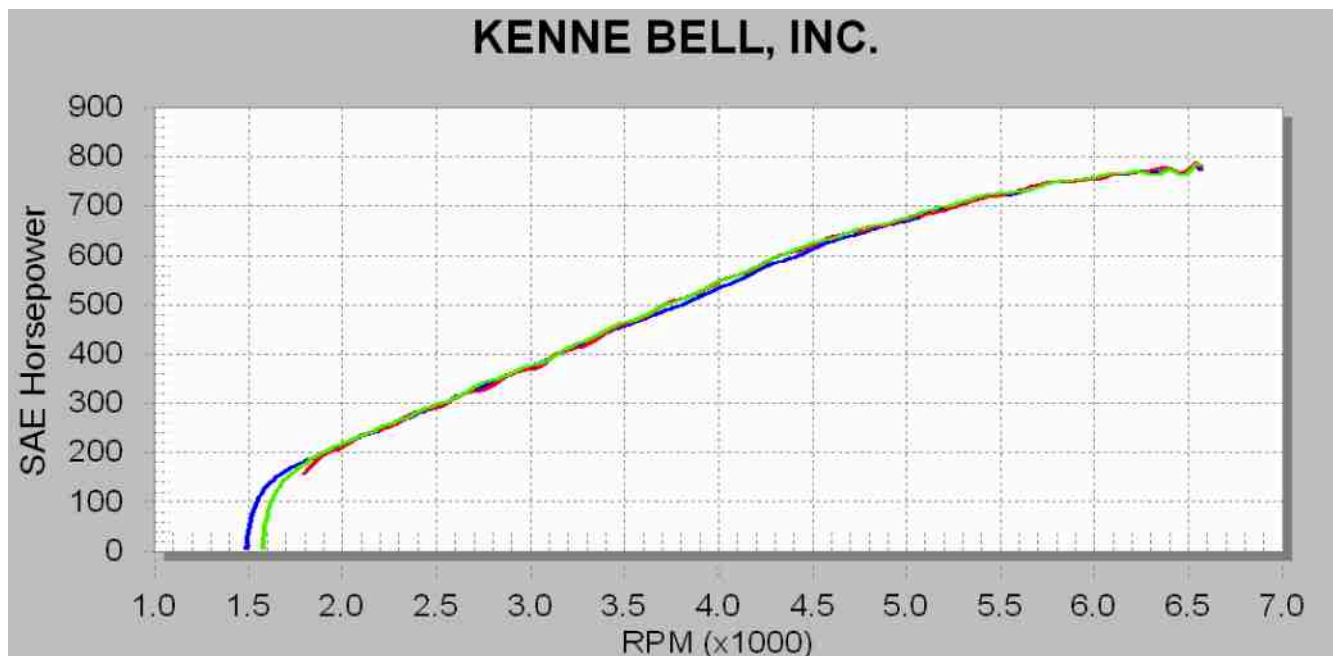


HEADER, CAT, X PIPE & EXHAUST TESTS  
'05 MUSTANG, '07 SHELBY



There's a sign on our dyno given to us by an old Ford engineer that reads "One of the real dangers in running a test is you're bound to get data." At Kenne Bell, we test ONE product or change at a time. We NEVER install a product and use a different AF ratio, timing, or use another product as a "crutch" to enhance it's performance. That is misleading. Over the years we've received complaints about our kits not making the HP with headers, etc. Our customers often add the ADVERTISED HP claims to their HP expectations and then blame the supercharger when it doesn't all add up. So we decided to do a "one product at a time" Kenne Bell style - exhaust, x pipe, cats and header test on our own '05 Mustang test car - the one used for our literature, dyno tests, etc. It was equipped with only the new MAMMOTH™ 2.8H Kit. We were shooting for 800RWHP. It made 279RWHP stock and 750 with only the MAMMOTH™ Kit on a 100% stock spec Sean Hyland built motor (no cams, heads, higher comp, etc. Just an electric water pump. The Sean Hyland motor made exactly 279HP, the same as our stock motor. Here are the tests.

RWHP	TEST
279	- Stock baseline
750	- MAMMOTH™ 2.9H Kit
775	- Bassani cat back
775	- Remove exhaust
775	- Custom x pipe
775	- Remove x pipe
775	- Remove cats
775	- Install 1-3/4" headers
775	- Install cats
775	- Install gutted cat pipes w/headers
775	- Install stock x pipe
775	- Install custom x pipe
750	- Reinstall stock exhaust

Plenty of 775's because we saw no gain from the headers, x pipe or cats. Get the message? Like it or not, these are the Dynojet results. Same dyno, car, timing and AF ratio. And the headers, no cats and x pipe did not lower boost. These results are in line with other one change at a time - back to back tests that Kenne Bell and some of our Tuners have run on the '03 Cobra and '07 Shelby. Then there's the well documented "Mod for 4V Fords, Part II - and Part III" Muscle Mustangs & Fast Fords Magazine '03 Cobra engine dyno tests. This Kenne Bell supercharged Sean Hyland '03 engine ultimately made 940HP. With Bassani exhaust and lower boost it pulled 677HP. Long tube headers increased power to 682 (+5HP). Note that the 5HP was made with OPEN 3" collectors and NO cat back exhaust. So was the mere 5HP in the headers or the 3" open collectors? Still believe headers are 50HP? See what happens when one makes TWO changes at once? Uh oh! Opinions! Later the 1-5/8"x3" headers were swapped for a set of 2-1/8" and the '03 Cobra made another 50HP! Yes, the "right" headers make HP. Sometimes nothing or very little but it is what it is. We would have very much liked to make some HP with the headers and push our MAMMOTH™ powered '05 kit over 800HP with only headers and a cat back. One would think that if stock manifolds were such a huge restriction why no HP gain at a whopping 775HP.

Here's more food for thought. The stock cat flowed 407cfm (814 for 2). Gutted cats were 549 cfm (1099 for 2). Think "Hi Flo" cats at ? cfm would have made more HP? We'll let you guess at the flow of the x pipe and exhaust. In 2004, back to back tests on Earl's 700HP Cobra also resulted in a "0" HP gain when he gutted the cats. He was told by experts to expect 35HP. Same results

for ST Motorsports on their 700HP 3V '06 Mustang test i.e. no HP gains from gutting the cats. ST changed the headers AND exhaust and made 25HP! Oops! Again, TWO changes at a time. Header leaks, tuning issues and HP claims simply consume too much of our tech people's time. Kenne Bell is not against any product that nets power gains. We would recommend that header companies do more accurate back to back header ONLY tests and not leave the claims and testing to "others."

The three 775HP runs are very close together. Too close to call.  
1. 100% stock headers, cats, x pipe w/ no exhaust.  
2. Stock Manifolds. No cats. Open exhaust. No x pipe.  
3. Headers. No cats. Open exhaust. No x pipe.

Here's another back to back test on an '07 Shelby GT 500.

Earls East Coast Speed  
Kenne Bell Supercharged '07 Shelby  
**STOCK MANIFOLDS, STOCK CATS, STOCK X PIPE, CAT BACK**  
762RWHP / 677 RWTQ - 19.25 psi boost

**ADD 1-3/4" HEADERS, 3" X PIPE, REMOVE CATS**  
764RWHP / 683 RWTQ - 18.75 psi boost

2HP! 14 FT LBS! What would your guess have been?

Headers \_\_\_\_\_ ?  
X pipe \_\_\_\_\_ ?  
No cats \_\_\_\_\_ ?  
-----  
HP \_\_\_\_\_ ?

Kenne Bell doesn't sell headers, nor do we gut cats. All we can do is run the tests and pass on the information to our customers. The decisions are yours.