

2011 Ferrari 458 Italia Supercar Test Drive

MARANELLO, Italy—Ferrari's new lust-worthy 562-hp supercar hits 60 mph in 3.4 seconds. It's indisputably attractive, but it is also derivative, as though it had been concocted from the best parts of previous great Ferrari designs. Let's see what it can do on real roads.

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The Specs

Ferrari's early cars were dominated by V12 engines. But the Italian sports car maker inherited its first V8 from Lancia in 1955, and its mid-engined V8 sport coupes have been the backbone of the company's model range for the last 35 years. Strictly speaking, the first road-going production-V8 Ferrari was the wedge-shaped, Bertone-designed Dino GT4 of 1973. The most recognizable was of course the Pininfarina-designed 308 launched at the 1975 Paris Motor Salon—a car that starred quite prominently in the hit TV series *Magnum PI*.

Since then, this series of uncompromising mid-engine V8 driver's cars has dominated Maranello production. This year, the F430 will occupy over 70 percent of Ferrari's annual global output, which is expected to be down just 6 percent, at 6100 cars—not bad in this economy. Next year ushers in the seventh model in the series, the all-new 458 Italia. Also a Pininfarina design, the 458 uses an all-new aluminium chassis expected to be in use for the next decade.

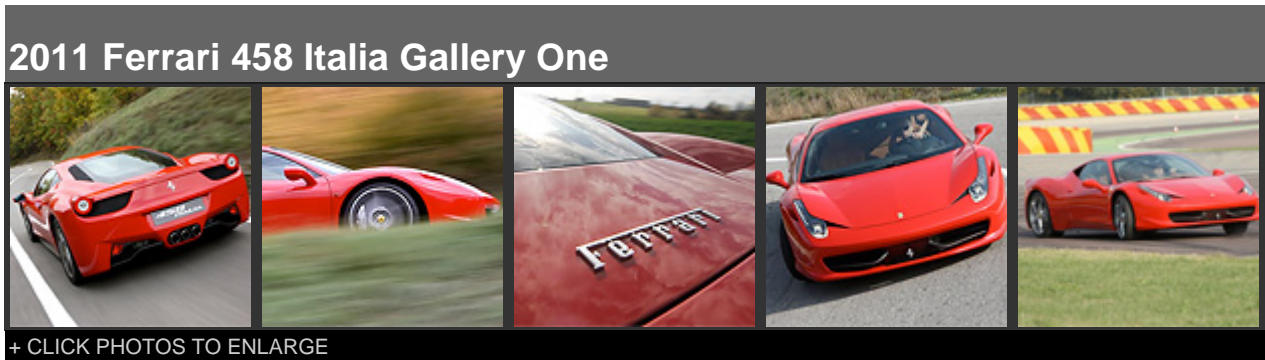
Look closely and you'll recognize bits of all sorts of good-looking Ferraris in the 458. If the result may not be exactly pretty, it is certainly attractive—even those bizarre headlamps, which combine a total of 40 light-emitting diodes stacked above the main projector units.

Under the gauze-like aluminium coachwork there's a lot of serious thinking in this new chassis. Aerospace aluminium alloys give strength with light weight, although there is still a steel crossmember at the front. The suspension is upgraded with an L-shaped lower control arm for the front wishbones and new links for the multilink independent rear suspension. The result is a stiffer car, with much more accurate control of the wheel geometry and lateral movement. Brakes are Brembo carbon-ceramic rotors. Despite all the chassis unobtainium, this 3274-pound car is 300 pounds heavier than the outgoing 430. Ferrari engineers blame the latest U.S. crash-test requirements and the Getrag twin-clutch transmission, which, for the first time ever, is the only option.

The engine uses the same basic castings as last year's [Ferrari California](#) model, but the machining is different, with a longer-stroke crankshaft giving 4.5-liters instead of 4.3. The pistons and tappets get low-friction coatings, and the crankcase is divided into two air chambers to minimize pumping losses, which also requires two scavenge pumps for the dry sump. Ferrari uses valves in the intake manifold to open up different plenum chambers and increase low-end torque, and valves in the muffler that reduce back pressure and create lots of lovely noise through the trio of exhaust snaps.

This motor is a fairly insane beast, with the 90-degree, double-overhead-cam, 32-valve mill producing 562 hp at a screaming 9000 rpm and 398 lb-ft of torque at 6000 rpm—a huge increase over the 483-hp F430. The 458's top speed is 202 mph, with 0 to 62 mph in less than 3.4 seconds and 0 to 124 mph arriving in just 10.4 seconds. That means this Ferrari can run to nearly 130 mph before a [Toyota Prius](#) hits 60 mph.

So never mind the current F430; this car is faster to 60 mph than a Ferrari Enzo and less than a second slower than that epochal million-dollar car to 124 mph. Yikes. What's more, Ferrari has even managed to improve the fuel economy and the 458 achieves 17.68 mpg (U.S.) in the NEDC combined cycle, although around town or if you start using the performance, you'll struggle to better 10 mpg (U.S.).



Aerodynamics play a big part in this performance equation. With a Cd of 0.330, the 458 is one of the most slippery Ferrari models ever, but that's not the whole story. There are deformable winglets on the lower grilles which bend in the airflow at high speeds and direct more air under the car rather than into the radiators. The engine and transmission coolers are ducted into the rear spoiler and then the air is jetted out through the tail, which reduces aerodynamic tumbling at the rear. Even the engine bay is vented with high-pressure air from the rear-wheel arches. Downforce at the top speed of 202 mph is equal to 794 pounds, almost a third of this car's curb weight.

Where Mercedes-Benz and Porsche have been going back to basics with their sports cars, Ferrari has unashamedly upped the electronics quotient with the 458. The revised suspension provides more accurate wheel articulation, and the steering rack ratio has been made quicker—a mere two turns lock-to-lock. To prevent such a quick rack from feeling too darty at speed, the safety systems (stability control, electronic differential, electronically adjustable dampers, ABS and the engine and transmission controls) are all handled by the same master electronic control unit which speeds responses and allows more tailored intervention. Chassis calibration settings on the steering wheel switch include; Wet, Sport, Race, Traction off (with only emergency stability intervention) and 'everything off' for the brave, or the very stupid.

Matteo Lanzavecchia, Ferrari's chief dynamics engineer, says that the new systems make the 458 easier to drive and safer, but one can't quite escape the conclusion that they also reduce the gap between the car's capabilities and the point where the owner might run out of talent. For the future, Ferrari is working on even more advanced chassis control systems inspired by the Northrop Grumman B-2 Stealth bomber, where they engineer an unstable but dynamically superior car and rely on electronic intervention to prevent drivers from getting into trouble.



The Drive

There are no steering-column stalks on the 458 Italia, and all the major functions grouped haphazardly on the center of the steering wheel. A two-seat coupe is hardly the acme of practicality, but the simple cabin has tiny door pockets, with a small shelf behind the all-embracing leather bucket seats. Oh, and there is a fair-size trunk. The instrument binnacle is dominated by an enormous yellow-backed rev counter and gear display, with two further displays on each side that show a choice of sat-nav, a conventional speedometer, temperature and pressure gauges, lap timers, or a vehicle-condition display with the specific heat of the brakes, tires and engine.

So you press the big red starter and the flat-plane V8 whirrs into life without a trace of temperament and sounding almost disappointingly quiet. Pull the right-hand steering-wheel paddle and first gear engages with a slight thump – Ferrari seems to have introduced graunch and crunch into this gearbox, which is so much more civilized in the California. As soon as you touch the accelerator, the noise changes to a hardcore buzz as muffler valves open. Unlike the old automated manual transmission Ferraris, maneuvering this twin-clutch model is easy, with no telltale whiffs of burning clutch.

At first, the 458 feels darty and abrupt. The steering is so sharp you could cut yourself, and it's very easy to overdrive this car in a series of twitching, elbows-out wheel movements. If you calm down and trust the steering, it starts to feel more natural. Similarly, the throttle is overly sensitive and on a bumpy road it is easy to find yourself kangarooing through corners until you learn to brace yourself with your left boot against the firewall.

Thus equipped, you are able to savor the superlative performance, which is shockingly accessible in almost all conditions. Rainy Italian hill routes gave a good test of the car's grip levels and while the 458's tail wags on the exit of a slippery turn, the front end bite on turning in is satisfyingly tenacious. The engine note is hardcore race car and Italians would stand at the side of the road applauding the scarlet coupe trundling past sounding like an Indy 500 entrant.

Supercars like this have an unreal quality, with such profoundly superior performance and handling that it almost feels as though they could take off and fly to their destinations. You rarely get an opportunity to use full throttle on a public road and when you do, the acceleration leaves you short of breath. The gear change is almost instant, and in race mode, where the gearbox opens one clutch at the same time as the other closes, the acceleration is seamless but never brutal.

2011 Ferrari 458 Italia Gallery Two



On the track, the 458 shows that in dynamic terms, it surpasses the F430. The new accuracy of suspension movement means that slides are more benign to control, without the unwinding feel of its predecessor that could result in a fishtailing series of opposite-lock slides. In fact the chassis is very docile, and the electronics keep it that way even if you provoke it. And while the engine is top-shelf-material rude, it has a torque curve flatter than the high plains, so you can leave the car in gear and make speedy progress or rev it to 9000 rpm and make speedy, noisy progress. Fortunately, the carbon-ceramic disc brakes are eye-poppingly powerful, although the pedal feels soft on the first application. At absolute extremes, the anchors fade quite considerably.

The Bottom Line

The supercar's obituary has been written many times, but in spite of ever more stringent speed restrictions, traffic congestion and the global recession, the breed is flourishing. In fact, the new 458 Italia is so fast that you wonder how much faster cars can get before you need a special license to drive supercars. Public-road driving in the 458 is a supreme test of self-discipline, but it is surprisingly uncompromised, with a flexible engine and reasonable ride quality. A car for all seasons? Hardly; the 458 isn't a massive step forward in the ethos of this rarefied world, especially as it weighs almost 1.5 tons. But those electronics give a degree of refinement, ride and flexibility that simply hasn't existed before without big compromises. In that respect, as well as its survival, the 458 Italia is worth applauding. Sales begin next spring, with a price yet to be determined. Ferrari says it will be up around 10 percent on the outgoing \$187,925 F430 model. In other words ... start saving now.