

# High-Speed Half-Breed

This modular/Fox mutant is inexplicably quick

Text by Dale Amy  
Photos by Dale Amy and Tom Wilson

"I've been called a liar since the day it went 9.99 right off the trailer," laughs Lidio Iacobelli in response to our inquiry about what makes his car so damn fast. Some folks seem to have a hard time accepting that a virtually stock 4.6 Cobra Four-Valve—even one fitted with an S-Trim Vortech pulled for 20 pounds of boost—can motivate a '91 LX through the traps in less than 10 seconds.

Somehow, this one does. The Emerald Green coupe—a joint venture between Lidio, who operates Alternative Auto Performance, and long-time acquaintance, "Turbo Joe" Spiteri—performed

**Morse Sense:** If there's a secret to the package it may be in the Speed-Pro fuel injection, which is used in combination with a crank trigger and an EEC IV-style EDIS module. Its data-logging capability has proven useful. "The Speed-Pro allows me to do some serious, refined tuning," Lidio Iacobelli explains. "I give it a lot of timing in the early, mid rpm, and I pull a lot of timing out as the boost starts to come on real big over 6,500 rpm. I would have never have put this motor in this bodystyle—and attempted to do this—with stock electronics."

The coupe has been lightened a bit, as it weighs about 2,850 pounds without Lidio. The A/C and heater were ditched for weight loss, but the power windows still work. The interior, though missing a rear seat, is tastefully finished with RCI buckets and looks anything but butchered. If you know Lidio, you know he wouldn't drive it otherwise.

The Four-Valve engine, which still relies on its original hypereutectic pistons, is 5000 stock. Nothing was ported. Even the intake and throttle body are still the factory components, although custom headers having generous 1½-inch primaries were crafted up to guarantee both a smooth installation and a place for all the 20 pounds of boost to exit. Said boost also dictated fuel-system upgrades, including a Weldon pump, No. 10 and No. 8 lines, and 55-pound injectors. The fuel rails, however, remain stock.



## 5.0 TECH SPECS

<i>Block</i> .....	<i>Stock 4.6 Cobra</i>
<i>Cylinder Heads</i> .....	<i>Stock 4.6 Four-Valve</i>
<i>Intake</i> .....	<i>Stock 4.6 Cobra</i>
<i>Throttle Body</i> .....	<i>Stock 4.6 Cobra</i>
<i>Camshaft</i> .....	<i>Stock 4.6 Cobra</i>
<i>Power Adder</i> .....	<i>Vortech S-Trim</i>
<i>Exhaust</i> .....	<i>Custom headers, H-pipe, and three-chamber Flowmasters</i>
<i>Fuel Pump</i> .....	<i>Weldon</i>
<i>Fuel Injectors</i> .....	<i>55 lb/hr</i>
<i>Mass Air Meter</i> .....	<i>n/a</i>
<i>Engine Management</i> .....	<i>Speed-Pro</i>
<i>Ignition</i> .....	<i>MSD DIS</i>
<i>Transmission</i> .....	<i>4R70W with Baumannator TCS</i>
<i>Rearend</i> .....	<i>8.8 with a spool and 4.56 gears</i>
<i>Springs</i> .....	<i>Coilover</i>
<i>Struts/Shocks</i> .....	<i>Koni drag struts/Koni drag shocks</i>
<i>K-member</i> .....	<i>Griggs Racing</i>
<i>Rear Suspension</i> .....	<i>HP Motorsport Megabite upper/lower control arms</i>
<i>Wheels</i> .....	<i>Weld Pro Stars</i>
<i>Tires</i> .....	<i>Mickey Thompson</i>
<i>Brakes</i> .....	<i>Aerospace</i>

the aforementioned head-turning 9.99 e.t. at its World Ford Challenge debut, and has since gone an even quicker 9.67 seconds at 139 mph.

Oddly enough, this was not the result of some great scheme to create a world-conquering modular mutant. Rather, it all started as a simple marriage of convenience that came about because (a) Joe had bought a theft-recovery LX stripped of its front clip and minus a drivetrain, and (b) Lidio owned a 4.6 4V he had removed from a customer's '97 Cobra convertible (in order to replace it with a 392 Windsor). The two simply decided to merge their resources and go modular racing.

Prior to insertion of Lidio's fat-head modular in Joe's Fox engine bay—a feat accomplished through the use of a Griggs K-member designed for this specific purpose—all Lidio did to the DOHC was remove the factory Intake Manifold Runner Control plates. He did this mostly because the Speed-Pro fuel-injection system he planned to use would not

control their function. Use of the Speed-Pro, which is a speed-density system, also meant the mass air wasn't needed. Lastly, Lidio has subsequently shimmed the stock valvesprings 0.060 inch tighter as they would otherwise float a bit more than 7,400 rpm. Lidio swears these are the only modifications.

Likewise, the transmission is a "totally used" 4R70W which Joe bought for \$300. If you're not familiar with the 4R70W, it is the wide-ratio version of the AODE, with a 2.84:1 First gear as found in some F-series trucks. It has been fitted with a Performance Automatic valve-body, a transbrake, and a

Stallion 4000-stall converter, and is controlled by a Baumannator TCS, Baumann Engineering's stand-alone electronic tranny control system. With the precise and tunable shift control of the Baumannator, neither Joe nor Lidio—who normally drives the car—attempt to outperform the tranny. They just let it shift itself on the way to those ripping nine-second passes.

So why is it so quick? Lidio really has no answer but seems to think the DOHC modular is "grossly underestimated" by a lot of people, and he reminds us that 20 psi is "a pretty good hit of boost." Lidio also thinks the Cobra Cammer likes the huge gearing combo of a 2.84 First gear combined with the 4.56 final Drive. "This car is in Third gear about 200 feet before the eighth-mile," he says. He also has rigged up an electric water pump to cool everything between passes.

Now for the bad news, guys. Veteran drag racers may have noted that a trap speed of 134 mph is a little slow for a 9.78 e.t. On the few passes the car has made as of this writing, the datalog has told Lidio of a consistent rich condition at high rpm in Third gear that he is carefully working toward leaning. Explains Lidio, "I think that ultimately, when I get the fat condition sorted out, she'll go a 9.50 something, or a low 9.60, and I'll get my mile-per-hour up around 138, 139, 140—where it should be. I honestly, truly believe this motor's going to go a 9.50 before we T-Trim it.

Let the Internet chatter begin.

**5.0**



*Lidio gutted the stock water pump and replaced its function with this electric unit.*

