

HACK YOUR CAR

Author(s): Michael Saunders, Globe Staff **Date:** June 6, 2005 **Page:** C1 **Section:** Business

ATLANTIC CITY Of course, there's no real reason to spend \$70,000 turning a refined BMW M3 into a rolling boom box. And upholstering a Corvette with shredded money may show a certain lack of taste. But car enthusiasts are finding ways to do this and more to their vehicles and display them on TV shows such as "Pimp My Ride" and "Overhauled." Coast-to-coast car shows are another venue: festivals of big wheels, bikinis, and ground-rumbling bass.

The customized cars and trucks at the International Auto Salon, held last month at the Atlantic City Convention Center, are the tip of a marketing push to bring that all-consuming "tuner" lifestyle to every part of the country. It's a lifestyle that generates \$4.1 billion annually, with advances in in-car technology making some of the biggest gains. And there are signs that more of that expanding customer base will likely come from the Northeast. That's why the Specialty Equipment Market Association has held its spring show in Atlantic City for the past two years and this year stopped holding a similar show in Los Angeles. SEMA is the trade group representing nearly 6,000 companies involved with changing the performance, appearance, or handling of anything on wheels.

The organization has traditionally had a West Coast base, as the California car culture has been the spawning ground of both manufacturers of new products and the early adopters who covet them. The East Coast is still a largely untapped market, said Peter MacGillivray, a Boston University graduate and Williamstown native who is SEMA's vice president of marketing and communication.

"Traditionally, lots of trends fashion, technology, pop culture have started on the West Coast and moved east, and that plays a big part in the automotive industry as well," MacGillivray said. "The difference is that it's been accelerated now it only takes a season or two for things to make the move."

SEMA is a business-to-business organization that has used its annual fall trade show in Las Vegas as the industry showcase for new aftermarket equipment of all kinds from fuzzy dice to free-flowing mufflers. The Atlantic City show is unique for its broad access; it's the only SEMA show open to the public.

The target market is 16- to 24-year-olds, most of them male, so some attendees paused to pose for photos with "booth babes," the attractive young women hired to wear corporate logos on tight T-shirts. Others preferred to ogle the canary yellow Porsche 997 Carrera in the Michelin booth, a car outfitted with aftermarket go-fast enhancements by RUF.

In the Ford booth, while a model monitored the line of folks waiting to drive a rally car racing simulator, Jay Horak demonstrated how his product, **AutoEnginuity**, can bring dealer-quality diagnostic software to small repair shops or home mechanics. Ford uses his software to train its mechanics but the basic package can be run on a PC laptop or a personal digital assistant, like a Palm.

It connects with the car's computer via the onboard diagnostics port. Nearly all cars made after 1996 use a standard called ODB II, the second generation of the diagnostic interface. "ODB II allows you to see about 10 to 20 percent of what's actually happening with the vehicle," Horak said in a post-show conversation from his company's home in Mesa, Ariz. "We can actually get in and see most of the rest. On a Ford there are something like 400 sensors but most ODB II readers will only show you 40. What separates the tools from the toys is the coverage."

The tuner culture is also spurring business for professional mechanics.

"It's going to be amazing."

It's even possible to perform limited reprogramming directly through the ODB II port, usually located under the dash on the driver's side of the car. The BSR PPC system can alter performance for Saab, Volvo, BMW, and other models. Cobb's AccessPort tuning for Subarus uses the ODBII port to upload turbocharger boost settings, air and fuel ratios, and fuel-injector pulse signals.

Beginning in 2004, some cars began to use a different interface, CAN, which will become mandatory for all cars beginning in 2008. Some of the latest innovations for CAN will be unveiled at SEMA's fall show in November.

That SEMA trade show usually draws 120,000 trade attendees and workers, 2,000 exhibitors dispersed among more than a

million net square feet, with buyers from more than 100 countries. It's the second-largest annual expo held in Las Vegas, topped only by the Consumer Electronics Showcase.

In Atlantic City, MacGillivray said, "You get a taste of what the SEMA show is all about. The exhibitors don't treat it like it's some kind of car show in a parking lot. We want the public there and do that intentionally because this is such a rapidly growing category.

"It's a big challenge, because the youth market, that's very different from the traditional marketplace. It's a different language, a different culture, different values.

"This is the largest population bubble in the history of this country and they'll be driving consumer spending for the next 30 years."

SIDEBAR:

AN AFTERMARKET SHOPPING SAMPLER

It's never too late to primp your ride, long after your car has left the showroom. Some selections from the latest crop of auto aftermarket products.

350 ZRS Aero package by Carmate

A sleek look previously available only in the digital world of Gran Turismo 4, the Playstation 2 driving simulator, is about the hit the street for the Nissan 350Z. The downforce-inducing spoiler, nose air dam, and side skirts are the first offshoots of the popular game to cross over into the tuner market. US street price has not been determined, but Japanese customers are paying \$700 to \$1,000 for the kit components.

Lowrance iWay 500c

Taking top honors as best new product at the fall SEMA show, the iWay 500c GPS navigation system has a 5-inch color touch screen, turn-by-turn directional controls, and is waterproof and fully portable, enabling it to be used in more than one car or on a motorcycle. New maps can be uploaded by USB connection and the internal 20GB drive saves half its space for MP3 music files. Coolest feature: The unit automatically turns down the music to issue voice commands. Suggested retail price is \$800.

Eclipse AVN5495

Typical of the higher end of the nav system market, the AVN 5495 is an in-dash entertainment system with an integrated CD, DVD, MP3 player. With the built-in CD ripper, users can play a CD and store the data as MP3 files in the 30GB hard drive. The 6.5-inch screen is a bit small for watching a letterboxed movie but the video outputs can be wired to the vehicle's other screens. Suggested retail is \$2,700.

Audiovox rear-view monitors

Some SUVs have rear blind spots almost as big as the vehicles, making backing up a challenge or a safety hazard. A basic setup is mini-monitor connected to a camera mounted on the rear bumper, or inside the car to keep an eye on a rear-facing carseat. Optional upgrades add a navigation system, multiple cameras, or in-car entertainment system. Starts at \$350 for basic systems.

SmarTire strap-mount tire pressure sensors

Small pressure sensors strapped to the inside of each of the wheels continuously monitor pressure. On basic models, an in-car receiver signals when air pressure falls below 22 psi. More advanced models indicate actual pressure and temperature for each tire. System starts at \$230.

ECU reprogramming via OBDII port

Cars built after 1996 use the second-generation of onboard diagnostics (OBD II) that enable users to tap into the car's computer and increase performance. An OBD II "tweak," using a device like the Cobb AccessPORT for the Subaru WRX 2002-2005, can raise horsepower and torque while keeping the car within the factory warranty specs.

Nology LaptopDyno and OBDII scan tool

A basic software package that enables users to read trouble codes stored in the car's computer and reset the nagging check engine light. Uses signals from engine sensors and the car's weight and gearing specs to compute horsepower and torque.

For PDA or PC. About \$370

AutoEnginuity laptop diagnostic tool

Used by both pros and weekend mechanics, **AutoEnginuity's** ScanTool software does all of the trouble-code reading and dynamometer computing of lesser-featured products but offers expanded ECU access to actually diagnose and repair problems. Can connect a PDA or PC with the OBD II port reader via Bluetooth, serial cable, or USB. About \$225, with optional expanded sensor monitoring \$150

Michael Saunders can be reached at m-saunders@globe.com.

[Perform a new search](#)