

# CAVALLINO

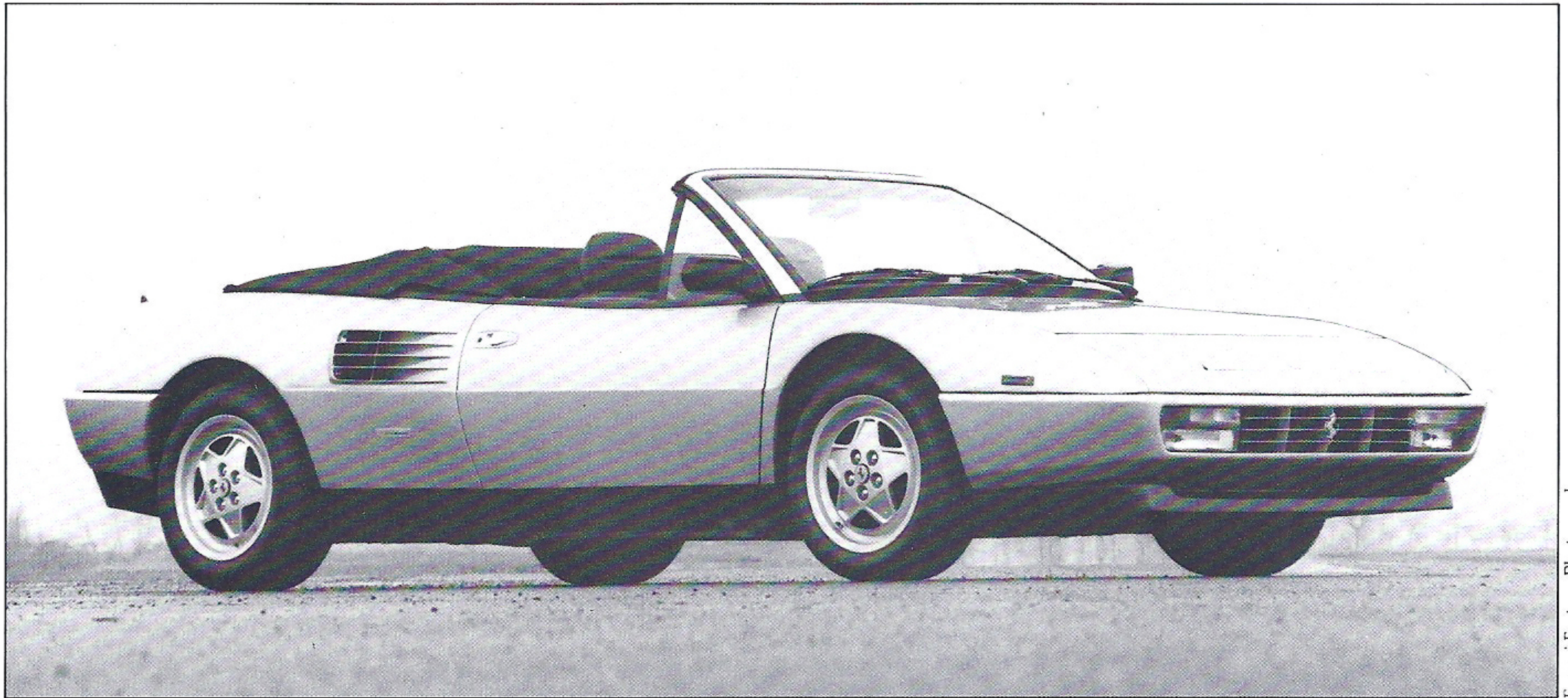


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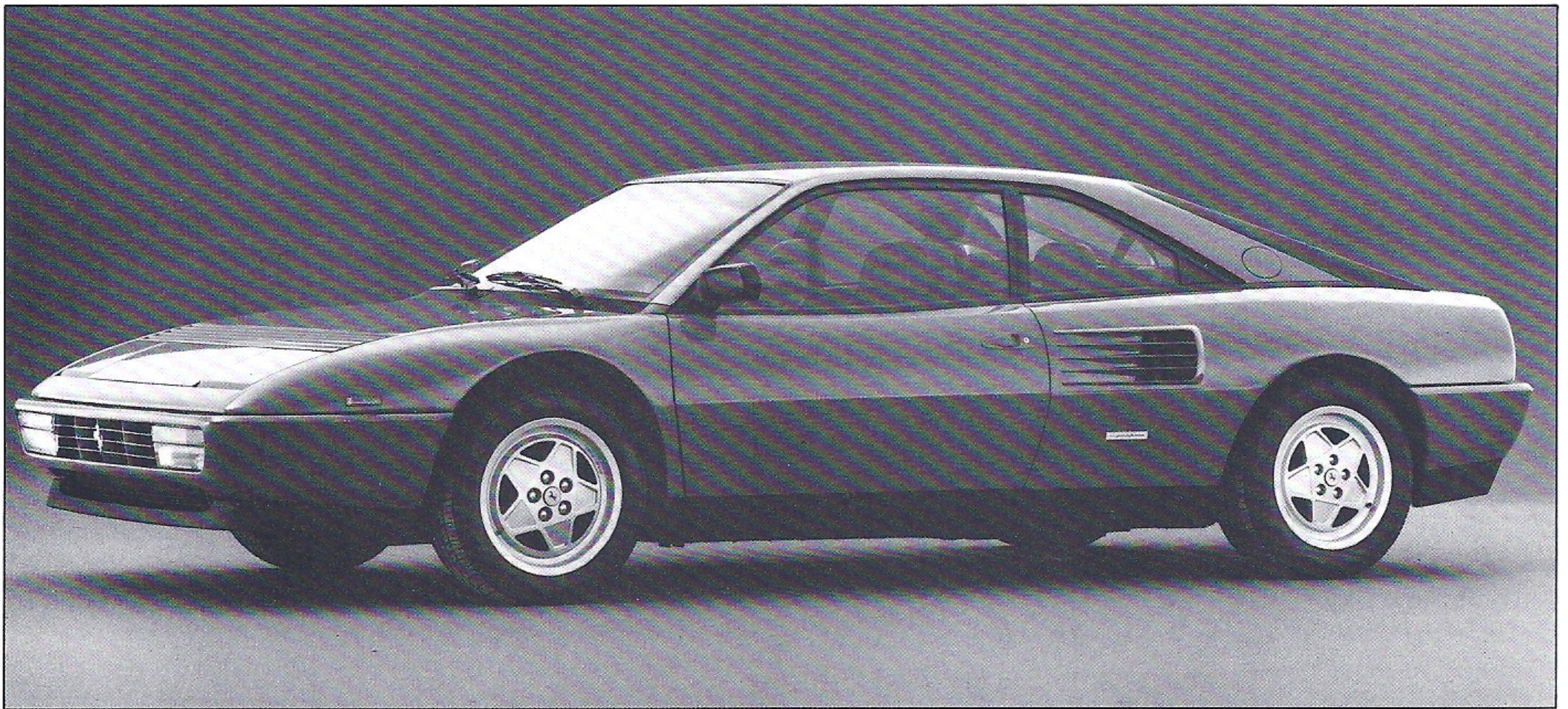
*750 Monza Found  
New Mondial t Appears  
340 Mexico Salon  
Baracca Biography*



# MONDIAL "t"



Ferrari Factory Photographs



*This Benign Cruiser Hides A Motherlode  
Of New Technology*

*All The Good News Is On The Inside*

Everyone flocked to the Geneva Auto Show in March to see the rumored debut of the 348 series of GTB and GTS, and they were disappointed, as the Mondial t was introduced instead. Actually, they should not have been disgruntled since in many ways, this introduction was more important to Ferrari, and to

the close followers of Ferrari, than the simply debuting of an updated type of car model. Ferrari, above all else, is engines, and a new powerplant introduction is quite an extraordinary occasion for the stalwarts inside the Factory, since they are all, in Enzo Ferrari's words, "priests in the religion of the automobile engine."

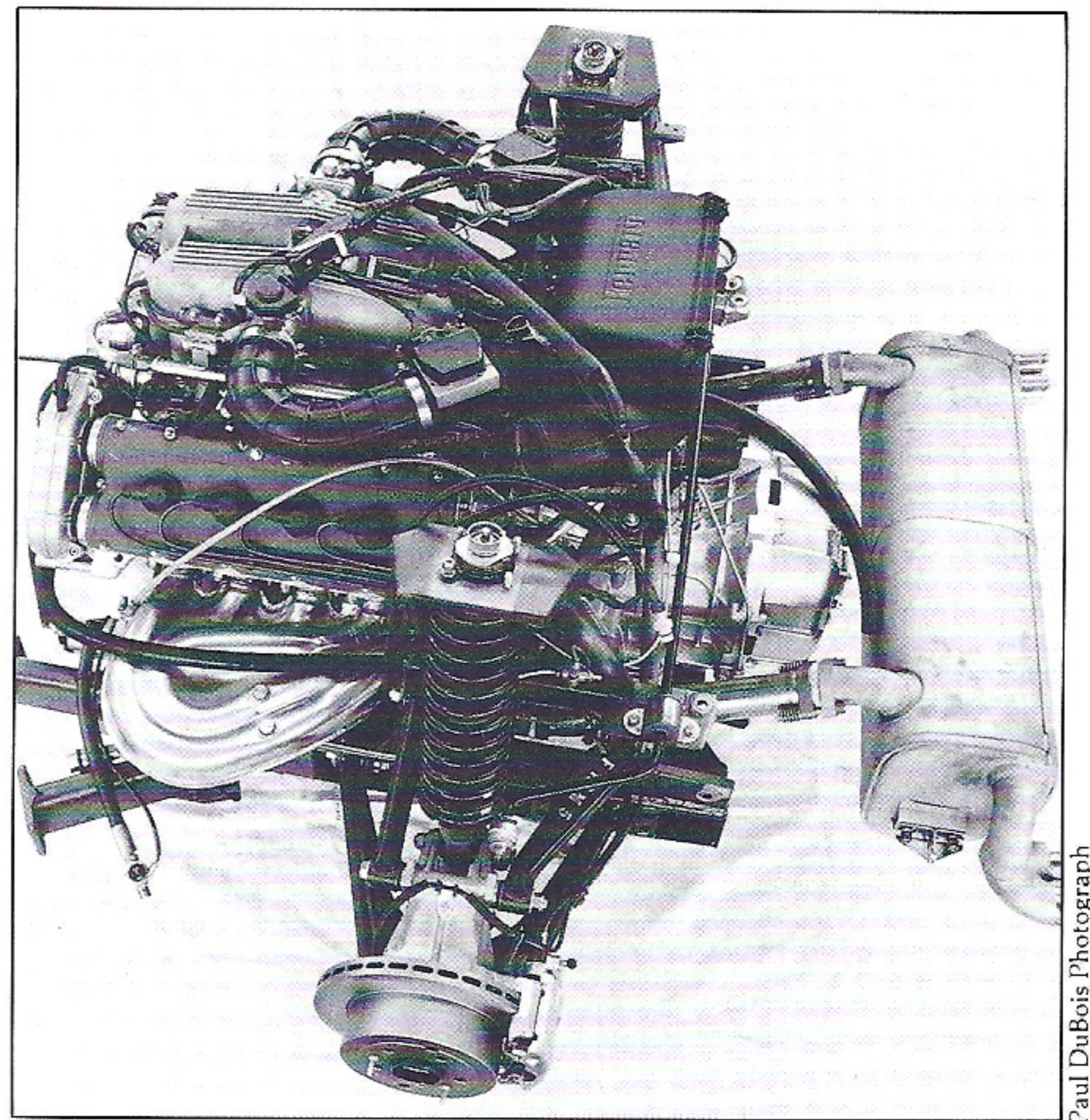
The engine in question is the new 3.4 litre V-8, and while it is based on the 3.2 and 3.0 litre motors that

preceded it, it has enough engineering innovations to show that Ferrari has kept up with the state of the art in powerplant technology, and added a few twists of its own. Quickly, there is a new design to the cylinder heads and the block, there is a dry sump lubrication system, and the electronic management of the ignition and the fuel injection is handled by a Bosch Motronic M 2.5 unit, in place of the previous Bosch K-Jetronic. Bore has been increased to 85 mm (3.35 in) from 83 mm (3.268 in), the stroke was upped from 73.6 mm (2.898 in) to 75 mm (2.955 in), and so the total capacity rules out to 3405 cc (207.6 cu in), up from 3185 cc (194.36 cu in). The compression ratio is up as well from 9.2:1 to 10.4:1, and all these changes have dramatically raised the horsepower from 260 bhp in U.S. form (270 bhp in the European version) to nearly 300 bhp(!), not at all bad to have in a 3,300 + lb, four passenger car. We'll have more in future issues, as the 348 GTB and GTS are due this fall, and in the intervening months, Ferrari will provide more details.

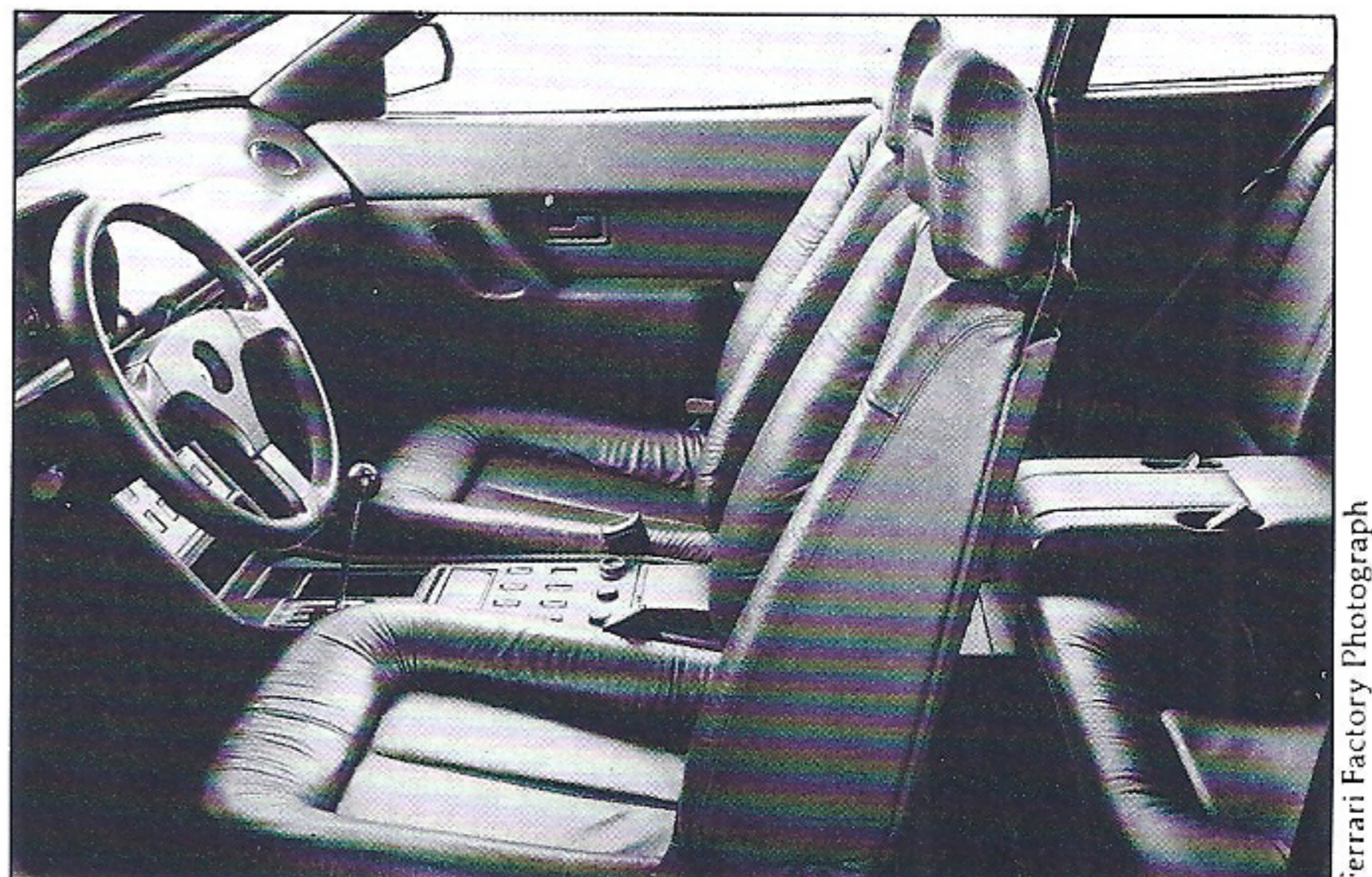
How this engine is placed in the chassis is also new. It now lies longitudinally along the front/rear axis of the car, and the main significance of this is to lower the engine considerably, improving weight distribution and handling tremendously. Side benefits of this lengthwise layout are more accessibility to the engine compared to the horizontal placement of the previous V-8 series of Ferraris, and also a less complex and convoluted exhaust system.

When the V-8 sat crosswise in the chassis in preceding Mondials, the gearbox was housed underneath; now it is behind the engine, but in order to reduce the extraordinary length of such a powertrain (engine, flywheel, clutch, gearbox, and final drive), Ferrari mounted the gearbox in a transverse position to the crankshaft, hence the "t" designation attached to the Mondial nomenclature. Proudly, the Ferrari people point out that this was borrowed from the successful "T" series of Ferrari Formula One cars of the 1970s, which also had transverse gearboxes. In addition, and again borrowing from Formula One experience, this time from the early 1960s, Ferrari chose to mount the flywheel and clutch outboard behind the gearbox. So the scheme of things runs thus: engine, gearbox/final drive, flywheel and clutch. A shaft runs from the engine through the gearbox to the flywheel and clutch; another shaft brings the drive forward again to the gearbox, where it is turned 90°, shifted, and sent out the final drive. A very neat, compact, and complex arrangement, but to Ferrari, all in a day's work.

But everything is not just in the power end of the Mondial t, as the chassis and suspension received some updating as well. Anti-skid braking is now standard, steering is power assisted, and the suspension is electronically controlled! Bilstein gas shocks have been added and they automatically adjust ride height and stiffness as need be, working off sensors that measure acceleration, deceleration, and roll attitude. Additionally, the driver can set a control in the cockpit to adjust the ride from soft, through medium, to hard, and even though set at "soft," for example, the Mondial will "firm up" automatically if unforeseen driving conditions warrant.



Paul DuBois Photograph



Ferrari Factory Photograph

On the outside, the visual changes have been subtle. The nose is a tad smaller, as are the pop up headlamp assemblies. The side grill air inlet is also smaller, and is more rectangular in shape. The flares over the wheel arches are gone, with the fender metal being "fattened" to meet the wheel cutouts exactly. Door handles are now color coordinated.

The interior is much more plush, if that's a proper term for Ferrari cockpits. It is not garish by any means, but it is more luxurious than the previous spartan look. After all, this is a four passenger tourer, not a balls out race car, so the amenities have to be up to a certain level of accepted comfort, both physically, and equally important, visually.

As we hinted in our headlines above, the Mondial doesn't look much changed, but underneath, in technological terms, the changes are prodigious and extensive, and indicate a whole new direction for Ferrari. In 1984, Ferrari promised great things for the decade ahead, and they are living up to their word. The Mondial t is quite the motorcar.