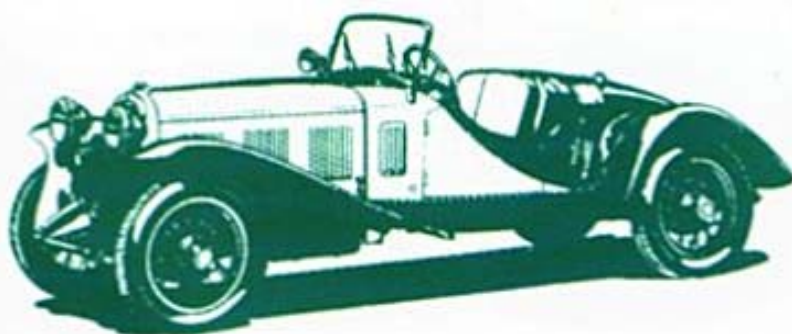
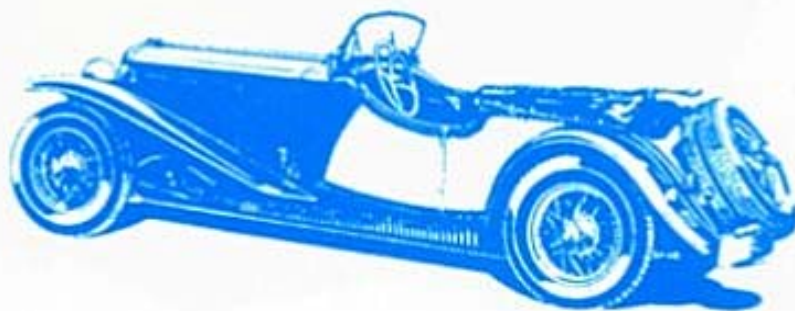


### **Fiat 509 S "Bateau"**

1925-1928. Two-door body with spoked wheels. The "SM" version won many races.

### **Fiat 525 SS**

1929-1931. Derived from the 525. Designed by Viotti and equipped with a highly compressed engine.



### **Fiat 514 S (M.M.)**

1929-1932. The 514 was aimed at a mass market. The S and MM versions were highly successful in races.



### **Fiat 508 S**

1933-1937. Introduced at the Milan Motor Show. Body built by Ghia. Sporting successes: Mille Miglia, Genoa-Pontedecimo, Montenero Circuit and Bol-d'Or race.

### **Fiat 1400 Cabriolet**

1950-1954. Presented at the Geneva Show in 1950. 1st Fiat with stress-bearing body, dubbed the Fiat 50th anniversary car.



### **Fiat 1200 Convertible**

1957-1960. Presented at the Turin Motor Show in 1957, replaced the 1100-103 TV convertible. Top speed more than 140 km/h.

### **Fiat 1500-1600 S Cabriolet**

1963-1965. Fiat improved its own Cabriolet by introducing bodywork by Pininfarina. Engine power increased. Gearbox with 5 forward speeds, all synchronised with new ratios.





### **850 Spider**

1965-1968. Presented at Geneva Motor Show. Body by Bertone. Bore laurel wreath crest typical of sports cars of the twenties

### **Dino Spider**

1966-1969. Presented at Turin Motor Show in 1966. Body by Pininfarina. The engine was designed by Ferrari. Equipped with transistorised electronic ignition from 1968. Could reach 210 km/h.



### **Fiat 124 Sport Spider**

1966-1969. Introduced at the Turin Motor Show. Body by Pininfarina. A new engine ensured a top speed of 170 km/h.

### **Fiat X 1/9**

1972-1978. Replaced the 850 Spider. Body by Bertone. Featured a new engine position: mid-rear and transversal.



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**Riccardo P. Felicioli**  
**Giovanni Ricci**

