

# Plasma cutting to 'Galpinize'

## Custom car shop speeds fabrication

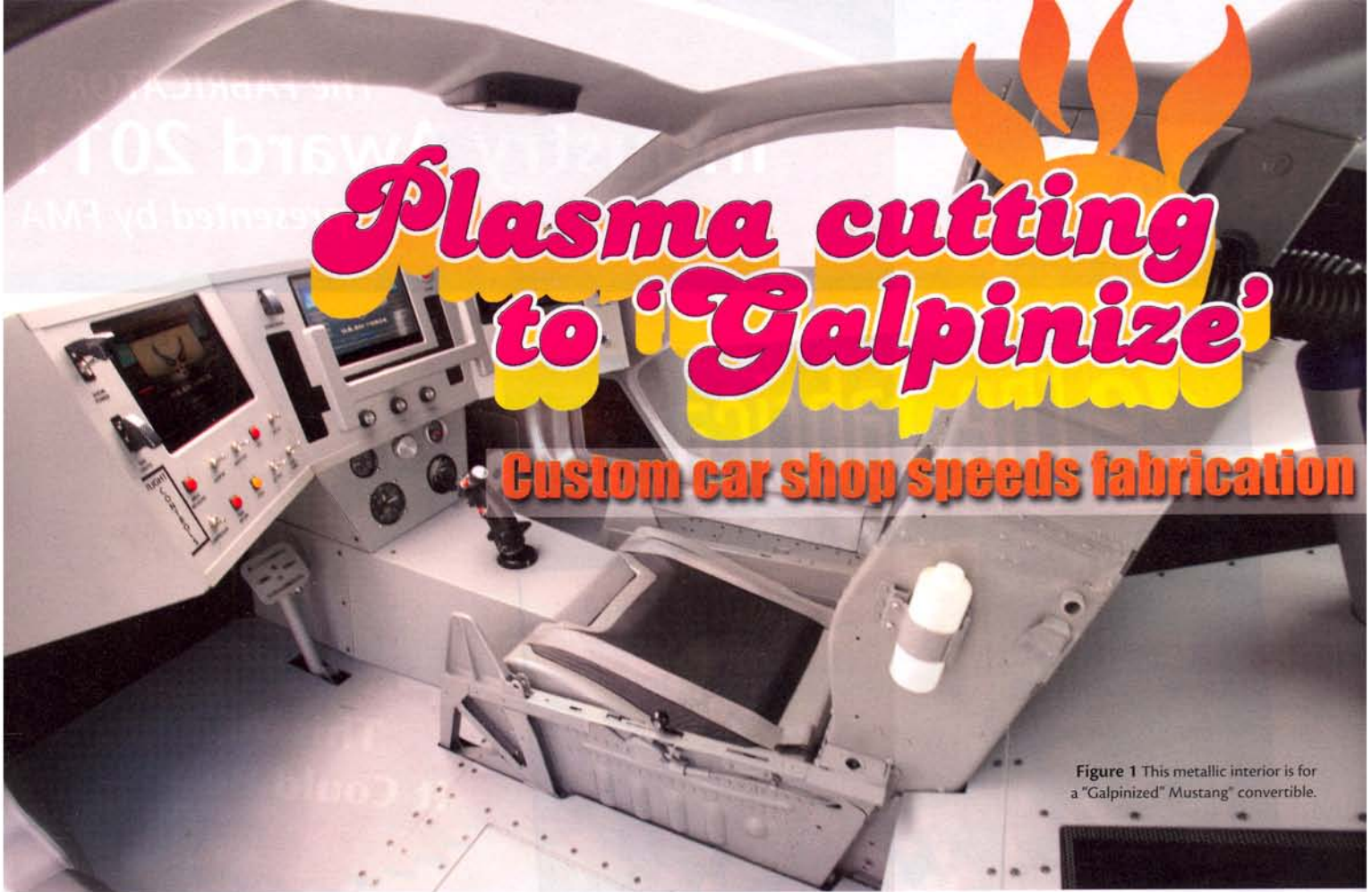


Figure 1 This metallic interior is for a "Galpinized" Mustang convertible.

By Tim Heston, Senior Editor

**N**eed a metal part? Just call Mad Mike. Complex contours? Multiple interior holes or cutouts? No problem. Just a picture of what you want will do. In less than an hour, the plasma table torch will light and start cutting, and soon Mad Mike will return—with his metallic creation in hand.

He's the guru of "Galpinization," the art of car customization at Galpin Auto Sports, Van Nuys, Calif.

Is he a CAD jockey, or a highly trained programmer? Nope. He's just a creative guy who found his own way to get the job done right—and quickly. Mad Mike doesn't use phrases like *takt time*, *work-in-process*, *inventory control*, and the like. And why would he? He's not working for Toyota. He's working at a place that made a Ford Pinto® fly.

### Mad Scientist Meets Metal Fab

The MTV generation knows Mad Mike from "Pimp My Ride," a reality show that turns sorry excuses for moving vehicles into dream machines. Mad Mike, aka Mike Martin, joined the famed Galpin custom auto shop in 2005 after a stint at another Southern California motor shop and, before that, as a radar specialist for the U.S. Air Force during Desert Storm.

GAS is part of an organization that began as a small Ford dealership in 1946 and evolved into a mini empire that grew up with Southern California's love affair with the automobile. Galpin Ford has sold more vehicles than any other Ford dealer in the world for two decades; it held the top spot even through 2009, the roughest year for the auto industry in a generation.

Over the years Galpin dealerships kept opening, from Honda and Mazda to Aston Martin. The company became so renowned, not only for its growth but also for its community support, that in 2003 Gov. Gray Davis declared

July 24 as Bert Boeckmann Day, after Galpin's longtime owner—a man who continues to lead the organization after an eye-popping 50-plus years.

And throughout the expansion, the folks at GAS kept on Galpinizing (see Figures 1-3).

"Growing up here in Southern California, I of course knew everything about Galpin," Martin said, "but to join the team, it's just been incredible." A Compton native, Martin recalled traveling north of L.A. to Van Nuys to get a glimpse of "the cool, crazy stuff. They made a Pinto fly. They put aquariums in vans. They were an encyclopedia of customization."

Yes, the Pinto story is true, and it represents an extreme of what folks at GAS call "Galpinizing." In the early 1970s an inventor approached the company with the idea and proposed design, and customizers (or Galpinizers) built the creation to suit. The car actually connected to the wings of a Cessna airplane, and the wizards at GAS added pedals and a special wheel to control the vehicle during flight. The project had a tragic end—the inventor died in a crash during a test flight—and since then GAS customizers have kept cars firmly (and safely) planted on the road.

But the incident continues to serve as a reminder of an idea that has made GAS so famous among motor junkies the world over. As long as ideas do not compromise safety in any way, and the customer is willing to pay for it, well then, *there is no such thing as going too far*.

Martin has worked in automobile customization following this mantra, so much so that others started to call him mad, hence the nickname. "I'm Mad Mike because I'm like a mad scientist. I've been this way since the second grade. I love building things, and coming up with all kinds of cool, crazy stuff."

It seems he was born to work at Galpin.

### Cool Car, Quick Plasma Cutting

You can't get much cooler than Spyker cars. Now known as the savior of Saab (Spyker bought the brand in February), the small Dutch maker of high-end, hand-built sports cars opened its first L.A. dealership with Galpin earlier this year. An hour before the opening gala, a Galpin manager came to Martin with a thought: Wouldn't it be cool if they could put a large Spyker logo on the front of the building? Martin looked at the dealer's first Spyker sports car, which had arrived in the showroom only minutes before, and said no problem; he'd have a logo ready before the event.

The manager raised his eyebrows: In an hour?

Martin grabbed his digital camera and got to work.

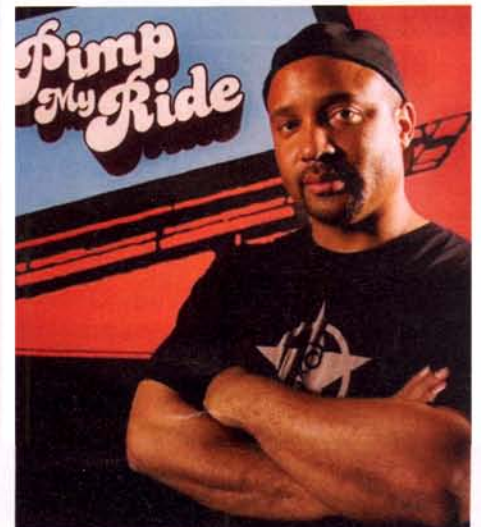


Figure 2 Mad Mike, aka Mike Martin, of MTV's "Pimp My Ride" joined Galpin Auto Sports, a custom car shop, in 2005.

He took a picture of the logo on the car hood, went back to his office, and imported that image into CorelDRAW®. He blew up the image about 500 percent, cropped it, and then exported the file into AutoCAD® as a DXF. There, he saved the image into a format that can be read by a program called ShopData, which produces programs that can be read by the controller on the MultiCam plasma cutting table, equipped with a Hypertherm high-definition plasma torch (see Figure 4).

In ShopData, Martin cleaned up the logo edges and then exported the program to the plasma table. The entire process, from snapping the picture with the camera to exporting the file, took about five minutes. "I went through my process, took the picture of that logo, went to the computer—boom, boom, boom—and by the time the party started, I had a big Spyker logo on the side of the building."

Customizers now use both hand-held plasma cutting systems alongside the plasma table, and the technology certainly beats the legacy equipment in the 6,000-square-foot custom shop. Before the plasma cutting investment, workers cut metal with either the band saw, cutoff wheel, or the oxyfuel torch. Today the shop uses plasma technology to cut various metal, from 22-gauge metal skins to 1.5-inch-thick metal bumpers for customized security and repo trucks.

## The operation merges traditional craftsmanship with the speed of modern mechanization.

### Working Under Pressure

Finding skilled labor isn't too difficult at GAS, given the shop's reputation. The hiring process is, like the company's products, unique. Martin invites potential hires to visit the shop for the day, meet sales associates and customizers, then asks a few questions that can determine if someone is hired or not. Being creative, highly skilled, and hands-on gets people in the door for an interview, but it doesn't get them the job. Often it's their reaction to one question from Mad Mike:

"Have you ever worked 24 hours straight?"

The shop doesn't compromise employee health, he said, but if work can be accomplished safely, and a job needs to be completed the next morning, that means the workday doesn't end at five.

The custom shop employs 30 individuals, artists in their own right. Most know multiple metal fabricating processes and have varied backgrounds. For instance, Jim Coutchure (or "Cooch"), fabricator and a whiz with the gas tungsten arc welding torch, has a background doing work for amusement parks, building everything from animatronics to roller coasters.

After going back and forth with the customer, the crew finalizes the design, and fabrication begins. Metal blanks emerge from the plasma table, while customizers cut roll bars, new suspension configurations, and myriad other components using the hand-held plasma torches. Often designers walk into Martin's office with a cardboard cutout of an intricate plate design. Martin scans it into drawing software, and minutes later the intricate blank is being cut on the plasma table. In a sense, the operation is a marriage of old and new, merging traditional craftsmanship with the speed of modern mechanization.



Figure 3 A limousine interior is customized for comfort and style.



Figure 4 The customization shop at Galpin Auto Sports now includes a plasma cutting table as well as several hand-held plasma cutting systems.

### What Recession?

Demand for GAS's handiwork hasn't waned, even during the Great Recession. What keeps the shop growing in part has been some creative marketing departments at the world's largest corporations. Companies like McDonald's, Panasonic, Red Bull, and Monster.com have come to GAS to customize trailers and other vehicles for road shows.

"Our trailer [customization] business has quadrupled over the past year or so," Martin said. "These companies can spend \$100,000 on a big advertising campaign, or they can spend it on a customized trailer and get out to the people. Everybody's going back to grassroots."

He added that an ad on TV lasts just seconds—and viewers can change the channel. But if a customized trailer

pulls into a local festival or other event, it can attract the eyes of thousands. As Mad Mike put it, "You have a guaranteed, captive audience."

"There was no recession here in the customization world," Martin continued. "There is just more work. And our head count keeps rising." With the additional workstations, "the toolboxes just keep getting closer together." **FAB**

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