

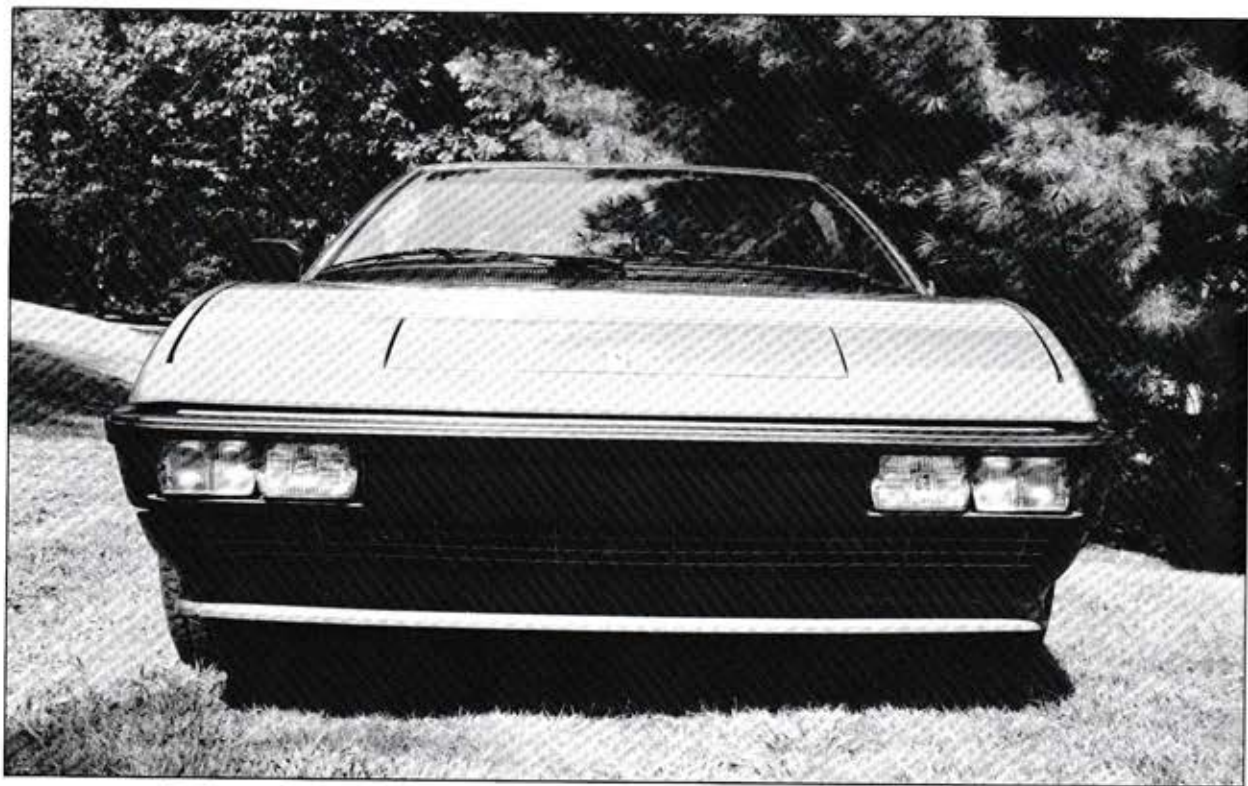
CAVALLINO



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NUMBER 14





MONDIAL 8

We Get Ferrari's Latest

Alright, alright. So, it doesn't have 12 cylinders, and it doesn't have that "ripping canvas" V-12 sound, and it won't break your neck when you plant your foot on the accelerator, and it won't stay glued to the road when you've *really* gone past your limit, but it does everything else a Ferrari is supposed to do.

It stops traffic (literally, as a Peterbilt nearly rolled into us because the driver said he was watching us and not his brake pedal), it turns heads (people wave, gesture, smile, give the thumbs-up) and it halts people in their tracks (many didn't know exactly what it was, but they knew it wasn't a kit car). Beyond this, it does a lot of things in typical Ferrari fashion, like being more than fast for today's speed limits, and being nimble and reliable through any turn, and stopping in a very short space with no panic. And beyond this, it has a lot of things that many Ferraris had not had before, like interior room, and comfortable surroundings, and good electrics and a really cold air conditioner.

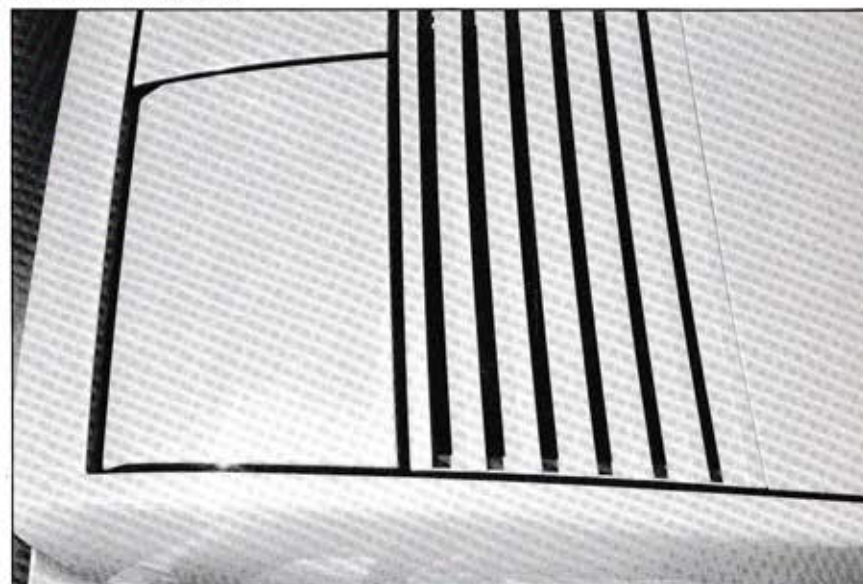
We had the second U.S. legal car in the country for awhile and found it to be quite an enjoyable experience. It has all the stable virtues of earlier Ferraris: it's decently fast, it's more than comfortable, Cavallino 18

and with light steering and an easier clutch pedal, it was easy to drive, even over long distances. Yes, it's sedate, but it's certainly no plug. And any loss in performance is more than compensated for by the car's solid virtues. In a way it faces the reality of today's world; why have blinding acceleration and a staggering top speed when you can't use it? Better to have passable performance in a car you can legally drive on the street.

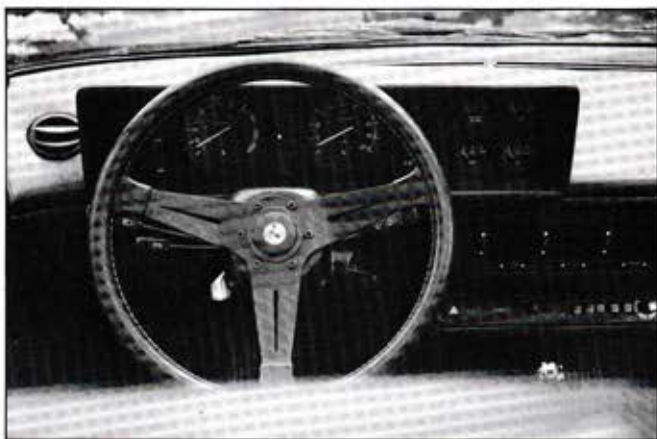
Not only is the car fun to drive, but the overall design is easy on the eyes. In the flesh, it looks much, much better than it ever did in photographs. Its rather stoutish shape is alleviated somewhat by the fact that the increased length of the car tends to flatten and stretch the body lines. The bluntish nose and chopped-off tail are not really as abrupt as they appear in photos. This plumpness comes from stuffing a 2+2 chassis into a 308 2-seater body, as explained in the following article by Vittorio Sabadin. The shape that results will never be called the best thing that Ferrari and Pininfarina ever did, but it's not a real embarrassment, either. (There are some early Ferrari body styles, pre-1950, that are so ungainly, that no one wants them even though the car underneath is rare and valuable. ►



The Mondial 8, sister to the 308 GTB/S series, still has a distinct look all its own. Detailing is perfect, with much attention paid to a neat fit everywhere. The American bumpers are nicely integrated and don't look at all like add-ons.



Headlight treatment makes the best of the ungainly necessity of pop-up headlights; when up, they are unobtrusive, when down, their covers blend in nicely. Vents and louvers are prominent, but not overdone.



Interior is spare but plush; it is loaded to the nines with electronic gear, some valuable, some just for fun.



While the overall shape is dictated by circumstances, the car is saved by the meticulous attention to design details. Pininfarina is a master at this sort of thing, and as you look over the car, you find a lot of things that show a little extra thought and attention. The venting trough at the bottom of the front window is not a simple grill affair, but rather has a delicate fluting that follows the subtle curve of the windshield. The venting grills on the front hood integrate nicely with the headlight covers, and have fine, beveled edges. The rear sail panels have a pleasing angle where they meet the rear deck, and on the left one, the gas filler door is not rounded or square, but an ellipse that fits nicely into the panel. Other touches, like the side marker lights, the square headlights, the bumpers, etc., all fit in just right and there's little on the car that you can look at and wish that it was different.

The one controversial feature, those rear flank, side intake grills are hard to get used to. Painted the same color as the car, they aren't as pronounced as before, but it's the one thing that one wished was solved better.

In the interior, the Mondial 8 takes Ferrari into computer country as the passenger compartment is a veritable cornucopia of electrical lights, buttons, switches, and gauges. Whether all of it is necessary will be debated forever, but it should prove valuable in the area of problem diagnostics.

The following categories are found on the center console between the seats and they fall into two groups: those that are critical are in red script (first five) and those that are important but not critical are in yellow script (second five):

- | | |
|-----------------------|---------------------|
| "Engine Cooler" | "Screen Washer" |
| "Break Warning Light" | "Service Due" |
| "Bonnetts" | "Stop Lights" |
| "Transmission Oil" | "Lights" |
| "Engine Oil" | "Air Conditioning." |

All this is brought to you by "Veglia Control Borletti" and if anything is amiss, the script plus a light next to it lights up.

More warning lights are found on the dashboard in front of you for:

- | | |
|------------------|---------------------|
| "Headlights" | "Parking Brake" |
| "Highbeams" | "Seatbelts" |
| "Foglights" | "Slowdown Cyl. 1-4" |
| "Parking Lights" | "Slowdown Cyl. 5-8" |
| "Battery" | "Brake Failure." |

Also on the dash are buttons, nice shallow, molded buttons that click-on, click-off for their functions:

- | | |
|------------------|---------------|
| "Power Windows" | "Foglight" |
| "Parking Lights" | "Fuel Door" |
| "Side Mirror" | "Front Hood" |
| "Sunroof" | "Engine Hood" |
| "Power Antenna" | "Rear Hood." |

(Nothing will ever replace good ol' toggle switches, but these new ones are purposeful and efficient, at least.)

Finally, on the dash are an electronic clock with stop watch features, fuel gauge, oil and water temperature gauges and oil pressure gauge. Plus air conditioning and heat controls.

This air conditioning, by the way, really works, and it's one of the many touches in the car that add a greater degree of comfort and serviceability for the occupants than in earlier Ferraris. For example, the interior light stays on for 11 seconds after all the doors are closed, there are spring-loaded hand holds that pop back out of the way, there are lights under the doors that shine on the ground as you prepare to enter and exit the car, the locking glove box has a bright map light, the steering wheel is fully adjustable, and the seat belts are routed out of the way when you don't want them.

Seating is very comfortable, and there's actually quite a bit of room for your head, elbows and knees. The two rear seats are full seats, and while cramped, they will hold a medium-sized adult without undue duress. For children, it's perfect. Leather is everywhere, carpeting and headliner are good cloth, and the construction and detailing of same is excellent.

Problem areas? None are readily apparent. The interior is a good, comfortable fit, not particularly plush, but not spartan either. And one wonders if all those electrics are going to work all the time, but that's down the road. The only objectionable

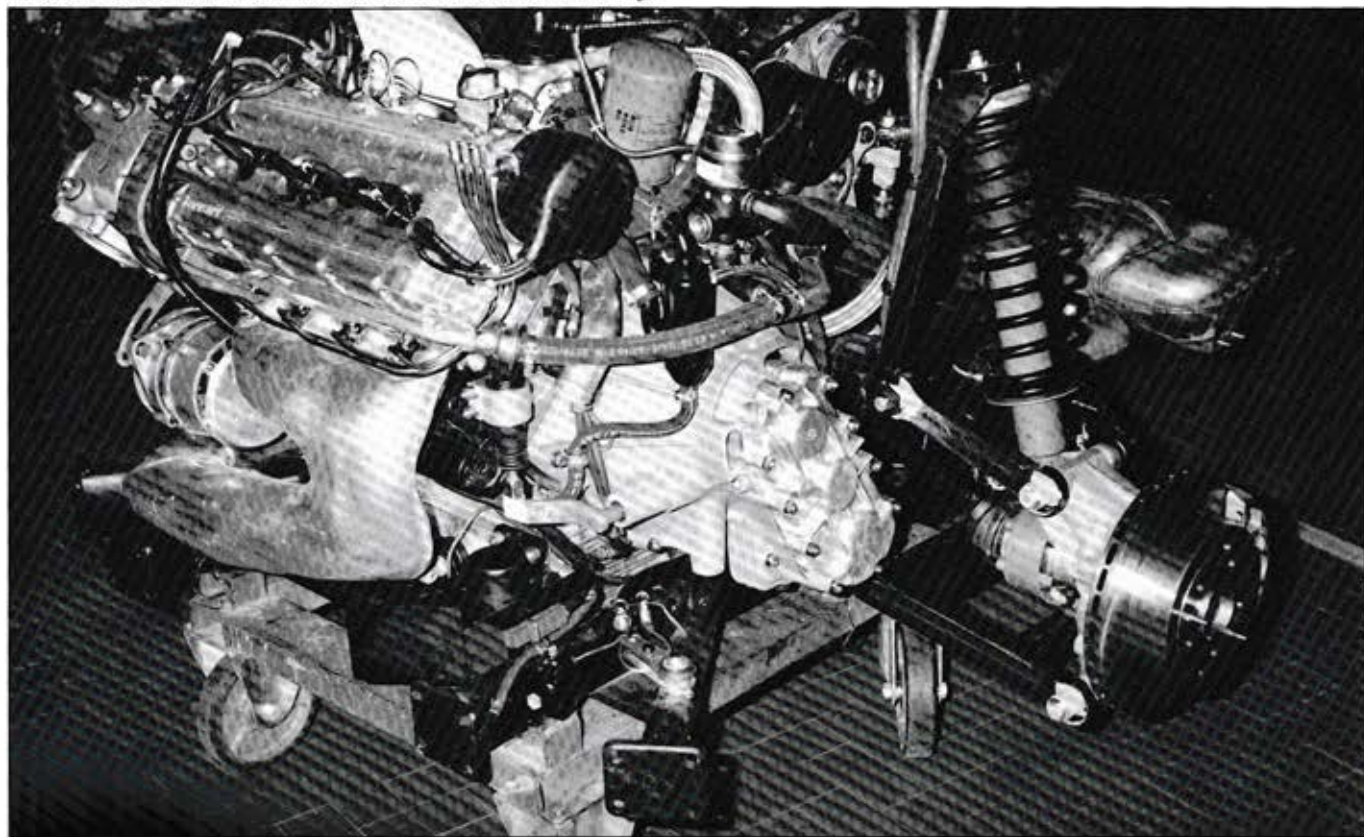
One of the great innovations of the Mondial 8 is the fairly easy removal of the rear end for maintenance. A mid-placement engine is hard to service from above and even harder to remove. Ferrari has solved this by allowing the complete engine/trans-axle and engine sub-frame to be removed totally from the chassis itself. The car is hoisted, the sub-frame is unbolted, the wiring and hoses are disconnected, and out the unit comes onto a dolly.

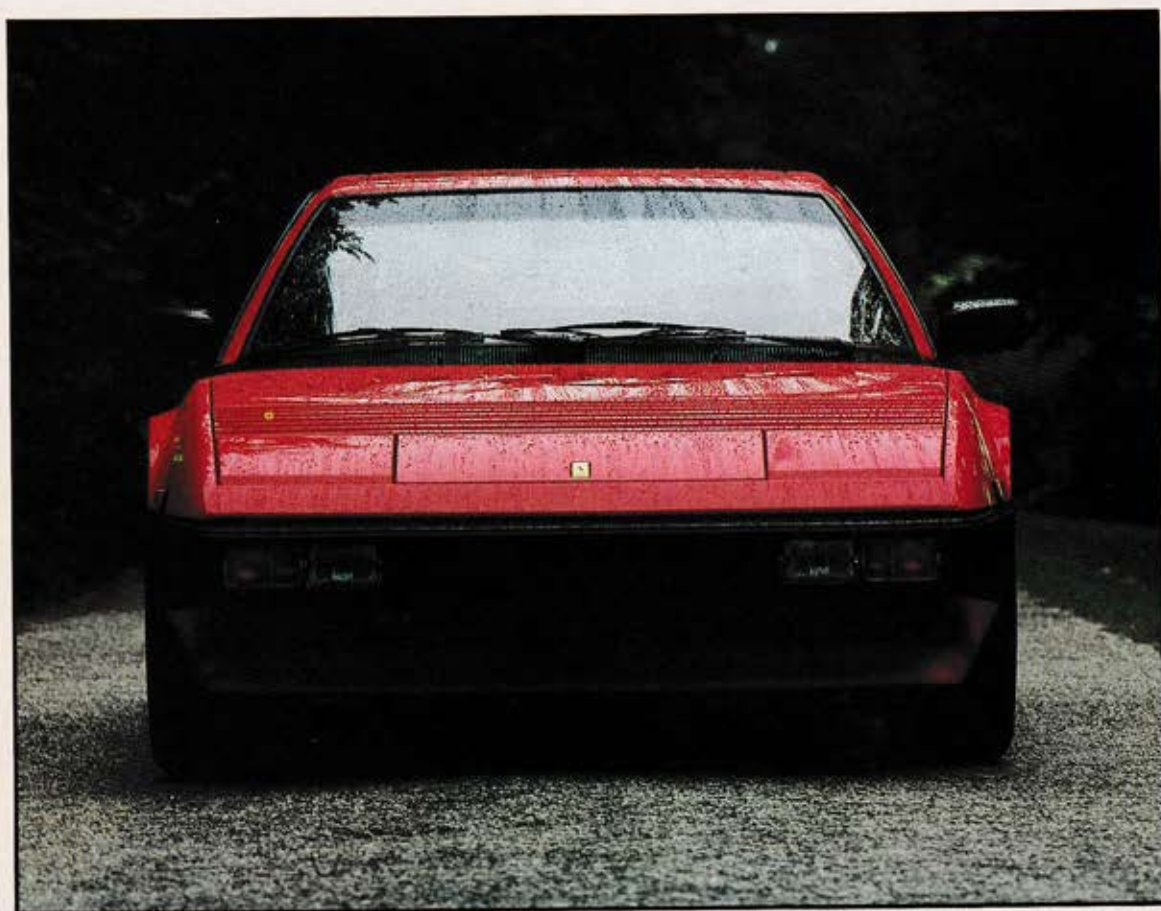
elements (tacky looking speakers, poorly angled dash cowl, awkward radio position) are all scheduled for fixing in the next batch of cars.

The mechanics of the Mondial 8 are basically the same as for the 308 GTB and S, and it should have the same record of reliability as the 308s have garnered over the past few years. The 3 litre V-8 is a workhorse, and has Bosch fuel injection and the newer Marelli Digiplex ignition system. For the American market, there is dual catalytic converters, exhaust-gas recirculation, and air injection. Even though the engine and its tuning are the same as the 308, the Mondial 8 is slower because of the extra weight of the 2+2 chassis. Response is still excellent, however, and the car never stumbles or falters.

As an aside, one of the great sensual pleasures of the car is the noise of that V-8 as it does its work just behind your head. It fills the cockpit with all the right, throaty, rumbling sounds, but the best is when you're in second or third gear, at good speed, under slight acceleration or deceleration. At this point, the engine gives off a beautiful high-pitch whistle that's very akin to the turbine whine you hear inside a large jet plane when it's throttled back and floating to a landing. It gives you a great feeling of being in touch with a real piece of machinery.

The Mondial 8 may be more Fiat than many people would want, but there's still enough Ferrari in there to keep the magic alive.





Photographs by David Edgerton

mondial 8

When tradition meets the future

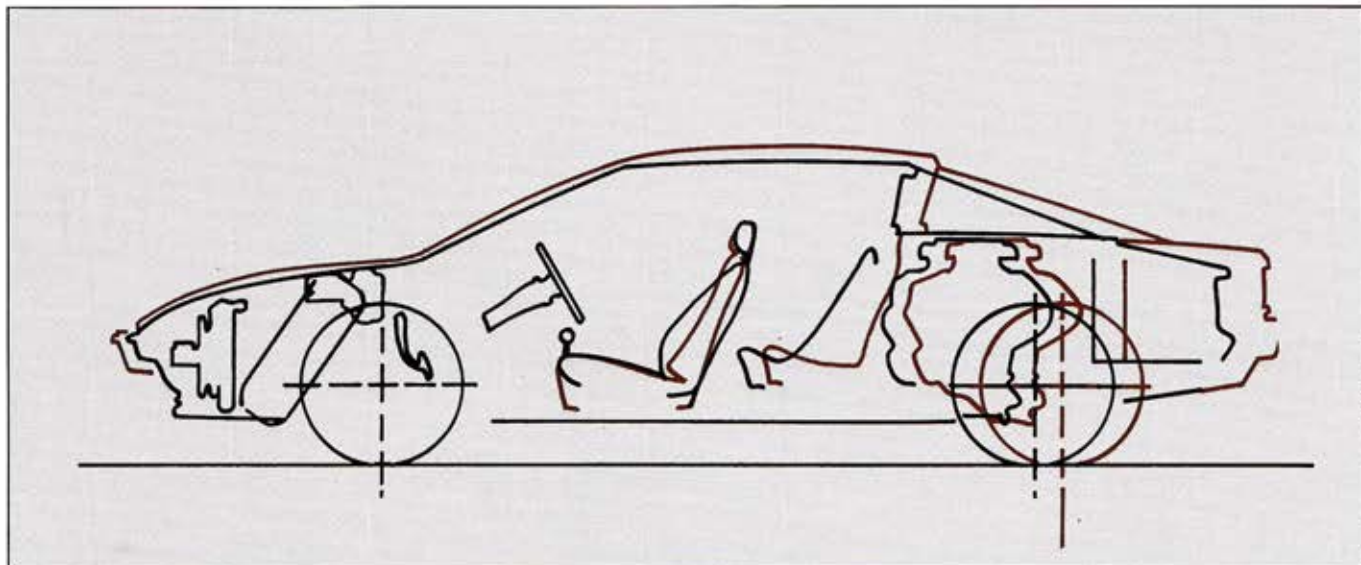
by Vittorio Sabadin

The theme that Ferrari suggested to Pininfarina was not an easy one to develop: designing the body for a mid-engined 2+2 car. Not only that, it was necessary to design it without altering the low aggressive line adjusting the two super-imposed shells, typical of all recent cars born from the cooperation between Maranello and Pininfarina. In fact the new model should not be too different from the 308 GT4, from which it inherited a large part of the mechanics, but should comfortably seat two extra passengers in the rear.

Pininfarina, as expected, managed to develop an idea that appeared impossible: the Mondial 8 was introduced at the Geneva Motor Show where it enjoyed all the success that the car deserves. In its class it is among the best cars in the world and its shape is a perfect blend of aesthetics, functionality, aggressiveness and elegance.

"After evaluating the difficulties of the project," says Leonardo Fioravanti, head of the design and research center at Pininfarina, "we asked Ferrari if, given the excellent roadholding of the 308 GT4, it was possible to increase the wheelbase by 10 cm in order to improve passenger space without altering the balance of the car. The answer was that there were no problems, that in fact the lengthening of the wheelbase might improve the road holding."

On those 10 cm, Pininfarina's technicians started a lengthy task based on few essential parameters. Having improved the passenger compartment in length, it was necessary to increase it in height by 3-4 cm, make a larger luggage compartment, limit the weight and, above all, design a car to be identical in both the European and the U.S. version. ▶



Difference can be seen between the shapes of the earlier 308 GT4 and the replacement Mondial 8. The Mondial is longer, allowing mainly for rear passenger room. Note also the raised roof area for more internal headroom. The subtle rounding of all outer surfaces takes some of the "edginess" away from the previous 308 GT4 design.

Drawing courtesy of Pininfarina

"From these parameters," Fioravanti says, "we made a series of studies and many drawings with which we tried to put the typical Ferrari image in line with the new dimension of the car." This research gave very interesting results. Some of them, especially with regard to passenger compartment and instrument design, were decidedly futuristic. The final choice, made in conjunction with Ferrari, was on more traditional lines: a large window surface, bumpers made from resin, air intakes on both sides below the rear side windows, a soft compact line that directly links this model to its predecessors.

In the front there are day-time flasher lights, fitted in the bumper underneath the retractable headlights, now legally accepted in all countries. The bonnet is very well blended into the roof thanks to the steeply inclined windscreen, and its extremely clean line is broken by louvres for the cooling air exits for the radiator, which is at the front of the car together with battery, spare wheel.

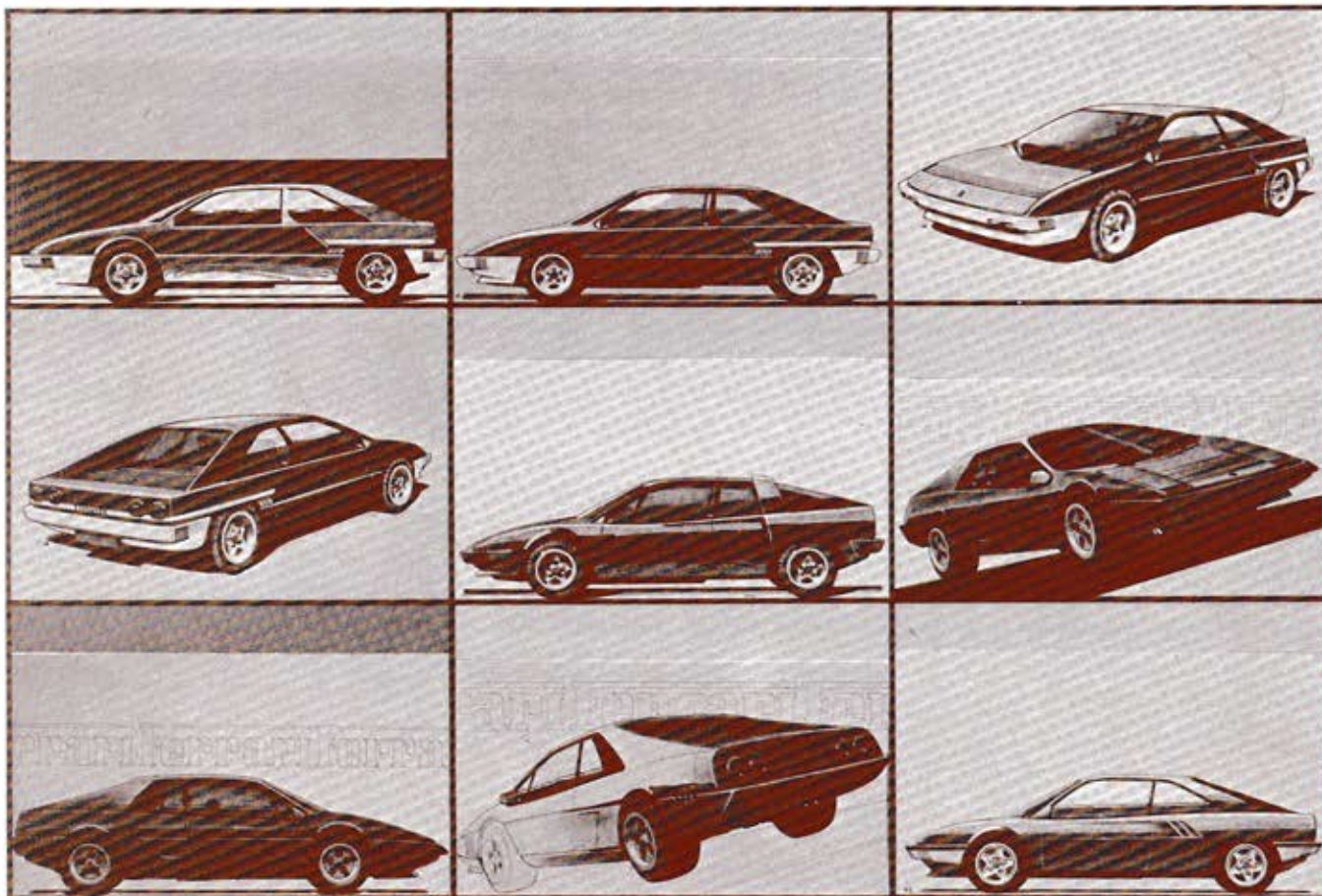
The profile is particularly streamlined by the careful design of the rear fins, which blend the roof to the tail and which are protected with polyurethane for safety. The fins have not only an aesthetic function, but also improve the coefficient

of penetration and the directional stability of the car at high speeds. The luggage compartment, at the rear behind the engine compartment, has a capacity of 300 dm³.

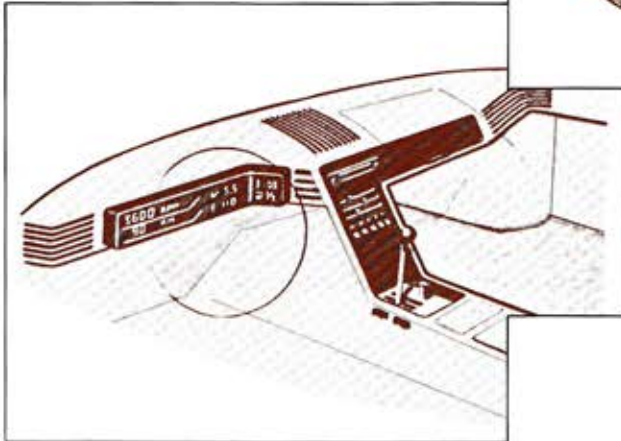
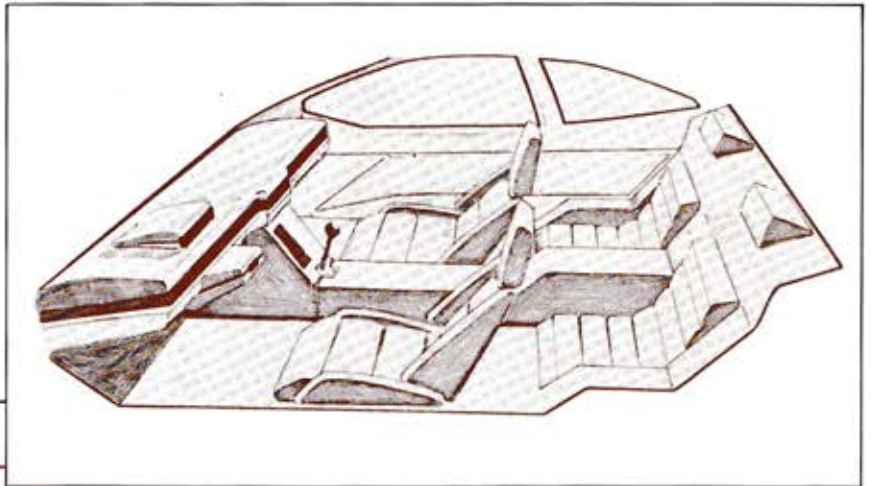
The most challenging task for Pininfarina was probably the design of the interior and of the instruments. "The general indications that Ferrari had given us," says Fioravanti, "was to add to the normal items some gadgets or unusual things to further improve the quality level of the passenger compartment. In particular, we studied in detail the instrument panel, to decide first of all whether to adopt digital or analogue instruments."

The engineers tried everything, Pininfarina prepared a series of sketches with space age instruments, extremely sophisticated, with speedometers and rev counters made with light-emitting diodes. Given the characteristics of the car, however, traditional instruments were chosen, but with digital odometer and trip recorder. To unify the aesthetics of the instruments, therefore, digital displays were chosen for analogue instruments. "As for the controls," Fioravanti adds, "we designed a completely new type of switch, which doesn't protrude, with less movement and illuminated incorporated symbols."

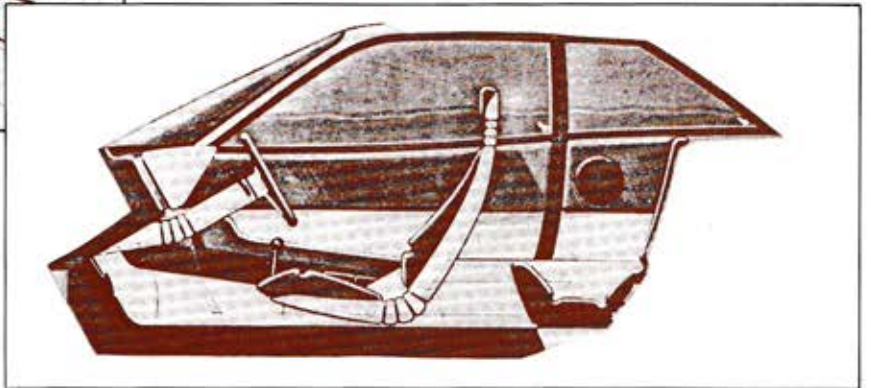
Yes, Ferrari and Pininfarina go to the same trouble in designing a car as do all the large Detroit auto manufacturers. Below is a selection of sketches that show the many studies made on the main theme before a final design was selected.



Drawing courtesy of Pininfarina



The interior goes through even more studies than the exterior. All interior drawings seem to have a space-age look to them (and this goes for all auto makers) before everything is reigned in for reasons of practicality. None of these designs ended up in the Mondial 8 as a whole, but details did.



On the console there is a small control board which allows the driver, before starting a trip, to check essential services: headlights, stop lights, parking lights, rear lights; engine and gearbox oil levels; closure of bonnet and boot lids; efficiency of the braking system. The board is also connected with the odometer, which has a "memory" with a series of pre-recorded mileages advising the driver by means of warning lights in the console, all necessary maintenance operations.

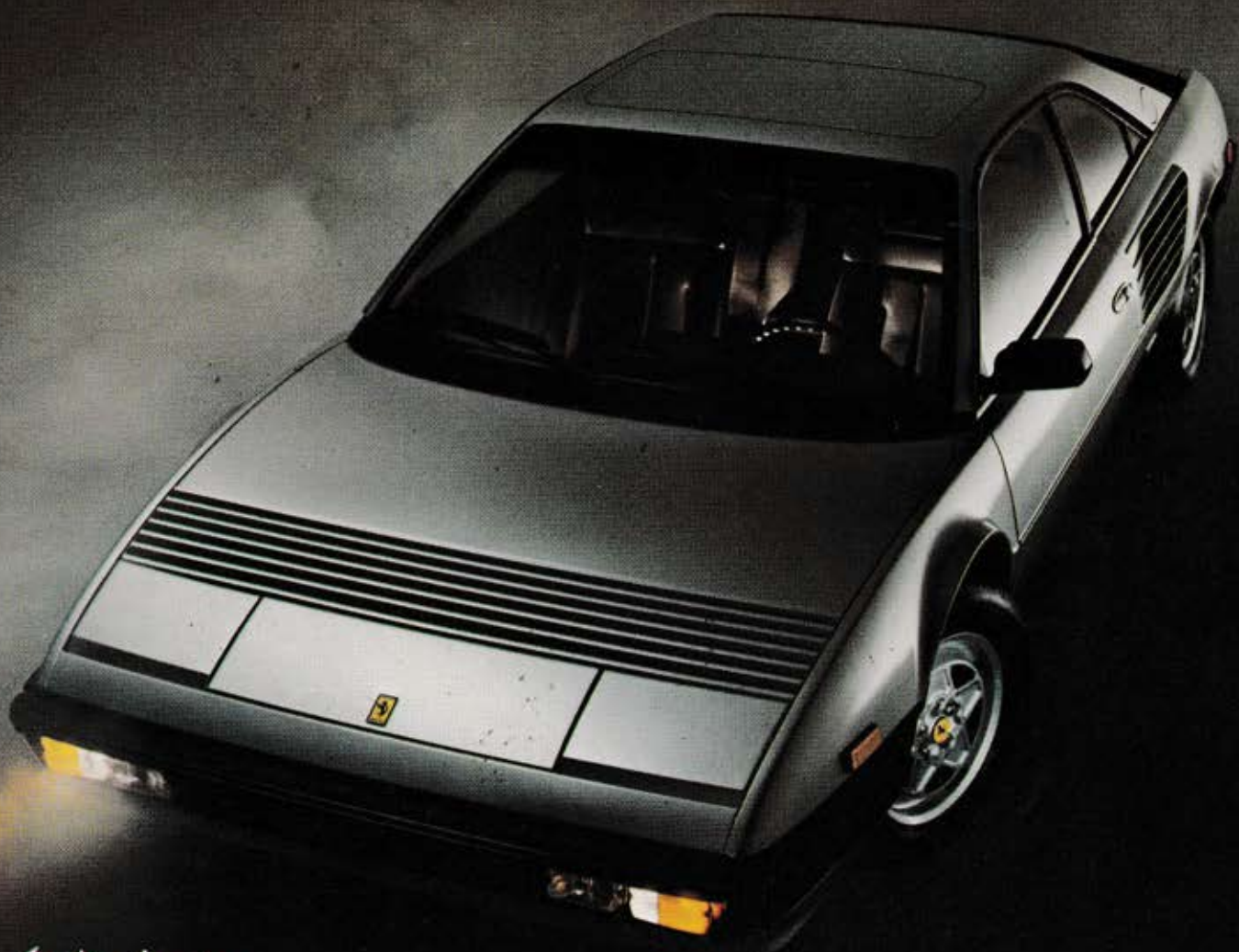
To keep the car within acceptable weight limits a mixed solution was adopted: steel plate for the body, special aluminum for non-structural parts such as doors, bonnet and boot lids, resin for the bumpers. Moreover the trellis frame, which is typical of all Ferrari production, has been developed for the Mondial 8 with a new important feature: the rear part can be removed (which supports engine, gearbox and suspension) in order to facilitate the maintenance of those units.

A masterpiece, in fact, that was born from precise marketing needs: according to a recent study the Ferrari owner travels about 30,000 km per year. In the range of the Maranello marque, a model with sporty performance and the comfort of a grand touring car was missing: the Mondial 8 was designed and built precisely to fill that vacuum. The car was also planned with an eye to the American market, which absorbs 35 per cent of Ferrari production; it already meets the strict U.S. regulations with regard to safety, both active and passive, and pollution.

The transversally mounted mid-engine is a 3 litre, 90-degree V-8 unit, derived from the one used on the 308. Fully electronic Marelli Digiplex ignition is used, and so is Bosch K-Jetronic fuel injection, which give adequate advance at part loads and, in effect, better performance with lower fuel consumption.

Article Courtesy of Auto & Design.

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