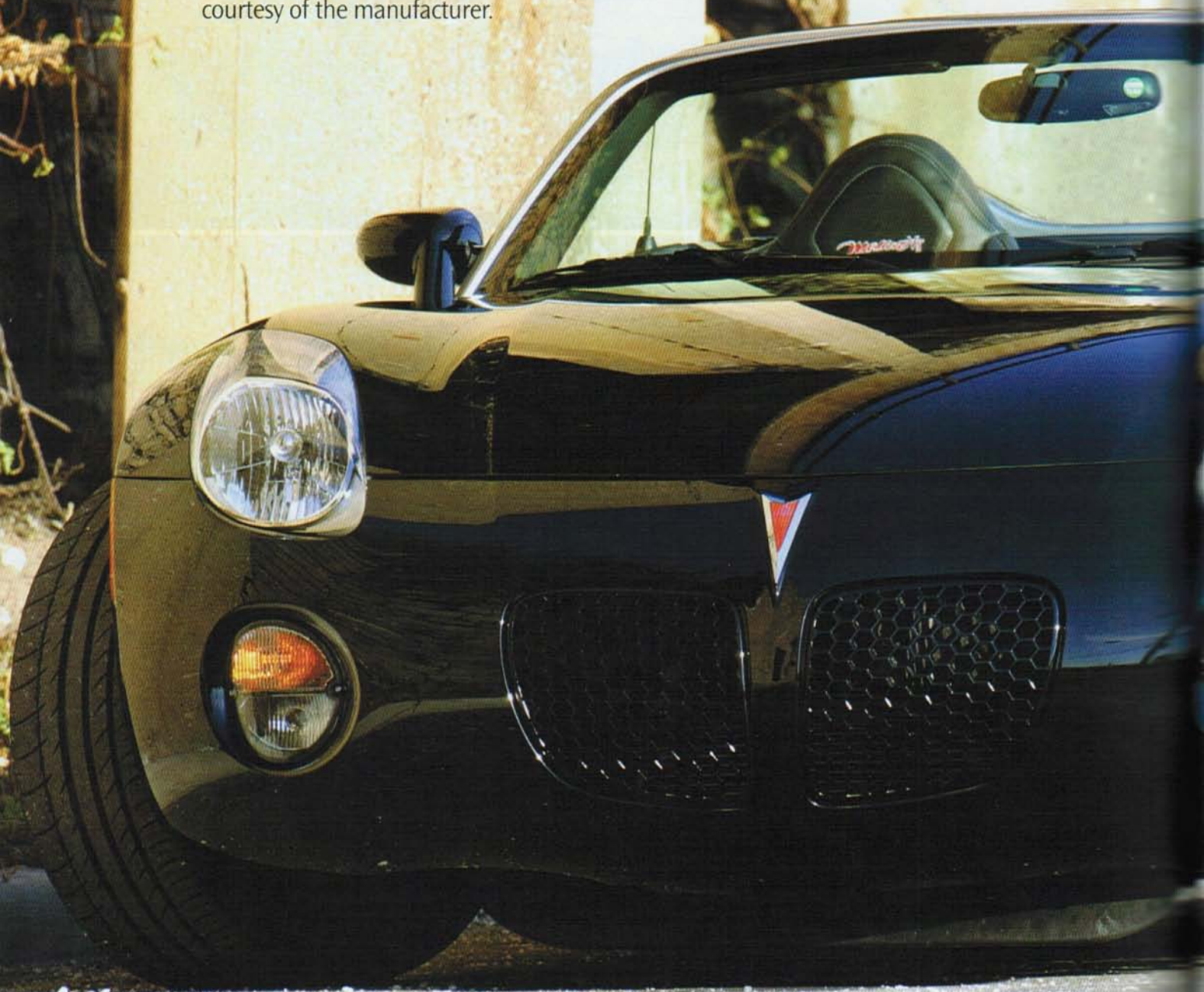


# SMALLER MALLET, SAME PUNCH

If you like the C6 but wish it were wrapped in a more compact package, Mallett Cars might have the answer. Jeff Glenn reports, photos courtesy of the manufacturer.







As soon as noted Corvette tuner Chuck Mallett spotted the Pontiac Solstice back in 2005, there was a twinkle in his eye. "I saw it at one of the early shows before the production version was released," Mallett recalls. "I looked at the frame rails, eyeballed it, and I knew there was enough room in there for a V8."

Later that year, the production Solstice opened to mixed reviews. Though the car's swoopy styling and hard performance numbers were well-received, *Corvette Magazine's* own Jay Lamm described the interior as being carved from racquet balls, and postulated that the window controls were ideally positioned for the double-jointed wrists of an orangutan. Lamm also commented that the base Solstice was a musclecar lacking in muscle—but let's not get ahead of ourselves.

Chuck Mallett grew up around racing. His father and uncles were involved with Ford factory racing for more than 20 years, starting out in the 1950s with drag racing and winding down with the Bud Moore Trans-Am team in the '70s. Along with his brother Lance, Chuck opened a shop in the latter part of that decade that specialized in high-end restorations, but was quickly sucked back into the family business of racing.

Working as a consultant for Chevy's racing division, Chuck worked with John Heinrich in the Escort Challenge, and later served as a crew chief in the Corvette Challenge. He was also involved with preparing and campaigning cars in Trans-Am, World Challenge and endurance racing venues. When he made the switch to building street cars, he quickly made an impression: An early Mallett-tweaked twin-turbo ZR1 was clocked at 273 mph back in 1996. With plenty of racing experience under his belt, Mallett viewed road-car tuning as an opportunity to turn his chassis expertise into a retail business. The firm has not completely cut ties with its racing past, with Mallett recently working on development for Max Crawford's Grand-Am prototype, but projects like the one seen here occupies the bulk of the company's time.

In original guise, the 2860-pound Solstice developed 177 horsepower from an Ecotec 2.4 liter 4-cylinder mill—hardly enough grunt to register on the radar of the typical Corvette fan. Right off the bat, Mallett knew it could be better. Though he's on the GM payroll as an independently contracted chassis developer, he had no problem re-engineering the Solstice where he felt it came up short. In the first week the Solstice was made available to retail customers, Mallett "ordered a car, wrote a check, and drove down there to pick it up."

Two weeks later, what Mallett perceived to be a glaring Solstice shortcoming had been solved by the installation of a stock LS2 small-



block V8. After three more weeks of sorting out the wiring, the car was fully operational. "We had it on the road for testing in December of 2005," Mallett relates. "It was 29 degrees, but it still ran 0-60 in 4.1 seconds, and the quarter in 12.8 seconds at 113 mph. It also recorded 1.05g on the skidpad. I knew we really had something." To put that performance in Corvette terms, imagine pulling about 500 pounds out of your C6.

That first LS2-powered prototype would become the model for V8 Solstices that Mallett now offers to retail customers. Saturn Sky versions are also available (though Mallett estimates Sky conversions are about half as popular), as are LS7 and other hotrod engine setups. The base LS2 conversion goes for just under \$23,000 not including the price of the car. Complete vehicles can be ordered directly from Mallett or from one of a handful of Pontiac dealers authorized to sell the conversions.

In addition to the 400-horsepower LS2 mill, the base Mallett Solstice includes an upgraded clutch assembly, a more aggressive spring and shock package, polyurethane rear control-arm and differential-mount bushings, an aluminum two-core radiator, Corsa stainless steel mufflers, bespoke carbon fiber coil-pack covers, and a set of special Mallett graphics. An automatic with a beefed-up torque converter and bellhousing is optional, and all of the package hardware is backed by a two-year, 24,000-mile warranty.

Adding performance to the standard LS2 package is a snap—just check the box next to the 400 rear-wheel horsepower banner on the order form (stock LS2s deliver about 360 rwhp). That adds custom cylinder heads, a six-speed Tremec transmission, a custom driveshaft, a 3.73 rear differential, 19x9-inch wheels wrapped in 265/35-19 Michelin Pilot Sports, and air conditioning. Specifying those extra bits will set the buyer back \$44,780. A third LS2-based option package adds 600 turbocharged rear-wheel horsepower and specially-valved Penske shocks to the tune of \$72,330.

The 7.0-liter LS7 slides right in there too, along with a six-speed Tremec gearbox, a custom driveshaft, the 3.73 diff, uprated clutch, non-adjustable Penske shocks, big brakes, and upgraded wheels and tires for \$54,365. If the LS7 strikes your fancy, but you're concerned that 505 horsepower isn't enough to fend off your neighbor with the 600-horsepower turbocharged Mallett Sky, you can (naturally) add a pair of custom Turbonetics turbos to the Z06-derived setup. The result is 750 rear-wheel horsepower and an \$87,320.50 credit-card bill.

So far, the ratio of completed LS2 to LS7 conversions are about 50/50, with about half of the LS2-powered machines ordered with the 600-horse turbo hardware. Mallett esti-







Though the Corvette-sourced V8 looks like a factory install, the Mallett Solstice is only available in certain states. Meeting California's strict emissions laws is a tricky and potentially expensive hurdle that Mallett won't try to cross: "It's not worth the hassle," he says.

mates nearly 100 cars have been sold to date. Watching the sales process, says Chuck, "has been fun because I've got young guys who can barely afford the LS2 and are scouring junkyards for the motor and scraping together pennies and nickels to build a base car, and I've got guys spending 70 or 80 grand without blinking an eye." The spirit of the car, he reckons, "is basically like a street rod. But, these are late-model cars that can easily be registered and insured—in that respect, it's less like a street rod and more like a real car."

After doing a few conversions, the process has been impressively streamlined. "We're knocking out an LS2 car in three weeks," Mallett says. "An LS7 conversion takes five weeks. The process is modular—we can zip in a five-speed unit as quickly as we can do a six-speed. My guys can really roll with the punches." In Mallett's Berea, Ohio shop, there are nine full-time employees, and five part-timers in the 40,000 square-foot space.

Like engineering a race-car chassis, Mallett quickly found that developing the V8 Solstice was more complex than bolting a few components together. Working through the process like he would a competition contract, he collected data, calculated roll centers, and developed suspension specifications on a sim-

ulated road-surface platform. "We plugged in the numbers," he remarks, "and it turns out the Solstice chassis frequency is really close to the Corvette, so that was our starting point. The car has more potential than people give it credit for. It just has that little motor in it, so a lot of people think it's just a toy. If you put a decent V6 or V8 in it, the car becomes a rocketship." The weight penalty for the LS2 is surprisingly minimal—according to Mallett, the package adds fewer than 80 pounds total. The motor is also positioned as far back in the engine bay as possible, to maintain the stock version's weight bias. Impressively, the four-cylinder car's front bias of 52 percent only grows to 52.2 with the LS2 V8 on board.

Sometime in the near future, Mallett will offer a "Pit Bull" bodykit for the V8 Solstice that will make room for 295-section 19-inch tires

up front, and 335s in the rear. To make the space, the bodywork is stretched out four inches up front and five in the rear, which makes the car an inch and-a-half wider than a C6 and nearly square in plan view. In order to break even on the cost of the body molds, Chuck needs 15 orders, but he hopes enough customers will see the benefit of being able to transfer the car's massive thrust to the pavement.

Indeed, with the car's light weight and short wheelbase, we couldn't help but wonder at what point the hopped-up Solstice transforms from potent street car into an expensive out-of-control smoke machine. "It just depends upon your driving style and how far into it you're getting," says Mallett, before estimating that 500 rwhp is the real-world limit. Past that level of power, he smiles, "you've got to feather the throttle and hold your tongue just right." ○

