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Phil Hill on the Iconic Ferrari 250 GTO

"Why are we driving this damn coupe?"

By [Phil Hill](#)

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In honor of what would be his 90th birthday, we're republishing this story, from the January 2000 issue of Road & Track, by the legendary Phil Hill. Many of you probably know Hill as a brilliant racer, notably the only American-born F1 champ, but he also wrote a number of eloquent, insightful articles for R&T, like this on the Ferrari 250 GTO. Enjoy. – Ed.

When Olivier Gendebien and I were assigned to drive the new Ferrari GTO at Sebring in 1962, we were somewhat offended. [Stirling Moss](#), Innes Ireland, the Rodriguez brothers, and other drivers were in sports prototypes, aiming for an overall win, and we wondered if there was a conspiracy against us. "Why are we driving this damn coupe?"

There was an excellent reason Olivier and I were in the GTO. The Manufacturers' World Championship for 1962 was based on points scored by Grand Touring cars. Sports cars were now called prototypes, and while Stirling, Innes, and the others were running for the glory of the overall win, we were chasing points for the championship ... and earned the maximum by winning the GT class and finishing 2nd overall.

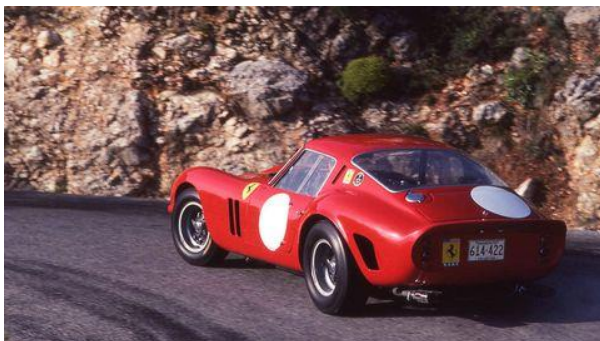
As it turned out, the GTO was a delight to drive. That's probably because the emphasis put on the GTs to win the championship meant there was extra effort put into this car, so the GTO was a giant step beyond the Grand Touring cars built up to that point. And even though the GTO shared a great deal with its predecessor, the differences were enough to make "this damn coupe" something very special.



It's really quite remarkable that anything worked out that well for Ferrari in 1962. During the winter between the 1961 and 1962 seasons, much of the team's top personnel quit. The list of those leaving included chief engineer Carlo Chiti, team manager Romulo Tavoni, their key man in the dyno room, Corrado Manfredini, and Giotto Bizzarrini, the man who had much to do with the development of the GTO and its predecessor, the 250 Short Wheelbase. Even a number of the mechanics left Ferrari. Much of the development of the cars was already complete, but even before the walkout, there were many of us who wondered if Ferrari wasn't spreading things too thin producing Grand Prix, Grand Touring, and prototype racing cars in addition to the production models. Young engineer [Mauro Forghieri](#), sharp as we knew him to be, was going to have one hell of a time keeping everything together.

As the 1962 season progressed, it was the Grand Prix team that suffered, while Ferrari's sports cars were as successful as ever, winning at Sebring, the Targa Florio, the Nürburgring, and Le Mans. Lodovico Scarfiotti even won the European Hill Climb Championship in a 2.0-liter Ferrari. And the GTO began a dominance of Grand Touring racing.

Fundamentally, the GTO is quite similar to its predecessor, the [250 Short Wheelbase](#) (hereafter called SWB in proper modern Ferrarese), but with improved aerodynamics and the 300-hp Testa Rossa version of the V12, which was mounted lower in the chassis to drop the center of gravity and the hoodline.



Development of the GTO for the 1962 racing season began early in 1961. The first test car was a special Pininfarina-bodied 250 SWB entered in that year's [24 Hours of Le Mans](#). The important difference was that it had the Testa Rossa V12 instead of the 260- or 280-hp engines that were in the competition SWBs. Next came a muletta that was an SWB with a crudely hammered-out

body very roughly approximating the shape of the GTO. After many miles of development driving, the first GTO was built with the chassis number 3223 and presented to the public at Ferrari's February 1962 press conference.

I'd always liked Ferrari GTs, particularly the SWB's predecessor, the Tour de France, but there was something very impressive about the GTO, particularly the low hoodline and the tall regulation windshield. I was surprised by the tiny mouth of the car, particularly compared with the huge, almost toothy grin of the SWB.

There's also the beautifully purposeful detailing of the GTO, the grille with driving lights on each side, the little brake cooling ducts, the covered headlights, and the U-shaped upper cooling slots with their removable covers. Of the two forward-leaning vents behind the wheels, the front one releases air from around the brakes and tires, while the other is an escape for hot engine compartment air. There are some variations from one hand-built GTO to the next, improvements made during the production run and as the cars were rebuilt after racing accidents. Many designers have tried to improve on the same collection of forms and holes and slots, but have always come up short.



This was perhaps the first time Ferrari had done serious work on a GT's functional (as opposed to imagined) aerodynamics. And when first seen, the GTO didn't have a rear spoiler, but by the time we got our race car—3223—to Sebring, it had a small one riveted across the back of the car. Soon GTO spoilers were blended into the bodywork as we learned more and more about the aerodynamics of race cars. Much of this began with a testing session at Monza, when Richie Ginther tried a 246 SP with its rear tail section removed and found he could go a lot faster through corners such as Lesmo and the Ascari curve, though the car was slower down the straights. That led to the first spoiler across the back of a Ferrari. I don't know if this episode was the initial use of such a spoiler, but it may have been the beginning of the constant month-by-month fight by a race team to continually refine a car's aerodynamics.

The GTO's beautiful Scaglietti-built bodywork wraps around a space frame that is a development of the SWB's, even keeping the same 94.4-inch wheelbase. The front suspension is typical Ferrari, with a pair of unequal-length A-arms, coil springs, Koni shocks, and an anti-roll bar. In 1962, the use of independent rear suspensions was only a few years old at Ferrari, and so we weren't surprised to find the GTO retained the old live rear axle. And why not? The SWBs had been quite successful with them, it was a dependable system, and it kept the problems of car maintenance to a minimum. These are especially good reasons for cars that would get a great

deal of long-distance racing, often in the hands of customers. GTO rear suspensions also have semi-elliptic springs and Koni shocks, some of which use auxiliary coil springs. There were four basic locating links for the car's axle, with a Watt linkage to control lateral motion.

Carrying over the SWB's rear disc brakes was considered sufficient, but the extra speed of the GTO caused Ferrari to employ the same big Girling disc brakes at the front of the GTO that the sport prototypes used at each wheel. Tires for the GTO were Dunlops—600x15s in front and 700x15s at the back—mounted on the traditional Borrani wire wheels.

In the GTO, the famous V12 engine was in its classic 3.0-liter dimensions, 2953cc from a bore and stroke of 73.0x58.5 mm. The dry-sump version of the V12 was used as a means of dropping the engine lower in the chassis. At this point, the V12 was producing around 300 hp and was the reason the GTO was such a joy to drive.



As usual, when we got the cars in Sebring, the throttle butterflies of the six Weber carburetors were all gollywumpus and had to be readjusted. Once they were correct, we had one of the most flexible race engines on the track. You could have driven the car to the circuit in traffic, then immediately taken it to full revs on the back straight without any fuss.

In fact, the [GTO](#) was a great deal more drivable than the Ferrari V8 prototypes with their large carburetor throats and venturis. We had fun annoying the drivers of the prototypes at Sebring on the odd occasion they'd come up behind us to pass. By simply pushing a little harder—like using the brakes more aggressively than normal for that period—we could frustrate the hell out of them for a few laps. They could not get by us. We'd drive deeply into the hairpin, finish the turn, and just pull their cork leaving the hairpin as the more highly-tuned prototypes were going *putt-putt-putt-putt-whoooooo*, stumbling to get full power. By then we'd be halfway down the straight, already going 30 mph faster than they were because we got a smooth start out of the corner, thanks to the flexibility of the GTO engine. This sort of engine performance, matched to the V12's proven reliability, was also one of the major reasons the GTO was such a successful customer car.

I can't, however, be as enthusiastic about the gearbox, which has Porsche baulking-ring type synchros. This change may have been an advantage to the younger drivers (and customers) who weren't adept at proper double-clutch downshifting, but the synchros slowed the entire gear-changing process. In comparison with other Ferrari racing transmissions, the GTO's long throws and heavy feel seemed a step backward.



That gearbox, however, was the only thing about the GTO that wasn't a pleasure. Looking at the stark interior now, the car looks slightly unfinished, but in 1962 we couldn't have cared less. Here was a GT that had quickly taken us out of the era in which a driver was constantly balancing a car's virtues against its vices, to that time when the basic vices were gone and our only job was to make maximum use of the virtues. A GT with handling that had neither difficult understeer nor treacherous oversteer and that was—best of all, perhaps—predictable and confident.

All those virtues give an interesting two-part nature to the GTO: one half pure race car, but a car that's so beautiful and easy to drive that the other half could easily qualify as a road car, albeit it a rather noisy one.

If you remember the GTO's first racing year, you'll recall the fuss that was raised when Ferrari didn't build the required 100 cars needed to meet the Grand Touring regulations. A total of 32 of the original type of 3.0-liter GTOs—unofficially referred to as Type 62/63—were eventually made. Three of the Type 64 GTOs with somewhat different, less curvaceous bodywork were also built, and four of the original GTOs were rebodied with the new shape. There was also one GTO with a body like that of the Ferrari 330 LMB, and two of the Type 62/63 style GTOs had 4.0-liter V12s. But although they didn't officially fit the regulations, the GTOs were, if you don't mind a little noise and a Spartan interior, the definitive Grand Touring automobiles of the 1960s ... or, some might well argue, of all time.

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