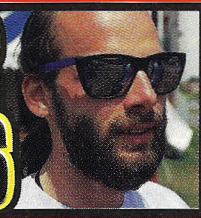


# CYBER STALLIONS



JEFF BAUER

If you were surfing for quality Ford tech info and happened to stumble across Jim Roal's Homepage (<http://home.att.net/~jroal>), you'd probably pass right by without giving it a second glance. After all, judging from the huge picture of Roal standing in front of an enormous bulldozer that takes up much of the site's lead page, you'd have every reason to believe that the site was an online tribute to heavy machinery, and not a depository of hard-earned automotive information, with a special emphasis on supercharged Fords.

But if you scrolled down just a little bit to see the links to this site's contents, you'd find tons of valuable advice, under the guise of being just another homepage. While this site is unlikely to win any awards for design or web wizardry, the usefulness of the information Roal provides for anyone interested in supercharging their Mustang or Ford truck is immeasurable.

Roal started what he called "a cheesy little web site" on his school's server when he was still in college in early 1997. He moved it to its current home in February 1999, and started to give it more of an automotive focus.

The lead photo of the bulldozer—it's an 850-hp Caterpillar D11R, by the way—is there because Roal's a Mechanical Engineer for Caterpillar. But virtually everything else on the site is a reflection of its owner's automotive background. Roal was a certified Ford tech for 15 years, an SVT dealership team member, and oh yeah, for a few years he supercharged Fords for a living. He was a Paxton dealer, but installed Allen and Kenne Bell kits as well, and has worked with Vortechs and Powerdynes. Lots of people can tell you about the specific supercharger they installed on their own rides, but Roal's in a unique position to share his experience and lessons learned from installing a variety of kits on a variety of vehicles, mainly on new cars and trucks.

For starters, check out Roal's Supercharging Fords article. Sharp-eyed readers might remember this piece from SN95.com ([www.sn95.com](http://www.sn95.com)), as it's posted there as well. Here he talks about the differences between centrifugal and positive displacement superchargers, which he prefers, and why. He describes his experience installing Paxton, Kenne Bell, and Allen blowers, and which he likes best. He covers what you need to do to your fuel system, ignition, and other engine mods to get the most out of your supercharger. Roal delves into compression ratios, intercooling, and fuel economy. He even offers a little on turbocharging. If you read only one page on this entire site, make it the Supercharging Fords article.

A companion page to Roal's Supercharging article is called Factory-Trained Hot-Rodder. Brian Holsten, a longtime Ford fan and fellow Ford tech who did supercharger installations at the same dealership with Roal, wrote it. It's slightly shorter but just as interesting as Roal's article, giving a different perspective on some of the same installations.

These two are arguably the site's best pages, but they're not the only worthwhile ones. Supercharging Questions and Answers is a good place to go if you want to learn from Roal's experience in a hurry. It takes on age-old queries like "How much power could I expect to gain with a turbocharger or supercharger?", "Which is more important, horsepower or torque?" and "I have a blower from a SuperCoupe. Can I bolt it on my engine?" The answers might surprise you. A separate page with links and contact info for a bunch of supercharger and turbocharger manufacturers rounds out the forced-induction portion of this site.

To expand the scope of his site a bit, Roal has provided an article on Automotive Physics, another on 4-Stroke Engine Performance, and a decent Glossary of Terms. All three are good, but I was more interested in the page called The Truth About the Auto Repair Industry. In this article Roal lays out the basic problems of the flat rate pay system, how it affected techs, and what the average consumer can do about it. He finishes it with

links to some of the sites that cover this issue thoroughly, including FlatRateTech ([www.flatratetech.com](http://www.flatratetech.com), see MM&FF, Nov. 2000). If you're not familiar with the subject, this article will be an eye-opener.

After reading about all these supercharger installations, you can't help wanting to see photos of some of them, and Roal is happy to oblige. Under the Some of My Projects—Automotive heading, he's got nine pages of photos and descriptions of some of the Fords he's had his hands on, including two '98 GTs with Allen superchargers, a '93 Cobra with a Kenne Bell, a '95 Cobra with a Powerdyne, a '95 Saleen SR, an '87 GT, a '93 LX notchback, and a '68 Mustang coupe that was Roal's car from high school. The ninth page features photos of blower installs on an F-150 and a Bronco.

And as if all of this information wasn't enough, Roal even uses his site to give away free automotive software. You can download a horsepower estimator, two gear/tire size selectors, a speedo calibrator, and a spreadsheet to help you select the proper size fuel injectors, fuel pump, and fuel management unit. There's also a zipped file so you download all of these programs at once, with a handy menu program. They're DOS programs, but they work just fine. "If I get time, I'd like to rewrite my software for Windows," Roal said. "I would also like to write some new programs that help with fuel system design."

For the future, Roal plans to feature another Allen kit installation he's done recently, and he's going to build a better links page. Most important, he's going to continue to offer up his expertise for free. "I enjoy sharing information with people, and I have no intention of charging for it as many people have suggested," he said. "I plan to keep it simple so it loads fast and doesn't bother visitors with annoying gimmicks that don't add value."

## Jim Roal's Homepage: It'll Blow You Away