

2006 SEMA SHOW-FULL COVERAGE



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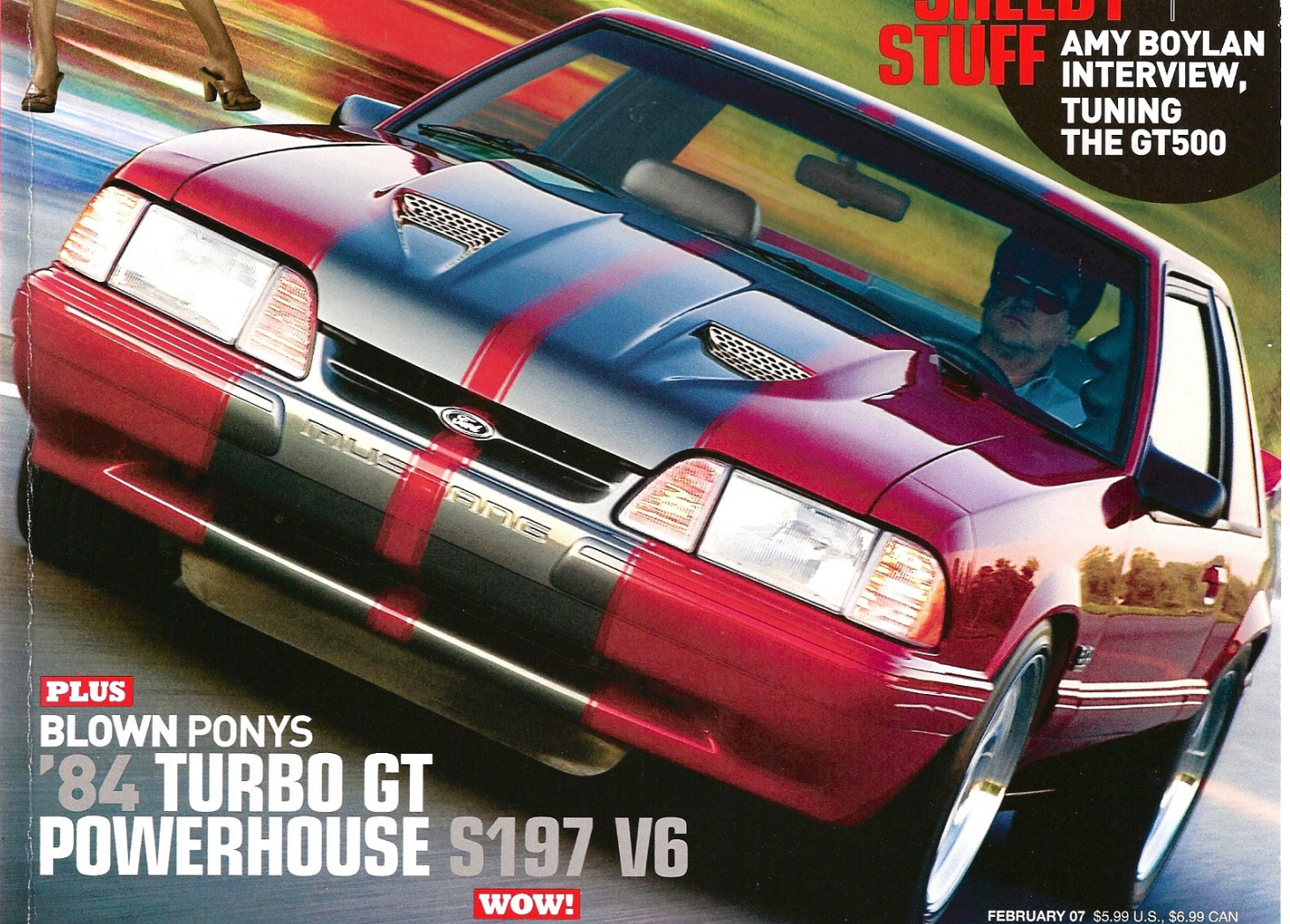
Mustangs

THE PERFORMANCE MAGAZINE FOR MUSTANG ENTHUSIASTS

FANTASTIC

A '93 COUPE THAT SHINES

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INTERVIEW,
TUNING
THE GT500



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TEXTBOOK COUPE

Follow **Jim and Jennifer Broome's** formula,
and you can't go wrong!



Story and Photos by **Brad Bowling**



TEXTBOOK COUPE

JIM AND JENNIFER BROOME'S 1993 MUSTANG LX



The question we get asked most often at shows and by e-mail is: "How can I get my car featured in *Modified Mustangs*?"

While there are no hard-and-fast rules about what we feature in the magazine, let's just say that first-time Mustang customizers Jim Broome and his daughter Jennifer are textbook examples of how to do everything right. If the *MM* editors were to lay out guidelines, the Broome duo's '93 LX coupe would have checkmarks next to each entry. Let's see how they did it.

1. HAVE AN INTERESTING STORY OR ANGLE.

Jim did not have much of a history with Mustangs before he got involved with this project. He occasionally drove his sister's light blue '65 coupe with Pony interior, and a friend once had a Mach 1, but Jim was a hard-working guy whose lawn maintenance business and parenting took up most of his time and income.

"I really never thought much about hot rods or muscle cars," Jim recalled. "I could never see myself with such expensive toys."

Children have a way of changing a parent's mind, however. At the age of 12 his daughter became infatuated with the square-bodied Fox Mustangs just as they were being replaced by SN95s. She spent the next decade promoting the idea of a 5.0-liter show car until one night during dinner in 2004 when her father finally gave the long-discussed project a green light. Thus 'J&J Racing' was born.

Neither father nor daughter had ever restored or built a car before, so they compiled stacks of catalogs and magazines and started networking with Mustang owners and shops to put their plan together. Jim and Jennifer knew they specifically wanted an 1987-93 coupe because of the notchback's purposeful shape and the fact that its chassis was slightly stronger than that of the hatchback or convertible.

"About six months after that, we decided what kind of car we were going to buy," Jim remembers, "I was in Darlington, SC on my

Jim Broome and his daughter are **textbook examples** of how to do everything right.

way back from the beach and I saw this clean black '93 coupe sitting in a used car dealer's lot. It was a Sunday, and the owner happened to be there.

"I bought the car and drove it home. By the time I got back to Charlotte it had lost nearly every fluid in the system, so I knew we would be shopping for a new engine soon."

2. BUILD AN ENGINE WITH SOME GRUNT.

Jim and Jennifer had a lot of decisions to make concerning their new powerplant.

"When we finally had a car to put a motor in, we realized how many options there were to consider," Jim told us. "We thought about



INTERIOR / EXTERIOR

Jim and Jennifer Broome's 1993 Mustang LX

CHASSIS

MAC Performance Products G-load brace and subframe connectors

EXTERIOR

Cervini fiberglass twin-scoop hood; Saleen wing

INTERIOR

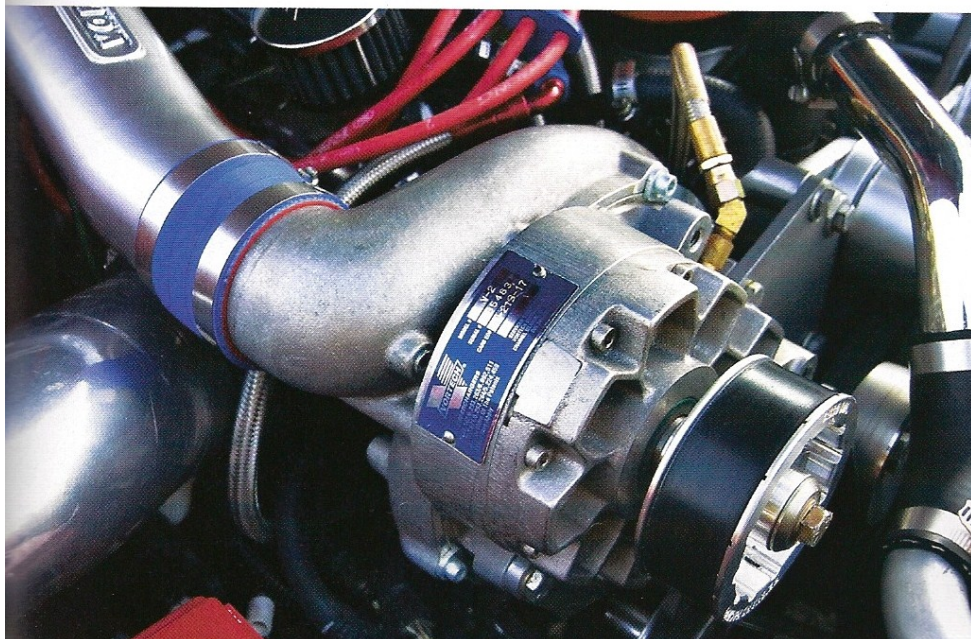
Auto Meter gauges; '01 Mustang power seats; Pioneer head unit with pop-up screen; billet accessories

SUSPENSION

KYB shocks; Eibach springs; Lakewood upper and lower control arms

WHEELS AND TIRES

Five-lug 17- x 9-inch chromed Cobra R rims; Falken Ziex ZE512 tires (fr) 245/45-17 Falken Ziex ZE512 (r) 270/40-17 Mickey Thompson Drag Radials



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honoring the 5.0-liter name by keeping it 302 cubic inches, then we talked ourselves into a 331, but eventually we agreed on a heavily modified 347."

The Broomes hired Outlaw Speed Shop in Monroe, NC to build that stroked-and-bored V8. Jerry White and James Turner started with a fresh cast-iron block and bolted in an Eagle 4340 steel crankshaft (prepped with chamfered oil holes, lighter throws and balanced by Trout Race Engines in Concord, NC), Eagle 4340 connecting rods, SRP forged flat-top pistons, a Comp Cams 276HR camshaft with 114-degree lobe center and Comp Cams roller lifters. Valve lift and duration were increased to .544/220 (intake) and .560/224 (exhaust).

A set of Crane 1.6 roller rocker arms, Ferrea valves (2.02-inch intake, 1.60 exhaust), Comp Cams steel retainers and springs and Ford Racing valve covers were fitted to the

new Edelbrock Performer aluminum heads. Outlaw matched the exhaust ports to the FelPro 1415 gasket and the intake to a FelPro 1262 after carefully measuring the 64cc combustion chambers.

SVO injectors rated at 42 pounds, a Holley 255 lph pump, BBK pressure regulator and Holley storage cell make up the fuel system. A Trick Flow Track Heat intake manifold, BBK 75mm throttle, Anderson Power Pipe four-inch intake and K&N filter work in concert with a Vortech V-2 T-trim supercharger wearing a 3.25-inch pulley. Exhaust is handled by a set of 1-5/8-inch MAC Jet Hot headers leading to 2-1/2-inch pipes and Flowmaster mufflers.

The nervous system of any car is its electrical components, and Jim and Jennifer chose wisely for their coupe. An MSD distributor, Red Top battery (sitting in its regular position), Autolite spark plugs and 9mm Ford Racing ignition wires keep the spark

flowing uninterrupted.

Knowing the engine would require some heavy-duty cooling - especially with the supercharger in place - Jim devoted a lot of effort to choosing the right combination of parts to keep operating temperatures low.


"We worked with Griffin Radiator to pick out a custom aluminum rad," he said. "And there were a lot of other considerations, such as the 55-gpm electric water pump, twin high-flow Perma-Cool fans, oil cooler and Canton oil pan, that keep engine temperature at a happy level."

The rest of the powertrain consists of a Tremec T-5 five-speed manual transmission with stock gear ratios, an SFI billet flywheel, Centerforce Dual Friction 10.5-inch clutch and pressure plate, Ford Racing aluminum driveshaft and Auburn Pro 3.73:1 differential. A Steeda Tri-Ax short-throw shifter pushes the gears around with authority.



ACKNOWLEDGEMENTS

Kelby Harris and Paul Conner at Harris Racing; Chris Brynarsky at Union County Custom; B&M Upholstery; Jerry White and James Turner at Outlaw Speed Shop.

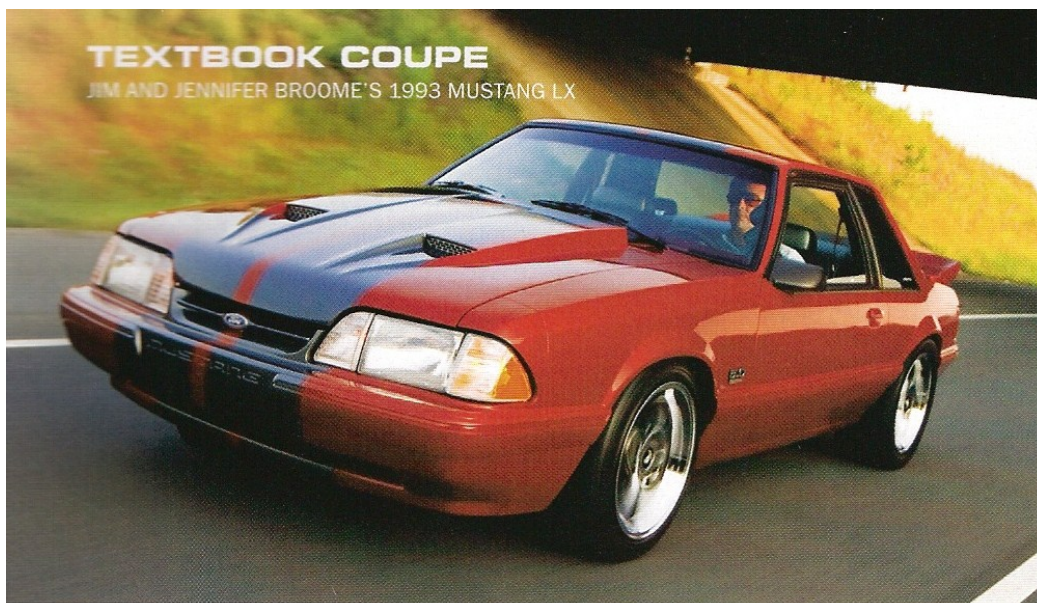


I liked the idea of
**repainting the car black
and putting on some
red and orange flames.**
I'm glad Jennifer talked
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Harris Racing performed some post-build tuning and modification, which resulted in rear-wheel dyno numbers of 502 for horsepower and 490 for torque.

3. GIVE YOUR CAR THE RIGHT "SIT".

Jim and Jennifer know that attitude is everything when it comes to the way a Mustang goes down the road. After consulting their sources, they compiled a list of suspension and chassis com-

ponents that would turn the high-riding, grocery-hauling LX into a ground-hugging Rottweiler in full attack mode. KYB shocks and Eibach springs made the body hunker down on top of the five-lug 17 x 9-inch chromed Cobra R rims, Falken Ziex ZE512 tires (245/45-17 front) and Mickey Thompson Drag Radials (270/40-17 rear). They stiffened the Fox body with a MAC Performance Products G-load brace and subframe connectors and Lakewood upper and lower control arms. The stock Ford disc/drum brake setup was retained.

Getting the **body back to pristine condition** was relatively straightforward.

4. DON'T SKIMP ON THE BODY AND PAINT.

"I liked the idea of repainting the car black and putting on some red and orange flames," Jim told us. "I'm glad Jennifer talked me out of that, because now I can't imagine it any other way than the way we did it."

Working with Chris Brynarsky at Union County Custom, (where?) the Broomes completely dismantled their LX for body work and painting. Every panel and piece of sheetmetal was removed from the chassis and carefully prepped for its world-class transformation. A previous owner had wrecked it twice before, but both incidents were minor so getting the body back to pristine condition was relatively straightforward on the then 11-year-old car.

Not wanting to detract from the Fox Mustang's elegantly simple styling, father and daughter chose to install only a couple of body pieces – a fiberglass Cervini cowl hood and one of Steve Saleen's rear wings. Jennifer had

to go outside the Ford catalog to find the exterior paint shade and stripe color the two could agree on, which were Metallic Cherry Red and Graphite Gray (yes, they are Chrysler colors, but if they look this good on a Fox, so what?)

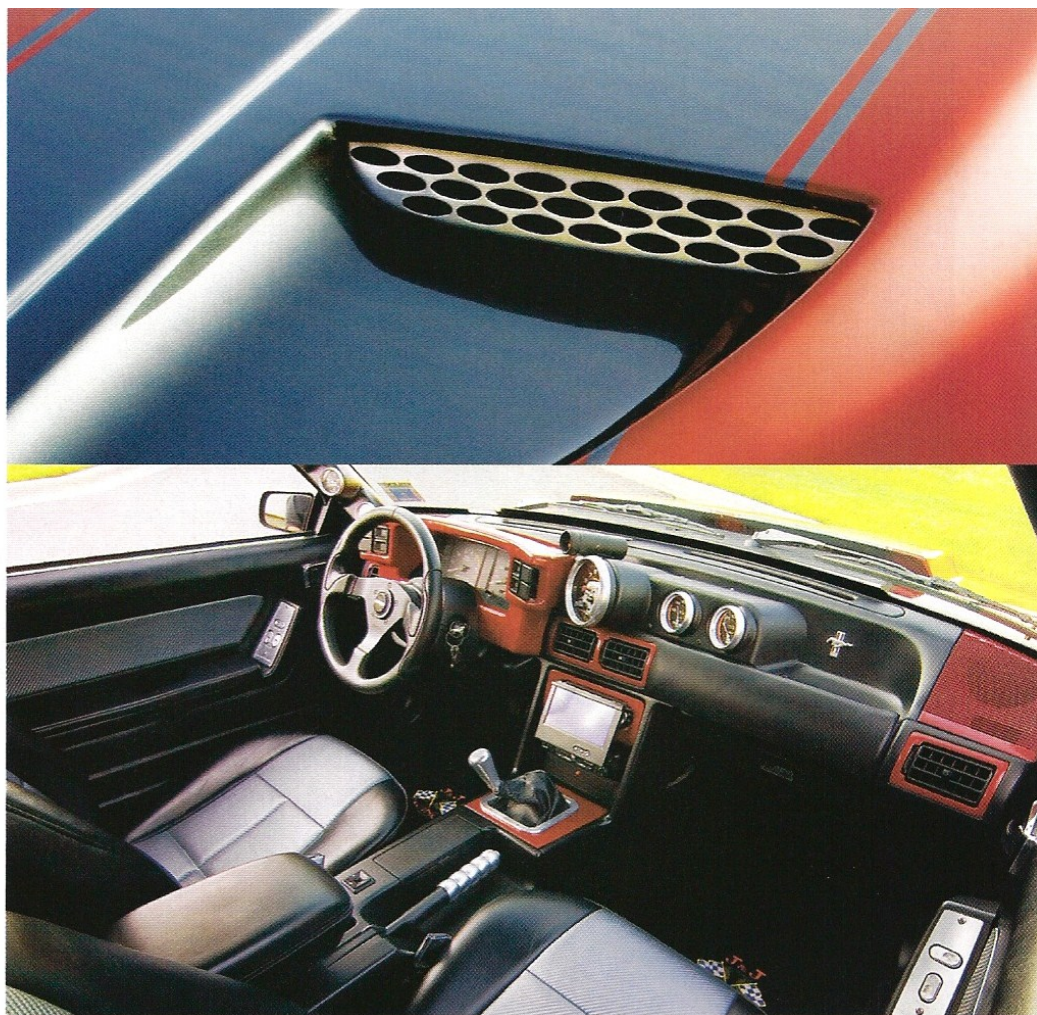
Jim and Jennifer paid special attention to every little detail with the paint, such as carrying the twin stripes down the firewall and across the radiator support in the engine compartment.

"That Saleen spoiler gave the car its nickname," Jim said. "One of our friends saw it and said it looked like a 'big ol' chicken wing.' In the South, we stretch out that word, so the car became Chicken Waang. Our license plate, 'CHKNWANG,' gets a lot of attention."

5. DON'T MAKE YOUR 'OFFICE' A BORING PLACE.

Ideally, a car's interior reflects the owner's personality and tastes. That could mean anything from some thoughtfully applied paint and seat material to plasma televisions and disco strobes. The Broomes' approach fell somewhere in between those two extremes.

All the dash bezels and the instrument cluster surround were painted to match the



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SPECIFICATIONS

Jim and Jennifer Broome's 1993 Mustang LX

ENGINE

347-cid V8

ENGINE MODIFICATIONS

Vortech V-2 T-trim supercharger with 3.25" pulley; Eagle 4340 steel crankshaft (prepped with chamfered oil holes, lighter throws and balanced by Trout Race Engines in Concord, NC); Eagle 4340 connecting rods; SRP forged flat-top pistons; Comp Cams 276HR camshaft with 114° lobe center; Comp Cams roller lifters; .544/220 intake valve lift/duration; .560/224 exhaust valve lift/duration; Crane 1.6 roller rocker arms; Ferrea valves (2.02" intake, 1.60 exhaust); Comp Cams steel retainers and springs; Ford Racing valve covers; Edelbrock Performer aluminum heads; gasket-matched ports; cc'd combustion chambers; SVO 42-pound injectors; Holley 255 lph fuel pump; BBK fuel pressure regulator; Holley fuel cell; Trick Flow Track Heat intake manifold; BBK 75mm throttle; Anderson Ford Motorsport Power Pipe four-inch intake; K&N filter; 1-5/8" MAC Jet Hot headers; 2-1/2" pipes; Flowmaster mufflers; Griffin Radiator aluminum radiator; Perma-Cool fans; Canton oil pan

ENGINE MANAGEMENT

MSD distributor; Red Top battery; Autolite sparkplugs; 9mm Ford Racing/SVO ignition wires

DRIVELINE

Tremec T-5 five-speed manual transmission; stock gear ratios; SFI billet flywheel; Centerforce 10.5-inch clutch and pressure plate; Ford Racing aluminum driveshaft; Auburn Pro 3.73:1 differential; Steeda Tri-Ax short-throw shifter

NUMBERS

502 RWHP; 490 RWTQ

exterior's Metallic Cherry Red, and Jennifer picked a silver carbon fiber-like material for the seat inserts and door panels. Use of billet accessories was limited to power window switches, parking brake handle and shift knob. AutoMeter gauges with carbon fiber backing run rampant from the A-pillar across the dashboard, and a tasteful, contoured Grant leather-covered steering wheel replaces the stock Ford airbag unit. The power bucket seats are from an '01 Mustang, and the 'J&J Racing' floor mats and trunk mat were custom made.

"The upholstery was actually something Jennifer and I disagreed on," Jim remembered. "I didn't like it on its own, but when I saw how it worked with the whole interior I told her she had made a good choice."

To give the show car an appeal that would cover all ages, the decision was made to install a thumpin' stereo based on a Pioneer head with pop-up screen, Kicker amps and a Sony PlayStation video game box in the trunk with dual monitors.

6. GET OUT AND BE SEEN.

We discovered the J&J Racing Chicken Waang at Lowe's Motor Speedway's semi-annual AutoFair car show a few months ago, fresh out of its two-year construction phase.

We got parked about 30 minutes late, **showed against 150 of the nicest Mustangs I've ever seen, and got chosen for Best of Show!** Well how about that?

Apparently, we weren't the only ones impressed with the little red coupe either, because it took home the Carolina Regional Mustang Club's Best of Show award that weekend. Since we photographed it for this feature, the *Modified Mustangs* February 2006 cover car has taken four first-place trophies, including some high honors during Mustang Week at Myrtle Beach.

"We didn't pre-register for the Mustang Week show," Jim said. "I didn't realize it was so big that there was a danger of not getting in, and they said there were no spaces left for the show."

"A guy from the Yellow Mustang Registry overheard this, and said one of their members had cancelled and that I could have their spot. We got parked about 30 minutes late, showed against 150 of the nicest Mustangs I've ever seen, and got chosen for Best of Show!" Well how about that? **MM**