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A SOURCE INTERLINK MEDIA PUBLICATION

Yeah, That's Sort of an  
'80s Title. But It So Fits  
This Kinda '80s Ride.

# SANO

By David Freiburger  
Photography: Ryan Hager and Tom Nelson



> The custom engine compartment in this '84 Camaro sets off the NRE twin-turbo 427 like a jewel case. The front-drive setup is from Billet Specialties.

SANO

"It looks like a show car, but it's really a killer."  
—Tom Nelson



It's the world's cleanest third-gen Camaro, and it has 1,700-plus horsepower.

As outstanding as that statement is on its own, this car's engine made it onto our cover because it also exemplifies this month's theme of new tech, new ideas, and most of all, new power. The Nelson Racing Engines (NRE) 427ci, twin-turbo Dart/Brodix small-block is crammed with billet-born innovation, including an all-new NRE three-piece intake manifold that features dual integral fuel rails with twin banks of injectors and a bolt-in fuel regulator setup that draws commands from the internally drilled boost-reference ports. The throttle body and inlet pipe are also part of the billet goodness. So, yeah, it's \$8,000 worth of intake manifold, but it includes a lot of other plumbing you'd otherwise have to buy, plus it simplifies a lot of other plumbing and installation problems that Tom Nelson sees all the time with his twin-turbo crate engines.

Likewise, notice the turbos themselves on this gleamer: Yes, they are mirror images of each other. Most twin installations end up asymmetrical thanks to the old one-way-only snail on a typical turbo, but these new NRE billet housings with matching wheels inside break new ground for stylish and simple installation. They're available in 66, 72, 74, and 76mm variations; this engine uses 72s with 44mm wastegates and 50mm blowoffs. Tom also now offers billet header collectors and turbo junctions. It's ludicrous.

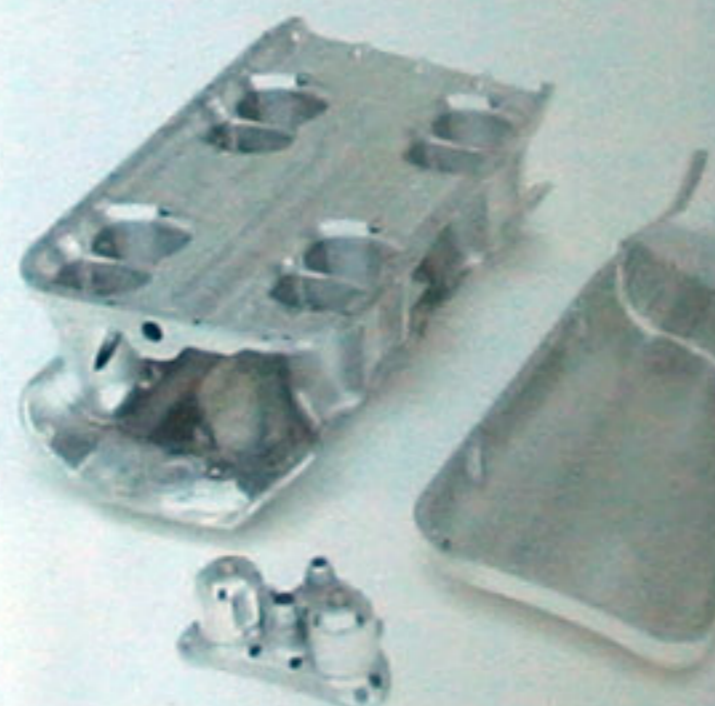
But it's totally functional. This small-block may be one of America's shiniest objects, but it also makes an absurd 1,700-plus horsepower and a like amount of torque when you ramrod two and a half atmospheres through the Ron Davis air-to-air intercooler—as in 38 psi boost. The punishment is swallowed by a Dart Iron Eagle tall-deck block, a Callies Magnum crank, Oliver billet rods, and JE extreme-duty slugs. It adds up to 427 ci with 4.125-inch bores and a 4.00-inch stroke. A Billet Specialties pan and Titan gerotor oil pump keep the parts slippery.

The pressure side includes that NRE intake along with Brodix 11x heads, which are 23-degree units with a spread-port exhaust pattern and stuffed with Inconel exhaust valves. The cam is a solid roller with 55mm roller bearings, 230 degrees of duration at 0.050, and 0.550-inch lift on both lobes, which are set at a 116-degree lobe-separation



> In this under-construction shot you can see the jig setup that's used to hang the turbos and to aid in the fabrication of all the bracketry and cold and hot plumbing. The entire nose of the car was also reworked to accept the Ron Davis intercooler and radiator as well as the air ducts.

> Here are the components of the trick NRE billet intake manifold, available in satin, polished, or black for small- and big-block Chevs in standard and tall-deck versions. Note the use of O-ring grooves, eliminating any gaskets. All the hardware is hidden upon installation. Got eight grand?



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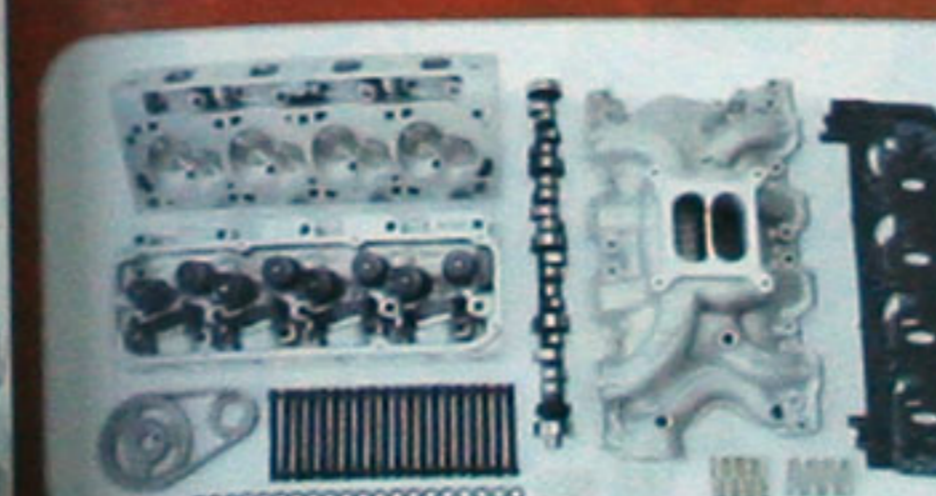
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# Edelbrock

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## SANO

> Hanging from the spotless undercarriage is a dual 3-inch-oval stainless exhaust system by Dan Lemons of Lemons Headers as well as twin Aeromotive fuel systems in a stainless fuel tank by Rick's Hot Rod Shop of El Paso, Texas.



angle. Valvetrain beef includes Crower lifters, Smith Bros. pushrods, and T&D shaft rockers.

The engine management is an Electromotive tec3 managing the dual Aeromotive in-tank pumps and the twin sets of injectors. Another new product involved is the Nelson billet harmonic damper that has the 60-tooth crank trigger cut right into it, which is a pretty cool problem solver.

And, oh yeah, there's a car attached to this monster. Who does all this to a third-gen Camaro? Randy Davis out of Wisconsin, that's who. He had bought a 377ci twin-turbo Nelson Racing Supercars part of the business, he eventually sent the entire car out to California for a beef-and-beauty makeover. The rollcage work was handled back home, then the '84 was treated to a trick back-half job and a bunch of sheetmetal work by Mark Bohlen at Bent Custom & Performance in Chatsworth, California. You read about Mark here in HOT ROD when he did all the custom hard-line plumbing on our F-Bomb Camaro, and he also did the tubing on this car.

Scott Carpenter of Scott's Customs showcased the engine in the handformed and fully painted sheetmetal engine bay that required the brake and steering hydroboost setup to be mounted at a 90-degree angle under the dash. As you can see, there's not a spec of wiring or ugliness in the engine compartment itself.

Back at Nelson Supercars, the Camaro was assembled with a Denney's driveshaft linking the Finish Line Transmissions' beefy 4L85E auto/overdrive (and TCI controller) to the Moser 9-inch rearend with 35-spline axles, 3.23 gears, and a Detroit Locker. The suspension uses an AJE tubular front crossmember with a power rack-and-pinion. The springs and sway bars are Hotchkis and the control arms are Spohn, while the rear carries a custom three-link. The brakes are all Baer discs.

Randy wanted his car to look virtually stock on the outside, and it does... once you get past the massive tires on Fikse wheels. That's BFG rubber in 275/40ZR18 up front and 345/35R18 drag radials on the back. The rest of the car, from T-tops to deck wing, was body-worked and painted pure white with orange stripes by Scott. The interior, too, looks stock, right down to the functional OE dash cluster and vintage orange "Camaro Camaro Camaro" cloth seats. And that's the story of the world's cleanest third-gen. Sano!



> One of the only parts of the car not handled by Nelson or Bent is the rollcage. Here you can see Bent's work in progress on the factory-soft mini-tub job that was later concealed by stock-appearing panels that were vacuum-formed in an extra width. **HRM**

"The general consensus on third gens is guys think they're a dweeb car. This should change that."  
—Tom Nelson



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